Enterprise Resource Planning (ERP)

Report

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TG/2018/392
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What is Enterprise Resource Planning (ERP)?

ERP is a centralized system, which controls all business processes in a large scale organization or a company. An ERP system has different modules for different activities, they can be identified as core software components. When those modules integrated into a one big software system, it can be called as ERP system.

Usually, ERP systems are very expensive. This concept is widely popular and used by many major businesses nowadays. Some modern ERP systems has included next generation technologies like AI systems.

Functionality of an ERP system

ERP system is based on a centralised database system. Instead of maintaining different databases for different departments or sections in organization, ERP system has a main centralized database which can be accessed by any department or section. Because of that, it is not necessary to interconnect different databases of different departments. All the data is up to date with the main database and can be accessed in real time by any other authorised department or section.

Benefits of an ERP System

An ERP system has a lot of benefits when comparing with disparate systems. They are,

1. Improve efficiency by automated data collection.
2. Helps to manage complex business processes easily.
3. Provides better business intelligence.
4. Increasing customer service capabilities.
5. Reduce the risk by better compliance. etc.

History of ERP

The term Enterprise Resource Planning is introduced in 1990. ERP is preceded by Material Requirements Planning (MRP), developed by Joseph Orlicky as a system for calculating the materials and components needed to manufacture a product.

ERP Implementations

ERP implementation options include **on premises**, **cloud** and a mix of the two, called **hybrid**.

Multi Tiered ERP

Many organizations now run multiple ERP systems under one environment, commonly known as two tier or multi tier ERP.

Reasons for this include geographic differences in the organization, different divisions running different systems or company mergers for which various systems have been brought into one environment.

ERP Vendors

There are many ERP vendors all over the globe and it's a fast growing field. Some of the popular vendors are,

1. SAP (Systems, Applications & Products in Data Processing)
2. Oracle
3. Microsoft Dynamics
4. Epicor Software Corp.
5. Infor
6. IFS (Industrial and Financial Systems)

And many more.

Advantages of ERP

1. Lowering maintain cost.
2. Improve reporting and planning because of the quick and reliable data.
3. Increase data security.
4. Centralized system is easy to maintain instead of scattered systems

Disadvantages of ERP

1. High implementation cost.
2. Requires change management during and after implementation.
3. Implementation difficulties.

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