# Types of Fact table in data warehouse

A fact table is the one which consists of the measurements, metrics or facts of business process. These measurable facts are used to know the business value and to forecast the future business. The different types of facts are explained in detail below.  
  
**Additive:**  
  
Additive facts are facts that can be summed up through all of the dimensions in the fact table. A sales fact is a good example for additive fact.  
  
**Semi-Additive:**   
  
Semi-additive facts are facts that can be summed up for some of the dimensions in the fact table, but not the others.  
Eg: Daily balances fact can be summed up through the customers dimension but not through the time dimension.  
  
**Non-Additive:**   
  
Non-additive facts are facts that cannot be summed up for any of the dimensions present in the fact table.   
Eg: Facts which have percentages, ratios calculated.

**Factless Fact Table:**

In the real world, it is possible to have a fact table that contains no measures or facts. These tables are called "Factless Fact tables".   
  
Eg: A fact table which has only product key and date key is a factless fact. There are no measures in this table. But still you can get the number products sold over a period of time.

A fact tables that contain aggregated facts are often called summary tables.

# Types of Dimensions in data warehouse

A dimension table consists of the attributes about the facts. Dimensions store the textual descriptions of the business. With out the dimensions, we cannot measure the facts. The different types of dimension tables are explained in detail below.  
  
**Conformed Dimension:**  
  
Conformed dimensions mean the exact same thing with every possible fact table to which they are joined.   
  
Eg: The date dimension table connected to the sales facts is identical to the date dimension connected to the inventory facts.  
  
**Junk Dimension:**  
  
A junk dimension is a collection of random transactional codes flags and/or text attributes that are unrelated to any particular dimension. The junk dimension is simply a structure that provides a convenient place to store the junk attributes.  
  
Eg: Assume that we have a gender dimension and marital status dimension. In the fact table we need to maintain two keys referring to these dimensions. Instead of that create a junk dimension which has all the combinations of gender and marital status (cross join gender and marital status table and create a junk table). Now we can maintain only one key in the fact table.  
  
**Degenerated Dimension:**  
  
A degenerate dimension is a dimension which is derived from the fact table and doesn't have its own dimension table.  
  
Eg: A transactional code in a fact table.  
  
**Role-playing dimension:**  
  
Dimensions which are often used for multiple purposes within the same database are called role-playing dimensions. For example, a date dimension can be used for “date of sale", as well as "date of delivery", or "date of hire".