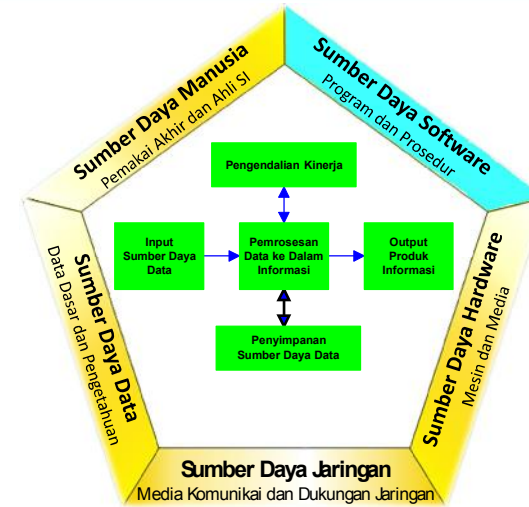


Manajemen Sistem Informasi

Minggu ke 06



Sumber Daya Sistem Informasi



- 3 -

POKOK BAHASAN

Mengelola Sumber Daya Perangkat Lunak (1)

Tujuan Instruksional Khusus

1. Jenis Perangkat Lunak
2. Perangkat Lunak Aplikasi Umum
3. Perangkat Lunak Aplikasi Khusus

Deskripsi Singkat

Pertemuan ini diharapkan agar Mahasiswa mempunyai pengetahuan dasar tentang berbagai sistem aplikasi (perangkat lunak) yang harus dikelola dalam sebuah organisasi / perusahaan

Bahan Bacaan

1. Discovering Computer 2011, Gary B. Shelly and Misty E. Vermaat, Course Technology, Cengage Learning
2. Sistem Informasi Manajemen, Mengelola Perusahaan Digital, Edisi 8, Kenneth C. Laudon, Jane P. Laudon, Penerbit Andi Yogyakarta, 2005
3. Pengantar Sistem Informasi Edisi 12, James O'Brien, PENERBIT SALEMBE EMPAT JAKARTA



Software Resources

- All information processing instructions including programs and procedures
- System software, application software and procedures

- 4 -



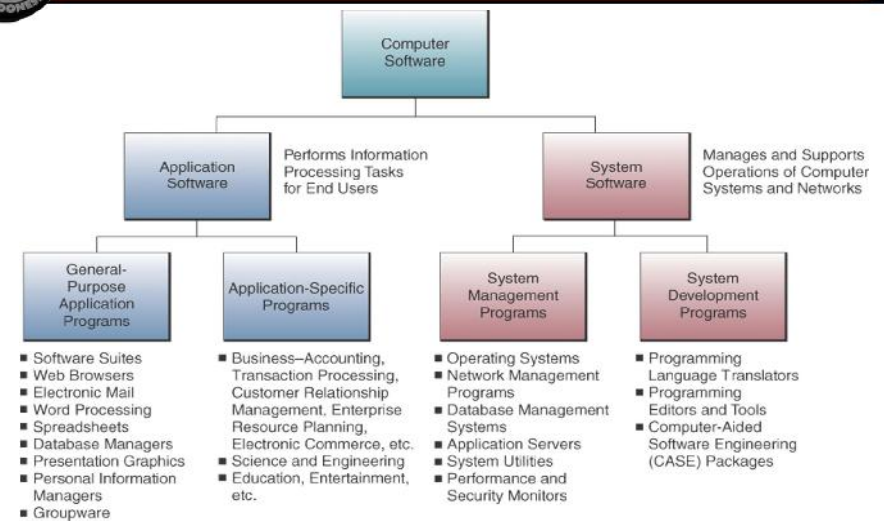
Bead Bar Software Requirements

- Buy or hire a programmer?
- Software to manage employees and inventory in studios
- Easy to use
- Contact management and presentation software
- Tax software and office suite, including spreadsheet
- Digital picture editing
- Software will need to be maintained and updated
- Employee benefits

- 5 -



Types of Application & System Software



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The Major Types of Software

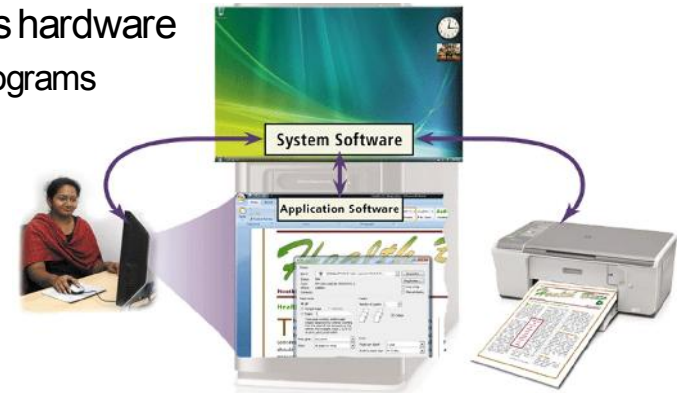
- **Software program:** Series of statements or instructions to the computer
- **System software:** Generalized programs, manages computer's resources
- **Application software:** Programs written to perform functions specified by end users

- 6 -



Types of Application & System Software

- **System software** serves as the interface between the user, the application software, and the computer's hardware
 - Utility programs



- 8 -



Application Software

- **Application software** consists of programs designed to make users more productive and/or assist with personal tasks

To make business activities more efficient

To assist with graphics and multimedia projects

To support home, personal, and educational tasks

To facilitate communications

- 9 -



Application Software

- Open-source Software
 - Developers collaborate on the development of an application using programming standards which allow anyone to contribute to the software
 - As each developer completes a project, the application code becomes available and free to anyone who wants it

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Application Software

- General Purpose
 - Programs that perform common information processing jobs for end users; e.g., word processing, spreadsheet
 - Also call productivity packages
- Custom Software
 - Software applications developed within an organization for use by that organization
- Commercial Off-the-Shelf (COTS)
 - Many copies sold
 - Minimal changes beyond scheduled upgrades
 - Purchasers have no control over specifications, schedule, or evolution, and no access to source code or internal documentation
 - Product vendor retains the intellectual property rights of the software

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Application Software

Four Categories of Application Software

Business	Graphics and Multimedia	Home/Personal/Educational
<ul style="list-style-type: none"> • Word Processing • Spreadsheet • Database • Presentation • Note Taking • Personal Information Manager (PIM) • Business Software for Phones • Business Software Suite • Project Management • Accounting • Document Management • Enterprise Computing 	<ul style="list-style-type: none"> • Computer-Aided Design (CAD) • Desktop Publishing (for the Professional) • Paint/Image Editing (for the Professional) • Photo Editing (for the Professional) • Video and Audio Editing (for the Professional) • Multimedia Authoring • Web Page Authoring 	<ul style="list-style-type: none"> • Software Suite (for Personal Use) • Personal Finance • Legal • Tax Preparation • Desktop Publishing (for Personal Use) • Paint/Image Editing (for Personal Use) • Photo Editing and Photo Management (for Personal Use) • Clip Art/Image Gallery • Video and Audio Editing (for Personal Use) • Home Design/Layoutting • Travel and Mapping • Reference and Educational • Entertainment
Communications		
<ul style="list-style-type: none"> • Web Browser • RSS Aggregator 	<ul style="list-style-type: none"> • E-Mail • Blogging 	<ul style="list-style-type: none"> • Instant Messaging • Newsgroup/Message Board • Chat Room • FTP • Text, Picture, Video Messaging • VoIP • Video Conferencing

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Business Application Software

- Function-Specific Application Software
 - Thousands of these packages support specific applications of end users
 - **Examples:** customer relationship management, enterprise resource planning, supply chain management, Web-enabled electronic commerce

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Components of Top Software Suites

Programs	Microsoft Office	Lotus SmartSuite	Corel WordPerfect Office	Sun StarOffice
Word Processor	Word	WordPro	WordPerfect	Writer
Spreadsheet	Excel	1-2-3	Quattro Pro	Calc
Presentation Graphics	PowerPoint	Freelance	Presentations	Impress
Database Manager	Access	Approach	Paradox	Base
Personal Information Manager	Outlook	Organizer	Corel Central	Schedule

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Software Suites, Integrated Packages

- Most widely used productivity packages are bundled together as software suites
- Advantages
 - Cost less than buying individual packages
 - All have similar GUI
 - Work well together
- Disadvantages
 - All features not used
 - Takes a lot of disk space (bloatware)

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Integrated Packages

- Integrated packages combine the functions of several programs into one package
 - Eg., Microsoft Works, AppleWorks
- Advantages
 - Many functions for lower price
 - Uses less disk space
 - Frequently pre-installed on microcomputers
- Disadvantages
 - Limited functionality

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Web Browsers

- Software applications that support navigation through the point-and-click hyper-linked resources of the Web
- Becoming the universal platform from which end users launch...
 - Information searches
 - E-mail
 - Multimedia file transfer
 - Discussion groups
 - Other Internet-based applications

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E-mail, Instant Messaging, and Weblogs

- E-mail
 - Software to communicate by sending and receiving messages and attachments via the Internet, intranet, or extranet
- Instant messaging (IM)
 - Receive electronic messages instantly
- Weblog or blog
 - A personal website in dated log format
 - Updated with new information about a subject or range of subjects

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Search Engines

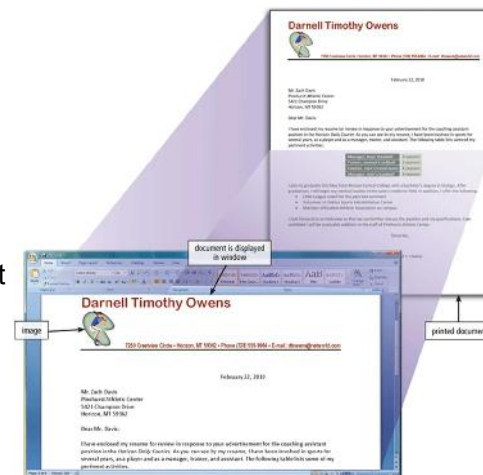
- Browsers are used to gain access to Internet search engines
 - Google, Ask Jeeves, Look Smart, Lycos, Overture, Yahoo!
- Using search engines to find information has become an indispensable part of Internet, intranet, and extranet applications

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Word Processing/ Desktop Publishing

- Word Processing
 - Create, edit, revise, and print documents
 - Example: Microsoft Word, Lotus WordPro, Corel WordPerfect
- Desktop Publishing
 - Produce printed materials that look professionally published
 - Example: Adobe PageMaker, Microsoft Publisher, QuarkXPress

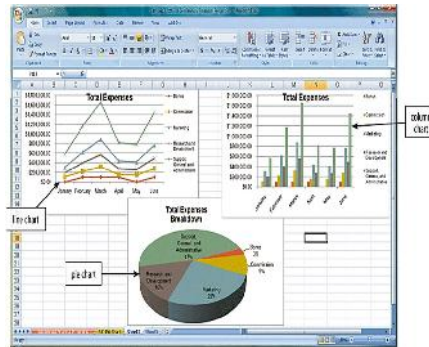


- 20 -



Electronic Spreadsheets

- Used by virtually every business for...
 - Analysis, planning, modeling
- Electronic Spreadsheet
 - Worksheet of rows and columns
 - Can be stored on local computer or on network
 - Requires designing format and developing the relationships (formulas)
 - Most help you develop charts and graphic displays of spreadsheet results
 - Supports what-if questions



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Personal Information Managers

- Software for end user productivity and collaboration
 - Stores information about clients
 - Manages schedules, appointments, tasks
 - Most include ability to access the Web and provide e-mail capabilities
 - Some support team collaboration by sharing information with other PIM users
 - Example: Lotus Organizer, Microsoft Outlook

Appointment calendar

Address book

Notepad

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Presentation Graphics

- Common presentation graphics packages...
 - Converts numeric data into graphics displays
 - Used to create multimedia presentations of graphics, photos, animation, and video clips
 - Eg., Microsoft PowerPoint, Lotus Freelance, Corel Presentations
 - Top packages can tailor files for transfer in HTML format to websites



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Groupware

- Software that helps workgroups collaborate on group assignments
 - E-mail, discussion groups, databases, video conferencing
 - Example: Lotus Notes, Novell GroupWise, Microsoft Exchange
 - Windows SharePoint Services and WebSphere both allow teams to create websites for information sharing and document collaboration

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Software Alternatives

- Outsourcing development and maintenance of software
- Application service providers (ASPs)
 - Companies that own, operate, and maintain application software and computer system resources
 - Use the application for a fee over the Internet
 - Pay-as-you-go
 - Use expected to accelerate in the coming years

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Categories of Group Software

- System Management Programs
 - Manages the hardware, software, network, and data resources of computer systems
 - Example: operating systems, network management programs, database management systems, system utilities
- System Development Programs
 - Helps users develop IS programs and procedures and then prepare them for processing
 - Includes language translators and editors, CASE and programming tools

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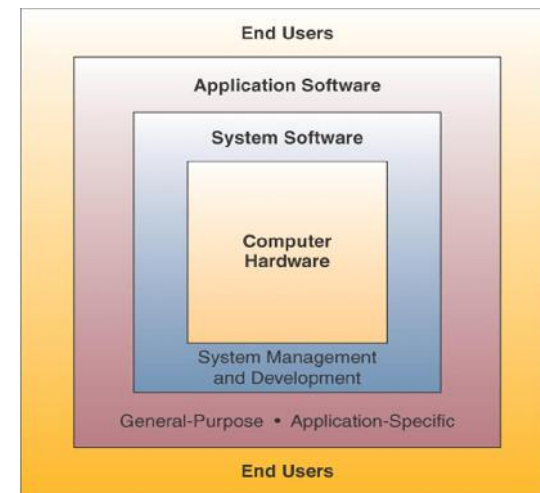
Software Licensing

- All COTS and ASP software is licensed
 - Involves the underlying..
 - Intellectual property rights
 - Copyright
 - Trademark
 - Trade secrets
 - Also involves traditional contract law, including Uniform Commercial Code (UCC)
- You don't buy software
 - You buy a license to use the software
 - Licensed to protect the vendor's property rights

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Interface Between End Users and Computer



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