



Office Procedures

Chapter 4
Mastering Technology

In today's office environment

- All employees should have at least a basic knowledge of technology
 - Computers & peripherals; operating systems
 - Printers/copiers
 - Cell phones
 - Software apps

Computers

- Computers generally fall into three categories:
 - Desktop
 - Laptop
 - Tablet

Desktop Computer



Components of the CPU

- Motherboard
 - Printed circuit board that holds the key components of the computer system
- RAM
 - Random access memory
 - Today's computers have 2GB – 8GB of RAM
 - More RAM means a faster computer
- Graphics card (video card)
 - Expansion card for producing 2D and 3D images

Components of the CPU...

- Hard Drive (disk drive)
 - Mass storage device for programs & data files
 - Today's hard drives have a capacity of 500GB – 1TB (or more)
- USB ports
 - Used to plug in a variety of external devices, such as printers, external drives, mice, speakers, etc. Common USB ports are versions 2.0 and 3.0.

Components of the CPU...

- Wi-Fi
 - Radio signal receiver/transmitter
 - To connect to internet or other wireless devices, such as printers and smartphones
- Bluetooth
 - Another kind of radio signal receiver/transmitter
 - To connect to personal mobile devices such as smartphones, speakers, cameras

Input Devices



Keyboard

- Many different kinds of keyboards are available
 - With or without numeric pad
 - Flexible keyboards
 - Wired and wireless keyboards



Mouse

- Mice (mouses??) come in many shapes and sizes





Mobile Devices



Laptop/Netbook

- Laptops typically have the same system options and configurations as desktop computers





When shopping for a new computer, you should think about...

- Screen size
- Ram
- Hard drive
- USB ports

Tablet

- Although today's tablets are used mainly for entertainment (games, video, surfing), they are moving closer to laptop-like capabilities.

- iPad
- Samsung Galaxy Tab
- Kindle Fire
- Google Nexus
- Surface Pro 3



Cell Phones / Smart Phones

- Phone, camera, texting, web browser, games – all rolled into one device
- Bluetooth for wireless transfer of photos and music to/from PC



Output Devices

Output Devices



DVD Player / Burner

- Read/write data files on CD or DVD
- Play movies or games from DVD



Flash Drives & Memory Cards

- Advantages are high storage capacity and portability
 - Capacity up to 256 GB (flash drives)



Printers, Scanners, Copiers

- All-in-One Printer
 - Print, scan, copy documents/images
 - Replaceable inkjet cartridges
 - More economical than laser printers
 - USB or wireless connection



Printers, Scanners, Copiers

- Laser Printer
 - Uses toner (powdered ink) instead of ink cartridges



Printers, Scanners, Copiers

- Inkjet Printer
 - Uses ink cartridges
 - Sprays ink onto paper



Printers, Scanners, Copiers

- Flat-Bed Scanner
 - Converts printed document to digital image
 - Practical for non-standard size documents



Printers, Scanners, Copiers

- Photocopier
 - Copy, 1 or 2 sides
 - Collate
 - Staple
 - Punch holes
- High speed copying
- Expensive



Software

TYPES OF SOFTWARE



Operating System

- The basic program that operates and coordinates the function of all components of the computer system. Without an operating system, the computer cannot function.
- Today's operating systems include:
 - Windows 8, Windows 7, Windows Vista
 - Mac OS
 - Linux

Software

- Application software
 - Software for specific tasks
 - MS-Office (Word, Excel, etc)
 - Sage Simply Accounting, QuickBooks
- Freeware
 - Programs at no cost, free downloads
 - OpenOffice.org (MS-Office compatible)
 - Kingsoft (MS-Office compatible)
 - Photoscape (image editing)

Software...

- Cloud computing

- Programs run from an internet source rather than installed on your computer

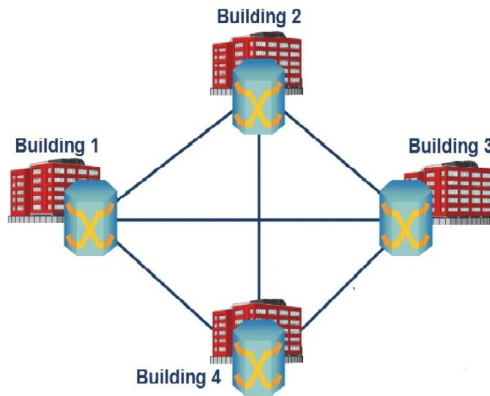
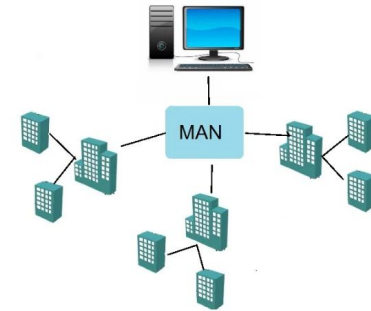
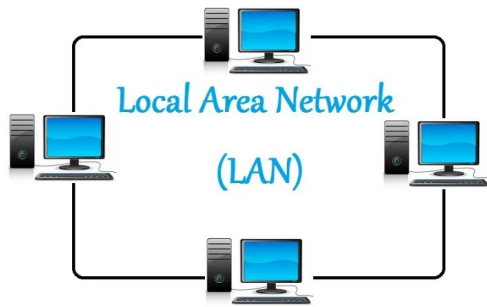
- Office 365 – the web-based version MS-Office

- Data storage services

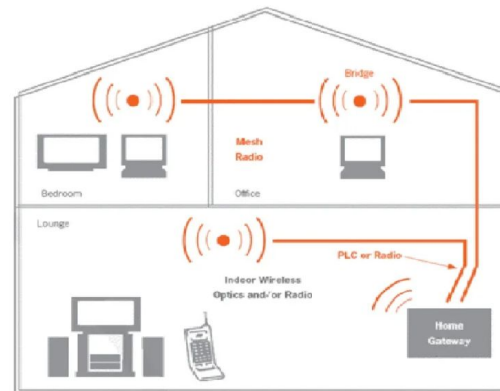
- Subscription fee (usually annual)

- No need to do software updates/upgrades on your computer because the software is managed by the application provider

Networks for Telecommunication



Campus Area Network(CAN)



Home Area Network(HAN)

Networks...

- Local area networks
 - Small Geographical area
- Metropolitan and wide area networks
 - City/region
 - International around the world

Intranets and Extranets...

- Intranet
 - Private, internal
- Extranet
 - External

Internet

- World Wide Web
 - Web Servers
 - Web Pages
 - Web Browsers
 - Search Engines

Telecommunication Pipelines

- Analogue Dial-Up
- Cable
- Digital Subscriber Line (DSL)
- Satellite
- Fibre-Optic Cable
- Wireless Connections

Security Threats

- ❑ **Spam** – unwanted emails that bring the risk of viruses, financial fraud, identity theft
- ❑ **Virus** – tiny programs that can do damage to your data
- ❑ **Phishing** – emails that try to get you to give out your personal information
- ❑ **Spyware** – malware programs that monitor everything you do, trying to get your personal information

Security Solutions

❑ Anti-virus programs

- ❑ Subscription (for a fee)
- ❑ Free online

❑ Firewall

- ❑ Program that blocks remote users from gaining access to your computer

❑ Effective Passwords

- ❑ Passwords that are not easy to crack
- ❑ Should include alphabet, numbers, special characters



Make your password hard to crack



- ❑ Don't use “password” as your password!!
- ❑ Use 8 characters or more (the longer the better), including letters, numbers, symbols
- ❑ Avoid dictionary words, common sequences (12345), repeated characters (2222), your birthday, other personal information



End