MBA 4th sem Production and Operations Management

By

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- **Delphi method**

 It is developed by Rand Corporation to forecast the military events. It is used when past data are not available. Opinions are taken from experts through questionnaire and then summarized and again given to experts for expected future evaluations.

Differences between Forecasting & Planning

FORECASTING	PLANNING
1.It is basis for planning.	1.Planning is basis for future course of action.
2. No decision can be taken without the help of forecasting.	▸ **2.** Planning helps to arrive at certain decision. They are regarding what is to be done, how is to be done and when is to be done

- 3. Forecasting is done at the middle or lower level of management;
- 4. A few members are involved in forecasting process.
- 5. Does not stimulates activity among employees

- 3. Planning is done at the top level of management.
- 4. large number of persons are involved in planning process.
- 5. Planning stimulates some activity to achieve the objectives of the organization

- 6. It is a tool of planning
- 7. It is done by experts.

- 6. It is not tool for forecasting
- 7. It can be done by any person

Exponential smoothing method

▸ *Exponential smoothing* is popular technique for short-run forecasting by business forecasters. This method is commonly applied to financial market and economic data, but it can be used with any discrete set of repeated measurements

Financial market includes

- Capital market
- Stock market
- Bond market
- Foreign exchange market
- Insurance market
- Credit market

Exponential smoothing method: (theoretical)

Exponential smoothing is forecasting technique that can be applied to time series, either to produce smoothed data to make forecasts.

This method assigns exponentially decreasing weights as the observation get older. The procedure gives heaviest weight to more recent information and smaller weights to observations in the more distant past. The reason for this is that the future is more dependent upon the recent past than on the distant past.

So, exponential smoothing weights past observations with exponentially decreasing weights to forecast future values. In the exponential smoothing the most recent observations have the greatest influence to forecast