Sistem Informasi
(SI Fungsi Bisnis)


Asep Wahyudin, M.T.
Ilmu Komputer
FPMIFA - Universitas Pendidikan Indonesia
Manufacturing and inventory control information systems help reduce cycle times and the cost of maintaining inventory.
Materials Requirement Planning (MRP)

- Take customer demand as initial input
  - Number of product units needed and when they are needed

- Use long-range forecasts to put long-lead material on order

- Help reduce inventory cost while ensuring availability
Manufacturing and Inventory Control

Materials requirement planning and manufacturing resource planning
Manufacturing Resource Planning (MRP II)

- Combines MRP with other manufacturing-related activities to plan the manufacturing process such as
  - Shop activity control and purchasing
  - Source of demand
  - Customer order entry and forecasting
  - Support functions such as financial management, sales analysis, and data collection
Manufacturing Execution Systems (MES)

- Track, schedule, and control manufacturing processes

- Collect data such as
  - Hours machine operates every day of the month
  - Hours the machine is idle and why
Market Research

- Statistical models help market researchers find the best populations for new and existing products.

Targeted Marketing

- Database management systems (DBMS) help define potential customers as narrowly as possible.
Marketing and sales information systems help target potential buyers and serve clients.
The Computer as a Marketing and Selling Medium

- Companies send customers promotional disks with information on their products and services.
- Commercial announcements are posted on public bulletin board systems.
- The Web lets companies reach more shoppers and serve them better.
### The Past and Future of Selling on the Web

<table>
<thead>
<tr>
<th>Year</th>
<th>Adult Home Web User (in millions)</th>
<th>Percentage of Users Buying on the Web</th>
<th>Expenditure Per User Per Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>46</td>
<td>15%</td>
<td>$146</td>
</tr>
<tr>
<td>1998</td>
<td>81</td>
<td>18%</td>
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<td>121</td>
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<td>$160</td>
</tr>
<tr>
<td>2001</td>
<td>159</td>
<td>27%</td>
<td>$165</td>
</tr>
</tbody>
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*Source: Deutsche Bank and Christiansen/Cummings Associates, 1999*
Sales Force Automation

- Equipping salespeople with information technology to facilitate productivity.
  - IT allows salespeople to present different options for products and services on the spot.

Customer Service

- Customer service via the Web is available 24 hours/day, 7 days/week.
  - Saves companies labor hours and telephone expenses.
Human resource management information systems help managers optimize the assignment of employees and provide payroll, benefits, and other employee-related services.
**Employee Record Management**
- Reduce space needed to store records, time to retrieve them, and costs of both

**Promotion and Recruitment**
- Search databases for qualified personnel
- Use intranet to post job vacancies
- Use the Web to recruit
Training

- Multimedia software training is replacing classrooms and teachers.
- Training software simulates an actual task or situation and includes evaluation tools.

Evaluation

- Evaluation software helps standardize the evaluation process and adds a certain measure of objectivity and consistency.
Compensation and Benefits Management

- ISs can help manage compensation efficiently and effectively.
  - Calculate salaries, hourly pay, commissions, and taxes
  - Automatically generate paychecks or direct deposits
- Special software helps manage benefits, such as health insurance, life insurance, retirement plans, and sick and leave days.
Enterprise Resource Planning (ERP)

- All business functions served by one system that supports different activities for different departments

- Support supply chain management, the series of main and supporting activities from order to delivery.
GroupWare lets workers in different locations communicate ideas, brainstorm, and work together as if they were in the same place.

**Document Control**
- Users can distribute and track electronic documents without working with outdated information.

**Collaborative Projects**
- Users can coordinate work on a single document from many different terminals.
What is Privacy?

- One’s right to control information about oneself.
- Not a constitutional right per se; secured by laws or convention.
- Increasing number of organizations may access information via better IT hardware and software.
- Business and civil rights advocates dispute degree of privacy vs. utility of information access.
Ethical and Societal Issues

Business Arguments

– Necessary to collect basic financial and personal information as cheaply as possible

– Higher costs to all businesses absent readily available information

– Consumers benefit eventually from competitive environment augmented by readily available information
Consumer Arguments

- Resent unsolicited mail and telephone calls
- Resent being refused credit because of credit bureau mistakes
- Frightened by ‘dossier phenomenon”
- Loss of control over information unfair—information gathered for a particular purpose with permission should remain restricted
Ethical and Societal Issues

Seven Commandments of Personal Data Collection and Maintenance

- **Purpose.** Companies should inform people who provide information of specific, *exclusive* purpose.
- **Relevance.** Companies should record and use only data necessary to fulfill their own purposes.
- **Accuracy.** Companies should ensure that their data are accurate.
- **Currency.** Companies should make sure that all data about an individual are current.
- **Security.** Companies should limit data access to only those who need to know.
- **Time Limitation.** Companies should retain data only for the time period necessary.
- **Scrutiny.** Companies should establish procedures to let individuals review their records and correct inaccuracies.
Selesai