

Quantitative Consulting for Business

Calculating tariff scenarios in subscription-type businesses

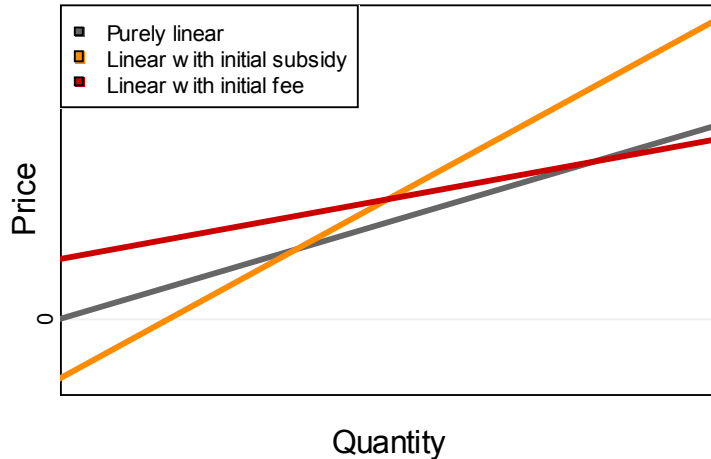


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For subscription-type products, not a single price but an optimal price model or tariff structure must be found.

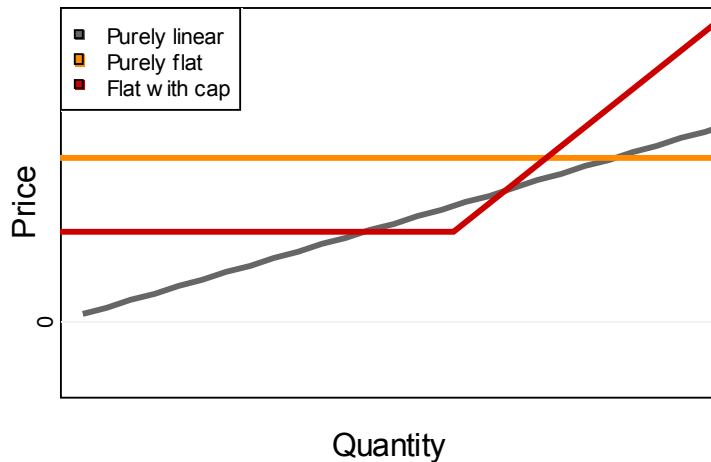
Linear pricing models



Linear price models

- Purely linear: fixed price per unit (minute, kg, km, song, Mbit, etc.)
- Linear with initial fee
- Linear with initial subsidy (and higher unit price)

Variants of flat pricing

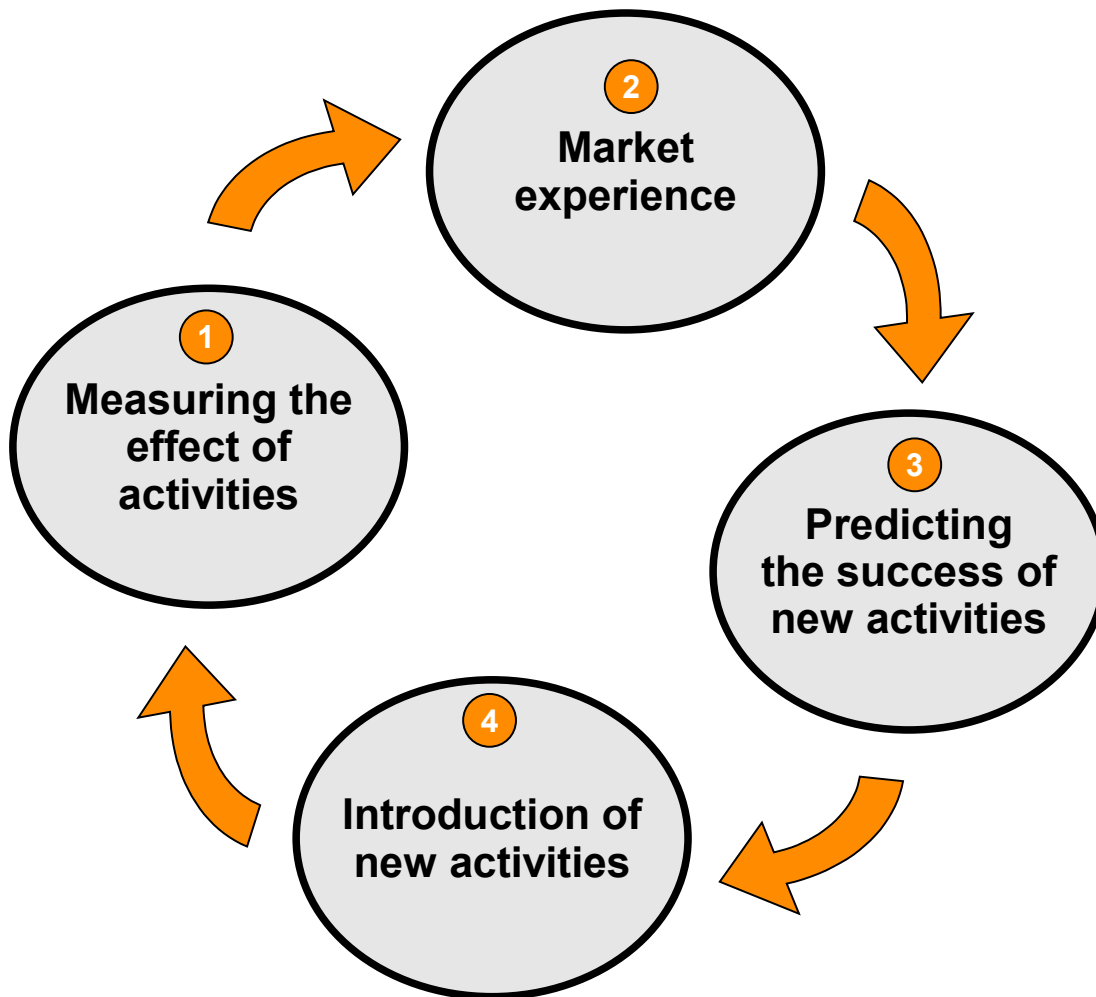


Flat price models

- Purely flat: Fixed fee with no quantity limits
- Capped flat: Fixed fee up to the cap, fixed unit price price after that (example: mobile minute packs)



The determination of an optimal price model follows the steps of the „Mantra of quantitative marketing.“



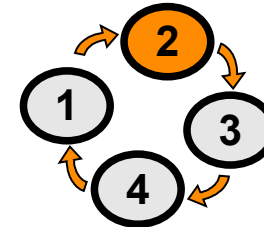
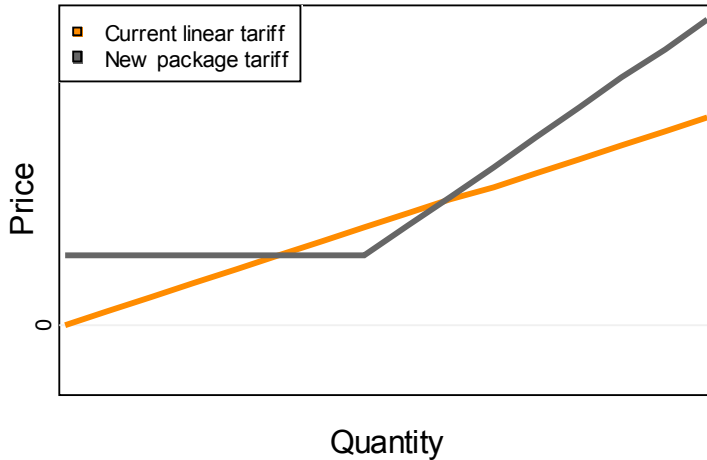
Gathering experience quantitatively

- 1 **Measure** the effect of **activities**
 - Quantify customer response to your activity
 - Calculate key parameters
- 2 **Condense** accumulated **knowledge**
 - Workshops
 - Complement with market research where necessary
- 3 **Plan** new **activities**
 - Calculate response scenarios based on quantified experience
- 4 Select activities with the **best prognosis**



The results of a change in the tariff structure can be estimated in a sequence of steps, based on the available data.

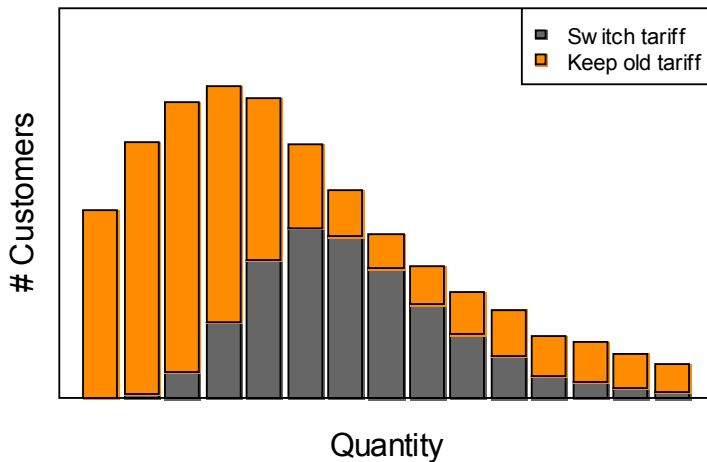
Introducing a new tariff



Identification of customers switching to the new tariff

- Who will switch (and when)?
 - Scenarios based on current usage
 - **Analysis** of effects of **past tariff changes**
 - Complement with results from market research / conjoint analysis
 - Sometimes, of course, the tariff change applies to everybody
- Always remember: The scenario „**Homo oeconomicus**“ of rational customers makes sense as **the worst case scenario**

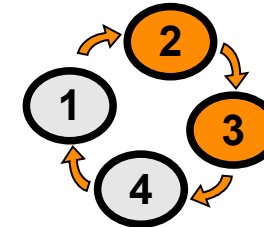
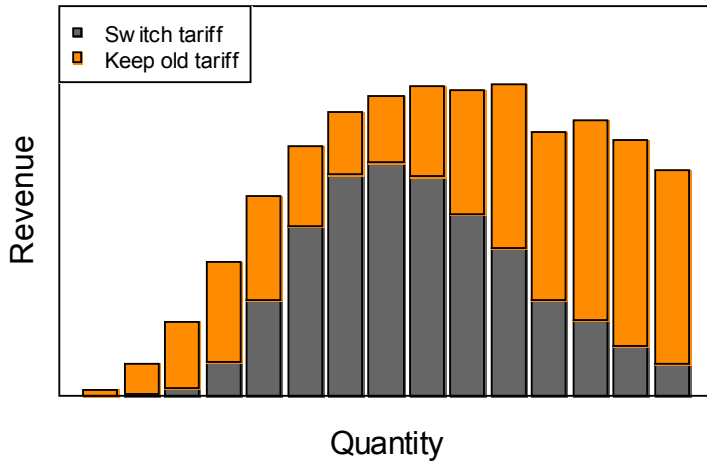
Current usage





In the ceteris paribus scenario revenue and profit effects of the new tariff are calculated under the assumption of constant usage pattern.

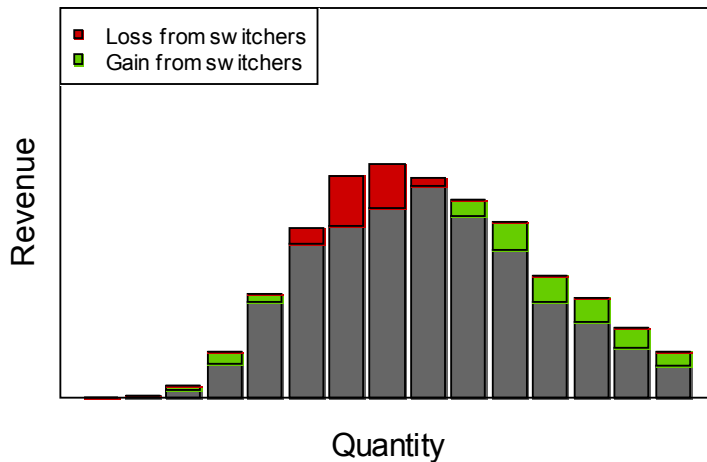
Current revenue



Ceteris paribus scenario

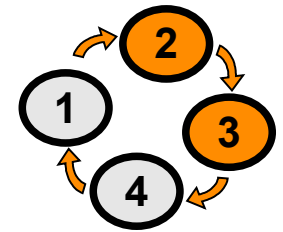
- Identification of usage pattern of switchers
- Calculation of tariff change effect based on this **current usage pattern**
- In fast moving markets it may be necessary to create a future baseline estimation for the current tariff first
- The **projected revenue effect** of the tariff change is then **measured against this baseline**

Effects of switching (ceteris paribus)

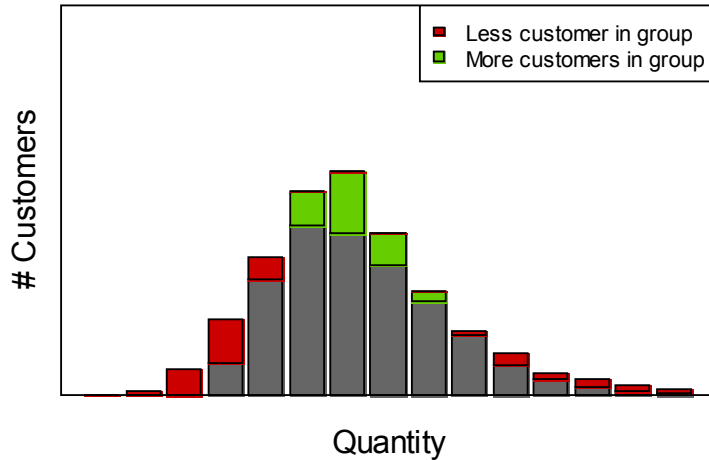




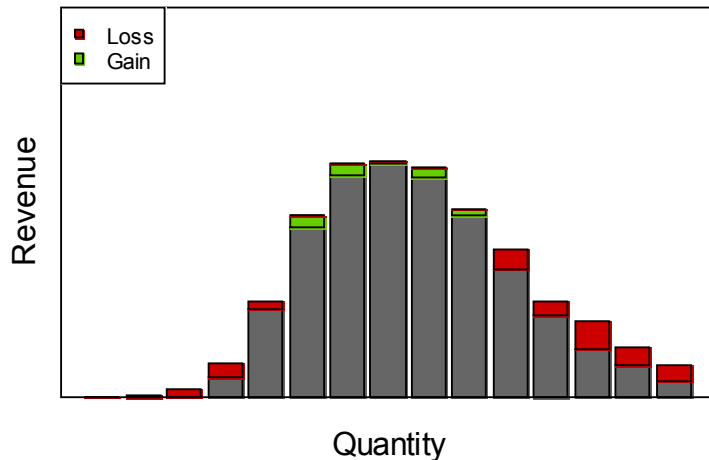
Usage change is typically one of the main effects when changing the tariff structure.



Change of usage due to new tariff



Effects of switching and usage change



Scenarios with usage change

- Try to **estimate usage change based on** known (or measured) **elasticities**
 - Usage increase for those groups that experience an effective price decrease
 - Usage decrease for those who experience a price increase
 - If necessary, complement with market research

Discussion and modification of scenarios

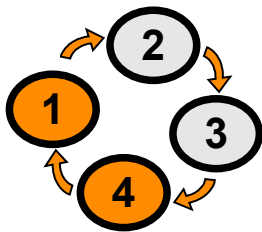
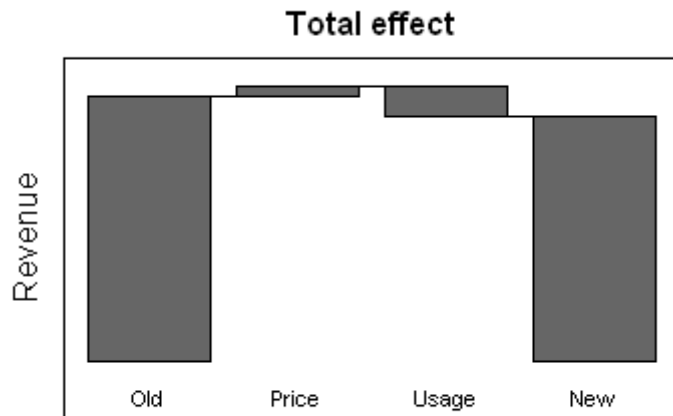
The result of a single scenario may well turn out to be negative. The team then needs to

- find the best scenario,
- possibly review hypotheses,
- and maybe increase commitments!



After having introduced the new tariff structure, it is of utmost importance to closely monitor the effects.

Elements of a monitoring system



- **Pricing effect**
 - based on fixed usage pattern
 - this is already known if a scenario calculation was made, but remains the main comparative
- **Usage effect**
 - How did revenue develop based on the new prices?
- **Warnings** for high usage deviations
- Average realized **price levels**
- **Price elasticities**

... for relevant customer and market segments.



Projects for introducing a tariff change usually necessitate a high involvement of the client's project team.

Typical project structure

Target definition

- Establish context for planned new tariff
- Target function (profit, revenue, new customer acquisition)

Data overview

- Overview over effects of past tariff changes
- Competitor tariff structure
- Available material from market research

Long list of measures

- Preliminary analyses
- Interviews and Workshops
- Establish structured list

Decision criteria and shortlist

- Duration, costs, requirements for implementation
- Expected outcome
- pre-selection and shortlist

Quantitative estimation of outcome

- Detailed measurement of past tariff changes (cf. above and below)
- Complemented by market research if necessary
- Simulation of the effects of main options discussed

Setting up a monitoring tool

- Monitoring elements
- Segments to be monitored
- Warning thresholds