A Study of Post Implementation Problems in an Educational Enterprise Resource Planning (e_ERP) System.

Mahtab Alam¹, Dr. Aftab Anwar Shaikh², Dr. A.M. Tamboli³
¹Department of Computer Science, Poona College, Camp, Pune-411 001, INDIA.
²Department of Commerce, Poona College, Camp, Pune-411 001, INDIA.
³Department of Electronic Science, Poona College, Camp, Pune-411 001, INDIA.

Abstract: Enterprise resource Planning (ERP) systems are becoming popular among institute of higher education. This paper is oriented to the afterwards of the problems faced by the management and their support staff and students in respect of the issues related to the successful implementation of the e_ERP software in the sector of the higher education. This research paper goes on to define the relationship between the different variables of the e_ERP system. The management has confronted with the problems faced by the staff and students in the software without which it would be difficult to imagine the integrated management of an enterprise as a whole, including its coverage of admission, examination, library and administration. The findings are based on a questionnaire survey performed among the various higher education institute (HEI). This paper summarises the data gathered for the investigation of the problems faced by the stakeholders.

Keyword: Educational Enterprise Resource Planning (e_ERP), variables, stakeholders, integrated management, Higher education institute (HEI).

I. Introduction

Educational Enterprise Resource Planning (e-ERP) dramatically improves the workflow, performance and the communication between various staff members and students of the educational organization. An e–ERP heightens the visibility and control of different activities within an organization - thus facilitating gap analysis, expedite decision making and support efficient use of resources in the rapidly changing educational environment. The proposed research will highlight the way in which students, staff and stakeholders are facing the problems related to the e_ERP. It will also help in opinion of the users how it helps them and what are the problems faced by them in the use of an e_ERP finding out the relationship between the different variables of an ERP system. The study was conducted to know the system.

II. Methodology

The sign binomial test was used when there are two possible outcomes. You know how many of each kind of outcome (traditionally called "success" and "failure") occurred in your experiment. You also have a hypothesis for what the true overall probability of "success" is. The binomial test answers this question: If the true probability of "success" is what your theory predicts, then how likely is it to find results that deviate as far, or further, from the prediction. The sign test is a special case of the binomial case where your theory is that the two outcomes have equal probabilities.

2.1 Research Technique.
The responded questionnaire was coded and the captured opinions were then subjected to further analysis by using S.P.S.S. (Statistical Package for Social Sciences) Software version 23 and A.M.O.S. for windows. A.M.O.S. (Analysis of a Moment Structure) is an added module of S.P.S.S. used for S.E.M. (Structural Equation Modelling) or Path Analysis or Confirmatory Factor Analysis.

2.2 Hypothesis Testing.
To try to find the problems faced by the students in the e_ERP software with reference to admission, examination, library and administration.

2.3 Variables and Measurement.
Respondents were asked to comment on the following statement related to the above hypothesis using the two point scale 1=Yes and 2=No.
i) Do you think that the fees and photo upload are the problems faced by students with regards to admission?
ii) Do you think that the slow site and downloading are the problems faced by students with regards to examination?

iii) Do you think that there is any problem in the library module?

iv) Do you think that there is any problem in the administrative module?

Test Proportion: Test proportion was taken as 0.5. Since more than 50% of favourable responses to a particular category suggest greater approval for this category.

Hence \( P = 0.5 \)

- \( H_0 = P \leq ( \text{proportion of responses indicating “students are facing the problem with reference to admission, examination, library and administration” is less than or equal to 50%}). \)
- \( H_1 = P > ( \text{proportion of responses indicating “students are facing the problem with reference to admission, examination, library and administration” is more than 50%}). \)

Level of Significance: \( \alpha = 0.05 \)

### III. Literature Review

An increasing number of higher education institutions have introduced ERP systems in order to improve their operations and make them manageable and more transparent. ERP vendors are also aware of this fact, which is the reason they already expand their solutions in order to satisfy the needs of higher education institutions (Leo Zornada and Tamara Bertok Velkavrh, 2005).

Many higher education institutions want to take advantages of ERP systems. They invest tens of millions of dollars in ERP projects that may go on for two, three or even more years (Swartz D, Orgill K., 2001). The investment in ERP systems represents the biggest investment in ICT for higher education institutions (Murphy C, 2004).

An Enterprise Resource Planning (ERP) system is an integrated software solution, typically offered by a vendor as a package that supports the seamless integration of all the information flowing through a company, such as financial, accounting, human resources, supply chain and customer information (Davenport, 1998). Gunasegaram (2007) defines the key elements of an ERP system as: one large real-time database which reduces data redundancy and improves accuracy; integrated business process that cut across business functions such as supply chain management; and seamless transitions between business transactions. In response to the growing global competition, many companies all over the world have embarked upon ERP implementation. The ERP system market is one of the fastest growing markets in the software industry (Willis and Willis-Brown, 2002).

The initial implementation of a Student Administration E.R.P. system in the institutions and explored how these institutions used the post-implementation phase to maximize the benefits from the E.R.P. system. A mixed-method approach consisting of an online survey and qualitative case study was utilized for data collection; within-case and cross-case analyses were performed to generate the research results and findings. The overall post-implementation experiences of the case study institutions were found to be similar in nature, regardless of institution size (Linda S. Sullivan, 2009).

E.R.P. systems are the largest software applications adopted by universities, along with quite significant investments in their implementation. However, unlike other applications little research has been conducted regarding these systems in a university environment. The research not only forms the basis of an evaluation of previous research and research needs, it also makes inroads in identifying the payoff of E.R.P’s in the sector from different perspectives with particular reference to the user (Ahed Abugabah and Louis Sanzogni, 2010).

The benefits of E.R.P. solutions are that being part of an E.R.P. project is good for one’s career; the new systems offer improved services for faculty, staff, and students; administrative, academic, and student data are standardized; university data is globally accessible over the Internet; and the new systems involve less cost and risk than legacy systems (Kvavik et.al., 2002).

Enterprise Resource Planning (E.R.P.) system is an integrated information system that is used to support business processes and resource management within an organization. These systems integrate between one business units with other business units. (Zainal Arifin Hasibuan and Gede Rasben Dantes, 2012).

Objectives of the Study

To formulate a conceptual framework for defining the relationship between the customize software, SAP, infrastructure, web site is slow, downloading, training, cost of purchase and the problems faced by students with reference to administration. The objectives of the study are as follows:

- To try to find the problems faced by the stakeholder, staff and students in the e_ERP software with reference to admission, examination, library and administration.

Primary Research

Primary data is used for the purpose of this study which is collected from respondents by means of using a questionnaire. Primary data refers to the data that is obtained by researcher through first hand investigation (Reference an IAC Publishing. What is primary and secondary data?).
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IV. Results And Discussions

4.1 a) are you facing problem regarding to admission
Observed proportion = 0.92, Test proportion = 0.50, p=0.000
Hence more than 50% students are facing the problem.

b) are you facing problem regarding to examination
Observed proportion = 0.69, Test proportion = 0.50, p=0.013
Hence more than 50% students are facing the problem.

c) are you facing problem regarding to library
Observed proportion = 1.00, Test proportion = 0.50, p=0.000
Hence more than 50% students are facing the problem.

d) are you facing problem regarding to administrative
Observed proportion = 1.00, Test proportion = 0.50, p=0.000
Hence more than 50% students are facing the problem.

V. Figures and Tables

Table 1: Sign Binomial Test

<table>
<thead>
<tr>
<th>Category</th>
<th>N</th>
<th>Observed Prop.</th>
<th>Test Prop.</th>
<th>Exact Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admission</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group 1 Yes</td>
<td>44</td>
<td>.92</td>
<td>.50</td>
<td>.000</td>
</tr>
<tr>
<td>Group 2 No</td>
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<td>.08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>48</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Examination</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group 1 Yes</td>
<td>33</td>
<td>.69</td>
<td>.50</td>
<td>.013</td>
</tr>
<tr>
<td>Group 2 No</td>
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<td>.31</td>
<td></td>
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<tr>
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<td>Library</td>
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<td>.000</td>
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<tr>
<td>Group 2 No</td>
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<td>1.00</td>
<td></td>
<td></td>
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<tr>
<td>Total</td>
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<td>1.00</td>
<td></td>
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<tr>
<td>Administration</td>
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<tr>
<td>Group 2 No</td>
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<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>48</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

VI. Conclusion

For the entire four variables the observed proportion is more than 50% and the p value is less than 0.05, hence the hypothesis “students are facing the problem with reference to admission, examination, library and administration” is proved. Hence it concludes that more than 50% students are facing the problems in ERP.

References


