

# UTILITY THEORY

Related to customer Satisfaction

Satisfaction is measured in utility.

Utility is want or mental satisfaction characteristics of a good or service. Utility is measured in units of measurement called utility.

Utility analysis is the investigation of how consumers reach decisions to achieve utility maximization. Utility is used ordinarily.

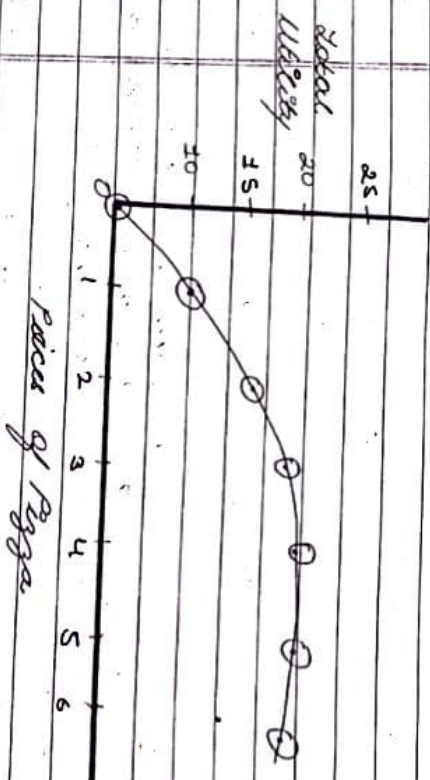
Total Utility :-

→ Total utility is the total amount of utility one derives from consuming goods or services.

→ Total utility decreases as time passes.

For example :-

Prices of Pizza	Total Utility
0	0
1	10
2	16
3	19
4	20
5	20
6	12



Marginal Utility :-

Marginal utility is the amount of additional utility, the person derives from the consumption of additional unit of a good or services.



Marginal Utility =  $\frac{\Delta \text{ in Total Utility}}{\Delta \text{ in no. of units of consumption}}$

Marginal Utility =  $\frac{\text{Change in total utility}}{\text{Change in no. of units consumed}}$

Marginal Utility =  $TU_2 - TU_1$   
 $C_2 - C_1$

Amount consumed    units consumed

### Calculation Marginal Utility

Problems of calculating Marginal Utility are generally stated in one of two forms :-

1) Calculating the change in utility going from one level of consumption to another.

2) Completing a table values which leaves blank at the top of the table and moving down the table.

For ex :-

Calculate Marginal utility when we are going from 0 piece of pizza to 1 piece of pizza.

Pieces of Pizza	Total Utility	MU
0	0	10
1	10	6
2	16	3

0 to 1 MU =  $10 - 0$   
 $1 - 0$

= 10

1 to 2 =  $16 - 10$  = 6 = 6  
 $2 - 1$

2 to 3 =  $19 - 16$  = 3 = 3  
 $3 - 2$