

Business Forecasting

Subjective Assessment Methods



Quantitative Forecasting

So far in the unit we have discussed mainly quantitative or quasi-quantitative approaches to forecasting

Advantages of quantitative forecasting methods:

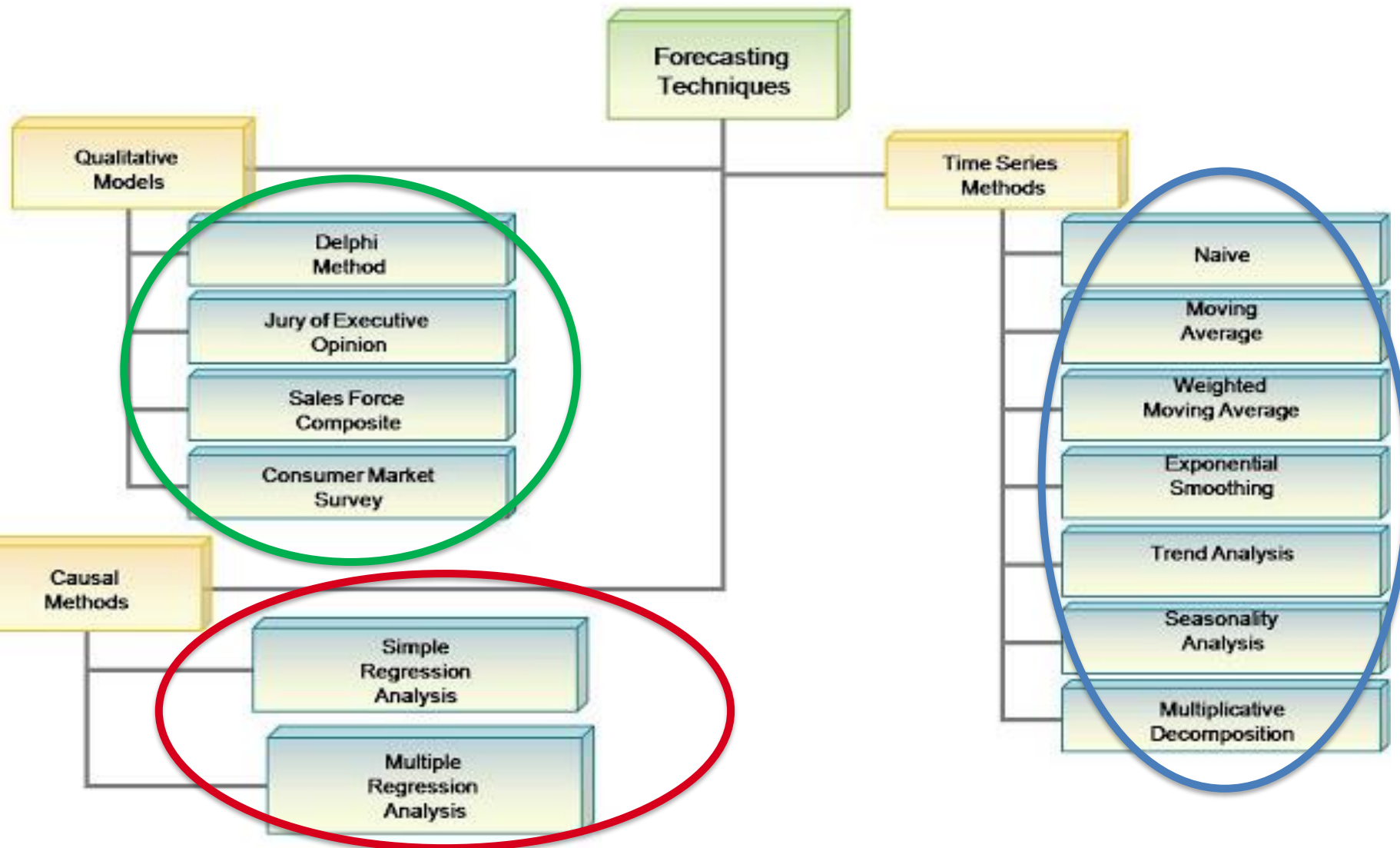
Objective, Consistent, Capable of processing large amounts of data and considering relationships between numerous variables

Disadvantages of quantitative forecasting methods:

Are only as good as the data upon which they are based.

When changes occur in the data that are not incorporated in the model, the generated forecasts cannot be accurate

Forecasting Techniques



Definition of Qualitative/Judgmental Forecasts

Judgmental forecasts, though **subjective** in nature, are formal predictions carried out in a **quasi-systematic** manner and are generally associated with some **level of confidence** in the forecast

Important to note it is not the forecast that is qualitative but **the manner in which the forecast is produced**

Judgmental forecasts are **not guesses or fiction** but based on relevant information

They may consider more than one potential future outcome with typically probabilities of outcomes

Use of Qualitative/ Judgmental Forecasts

Judgmental forecasts can be a possible alternative to quantitative forecasting when there is little or no numerical data available

May be useful in circumstances where the future environment is unlikely to be similar to past environment (rapid change in market)

May be an alternative when the skill level of the forecaster is low or resources are not available

Can be used in short to medium term but will have advantages (over quant methods) in longer term forecasting

Merits of Judgmental Forecasting

Judgmental forecasts have a distinct advantage over quantitative forecast methods in medium to longer term forecasting

Numerical extrapolation in these situations is unlikely to produce relevant and accurate forecasts

Many businesses also use judgmental forecasting methods as alternatives to quantitative method based forecasts in short to medium term forecasting

In these situations, the relative merit and superiority of judgmental forecasting over quantitative based methods is not so clear

Judgmental Methods

Two Major Categories:

Subjective assessment methods - use relevant (subjective) information and then **subjectively assess** and **weight the information to produce forecasts** (Short to medium term)

Exploratory methods involve consideration of **multiple potential circumstances, impacts and outcomes**. The information is subjectively assessed to produce forecasts for possibly **varied future circumstances** (medium to longer term forecasting)



Subjective Methods

Subjective methods are common in typical business forecasting situations

They are typically **used in place of quantitative forecast methods** (possibly in conjunction)

Managers or relevant forecasters make subjective assessments of relevant information and determine necessary forecasts

Subjective Methods include;

1. Sales Force Composite Forecasting

2. Jury of Executive Opinion

3. Subjective Probability assessments

Sales Force Composite Methods

The views of individual Salespeople and/or Sales management as to the future sales outlook.

1. Grass Roots Approach:

Collection of individual Sales Assessments (typically sales staff using Pipeline). Aggregated by region, product etc.

2. Sales Management Techniques:

Sales executive staff use the above information and other information to generate forecasts.

Executives may have access to more info and are trained to make better assessments over time (likely to lead to greater forecast accuracy)

Sales Force Methods (cont)

3. Wholesaler or distributor approach:

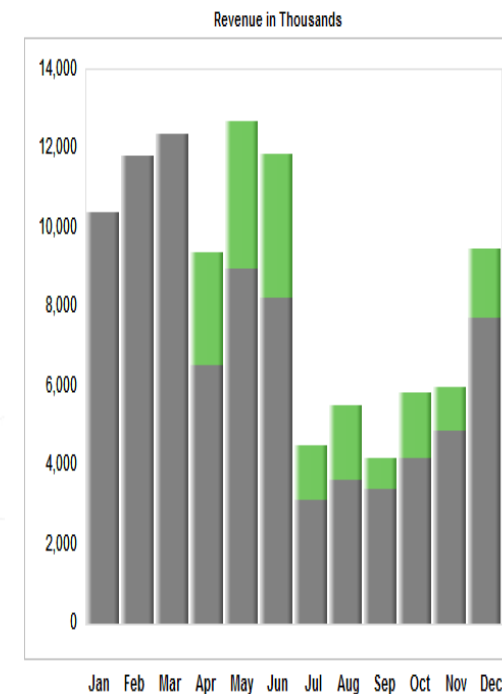
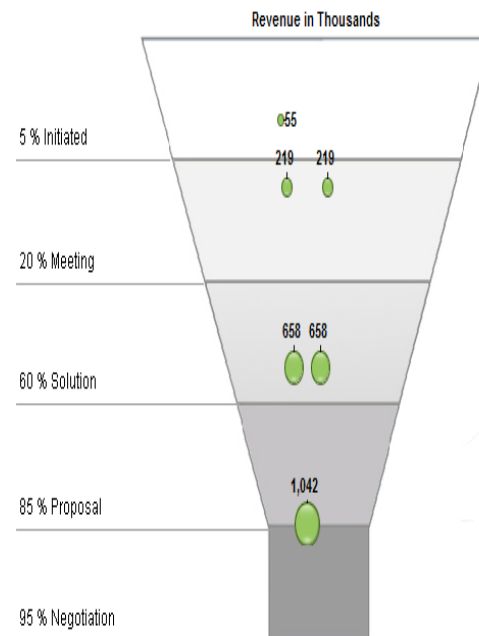
Generally used by **manufacturing concerns** that distribute their product through independent channels of distribution rather than through direct contact with the users of their products

It involves asking each distributor of the product for information as to the size and quantity of the company's product lines that they expect to sell in the next quarter or the next year

The forecasts from the wholesalers/distributors are used as forecast input for the organisation



Pipeline Sales Forecasts



| | Probability in % | Potential revenue |
|---------------|------------------|-------------------|
| Opportunity 1 | 5 % | \$ 55 |
| Opportunity 2 | 20 % | \$ 219 |
| Opportunity 3 | 20 % | \$ 219 |
| Opportunity 4 | 60 % | \$ 658 |
| Opportunity 5 | 60 % | \$ 658 |
| Opportunity 6 | 95 % | \$ 1,042 |

Period comparison of Bookings revenue vs WEIGHTED FORECAST revenue

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|-----------|--------|--------|--------|-------|--------|--------|-------|-------|-------|-------|-------|-------|
| Committed | 10,476 | 11,900 | 12,433 | 6,578 | 9,031 | 8,294 | 3,157 | 3,688 | 3,459 | 4,254 | 4,935 | 7,769 |
| Forecast | | | | 9,428 | 12,756 | 11,944 | 4,577 | 5,575 | 4,238 | 5,884 | 6,020 | 9,517 |

Jury of Executive Opinion

Most basic form, it consists of corporate executives sitting around a table and deciding (as a group) a consensus estimate for the item to be forecast

A more sophisticated variation has the jury periodically submitting its estimates in writing (possibly also through Delphi)

These written estimates may then be reviewed by the CEO or another senior executive who makes the final assessment on the basis of the opinions expressed or they may be averaged to arrive at a representative forecast.

Subjective Probability Assessments

Commonly used to incorporate individual judgment into forecasting

An attempt is made to identify a range of values (probability distribution) for the uncertain event

Forecasters asked to assign probabilities to different outcomes along the assumed range

eg Economic growth outlook High-30%, Medium 50%, Low 20%

Forecasters may have **difficulty making subjective probability assessments** and typically **require guidance and training** as to how such assessments can be made.