

ERP Management System of Educational Institutes

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Abstract—With fierce competition in today’s business world, organizations try to improve their overall efficiency all the time. A system for enterprise resource planning (ERP) brings together finance, human resource, supply chain management and customer relations into a single, unified network. This research project aims to explore the implementation, benefits, and challenges of ERP system in organization.

The study will provide a comprehensive analysis of how ERP systems can streamline operation by automating and integrating core business process, leading to improve data accuracy, real-time information access, and better decision –making capabilities. It will examine the impact of ERP systems on organizational performance, employee productivity, and customer satisfaction.

Through a combination of qualitative and quantitates research method including case studies, surveys and interviews with industry professionals, the project will identify best practice and potential pitfalls in ERP adoption. Ultimately, this research is to contribute to the understanding of ERP management

Keywords: ERP System, ERP Survey, Enterprise Resource Planning.

I. INTRODUCTION

“Software that covers manufacturing, the general ledger, purchasing, warehousing, transportation, order entry, accounts receivable & payable and human resources” may be included in an Enterprise Resources Planning (ERP) system. ERP in the manufacturing industry works through packaged systems instead of making use of privately written software. Depending on how compatible they are, ERP modules can integrate with an organization’s software by varying levels of work. An ERP system is a general name for a combined enterprise computing system. This is a software system that is set up for instant use by businesses.

What Enterprise needs from its information systems. The system in place that allows information to be passed among the varied functions within a company. All ERP systems use the common database and are

managed through one development platform. Such systems are tuned to fit the workflows of the supporting company.

Education is an important industry in our economy and it’s a key part of every society; thus, you need an Education ERP for total automation & digitalization of the campus. Our software proposes that a government with efficiency and openness demonstrates good governance well. You will find that ERP is simple to use, can be put in place quickly and gives you the best outcomes. The software product from Education ERP enables a full E-Education System. School, college and universities are expected to give more without increasing spending. A school can teach about Enterprise Resource Planning (ERP) even without a real system. From their experience, the authors observe that interacting with business computers improves the students’ knowledge, since it is experiential learning. By learning, students enhance their skills that companies look for when conducting recruiting activities. The ERP system serves to digitalize all the tasks that were once filled in by hand.

All information is uploaded to the system or computer, so employees do not need to split their duties among different parts. With the database you can store large amounts of data alongside your information. The file is easy and flexible to manage. The records are always updated.

Making data and procedures accessible is as elementary as can be.

Significance of ERP Management system

Financial Management: With an ERP system, businesses handle financial transactions, make financial statements, manage tangible and intangible assets and watch over money flowing in and out of the organization.

Supply Chain Management: “ERP systems help to monitor the stock levels, track inventory movement, manage the movement of goods, and automate the purchasing process”.

Human Resources: In companies, an ERP system is helpful because it can keep employee data, automatically process payroll and oversee the recruitment and onboarding process.

Customer Relationship Management (CRM): With an ERP system, sales processes can be automated, marketing efforts are handled through automation, customer communication is tracked and customer happiness is increased.

Project Management: Project planning and scheduling are supported by ERP systems which also keep track of how much time and money is being used on each project.

Manufacturing: Manufacturing plans are made with ERP systems, the list of materials for production is formed and ERP helps to observe the production process.

II. LITERATURE REVIEW

Enterprise Resource Planning is what ERP means. “The enterprise resource planning (ERP) system is business management software mainly used to look after the main data of each department”. The ERP system uses data to record the business’s resources: raw materials, production capacity, cash and items in orders like purchase orders, payroll and Sales. Since all applications on ERP share the data, departments like manufacturing, purchasing, accounting and Sales can all access this information. For that reason, it is at the heart of the data used. The ERP helps to pass information between business functions and links with outside parties.

The ERP System is hosted online and uses a functional and beautiful Interface System for its users. It is hoped that this system will replace the manual approach.

Automated web system used in a system of schools. In addition, this system takes care of storing, managing and retrieving data.

Short-term and long-term data are safely and correctly set up as needed. The ERP System is a single-entry point for each teacher in all schools. All the departments before operated separately. Accessing the information gathered by such systems in a group way is impossible.

The current system will not work if students are absent. After that, the student’s performance may suffer. Because so much data is present, maintaining, updating and searching it becomes a significant challenge. Because the current system is not

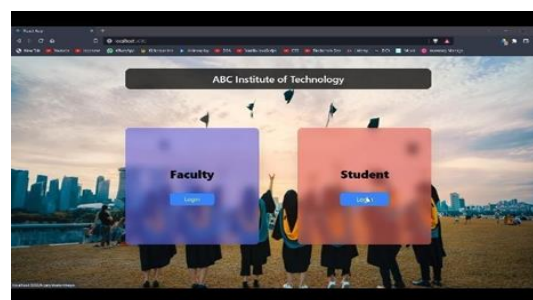
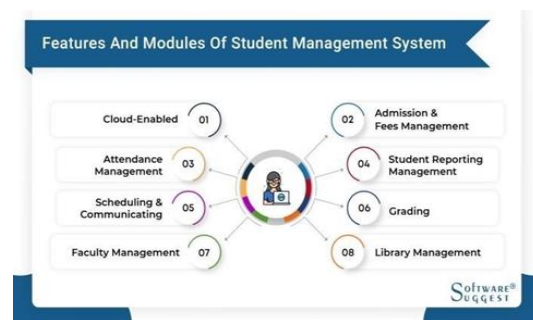
automatic, these are the main issues it faces: -

1. “It is redundancy of the data.
2. It’s difficulty in updating the data.
3. It is non-centralized data.
4. The delay in retrieving information.
5. The problem for keeping the data.
6. It is not proper retrieval of information”.

III. PROPOSED OUTCOMES

IN THE PROPOSED ERP SYSTEM THE WORK WILL BE CARRIED OUT AS FOLLOWS:

- i. Student data management.
- ii. Faculty data management.
- iii. Subjects, results and attendance management.
- iv. Creating test, uploading marks and marking attendance management



The screenshot shows a VS Code editor with a Vue.js application. The file explorer on the left shows the project structure: `src` (with `assets`, `components`, `views`, and `styles` subfolders) and `app.js`. The `app.js` file contains the following code:

```

1  const App = () => {
2    // Routes
3    const routes = [
4      {
5        path: '/faculty/update/password',
6        element: <FacultyPassword />,
7      },
8      {
9        path: '/faculty/create/stu',
10       element: <CreateStu />,
11     },
12     {
13       path: '/faculty/markattendance',
14       element: <MarkAttendance />,
15     },
16   ],
17   // Student
18   const studentLogin = {
19     path: '/login/studentlogin',
20     element: <StudentLogin />,
21   },
22   const studentForm = {
23     path: '/studentForm',
24     element: <StudentForm />,
25   },
26   const studentProfile = {
27     path: '/student/profile',
28     element: <StudentProfile />,
29   },
30   const studentSubject = {
31     path: '/student/subject',
32     element: <StudentSubject />,
33   },
34   const studentSubjectList = {
35     path: '/student/subjectlist',
36     element: <SubjectList />,
37   },
38   const studentTestResult = {
39     path: '/student/testresult',
40     element: <TestResult />,
41   },
42   const studentAttendance = {
43     path: '/student/attendance',
44     element: <Attendance />,
45   },
46 ];
47
48 export default App;

```

The interface consists of a sidebar with navigation links: Home, Faculty, Student, and Profile. The main content area displays a table of students with columns for ID, Name, Email, and Age. The table contains three rows of data.

“The main purpose of the project is to develop a system that lets educational institutions handle student”, teacher and management tasks and notices easily. People in their current location will enjoy more secure and reliable work due to the new approach. This becomes particularly useful during the pandemic. Advanced intelligence applied to this process could allow the organizations to pinpoint where their management could be stronger and pass that analysis to the board for improvements. So, the

main difficulty in keeping the work well-managed by the administrator is resolved. It used to be awkward to handle both the time table and daily schedule before. "As a result of this web-based application, the administrator can breeze through this task", putting in less work and still saving a lot of time. By reducing the time and eliminating manual computations, the reports can be produced often and on request and work is optimized. The storage facility will simplify the operator's tasks. As a result, the administrative system will ease many of the administrator's previous tasks. An effective enterprise resource planning (ERP) system brings many important benefits. Improving technology is not key to the future of successful ERP implementation; it depends more on preparing teams and companies to use ERP in ways that help achieve their defined goals.

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