

THE NEWSPAPER
FOR THE CHEMICAL AND
LIFE SCIENCES MARKETS

Conjoint Analysis: Decide on Measures

Client Requirements in the Chemical Industry

A detailed understanding of customer requirements is essential for chemical companies in order to optimize their product offerings. Do customers only care about price? Or is good technical service essential for business success? Are some customer segments willing to pay a substantial premium for delivery within 24 hours? How important are customized products? Getting answers to these questions almost guarantees increased sales and profits.

In reality, classical customer surveys sometimes fail to deliver these answers. Extended face-to-face interviews with customers are very helpful for learning about market trends and general customer requirements. However, when it comes to setting priorities between different product properties, they are less fruitful. The typical customer asks for highest quality, fastest delivery, highest level of technical service, etc. – and all at the lowest price. This is understandable, but not very helpful in determining the optimum product offering.

If these were your only options, which would you choose?
Please choose by clicking one of the buttons below

	Offering 1	Offering 2	Offering 3
Price	5% below average market price	Average market price	5% above average market price
Consistent Quality	2% of deliveries with minor quality problems	5% of deliveries with major quality problems	100% deliveries without quality problems
Technical Support	Good technical support given for all volumes and materials	No technical support given	Technical support only given in combination with high ordered volumes
TDI Content	High (> 1% of hardener)	Medium (0.5% of hardener)	Low (0.2% of hardener)
Payment Terms	30 days	90 days	Advance payment only
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Fig. 1: Appearance of the online survey on the web

The conjoint analysis is a customer survey technique which forces customers to state clear preferences and to make trade-offs between product attributes. This is done by giving the customers a choice between different product bundles. By indicating their preferred choice among several product bundles, the customers implicitly give information about which attributes are the most important to them.

To give a simplified example, customers may look at three different parameters when choosing a supplier for a specific chemical:

- Purity may be either 99% or 99.9%

- Price may be either €5/kg or €5.5/kg
- Delivery time may be either one day or one week.

In a conjoint survey based on this example, the customers are not asked to state their ideal combination (which would obviously be the 99.9% pure chemical at €5/kg delivered within one day). Instead, they may be asked whether they would rather have Product A (99.9% pure but at the higher price of €5.5/kg and delivered within one day) or Product B (only 99% pure and delivered only after one week but at the lower price of €5/kg). Thus they are forced to make a

trade-off between, e.g., price and purity/delivery time.

Once the customers have indicated their preference, they are again presented with two or more products (but with a slightly different combination of attributes) and asked for their preference. In a real-life conjoint survey, the customers participating in the survey are ideally asked to indicate their preferred choice about 20 times. The data thus generated is used as input for a specific computer program which calculates the importance of the different attributes based on the customer input.

Let us take a look at a more realistic example – a conjoint

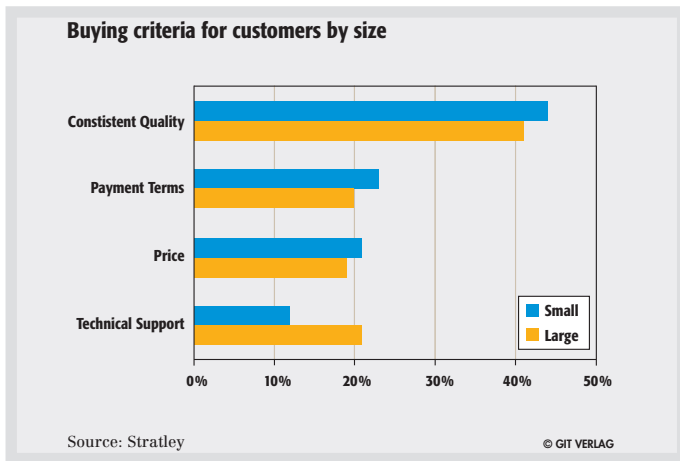


Fig. 2: Conjoint survey results: relative importance of selected buying criteria

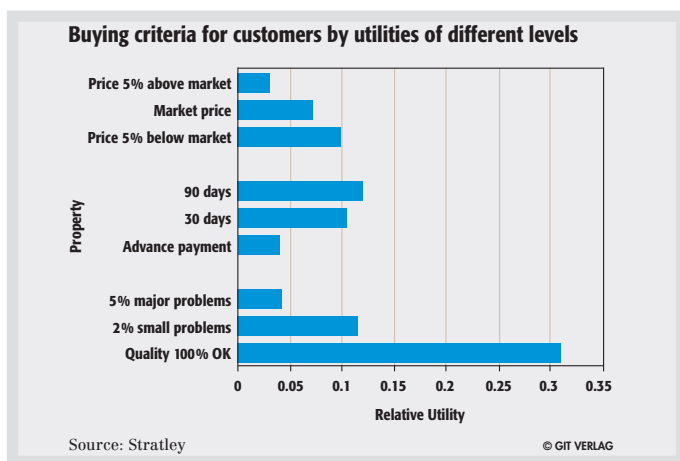


Fig. 3: Conjoint survey results: utilities of different attribute levels

survey conducted by Stratley for a global chemical company in China. This example also shows that running a conjoint survey is somewhat complex as it consists of a number of separate steps:

- Initial qualitative interviews to get an overview of customer buying criteria
- Definition of most essential 4–6 buying criteria
- Definition of 2–3 levels for each buying criterion
- Development of the actual conjoint survey
- Conduct the online conjoint survey
- Analyze results
- Decide on measures based on the results

Initial Qualitative Interviews

The conjoint analysis described here is a tool for prioritization of a number of given buying criteria. However, it cannot be employed for determining which criteria should be prioritized. Therefore, it is necessary to identify all relevant customer

buying criteria in the preparation phase of a conjoint survey. In the example given here, this was done in a series of interviews with experienced sales staff from the client company. The result was a longlist of approximately 20 criteria that were found by sales staff to have an influence on the buying decision of customers.

Definition Of Buying Criteria

This longlist of criteria was then reduced to 4–6 criteria as the conjoint survey only gives meaningful results if the number of product attributes is small (otherwise the quality of customer replies decreases considerably). This was accomplished in a workshop to identify the most important criteria in a discussion together with management and senior sales staff.

Definition Of Levels

For each criterion, different levels have to be designed. For

example, the buying criterion “delivery time” is meaningless unless, e.g., the three possible options “one day,” “one week,” and “one month” are assigned. Finding the right levels also requires input from the business experts as levels have to reflect the real or potentially real situation in the market place.

Development of the Actual Conjoint Survey

The actual online survey is then developed based on the selected criteria. This includes a computer-optimized choice of product bundles as well as the graphic design of the web-based survey and is a complicated process. Also, at this point the number of questions put to the customers needs to be determined. The online conjoint survey may be supplemented by open or multiple-choice questions that can also be included in the overall online survey. Depending on the region, more than one version may be used.

Conduct the Online Conjoint Survey

After some internal test runs, the conjoint survey is now put online and made accessible to the customers. It is important to motivate as many customers as possible to go through the survey, for example, by inviting them to participate via email in combination with phone calls. Reply targets may be given to the sales staff. In the example described, the conjoint survey was online for a total of five weeks, with a reminder sent out after two weeks. Of the approximately 500 customers initially contacted, more than 25% participated in the online survey, giving a substantial information base.

Analyze Results

Most importantly, once the conjoint survey is closed, the results need to be analyzed with the help of customized software. In the example given, information obtained included:

- The general importance of different buying criteria
- The specific importance of buying criteria for various

market segments (e.g., large vs. small customers, Chinese vs. foreign customers, etc.)

- The utilities of the different levels. The utility is a relative measurement of the strength of preference for each level of each attribute of the product. Illustrative results are shown in fig. 2 and 3.

Decide On Measures

The actual value of a conjoint survey is not achieved by just extending customer knowledge. At this point it is advisable to run a workshop or discuss with management what measures to implement in order to benefit from the conjoint results. Typical measures are:

- Expansion/improvement of attributes (e.g., shorter delivery time as importance is greater than originally thought)
- Price increases for all customers or for less price-sensitive segments
- Shift of focus among customer segments (as some segments are found to be more profitable)
- Dropping of services for which customers are not really willing to pay
- Adaptation of marketing to identified customer priorities
- Development of segment-specific product offerings (e.g., “no frills”-segment)

As these steps show, running a conjoint survey is a somewhat complex task that requires both a lot of effort and some previous market knowledge. However, conjoint surveys may substantially improve marketing and sales of chemicals as they force customers to clearly state what they want and what they are willing to pay for. Thus, the conjoint survey is a valid tool for optimizing chemical product offerings.

STRATLEY
Portfolio Performance
Incorporated

► Contact:
Dr. Kai Pflug, Stratley AG, Shanghai
Tel.: +86 21 2890 9677
Fax: +86 21 2890 9999
k.pflug@stratley.com
www.stratley.com