Measuring service quality trade-offs in Asian distribution channels: a multi-layer perspective

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ABSTRACT In international marketing channels customer service has become an important factor in supplier and purchase decisions. In evaluating supplier performance several trade-offs are taken into account by actors operating at various channel levels. These are trade-offs among customer service elements and between customer service elements and costs. With the help of conjoint analysis, these trade-offs were analyzed for different layers of the Asian distribution system of a global marketer of fast-moving consumer goods. Results suggest that considerable differences occur with regards to the various perspectives on customer service between channel members.

Introduction
Customer service is gaining importance as a marketing instrument by manufacturers towards distributors in international marketing channels and global logistics (Churchill & Peter, 1994; Sarathy & Terpstra, 1994). Several authors have shown that customer service plays a crucial role in supplier evaluation and purchase decisions (Ballou, 1992; LaLonde et al., 1988; Mentzer et al., 1989). On the basis of customer service quality, long-term relationships can be forged or even partnerships or strategic channel alliances can be formed. International marketers should, therefore, be well aware of the needs of their intermediary channel customers and fine-tune their customer service efforts on the basis of customer service quality measurements. However, the measurement of customer service quality is a complex phenomenon due to a number of factors. In the first place, service expectations and perceptions may differ considerably across cultures and at the various levels of the international distribution systems (Cateora, 1993; Frazier et al., 1989). Moreover, even within the corporate cultures of organizations at the various channel levels, different perspectives on service quality exist between, for instance, boundaries spanning personnel and management (Bateston, 1991; Ehrlon, 1990; Gilmour, 1977; Kasper & Lemmink, 1989; Langeard et al., 1981; Parasuraman & Zeithaml, 1982; Schneider et al., 1980). A second factor that complicates the measurement of customer service quality in international marketing channels is that fact that, due to long shipping distances and multiple transhipments, significant efforts and
financial risks on behalf of manufacturers are required (Assigman & McCullough, 1993). Therefore, attention should be paid to the trade-off between costs and the level of customer service (Ballou, 1992; Coyle et al., 1992). This may be called an intra-service element trade-off. However, this trade-off between service level and the costs of rendering that service level is not the only trade-off that manufacturers are confronted with. Other trade-offs have to be made among the elements of the customer service mix, such as order cycle time and credit facilities (Levy, 1981; Perrault & Russ, 1974). This trade-off between the various elements may be called an inter-service element trade-off. Measurement of customer service quality in international marketing channels, therefore, should take these types of trade-offs into account as well as the different perspectives that may exist in multi-layered international distribution systems. These issues have barely been addressed in the international marketing literature (LalBahn, 1994). Therefore, this article reports on a study that was designed to measure perspectives on customer service quality from different layers of the Asian distribution system of a global marketer of fast-moving consumer goods. The study focused on: (1) inter-service element trade-offs or the relative importance of customer service mix elements; and (2) intra-service element trade-offs, or trade-offs between customer service levels and costs. The article is structured as follows. First, we shall review the literature on customer service in marketing channels. Next, we shall discuss the (dis)advantages of research methods that can be used to measure the perceived customer service quality in international marketing channels. Subsequently, we shall report on the results of our empirical study. Finally, we shall briefly consider the theoretical as well as managerial issues emerging from our findings.

Conceptualizing customer service

Although the importance of customer service in marketing channels is generally acknowledged by marketers, the views on what is actually meant by customer service are quite divergent (Christopher & Wilh, 1974; LaLonde & Zinszer, 1976; LaLonde et al., 1988; Mentzer et al., 1989; Rakowski, 1982; Rinehart et al., 1989; Sterling & Lambert, 1989). Tucker (1983) distinguishes two major approaches to conceptualizing customer service on the basis of the nature of customer service elements included: (1) the physical distribution, i.e. logistics, approach; and (2) the marketing approach. The physical distribution approach to customer service refers to the interface between the supplier's (formal) order, delivery and information system with the customer (LaLonde et al., 1988; LaLonde & Zinszer, 1976; Perreault & Russ, 1974; Stephenson & Willet, 1969). According to this perspective, customer service in channels is considered as a constraint, the costs of which should be minimized (Lekashman & Stolle, 1965; Parker, 1962). The physical distribution approach to customer service essentially views customer service as strongly related to the physical distribution process. The marketing approach to customer service, on the other hand, is more elaborate in scope; several other elements of the marketing mix are involved (Kjøl, 1989). These include, for instance, the behavior of personnel in complaint handling or the level of marketing support in the channel. Thus, the marketing approach to customer service encompasses the logistics approach to customer services with a range of marketing-related customer service elements. It has been argued that the relative importance of these diverse elements should be taken into account (Gilmour, 1977; Hutchison & Stolle, 1968; Marr, 1983/84; Mentzer et al., 1989; Rakowski, 1982; Rinehart et al., 1989; Sterling & Lambert, 1989). It acknowledges the fact that channel members may switch from one supplier to another as the result of inadequate customer service levels. Customer service is regarded as a decisive factor in industrial purchase decisions (Banting, 1976; Cunningham & Roberts, 1974; Evans, 1980; Lehmann & O'Shaughnessy, 1974; Perreault & Russ, 1974). According to this view, the
profit-generating potential of customer service should be acknowledged (Ritchhart et al.,
1989). Consequently, levels of customer service should be traded off against the profit
generated by customer service improvements or the costs associated with these improvements
(Christopher & Wills, 1973; Hutchison & Stolle, 1968; Perreault & Russ, 1974; Shycon &
Sprague, 1975; Stewart, 1965).

Finally, while the logistics approach to customer service is primarily involved in providing
services to the next member in the marketing channel, the marketing approach focuses on
the multi-layered marketing channel, for customer service provided by the manufacturer can
have quite an impact on all levels of the marketing channel. However, wholesalers and
retailers might have quite different views of customer service (Ghosh, 1990; Rosenbloom,
1987).

Measuring customer service quality

Measurement of the marketing approach to customer service has remained limited so far in
the literature on domestic and international channels, as previous research has mainly
concentrated on the (relative) importance of physical distribution elements (Hutchison &
Stolle, 1968; Lehmann & O’Shaughnessy, 1974; Perreault & Russ, 1974). One exception
forms a study by Pishoradi and Langley (1990), in which the well-known SERVQUAL model
was adapted for use in a logistics environment. This model departs from the assumption that
service quality involves a comparison of expectations with perceived performance in the
context of interactions between firms and their customers. Perceived service quality is
determined by the size and the direction of so-called internal gaps: (1) between customer
expectations and management perception of those expectations; (2) between management
perceptions of customer expectations and the firm’s service quality specifications; (3) between
customer service quality specifications and actual customer service delivery; and (4) between
actual service delivery and external communications about customer service. Gap 5 (the so-
called external gap) involves a comparison between expectations and performance. Within
the context of marketing channels, this would mean the interaction between manufacturers
and distributors (Pishoradi & Langley, 1990). On the basis of the SERVQUAL model, both
management and customer perceptions can be taken into account. Easy adaption to the
requirements of a specific industry, as well as a resulting multi-dimensional and multi-
perspective concept of customer service quality, are the major advantages of SERVQUAL as
a channel service measurement instrument. However, several shortcomings have been
identified recently. First, the stability of the service dimensions across different branches of
industry has proven to be weak (Carman, 1990; Cronin & Taylor, 1992; Moore & Schiegel-
milch, 1994). Second, the validity and reliability of the difference between expectations and
performance has been seriously questioned (Carman, 1990). Third, application of the
SERVQUAL instrument is, by definition, limited to existing products since experience and
performance must both be taken into account. Hence, the effects of customer service
innovations can hardly be measured. Finally, additive relationships between service dimen-
sions are implied by the model, while this may not be a realistic assumption (Cronin &
Taylor, 1992). As we have already indicated, trade-offs between various customer service
mix elements play an important role, particularly in an international marketing channel
context. Therefore, there is clearly a need for a research method that allows us to deal with
a number of aforementioned ‘gaps’ of the SERVQUAL instrument. Conjoint analysis may
be such a method (DeSarbo et al., 1994).

Conjoint analysis is a technique which allows a set of overall responses to factorially
designed stimuli to be decomposed so that the utility of each stimulus attribute can be
inferred from the respondents' overall evaluations of the stimuli (Green et al., 1988). For the purpose of the research design a number of (hypothetical) combinations of customer service elements can be devised which can be presented to a sample of customers. Selection of the elements results from a stepwise procedure. First, a number of customer service elements and service levels are identified on the basis of a small number of in-depth customer interviews. In a distribution context, an instance would be 'complaint handling' with the accompanying levels of friendly, somewhat unfriendly and unfriendly, or 'fill rate' with the levels 95, 97.5 and 99%. Second, customers rate the attractiveness of a number of possible combinations of customer service elements. Third, the ratings are used to eliminate part-worth utilities, i.e. the utility which is attached to the individual levels of each customer service element included in the research design. Consequently, an accurate estimate of customer trade-offs between customer services elements can be obtained.

One major drawback of conjoint analysis is the limited number of customer service elements that can be used in the research. Large numbers of elements would result in an immense number of stimuli to be rated or ranked by respondents. For example, if a full factorial design with seven elements each at three levels were chosen this would lead to 2187 (i.e. 3") possible combinations of service elements. A solution to this problem that is often used in conjoint analysis is to apply fractional factorial designs, i.e. orthogonal designs which allow the researcher to measure the main effects with a limited number of combinations (Addelman, 1962). Second, care should be taken in the selection of the levels of the different elements because unrealistic estimates of these levels will lead to increased perceived importance of the particular service element. For instance, if the service element 'credit' was evaluated on the number of days varying from zero to 210 and if the usual period of credit does not normally extend beyond 120 days, then this particular customer service element would probably be considered more important by respondents. Third, the number of levels belonging to one specific service element should be the same for all remaining elements. It has been argued that when the number of levels for one attribute exceeds the number of levels of the remaining attributes, this will result in increased sensitivity for the attribute with the higher number of levels (Wittink et al., 1989). Additionally, it has been pointed out that the method requires considerable cost, know-how and experience (Green et al., 1988). Despite these drawbacks, however, we decided to take a conjoint analysis approach to measuring the relative importance of customer service quality elements as well as the relationship between various levels and gross margin because it enabled us to take trade-offs in international trade relationships into account.

Research questions

Relatively little is known about the nature of customer service quality in an international marketing channel context (Klein & Roth, 1993; LaBahn, 1994). Moreover, the use of conjoint analysis as a research method in international marketing has been very limited. Aulakh and Kotabe (1993) report that this method has been employed in only two studies in the field of international marketing between 1980 and 1990. Therefore, we formulated the following empirical research questions:

1. Are there differences between layers of international marketing channels with respect to perceptions on customer service quality?

2. How can conjoint analysis be used to measure customer service quality in international marketing channels?

The answers to these questions were prepared on the basis of an empirical study.
Empirical study

Research setting

The setting that was selected for conducting our research was a large, multinational manufacturer of fast-moving packaged consumer goods based in the Netherlands. In our research we investigated two layers of the Asian distribution system of this producer. In the first place, we approached the five major Asian importers (those companies that had ordered more than 10,000 units of the supplier's products in the previous year, to ensure that the companies had a sufficient degree of customer service experience). Their answers were compared with the perspective of 10 managers concerned with international affairs at the central headquarters of the manufacturer in the Netherlands. Second, we focused on the Singapore market segment in measuring perceptions of customer service quality of 36 customers (i.e. wholesalers) of the Singapore distributor. Again, the answers of the Singapore wholesaler-customers were compared with the perspective of 10 managers from the Singapore sales office. In this way, management's view of the customer perspective could be compared with the customer's actual perspective at two levels in the channel.

Questionnaire design

The questionnaire contained trade-offs between seven different customer service elements which were identified on the basis of a review of the physical distribution and logistics literature as well as trade-offs between service levels of six elements and gross margin (Ballou, 1992; Banister, 1976; Coyle et al., 1992; Cunningham & Roberts, 1974; Gilmour, 1977; Hutchison & Stolle, 1968; LaLonde et al., 1988; LaLonde & Zinszer, 1976; Marr, 1983/84; Mentzer et al., 1989; Parasuraman et al., 1985, 1986; Perreault & Russ, 1974; Rakowski, 1982; Rinehart et al., 1989; Rosenbloom, 1987; Sabath, 1978; Stephenson & Willet, 1969; Sterling & Lambert, 1980; Stern et al., 1989; Zeithaml et al., 1990). Initially, a list of 49 relevant customer service elements related to the marketing approach to customer service was drawn up. In-depth interviews and a mail survey with management, boundary personnel and customers resulted in a reduction of customer service elements. The pretest involved four members of top management, 11 members of boundary personnel and 10 customers, thus ascertaining adequate pretest sample size (Hunt et al., 1982). From these the seven most important customer service elements were selected and were used in the trade-off analysis. Further, tests were undertaken to determine whether the ranges on these seven customer service elements were realistic and whether they were far enough apart to be considered distinctly. The elements that were included in our study were: total order cycle time; percent of orders delivered completely without any errors; order status information and complaints handling; marketing support; rush orders and special requests; credit facilities; and gross margin. Thus, elements from both the logistics as well as the marketing perspective on channel customer service were included in our questionnaire.

Data analysis

Conjoint analysis was carried out using a part-worth function model. Data were collected using a full-profile approach. A fractional factorial design using Addelman's basic plans (Addelman, 1962) for designing an orthogonal main effects plan was chosen. Interactions were not significant. This resulted in 18 combinations which were presented to the respondents. These combinations were evaluated on a nine-point Likert scale. Part-worth utilities were estimated using ordinary least squares (OLS) regression (Green et al., 1988; Green &
Srinivasan, 1978; 1990). The utility range was used as a measure of importance for the customer service elements included in the conjoint analysis. The utility range is calculated by subtracting the part-worth utilities of the least preferred level of each customer service element from the part-worth utilities of the most preferred level of each customer service element. Relative importance (on the basis of inter-service element trade-offs) is expressed in percent of the total range, while levels of the customer service elements are expressed in gross margin percentage (intra-service elements trade-offs).

Results

Table 1 presents the results that were obtained with regards to the manufacturer-importer dyads. As can be observed from Table 1, both manufacturer management and the Asian distributors feel that error-free delivery is the most important customer service attribute. Major differences between manufacturer and distributor perceptions of customer service quality importance exist with regards to total order cycle time, grow margin, order status information and complaint handling. On the one hand management overestimates the importance of margins and order status information and complaints handling, while under-

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Attribute importance</th>
<th>Management manufacturer (%) (n = 10)</th>
<th>Asian distributors (%) (n = 5)</th>
<th>Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total order cycle time</td>
<td>10.04</td>
<td>17.01</td>
<td>(1) 2 weeks later than current</td>
<td></td>
</tr>
<tr>
<td>Percentage orders delivered completely without any errors</td>
<td>21.99</td>
<td>18.70</td>
<td>(1) 60%</td>
<td></td>
</tr>
<tr>
<td>Order status information and complaints handling</td>
<td>13.56</td>
<td>10.29</td>
<td>(2) 80%</td>
<td></td>
</tr>
<tr>
<td>Order status information</td>
<td>12.20</td>
<td>12.55</td>
<td>(3) 95%</td>
<td></td>
</tr>
<tr>
<td>Marketing support</td>
<td>13.26</td>
<td>12.55</td>
<td>(1) Slow and unfriendly</td>
<td></td>
</tr>
<tr>
<td>Rush orders and special requests</td>
<td>12.41</td>
<td>14.97</td>
<td>(2) Somewhat slow and unfriendly</td>
<td></td>
</tr>
<tr>
<td>Credit facilities</td>
<td>11.81</td>
<td>14.75</td>
<td>(3) Speedy and friendly</td>
<td></td>
</tr>
<tr>
<td>Gross margin in terms of current gross margin</td>
<td>17.22</td>
<td>11.74</td>
<td>(1) Very strong</td>
<td></td>
</tr>
</tbody>
</table>

*Total equals 100%.
estimating the importance of total order cycle time. Minor differences were found between manufacturer and distributor perceptions with regards to the role of marketing support, rush orders and special requests and credit facilities. The relative importance of the customer service attributes is more or less similar.

The results that were obtained with regard to the relationship between the Singapore importer and its wholesaler-customers are presented in Table 2. As can be observed from Table 2, there is a relatively high degree of congruence between the views on customer service quality between these two layers of the distribution channel. Credit facilities is considered the most important attribute by far by both the Singapore importer management and its wholesaler-customers. Also, both levels have similar perceptions on the relative importance of gross margin and marketing support. Major differences between importer and wholesaler perceptions of customer service quality exist with regards to order status information and complaints handling and rush orders and special requests. On the one hand, management at the Singapore sales office overestimates the importance of rush orders and special requests, while underestimating the importance of order status information and complaints handling. Minor differences were found between the Singapore sales office and wholesaler perceptions with regards to total order cycle time and error-free order delivery.

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Management Singapore sales office (%) (n = 10)</th>
<th>Customers Singapore (%) (n = 36)</th>
<th>Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Total order cycle time</td>
<td>11.32</td>
<td>10.71</td>
<td>(1) 24 hours later than current</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(2) Current</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(3) 2 hours faster than current</td>
</tr>
<tr>
<td>(2) Percentage orders delivered completely without any errors</td>
<td>11.41</td>
<td>11.00</td>
<td>(1) 10%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(2) 80%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(3) 95%</td>
</tr>
<tr>
<td>(3) Order status information and complaints handling</td>
<td>8.70</td>
<td>9.32</td>
<td>(1) Slow and unfriendly</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(2) Somewhat slow and unfriendly</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(3) Speedy and friendly</td>
</tr>
<tr>
<td>(4) Marketing support</td>
<td>12.92</td>
<td>12.78</td>
<td>(1) Weak</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(2) Moderately strong</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(3) Very strong</td>
</tr>
<tr>
<td>(5) Rush orders and special requests</td>
<td>12.19</td>
<td>8.93</td>
<td>(1) Always a problem</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(2) Sometimes a problem</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(3) Never a problem</td>
</tr>
<tr>
<td>(6) Credit facilities</td>
<td>26.59</td>
<td>30.34</td>
<td>(1) 0 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(2) 60 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(3) 120 days</td>
</tr>
<tr>
<td>(7) Gross margin in terms of current gross margin</td>
<td>18.87</td>
<td>16.91</td>
<td>(1) 95% of current gross margin</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(2) Current gross margin</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(3) 105% of current gross margin</td>
</tr>
</tbody>
</table>

*Total equals 100%.
*Second level of each attribute rescaled on zero.
Next, intra-service element trade-offs between the levels of the various customer service elements and gross margin were analyzed for the two dyads in this international marketing channel. Figure 1 presents the results that were obtained with regards to the manufacturer-importer dyads. Improvements of customer service elements are expressed in terms of percentage of gross margin. For instance, if an importer has a gross margin of 5% and would be willing to sacrifice 20% of that margin for an improvement of customer service level (e.g. the total order cycle time takes place 1 week faster), it would mean that his gross margin would drop to 4% (0.8 x 5%). In our research each customer service element has three levels (for exact specification of the various customer service levels see Tables 1 and 2).

In Fig. 1 a distinction is made between an improvement from level 1 to level 2 and an improvement from level 2 to level 3. For instance, TOTAL1 signifies the improvement relative to the current level in total order cycle time from 2 weeks later than the current time, while TOTAL2 relates to the improvement in customer service from the current level to a total order cycle time that is 1 week faster than the current level. With regard to total order cycle time, we found that according to the manufacturer’s management their customers would be willing to sacrifice 0.68% of their current gross margin for a customer service improvement from level 1 to level 2 and 2.7% of their current gross margin for a customer service improvement from level 2 to level 3 (i.e. a total order cycle time that is 1 week faster).

A considerably different picture emerges from the perspective of the Asian importers themselves. With regards to total order cycle time, they are willing to trade in 5.13% of their current gross margin for the first customer service improvement, while they would be willing to sacrifice no less than 20.51% of their current gross margin for an improvement from level 2 to level 3. From Fig. 1 it becomes clear that manufacturer management considerably underestimates the sacrifice that the Asian importers are willing to make, particularly with regards to customer service improvements regarding total order cycle time, credit facilities and error-free deliveries. Furthermore, the largest differences occur with respect to customer service improvements between levels 2 and 3. There is only one exception in this respect, marketing support. According to manufacturer management, their Asian importers are willing
to 'pay' 3.78% of their current gross margin for an improvement from weak to moderately strong marketing support and 0.14% for an improvement from moderately to very strong support. In contrast, the Asian importers are willing to sacrifice 2.56% of the current gross margin for improvement on both levels.

A similar analysis was conducted for the second level in the Asian distribution channel in Singapore. The results are shown in Fig. 2. At this level a more diverse picture emerges from our analysis of the trade-offs between customer service levels and gross margin. While the management of the Singapore sales office underestimates the sacrifices that their wholesaler-customers are willing to make with regards to error-free delivery, order status information and complaint handling and credit facilities, they make an overestimation with regards to total order cycle time and rush orders and special requests. Again, the management of the Singapore sales office overestimates an improvement with regards to marketing support from weak to moderately strong (4.61 versus 4.06%), while underestimating the price wholesalers are willing to pay for an improvement from moderately strong to very strong marketing support (0.24 versus 0.78%).

Discussion
This study has examined the perspectives on customer service quality at two different levels in international marketing channels with the help of conjoint analysis. With the help of this technique we were able to focus on: (1) inter-service element trade-offs; and (2) intra-service element trade-offs. With regards to the first-empirical research question, our results reveal that considerable differences emerge between adjacent levels in the international marketing channel. This is what may be called first-order differences. In relation to inter-service element trade-offs, we found that first-order differences exist between manufacturer and Asian importers relating to total order cycle time, gross margin and order status information and
complaints handling. First-order differences between the importer-wholesaler dyads primarily relate to order status information and complaints handling and rush orders and special requests. These are predominantly related to the so-called marketing approach to customer service in marketing channels. With regards to intra-service element trade-offs, differences with respect to all customer service elements occur.

In addition, second-order differences or differences between non-adjacent distribution levels (i.e., differences in perspective between manufacturer management and the Singapore wholesaler-customers) with respect to inter-service element trade-offs relate to order status information and complaint handling, rush orders and special requests, error-free delivery and credit facilities. Again, there is a strong emphasis on elements that are part of the marketing approach to channel customer service. Particularly with regards to error-free delivery and credit facilities, relatively large differences were found. Manufacturer management heavily underestimates the importance attached to credit facilities by the Singapore wholesalers, while it strongly overestimates the importance of the orders delivered completely without any errors. With regards to intra-service element trade-offs, differences, although less considerable than at the first-order level, occur with regards to all service elements. Thus, our results confirm findings in the literature on domestic channels, that differences between the views of manufacturers and wholesalers and/or retailers exist (Ghosh, 1990; Rosenbloom, 1987). They also stress the need to investigate different perspectives on customer service quality at the various layers in international marketing channels. It follows from our study that a marketing approach to customer service forms the most suitable point of departure for such an investigation.

With regards to the second empirical research question that we set out to answer, it can be concluded that conjoint analysis is a useful instrument for taking into account the trade-off between service level and the costs of rendering that service level as well as trade-offs between the various customer service elements. The importance weights obtained by means of the conjoint analysis estimations provide a valuable basis for customer service segmentation and quality optimization of customer service by decision-makers in marketing channels. For instance, the use of this technique enables managers to calculate the effect of customer service improvements in terms of actual costs. In this way, customer service portfolio management in international marketing channels can be practised.

Part of the strength of any empirical research project lies in the recognition of its limitations. The limitations form an important point of departure for further research efforts. Owing to the use of the full profile conjoint design, our research was limited in scope in that only a small number of customer service elements could be taken into account. In contrast, by measuring customers' perceptions of customer service elements, for instance by adapting the SERVQUAL questionnaire to a channel context, a much wider scope could be obtained. Future research, therefore, should focus on the use of perceptual and utility measures in a complementary fashion in order to optimize their combination.

Furthermore, the picture that emerges from our study is also limited in the sense that it is based on the case of one specific company only. Cross-sectional studies from diverse channel environments should be used to draw a more reliable picture of the quality of customer service in international marketing channels.

References
