

ERP

Enterprise Resource Planning





Meaning and Definition of ERP

Enterprise Resource Planning (ERP) is a business management system that integrates key organizational functions like finance, HR, production, and sales into a single unified platform, enabling better coordination and efficiency.

Key benefits:

- Single centralized database
- Standardized business processes
- Real-time information access

Business Importance of ERP

ERP aligns business strategy with daily operations by automating routine tasks, enabling better planning and decision-making. It also improves coordination between departments, reducing delays and communication gaps.

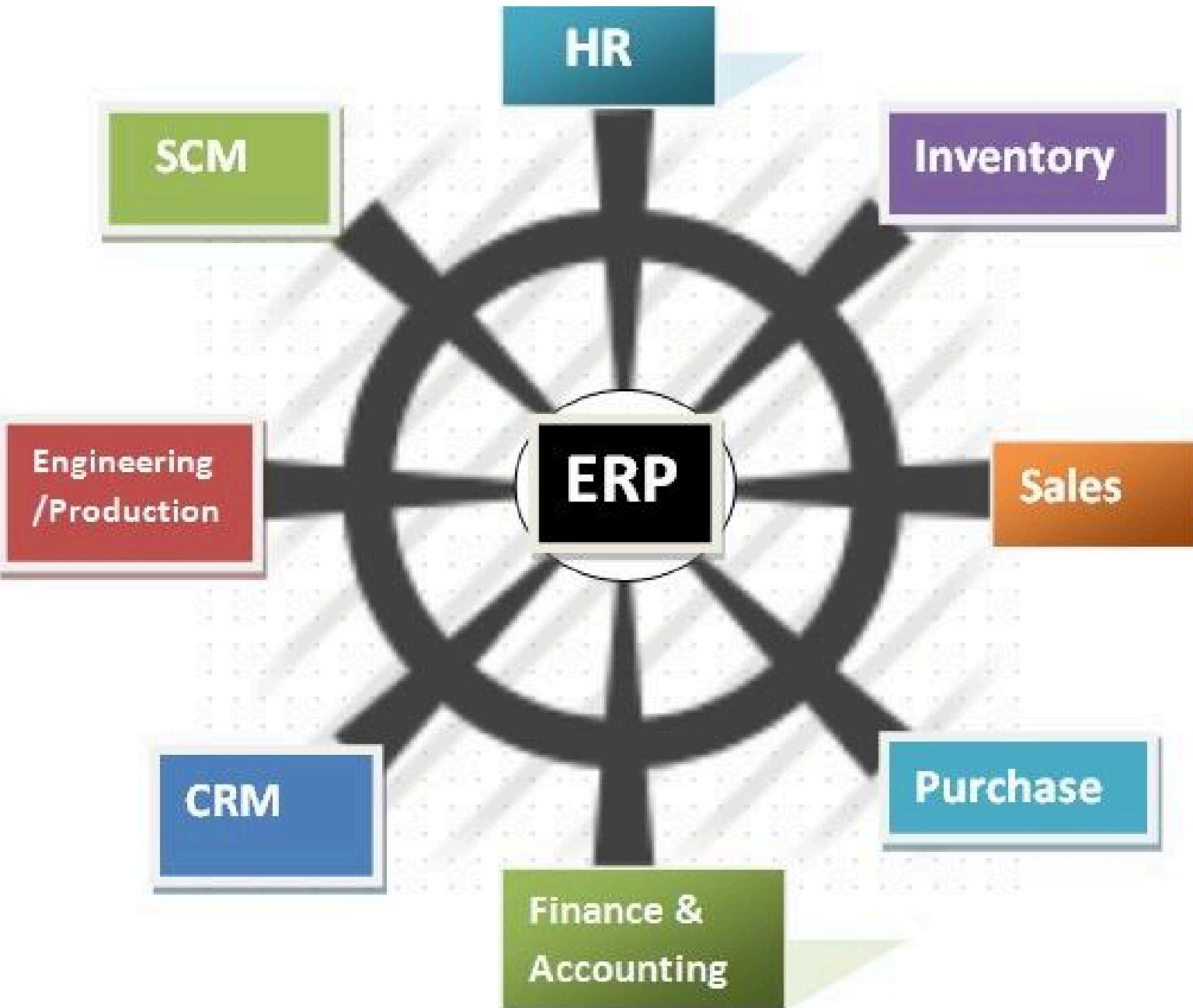
Key benefits:

- Faster decision-making using real-time reports
- Cost control and resource optimization
- Improved customer service and order fulfillment

Core Modules of ERP

ERP integrates key business functions such as :

- Finance & Accounting – budgeting, reports (P&L statements)
- Human Resources – payroll, hiring (salary processing)
- Supply Chain – purchasing, logistics (vendor orders)
- Manufacturing – production, quality (production plans)
- Sales & CRM – sales, customers (order tracking)
- Inventory – stock control (warehouse levels)



How ERP Works

Process Flow

ERP uses a centralized database where data entered in one module automatically updates all related modules, ensuring seamless coordination.

Input :
Business
transactions

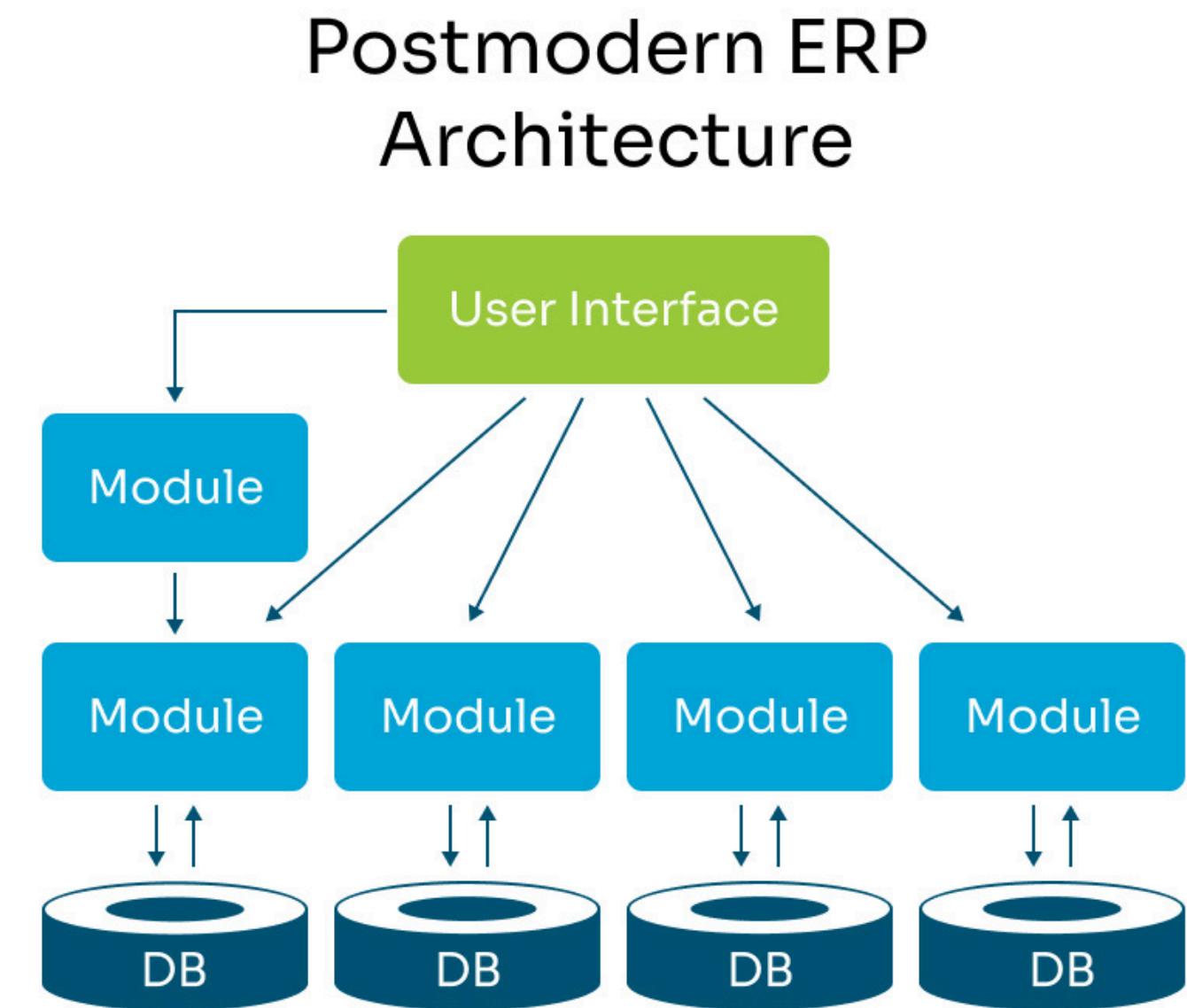
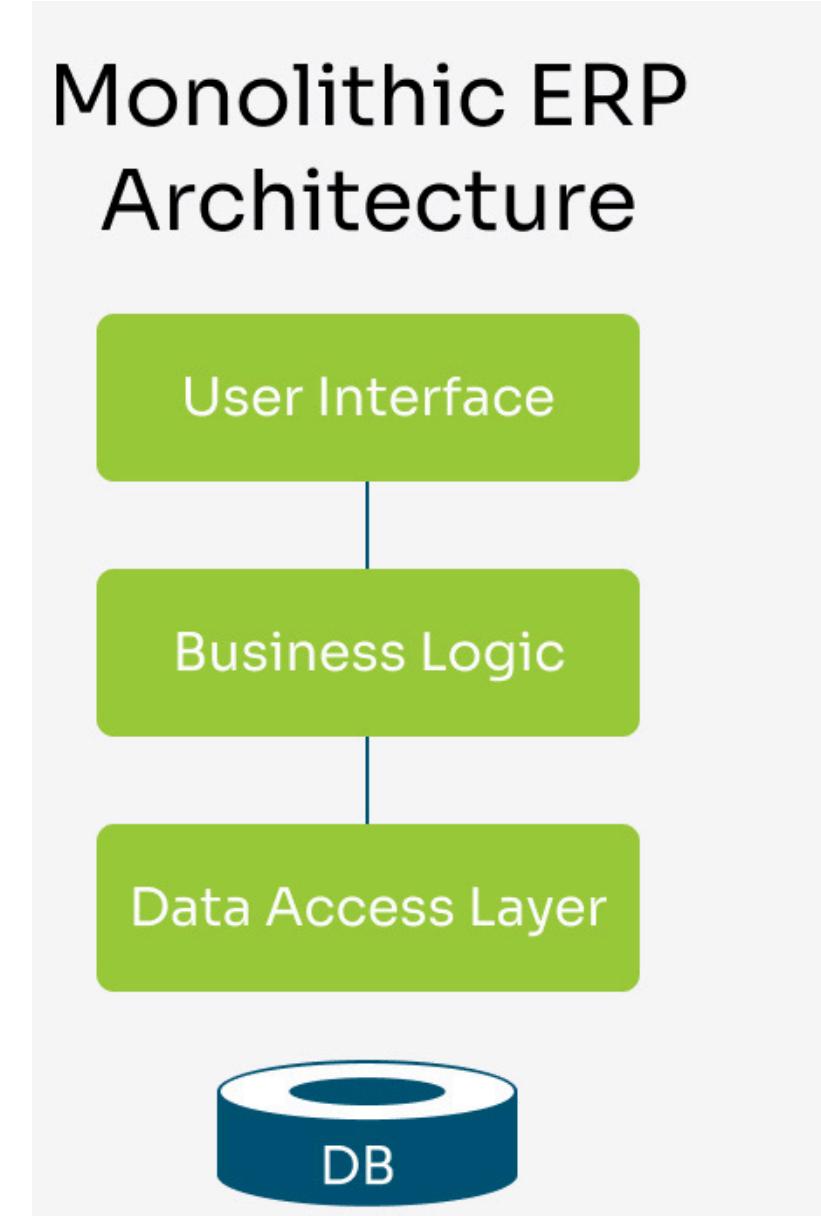
Processing :
System validation &
workflows

Output :
Reports and
dashboards

ERP Architecture

ERP architecture consists of three layers:

- Presentation layer (user interface)
- Application layer (business logic)
- Database layer (data storage)



Types of ERP Systems

ERP solutions are available in different deployment models. Organizations choose based on budget, security needs, and scalability.

On-Premise ERP – Installed within the organization, higher control

Cloud ERP – Hosted online, flexible and cost-effective

Hybrid ERP – Combination of on-premise and cloud

BENEFITS OF ERP FOR BUSINESSES



Scalability for business growth

Improved productivity and efficiency

Better collaboration across departments

Accurate and consistent data

ERP in Indian Business Context

ERP adoption in India is growing across IT, manufacturing, banking, and retail sectors to manage operations and compliance.

Examples :

- IT firms (TCS, Infosys) – project & resource management
- Manufacturing – SAP for production & supply chain
- Banking – financial reporting & consolidation
- MSMEs – cloud ERP like Odoo and Tally

Challenges and Conclusion

ERP requires strong support and training.

It integrates people, processes, and technology for growth.

I

High initial investment

II

Employee resistance to change

III

Data migration and training challenges