**Input Design:**

Inaccurate input data are the most common causes of errors in data processing. Errors entered by data entry operators can be controlled by the Input design. "Input design is the process of converting user originated inputs to computer based formats". It consists of developing specification and procedure for data preparation.

**Objectives of input design:**

The main objectives of input design are:

1. Controlling amount of input: Due to so many reasons, design should control the quantity of data    for input. Reducing the data requirement can lower cost by reducing labour expenses. By reducing input requirement, the analyst can speed the entire process from data capture to providing results to the users.

2. Avoiding delay: A processing delay resulting from data preparation or data entry operator is called bottleneck. Avoiding bottleneck should always be one objective of the analyst while designing output.

3. Avoiding errors in data: The rate at which errors occurs depends on the quantity of data, i.e. smaller the amount of data to input the fewer the opportunities for errors.

4. Keeping the process simple: Simplicity works and is accepted by the users. Complexity should be avoided when there are simple alternatives.

**Output Design:**

The term output necessarily implies to information on printed or displayed by an information system. Following are the activities that are carried out in output design stage.

Ø  Identification of specific output required to meet the information requirements.

Ø  Selecting of methods for processing outputs.

Ø  Designing of reports, formats or other documents that acts as a carrier of information.

**Output Design Activities**

The output design of an information system must meet the following objectives:

1. The output design should provide information about the past, present or future events. The operational control level outputs provide operations of the past and present events. On the other hand, strategic planning level provides information of the future events.

2. The output design should indicate the important events, opportunities and problems.

3. The output design should be designed keeping in mind that an action must be triggered in response to some event. A set of rule is pre- designed for such trigger.

4. The output design should produce some action to the transaction. For e.g. when the telephone bill is generated, a receipt is printed.