



Chapter 2

Software Computer and Applications

Computer : Software

- **Computer software** is a package of specific instructions (a program) written in a defined order that tells a computer what to do and how to do it.
- **Type of software :**
 - System Software
 - Programming Software
 - Application Software

System Software

- **System software** is computer software designed to operate the computer hardware, to provide basic functionality, and to provide a platform for running application software.
- System software includes device drivers, operating systems, servers, utilities, and window systems.

Programming Software

- **Programming software** include tools in the form of programs or applications that software developers use to create, debug, maintain, or otherwise support other programs and applications.
- The term usually refers to relatively simple programs such as **compilers, debuggers, interpreters, linkers,** and **text editors**, that can be combined together to accomplish a task.

Application Software

- **Application software** is developed to perform in any task that benefits from computation. It is a set of programs that allows the computer to perform a specific data processing job for the user. It is a broad category, and encompasses software of many kinds, including the internet browser being used to display this



How user interact with Computer

Information Technology in everyday life



Education



Business



Entertainment



Transportation



Health care

Educational media and tools can be used for:

- *task structuring support: help with how to do a task (procedures and processes),*
- *access to knowledge bases (help user find information needed)*
- *alternate forms of knowledge representation (multiple representations of knowledge, e.g., video, audio, text, image, data)*

1) IT for Education

Educational Technology :

- **Theory and practice of educational approaches to learning**
- **Technological tools and media**
- **Learning system management (LMS)**



Ref@http://en.wikipedia.org/wiki/Educational_technology#Audio_and_video

1) IT for Education

Example of Educational of media :

- **Audio and video**
- **Computers, tablets and mobile devices**
- **Social networks**
- **Webcams**
- **Whiteboards**
- **Screen casting**
- **Virtual class room**



1) IT for Education

Benefits:

- **Easy-to-access course**
- **Student motivation**
- **More opportunities for extended learning**
- **Wide participation**
- **Improved student writing**
- **Differentiated Instruction**



Ref@http://en.wikipedia.org/wiki/Educational_technology#Audio_and_video

2) IT for Business

Example of Software for Business :



Office Automation



Desktop Publishing



Graphic & Animation & Simulation



Management Information System



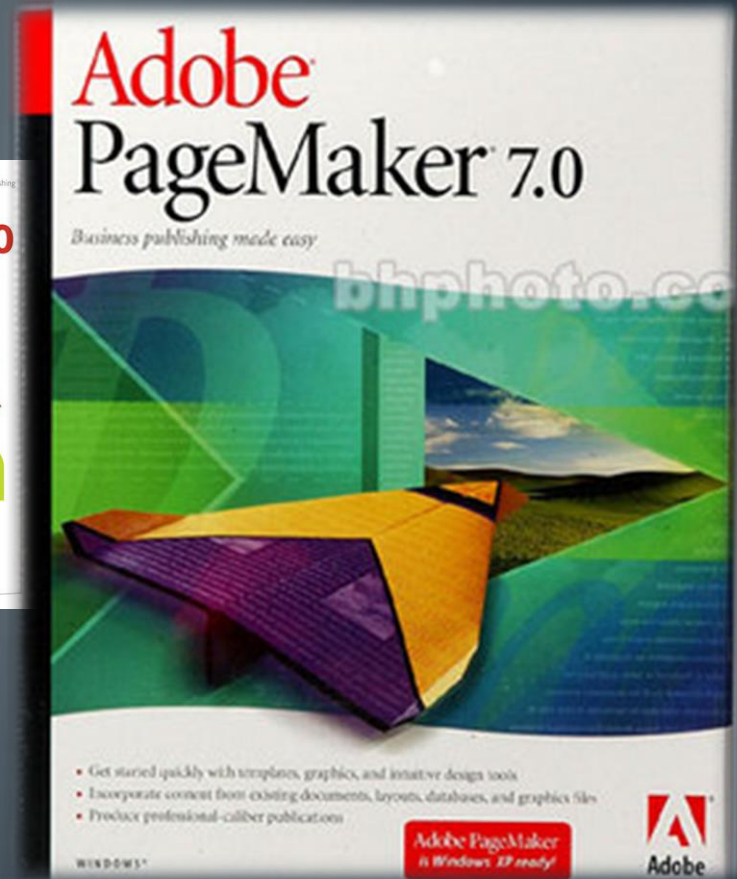
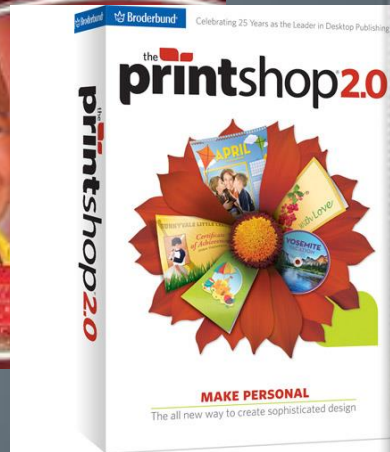
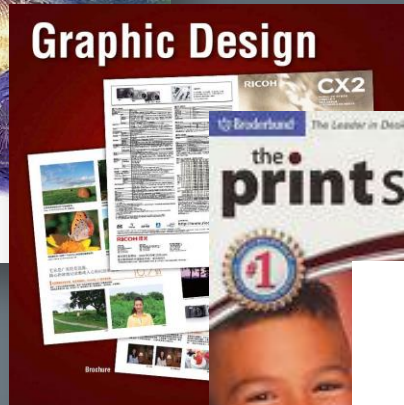
Expert System

Office Automation

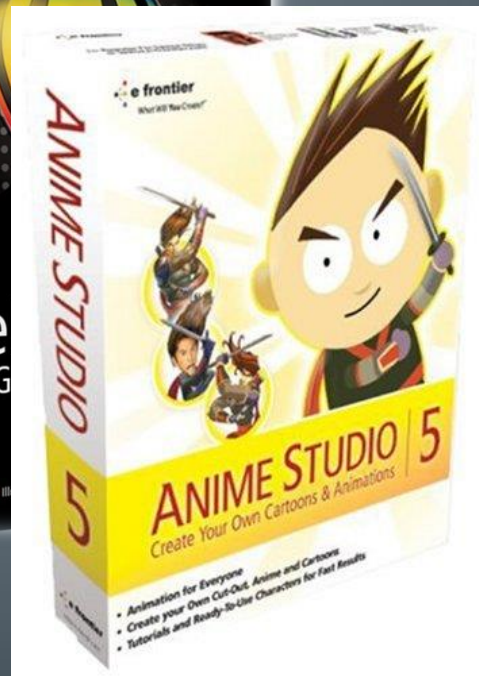
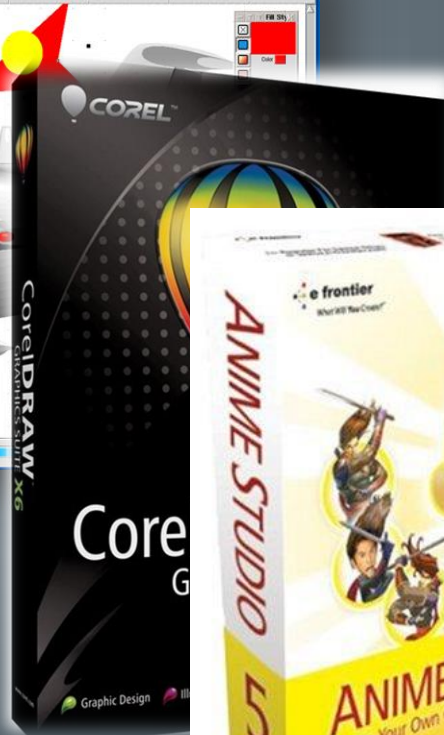
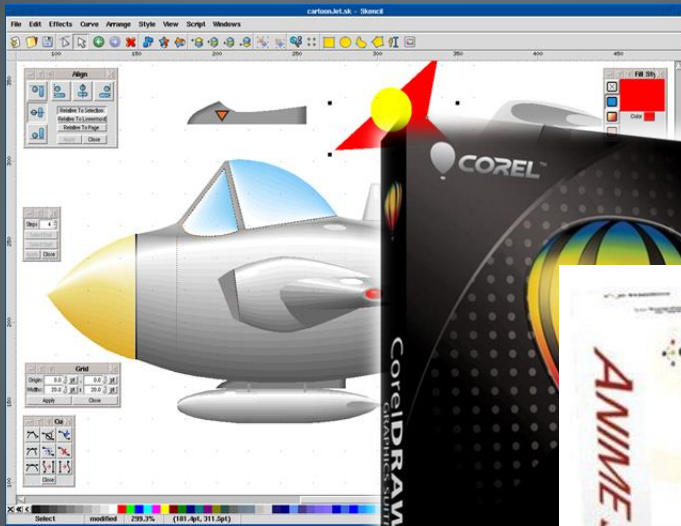
Microsoft Office 2013



Desktop Publishing



Graphics & Animation software



Simulation software



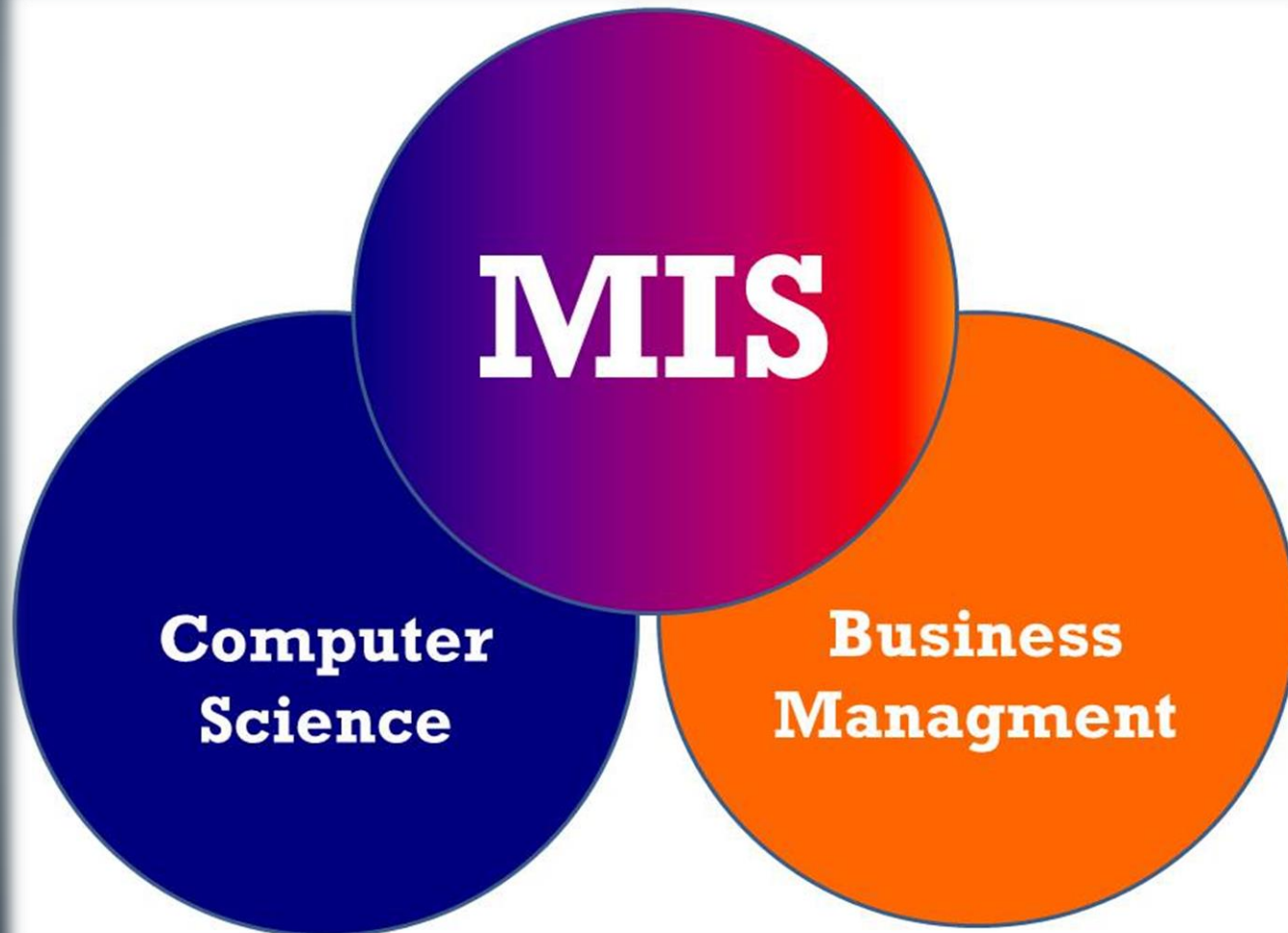
Management Information System (MIS)

The MIS concept addresses the use of IT to improve individual and organizational performance at two levels :

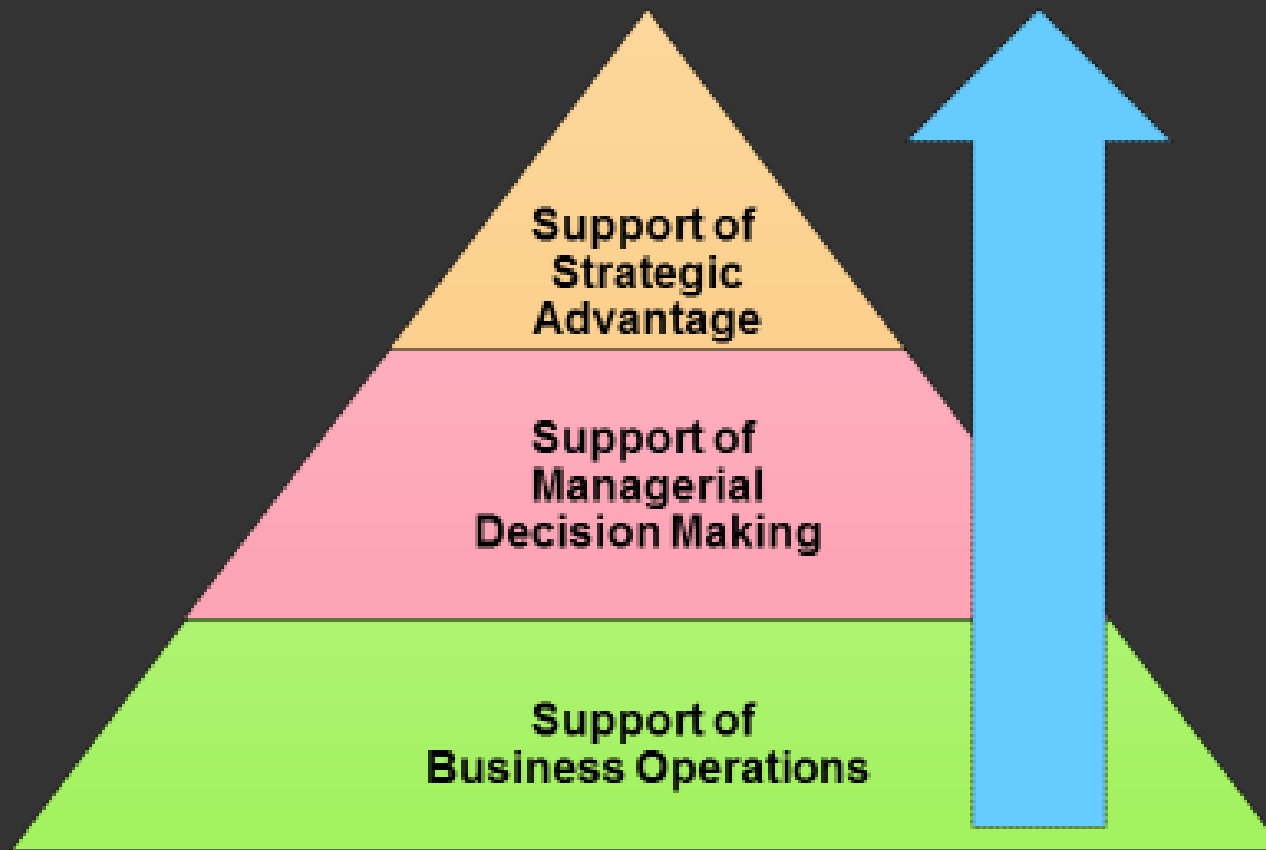
- 1) producing “better” tangible outputs*
- 2) developing tools and processes that allow better management decision making*



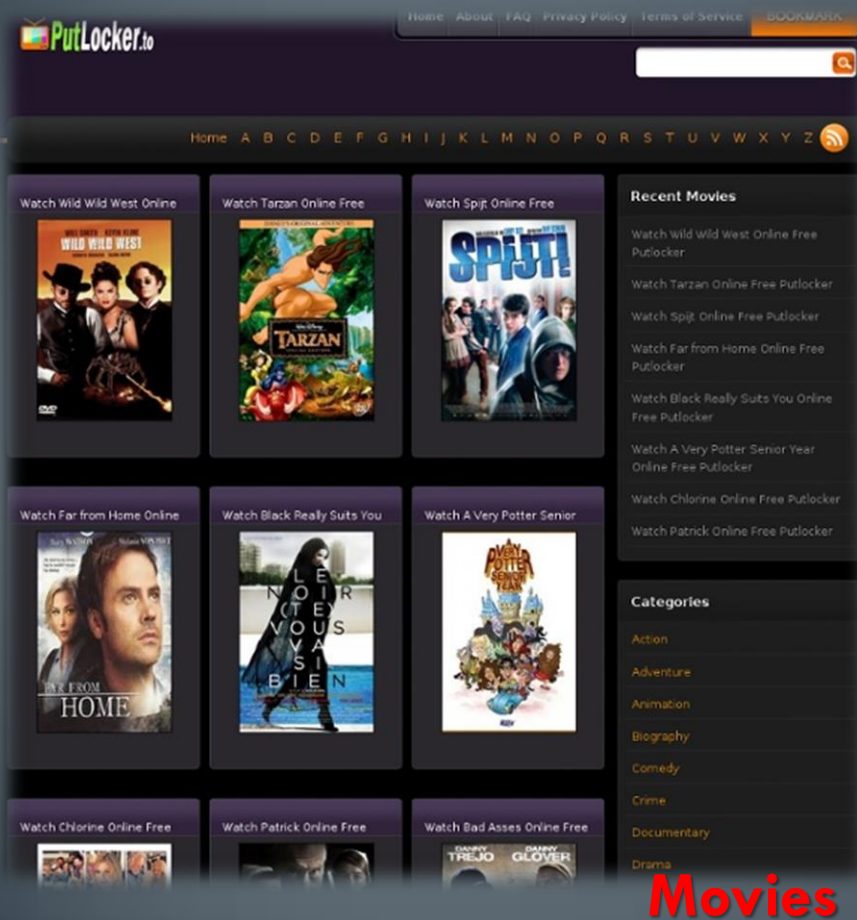
Management Information System (MIS)



Major Roles of Information Systems



3) IT for Entertainment



4) IT for Transportation

- Traffic Control system
- Vehicle Tracking system
- Logistic Tracking system
- Electronic Driving Control system

4) IT for Transportation

- *Ex. Traffic Control system*



4) IT for Transportation

- *Ex. GPS Tracking system*



5) IT for Healthcare

Hospital Management system

Patient Registration



Nursing



Investigations



Specialities



Reports



Doctor Consultation



Resource Management



Financial Management



Admin Management



Store Management



Pharmacy Management



Canteen Management



Laundry Management



Business Management



Search Patient Details



5) IT for Healthcare



SeshClinic

Mobilize Healthcare

“ Integrating the Web and Mobile platforms to empower Medical Practitioners consult anytime, anywhere... ”



A Mobile networking platform to exchange knowledge



Authentication
Data Integrity
Audit Controls
Transmission Security
Access Control
Encryption

Information Technology for Healthcare



- mHealth
- Health care outlook 2020
- Future of health care





Questions

1. Identify the differences between System software and Application software?
2. Explain usages of Computer in following fields
 - Education
 - Business
 - Healthcare
 - Transportation
 - Entertainment