

CAD SYSTEM ARCHITECTURE

- ❖ It is an early model which was used for the basic geometry construction and modelling purpose.
- ❖ Four major components of CAD System Architecture are
 1. Database
 2. Operating system
 3. Input/output devices
 4. User interface

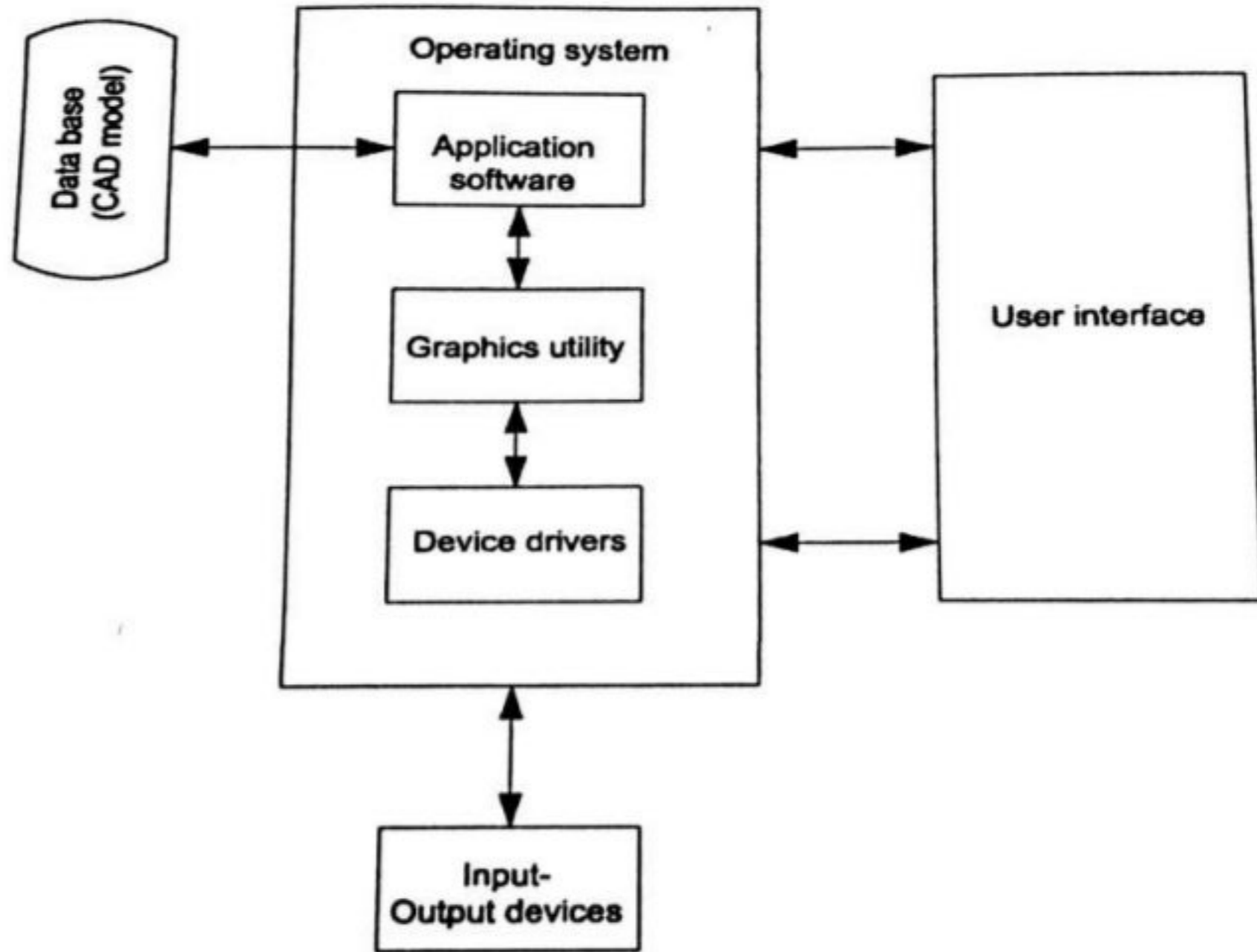


Figure 1.14 Basic architecture of CAD system

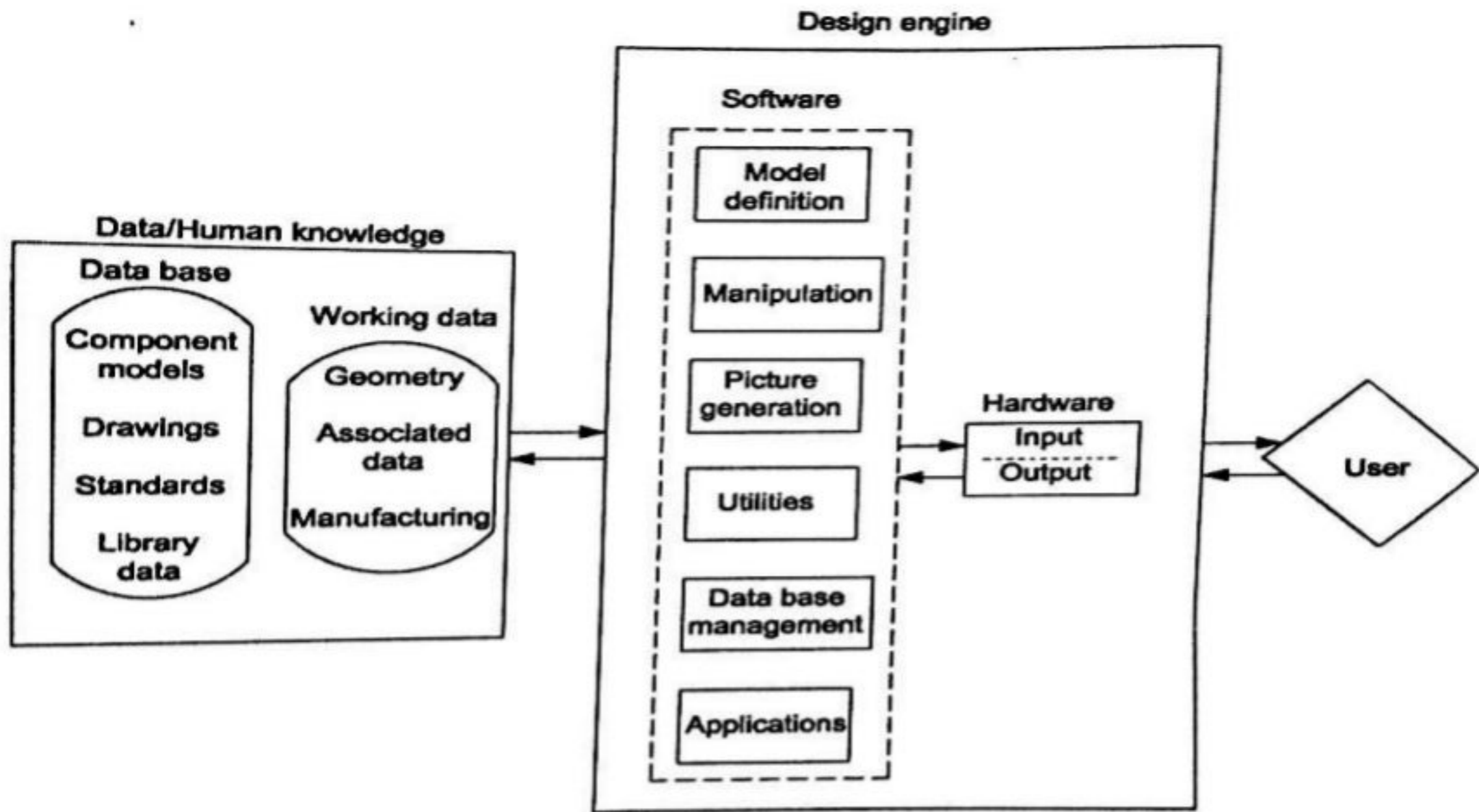


Figure 1.15 The architecture of advanced CAD system

COMPUTER GRAPHICS (CG)

- ❖ Computer graphics is a technology which uses the display of the drawing or the geometric model of the component in CAD.
- ❖ CG may be defined as the process of creation, storage and manipulation of drawings and pictures with aid of a computer.
- ❖ It is an extremely effective medium for communication between users and computers.
- ❖ There are two types
 1. Passive CG
 2. Interactive CG

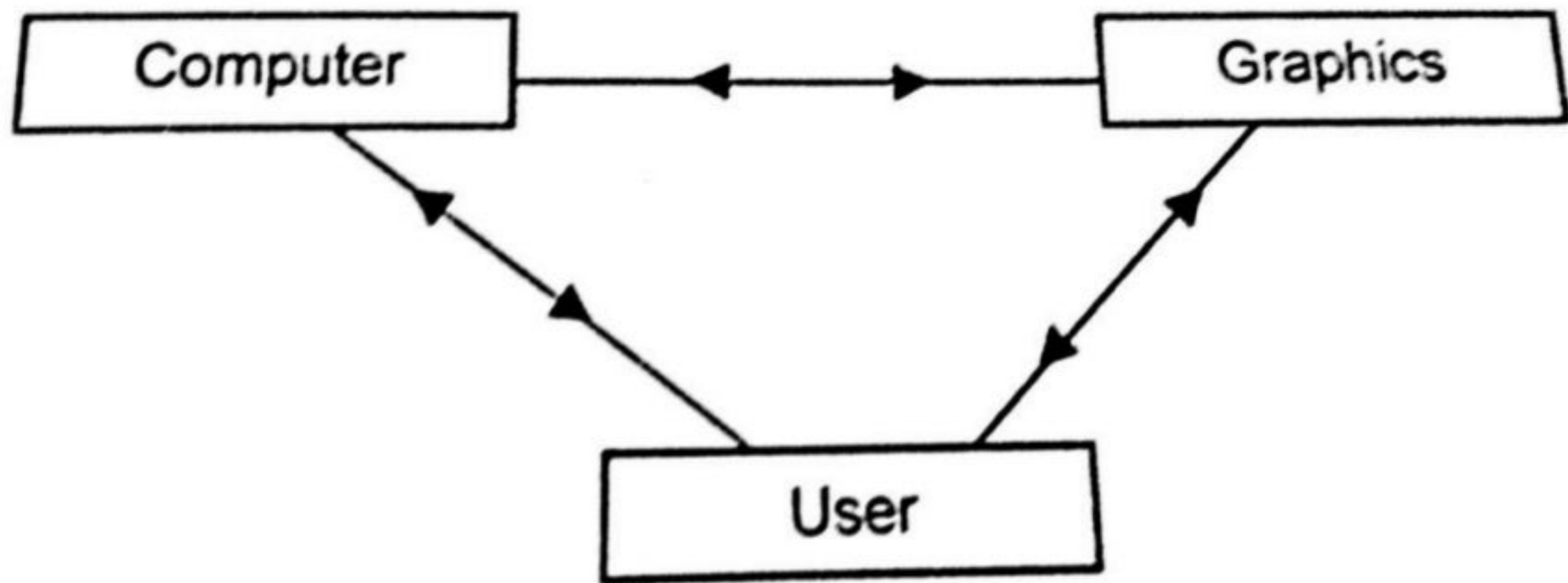


Figure 1.16 Concepts of IGC

Interactive CG

The following functions of the ICG

- ❖ Modelling
- ❖ Storage
- ❖ Manipulation
- ❖ Viewing

ADVANTAGES OF COMPUTER GRAPHICS

- ❖ The object drawings can be denoted by its geometric model in three dimensions. i.e. X, Y, Z coordinates.
- ❖ Accurate drawings can be made.
- ❖ Sectional drawings can be easily created.
- ❖ Modification of geometric model of objects is easy.
- ❖ It is easy storage and retrieval of drawings.

APPLICATIONS OF COMPUTER GRAPHICS

- ❖ Paint programs
- ❖ Design programs
- ❖ Presentation graphics software
- ❖ Animation software
- ❖ CAD software
- ❖ Desktop publishing
- ❖ Education and training
- ❖ Image processing