

## Topic: Sales forecasting MPH- 103T (Modern Pharmaceutics)

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## What is sales forecasting?

- Sales forecasting is an important aspect of sales management
- "Estimate of company sales for a specified future period"
- A sales forecast is a projection of the expected customer demand for products or services at a specific company, for a specific time horizon, and with certain underlying assumptions

#### Salient features of sales forecast

- Helps to achieve sales goal
- Helps to improve sales revenue
- Helps to increase customer retention
- Helps to reduce overall cost

# Factors affecting sales forecast

- I. Internal factors
- Labour problems
- Inventory shortages
- Working capital shortage
- Price changes
- Change in distribution method
- Production capability shortage
- New product lines

#### II. External factors

- Relative state of the economy
- Direct and indirect competition
- Consumer earnings
- Population changes
- Weather

#### **Importance Of Sales Forecasting**

 An appropriately designed sales forecast helps in setting of suitable sales quota and selection of appropriate sales budget



# Methods of sales forecasting

The methods for sales forecasting are

- 1. Qualitative method
- a. Executive opinion method
- b. Delphi method
- c. Sales force composite method
- d. Survey of buyer's intention
- 2. Quantitative method
- a. Time series analysis
- b. Market survey method
- c. Regression analysis

## Executive opinion method

- Most widely used
- Method of combining and averaging views of several executives regarding a specific decision or forecast.
- Leads to a quicker (and often more reliable) result without use of elaborate data manipulation and statistical techniques.

## Delphi Method

 Process includes a coordinator getting forecasts separately from experts, summarizing the forecasts giving the summary report to experts who are asked to make another prediction; the process is repeated till some consensus is reached

## Sales force composite method

- Also known as "Grassroots Approach"
- Individual salespersons forecast sales for their territories
- Individual forecasts are combined & modified by the sales manager to form the company sales forecast.
- Best used when a highly trained & specialized sales force is used

## Survey of Buyer's intentions

- Process includes asking customers about their intentions to buy the company's product and services
- Questionnaire may contain other relevant questions

## **Time Series Analysis forecasts**

- Based purely on historical patterns in the data. It has four components
- The Trend component-Gradual upward or downward movement over time.
- The Cyclical Component Sales are often effected by swings in general economic activity as consumers have more or less disposable income available
- The Cyclical Component includes
- The Seasonal Component It is a distinguished pattern to sales caused by things such as the weather, holidays, local customs and general consumer behaviour. The Seasonal Component 11
- The Erratic events-Random Variations in data caused by change and unusual situations
- Time series analysis are accurate for short term and medium term forecasts and more so when demand is stable or follows the past behaviour.
- Some of the popular techniques of time series analysis are:
- moving averages
- exponential smoothing

## Market Test Method

- Used for developing one time forecasts particularly relating to new products
- A market test provides data about consumers' actual purchases and responsiveness to the various elements of the marketing mix.
- On the basis of the response received to a sample market test, product sales forecast is prepared

## **Regression Analysis**

- Identifies a statistical relationship between sales(dependent variable) and one or more influencing factors, which are termed the independent variables.
- When just one independent variable is considered (eg. population growth), it is called a linear regression, and the results can be shown as a line graph predicting future values of sales based on changes in the independent variable.
- When more than one independent variable is considered, it is called a multiple regression

## **Benefits of Sales Forecasting**

- Better control of Inventory
- Staffing
- Customer Information
- Use for Sales People
- Obtaining Financing

#### CONCLUSION

- Proper demand forecasting enables better planning and utilization of resources for business to be competitive.
- Forecasting is an integral part of demand management since it provides an estimate of the future demand and the basis for planning and making business decisions