What is ERP?

By Susan L. Miertschin

ERP - has roots in manufacturing

Manufacturing Roots of ERP

• Materials Requirements Planning (MRP) - emerged in the 1960s and 1970s
• MRP allowed companies to develop production and raw material plans based on a sales forecast
  • MRP not possible without a computer when products, raw materials and shared production resources were numerous
### Electronic Data Interchange

- EDI allowed a company to communicate its purchase requirements electronically (1980s)
- EDI – a standard
- Adopted by DOD
- Sharing long-range production schedules between manufacturers and suppliers was the beginning of contemporary supply chain management (SCM)

### Evolution of Planning Systems

- Early 1980s: Materials Resource Planning (MRP)
  - Planning for materials in manufacturing processes
  - Helped reduce inventories which saved money
  - Helped reduce raw material outages which were very costly
- Manufacturing Resource Planning (MRP II)
- Enterprise Resource Planning (ERP)

### ERP Systems

- Software systems used by companies to manage information in every area of the business
- Help manage company-wide business processes using a common database and shared management reporting tools
- Support the efficient operation of business processes by integrating activities throughout a business
Web Resources

- [http://www.erpfans.com/erpfans/erpdefinition/erp001.html](http://www.erpfans.com/erpfans/erpdefinition/erp001.html)
- [http://searchaep.techtarget.com/sDefinition/o_sid21_gci213946_00.html](http://searchaep.techtarget.com/sDefinition/o_sid21_gci213946_00.html)
- [http://www.gcn.com/print/vol19_no31/3190-1.html](http://www.gcn.com/print/vol19_no31/3190-1.html)

Vendors of ERP Systems

- SAP
- PeopleSoft
- Oracle Applications
- Microsoft

Specialized ERP

- CRM – Customer Relationship Management
- SCM – Supply Chain Management
- EMR – Electronic Medical Record – ??
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