Chapter Objectives

Identify each of the following cross-functional e-business systems and give examples of how they can provide significant business value to a company and its customers and business partners.

- Enterprise resource planning
- Customer relationship management
- Enterprise application integration
- Supply chain management
- Online transaction processing
- Enterprise collaboration
Chapter Objectives

Give examples of how Internet and other information technologies support business processes within the business functions of accounting, finance, human resource management, marketing, and production and operations management.

The e-Business Application Architecture
Enterprise Resource Planning

- Production Planning
- Integrated Logistics
- Sales Distribution, Order Management
- Accounting and Finance
- Human Resources
- Customer/Employee
- Production Planning
- Integrated Logistics
- Sales Distribution, Order Management
- Accounting and Finance
- Human Resources
- Customer/Employee

Customer Relationship Management

- Marketing and Fulfillment
- Retention and Loyalty Programs
- Store Front and Field Service
- Customer Service and Support
- Customer Contact Management
Cross-Functional Integrated Systems

Enterprise Application Cluster
Front Office Applications
- CRM Application
- Customer Service
- Field Service
- Sales Order
- Product Config

Enterprise Application Integration

Enterprise Application Cluster
Back Office Applications
- ERP Application
- Distribution
- Manufacturing
- Scheduling
- Finance

Customers

Suppliers

Business Partners

Supply Chain Management

Supply Chain Life Cycle

Commit
Schedule
Make
Deliver

SCM Functional Processes

Order Commitment
Demand Planning
Manufacturing Planning

Advance Scheduling
Transportation Planning
Distribution Planning

SCM Integrated Solution

Internetworked Supply Chain Management
Transaction Processing Systems

1. Data Entry
2. Transaction Processing
   • Batch
   • Online/Realtime
3. Database Maintenance
5. Inquiry Processing

Tools for Enterprise Collaboration

Enterprise Collaboration System

Electronic Communications Tools
• E-Mail
• Voice Mail, I Phone
• Web Publishing
• Faxing

Electronic Conferencing Tools
• Data Conferencing
• Voice Conferencing
• Videoconferencing
• Discussion Forums
• Electronic Meetings

Collaborative Work Management Tools
• Calendaring
• Task and Project Management
• Workflow Systems
• Knowledge Management
• Document Sharing
### Forms of groupwork

- **Groupware Time Space Matrix**  
  [Ellis, Gibbs, Rein, 1991; DeSanctis & Gallupe]

<table>
<thead>
<tr>
<th>Same Place</th>
<th>Different Places</th>
</tr>
</thead>
<tbody>
<tr>
<td>Same time</td>
<td>Different times</td>
</tr>
<tr>
<td>face-to-face interaction</td>
<td>asynchronous interaction</td>
</tr>
<tr>
<td>synchronous distributed interaction</td>
<td>asynchronous distributed interaction</td>
</tr>
</tbody>
</table>

### Grudin’s time space matrix

<table>
<thead>
<tr>
<th>Same time</th>
<th>Different times</th>
<th>Different times, not known</th>
</tr>
</thead>
<tbody>
<tr>
<td>meeting rooms</td>
<td>work shifts</td>
<td>team rooms</td>
</tr>
<tr>
<td>tele/video/desktop conferencing</td>
<td>E-mail</td>
<td>collaborative writing</td>
</tr>
<tr>
<td>Interactive multicast seminars</td>
<td>bulletin boards</td>
<td>workflow</td>
</tr>
</tbody>
</table>
Financial Information Systems

Chapter Summary

The e-Business Application Architecture reflects the key e-business applications and their interrelationships.

Cross-functional enterprise applications cross the boundaries of traditional business functions. These systems focus on supporting integrated clusters of business processes.

Supply Chain Management relies on information technology and management practices to optimize information and product flows among the processes and business partners within the supply chain.
Chapter Summary (cont)

A transaction processing system is an information system that processes data resulting from the occurrence of business transactions.

Traditional functional business systems support specific business functions including marketing, accounting, finance, production/operations, and human resource management.

Marketing information systems support traditional and e-commerce processes and management of the marketing function.

Computer-based manufacturing systems help a company simplify, automate, and integrate many of the activities needed to quickly produce high-quality products to meet changing customer demands.

Human resource information systems support human resource management in organizations.

Several different types of electronic payment systems are used to support e-commerce transactions.
Because the Internet is not a secure network special security measures must be undertaken to protect sensitive customer information.