10 Bottlenecks in B2B Quality Management and Their Impact on Marketing Research

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10.1 Introduction

While much is known about perceived quality in b2b transactions – and quality management standards can be considered well-founded from a transactional point of view – in the context of relationship dimension further elements of quality seem to be important moderators.

This paper discusses the issue of how to modulate the quality image by limiting the generalizability of the ordinary performance-importance map. Based upon extensive research among clients of different b2b services (such as packaging, IT system supply, project information center, utility services, market research, quality management consultancy, freight forwarding etc.) the paper identifies a set of moderating factors. In the study* the following concepts and their impact on research are discussed: time vs. complaint, hierarchy of actors, frontline episodes, relationism in loyalty and competence vs. loyalty.

10.2 Problem definition

The final aim of quality management in the company practice is to stabilize the quality level defined in the corporate quality policy and to assure the process of continuous improvement (Feigenbaum 1983). According to the TQM-modell those manifestations of quality can be considered as the marketing dimension of the quality management, which have to be taken into account on the basis of customer orientation. These are:
- client satisfaction and (especially in the case of services).
- internal marketing.

The importance of the topic has been underlined by the new ISO standards. Under these standards it is now compulsory – not simply recommended - to measure client satisfaction and staff satisfaction. The operational link to quality management is well

* This paper is based upon the authors' presentation at ISBM/CBIM B2B Academic Workshop
held in Orlando (FL) in February 2003.

described by the Quality Function Deployment model, which also makes necessary to measure clients opinion with high precision.

In order to meet this new requirement the ISO-qualified firms – disregarding the „cost-saving" D-I-Y solutions – will give orders to an external quality consultant or to a market research agency to carry out a tracking type of satisfaction research. The task of the supplier in this case is „not more" than to deliver reliable and acceptable results for the client on an ordinarily low quality research budget. It is thus not surprising that it is the b2b market where client satisfaction research has reached real proficiency, since the personal supplier-buyer relationship could not be managed without such continuous monitoring (Grönroos 2000).

The usual way of exploring the client (and employee) satisfaction in practice is as follows. First, the analysis of quality dimensions has to map the scope of perceived quality dimension by dimension with an output of possible quality attributes (Garvin 1987). The parametrisation of quality attributes will translate the set of sometimes very abstract quality attributes into measurable quality parameters. After the questionnaire design and the data collection the data processing in the majority of cases leads to the creation of performance-importance map (Figure 10.1).

Figure 10.1 Performance-importance map
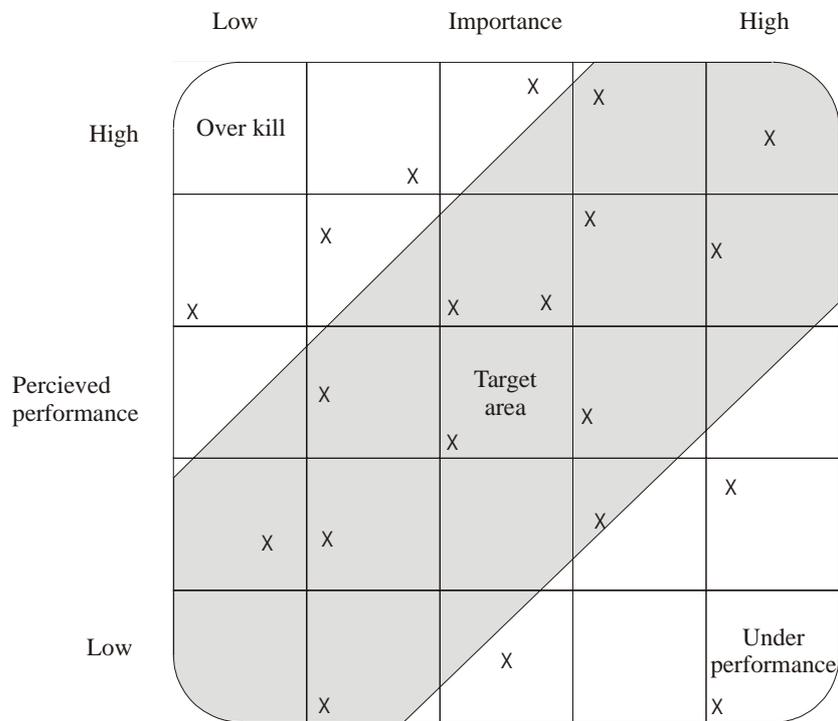
Source: based on Christopher and Yallop (1990)

For quality management this map is an input to quality development (Axelsson and Wynstra 2002). Most managerial research reports do not go beyond analysing the gaps between the perceived performance level and the explicit (at best implicit) importance of the related quality parameters. The methodological problem – and this is what this paper aims to discuss– lies in the generalizability of the performance-importance map. In this case since the result presented in such a way cannot be considered as one of general validity, it must not be applied to quality development decisions without reservations.

In the last one and a half decades in the business practice of quality management a new question emerged: is at all sufficient to apply the performance importance map to quality development? As a result, loyalty research – beside satisfaction research – has become more and more popular among decision makers. Many studies supported the evidence that the stronger the client-retention capability of a firm the more profitable the operation. We can still remember the slogan-like arguments: the net present value increase in profit that results from a 5% increase in customer retention varies betwen 25 and 95% over 14 industries (Reicheld and Sasser 1990). Moreover, others have noted that the relative costs of customer retention are substantially less than those of acquisition (Fornell and Wernerfelt, 1987).

Figure 10.2 The factors affecting customer satisfaction and loyalty
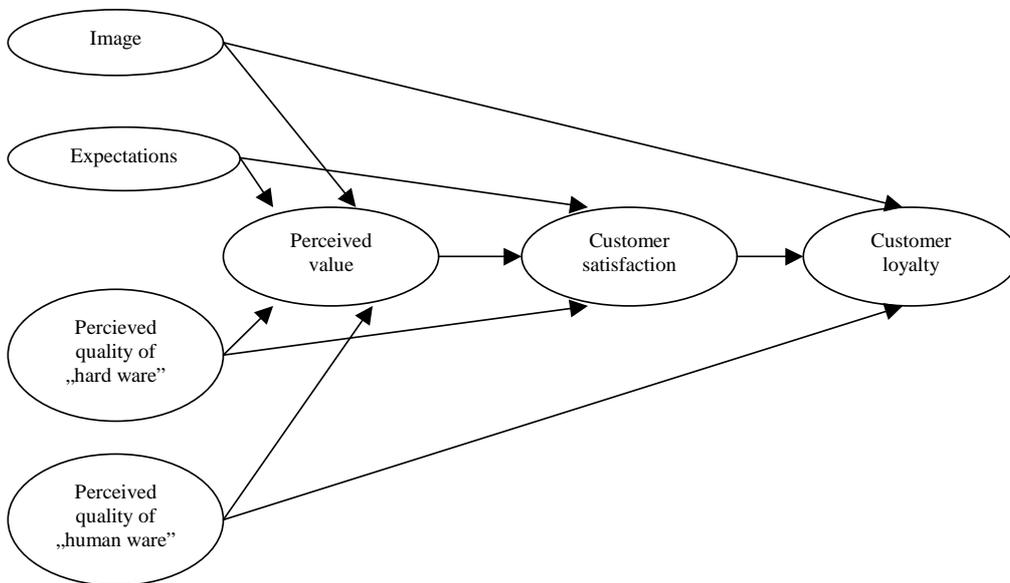
Source: Grönholdt et. al (2000: 510)

Some could later prove that the formerly purely hypothetical „quality-satisfaction-loyalty chain" really existed, that is the expected performance leads to satisfaction and finally to loyalty (Grönholdt et al 2000, Martensen et al 2000). In the interpretation of the quality – satisfaction – loyalty chain beside others (e.g. Parasuraman-Grewal) the model below can serve as a starting point for the quality manager. Our problem is however the same as it was in the previous case, namely, the generalizability of the measuring model of loyalty. Are there additional explanatory variables in the loyalty-function or are there not? From a managerial point of view the topic is of great importance because the precise methodology for the detection of client satisfaction and loyalty would make the firm capable of „keeping the clients in hand" and enable it to better plan the management of new clients (Figure 10.2).

10.3   Empirical evidence of some inconsistencies

In the last years we carried out numerous ad-hoc research projects focussed on b2b client satisfaction. The different areas of the projects included: the packaging industry, IT system supply, a project information center, utility services, market research, management consultancy, freight forwarding etc. The numerosity of the clientele ensured a sufficient sample size to keep the error within a margin of 5% on a 95% confidence level even in the worst case.

While presenting the results in the ordinary way we observed two typical phenomena which made the presentation more difficult. These two phenomena practically speaking could be considered as the statistical weakness of the results. One was the extremely high deviation behind the means, and the other one the phenomenon of the irregular distribution of the answers. The former one can be presented in the simplest way if we imagine dispersion ellipses around the coordinates representing the means on the ordinary performance-importance map. The managerial practice is apt to belittle – or even to ignore - this natural statistical phenomenon. The simplification can however result in very erroneous conclusions. The second phenomenon can be seen very well in Figure 10.3, which shows the results among the clientele of a freight forwarding company. The research project was carried out in 1997 on a sample of 127 companies. In the survey we investigated the components of the clients' satisfaction on five (5) degree scales. For the researcher the real interpretational difficulty lies in the duplication of the distribution peak and not so much in the distribution obliquity.

While preparing our survey with qualitative research in utility service industry also turned out that the loyalty model was very far from general validity. Consequently, there must be other dimensions apart from the already accepted ones in defining loyalty. In the in-depth interviews it frequently emerged that the self-consciousness of the clients may also influence loyalty and this new dimension appears first of all in the presumed competence of the client and in his ability to

assert his interest. By content-analysis of the interviews it has been found that the loyalty of the clients is highly influenced by the awareness of their rights and obligations and the possibility of managing complaints and problems.

The reasons behind the above mentioned results are diverse and they may occasionally exist simultaneously:
- buying center effect,
- time vs. complaint,
- frontline episodes,
- relationship quality,
- competence, and
- assertion of interest.

(a)   Buying center effect

In a survey we were confronted to the fact that in many cases in the organizational market the perceived performance of the supplier can be interpreted and measured only on more levels. The research project was to explore the quality of internal services of a big manufacturer in the chemical industry. In the survey the "buyers" of the services of the IT system supply division have been interviewed about their needs and satisfaction.

The research confirmed that there is quality perception on the top and middle management levels and at the operative bottom (on the level of the real contact persons).The quality management of the company has to be aware of the client satisfaction on each level of the hierarchy. The managerial implications, however, are necessarily different. The answers being measured on a different level of hierarchy can naturally result in more significant deviation.

Figure 10.3 Perceived performance of the exceptional problem solution
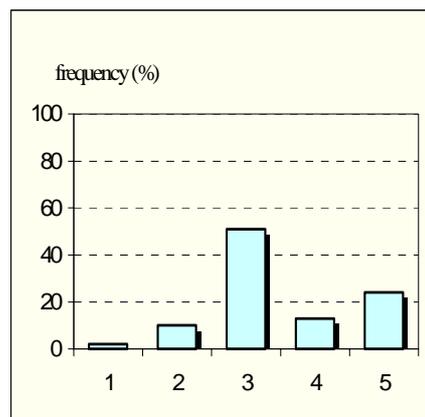
Source: Veres (2003: 89)

(b)   Time vs. complaint

The satisfaction originating from perceived quality is extremely sensitive to the complaint situations, and especially to the length of the period which has passed since the last complaint situation and its handling. This phenomenon can hypothetically be modeled as a stable and a transient phase of client satisfaction. The former stationary one is the result of the experience and perceived relationship of a long period. This stable satisfaction turns into a transient phase when the complaint situation emerges. This is the very beginning of the service recovery phase and it lasts until the satisfaction stabilizes again on the former or on another level. Consequently, the mixing of clients in a stable satisfaction phase and those of being in the service recovery phase in the sample might be a source of measuring error.

(c)   Frontline episodes

In measuring satisfaction, the opinion of the frontline persons - who frequently take part in intensive interactions – can cause considerable deviation in the results. Especially the client relationship of key account managers can result in measuring difficulty since they personalize their relationship much more, therefore the client opinion says more about the contact person than about the supplier. The personality of the key account manager certainly shifts the result toward the uniqueness of the satisfaction level.

(d)   Relationship quality

It is well known that relationship quality which can originate from the prehistory of the business relationship is based upon a very different client value than transactional quality (Cova and Salle 1999, Cova and Ghauri et al 2002). The numerosity of each perception preference depends on the complexity of the relationship portfolio. As a minimum, we have to distinguish four relationships: the newcomers, the loyals, the wilful deserters and the converted lambs, although the portfolio in reality is even more complex. An undoubtedly logical hypothesis can be that the different relationship statuses define significantly different satisfaction preferences thus the strengthening deviation of the opinions can originate also from this relationship dimension (Gadde and Hakansson 2001).

(e)   Competence

The emerging of the competence dimension is probably the consequence of the strengthening self-consciousness of the clients. In the organizational market the more competent clients are to enjoy higher advantages in establishing and forming the business relationship. Although a partner with less awareness of his rights and

obligations can also think himself competent, the subjective conviction in competence can influence loyalty. Based upon our eventual surveys in the utility service industry we can suppose that in the case of b2b services the competence of the client plays a key role in loyalty.

(f)   Assertion of interest

The assertion of interest as another dimension of client self-consciousness can influence loyalty. It can play a special role in forming the conditions of cooperation, and an even more important role in complaint situations. The reason for the emerging interest-assertion dimension is – similarly to competence – the strengthening client consciousness, since the increasing propensity and possibility to assert interests can improve the client bargaining position.

10.4   Interpretation

By secondary analyses of the survey results we have tried to verify the above mentioned hypotheses and suppositions. The most significant outputs of the analysis are as follows:

(a)   Different levels of quality image

In the above mentioned survey at a chemical industry manufacturer we assessed the results of the division's performance as extremely inhomogeneous. Testing by ANOVA the opinion-deviations of the respondents belonging to different levels of hierarchy we have got significant differences. As previously anticipated not only the parameter means but also the importances proved to be different on different decision levels.

(b)   Perceived performance and complaint times

When investigating the perceived performance of a supplier in the packaging industry we found unexceptedly high deviations. The survey has been carried out in the years 2000 and 2001 on a sample of 114 key accounts. In order to explore the complaint segments – by repeated questioning – we have completed the statistical variables with a question which detected the length of the time-period that had passed since the last significant complaint situation (net valid answers equal 103).

The aggregated satisfaction of the clients in function of the time variable defined in the above mentioned way proved to be in significant relationship with the time-period. It can be well followed in box-plot Figure 10.4 that in the case of

simultaneous answers the satisfaction level is proportionate to how long ago the complaint situation emerged (result tested by ANOVA), that is the longer time ago the complaint emerged the higher the perceived performance.

Figure 10.4 The box-plot of the level of performance plotted against the complaint times

Oldness of the complaint affair
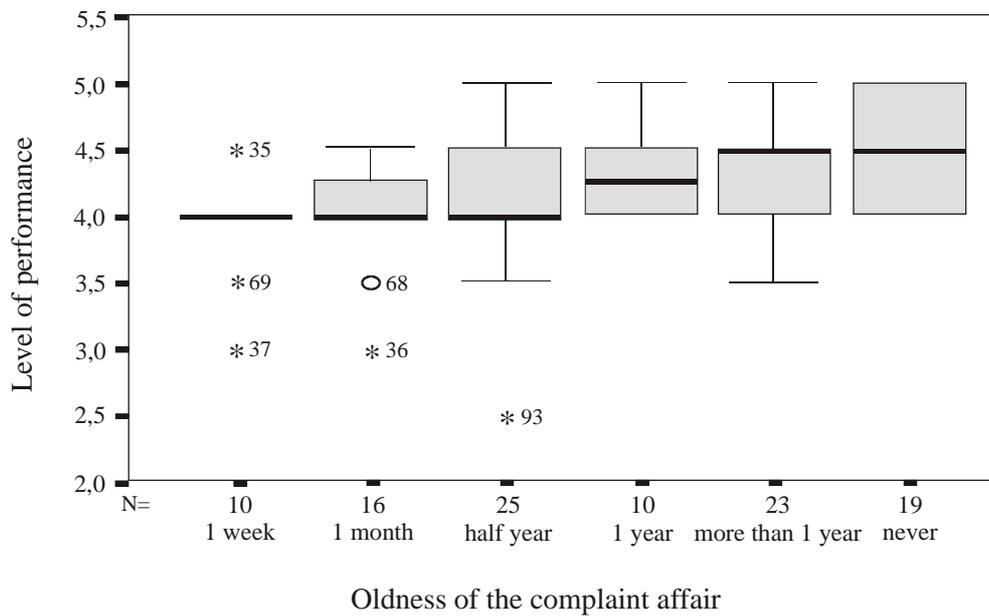
Source: exclusive research (by permission of Consact)

(c) Frontline experiences

Due to non-parametric eventual experiences (critical incidents) and the frontline personnel-specific quality in certain projects the ordinary research design had to be completed with a frontline audit. This could explore the quality of the frontline by questioning the contact personnel on both sides, by observing the frontline activity and by studying the backoffice-frontline interactions in the backstage (internal service moments).

Important information for quality management was that the quality preferences of the frontline persons and of the contact client persons were significantly different. The differences coming from the uniqueness of the contact persons were also significant. The dependence of the client opinions on the contact person has also been verified by the critical incident analyses.

(d)   Relationship segments

If we generate the results by relationship segments the distribution improves and the quality image becomes clearer. When we, for example, computed the perceived performance of the exceptional problem solution (as a key parameter of many services) for the four basic relationship groups the uneven answer-distribution of the total clientele became more regular. Especially in the case of separating the brand loyal clients (Figure 10.5).

Figure 10.5. Perceived performance of the exceptional problem solution
(segment of brand-loyal clients)
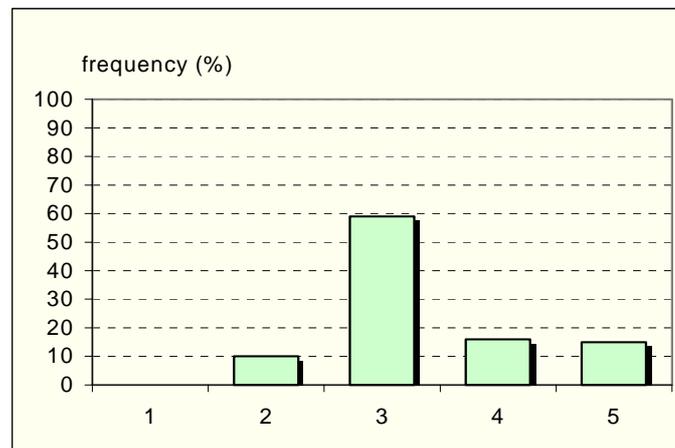
Source: Veres (2003: 89)

(e)   Client consciousness

The results of our survey carried out in Hungary about the customer loyalty to the local electricity distributors. prove that the loyalty factors known from the international literature should be dealt with special care in the case of the electricity industry. A representative sample of 1000 in the population living in the supply area of a Hungarian electricity supplier has been asked to fill in a questionnaire. The sample was selected with the mechanical simple random method (method of each n). The factor analysis of the survey results – by operationalizing the client consciousness in three dimensions – served to test the in-depth interviews (Table 10.1 and 10.2).

Table 10.1 Factor analysis of the consciousness dimension

Questions	Factors			
	1	2	3	4
Comp1	**0.91**			
Comp2	**0,91**			
Comp3	**0,89**			
Comp4	**0,80**	0,28		
Comp5	**0,53**	0,45		
Info2	0,29	**0,76**		
Info3	0,21	**0,73**		
Info1	0,32	**0,72**		
Info5		**0,65**	0,26	
Info6		**0,63**	0,23	
Info4		**0,62**	0,20	
Interest4			**0,90**	
Interest5			**0,88**	
Interest3		0,23	**0,71**	0,39
Interest1		0,40	**0,41**	0,27
Interest2				**0,85**

Source: Hetesi (2001)

Table 10.2 Analysis of the explained variance

	Explained variance after rotation		
Factors	Eigenvalue	Explained variance	Cumulated variance
1	3,67	22,95	22,95
2	3,42	21,35	44,30
3	2,45	15,30	59,60
4	1,26	7,89	67,49

Source: Hetesi (2001)

From the 16 questions the factor analysis identified four factors as explicative dimensions of client consciousness, where the
- first factor represents competence,
- second the "being informed",
- third the assertion of interest and
- fourth is not in relationship with the consciousness dimension.

The separation of competence and interest-assertion and the eigenvalues draw the attention of quality managers to the fact that in quality development these variables have also to be taken into account when managing loyalty.

More useful information can be found in the result of the regression analyses. We can study the absolute value and direction of the standardized regression coefficients in Table 10.3, and certain findings can be interpreted on the presumed relationship between the variables.

Table 10.3 Result of the regression analysis

Independent variables	Loyalty	
	Standardized beta	p value
ÜSZI	-0,22	0,003
EMP	-0,19	0,002
ÉRD	-0,15	0,010
KOMP	0,12	0,044
ELÉR	-0,17	-0,035
R^2=0,12	P<0,05	

Abbreviations: ÜSZI = client service, EMP = empathy, ÉRD = assertion of interest, KOMP = competence, ELÉR = accessability
Source: Hetesi (2001)

For quality management it is important information that competence is in inverse function with loyalty, consequently, the more competent clients will more easily leave the supplier than the less competent ones. On the other hand, the assertion of interest is in positive relationship with loyalty.

We have seen that the ordinary performance-importance map in itself can mislead the quality management if the company neglects those – and other – inconsistencies that we presented in this paper. As a practical scenario it is proposed to segment the client-population in different dimensions by

- hierarchy of the respondents,
- complaint,
- contact persons,
- relationship status.

Based upon the empirical results of the surveys as a new dimension, the measuring of client consciousness has to be built in to the research design. The impact of competence and the assertion of interest in loyalty can deliver useful information for quality management.

10.5   Conclusions

The ordinary client satisfaction surveys in company practice ignore the above detailed segment-specific differences, therefore, they report the means of the client opinions. When applying the quality image models a threshold of deviation should be defined above which the grouping of the population and analysis of variance would be proposed. The users have to reveal that the performance-importance map is not a two-dimensional phenomenon but a much more complex one because the quality image is a multiple-sided prism. The image depends on where we look at it from. The marketing research experts can deliver these proposals to the quality management. The real question is in fact how the management will be able to operationalize the proposals.

The measuring of loyalty also needs corrections. It is probable that the variables which are responsible for influencing loyalty are industry-specific ones. Special research could explore for quality management the key dimensions in the loyalty function. Measuring difficulties can also emerge in the operationalization of the competence variable (items to measure exactly an extremely subjective parameter, building into the measuring model etc.). Apart from the mixed opinion of the respondents in a stable satisfaction state and those within a service recovery process there is a further difficulty in measuring loyalty: the operationalization of the assertion of interest. What influence loyalty more: the propensity or the possibility to assert interest or both? In which situation should we detect this dimension: in the forming of cooperative conditions or in complaint handling or in both?

The correct methodology for total quality management programs is indispensable, but before finding this correct methodology the minimum what we can do is to comprehend our limits in the exploration of the quality image.

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