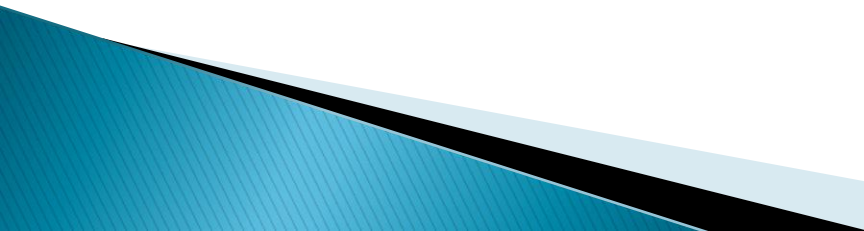


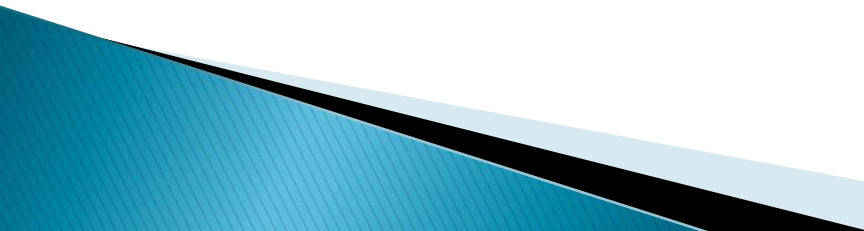
MBA 4<sup>th</sup> sem  
Production and Operations  
Management

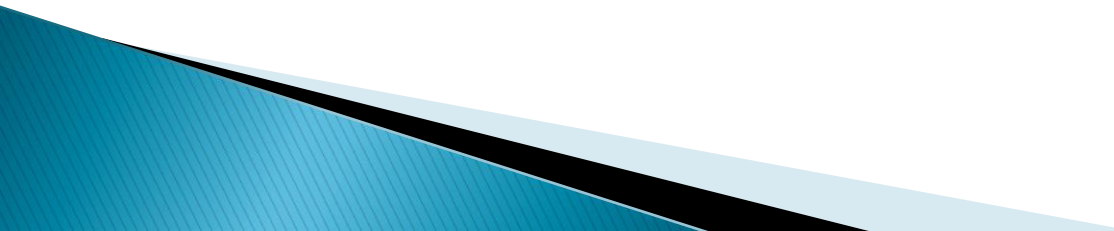
By  
Dr. Sonal singh Skiarwar

# Advantages of forecasting

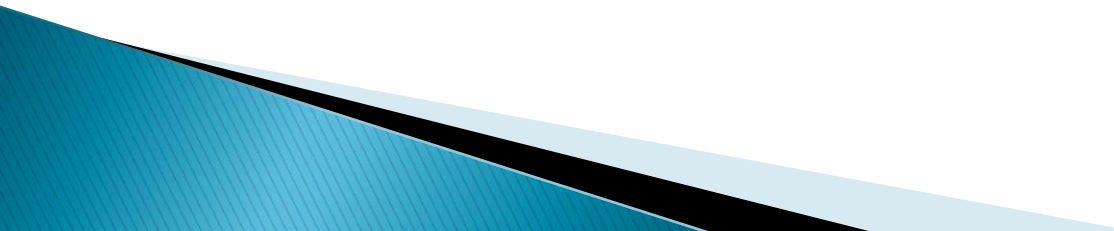
- ▶  Effective handling of uncertainty
  - ▶  Better labor relations
  - ▶  Balanced work-load
  - ▶  Minimization in the fluctuations of production
  - ▶  Better use of production facilities
  - ▶  Better material management
  - ▶  Better customer service
  - ▶  Better utilization of capital and resources
  - ▶  Better design of facilities and production system.
- 

# Limitation

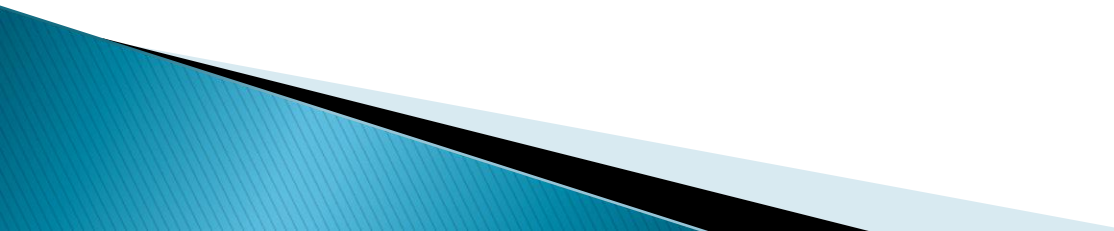
- ▶  Forecasting is to be made on the basis of certain assumptions and human judgments which yield wrong result.
  - ▶  It can not be considered as a scientific method for guessing future events.
  - ▶  It does not specify any concrete relationship between past and future events.
- 

- ▶  It requires high degree of skill.
  - ▶  It needs adequate reliable information so difficult
  - ▶ to collect reliable information.
  - ▶  Heavy cost and time consuming.
  - ▶  It can not be applied to a long period.
- 

# Methods of forecasting

- ▶ There are mainly two methods:
    - ▶ 1. Qualitative
    - ▶ 2. Quantitative
- 

# Methods :-

- ▶ Survey method
  - ▶ Time series analysis
  - ▶ Delphi Method
  - ▶ Regression analysis
  - ▶ Business Barometers
  - ▶ Input – output analysis
- 

# Regression Analysis:-

Regression analysis is used to find out the effect of changes of the relative movements of two or more inter-related variables. In the modern business conditions and situations ,number of factor are responsible for the changes made in the variables.

- ▶ For example , if we take two inter related variables viz. cost of production and profit ,there will be a direct relationship prevailing between this two variables. It is possible to have an estimate of profit on the basis of cost of production ,provided other things remain the same.

# Business barometer:-

- ▶ Index numbers are used to measure the state of condition of business condition between two or more periods. Business trend, seasonal fluctuations of a business and cyclical movements are studied with the help of index numbers.



# Input and output analysis:-

Under this method, a forecast can be made if the relationship between input and output is known . At the same time , the input requirements can be forecast of the basis of output. In other words, input can be determined on the basis of need of output

# Survey method:-

Field survey can be conducted to collect information regarding the attitude of people.

## ▶ **Time series analysis:-**

This method is quite accurate where future is expected to be similar to the past. Time series analysis can be applied. Only when the data are available for a long period of time