



Demand Forecasting & Market Potential Analysis



Demand Forecasting



Decisions that Need Forecasts

- ▶ Which markets to pursue?
- ▶ What products to produce?
- ▶ How many people to hire?
- ▶ How many units to purchase?
- ▶ How many units to produce?
- ▶ And so on.....



Common Characteristics of Forecasting

- ▶ Forecasts are rarely perfect
- ▶ Forecasts are more accurate for aggregated data than for individual items
- ▶ Forecast are more accurate for shorter than longer time periods



Forecasting Steps

- ▶ What needs to be forecast?
 - ▶ Level of detail, units of analysis & time horizon required
- ▶ What data is available to evaluate?
 - ▶ Identify needed data & whether it's available
- ▶ Select and test the forecasting model
 - ▶ Cost, ease of use & accuracy
- ▶ Generate the forecast
- ▶ Monitor forecast accuracy over time



Types of Forecasting Models

- ▶ Qualitative (technological) methods:
 - ▶ Forecasts generated subjectively by the forecaster
- ▶ Quantitative (statistical) methods:
 - ▶ Forecasts generated through mathematical modeling



Qualitative Methods

Type	Characteristics	Strengths	Weaknesses
Executive opinion	A group of managers meet & come up with a forecast	Good for strategic or new-product forecasting	One person's opinion can dominate the forecast
Market research	Uses surveys & interviews to identify customer preferences	Good determinant of customer preferences	It can be difficult to develop a good questionnaire
Delphi method	Seeks to develop a consensus among a group of experts	Excellent for forecasting long-term product demand, technological changes, and scientific advances	Time consuming to develop



Quantitative Methods

▶ Time Series Models:

- ▶ Assumes the future will follow same patterns as the past

▶ Causal Models:

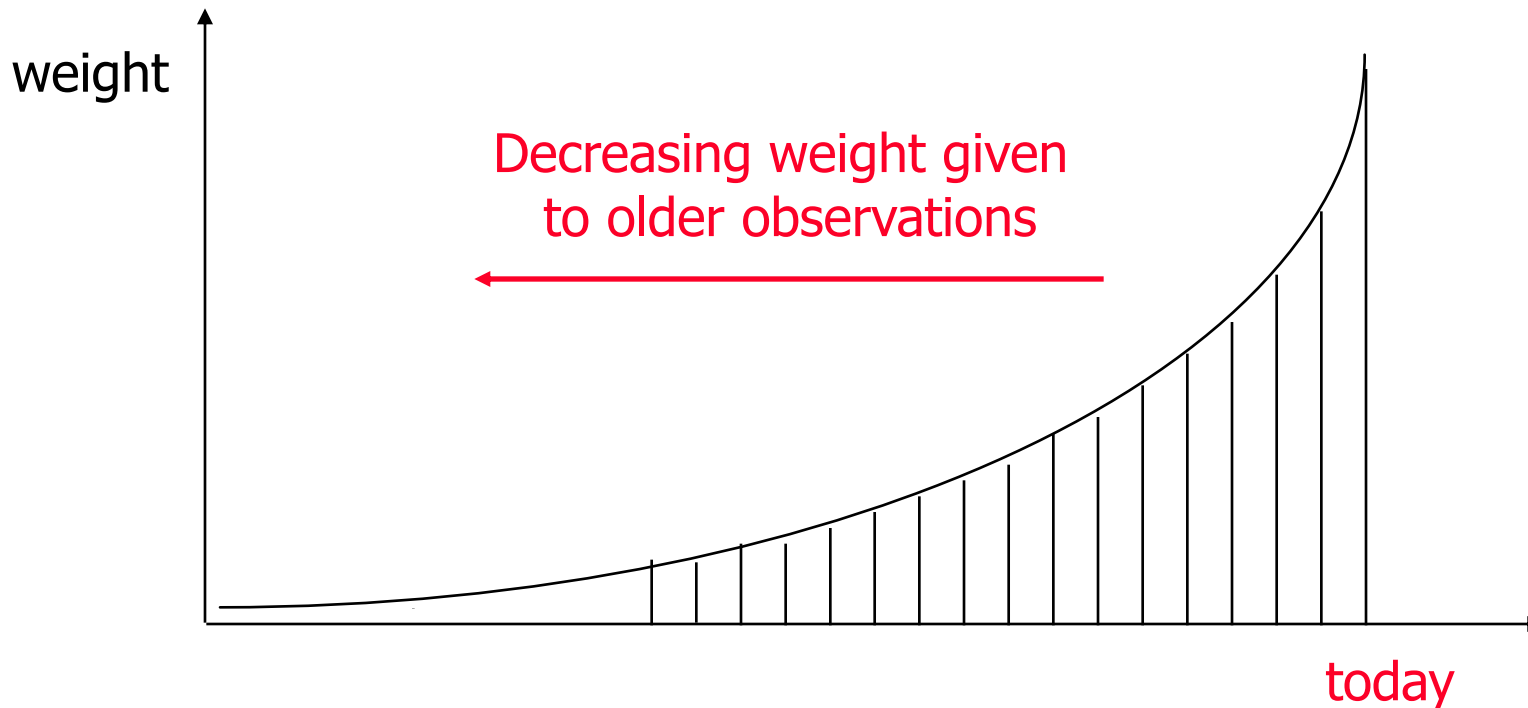
- ▶ Explores cause-and-effect relationships
- ▶ Uses leading indicators to predict the future
- ▶ E.g. Stationery Products for students



Quantitative Methods

▶ Exponential Smoothing

- ▶ Include all past observations
- ▶ Weight recent observations much more heavily than very old observations:



Market Potential Analysis

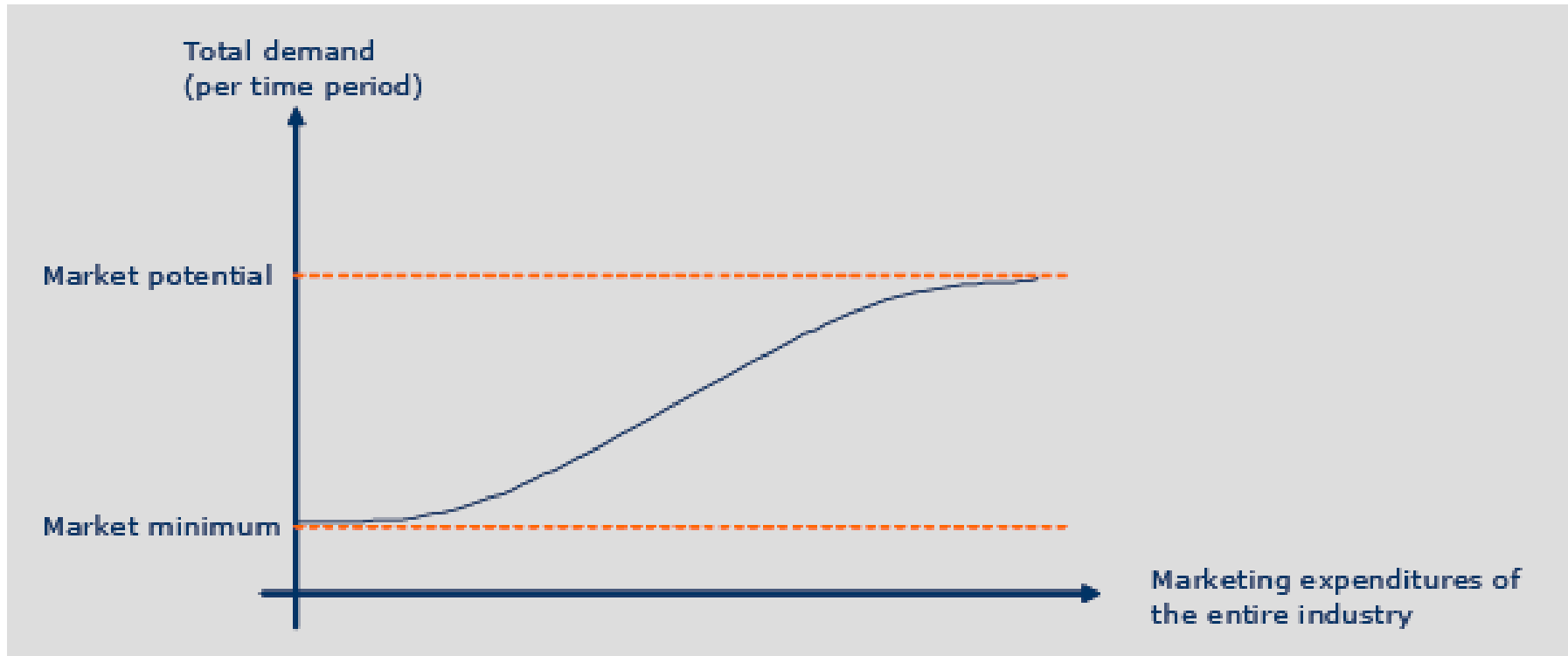


Meaning

- ▶ Market potential describes the maximum capacity of a defined market for a specific product / a service within a defined time period.
- ▶ In this context market refers to the total of all potential consumers with a certain need or desire who are willing or able to satisfy this need or this desire through the purchase of products / services.
- ▶ The sales potential can then be derived from the results of the market potential analysis.



- ▶ Market potential consists of the upper limit of total demand which would theoretically be converged on at (infinite) rise of marketing expenditures of all relevant providers (see figure).



Steps to Estimate the Market Potential

- ▶ Define the market segment (target market)
- ▶ Define the geographic boundaries of the market
- ▶ Define the competition
- ▶ Define the market size (through Primary & Secondary research)
- ▶ Estimate market share
- ▶ Determine the average annual consumption
- ▶ Estimate an average selling price



Bottom Up or Top Down Approach

- ▶ **Bottom Up approach:** It starts with your customers. How much and often do they buy? What is their profile? How many potential customers do you have in the market based on your customer profiles? How can you reach them?
- ▶ **Top Down approach:** It starts with market and industry data. It takes a close look at a geographic market area and profiles the consumers and/or businesses to let you know their propensity to buy your products and services.



Benefits of Market Potential Analysis

- ▶ Understand market potential for a single store, network of stores or a new market
- ▶ Deploy resources effectively by ranking markets in priority order
- ▶ Forecast total opportunity in terms of number of customers and revenue potential
- ▶ Estimate your market share

