The ERP Software for Enterprises

Sagar Narnaware

Master in Computer Application Tulsiramji Gaikwad Patil College Of Engineering And Technology Mohgaon, Nagpur, India

Abstract: Enterprise Resource Planning (ERP) is an integrated software solution offered by a vendor to support the seamless integration of information flows through an organization. The ERP Software is Web Application enables enterprises to manage their resources with a complete control and security. The ERP is an automation system for the enterprises which provide greater speed to manage enterprises easily. The ERP provides data security, data integration, and authorization and so on. The ERP provide good interface to user so they can work easily. This is the web application so it can be possible to work from anywhere, anytime. It provides facility to user to maintain their transactions for future uses.

Keywords: Introduction, Goals, History, Evaluation, Functions, Features, Advantages, Disadvantages, Future Scope, Conclusion.

I. Introduction

Enterprise Resource Planning (ERP) is a software solution becoming necessary to implement with the passage of time. This software completely transforms a business into the digital world. This is a software solution used by all type of industries and businesses. Whether you’re running a small organization or large enterprises, ERP is the best tool available for efficient goal achievement. It efficiently manages the organizational day to day activities that include accounts, inventory, management, and others. The ERP package is designed to support and integrate almost every functional area of a business process such as procurement of goods and services, sale and distribution, finance, accountings, human resource, manufacturing, production planning, logistics & warehouse management. ERP systems are specially designed according to a defined data structure and provide access to data from authorized users. It has centralized all of the data and distributes it accordingly. It allows the management and other stakeholders to have complete trust in data accuracy.

II. Goals

1. Efficiency
2. Cost Reduction
3. Quality
4. Profitability
5. Decentralization

III. History

ERP got its start from MRP with a core focus on Manufacturing; with time it grew into something much larger. In 1990, The Gartner Group, an information technology research and advisory firm coined the acronym “ERP”. By the mid 1990’s ERP systems had grown from MRP and manufacturing roots into a system that covered all of the core functions of a company such as; accounting, maintenance, human resources, and more.

ERP systems originally dealt with functions that did not affect customers such as IT, accounting, and HR processes but as time went on, ERP systems evolved and began to take on functions such as CRM, ecommerce, Supplier Relations, and others. This changed everything; now companies could have all if their information in one
place rather than having separate computer systems for each business function, solving numerous issues that were a constant battle with all of the silos or data and disparate systems.

IV. Evaluation
During early phases of development, integrated solutions were designed for particular process areas such as
- Material Management – the integrated system was known as Material Requirement Planning (MRP)
- Manufacturing – the integrated system was known as Manufacturing Resource Planning

However, none of the integrated systems came with a complete solution for an organization covering major business process areas. In early 1990’s, the Gartner Group first used the acronym ERP. By mid-1990’s, ERP systems addressed all the core enterprise functions.

In the early stages, most of the ERP solutions were focused on automating back office functions that were not directly affecting customers or general public. Later, front office functions such as customer relationship management and e-business systems were integrated.

V. Functions

VI. Features
1. Integration: ERP provides a fully-integrated, intuitive platform through which you can analyze, monitor and conduct the majority of data-driven tasks. Through a single database, ERP collects, stores and analyzes data across all departments.
2. Automation: This ERP capability automates common tedious tasks including order entry, payroll, accounting, invoicing, reporting and more.
3. Data Analysis: ERP analyzes data relating to all business operations, including client data, production statistics, sales data and much more.
4. Reporting: ERP provides detailed reports that are intuitive, actionable and relevant.
5. Customer Relationship Management: CRM is a great option for companies whose customer base has become too large for spreadsheets. Spreadsheets work well until you find yourself spending more time updating it than actually using it to find information.
6. Accounting: ERP systems help manage processes like accounts payable, accounts receivable, fixed-asset management, risk management and tax management.
7. Tracking and Visibility: Many ERP systems today have the technology to track finished products as well as raw materials from manufacture to delivery. Much of this is made possible by the high level of integration ERP systems provide.

VII. Advantages
1. Focused It Costs: Although ERP is often a large investment, it can unify your IT costs and improve efficiency. Instead of spending resources on multiple systems that all need dedicated staff, infrastructure, support teams and licenses, you can focus all these costs into one ERP.
2. Total Visibility: This benefit of ERP is one of the biggest selling points for the software. ERP allows total
access to every important process in your business by making data from every department easily accessible to you and your senior management.

3. **Improved Reporting And Planning**: Along with improved visibility, better insight is a major advantage of erp. Implementing an erp suite across departments means your organization has a single, unified reporting system for every process. By having a single source of truth, an erp system can readily generate useful reports and analytics at any time.

4. **Complete Customization**: One of the biggest advantages of enterprise resource planning software in the present day is its modular makeup. Most erp vendors offer several applications that can be implemented together according to business needs. Barring a few exceptions, each application is designed to be able to stand alone or integrate with the larger suite.

5. **Improved Efficiency**: Along with reduced it and training costs, an erp can reduce the time and effort required by your workforce to carry out their daily activities. Properly implemented, an erp can greatly reduce or eliminate repetitive manual processes, thus freeing up team members to focus on revenue-affecting tasks.

6. **Customer Service**: Your company’s clients also receive erp system benefits, even if they don’t know it. Because client information is centralized and streamlined, your sales team will be able to focus on building and maintaining customer relationships instead of maintaining spreadsheets.

7. **Data Security And Quality**: One of the biggest advantages of an erp system is data security. After all, at the heart of the erp concept is data. Sharing data across functional silos such as customer service, sales, marketing and business development enhances collaboration throughout a company.

8. **Improved Collaboration And Workflows**: Collaboration is an essential part of a thriving business. But more often than not, companies find their teams working in silos simply because collaboration requires more time and effort.

9. **Standardized Business Processes**: Most erp systems are developed according to industry best practices. These tried-and-true processes bring major benefits to the table for businesses of all sizes. It also allows businesses to standardize their own processes and systems, which further enhances productivity and efficiency.

10. **Facilitated Regulatory Compliance**: One of the most difficult ongoing tasks for businesses is meeting compliance requirements. Maintaining perfect accuracy within your financial records isn’t exactly easy, but needs to be done nevertheless.

11. **Improved Supply Chain Management**: For companies that deal with the moving of physical inventory and production, an erp system bolsters supply chain management in a variety of ways. This improvement results in shortened lead times, more on-time deliveries and many other benefits that enhance the overall operation and success of your business.

12. **Superior Scalability**: To ensure the ongoing success of your business, you have to keep an eye on the future. All too often, businesses fail to plan properly and experience serious growing pains that pose serious roadblocks to whatever progress they’re enjoying.

**VIII. Dis-Advantages**

1. **Cost of the Software**: If you choose to invest in a traditional ERP, you could easily end up spending five figures for a single license. For many, this is by far the biggest disadvantage to ERP software. The upfront cost of the software alone can be prohibitively high, especially for small-to-medium-sized businesses.

2. **Cost of Implementation and Maintenance**: While the software alone is a major investment, the implementation process can cost nearly four times as much. Businesses must take into account the cost of manpower and time necessary for a successful deployment.

3. **Customization Process**: Customization is one of the best aspects of ERP, but it can easily and quickly get out of hand. Customizing your ERP software takes a lot of time, effort, expertise and money.
4. **Complexity**: ERP software solutions provide numerous capabilities, but that also means the software can be complex and difficult to use. It’s not unheard of for companies to get swept up in all the potential of an ERP but fail to plan properly for its implementation.

**IX. Future Scopes**

1. **Greater Mobility**: You would have great difficulty trying to refute the fact that we live in a world full of devices. Users from all generations are now using them, and it may not be a giant assumption to say that they will be wholly reliant upon them in the very near future.

2. **Rise of eCommerce**: No different to Mobility tools, users have developed an expectation of having an “easy to use” experience when transacting with organisations. B2B (Business to Business) and B2C (Business to Consumer) solutions will also become more integral to an ERP solution.

3. **Integrated Solutions**: Whilst most ERP systems can capture and store information, there are many that don’t have the tools to analyse this vast amount of data. Whilst ERP’s can provide surface level reporting, there are usually a number of people in organisations who need to have a deeper understanding of their operational data.

**X. Conclusion**

Enterprise Resource Planning (ERP) is a system that integrates business functions by managing and organizing organizational data and information. ERP is the most reliable system for the management of data, ensuring its reliability, uniformity, transparency and visibility across the organization. It provides easy to the organizations in maintaining the business data and ensure the access to the integrated valuable business information to all the members of the organizations. ERP software manages important data in an efficient way, avoiding its redundancy and validating the entire process. The appropriate management of information helps the organization in saving the cost and increasing productivity.

**References**


