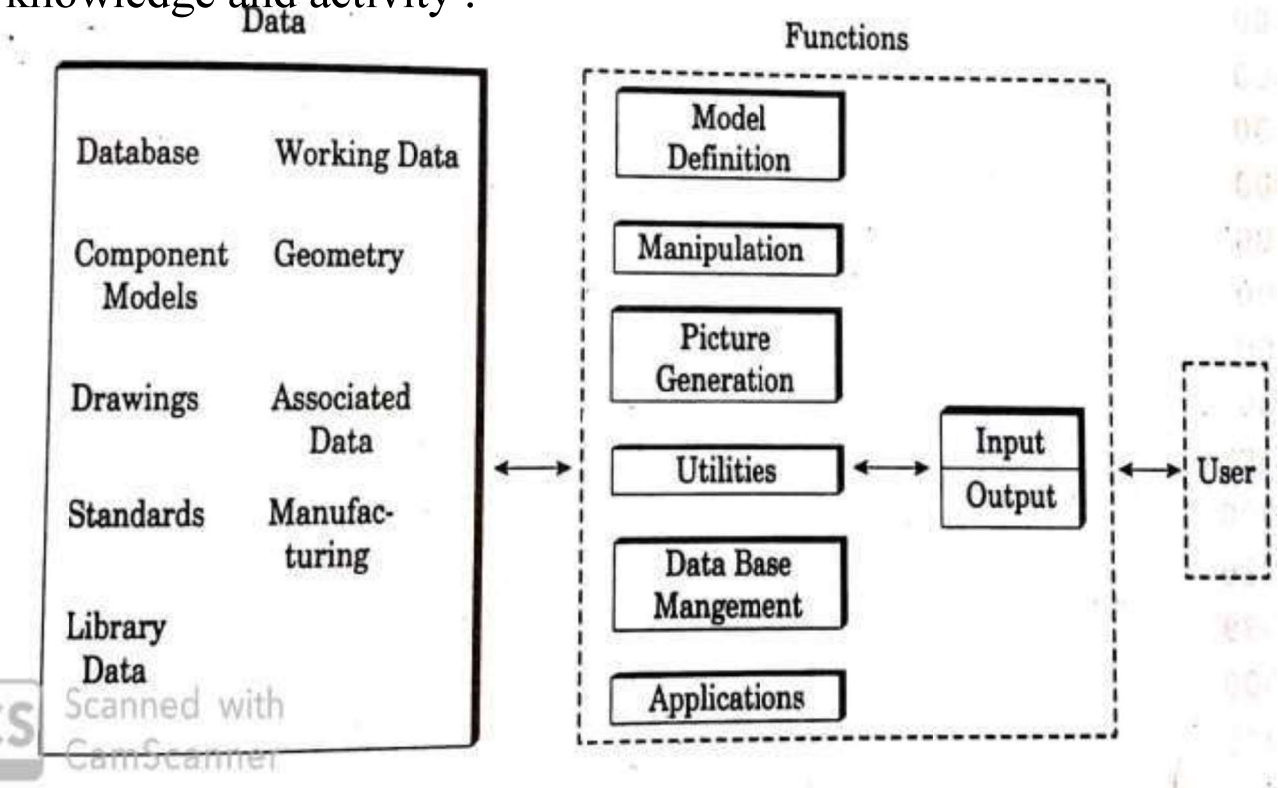
CAD SYSTEM ARCHITECTURE

A CAD system comprises of the following:

1. Hardware: the computer and associated peripheral equipment.
2. Software: the computer program running on the hardware .
3. Data: the data structure created and manipulated by the hardware.
4. Human knowledge and activity .



The architecture of cad system

BENEFITS OF CAD

- Automation of routine design tasks to increase the productivity of designers and engineers.
- Makes the designers to concentrate more on creativity.
- Due to 3D visualization of the model there is increase the designer's conceptual capacity, and hence the quality of the design.
- Creating prototypes using digital manufacturing.
- No paper works.
- Can share data with other applications.
- Shorter preparation time for drawing
- Reduce man power requirement
- Costumer modification in drawing are easier
- More efficient operation in drafting
- Low wastage of drawing
- Minimize the transcription error in drawing
- Better design can be evolved

- Revision are possible
- Assistance in preparation in documentation
- Colures can be used to customize the product
- Production of orthographic projection with dimensions and tolerance
- Isometric views
- Printing can be done to any scale
- Hatching of all section with different filling patterns
- Preparation of assembly and subassembly drawing
- Hydraulic and pneumatic circuit drawing with symbol