

## **Customer Insights on Industrial Markets – A New Method to Measure Complex Preferences**

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### **Abstract**

Under the increasing pressure of competition, the analysis of customer preferences is gaining in importance for the establishment of stable business relationships. This is due to the fact that over a set of given alternatives customers choose the product, and respectively its supplier, that yields the best utility to them. The analysis of preferences of industrial customers however often turns out to be very complex. This is because industrial customers might dispose of a high number of preferences which are each based on individual reasons. As up to now, there exists no measurement method that is capable of surveying a large number of individualized attributes at an individual level, the following article reports on the development and empirical test of a new measurement method which is directed towards the distinct characteristics of industrial preference measurement.

## **Introduction**

Increasing tendencies toward saturation have been recently observed on many industrial markets. The stagnating demand thereby appears even more problematic as a large number of branches had to accept an increase in the fixed cost pool accompanied by a shorter product life cycle. Under the growing pressure of costs and competition, many companies can only survive on the market if they concentrate on building up and maintaining long-term business relationships with their customers (c.f. Cannon and Perreault, 1999; Narayandas and Rangan, 2004; Ulaga, 2003). The relationship approach thereby transforms the customer into an object of investment in which the totality of ensuing business transactions pays for the costs of the initial acquisition (c.f. Palmatier et al., 2006).

Suppliers will, however, only be able to build up stable business relationships with their customers if they analyze their underlying preferences and needs. This is due to the fact that over a set of given alternatives customers choose the product, and respectively its supplier, that yields the best utility to them in the long-term, i.e. beyond several transactions. In this it becomes clear that only through a seller's behavior that is oriented toward the specific customers' needs existing business relationships can be safeguarded against potential competitors and customers can be acquired from relationships with competitors.

In this context it must however be considered that the analysis of preferences of industrial customers turns out to be much more complex than on consumer markets (c.f. Choffray and Lilien, 1978). This is because industrial transaction processes frequently involve highly customized product specifications which require additional services, such as preparatory training and technical adjustments. In view of this, industrial customers might dispose of a high number of preferences which are each based on individual reasons. For industrial sellers, this means that they should devote particular attention to a comprehensive analysis of preferences that investigates the costumers' needs at an individual level.

Given the depicted significance of preferences on purchasing decisions it does not seem astonishing that marketing research has developed numerous approaches for the measurement of preferences in general. In this regard, a particularly appropriate method which is widely applied in both research and practice is conjoint analysis (c.f. Green and Srinivasan, 1990). Despite its broad acceptance, Conjoint Analysis (CA), and respectively its further developed variant of Limit Conjoint-Analysis (LCA) (c.f. Backhaus et al., 2005), cannot be recommended for the problem on hand. First of all, both CA and LCA only permit a limited number of attributes. Moreover, they are not able to reflect the individuality of industrial costumers' purchase decisions. However, also the other existing variants of conjoint analysis do not constitute adequate methods for the measurement of industrial preferences. This is due to the fact that they too are not suitable for the previously described requirements of industrial preference measurement. In this sense none of them are capable of surveying a large number of individualized attributes at an individual level. Apart from this, they often result in only low validities.

The above illustrations make clear that a new methodology is needed for the measurement of industrial preferences in a valid manner. Against this background, the structure of our paper is as follows: First of all, we will give a short overview of conjoint analysis research in order to provide a comprehensive basis for its further development concerning industrial preference measurement. Subsequently, the main contribution of our article lies in the development and empirical analysis of a new measurement method which is directed towards the distinct characteristics of industrial markets. Finally, practical implications as well as further research in the area of industrial preference measurement will be discussed.

### **Preference Measurement in Business Relationships on the Basis of the Utility Construct**

Under the increasing pressure of competition, the analysis of customer preferences is gaining in importance on industrial markets. This applies in particular to sellers that wish to enter into long-term business relationships with their customers. The reason for this lies in the fact that during repeated transactions processes with the same customer (unlike individual transactions) it is not enough to suggest

a competitive advantage to the customer. On the contrary, this advantage must be clearly focused on the underlying needs and preferences as during the course of the business relationship the customer can check upon the perceived benefit creation. It is on the basis of this result that the customer will then decide on how the business relationship is to progress.

Independent of the transaction perspective (business relationships vs. individual transaction), preferences indicate the result of an evaluation process at the end of which stand the assessment and ranking of all conceivable alternatives with regard to a concrete decision-making situation (c.f. Louviere, 1984). In the context of industrial purchase decisions, it is easy to notify that the difficulty of this evaluation task correlates with the complexity of the transaction process. On the one side this task can merely constitute a simple price comparison for the customer if, for example, they purchase a standardized product as part of a singular procurement process. On the other side the evaluation process is significantly more difficult if the customer's choice of product resp. supplier depends on a multitude of criteria other than the price, such as highly customized product specifications or additional services that accompany the product.

In this context reference can be made to relevant literature on consumer behavior which indicates the utility construct as being the key assessment criterion within the scope of complex preference formation processes. As an intervening variable in the underlying S-O-R approaches it is considered as a hypothetical, and therefore empirically non-observable, assessment measure whose comparison across alternatives leads to item-related preferences. The utility construct thus takes up a mediating function as a result of which differences in the individual assessment and decision-making processes can be made clear.

In light of the described significance of the utility construct in complex buying decisions, it does not seem astonishing that there is a discernible trend in marketing science toward intensively addressing issues of utility measurement. In this regard, a fundamental distinction should be made between compositional and decompositional methods, wherein some of the latter are based on prior compositional measurements. In compositional procedures, the attributes of a product are first evaluated individually and their overall utility is then usually derived from the additive summation of the individual utility values. Decompositional procedures involve an interviewee submitting an overall evaluation of the different alternatives which are then separated into partworth values using statistical procedures (c.f. Jain et al., 1979; Green and Wind, 1975). Whereas compositional approaches were initially dominant, there has been a growing trend towards decompositional approaches in recent years.

In this context, a particularly appropriate method which is widely applied in both research and practice is conjoint analysis (c.f. Gustafson et al., 2003; Green and Srinivasan, 1990). In the following we will give a short overview of this method and report on its deficits for the problem on hand in order to put the importance of the development of a new measurement method into perspective.

### **Conjoint Analysis in the Measurement of Utility**

#### *The traditional conjoint analysis approach and its deficits for the problem at hand*

As mentioned before conjoint analysis determines, based on empirically derived (overall) evaluations of multi-attributively described product concepts, the utility of the attribute levels applied for describing the product concepts, usually via a linear additive utility model. Conjoint analysis is used for the most diverse of marketing tasks, such as product development, pricing, publicity concepts, distribution and market segmentation. It is also applied to problems outside of marketing, such as controlling, remuneration policies, organization, human resources and procurement (c.f. Gustafson et al., 2003).

Despite its broad acceptance, Traditional Conjoint Analysis (TCA), and respectively its further developed variant of Limit Conjoint-Analysis (LCA) (c.f. Backhaus et al., 2005), should not be applied to the problem on hand. First of all, both methods are conducted by means of a standardized survey design. However, as our above illustrations show, industrial preference measurements should be able to

display the individuality of industrial purchase decisions. This is all the more true as industrial suppliers often confront a relatively small number of customers. Therefore, investigating preferences on an individual level is essential for a company's business success.

Secondly, both TCA and LCA are criticized for only permitting a limited number of attributes (c.f. Leigh/MacKay/Summers, 1984). This is a substantial deficit with regard to industrial purchase decisions as these were shown to be oftentimes very complex. As already mentioned, many industrial purchase decisions are primarily not only based on the price but rather consist of up to 20 or 30 possible decision criteria. By covering only a limited number of decision-relevant attributes, a valid measurement of industrial preferences thus cannot be guaranteed.

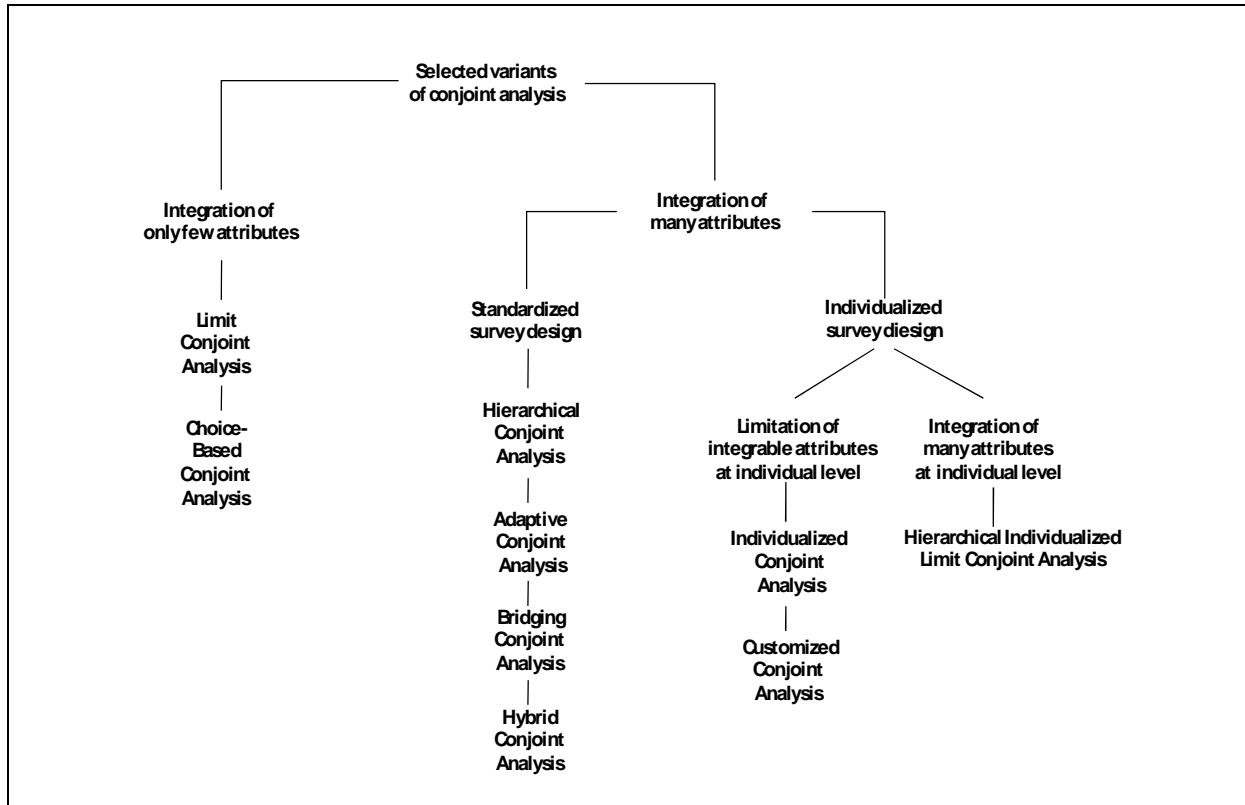
### *Variants of Conjoint Analysis*

Given the depicted significance of these two core weaknesses, it comes as no surprise that numerous conjoint variants are being discussed in literature which generally aim at eliminating or partially remedying these points of criticism. As a result, a number of approaches have been developed in literature that enable a higher number of attributes to be integrated in their study design. These can be further subdivided according to what extent their approach is carried out on a standardized or individualized basis.

The standardized methods hereby integrate a larger number of attributes by using “evaluation splitting” to counteract the additional evaluation complexity induced by the increased numbers of attributes. While splitting in Bridging Conjoint Analysis is “horizontal” (design is split into sub-designs, which – aside from overlapping attributes – are each characterized by different attributes), splitting in Hierarchical Conjoint Analysis is “vertical” (a design with higher-level attributes is linked to sub-designs of more specific attributes). In Hybrid Conjoint Analysis, a type of “cross-subject splitting” is performed (a total design is split into sub-designs, wherein the sub-designs are evaluated by different test subjects; their evaluations are then merged in the subsequent utility assessment) (Green/Goldberg/Montemayor, 1981).

In contrast, the individualized methods of TCA that exist so far (Customized Conjoint Analysis and Individualized Conjoint Analysis) assume that it is necessary to consider many attributes in market research practice because different test subjects consider different attributes in their individual purchasing decisions. That is why this methods allow test subjects to select attributes that are especially relevant to the individual test subjects from a (large) given pool of attributes. This is again accompanied, however, by a reduction in the maximum integrable number of attributes at the individual level.

Consequently, the depicted variants that allow for the inclusion of a broad number of attributes on study level as well as dispose of an individualized survey procedure also cannot be recommended for the measurement of industrial preferences. This is due to the fact that by individualizing the survey design, a limitation of the integrable attributes at the individual level occurs. However, as previously mentioned, analyzing the specific needs of each customer in their entirety is highly significant for building up long-term business relationships. To this end, it must however be possible to survey a large number of individualized attributes at an individual level. As shown in figure 1, the conjoint variants that exist in literature have so far not met this requirement.



**Figure 1: Exemplary overview of Conjoint variants in literature**

In order to meet the rising importance of a valid preference measurement method for industrial buyer-seller relationships, we decided to develop a new conjoint variant, named the Hierarchical Individualized Limit Conjoint-Analysis (HILCA). It is a conjoint variant that is based on one of the current variants of the CA, the LCA. What distinguishes LCA from the CA is the fact that information about selection intentions is directly integrated into TCA by questions about the intention to buy regarding the previously evaluated stimuli (product concepts). In the process, the interviewee puts a "limit card" behind the product he or she still considers worthy of buying in the categorization of the product concepts. This position is interpreted as "utility zero point". This means it is considered to be the net utility when the product to be evaluated begins to have greater utility than all other given alternatives in which the resources needed for purchase could be invested. This allows overall utility values of less than zero to be interpreted as declined purchases, for example, for product concepts examined for forecasting purposes (c.f. Backhaus et al., 2005). The theoretical background and its basic procedure are introduced in the following.

### **Theoretical Background and Procedure of our Newly Developed Conjoint Variant**

#### *Theoretical Background*

In order to increase the number of considered attributes at an individualized level, the HILCA method refers to the findings of Information Processing Theory (c.f. Newell and Simon, 1972). In the framework of this theory one assumes that to avoid cognitive overload, individuals presented with complex evaluation tasks perform a hierarchization and subsequent sequential processing of the information blocks to be processed. Applied to the multi-attribute evaluation problem within conjoint analysis, this implies that in an initial step each subject excludes from further analysis those evaluation alternatives that have unacceptable attribute levels. From the pool of all product attributes they then view those that are individually important to them; they are incorporated in the objects of the actual rating process. If the number of these attributes exceeds the maximum number of attributes that can be

weighed against one another in parallel due to limited cognitive capacity, individuals then break down the group of all relevant attributes into subgroups. Especially important attributes are evaluated most intensively in juxtaposition to one another; less important attributes, on the other hand, are merely considered with reduced intensity.

### *The HILCA Procedure*

In implementing HILCA within market research studies, computer-based interviews are conducted with test subjects. Here an attempt is made to use the selected process steps to model the actual flow of a decision-making process for a complex product described by multiple attributes. Therefore, in the interviews the following survey steps are performed which are based on the process steps for HILCA proposed by Voeth:

#### *Selection of relevant attributes:*

Here the test subject is given a list of all attributes and attribute levels that can be interrelated to describe the product concepts in the survey. The test subject selects those attributes he or she would consider in purchasing this product ("relevant attributes"). If an attribute is not selected, it can be assumed that it does not play any role for the test subject in decision-making. Therefore, it will no longer be considered in the further course of the survey with this test subject.

#### *Compositional rating of levels of relevant attributes and naming of unacceptable attribute levels:*

Subsequently, the attributes selected by the respondent are set out before him one after the other with their respective levels. The respondent now evaluates each individual level on the basis of a points scale from 0 to 100. A zero means that the level is unacceptable and that a product with this level would not be purchased in any case.

#### *Rating of product concepts:*

The respondent is now presented, as is usual in conjoint analysis, with product alternatives for comparative evaluation (c.f. Green and Wind, 1975) which are composed of the levels of the maximal five individually "most important" attributes. These are determined by the largest span of the compositional point ratings between the best and the worst level of an attribute.

#### *Setting the limit card:*

In the last step, the so-called limit card is set in order to separate acceptable stimuli from unacceptable stimuli. For this purpose, all product concepts are presented to the test subject once again in descending order of the point ratings the test subject assigned to them. The test subject must now indicate up to which product he or she would still consider a purchase. In individual cases, it is possible for either all or none of the products to be considered acceptable.

### *Utility estimates in HILCA*

Whereas its calculation of the utility values for the most important attributes can take place in the same manner as for the LCA by means of the Least-Square-Errors-Estimation, the HILCA methodology requires a different measurement for the remaining relevant (but not "most important") attributes, because in their case – as described in step 2 – only compositional point ratings are available. For allowing a comparison of these utility values generated in two different ways, e.g. for purposes of optimized negotiation offers, the point ratings need to be expressed on the scale of the utility values generated by conjoint analysis. For this purpose, a regression of the point ratings for each level is carried out on the corresponding utility value.

## **Empirical Studies**

Altogether the theoretical and conceptual illustrations make it possible to assume that the HILCA-method is able to investigate preferences of industrial customers in a valid manner because it enables the analysis of a high number of attributes at an individualized level. As previously mentioned, this is imperative in industrial markets to secure stable and long-term business relationships.

In order to also empirically verify the applicability of HILCA, we analyzed industrial preferences in various studies. These studies were e.g. conducted in the field of financial services, facility management and computer software. Our first and so far most comprehensive study was conducted in the construction industry. This industry appeared particularly suitable for a first comprehensive validation of HILCA as it is characterized by a small number of key accounts. Therefore, determining the individual preferences of buying agents in building companies is of high importance for suppliers. In order to avoid product-specific bias on the validity of HILCA, our study included a preference measurement concerning two different purchase objects in order to avoid product-specific bias on the validity of the measurement method. These were preferences concerning the purchase of sand-lime brick and of porous concrete as these products characterize two of the most common materials used in the construction industry.

In order to obtain a complete list of the product attributes that are relevant for customers, a total of 27 attributes for each of the two products (e.g. price, brand, size of the bricks and several services as packaging) with between two and four levels each were drawn up in cooperation with a leading construction company that deals internationally with the production and distribution of building materials. In order to ensure that the attribute levels reflected the prevailing state of development in the marketplace, we furthermore conducted in-depth interviews with 15 current industrial professionals. In addition, the computer-aided questionnaire was tested for comprehensibility and application on 20 relevant buying center members of building contractors within the scope of a pre-test. Its results were then edited in the questionnaire for the main survey. It included a total of 138 usable interviews that were carried out in person on a representative sample of German building contractors.

## **Research Findings**

In order to analyze the applicability of HILCA for the measurement of industrial purchasing preferences, both general results as well its predictive validity were drawn upon. First, we will present some of the general results of our study.

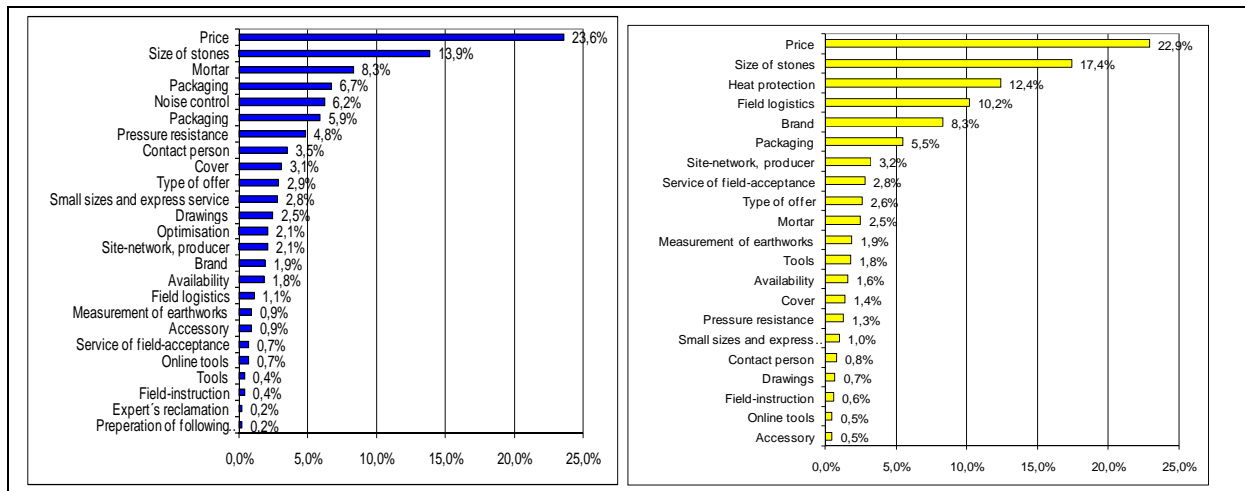
### *General results*

As the HILCA-procedure shows, it is possible in this method to study how many attributes test subjects categorize as relevant. On average, test subjects in our study rated 6.31 of the 27 attributes available for selection as relevant. This underscores the fact that in a complex decision-making situation characterized by many attributes, people tend to focus on just a few attributes. Moreover our results indicate the need for individualization in the selection of attributes. In the HILCA study depicted above, each of the individual attributes was rated as relevant by at least 6.27% of test subjects. The most frequently selected attribute was price at 75.20%. Regarding unacceptables, 47 of the total of 82 attribute levels were named at least once as unacceptable. However, on average each test subject only identified 2.59 attribute levels as unacceptable.

With regard to the general results of HILCA, we furthermore checked a number of plausibility considerations. Hereby we examined, amongst others, the individual relative importance of the attributes. In this context, we found out that compared to other conjoint variants HILCA leads to a strong diversification of the attribute importances. Affirmative research by Orme/Alpert/Christensen (1997), Pullman/Dodson/Moore (1999) shows that for example the ACA method produces similar relative priorities for virtually all attributes.

Figure 2 shows the relative attribute importance in percent for sand-lime brick and porous concrete. Here it becomes apparent how well HILCA corresponds to actual market circumstances, as it leads to widespread attribute importances. As a consequence our general results let us assume that the HILCA-method constitutes a decisive instrument for an advanced industrial preference measurement. This is

all the more true as HILCA also allows for an examination of how many attributes were categorized by the interviewees as unacceptable through which further insights into the costumers' preference structures can be derived.



**Figure 2: Relative attribute importance in percent for sand-lime brick and porous concrete**

### *Predictive Validity*

To be able to test the applicability of HILCA not just based on general results, a quality criterion is needed that can be used as a measure of the performance of the method. Therefore, we additionally applied internal consistency as a measure of quality in this study. To measure internal consistency, at the end of the conjoint interview three choice sets for each of the two products (sand-lime brick and porous concrete) were presented (each comprising three fully-described products as well as the “not-buy” option) for which the respondents had to state whether and, if so, which of the products they would purchase. The selection decision was then reproduced with the aid of the utility values from HILCA in order to determine how well the measurement method is able to predict the purchase decision. This method constitutes a basic criterion for practical applicability of any preference measurement method (c.f. Krishnamurthi, 1988).

As a result, we were able to determine a predictive validity of 58.2% for HILCA concerning sand-lime brick. For porous concrete, an even better validity of 61.1% was able to be ascertained. As the validity with other popular conjoint variants (as e.g. ACA) normally lies between 35-40% (c.f. Hartmann and Sattler, 2002), these results can affirm our previously met assumption that the presented HILCA is a highly recommendable method for industrial preference measurement. In order to verify this first result, we conducted a number of further studies (e.g. preference measurement for financial services, facility management, computer software). However, as the predictive validity of HILCA always laid between 50-60%, we were able to confirm the applicability of our newly developed method.

### **Implications**

Our empirical studies have shown that from a market research perspective HILCA appears to be an applicable and valid method for the measurement of industrial customers' preferences. Therewith it also allows for the derivation of practical implications for an advanced business relationship management:

In this regard, it should be first of all recalled that on the basis of HILCA it is possible to measure the relative importance of a multitude of decision relevant criteria at an individual level. It therefore allows industrial suppliers to differentiate their marketing activities by focussing on the most important purchase criteria for each customer. Given today's increasingly important efficiency considerations this advantage seems to be of even higher significance. This is due to the fact that the

differentiation between the attribute importances indicates with which criteria increased customer orientation is worth the investment and with which criteria the increased costs of the sellers lie above the customer's perceived utility benefit.

Nevertheless, also decision criteria that are determined as less important should not be excluded from the outset of the seller's efforts. In particular on highly competitive markets differentiation becomes increasingly more difficult for sellers as an overall standard price-performance ratio has become established. In this case, sellers can often only stand out from their competitors if they generate a perceived customer utility benefit through a multitude though less important customer benefits.

Overall our illustrations show that on the basis of HILCA it is possible to gain valuable information for stable and long-term business relationships. On the hand these information comprise effectiveness criteria that show industrial sellers which marketing aspects are of particularly high relevance to customers and thus are important for both winning and retaining them. On the other hand the information also reveal savings potential to selling companies. This is due to the fact that through the utility values it is possible to establish the additional willingnesses to pay that offered goods and services result in. This information again is indispensable for long-term survival in a competitive environment and can thus be considered as a prerequisite for establishing successful buyer-seller relationships.

### **Limitations**

Nonetheless, it should not be overlooked that the HILCA-method is still at its starting points. Thus for HILCA to become an established and well-known market research method both in theory and practice, the method first of all needs to be further empirically verified. Future validations of HILCA in different industry sectors should especially be undertaken in order to provide more in-depth evidence of its superiority and to state that our results are capable of generalization.

Moreover, the validity results of HILCA can still be improved. One avenue of approach involves efforts to influence cognitive loading and the involvement level of the test subject within the conjoint interview as HILCA's interview length still exceeds 30 minutes. Therefore, areas of interest in improving validity are perceived to include modeling of cognition in particular, and increased motivation of test subjects within conjoint interviews. Furthermore, improved handling of unacceptables represents another potential source of process improvement. For example, even in the current HILCA version about one-third of test subjects still contradicted their own unacceptables choices. Future research should therefore be directed at obtaining further valid investigation of unacceptables.

### **Conclusion**

Under the increasing pressure of competition, the analysis of customer preferences is gaining in importance on industrial markets. Hereby our illustrations have shown that this applies in particular to sellers that wish to enter into long-term business relationships with their customers. While a multitude of conjoint variants exist in market research, they do not appear to be entirely suitable for the problem at hand. In this light, we have developed a new conjoint variant which is capable of measuring a large number of individualized characteristics at an individual level. The above findings show that utility measurement on industrial markets with HILCA may provide profound customer insights by showing a high validity as well providing differentiated implications for industrial suppliers. Nonetheless, for HILCA to establish itself as a market research instrument in science and practice, certain aspects of the method still need to be improved.

## References

- Backhaus, K., Voeth, M., Sichtmann, C. and Wilken, R. (2005), "An empirical comparison of methods to measure willingness to pay by examining the hypothetical bias", **International Journal of Market Research**, Vol 47 No 5, pp. 543-562.
- Cannon, J. P. and Perreault, Jr., W. D. (1999), "Buyer-seller relationships in business markets", **Journal of Marketing Research**, Vol 36 No 4, pp. 439-460.
- Choffray, J.-M. and Lilien, G. L. (1978), "Assessing response to industrial marketing strategy", **Journal of Marketing**, Vol 42 No 2, pp. 20-31.
- Green, P. E. and Srinivasan, V. (1990), "Conjoint analysis in marketing: New developments with implications for research and practice", **Journal of Marketing**, Vol 54 No 4, pp. 3-19.
- Green, P. E. and Wind, Y. (1975), "New way to measure consumers' judgments," **Harvard Business Review**, Vol 53 No 4, pp. 107-117.
- Green, P. E., Goldberg, S. M., Montemayor, M. (1981), "A Hybrid Utility Estimation Model for Conjoint Analysis", **Journal of Marketing**, Vol 45, pp. 33-41.
- Gustafsson, A., Herrmann, A., Huber, F. (2003), "Conjoint Analysis as an Instrument of Market Research Practice", in Gustafsson, A., Herrmann, A. & Huber, F., **Conjoint Measurement: Methods and Applications**, 3. Ed., Springer, Berlin, pp. 5-46.
- Hartmann, A. and Sattler, H. (2002), "Commercial Use of Conjoint Analysis in Germany, Austria and Switzerland", **Research Paper on Marketing and Retailing of the University of Hamburg**, No 6.
- Jain, A. K., Acito, F., Malhotra N. K., Mahajan, V. (1979), "A Comparison of the Internal Validity of Alternative Parameter Estimation Methods in Decompositional Multiattribute Preference Models", **Journal of Marketing Research**, Vol 16 No 3, pp. 313-322.
- Krishnamurthi, Lakshman (1988), "Conjoint models of family decision making", **International Journal of Research in Marketing**, Vol 5 No 3, pp. 185-198.
- Leigh, T. W., MacKay, D.B., Summers, J. O. (1984), "Reliability and Validity of Conjoint Analysis and Self-Explicated Weights: A Comparison", **Journal of Marketing Research**, Vol 21, pp. 456-462.
- Louviere, J. J. (1984), "Hierarchical Information Integration: A New Method for the Design and Analysis of Complex Multiattribute Judgment Problems", **Advances in Consumer Research**, Vol 11, pp. 148-155.
- Narayandas, D. and Rangan, V. K. (2004), "Building and sustaining buyer-seller relationships in mature industrial markets", **Journal of Marketing**, Vol 68 No 3, pp. 63-77.
- Newell, A. and Simon, H. A. (1972), **Human Problem Solving**, Prentice-Hall, Englewood Cliffs (NJ).
- Orme, B. K., Alpert, M. I., Christensen, E. (1997), "Assessing the Validity of Conjoint Analysis – Continued", **Sawtooth Software Conference Proceedings**, Sequim 1997, pp. 209-225.
- Palmatier, R. W., Dant, R. P., Grewal, D., Evans, K. R. (2006), "Factors Influencing the Effectiveness of Relationship Marketing: A Meta-Analysis", **Journal of Marketing**, Vol 70 No 4, pp. 136-153.
- Pullman, M. E., Dodson, K. J., Moore, W. L. (1999), "A Comparison of Conjoint Methods When There Are Many Attributes", **Marketing Letters**, Vol 10 No 2, pp 125-138.
- Ulaga, W. (2003), "Capturing value creation in business relationships: A customer perspective", **Industrial Marketing Management**, Vol 32 No 8, pp. 677-693.