

TO STUDY THE IMPLEMENTATION OF ERP IN UNIVERSITIES AND COLLEGES

¹Sanjoli Kaushik, ²Dr. Harsh Kumar

¹Research Scholar, Dept. of Computer Science,
Himalayan Garhwal University, Uttarakhand (India)

²Professor, Dept. of Computer Science,
Himalayan Garhwal University, Uttarakhand (India)

ABSTRACT

In the education sector, ERP implementation will benefit both academics and administration. After the industrial revolution, the word "automation" was coined to describe mechanization. Automation is perceived as a single process that can be scaled up quickly by combining processes. The term "automation" refers to the use of a combination of mechanisms and humans to organize or regulate the use of production resources. Automation is the process of optimizing one's business and activities in the manufacturing industry in order to maximize production. Automation is a mechanism that involves automated machines that can perform actions and make decisions without the need for human interference. The word refers to a self-contained computer, instrument, or unit. Automation infrastructure, automated installation, and automation system are not included in the definition.

KEY WORDS: *ERP Implementation, Automation, Optimization, Production, Automatic Installation, Organization.*

INTRODUCTION

A training and development department exists in an enterprise to train business processes for the smooth operation of sales, distribution, and finance, accounting, production, and human resource management. Certain business processers are available to assist vendors and customers. It is also stated that when information technology is required to operate a company, internal processes are defined and implemented using ERP. Supply chain management (SCM) is used by several

companies to handle their suppliers. Extended ERP refers to the combination of ERP, SCM, and CRM.

ERP AND ITS MODULE

The ERP comes with a variety of modules, each of which varies from one domain to the next. The aim of ERP in an organization is for it to run smoothly.

- Finance asset management
- Materials management
- Production management
- Project management
- Quality management
- Maintenance management
- Sales and distribution
- ERP applied in any company will support different functions of operation in a platform such as:
 - Human Resource Management (HRM); Customer Relationship Management (CRM); and so on.

These modules are typically focused on a single role or department within a company. ERPs are made up of various packages, each with its own set of functions tailored to the needs of specific industries. Process industry, coal, steel, car, textile, cement, banking, finance, and so on are just a few of the industries for which ERP modules provide solutions. The functional modules in each of these packages are responsible for only one purpose. However, depending on the complexity of the implementation, these functional modules may be integrated later.

Some of the functional modules of ERP have been defined in the following section to provide a thoughtful information flow for automating business processes.

ERP FUNCTIONAL MODULES

Various features are included in the ERP software module. ERP is used in functional areas of an enterprise based on the requirements.

Finance, manufacturing, marketing, quality control, sales, distribution, material management, and other modules make up a general ERP module.

- Sales and marketing,
- Financial,
- Manufacturing,
- Human resource,
- Education
- Marketing

ERP kits come with a variety of modules. ERP kits come in a variety of sizes and can be tailored to the needs of individual businesses. ERP aids in the automation of processes by connecting all divisions and functions to a single board.

ERP IN HIGHER EDUCATION INSTITUTIONS

Many organizations have been drawn to ERP systems because they provide a solution for a variety of challenges and the organization's development. The ERP system's appeal may be attributed to a variety of factors:

- Control
- Information accuracy
- Centralized systems
- Real time

ERP systems in the business domain have attracted customers, while ERP implementation at universities has a number of issues. Since the middle of the 1990s, universities have been working on ERP implementation. This was attributed to the administration's legacy systems and academic activities.

The mechanism that takes place in universities is not, in general, a collective effort. There are various divisions, some of which operate independently and others which are inter-disciplinary. This makes bringing all of the divisions, research activities, and administrative work under one roof a difficult job for the ERP vendor. There are other issues that arise as a result of university

IT staff not being exposed to technology as much as IT personnel in large corporations. As a result, there is a significant gap in the testing and training of ERPs in universities. PeopleSoft was a company that sold ERP systems to colleges and universities.

RESEARCH METHODOLOGY

ERP implementation in higher education institutions faces a number of challenges, including fostering conditions, social impact, and ERP end users' age. This study aims to recognize and concentrate on user acceptance of ERP implementation in New Delhi's higher educational institutions. As a result, the individual involved in using ERP in a New Delhi educational institution is the unit of research. According to the available literature, there are benefits and drawbacks to implementing ERP in higher education institutions. Many colleges, on the other hand, have successfully introduced ERP for educational institution administration.

The problems in ERP functions and user acceptance must be investigated. This study could aid higher education institutions in avoiding significant financial losses. In addition, the research will look at user friendliness, technological advancements, and ERP approaches, procedures, and strategies used in the current educational system.

Automation support process (ERP) is needed in the higher education sector to combat academic and administrative functions. In fact, the automation support process has a number of flaws (ERP). This is due to technological interference and human nature. Higher education agencies spend a lot of money on ERP implementation. However, the problem of user acceptance of ERP implementation in the Indian context with regard to the demography studied for this study is uncommon. Previous research in the field of ERP in higher education has shown that there is potential to conduct a study for the benefit of higher educational institutions. The aim of this research is to discover the factors that affect ERP users as well as the challenges they face. The research gap concerns the extent to which automation and emerging technologies contribute to higher education and administration performance.

Tables display the results of the item review based on demographic characteristics of respondents.

RESPONDENT CLASSIFICATION BASED ON THE TYPE OF INSTITUTION

Particulars	No of Respondents	Percentage
State University	46	12.9
Deemed University	311	87.1
Total	357	100.0

87.1 percent of respondents are from colleges, while 12.9 percent are from state universities. The results indicate that respondents from considered universities make up a larger percentage of the total.

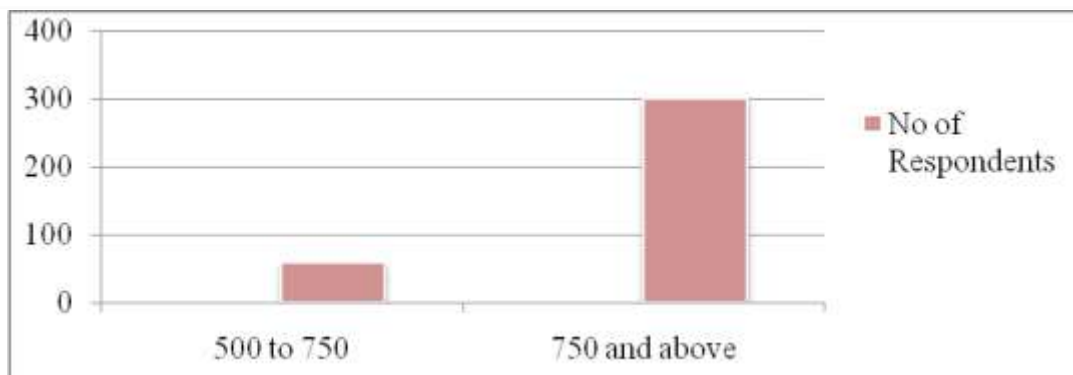
RESPONDENTS ARE CLASSIFIED BY THEIR AGE

Particulars	No of Respondents	Percentage
Below 30	46	12.9
31-40	184	51.5
41-50	81	22.7
Above 50	46	12.9
Total	357	100.0

According to the age of the respondents, 64.4 percent are under 40 years old, 22.7 percent are between 41 and 50 years old, and 12.9 percent are over 50 years old. The age range of 31 to 40 has the highest frequency.

NUMBER OF STUDENTS IN THE INSTITUTION ON AVERAGE

Particulars	No of Respondents	Percentage
500 to 750	57	16.0
750 and above	300	84.0
Total	357	100.0

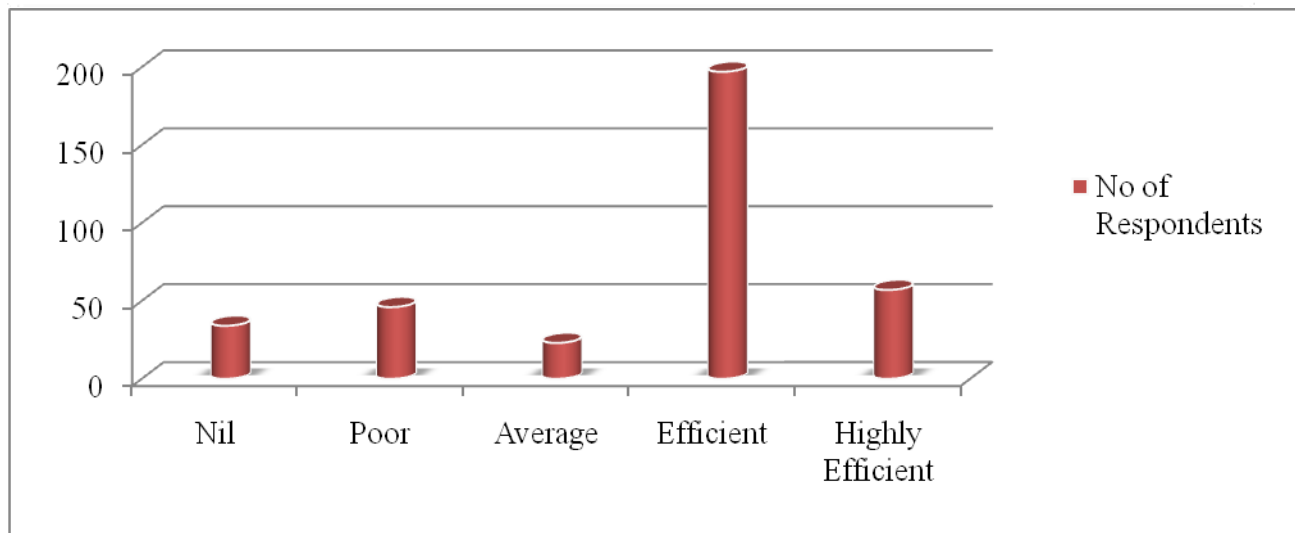


According to the report, 84 percent of institutions have a student strength of more than 750, while 16 percent have a student strength of less than 750. This is consistent with the findings of table 4.11, which revealed that the institution had a significant number of workers.

RESULTS AND DISCUSSION

RESPONDENTS PROFICIENCY IN COMPUTER SKILLS

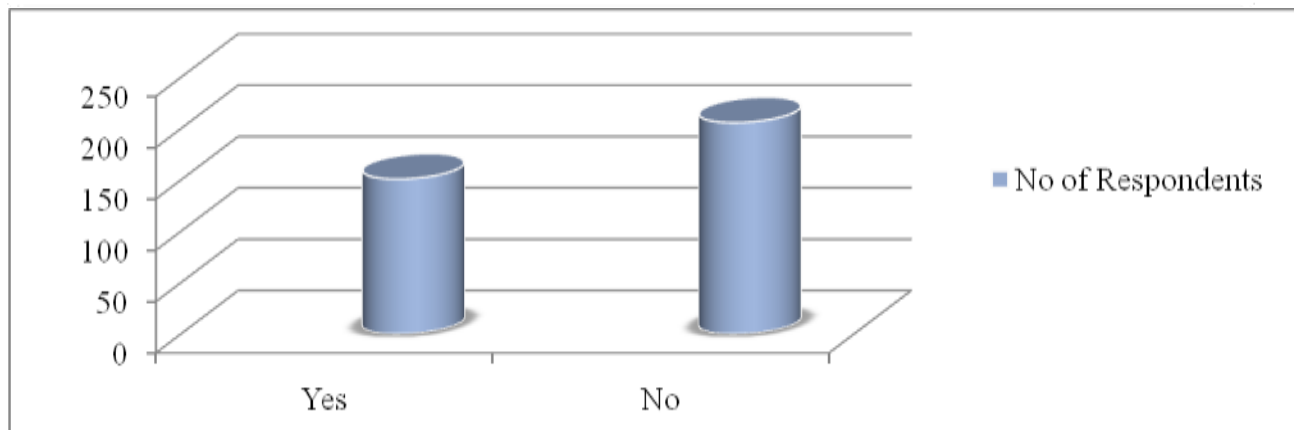
Proficiency in computer skills	No of Respondents	Percentage
Nil	34	9.5
Poor	46	12.9
Average	23	6.4
Efficient	197	55.2
Highly Efficient	57	16.0
Total	357	100.0



55.2 percent of respondents were proficient in computer skills, 16 percent were extremely proficient in computer skills, 12.9 percent of respondents were low in computer skills, 9.5 percent of respondents had no proficiency, and 6.4 percent of respondents had average computer skills.

RESPONDENT CLASSIFICATION BASED ON ANY QUALIFIED CERTIFICATION COURSE OR TRAINING PROGRAM COMPLETED TO ASSIST THE INSTITUTION'S AUTOMATION TECHNOLOGY

Particulars	No of Respondents	Percentage
Yes	151	42.3
No	206	57.7
Total	357	100.0



The training program had been completed by 42.3 percent of respondents, while the remaining respondents had not completed any training.

PERFORMANCE EXPECTANCY MEAN VALUE

Performance Expectancy	N	Mean Value
ERP is useful to complete administrative task in education institution	357	4.87
ERP is useful to complete the academic task in education institution	357	4.80
ERP reduces the work load quickly	357	4.12
ERP decreases the workload	357	4.35
ERP help to increase the quality of work	357	4.45

We may deduce from the study that the Performance Expectancy is valued highly. The average value is 4.12, with a range of 4.12 to 4.87. The rating is based on the average of each variable's score.

MEAN VALUE ON ORGANIZATIONAL IMPLEMENTATION PERCEPTION

ORGANISATIONAL IMPLEMENTATION	N	Mean Value
ERP performance is evaluated periodically by the organization	357	4.86
Users opinions are considered for the software update	357	4.80
ERP new updates are without training is implemented	357	4.12
ERP new updates with training can help for better usage	357	4.35
ERP new updates are for the betterment of the organization	357	4.44

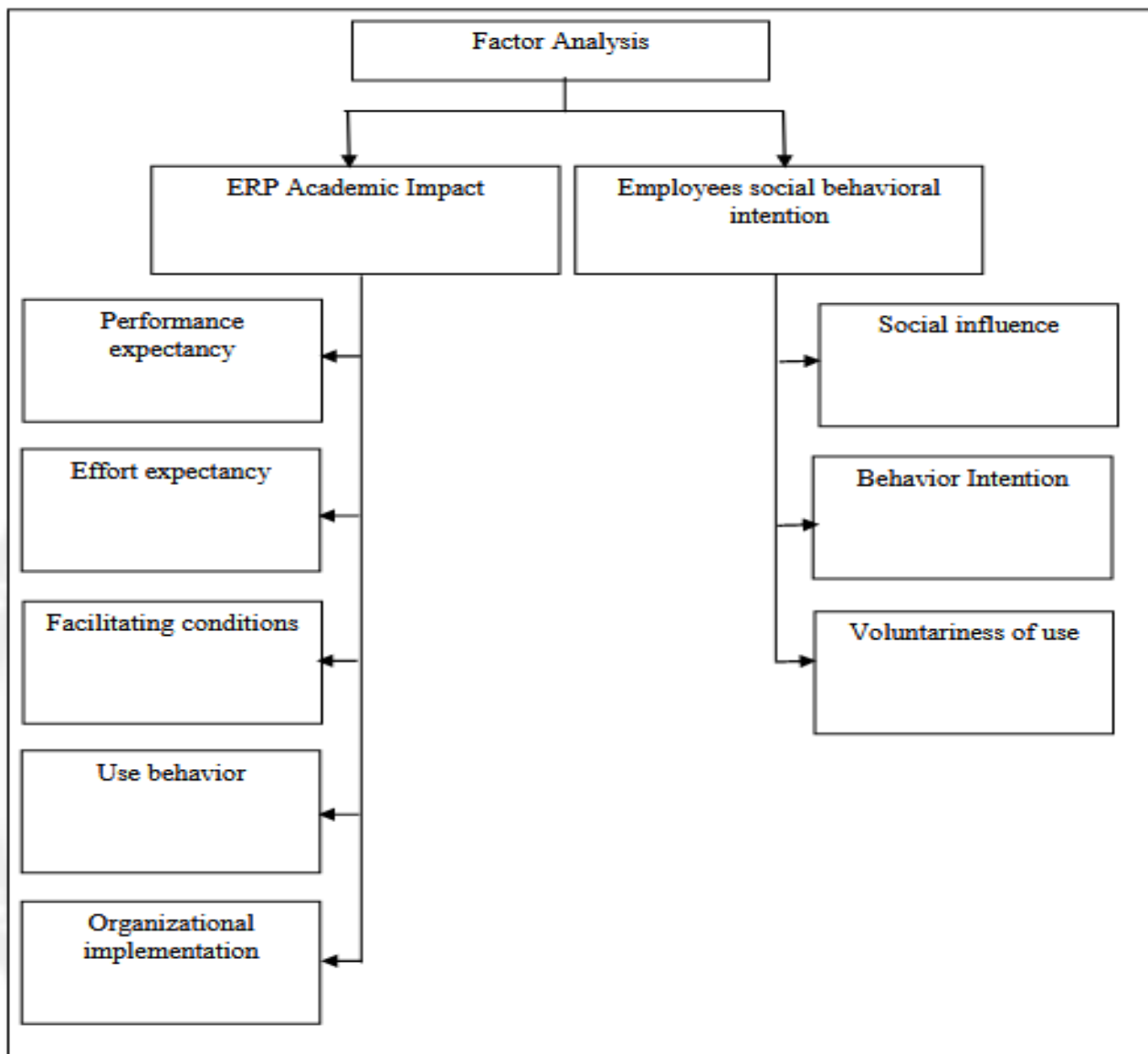
We may deduce from the research that Organizational Implementation is valued highly. The average value is 4.12, with a scale of 4.12 to 4.86.

RANK ON THE PERCEPTION OF ORGANIZATIONAL IMPLEMENTATION

ORGANISATIONAL IMPLEMENTATION	Rank
ERP performance is evaluated periodically by the organization	1
Users opinions are considered for the software update	2
ERP new updates are for the betterment of the organization	3
ERP new updates with training can help for better usage	4
ERP new updates are without training is implemented	5

The information shows how the products rate in terms of organizational execution. Users are aware that the organization evaluates ERP performance on a regular basis and that they are provided with training for new ERP updates.

FACTOR ANALYSIS



SUMMARY OF FINDINGS, AND CONCLUSION

The results of a survey of respondents employed in ERP solutions in higher education institutions are presented in this chapter. The implications and interpretation of the different instruments used in the study are also discussed in this section.

Demographic and Professional Factors Percentage Analysis

The higher percentage of respondents from deemed universities indicate that private institutions value ERP implementation in the higher education sector. According to a percentage study of age, 64.4 percent of workers are under 40 years old, 22.7 percent are between 41 and 50 years old, and 12.9 percent are over 50 years old. The majority of ERP users in this sample are under the age of 40. Employees can quickly embrace and learn ERP packages with limited training programs, according to the report, which may be due to their technical journey. This category can be classified as computer and mobile generation respondents. The sample population shows that male workers outnumber female employees. As a result, even part-time workers have the opportunity to upgrade their academic functionalities in ERP. There are workers with a combined career experience of more than 12 years. Since they may be from the radio age, these respondents may need additional ERP implementation training in higher education.

Employees' functional departments had major differences in their views of ERP implementation in higher educational institutions, according to an F-test.

- According to the findings, user acceptance of ERP implementation in higher educational institutions varies depending on the age of the institution. According to the findings, there is an important relationship between the age of the institution and user acceptance of ERP implementation in higher education institutions.
- The findings show that there are high levels of annual income expectations and user acceptance of ERP implementation in higher education institutions. The mean value indicates that respondents with annual salaries of more than three lakhs have positive

attitudes toward ERP implementation in higher education institutions. There is no substantial difference between annual income expectations and user acceptance of ERP implementation in higher educational institutions, according to an F-test.

- The findings show that demographic variables have a strong relationship with user acceptance of ERP implementation in higher education institutions.

REFERENCES

- Holland, C. P. and Light, B. 2019. A basic achievement factors model for ERP execution. *IEEE Software*, 16(3), 30-36.
- Yasser Jarrar, "ERP Implementation and Critical Success Factors, The Role and Impact of Business Process Management", *Proceedings of The IEE International Conference on Management of Innovation and Technology*, Singapore, pp. 167-178, 2019.
- Schrage M., (2019) "The Real Problem with Computer", *Harvard Business Review*, Vol. 75, No.5, pp.178-188.
- Stratopoulos T., Dehning B., (2019) "Does effective interest in data innovation tackle the efficiency oddity?", *Information and Management* , Vol. 38, No. 2, pp.103-117.
- Brynjolfsson E., (2019) "The Productivity Paradox of Information Technology", *Communications of the ACM* , Vol. 36, No. 12, pp.67-77.
- Lee, S. C and Lee, H. G. (2019). The significance of progress the board after ERP execution: a data ability viewpoint. In: R. Agarwal, L.Kirsch and J. I. DeGross (Eds.), *Proceedings of the 25th. Worldwide Conference on Information Systems*, Washington, DC: ICIS Press (AIS e-Library), 939-954.
- Ward, J . and Peppard, J. (2019). Brain the gap:diagnosing the connection between the IT association and the remainder of the business. *Diary of Strategic Information Systems*, 8(1), 29-60
- Willcocks, L. P. and Sykes, R. (2019). The part of the CIO and IT work in ERP. *Correspondences of the ACM*, 43(4), 32-38.