Introduction to Information and Communication Technologies

Chapter 3
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Agenda

- Business software
- Graphics and Multimedia Software
- Software for Home, Personal and Educational Use
- Web Applications

CATEGORIES OF APPLICATION SOFTWARE

	① Business	**② Graphics and Multimedia**	**③ Home/Personal/Educational**
A P P L I C A T I O N S O F T W A R E	• Word Processing • Spreadsheet • Database • Presentation Graphics • Note Taking • Personal Information Manager (PIM) • PDA Business Software • Software Suite (e.g., word processing, spreadsheet, presentation graphics, PIM) • Project Management • Accounting • Document Management • Enterprise Computing Software	• 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	• Software Suite (for Personal Use) (e.g., word processing, spreadsheet, database) • Personal Finance • Legal • Tax Preparation • Desktop Publishing (for Personal Use) • Paint/Image Editing (for Personal Use) • Photo Editing • Clip Art/Image Gallery • Video and Audio Editing (for Personal Use) • Home Design/Landscaping • Reference • Educational • Entertainment

④ ◄——— Communications ———►

• E-Mail • Internet Telephony	• FTP • Newsgroup/Message Board	• Web Browser • Chat Room	• Video Conferencing • Instant Messaging • Blogging

◄——— Popular Utility Programs ———►

• Antivirus • File Compression	• Personal Firewall • Backup	• Spyware Remover • CD/DVD Burning	• Internet Filters • Media Player	• File Manager • Personal Computer Maintenance

Business Software

- **Business software** is application software that assists people in becoming more effective and efficient while performing their daily business activities.

- Business software includes programs such as
    - word processing,
    - spreadsheet,
    - database,
    - presentation graphics,
    - note taking,
    - personal information manager software,
    - software suites,
    - project management,
    - accounting,
    - document management.

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POPULAR BUSINESS PROGRAMS

Application Software	Manufacturer	Program Name
Word Processing	Microsoft	Word 2007
	Sun	StarOffice Writer
	Corel	WordPerfect
Spreadsheet	Microsoft	Excel 2007
	Sun	StarOffice Calc
	Corel	Quattro Pro
Database	Microsoft	Access 2007
	Sun	StarOffice Base
	Corel	Paradox
	Microsoft	Visual FoxPro SQL Server
	Oracle	Oracle Database
	MySQL AB	MySQL
Presentation Graphics	Microsoft	PowerPoint 2007
	Sun	StarOffice Impress
	Corel	Presentations
Note Taking	Microsoft	OneNote 2007
	Agilix	GoBinder
	Corel	Grafigo
Personal Information Manager (PIM)	Microsoft	Outlook 2007
	IBM	Organizer
	Palm	Desktop
PDA Business Software	CNetX	Pocket SlideShow
	Microsoft	Pocket Word Pocket Excel Pocket Outlook
	Mobile Systems	MobiSystems Office Suite Professional
	Mozilla	Thunderbird
	Ultrasoft	Money

Application Software	Manufacturer	Program Name
Software Suite (for the Professional)	Microsoft	Office 2007 Office for Mac
	Sun	StarOffice Office Suite
	Corel	WordPerfect Office
	IBM	Lotus SmartSuite
Project Management	Microsoft	Project 2007
	Primavera	SureTrak Project Manager
Accounting	Intuit	QuickBooks
	Sage Software	Peachtree
Document Management	Adobe	Acrobat
	Enfocus	PitStop
	Nuance	PDF Converter PaperPort
Enterprise Computing Software	Oracle	PeopleSoft Enterprise Human Resources
	Sage Software	Sage MAS 500
	MSC Software	MSC.SimManager
	Oracle	Oracle Manufacturing
	SAP	mySAP Customer Relationship Management
	NetSuite	NetERP
	Apropos Technology	Apropos Interaction Management Suite

FIGURE 3-4   Popular business software.

Business Software

- **Word processing software**, sometimes called a word processor, allows users to create and manipulate documents containing mostly text and sometimes graphics.
- Millions of people use word processing software every day to develop documents such as letters, memos, reports, fax cover sheets, mailing labels, newsletters, and Web pages.
- Word processing software has many features to make documents look professional and visually appealing.
- Some of these features include the capability of changing the shape and size of characters, changing the color of characters, applying special effects such as three-dimensional shadows, and organizing text in newspaper-style columns.
- A major advantage of using word processing software is that users easily can change what they have written.

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Business Software

- **Spreadsheet software** allows users to organize data in rows and columns and perform calculations on the data. These rows and columns collectively are called a **worksheet**.

- Most spreadsheet software has basic features to help users create, edit, and format worksheets. The following sections describe the features of most spreadsheet programs.

- A formula performs calculations on the data in the worksheet and displays the resulting value in a cell, usually the cell containing the formula. When creating a worksheet, you can enter your own formulas.

- One of the more powerful features of spreadsheet software is its capability of recalculating the rest of the worksheet when data in a worksheet changes.

- Another standard feature of spreadsheet software is charting, which depicts the data in graphical form.

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Business Software

- **Presentation graphics software** is application software that allows users to create visual aids for presentations to communicate ideas, messages, and other information to a group.

- The presentations can be viewed as slides, sometimes called a slide show, that are displayed on a large monitor or on a projection screen.

- Presentation graphics software typically provides a variety of predefined presentation formats that define complementary colors for backgrounds, text, and graphical accents on the slides.

- This software also provides a variety of layouts for each individual slide such as a title slide, a two-column slide, and a slide with clip art, a chart, a table, a diagram, or animation.

- When building a presentation, users can set the slide timing so the presentation automatically displays the next slide after a preset delay.

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Business Software

- **Database software** is application software that allows users to create, access, and manage a database. Using database software, you can add, change, and delete data in a database; sort and retrieve data from the database; and create forms and reports using the data in the database.

- **Note taking software** is application software that enables users to enter typed text, handwritten comments, drawings, or sketches anywhere on a page and then save the page as part of a notebook.

- Users also can include audio recordings as part of their notes. Once the notes are captured (entered and saved), users easily can organize them reuse them, and share them.

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Business Software

- A **personal information manager** (**PIM**) is application software that includes an appointment calendar, address book, notepad, and other features to help users organize personal information. The appointment calendar allows you to schedule activities for a particular day and time.

- A **software suite** is a collection of individual programs sold as a single package. Business software suites typically include, at a minimum, the following programs: word processing, spreadsheet, e-mail, and presentation graphics.

- Two of the more widely used software suites are Microsoft Office 2007 and Sun StarOffice.

- Software suites offer two major advantages: lower cost and ease of use.

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Business Software

- **Project management software** allows a user to plan, schedule, track, and analyze the events, resources, and costs of a project. Project management software helps users manage project variables, allowing them to complete a project on time and within budget.
- **Accounting software** helps companies record and report their financial transactions. With accounting software, business users perform accounting activities related to the general ledger, accounts receivable, accounts payable, purchasing, invoicing, and payroll functions. Accounting software also enables users to write and print checks, track checking account activity, and update and reconcile balances on demand.
- **Document management software** provides a means for sharing, distributing, and searching through documents by converting them into a format that can be viewed by any user. A popular file format used by document management software to save converted documents is **PDF** (Portable Document Format),

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Graphics and Multimedia Software

- In addition to business software, many people work with software designed specifically for their field of work.
- Power users such as engineers, architects, desktop publishers, and graphic artists often use sophisticated software that allows them to work with graphics and multimedia.
- This software includes computer-aided design, desktop publishing, paint/image editing, photo editing, video and audio editing, multimedia authoring, and Web page authoring.
- Next table lists the more popular programs.

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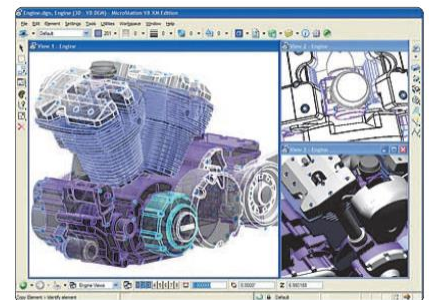Govt. Zamindar Graduate college Gujrat

POPULAR GRAPHICS AND MULTIMEDIA SOFTWARE

Application Software	Manufacturer	Program Name
Computer-Aided Design (CAD)	Autodesk	AutoCAD
	Chief Architect	Chief Architect
	Microsoft	Visio 2007
Desktop Publishing (for the Professional)	Adobe	InDesign
	Corel	Ventura
	Quark	QuarkXPress
Paint/Image Editing (for the Professional)	Adobe	Freehand Illustrator
	Corel	Painter
	Microsoft	Expression Graphic Designer
Photo Editing (for the Professional)	Adobe	Photoshop
	Nik Software	Nik Sharpener Pro
Video and Audio Editing (for the Professional)	Adobe	Audition Encore DVD Premiere Pro
	Avid Technology	Avid Xpress Pro
	Cakewalk	SONAR
	Sony	ACID Pro
	Ulead	MediaStudio Pro DVD Workshop
Multimedia Authoring	Adobe	Authorware Director
	SumTotal Systems	ToolBook Instructor
Web Page Authoring	Adobe	Dreamweaver Fireworks Flash GoLive
	Microsoft	SharePoint Designer 2007

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Graphics and Multimedia Software

- **Computer-aided design** (**CAD**) **software** is a sophisticated type of application software that assists a professional user in creating engineering, architectural, and scientific designs. For example, engineers create design plans for vehicles and security systems. Architects design building structures and floor plans.

- **Desktop publishing** (**DTP**) **software** enables professional designers to create sophisticated documents that contain text, graphics, and many colors. Professional DTP software is ideal for the production of high-quality color documents such as textbooks, corporate newsletters, marketing literature, product catalogs, and annual reports. Today's DTP software also allows designers to convert a color document into a format for use on the World Wide Web.

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Graphics and Multimedia Software

- **Image editing software** provides the capabilities of paint software and also includes the capability to enhance and modify existing pictures and images. Modifications can include adjusting or enhancing image colors, adding special effects such as shadows and glows, and creating animations.

- **Professional photo editing software** is a type of image editing software that allows photographers, videographers, engineers, scientists, and other high volume digital photo users to edit and customize digital photographs. With professional photo editing software, users can retouch photos, crop images, remove red-eye, change image shapes, color-correct images, straighten images, remove or rearrange objects in a photo, and apply filters.

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Graphics and Multimedia Software

- **Video editing software** allows professionals to modify a segment of a video, called a clip. For example, users can reduce the length of a video clip, reorder a series of clips, or add special effects such as words that move horizontally across the screen. Video editing software typically includes audio editing capabilities.

- **Audio editing software** lets users modify audio clips, produce studio-quality soundtracks, and add audio to video clips.

- **Multimedia authoring software** allows users to combine text, graphics, audio, video, and animation into an interactive application. With this software, users control the placement of text and images and the duration of sounds, video, and animation. Once created, multimedia presentations often take the form of interactive computer based presentations or Web-based presentations designed to facilitate learning, demonstrate product functionality, and elicit direct-user participation.

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POPULAR PROGRAMS FOR HOME/PERSONAL/EDUCATIONAL USE

Application Software	Manufacturer	Program Name
Software Suite (for Personal Use)	Microsoft	Works
	Sun	OpenOffice.org
Personal Finance	Intuit	Quicken
	Microsoft	Money
Legal	Broderbund	Family Lawyer Home and Business Lawyer WillWriter
	Cosmi	Perfect Attorney
	Nolo	Quicken Legal Business Quicken WillMaker
Tax Preparation	2nd Story Software	TaxACT
	H&R Block	TaxCut
	Intuit	TurboTax
Desktop Publishing (for Personal Use)	Broderbund	The Print Shop PrintMaster
	Microsoft	Publisher 2007
Paint/Image Editing (for Personal Use)	Corel	CorelDRAW Paint Shop Pro
	Sun	StarOffice Draw
	The GIMP Team	The Gimp

Application Software	Manufacturer	Program Name
Photo Editing (for Personal Use)	Adobe	Photoshop Elements
	Corel	Paint Shop Pro Photo
	Microsoft	Digital Image Photo Story
	Roxio	PhotoSuite
	Ulead	PhotoImpact Photo Express
Clip Art/Image Gallery	Broderbund	ClickArt
	Nova Development	Art Explosion
Video and Audio Editing (for Personal Use)	Microsoft	Movie Maker
	Pinnacle Systems	Studio MovieBox
	Roxio	VideoWave
	Ulead	VideoStudio
Home Design/ Landscaping	Broderbund	Instant Architect
	Quality Plans	3D Home Architect Better Homes & Gardens Home Designer
	ValuSoft	LandDesigner
Reference	DeLorme	Street Atlas
	Fogware Publishing	Merriam-Webster Collegiate Dictionary & Thesaurus
	Microsoft	Encarta Streets & Trips

FIGURE 3-21 Many popular programs are available for home, personal, and educational use.

Software for Personal Use

- A **software suite** (for personal use) combines application software such as word processing, spreadsheet, database, and other programs in a single, easy-to-use package. Many computer vendors install a software suite for personal use, such as Microsoft Works, on new computers sold to home users.

- **Personal finance software** is a simplified accounting program that helps home users and small office/home office users balance their checkbooks, pay bills, track personal income and expenses, track investments, and evaluate financial plans.

- **Legal software** assists in the preparation of legal documents and provides legal information to individuals, families, and small businesses. Legal software provides standard contracts and documents associated with buying, selling, and renting property; estate planning; marriage and divorce; and preparing a will or living trust.

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Software for Personal Use

- **Tax preparation software** can guide individuals, families, or small businesses through the process of filing federal taxes. These programs forecast tax liability and offer money-saving tax tips, designed to lower your tax bill. After you answer a series of questions and complete basic forms, the software creates and analyzes your tax forms to search for missed potential errors and deduction opportunities.
- **Personal DTP software** helps home and small business users create newsletters, brochures, advertisements, postcards, greeting cards, letterhead, business cards, banners, calendars, logos, and Web pages. Personal DTP programs provide hundreds of thousands of graphical images. You also can import (bring in) your own digital photographs into the documents.

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Software for Personal Use

- **Personal paint/image editing software** provides an easy-to-use interface; includes various simplified tools that allow you to draw pictures, shapes, and other images; and provides the capability of modifying existing graphics and photos.
- Many home users work with easy-to-use **video and audio editing software**, which is much simpler to use than its professional counterpart, for small-scale movie making projects. With these programs, home users can edit home movies, add music or other sounds to the video, and share their movies on the Web. Some operating systems include video editing and audio editing software.
- **Educational software** is software that teaches a particular skill. Educational software exists for just about any subject, from learning how to type to learning how to cook. Preschool to high-school learners use educational software to assist them with subjects such as reading and math or to prepare them for class or college entry exams.

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APPLICATION SOFTWARE FOR COMMUNICATIONS

E-Mail
- Messages and files sent via a network such as the Internet
- Requires an e-mail program
  - Integrated in many software suites and operating systems
  - Available free at portals on the Web
  - Included with paid Internet access service
  - Can be purchased separately from retailers

FTP
- Method of uploading and downloading files with other computers on the Internet
- May require an FTP program
  - Integrated in some operating systems
  - Available for download on the Web for a small fee

Web Browser
- Allows users to access and view Web pages on the Internet
- Requires a Web browser program
  - Integrated in some operating systems
  - Available for download on the Web free or for a fee

Video Conferencing
- Meeting between geographically separated people who use a network such as the Internet to transmit video/audio
- Requires video conferencing software, a microphone, speakers, and sometimes a video camera attached to your computer
- Requires video conferencing software

Internet Telephony (VoIP)
- Allows users to speak to other users over the Internet
- Requires Internet connection, Internet telephone service, microphone or telephone, and Internet telephone software or telephone adapter

Newsgroup/Message Board
- Online area where users have written discussions
- Newsgroup may require a newsreader program
  - Integrated in some operating systems, e-mail programs, and Web browsers; built into some Web sites
  - Available for download on the Web, usually at no cost
  - Included with some paid Internet access services

Chat Room
- Real-time, online typed conversation
- Requires chat client software
  - Integrated in some operating systems, e-mail programs, and Web browsers
  - Available for download on the Web, usually at no cost
  - Included with some paid Internet access services
  - Built into some Web sites

Instant Messaging
- Real-time exchange of messages, files, audio, and/or video with another online user
- Requires instant messenger software
  - Integrated in some operating systems
  - Available for download on the Web, usually at no cost
  - Included with some paid Internet access services

Blogging
- Time-stamped articles, or posts, in a diary or journal format, usually listed in reverse chronological order
- Blogger needs blog software, or blogware, to create/maintain blog
  - Some Web sites do not require installation of blog software

Utility Program

- Utility programs are considered system software because they assist a user with controlling or maintaining the operation of a computer, its devices, or its software.

- Utility programs typically offer features that provide an environment conducive to successful use of application software.

- One of the more important utility programs protects a computer against viruses.

- A computer virus is a potentially damaging computer program that affects, or infects, a computer negatively by altering the way the computer works without the user's knowledge or permission.

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WIDELY USED UTILITY PROGRAMS

Utility Program	Description
Antivirus Program	An antivirus program protects a computer against viruses by identifying and removing any computer viruses found in memory, on storage media, or in incoming files.
Personal Firewall	A personal firewall detects and protects a personal computer from unauthorized intrusions.
Spyware Remover	A spyware remover detects and deletes spyware, adware, and other similar programs on your computer.
Internet Filters • Anti-Spam Program • Web Filter • Pop-Up Blocker	 An anti-spam program attempts to remove spam (Internet junk mail) before it reaches your e-mail inbox. A Web filter restricts access to specified Web sites. A pop-up blocker stops advertisements from displaying on Web pages and disables pop-up windows.
File Manager	A file manager provides functions related to file and disk management.
File Compression	A file compression utility shrinks the size of a file(s), so the file takes up less storage space than the original file.
Backup	A backup utility allows users to copy selected files or an entire hard disk to another storage medium.
Media Player	A media player allows you to view images and animation, listen to audio, and watch video files.
CD/DVD Burning	A CD/DVD burner writes text, graphics, audio, and video files on a recordable or rewritable CD or DVD.
Personal Computer Maintenance	A personal computer maintenance utility identifies and fixes operating system problems, detects and repairs disk problems, and includes the capability of improving a computer's performance.

Web Applications

- Users often interact with Web-based software, sometimes called a **Web application,** directly at the host's Web site. Some Web sites, however, require you download the software to your local computer or device.

- Web-based software sites often store users' data and information on their servers. Web-based software sites may provide users with an option of storing data locally on their own personal computer or mobile device. Many of the previously discussed types of application software have Web-based options.

- For example, word processing, e-mail, personal information manager, software suite, photo editing, Web page authoring, tax preparation, clip art/image gallery, reference, educational, and entertainment programs are available as Web based software.

- Some Web sites provide free access to the Web-based software. For example, one site creates a map and driving directions when a user enters a starting and destination point.

THE END