Quantitative Consulting for Business

Price sensitivity and how to measure it

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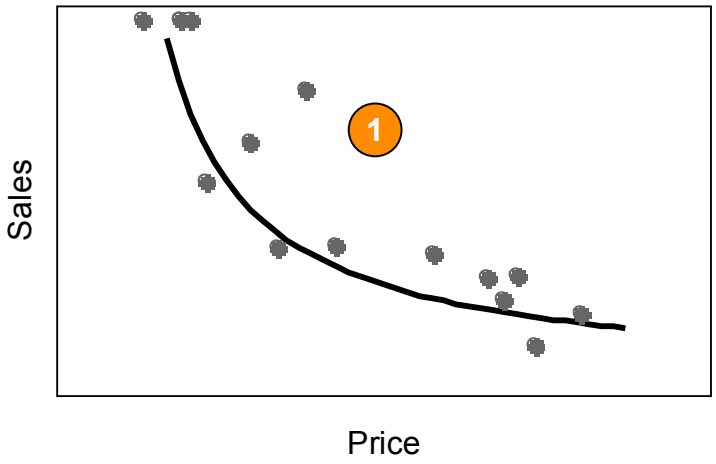
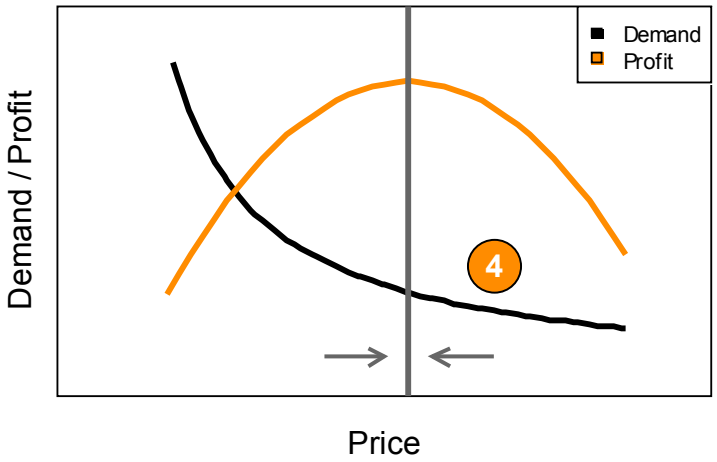
Knowing how your customers will react to price changes is the heart of what we call „Pricing“.

Demand curve



Profit-optimal price

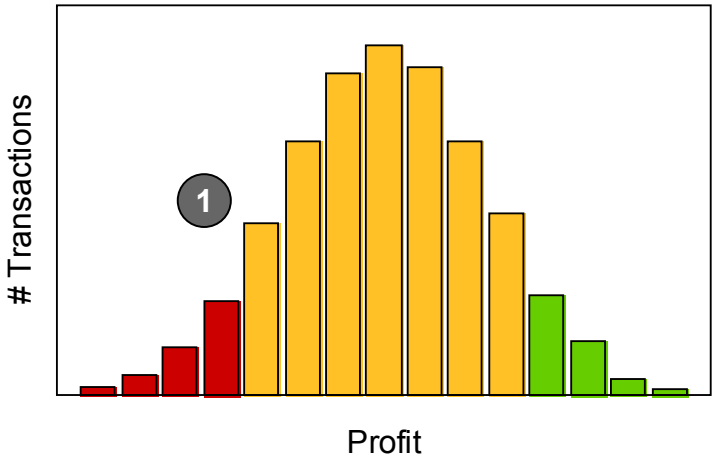


1. Methods for estimating the **demand function**
   - Measuring effects of past price changes
   - Market simulations based on market research / Conjoint analysis data
   - Expert workshops
2. The „**Price elasticity**“ **e** measures your customers' propensity to react to price changes
   - A price increase by x % leads to a decrease in sales by **e***x %
3. The **target function** need not always be **profit**, but most often it is
4. Finding the profit-optimal price
   - At the optimum, the following simple rule holds for the elasticity **e**:

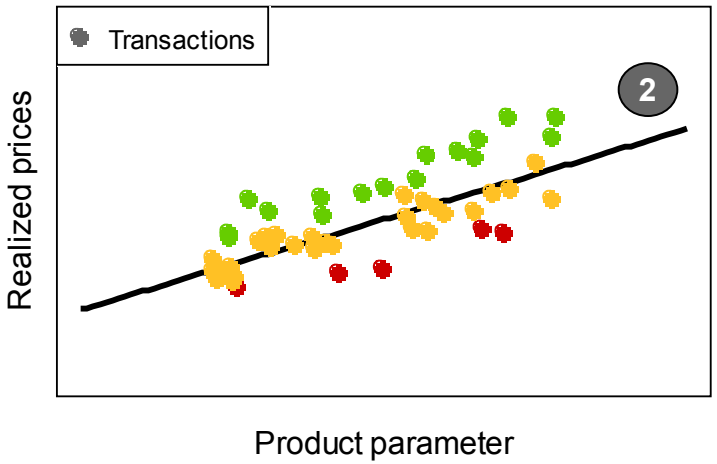
     1/e = Operating margin
   - Intuition is that **low competitive pressure** allows for **high margins** and vice versa

A lot can be learned about optimal pricing by comparing the prices or margins realized by your sales force for a given product.

Deviation analysis



Real prices and reference line



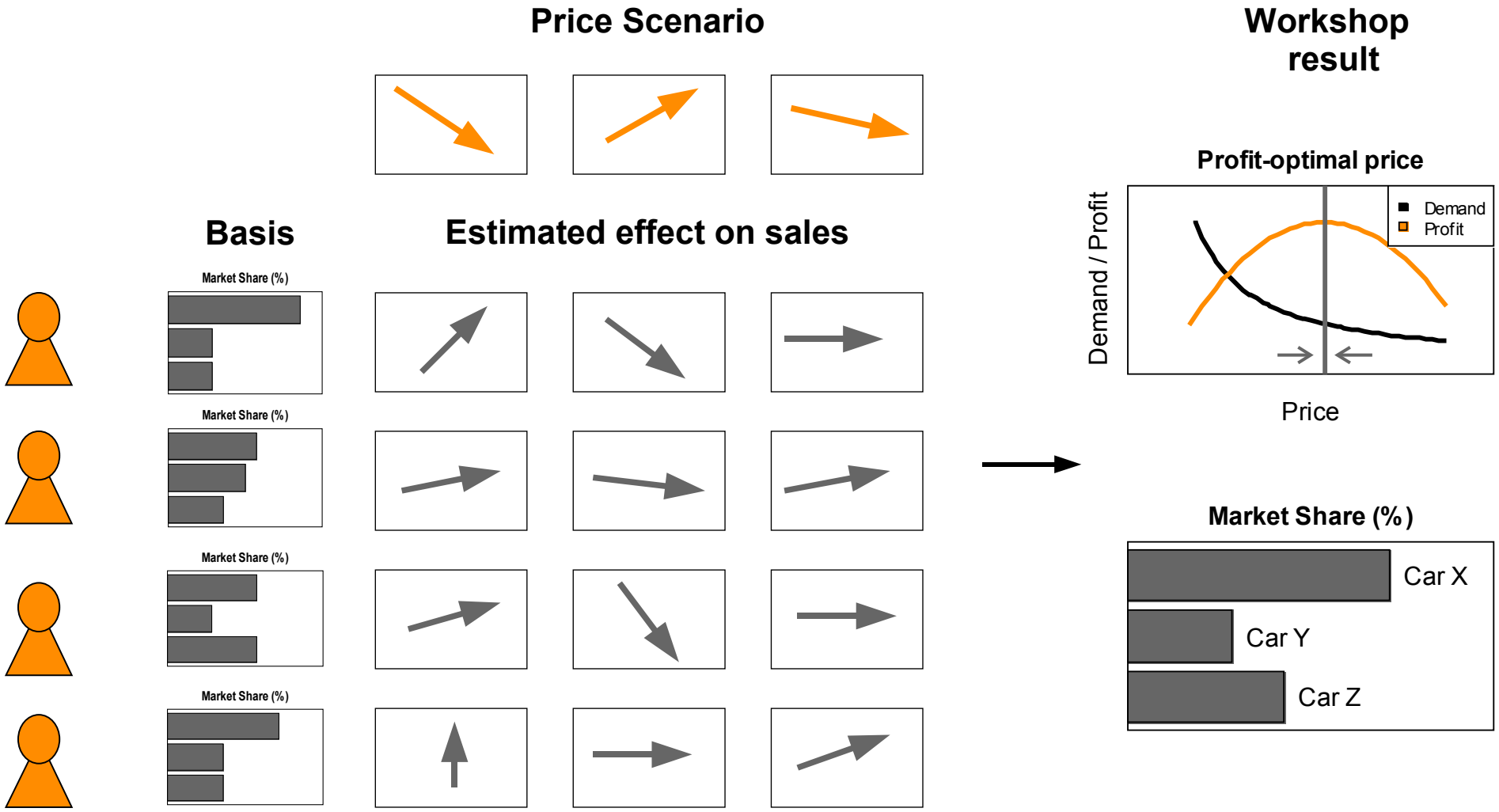
Benchmarking B2B-sales performance

1. Comparison of realized margins for individual transactions for a given product
   - Establish **reference profitability**

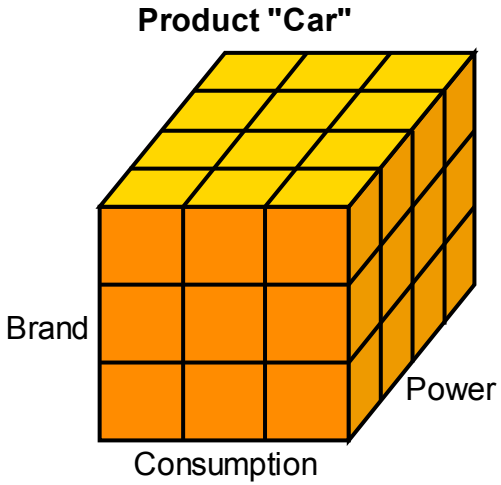
2. Modified approach using a reference profit line or reference price line
   - **ensure comparability** across several products by taking into account the main product and market parameters
   - avoid use of profitability when necessary (not universally known, or under debate etc.). Then the benchmarking can be **based on realized price** levels.

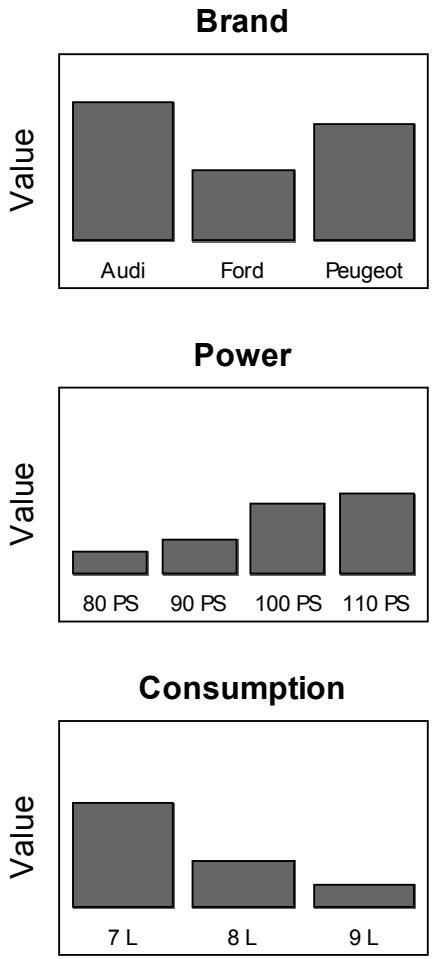
→ **See our article about constructing benchmarking systems**

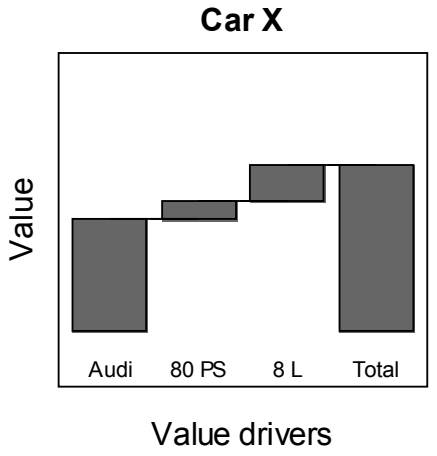
An approach to estimating price elasticity for a product is to have internal experts estimate different scenarios for price change.



Conjoint analysis is a popular market research tool to measure customers valuation of product components for new products relative to price.



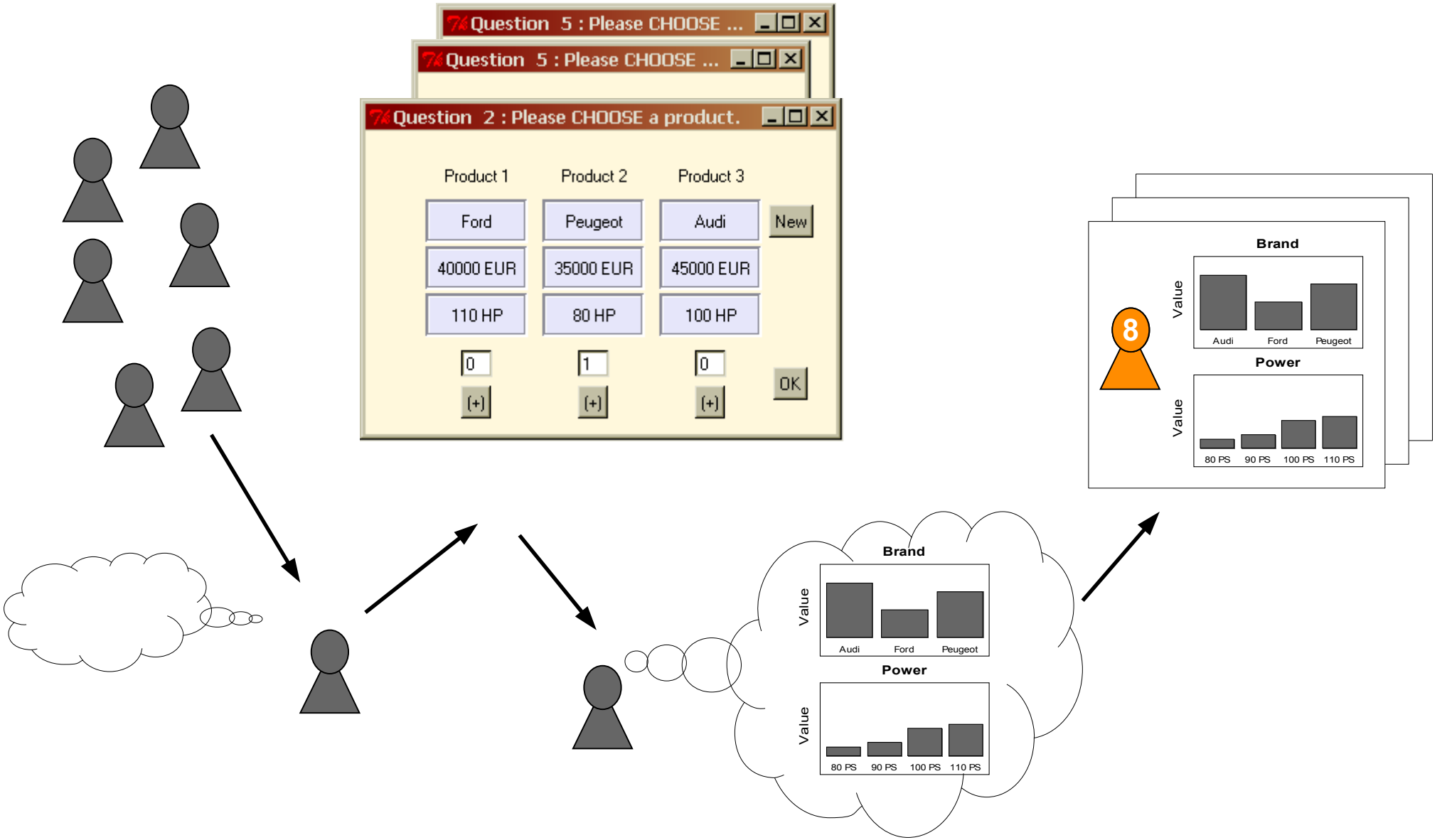




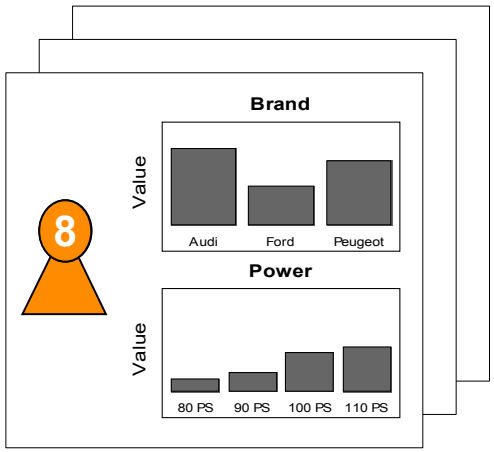
Value drivers

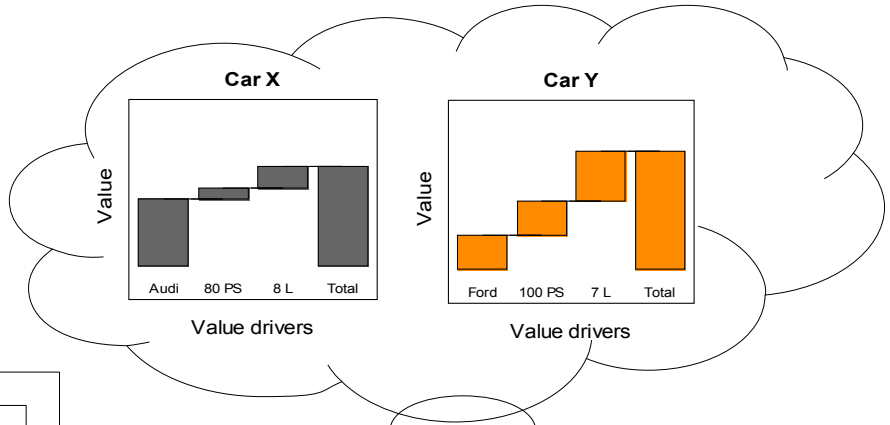
1. Decomposition of the product into its main value creating components
2. Measure the contribution of each component to the perceived customer value
3. Determine a products total perceived customer value

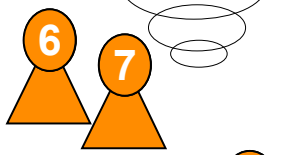
We provide a flexible tool integrating many of the established methods to create and perform conjoint analysis projects online and offline.

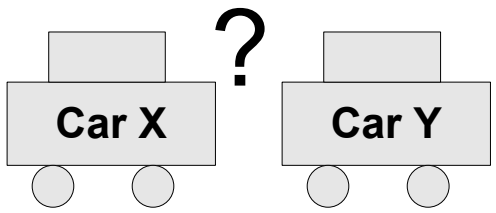


The results of the conjoint analysis can then be used in market simulations to determine price elasticities and optimal prices of products.

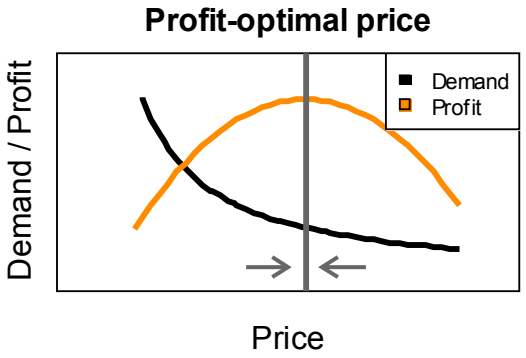


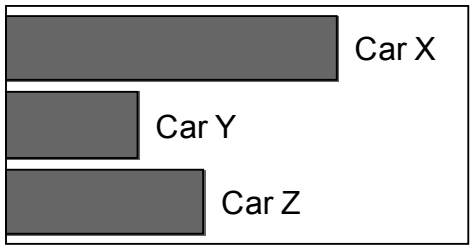






Result of market simulation





For efficiency reasons we favor methods based on internal knowledge and data analysis whenever possible.

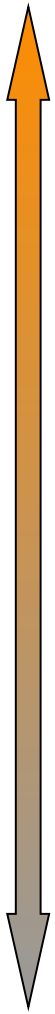
Market research / conjoint analysis

External expert workshops

Measurement of effects of past price changes

Internal expert workshops

Internal benchmarking systems and reference price lines



All products in the market

High complexity / cost

Only single products

Customer view

Low precision

New products / Innovations

Internal view

Relatively precise

Existing products or recombinations

Medium complexity /cost

Product portfolios

Mainly own products