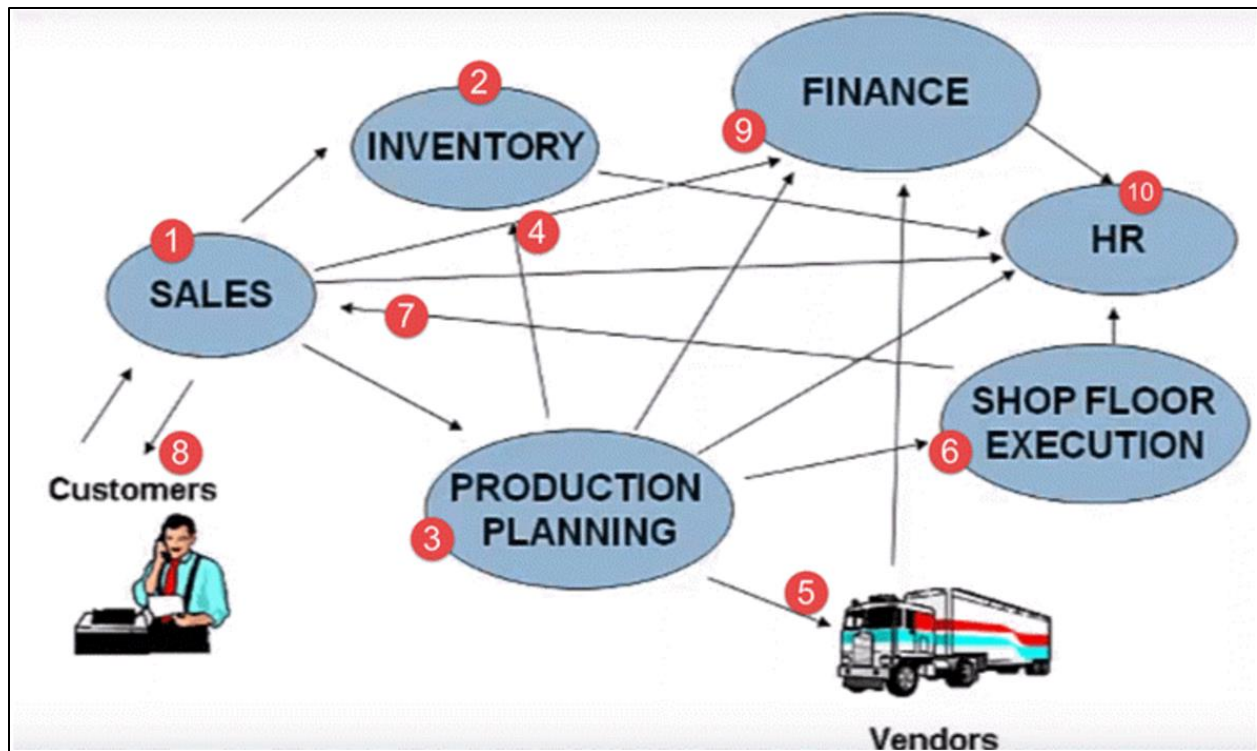


The very basic question to any beginners is why Enterprise Resource Planning also called ERP is required? To answer this, let's examine this typical business scenario.



Suppose a client approaches sales team asking for a particular product. The sales team contacts to inventory department to check the availability of the product. To their surprise, sales team found out that the product is out of stock. So next time this doesn't happen, they have to introduce a SAP ERP tool.

Before we actually see in detail, what ERP is and how ERP can help in your business process, we will understand how different departments are involved in the whole business process, right from the ordering of the raw material – to manufacturing goods – to delivering final goods to the customer.



Here is the whole process that is followed by any business unit.

1. Client contacts the sales team to check the availability of the product
2. Sales team approaches the Inventory department to check for the availability of the product
3. In case the product is out of stock, the sales team approaches the Production Planning Department to manufacture the product
4. The production planning team checks with inventory department for availability of raw material
5. If raw material is not available with inventory, the Production Planning team buys the raw material from the Vendors
6. Then Production Planning forwards the raw materials to the Shop Floor Execution for actual production
7. Once ready, the Shop Floor Team forwards the goods to the Sales Team
8. Sales Team who in turn deliver it to the client
9. The sales team updates the finance with revenue generated by the sale of the product. Production planning team update the finance with payments to be made to different vendors for raw materials.
10. All departments approach the HR for any Human Resource related issue.

That is a typical business process for any manufacturing company. Some key inferences one could derive from the scenario would be.

- It has many departments or business units
- These departments or business units continuously communicate and exchange data with each other
- The success of any organization lies in effective communication, and data exchange, within these departments, as well as associated third party such as vendors, outsourcers, and customers.

Decentralized System

Let's look at Decentralized system first, in a company with Decentralized System of Data Management, there are two major problems –

- Data is maintained locally at the individual departments
- Departments do not have access to information or data of other departments

To identify problems arising due to decentralized Enterprise management system lets look at the same business process again. The customer approaches the sales team for a product and he needs the product, on an urgent basis.

Since it is a decentralized process, the Sales Team do not have any real-time information access to the products availability. So they approach the Inventory department to check the availability of the product. This process takes time and customer chooses another vendor leading to loss of revenue and customer dissatisfaction.

If the product is out of stock and the Sales Team approaches the Production Planning team to manufacture the product for future use. Production Planning Team checks the availability of the raw materials required.

In a decentralized system, raw material information may be separately stored by Production Planning as well as Inventory Department. Thus, data maintenance cost (in this case Raw Material) goes up.

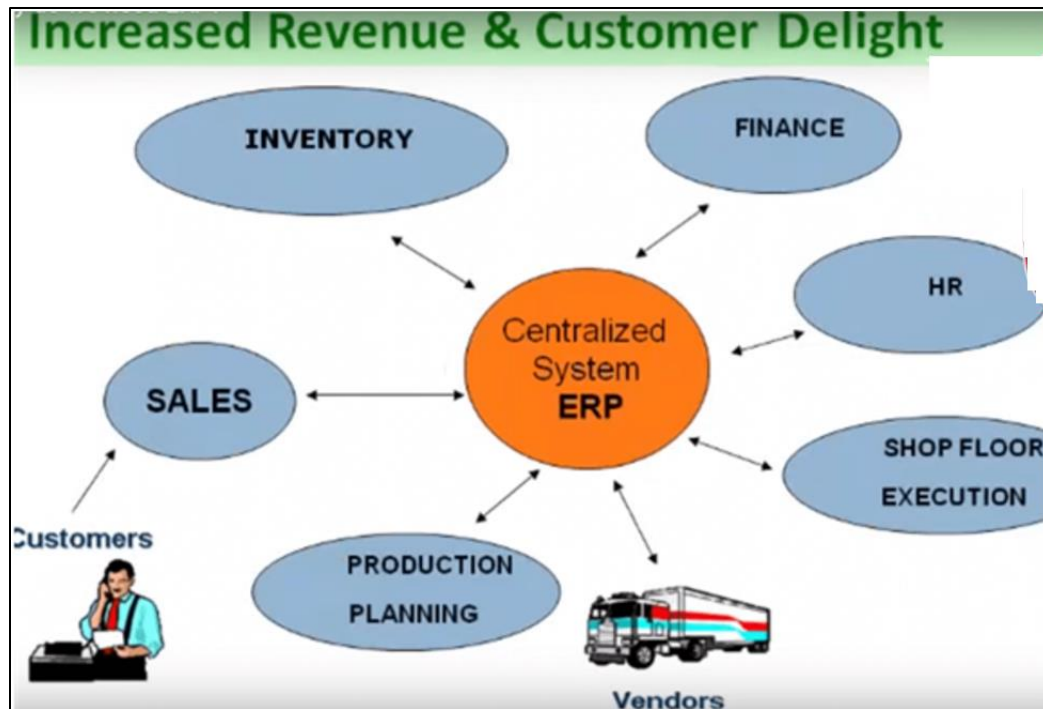
These problems continue in the remaining departments as the processes are not integrated.

Centralized System

In a company, with Centralized System of Information and Data Management.

- 1) Data is maintained at a central location and is shared with various Departments
- 2) Departments have access to information or data of other Departments

Let's look at the same business process again to understand how a Centralized Enterprise System helps to overcome problems posed by a Decentralized Enterprise System.



In this Case, all departments update a Central Information System.

- When Customer approaches the sales team to buy a product on an urgent basis. The Sales Team has real-time information access to the products in inventory which is updated by the Inventory Department in the Centralized System
- Sales Team respond to customer request on time leading to Increased Revenue and Customer Delight.
- In case, manufacturing is required the Sales Team update the Centralized Database, so that all the department remain informed about the product status.
- Production Planning Department is **auto updated** by the Centralized Database for requirements. Production Planning Team checks the availability of the raw materials required via Central Database, which is updated by the Inventory Department.
- Thus, Data Duplication is avoided, and accurate data is made available. The Shop Floor Team update their Man Power Status regularly in the Central Database, which can be accessed by the HR department.
- In case of shortage of workforce, HR team starts recruitment process with considerable lead time to hire a suitable candidate at market price. Thus labor cost goes down.
- While vendors can directly submit their invoices to the Central Enterprise System, which can be accessed by the finance department. Thus, payments are made on time.
- SAP Software is a centralized enterprise management system also known as Enterprise Resource Planning.