

Enterprise Resource Planning ERP

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ERP Business Environment

**Best
practices**

**Demand
driven**

**Bottom line
improvement**

**Improve
Response**



**Quick
decisions**

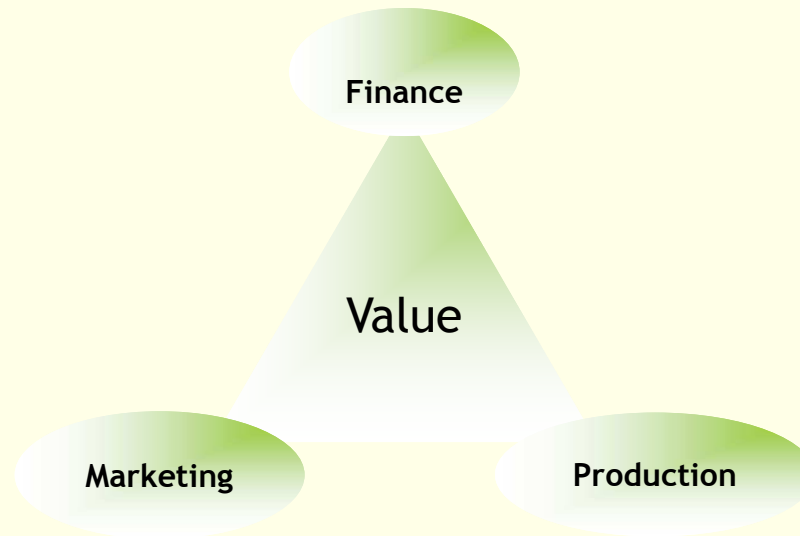
**Real time
Enterprise**

The Challenges

- ✓ Dynamic market
- ✓ Need info quickly & accurately
- ✓ Need to have integrated system
- ✓ Competitive business environment
- ✓ Fast decision making

Conflicts of business

- Reduce inventory
- Large production runs
- Continuous production runs
- Make to order



- High inventory
- Flexible production
- Extensive distribution system

- Long production runs
- Lesser number of products
- High raw material inventory
- High WIP inventory

ERP Perspectives



Business



Technology



Human

Enterprise resource planning

a definition

An accounting oriented information system for identifying and planning the enterprise wide resources needed to make, ship and account for customer orders

APICS Dictionary

Historical background

1980s

- ✓ Computing power was costly
- ✓ Communication technology was naïve
- ✓ Programming was sequential
- ✓ Departments were silos

1990s

- ✓ Sharp reduction in cost of computing power
- ✓ Fast development in communication
- ✓ Object oriented programming
- ✓ Need for integration

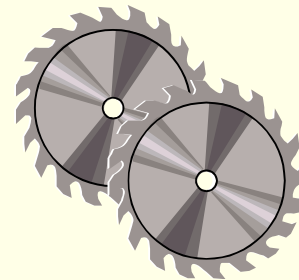
Features of ERP

- /// A Tightly Integrated Product
- /// Process Approach cutting across Modules(departments)
- /// Data is entered only once
- /// All related activities run in the background using this data

Components of ERP



People



Process



Technology

Physical elements of ERP

- **Network**

- Physical media
- Network devices such as switches, routers

- **Hardware**

- Servers HP, IBM, Sun
- Clients NT, 95,98, Apple

- **Software**

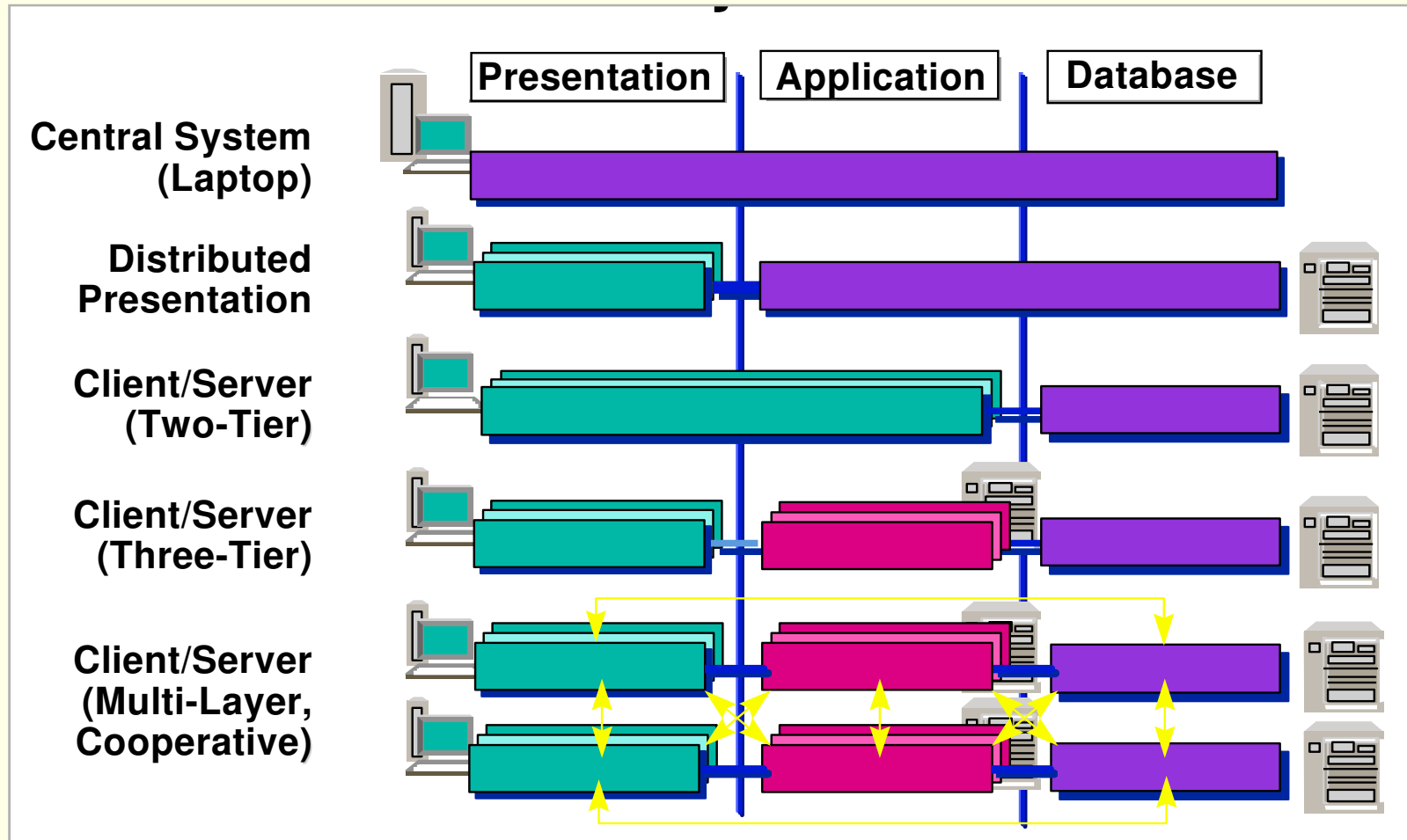
- Operating system NT, Unix, Linux
- Database Oracle, DB2, Informix, SQL
- ERP software SAP, Oracle, JD Edwards, Mfg pro
- Network management software

ERP platforms an example

BUSINESS TECHNOLOGY PLATFORM

Presentation	Web Browser	Java	MS Windows	Mobile Objects					
Communication Environment	HTTP / XML / SOAP		NET / COM +	JAVA / CORBA					
Programming Languages	ABAP Objects	Java/ Java Scripts	Visual Basic /C#	C / C++					
Database	IBM DB2			Informix	Microsoft SQL	Oracle	SAP DB		
	/UDB	/400	/390						
	UNIX						Windows	Mid range	Main frame
Operating system	Compaq True64 UNIX	IBM AIX	HP UX	Linux	Siemens Reliant UNIX	Sun Solaris	MS Windows 2000/NT	IBM OS/400	IBM OS / 390
Architecture / System	Alpha	Power PC	PA	Intel	MIPS	SPARC	Intel	AS/400	AS/390

ERP architecture



How the system functions

- Master data is the key
 - Tool for achieving enterprise wide data discipline
 - Common language across enterprise
- Data entry at source
 - Removes redundancy
 - Reduces reconciliation activity
 - Improves business process efficiency
- All transactions related to an event are generated
- System uses best business processes
 - Current approach is functional

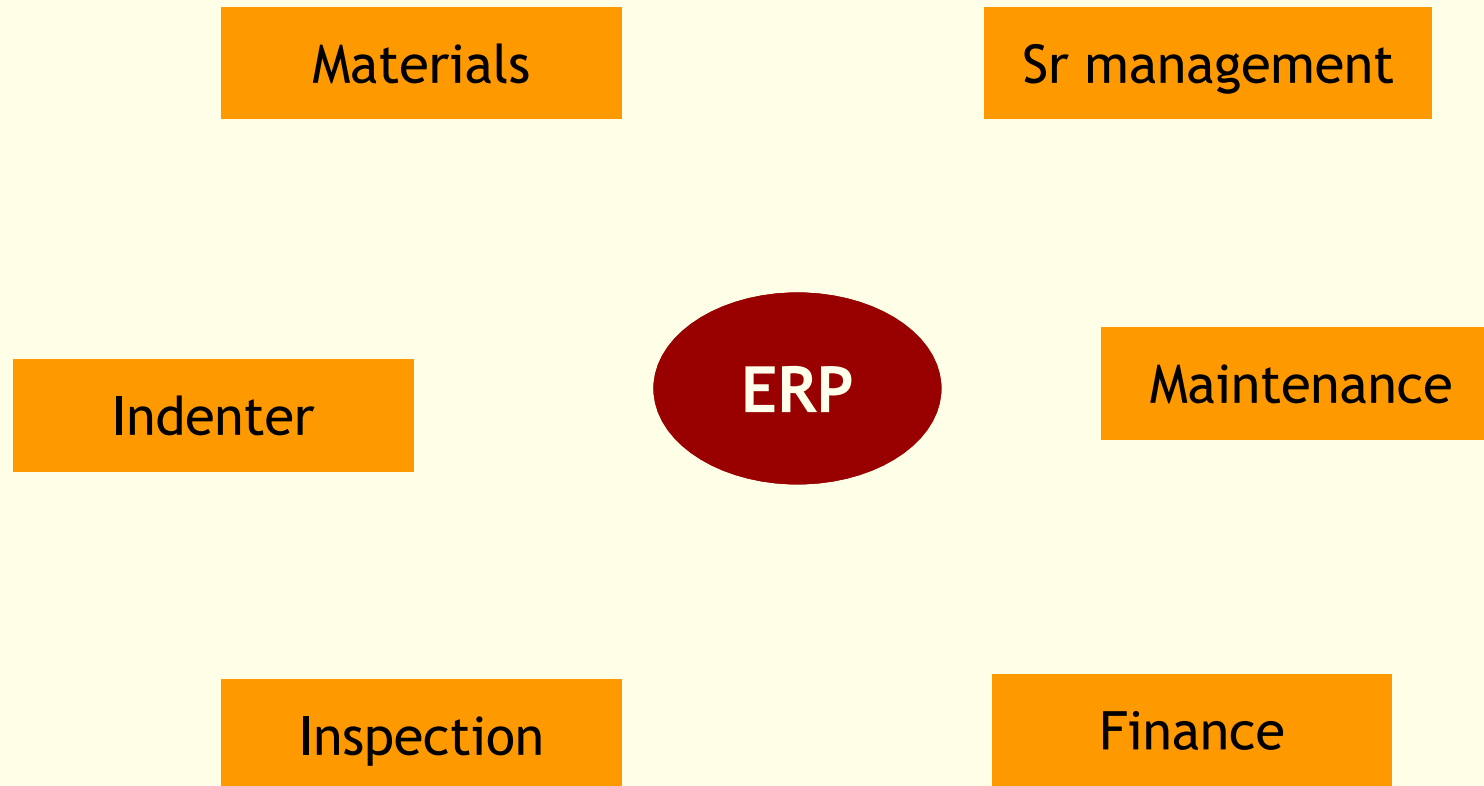
How the system functions

- Enables online transparency of transactions
 - Need to know basis
 - Comprehensive view of the enterprise
- Reduces back office work
- Defines data ownership
- Exercises strict control on enterprise functions
 - Authorization
 - Authentication

Procurement process

- | | |
|--------------------------|---------------|
| • Initiating requisition | By indenter |
| • Preparation of tender | By materials |
| • Floating of tender | By materials |
| • Evaluation of tender | By committee |
| • Order placement | By materials |
| • Receipt of goods | By materials |
| • Inspection of goods | By inspection |
| • Receipt of invoice | By materials |
| • Preparation of bills | By materials |
| • Passing of bills | By finance |
| • Payment of bills | By finance |

How procurement works in ERP



Implementation challenges

- Data collection and cleaning
 - Data may not be available
 - Data may have to be keyed in
 - Data may have to be converted
- Volume of data is enormous
- Importance of correct master data
 - Impact of wrong data across organization
 - Example of wrong material code
 - Impact on Material, Maintenance, Finance etc

Benefit Drivers

- ✓ Restructuring of Organization
- ✓ Introduction Of Best Practices
- ✓ Re Engineering of Business Processes
- ✓ Empowerment and Responsibility
- ✓ Visibility of Data for improved decision making

Implementation challenges

- Factors influencing resistance to change.
 - Fear of loosing focus of control
 - Fear of new technology
 - Transparency
 - Fear of losing job
- Challenge of change in organization
 - Need for change to be felt
 - Roadmap for change to be planned
 - Decisions to change to be taken
 - Sustain change
- Communication is the key to change

Why an organisation should go for ERP

- Organizational vision, mission, objectives
- What are the drivers for achieving the business plan
- If the drivers can be enabled by ERP then go for it
- Example
 - Globally competitive
 - Customer friendly
- Globally competitive
 - Cost competition at global level
 - Flexibility at global level
- To delight customer efficient internal processes
- Balanced scorecard concept

Thank You !!!

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