The integration of internal and external quality
Roest, H.C.A.; Verhallen, T.M.M.

Published in:
2nd International Conference on Recent Advances in Retailing and Services Science, Broadbeach, Sydney, Australia, July, 1995

Publication date:
1995

Link to publication

Citation for published version (APA):

Download date: 01. Aug. 2019
The integration of internal and external quality

*a strategic-program approach*

Henk Roest and Theo Verhallen

Marketing and Market Research
Tilburg University

SUMMARY

In this paper a program is presented to implement quality within a commercial strategy. The ABCDE-quality program starts from the Analysis of customers' quality perceptions. It is argued that each quality program should start with information on how the customer perceives and experiences the companies service delivery. Bringing about the involvement of top-management and employees with the quality orientation is a second prerequisite for a successful quality program. Communication both internal between management and personnel and later external to the clients on what to improve and how to do that is essential in preparing the organization for the next step: the actual Diffusion of quality. It is argued that a successful implementation of quality depends on the specification of service improvements as found from the analysis of clients perceptions. Finally the Effectiveness measurement as a means for feedback to the organization can make a quality program into a continuous improvement process.

1. Introduction

Perhaps one of the most intriguing concepts in economic behavior has been the

---

1 Tilburg University P.O.Box 90153 5000 LE Tilburg the Netherlands
Telephone: +31-13 663043, Fax: +31-13 662875
concept of quality. Thousands of conferences, books and articles prove this statement. Quality literature shows a development in thinking about quality. Until recently, quality was studied from only a technical perspective, which stresses 'objective' internal technical procedures, processes and control. More recently, a subjective quality perspective was added, in which the customer instead of the technician judges quality.

Whereas internal quality has been traditionally the domain of production management (Schonberger, 1982; Juran, 1984; Young, 1984; Herroelen and Lambrecht, 1985; Garvin, 1986 a.o.), external, subjective or perceived quality seems to be the arena of consumer psychology (Parasuraman, Zeithaml and Berry, 1985, 1988; Kasper and Lemmink, 1989; Steenkamp, 1989 a.o.). As we can see, both perspectives require different proficiencies and this is perhaps the most important reason why the integration of internal and external quality is underexposed in literature (Parasuraman et al., 1985; Cravens, Holland, Lamb and Moncrief, 1988). In this area however, it is the marketers' task to bridge external and internal quality (O'Neal and LaFief, 1992). In this process, perceived quality, mostly expressed and considered in the meaning of "fitness for use" (Juran, 1984), is used as a starting point.

This article will expand on how the two quality perspectives interact as the effect of external quality management will depend on the level of internal quality management. We will focus on how quality management matches the internal quality program with the external quality perceptions of customers. We have developed an ABCDE-Quality Program that consists of several steps the marketing manager has to consider when trying to implement quality as an effective marketing strategy. The successive steps are: Analyzing customers' quality perceptions, Bringing about involvement of management and employees, Communication -both internal and external-, Diffusion of quality, and Effectiveness measurement of the quality program.

2. The power of perceived quality

Studying perceived quality, it is found that quality as a marketing strategy is extremely prosperous when implemented properly. Researching distinctive competences in 113 service organizations, Aaker (1992) found that service quality is thought to be the most effective. Analysing data of a Forum Corporation survey of 2,374 customers, it was found that more than 40 percent listed poor service as the number one reason for switching to the competition, while only 8 percent listed price. Even worse, a Technical Assistance Research Program (TARP) study says that the average person who has been burned, tells nine to ten colleagues (Sonnenberg, 1989). Besides Sonnenberg (1989), positive impacts of quality and key business performances indicators have been found
by e.g. Thompson, DeSouza and Gale (1985) who studied services and Luchs (1986) and Buzell and Gale (1987) who studied products. These researchers used and analyzed the Profit Impact of Market Strategy (PIMS) database of the Strategic Planning Institute. The major relationships are presented in table 1 and figure 1.

**TABLE 1: BENEFITS OF HIGH PERCEIVED QUALITY**

<table>
<thead>
<tr>
<th>Marketing effects</th>
<th>Financial effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Higher market share (a, b, c)</td>
<td>Growing sales (a, b, c)</td>
</tr>
<tr>
<td>Attract new customers (d)</td>
<td>Higher Return on Investment/Return on Sales (a, b)</td>
</tr>
<tr>
<td>Customers want to pay more without affecting share (a, b, c, d)</td>
<td></td>
</tr>
<tr>
<td>Customer loyalty/repurchase (b, c, d)</td>
<td>Lower marketing costs (b, c)</td>
</tr>
<tr>
<td>Less vulnerable to price (b, c, d)</td>
<td></td>
</tr>
</tbody>
</table>

* Thompson et al. (1985) = a  
  Luchs (1986) = b  
  Buzell and Gale (1987) = c  
  Sonnenberg (1989) = d
FIGURE 1: THE EFFECT OF QUALITY ON BUSINESS PERFORMANCE

Studying perceived quality from the consumers' perspective, literature shows evidence that perceived quality is an antecedent for satisfaction (Churchill and Surprenant, 1982; Oliver, 1993) which has a significant relationship with (re)purchase intentions, brand loyalty and positive word of mouth (LaBarbara and Mazursky, 1983; Oliver and Swan, 1989; Cronin and Taylor, 1992; Boulding, Kalra, Steela and Zeithaml, 1993). Because of this and the fact that perceived quality is product (and not consumer) related, cognitive (and less affective), and concerns only benefits (and no sacrifices), perceived quality proves to be a more interesting managerial tool than satisfaction.

Due to these interesting findings, quality as a marketing strategy has been adopted by many organizations. Research by Frambach, Roest and Verhallen (1995) shows that the majority (XX%) of the organizations claim 'differentiation through quality' to be the central issue in their strategic marketing planning. A variety of problems however can be seen in marketing practice regarding the implementation of this prosperous strategy.

3. Problems in implementing quality strategy

Although a quality strategy holds much promise, it is also difficult to execute. Focussing on specific marketing problems, we can distinguish three major categories:
1. the knowledge of perceived quality;
2. the translation of external quality into internal quality (and vice versa), and
3. the simplification of the quality process.

First, an organization must offer benefits to the consumers that they will find so distinctive and important that customers will choose to buy them. We call this distinctive satisfaction. Based on our experience, organizations lack knowledge of how and why customer quality judgments are formed, what cues customers
use, and how competitors perform on quality issues. Many organizations rely on quality goals and objectives based on internal subjective perceptions of customers needs rather than objective market research and intelligence (Morgan and Piercy, 1992) unknowing or unrealizing that there may be important differences (see e.g. Kasper and Lemmink, 1989). No information is available on customer quality expectations and on what is perceived as 'really distinct' perceived quality (Levitt, 1980). Quality performance must also be based on a distinctive competence (Porter, 1985), without which there is no basis for the quality strategy.

Second, moving from distinctive competence (read: internal technical quality) to distinctive satisfaction (read: external or perceived superiority) and vice versa, seems difficult. This is partly due to the fact that quality programs are often created and executed by production experts -who think in physical specifications-or by marketing experts -who think in customers' needs- (Cravens et al., 1988). These experts seek different laguages and have different objectives. A cross-pollination between internal and external disciplines could resolve this, but is rarely performed in practice and literature.

Third, even if quality perception research is executed and applied in quality programs, it is often oversimplified. The idea, for example, that every discrepancy between the customer's expectation and the perceived performance (Lewis and Booms, 1983) should automatically lead to an adjustment of the product or the organization is too obvious. An other myopia is that every organization should continually seek for higher performance (Cravens et al., 1988). These questions are rarely asked: (1) What caused the difference and why? It is possible, for example, that one could still be satisfied about a tour operator and its service, even if consumer expectations were not met (due to the bad weather). (2) What is the impact of this discrepancy on the overall quality judgment? When a customer is in a hurry and there is a crowd before the registration desk, this will have a more important effect on the quality assessment than when the customer is not in a hurry. (3) What will be the effect of quality level adjustments? Not every product adjustment automatically leads to better quality. Insurance company customers might still be dissatisfied if the term of payment is shortened from two months to three weeks, if they still expect payment within one week.

In the light of the implementation problems and examples listed above, it shouldn't surprise us to see that organizations who claim quality to be the strategic choice, often don't experience the pursued prosperous business economic effects.

We conclude that although perceived quality as a strategy promises much for organizations, they often lack the opportunities and conditions to execute it. The next section will therefore consider how quality as a marketing strategy can be executed more effectively.
4. Matching internal and external quality

The previous section described some aspects important for perceived quality to become a successful marketing strategy. Knowledge of the customers' quality perceptions and the capacity of the organization to take advantage of this, using both the product and the organization in a positive and distinctive way, take a central position in this strategy. From that perspective we have developed an ABCDE-Quality Program:

A. Analyzing customers' quality perceptions

To discover what quality perception processes a customer uses for assessing quality, five aspects should be considered in succession: identifying the quality dimensions clients use, finding out what and how quality cues are related to these dimensions, measuring the relevant levels within each quality cue, and recording both consumer ratings and establishing priorities.

1. The first phase is to examine the quality dimensions customers use in their quality judgments. Research within the service industry has come up with five quality dimensions: reliability, responsiveness, assurance, empathy and tangibles. These dimensions vary in importance depending on psychological, situational and service typical factors (Parasuraman, Zeithaml and Berry, 1985, 1988) and must sometimes be differentiated further (Carman, 1990).

FIGURE 2: THE ABCDE-QUALITY PROGRAM
2. Also important is which quality cues customers use in determining the level of the quality dimensions. For example: according to consumers the color of bread provides a cue about its taste. Some quality cues are obviously easier to control and manage than others. The power of these cues is that they make the connection between the distinctive satisfaction and distinctive competence. Within cues, intrinsic (technical) and extrinsic perceived product benefits are present. Verhallen (1992) states that in service quality research (e.g. banking and insurance companies) 40 to 50 quality cues can be established.

3. Determination of the quality levels used by customers is the next step. A customer trying to make a telephone call to an organization, for example, can be dissatisfied when he is not connected with the right employee within 15 seconds. Especially experience within the product category translated into experience-based-norms (Cardotte, Woodruff and Jenkins, 1987) is a major antecedent for the quality levels used by customers.

4. Defining quality levels in operational terms, with clear meaning to the customer as well as to the organization and its translation to daily delivery practice, can easily bridge the gap between internal and external quality (see step B). The actual measurement of cues and dimensions for products, the
organization and its competitors can be executed in several ways (see also step E).
5. Finally, the customers' own priorities have to be determined. This will prevent unnecessary investment in attributes with no relevance for quality perception. In the SMART-procedure, developed by Research International, the customer is asked to rate quality improvements (Sikkel 1992) which can be expressed as differences between quality levels on relevant quality cues.

Once it is known how the client rates the level of quality currently delivered, as well as what is possible, and this also parallels aspects on which the organization can gain a sustainable level of distinctiveness, only then it is useful to further develop the quality strategy.

**B. Bringing about involvement of management and employees**

For controlling and executing marketing quality and, when needed, implementing quality improvements, involvement of the organization's employees and management is a basic requirement. Many quality operations have failed because organizations overlooked integrating the marketing quality consequences with organizational operations. Organizations implemented quality teams and quality circles, often copied from Japanese businesses, without defining the role and the logic of it and without providing the opportunity and delegating the authority for necessary actions. The necessary support and incentives from management were also missing to carry out this strategy effectively.

In this context it is important to carefully describe the perceived quality specifications (Verhallen, 1992). Important quality dimensions from step A should, in other words, be translated into operational, measureable (Raffield and Bingham, 1989) and controllable actions for the organization. For example, how can the organization measure courtesy of personnel? The following scale may help:

- gruff, stiff personnel on telephone or front office desk;
- cool, reserved and professional personnel on telephone or front office desk;
- cheerful, friendly and professional personnel on telephone or front office desk.

Here the lowest level is described as gruff/stiff personnel, the middle level as cool/reserved/professional employees and the highest level as cheerful/friendly/professional on telephone or front office desk. Quality level specification is especially important to make clear to the personnel what is really meant by the phrase 'please, be more polite.' When an organization pursues the highest courtesy level, it must, for example, determine to react with a well-organized administration desk where work pressure is not in evidence
and with personnel who welcome customers with spontaneous smiles and eye contact. Quality dimensions and their desired levels must thus be translated into unambiguous terms for both client and personnel, and must be clearly transformed into operational activities. In this way the operational personnel feels more involved in quality, and can better and earlier recognize possibilities for improvements (Singh, 1990). Focussing on marketing quality specifications requires careful tuning between several organizational departments, across the hierarchial structure. Training and motivating personnel can also be based on this principle. Faster delivery is more than a matter of running faster; it is a different way of organizing. Giving personnel the opportunity to observe customers (from a distance), their behavior and the way the organization handles the customer contact, will help personnel be more customer orientated and increase employee involvement. Customer research, in the form of group discussions with customers, for example, can be set up so that employees have the unique opportunity of watching the discussion via a camera-monitor formation or a 'blind-screen.' Perhaps a mentality of improvement is one of the most crucial factors in order to arrive at an effective marketing quality strategy.

C. Communication; both internal and external

Communication is clearly an important factor in this context. Quality marketing is averse from hierarchial organization structures; communication structures should therefore be vertical, horizontal and even diagonal. An organization depends on bottom-up communication, for example, because executives rarely have good insight into customers' perceptions. Schneider and Bowen (1985) suggest that customer-contact personnel are more able to assess and investigate these perceptions. These findings should be communicated from the bottom up. Using top-down communication, management informs the front office about specifications, goals and the results achieved. The importance of horizontal and diagonal communication becomes manifest in the coordination between people and departments in their efforts to realize marketing goals. Internal problems between departments of any kind are not in the customer's interest. Especially in services this aspect deserves extra attention, because customers also experience the service production in which they participate. Not only the service product but also the production process experiences will be used to assess their service quality perceptions. Only if the organization can guarantee the quality sufficiently, it should be allowed to tell customers about it using the motto 'be good and tell about it.' If possible, customers should be made aware of the distinctive capabilities of the organization. This kind of claim increases the customer's level of expectation up to the 'augmented' level, which only the organization can perform (Levitt, 1980). Figure 2 depicts the communication and information flows between involved parties.
D. Diffusion of quality

Another problem associated with quality programs is dosing the introduction of quality as a marketing strategy. It is often assumed that once the management has communicated that quality is an important issue to them in policy and performance, this will have structural and ongoing impact. Management tends to forget that implementing quality marketing is successful only if it penetrates into the capillary vessels of the organization. Quality as a strategy interfaces more with the organizational culture than with the organizational structure. Preparation and performance must take place in a profound, continuous and stimulating way and quality programs must be handled systematically and carefully. Too many good ideas are fatal for a quality program and to work well, the best ideas should be selected early on.
Bad ideas are hardly a problem because they usually are recognized as such.

It makes sense to start the quality implementation trajectory with just a few quality aspects that are important to customers and where implementation depends on a combined effort of as many different people/departments as possible. Management's objective here is to let personnel understand "the customer sees it all" and that increasing quality is possible (evolution instead of revolution) and to stimulate continuation as a team. As an example, a local housing association, in the context of its desire to privatize, had to raise their quality performance level up to the level of their competitors (Roest, 1987). We found that, among several other factors, accuracy was extremely important for their customers. This was true for both the tangible part of the product, the house, and the intangible part, the service relation with the tenants. Using the customers' perspective, the association formed a project committee with representatives from several departments. Each representative would determine from his own department and expertise, how the accuracy of their mutual and dependant activities and operations could be improved. Subsequent meetings between management and the respective departments, evolved into a quality mentality that led to a level of further quality development exceeding everyone's expectations. When it is clear what consumers want and expect, and what the organization is capable of in consumer terms, internal and external quality may be matched and prevent customers from forming quality expectations that the organization cannot perform (yet).

E. Effectiveness measurement of the quality program

Effectiveness measurement forms the basis for quality improvement plans; quality in fact, is never satisfied. Has quality perception, for example, developed in a positive and desirable way and has it increased the difference with our competitors? Quality perception research which offers fast feedback, much faster than waiting for and analyzing sales and turnover figures. Five methods of quality effectiveness measurement can be distinguished. The first three methods are primarily useful as a quality problem signal instrument. The fourth method is especially suitable as a monitoring instrument whereas the last method excels as a planning instrument. (1) Customer complaint registration assumes the customer makes his complaints to the organization known. Measurement here seems extremely simple. Few customers however will actually voice their complaints by letter or telephone, and so customer complaint (dissatisfaction) registration indicates only the top of the iceberg. It should also be noted that all discontent -expressed or not-causes negative word-of-mouth communication. An extra disadvantage of this method is that complainers will often cite concrete events rather than abstract underlying motives they may have for their dissatisfaction.
(2) A second way to gain insight into the customers' quality perception is to get their reactions right after delivery. Well known is the inquiry-card that restaurants and hotels often enclose with the invoice and that can be mailed back to the organization later. Disadvantages are that the customer has only limited possibility to express his true quality perceptions and that the inquiry only highlights a small number of items the organization is interested in.

(3) A method that requires a more active attitude from the organization is the lost customers analysis. It is important to realize however, that lost customers often advance other, more rational, arguments for ceasing to do business with an organization. The customer won't easily say that he resented impersonal treatment by an employee, and will try rather to advance more objective arguments.

(4) A method in which not the customer himself, but a third party will make a statement in relation to quality perception is mystery shopping. Here a researcher acts like a customer and reports on the way he has been treated or how he perceives the product's performance. The Michelin restaurant star classification system, for example, is based on this method (Roest and Verhallen, 1994).

(5) Finally, it is possible to have a detailed customers quality perception inquiry. Here, customers evaluate the quality of the product or organization according to defined quality dimensions. This yields in a good picture of how customers perceive quality. Costs of this kind of inquiry can be prohibitive, however. Market research companies offer a variety of ways for carrying out this type of investigation. Different kinds of detailed customer quality perception inquiry that deserves special attention are: (a) Servqual (Parasuraman et al., 1985, 1988) in which aggregated brand performances are compared with apriori ideal product class norms, (b) Servperf (Cronin and Taylor, 1992, 1994) a Servqual spin-off in which only aggregated performances are measured based on the idea that expectations will have no effect, (c) Critical Incident Technique (Bitner et al., 1990) in which specific interactions between customers and organizations' employees are emphasized that are especially satisfying or especially dissatisfying (d) SMART (Salient Multi Attitude Research Technique; Sikkel, 1992), which highlights specific quality improvements and priorities and (e) PRP (Problem Ranking Process; auteur?.....), which is based on the assumption that customers find it difficult to report what is important but find it easy to recognize quality problems.

Table 2 presents an overview of the five distinctive measurements in relation to their costs, the amount of quality perception details provided and the amount of response control. The more detailed the measurement, the more accurate the evaluation of the performance of the activities and their effects can be determined. However, this type of measurement will also require a lot of effort and a large budget. The more controlled the sample is, the more reliable the results are and thus the more suitable they will be in their impact on quality.
policy. No one method can claim to be best, the optimal method depends on
the situation.

**TABLE 2: FIVE QUALITY MEASUREMENT METHODS**
*(the number of stars is related to the extent the method is suitable for that item)*

<table>
<thead>
<tr>
<th>Quality (effectiveness) measurements</th>
<th>low costs</th>
<th>amount of detail</th>
<th>amount of control</th>
</tr>
</thead>
<tbody>
<tr>
<td>administration of complaints</td>
<td>*****</td>
<td>**</td>
<td>*</td>
</tr>
<tr>
<td>reaction after delivery</td>
<td>***</td>
<td>*</td>
<td>**</td>
</tr>
<tr>
<td>lost customers analysis</td>
<td>**</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>mystery shopping</td>
<td>**</td>
<td>***</td>
<td>****</td>
</tr>
<tr>
<td>customers perception investigation</td>
<td>*</td>
<td>****</td>
<td>***</td>
</tr>
</tbody>
</table>

5 Conclusions

Implementing quality as a strategic instrument is a continuous process of
measuring and analyzing quality perceptions of customers. Marketers are most closely related to customers. In effect, the customer's representative within the company, the marketer, is involved with everything that concerns both parties. Dealing with perceived quality allows an organization to investigate customers and implement new programs. Distinctive satisfaction and distinctive competence are both sides of the same coin. Not every possible quality problem and improvement, according to the customers' view, will be equally important or will have an acceptable cost level. A cost calculation of the possible quality improvements will be relevant only if an organization has good insight into the profits for both the customer and the organization. The larger the gap between employees and the customers is, the worse that insight will be into the way customers think about quality and how this can be translated into activities that really work and can be measured regularly. Real contact with customers is the key opening the door for implementing quality as a successful marketing strategy.
References

Industrial Marketing Management wenst te werken met nummer in tekst!!!


Frambach, Roest and Verhallen, 19.. het NIMA verhaal


Roest H.C.A. (1987), Een relatiebelevingsonderzoek in de sociale
woningbouwverhuur; de GWD als voorbeeld, unpublished survey, Tilburg University.


Sikkel D. (1992), SMART, een diagnose-instrument voor de kwaliteit van dienstverlening, Jaarboek van de Nederlandse Vereniging van Marktonderzoekers, pp. 135-147.


Young A.Y. (1984), Quality: the Competitive Advantage, Hewlet Packard meeting Zeist