

Information Systems within the Organization

- 1. Transaction Processing Systems
- Functional Area Information Systems
- 3. Enterprise Resource Planning (ERP) Systems
- 4. ERP Support for Business Processes



- 1. Explain the purpose of transaction processing systems.
- 2. Explain the types of support that information systems can provide for each functional area of the organization.
- 3. Identify advantages and drawbacks to businesses implementing an enterprise resource planning system.

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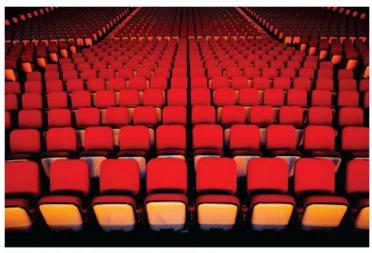
4. Describe the three main business processes supported by ERP systems.

OPENING

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The Lion King Roars Back

1. Why are yield management systems so important to the producers of Broadway



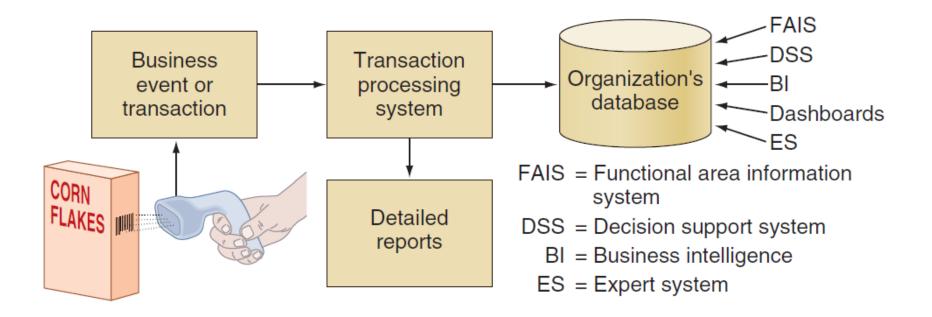
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- shows? Hint: What is the value of an unsold seat once the curtain goes up?
- 2. Describe potential disadvantages of Disney's yield management system.

11.1 Transaction Processing Systems

- Transaction
- Transaction Processing System (TPS)
- Batch Processing
- Online Transaction Processing (OLTP)

Figure 11.1: How TPS Manage Data



11.2 Functional Area Information Systems

- IS for Accounting and Finance
- IS for Marketing
- IS for Production/Operations Management
- IS for Human Resource Management
- Reports

Figure 11.2: Systems supporting functional Areas

| Profitability Planning | Financial Planning | Employment Planning, Outsourcing | Product Life Cycle Management | Sales Forecasting, Advertising Planning | STRATEGIC |
|--|---|--|--|---|-------------|
| Auditing, Budgeting | Investment Management | Benefits Administration, Performance Evaluation | Quality Control, Inventory Management | Customer Relations, Sales Force Automation | TACTICAL |
| Payroll, Accounts Payable, Accounts Receivable | Manage Cash, Manage Financial Transactions | Maintain Employee Records | Order Fulfillment, Order Processing | Set Pricing, Profile Customers | OPERATIONAL |
| ACCOUNTING | FINANCE | HUMAN RESOURCES | PRODUCTION/ OPERATIONS | MARKETING | • |

IS for Accounting and Finance

- Financial Planning and Budgeting
- Managing Financial Transactions
- Investment Management
- Control and Auditing

Financial Planning and Budgeting

- Financial and economic forecasting
- Budgeting

Managing Financial Transactions

- Global stock exchanges
- Managing multiple currencies
- Virtual close
- Expense management automation (EMA)

Control and Auditing

- Budgetary control
- Auditing
- Financial ratio analysis

IS for Production/Operations Management (POM)

- In-House Logistics and Materials Management
- Inventory Management
- Quality Control
- Planning Production and Operations Management
- Computer-Integrated Manufacturing
- Product Lifecycle Management

IS for Human Resource Management

- Recruitment
- Human Resources Development
- Human Resources Planning and Management

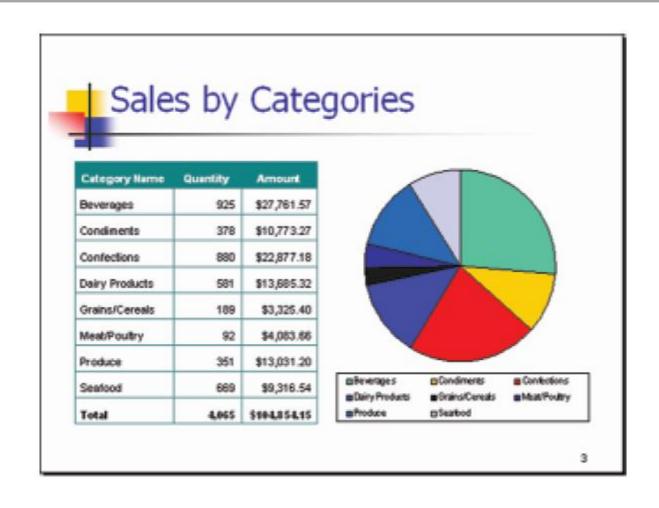
Three Areas of IT support in HR Planning and Management

- 1. Payroll and employees' records
- 2. Benefits administration
- 3. Employee relationship management

Reports

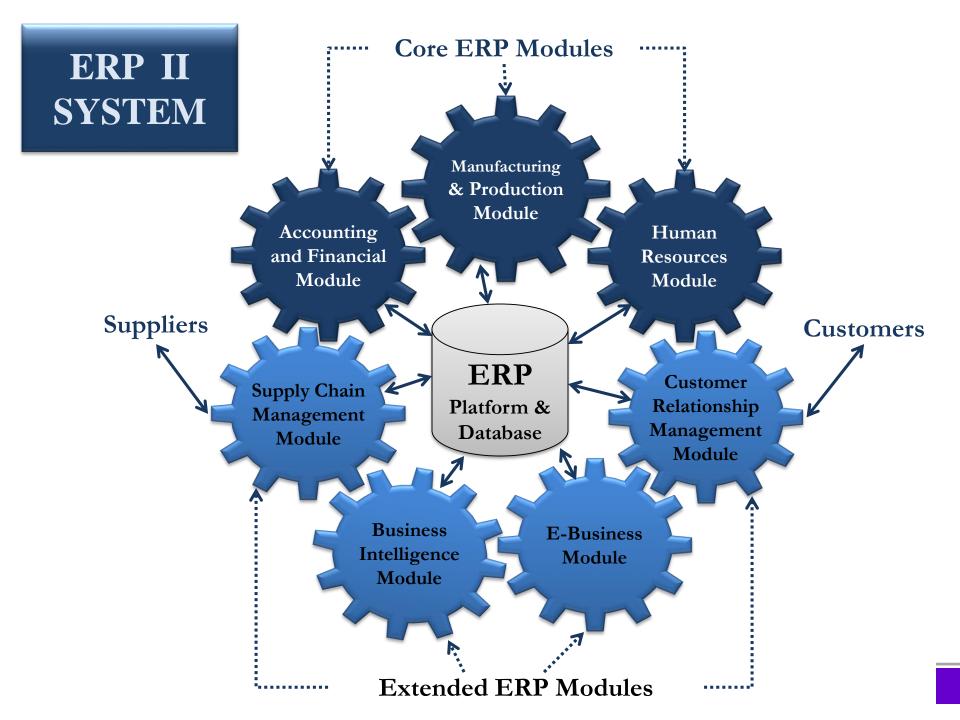
- Routine Reports
- Ad-hoc (On-Demand) Reports
 - Drill-down reports
 - Key indicator reports
 - Comparative reports
 - Exception reports

Monthly Sales Report



11.3 Enterprise Resource Planning (ERP) Systems

- ERP II Systems
- Benefits and Limitations of ERP Systems
- Implementing ERP Systems
- Enterprise Application Integration



ERP Systems: Benefits

- Organizational Flexibility and Agility
- Decision Support
- Quality and Efficiency

ERP Systems: Limitations

- Business Processes Predefined by Best Practices
- Difficult to Implement
- Potential for Failure

Major Causes of ERP Implementation Failure

- Failure to involve affected employees in planning and development
- Attempting too much too fast
- Insufficient training
- Failure to perform proper data conversion and testing

Implementing ERP Systems

- On-Premise ERP Implementation
- Software-as-a-Service (SaaS) ERP Implementation

On-Premise ERP Implementation

- Vanilla Approach
- Custom Approach
- Best of Breed Approach

'S ABOUT BUSINESS 11.1

GEA Group Uses SAP for Financial Reporting

- 1. Discuss the reasons why financial reports must be timely.
- 2. Explain how SAP enabled the GEA Group to produce their financial reports in an efficient, timely manner.
- 3. What are the advantages of the SAP solution to the GEA Group?

11.4 ERP Support for Business Processes

- The Procurement, Fulfillment, and Production Processes
- Interorganizational Processes: ERP with SCM and CRM

The Procurement, Fulfillment, and Production Processes

- Procurement Process
- Order Fulfillment Process
- Production Process

Figure 11.4: Departments & Documents Flow in Procurement

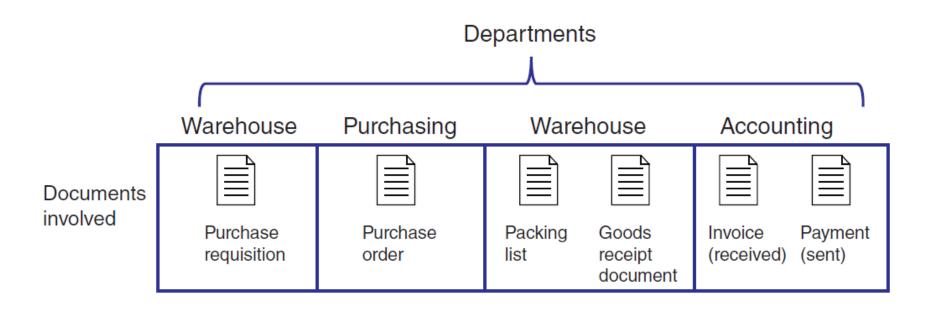


Figure 11.5: Departments & Documents Flow in Fulfillment

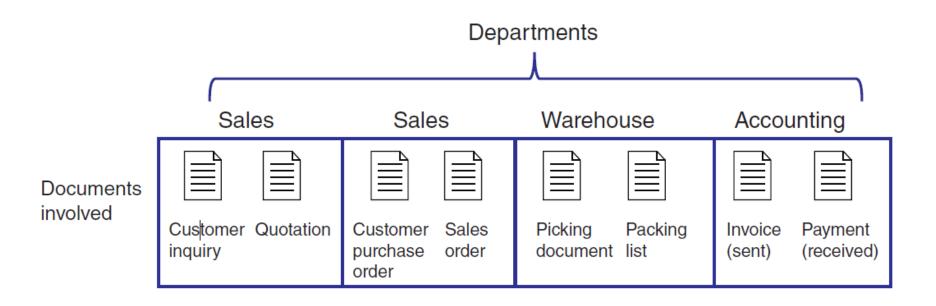


Figure 11.6: Departments & Documents Flow in Production

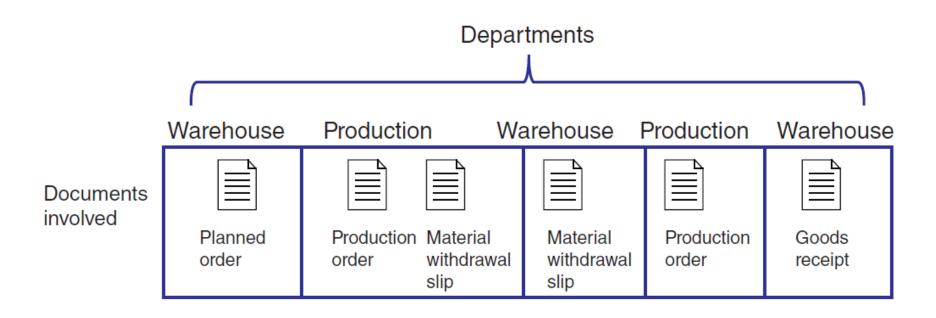
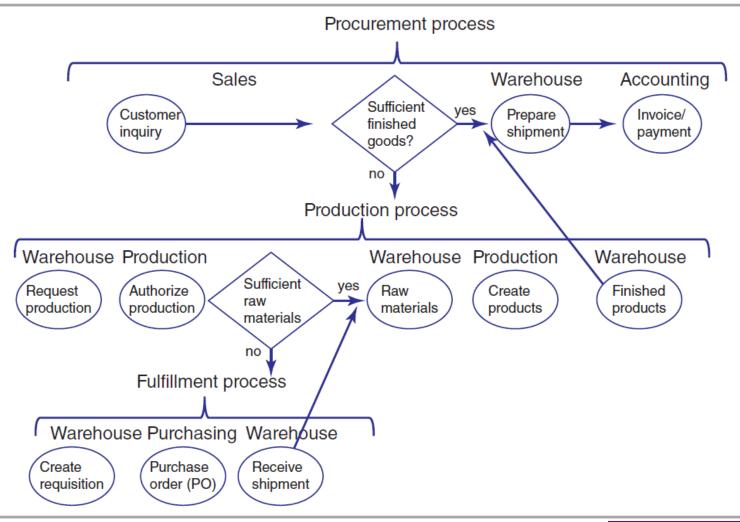


Figure 11.7: Integrated Processes with ERP Systems



Interorganizational Processes: ERP with SCM and CRM

- Enterprise Resource Planning (ERP)
 Supply Chain Management (SCM)
 Systems
- Enterprise Resource Planning (ERP)
 Customer Relationship Management
 (CRM) Systems