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Newark and New Brunswick

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Accounting Information Systems

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A.I.S. Class 28: Outline

- Learning Objectives for Chapter 14
- Enterprise Resource Planning Systems
- Peachtree v. SAP
- Course Objectives
- Conclusion

Learning Objectives for Chapter 14

- After studying this chapter you should be able to:
  * identify information needs within and across functional areas of an enterprise
  * explain how business processes other than sales and purchases would be modeled in an enterprise wide scenario
  * develop an extended entity relationship diagram for enterprise wide business processes
  * convert an extended entity relationship diagram of enterprise wide business processes to tables for implementation in a relational database system
  * understand how an enterprise wide model can be implemented in Microsoft Access
  * identify the integration points between functional areas in an enterprise wide model

Learning Objectives for Chapter 14

- After studying this chapter you should be able to:
  * explain the benefits of cross-functional integration in an enterprise-wide system
  * discuss the advantages of an enterprise-wide accounting information system relative to manual and automated "bookkeeping" oriented software packages
  * describe in some detail the features of a high-end enterprise resource planning system, specifically SAP R/3
  * understand the client-server architecture of SAP R/3 and the features of the major modules within the R/3 system
  * discuss the advantages of ERP systems relative to manual and "computerized bookkeeping" systems

Enterprise Resource Planning Systems

- Cross-functional integration
- Cutting across 'stove pipes' or 'silos'
- Integration points
  * Inventory
  * Cash
- *Recall "decoupling"*
- *Note links also with Julia Smith David's "Three Events . . ." paper*

Enterprise Resource Planning Systems

- Duality relationships
  * In an economic exchange, one resource is increased while another is decreased
- Each resource must have events that increase it and events that decrease it
  * Often these are not in the same cycle
  * This will be clearer in an integrated approach
- Bottom-up v. Top-down integration

Enterprise Resource Planning Systems

- *Beware of errors in the integrated diagram (beyond purchases and sales) and the associated tables*
- Enterprise Resource Planning Systems – BOPSE (1999 – 59% market share in total)
  * Baan (now SSA Global)
  * Oracle (includes PeopleSoft and J.D. Edwards)
  * SAP (market leader)
- Enterprise Resource Planning Systems – SAP, Oracle, Sage Group, Microsoft Dynamics, SSA Global (2006 – 78% market share)

Enterprise Resource Planning Systems

- SAP
  * Systems, Applications, and Products
  * Founded in Germany in 1972
  * R/3 released 1992
  * Programmed in ABAP/4
    - Advanced Business Application Programming language
  * Total Revenues c. $17 billion for 2008 (up c. 14% depending on currency)
    - 31% software, 41% support, 26% services, 2% other
    - 34% US
  * about 27.5% world-wide ERP market share (also 25.4% of CRM market, and 22.4% of SCM market)

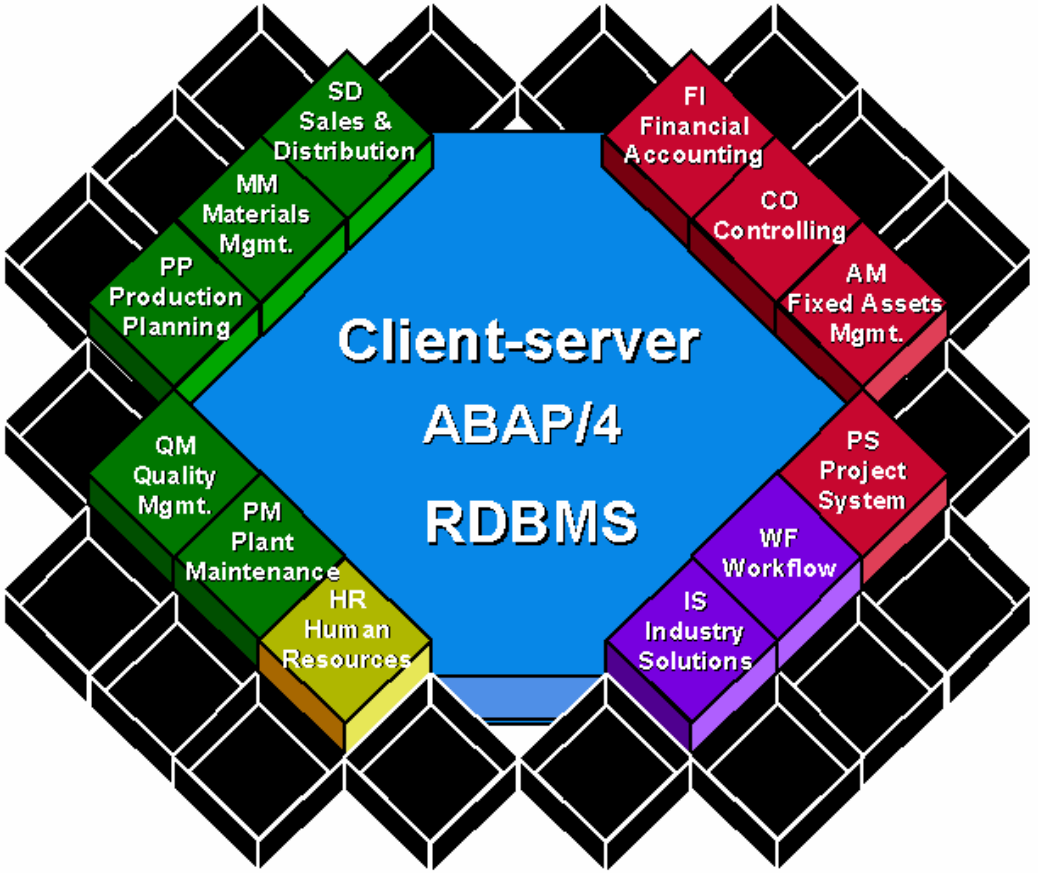
Enterprise Resource Planning Systems

- SAP 4.6b
  - 25,000 tables
  - 15,000 transactions
  - 27,000 screens
  - 160,000,000 lines of code
- SAP 6.0
  - 74,000 tables
  - 270,000,000 lines of code

Enterprise Resource Planning Systems

- SAP
  - Three core functional areas
    - financial
    - logistics
    - human resources
  - Three layer approach
    - Presentation layer (SAPGUI)
    - Application layer
    - Database layer

Enterprise Resource Planning Systems



Enterprise Resource Planning Systems

- Advantages
  * No data redundancy
  * On-line data validation
  * Cross-functional integration
  * Ability to perform cross-functional queries
  * Ability to generate real-time reports
  * Ability to "drill down" to view details of summary reports

Enterprise Resource Planning Systems

- Potential Obstacles/Drawbacks
  * High cost of software, consultants, employee time and training
  * Significant changes in corporate culture and business processes
  * Complex and extended undertaking
  * Extensive reliance on the ERP software vendor

SAP

- Hands-on Demonstration

SAP

- SAP Logon: IS5 – mySAP ERP 2005
- Client: 323
- UserID: RUTG-xx or RUTG1-xx as assigned on spreadsheet
- Initial Password: PASSP234
  - CASE SENSITIVE – use upper case
- New Password: your regular Blackboard password
- See Handout for further work . . .

PEACHTREE v. SAP

Course Objectives

- At the conclusion of this course, students should have gained:
  * an enhanced understanding of business enterprises and business processes
  * an awareness of the role of information and accounting systems in business management
  * an understanding of traditional accounting information systems and criticisms of them
  * an understanding of semantic modeling and event driven accounting information systems
  * an understanding of internal control over financial reporting and information systems
  * familiarity with the development, documentation, control and audit of accounting information systems
  * familiarity with the use of database management software in developing modern accounting information systems
  * experience of working in groups
  * an introduction to financial reporting using XBRL
  * an introduction to accounting software packages and Enterprise Resource Planning systems.

Group Evaluations

Please turn these in to me as you leave

Conclusion

Happy Holidays!