

## Quantitative Consulting for Business

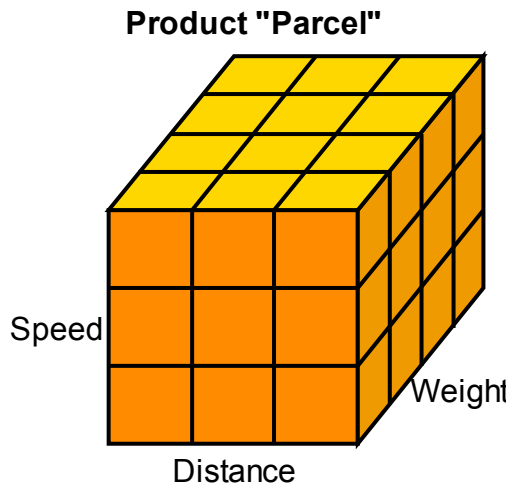
### Internal benchmarking systems for prices



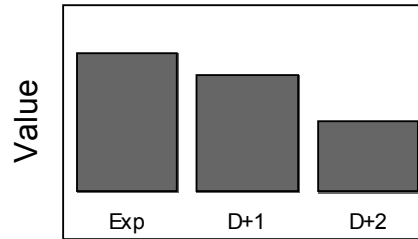
Dr. Boris Vaillant



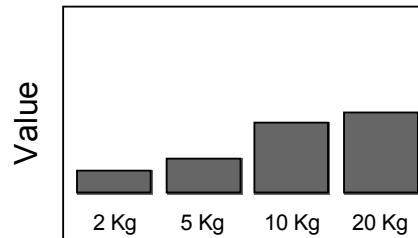
The starting point is to structure the product portfolio by decomposing its products into their price/value driving components.



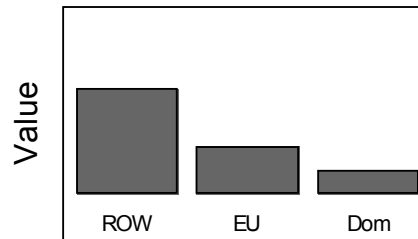
**Speed**



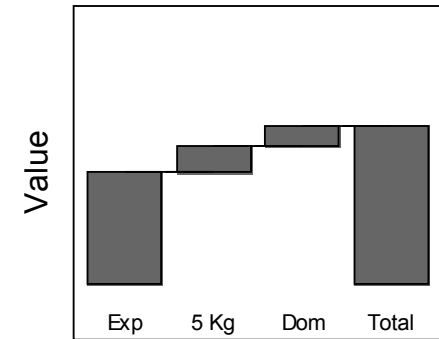
**Weight**



**Distance**



**Product X**



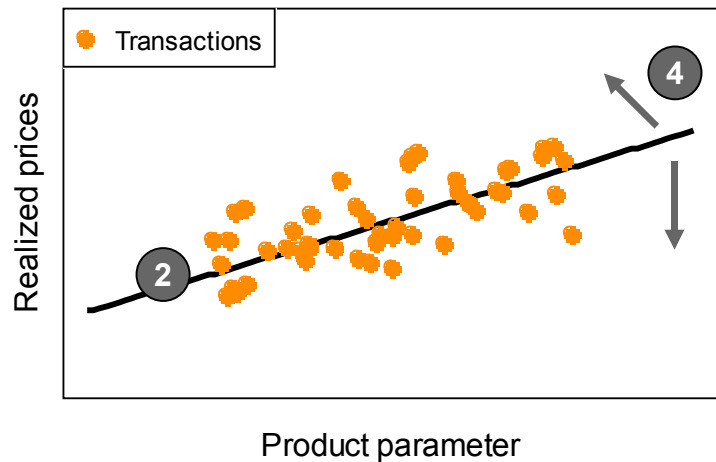
**Value drivers**

- 1 Decomposition of the product into its main value creating components
- 2 Measure the contribution of each component to the price
- 3 Determine a products' total price



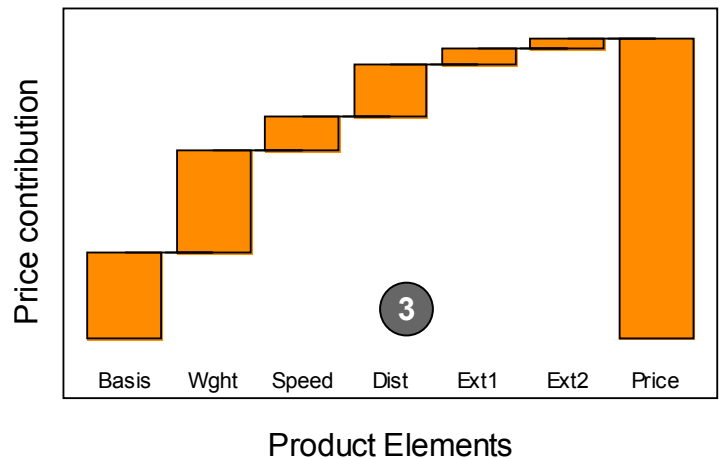
Price benchmarking is often hampered by a lack of comparability between products. We therefore take into account all major influences on the price.

Real prices and reference line



- 1 Identification of price relevant **product components** (e.g. for comparisons across a product group) and **market influences**
- 2 Measurement of the the **importance of each product component and market influence** on the price
- 3 Identification of a reference price rule / **parametrisation** of the price list:
  - „Base Price + Contribution of product components and market influences“
- 4 Easy **implementation of pricing policy** changes by changing single parameters

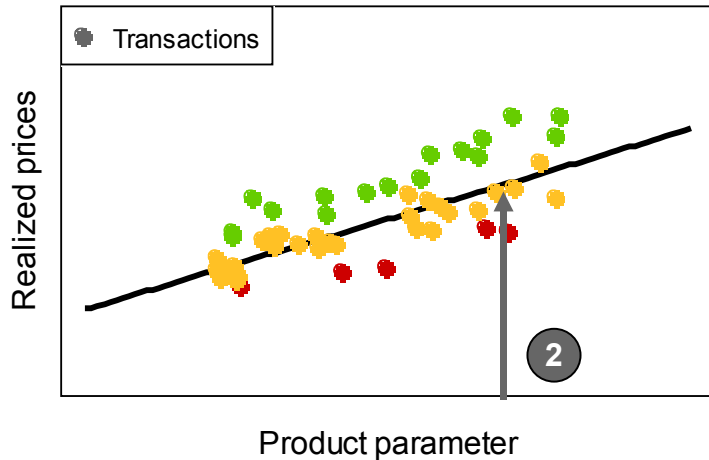
Price calculation for product X





Reference price lines can be implemented in quotation systems or sales support tools. They also allow detailed monitoring of sales policies.

### Real prices and reference line



#### 1 Monitoring sales of specific elements

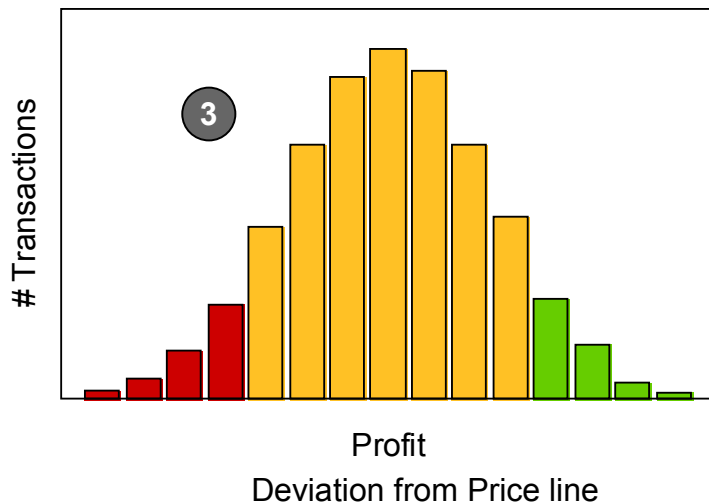
- Real revenue from extras vs. price list revenue from extras

#### 2 Price new products that are recombinations of existing products

#### 3 Monitoring sales policy

- Measure deviation of current transactions from the reference
- Reference line guarantees a **fair comparison level** across markets and product groups
- This can be integrated into sales and order entry tools in form of a „traffic light system“

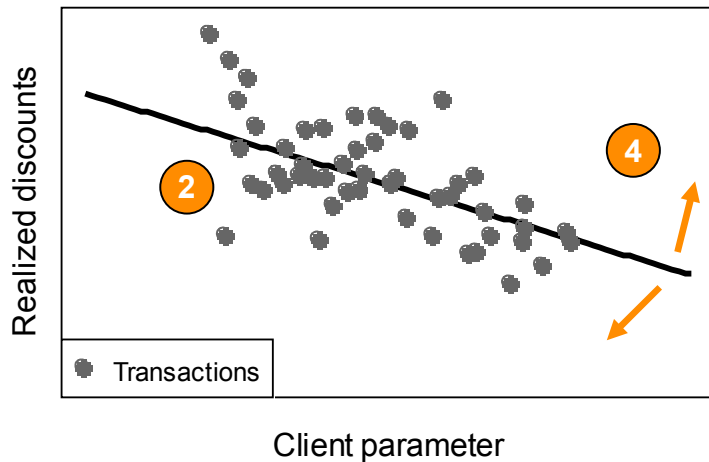
### Deviation analysis





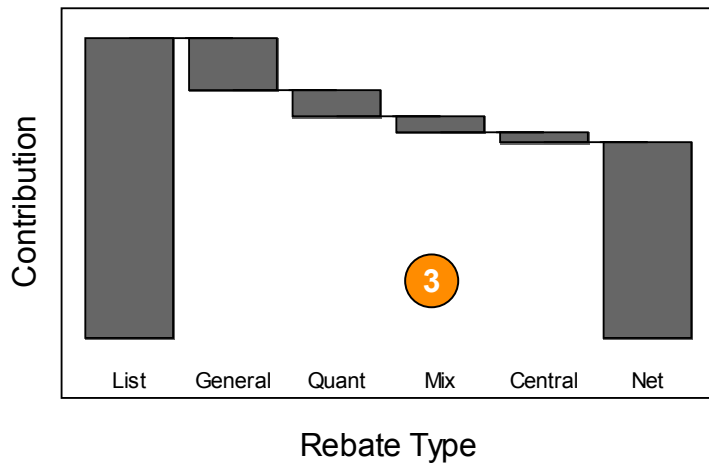
The reference line methodology can be used in the same way to establish a reference for client rebates in B2B-type situations.

Real rebates and reference line



- 1 Identification of those **attributes** of our clients that have an **influence** on the **rebate** level:
  - Total sales volume
  - Growth of sales with the client
  - Product mix bought
  - etc...
- 2 Measurement of the the **importance** of each of the **client attributes** on the rebate level
- 3 Identification of a reference rebate rule / **parametrization** of the rebate scheme
- 4 Easy **implementation of rebate policy** changes by changing single parameters

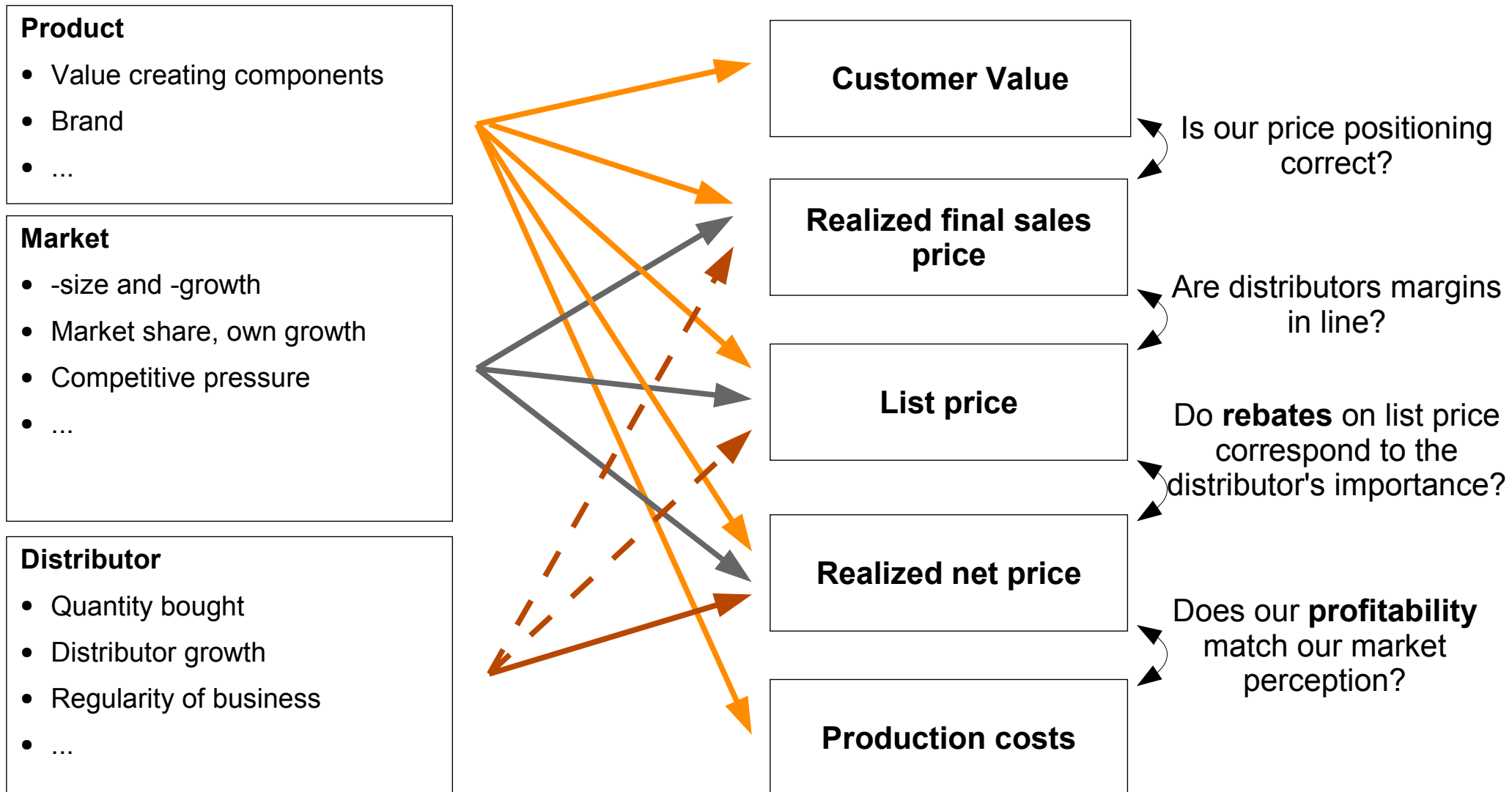
Rebate calculation for client X





**Prices at different levels of the distribution chain can be modelled. Each reflects a different perception of value and different forces present.**

**Example: Manufacturer selling through distributors**





**The introduction of reference prices can be a highly political affair. The quantitative approach helps to create commitment of those involved.**

## Typical project structure

### Workshop/Target definition

- Establish context and objectives for the creation of reference lines
- Selection of prices for which to construct references
- Discussion of main drivers for the price

### Data overview

- Overview of available sales data, including price and profit information
  - Costs, Net price, Price lists, Final sales price
  - Decision on granularity: Product level, Transaction level etc.
  - Main price drivers: Product elements, market descriptions

### Analysis phase

- Test of different models and parametrisations for the reference line
  - Relevance of the product elements and market
  - Deviation of reference from current practice
  - Simulation of effects of price change

### Workshop/Discussion of model results

- Discussion of the parametrisation found and how it reflects the business intuition.
- Discussion of usage of reference, main deviations etc.

### Implementation as a tool

- Monitoring tool or pricing tool at order entry
- Standalone or integration into existing systems