
The determinants of service quality: satisfiers and dissatisfiers

Determinants of service quality

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Introduction

There appear to be five major debates taking place in the service quality area. One debate concerns the similarities and differences between the constructs of service quality and satisfaction (see e.g. Anderson and Sullivan, 1993; Bolton and Drew, 1991; Cronin and Taylor, 1992, 1994; Oliver, 1993; Parasuraman *et al.*, 1988; Taylor, 1993; Zeithaml *et al.*, 1993). There appears to be a consensus emerging that satisfaction refers to the outcome of individual service transactions and the overall service encounter, whereas service quality is the customer's overall impression of the relative inferiority/superiority of the organization and its services (Bitner and Hubbert, 1994).

A second debate is about the efficacy of the expectation-perception gap view of service quality, which is similar to the disconfirmation theory found in the consumer behaviour literature (see, for example, Berry *et al.*, 1985; Grönroos, 1984, 1990; Haywood-Farmer and Nollet, 1991; Parasuraman *et al.*, 1994). Some researchers now believe that there is strong empirical evidence that service quality should be measured using performance-based measures (see for example Babakus and Boller, 1992; Cronin and Taylor, 1994).

A third debate is concerned with the development of models that help our understanding of how the perception gap arises and how managers can minimize or manage its effect (see, for example, Brogowicz *et al.*, 1990; Grönroos, 1990; Gummesson and Grönroos, 1987; Parasuraman *et al.*, 1985).

A fourth debate concerns the definition and use of the zone of tolerance. Berry and Parasuraman (1991) suggested that "the zone of tolerance is a range of service performance that a customer considers satisfactory". The importance of the zone of tolerance is that customers may accept variation within a range of performance and any increase in performance within this area will only have a marginal effect on perceptions (Strandvik, 1994). Only when performance moves outside of this range will it have any real effect on perceived service quality (see also Johnston, 1995; Liljander and Strandvik, 1993).

A fifth debate, and the area of interest for this article, concerns the identification of the determinants of service quality. This should be a central concern for service management academics and practitioners, as the identification of the determinants of service quality is necessary in order to be able to specify, measure, control and improve customer perceived service quality. The next section provides an overview of the literature on service quality determinants.

The objective of this article is to explore the link between the determinants of service quality and outcomes either side of the zone of tolerance; that is are there some determinants which tend to be primarily a source of dissatisfaction and others that tend to be primarily a source of satisfaction. If these can be identified, service managers should be able to improve the delivery of customer perceived quality during the service process and have greater control over the overall outcome.

The determinants of service quality

Most writers agree that customers' expectations are rarely concerned with a single aspect of the service package but rather with many aspects (see, for example, Berry *et al.*, 1985; Johnston and Lyth, 1991; Sasser *et al.*, 1978).

Parasuraman *et al.* (1985) provided a list of ten determinants of service quality as a result of their focus group studies with service providers and customers: access, communication, competence, courtesy, credibility, reliability, responsiveness, security, understanding and tangibles. In a later article that year (Berry *et al.*, 1985) they added that:

although the relative importance of the categories would vary from one service industry to the next, we believe the determinants of service quality in most (if not all) consumer service industries are included in this list.

In the next phase of their research, Berry *et al.* (1985) found a high degree of correlation between, on the one hand, communication, competence, courtesy, credibility and security, and, on the other, between access and understanding; and so they created the two broad dimensions of assurance and empathy, that is, five consolidated dimensions. They then used the five dimensions – tangibles, reliability, responsiveness, assurance and empathy – as the basis for their service quality measurement instrument, SERVQUAL (Parasuraman *et al.*, 1988; Zeithaml *et al.*, 1990). They reported further that, regardless of the service being studied, reliability was the most important dimension, followed by responsiveness, assurance and empathy. The intangibles were of least concern to service customers.

These dimensions have been the subject of some criticism, though they have formed the basis for a considerable amount of research and application in the field of service management. Finn and Lamb (1991), for example, in a study of retailing, concluded that their results did not support Berry *et al.*'s (1985) belief that the instrument could be used to assess quality in a wide range of service firms. They found that the model's five dimensions were insufficient to cover quality in a retailing setting. They questioned particularly whether the five dimensions are generic and suggested that much development and refinement was needed. Cronin and Taylor (1992), in their research into service quality in banks, pest control, dry cleaning and fast food, also found little support for the five dimensions. They stated:

our results suggest that the 5-component structure proposed by Parasuraman *et al.* (1988) for their SERVQUAL scale is not confirmed in any of the research samples.

Research by Johnston *et al.* (1990) involved some testing of the comprehensiveness of Parasuraman *et al.*'s (1988) service quality determinants in the light of empirical data gathered in ten UK service organizations. Their analysis, although generally supportive of the ten determinants, suggested a refined list of 12: access, appearance/aesthetics, availability, cleanliness/tidiness, comfort, communication, competence, courtesy, friendliness, reliability, responsiveness and security. The limitation of their work lay in the fact that the empirical investigation drew only on management perceptions of service. Unlike Parasuraman *et al.* (1988), Johnston *et al.* (1990) did not use customer data in order to identify the determinants of service quality.

Johnston and Silvestro (1990) went on to add the customer's perspective to the 12 service quality characteristics. This led to the identification of an additional five service quality determinants: attentiveness/helpfulness, care, commitment, functionality, integrity; it also led to a refining of some of the other definitions.

A number of other authors have also postulated their own determinants of service quality, though in some cases they appear to have been based on Berry *et al.*'s (1985) well publicized work.

Walker (1990) suggested that the key determinants are product reliability, a quality environment and delivery systems that work together with good personal service – staff attitude, knowledge and skills. Grönroos (1990) postulated six criteria of perceived good service quality: professionalism and skills; attitudes and behaviour; accessibility and flexibility; reliability and trustworthiness; recovery; reputation and credibility. Albrecht and Zemke (1985) suggested care and concern, spontaneity, problem solving and recovery.

Armistead (1990) split the dimensions into "firm" and "soft". The *firm* dimensions are time (including availability, waiting time and responsiveness), fault freeness (including physical items, information and advice) and flexibility (ability to recover from mistakes, to customize the service or add additional services). The *soft* dimensions are style (attitude of staff, accessibility of staff and ambience), steering (the degree to which customers feel in control of their own destiny) and safety (trust, security and confidentiality).

The key issue for this article is that the work on the determinants of service quality does not necessarily distinguish between the effect of the determinants in terms of creation of satisfaction or dissatisfaction. It is implicitly assumed that they are the two sides of the same coin; for example, reliability was Berry *et al.*'s (1985) most important factor, which implies that unreliability will lead to dissatisfaction and that reliability will lead to satisfaction. Could it not be that a train which arrives on time is satisficing not satisfying? Their instrument measured only the importance, but not the relative impact of any individual, or collection of, determinants.

Satisfiers versus dissatisfiers

There has been some recent research which has sought to identify some of the determinants of satisfaction or dissatisfaction. The earliest work is to be found in the consumer behaviour literature.

Swan and Combs (1976) postulated that:

consumers judge products on a limited set of attributes, some of which are relatively important in determining satisfaction, while others are not critical to consumer satisfaction but are related to dissatisfaction when performance on them is unsatisfactory.

Their hypothesis was that there are two types of determinants – *instrumental* (the performance of the physical product) and *expressive* (the psychological performance of the product) – and that both have to be achieved to satisfy the consumer. They postulated that satisfaction will tend to be associated with expressive outcomes above or equal to expectations and dissatisfaction will tend to be related to performance below expectations for instrumental outcomes. Also, to be satisfactory the product must meet expectations on both instrumental and expressive outcomes. They suggested that dissatisfaction may occur from either type of performance. To test their ideas they applied a modified version of the critical incident technique (CIT) and asked 60 graduate students to “think about an item of clothing that has been especially satisfactory and an item that has been especially dissatisfactory”. The students were interviewed about their reasons.

Swan and Combs stated that this was very much an exploratory study and that its findings were not necessarily generalizable. They found some problems in the classification of their data: for example, comfort could be instrumental or expressive, and its categorization as one or the other significantly affected the results. They also found that *both* instrumental and expressive factors led to *both* satisfaction and dissatisfaction. It should also be noted that their work was concerned with products and not services.

Maddox (1981) replicated Swan and Combs's (1976) work and collected data on clothing, personal care products, durables and small appliances. He applied a self-administered questionnaire to about 200 members of a consumer behaviour class at the University of Missouri-St Louis in 1979. The response rate was over 80 per cent. He used the same classification and hypotheses as Swan and Combs. The outcome of his study provides support for Swan and Combs' findings that it is difficult to make predictions on the link between the two outcomes and customer satisfaction. He did find, however, that “low values on an expressive attribute will reduce satisfaction, but will not lead to dissatisfaction”.

Another preliminary investigation was carried out by Hausknecht (1988). He again applied CIT to a group of 94 students investigating their experience of a number of products. He concluded that satisfaction is best characterized by the emotions interest, joy and surprise, and dissatisfaction by anger, disgust and surprise. His study revealed differences in the emotions of satisfaction and dissatisfaction, rather than the causes of these states.

Cadotte and Turgeon (1988) undertook an analysis of the content of complaints and compliments reported by a cross-section of restaurant owners in the USA. There were 432 responses from restaurants and 260 from hotels, most of which, surprisingly, were compliments and not complaints (only 9 per cent of the guests' comments were unfavourable). They found that some variables were *dissatisfiers* when the performance or absence of the desired feature led to dissatisfaction, which then resulted in complaining behaviour.

Furthermore, higher levels of them did not appear to cause compliments; for example, parking at the restaurant. They concluded that “Dissatisfiers represent the necessary but not sufficient conditions of product performance”. There were also some *satisfiers* where unusual performance elicited strong feelings of satisfaction leading to complimenting behaviour, but typical performance or the absence of performance did not necessarily cause negative feelings. They stated: “from a management point of view satisfiers represent an opportunity to move ahead of the pack”.

They further suggested that there were “criticals” which were the variables that could elicit both positive and negative feelings – quality of service was one of the factors that ranked high as both a satisfier and dissatisfier. They also identified “neutrals” as those areas which received neither compliment nor complaint.

This work seems to suggest that the causes of satisfaction and dissatisfaction may be different. However, by analysing compliments and complaints it is possible that only the very extremes of satisfactory and dissatisfactory experiences were considered. Furthermore, and importantly, service quality was a single variable, yet other variables included service quality characteristics: for example, cleanliness, speed of service, employee knowledge. It was unclear what remained in the quality of service category.

There have been a number of studies undertaken more recently by service management researchers. A study by Bitner *et al.* (1990), again using CIT, attempted to identify the events and employee traits that led to satisfactory and dissatisfactory outcomes. They studied 700 incidents from customers of airlines, hotels and restaurants. They identified employees’ willingness to respond to a problem, employees’ responsiveness to customer needs and requests and unsolicited employee actions as being the key employee actions that elicit *both* satisfaction and dissatisfaction. Their study focused on the actions of employees and so had only limited coverage of customer perceived service quality.

A CIT study by Johnston and Silvestro (1990), using a convenience sample of 100 with anecdotes covering many different service industries, revealed some support for the satisfying, dissatisfying and “criticals” proposition put forward by Cadotte and Turgeon (1988). They called their categories *hygiene, enhancing* and *dual* factors, (recognizing the similarities with Herzberg *et al.*’s (1959) categorization of the factors affecting job satisfaction (see also Johnston and Lyth, 1988).

Mersha and Adlakha (1992) asked 25 MBA students to identify the factors that satisfied and dissatisfied them. The 12 resulting attributes were found to be similar to those proposed by Parasuraman *et al.* (1985). This led to the development of a questionnaire which was pre-tested on an undergraduate class and tested on a graduate class. Five services were covered: physician; retail banking; car maintenance; colleges; and fast-food restaurants. The attributes of good quality were knowledge of the service, thoroughness, accuracy, consistency, reliability, reasonable cost, willingness to correct errors, timely and prompt service. The attributes of poor quality included lack of knowledge about the service, employees’ indifference, reluctance to correct errors, service inconsistency, sloppiness and high cost. There seems to be some evidence that,

at a detailed level, there may be some difference between the causes of satisfaction and dissatisfaction.

Another study was undertaken by Smith *et al.* (1992) using CIT and cluster analysis. They suggested that the determinants of satisfaction and dissatisfaction indeed may be different. They did not use the existing service quality characteristics but found that satisfaction was usually generated by service going beyond expectations and dissatisfaction resulted from failure, slowness, disinterest and rudeness of staff. Their data came from a single industry – retail services – and their sample comprised graduate and undergraduate students from an American university. Their analysis was based on 35 satisfying incidents and 36 dissatisfying incidents.

Edvardsson (1992) used CIT to investigate the causes of negative critical incidents in an airline. He took information from both passengers and staff to identify the cause and result of the incidents. His findings were interesting and he reported a difference in the perception of incidents between customers and staff. He suggested that collecting information from frontline staff will not necessarily help in understanding customers' perceptions of quality failures.

What emerges from these studies is a view that there may well be a difference between the causes of satisfaction and dissatisfaction and also, from Edvardsson (1992), that it is important to gain that information directly from customers.

All of the studies were acknowledged to have some weaknesses:

- The early studies were product-based and therefore did not assess service quality (Hausknecht, 1988; Maddox, 1981; Swan and Combs, 1976).
- Some studies used broad categories of service quality (Bitner *et al.*, 1990; Cadotte and Turgeon, 1988; Swan and Combs, 1976).
- Some studies used small samples: for example, Mersha and Adlakha's (1992) sample was 25 and Smith *et al.*'s (1992) was 36.
- Some of the studies were exploratory in nature, using students whose experiences and expectations may not necessarily reflect those of the population (Hausknecht, 1988; Maddox, 1981; Mersha and Adlakha, 1992; Smith *et al.*, 1992; Swan and Combs, 1976).
- Some studies took data from several different industries and services between which the satisfiers and dissatisfiers may vary (Bitner *et al.*, 1990; Johnston and Silvestro, 1990; Mersha and Adlakha, 1992).
- Edvardsson (1992) chose to look only at negative factors.

The study

This study seeks to classify the determinants of service quality into those determinants that are predominantly satisfiers and others that are predominantly dissatisfiers. It will attempt to gain a large number of responses from a sample of customers in a single organization since it is possible that the satisfiers and dissatisfiers are different between different organizations. It will

also use the 17 determinants of service quality identified by Johnston and Silvestro (1990) as the base for the classification. It is hoped by so doing that the study will overcome some of the limitations of the earlier studies. If the results prove conclusive, the study can then be replicated with different service industries.

A bank was the organization chosen for this study because banks are the largest identifiable source of anecdotes in the study reported by Johnston and Silvestro (1990). Furthermore, banks have identifiable customers who will have had not just a single experience with that organization, as might be the case with some retailers, hotels and catering organizations, but an ongoing relationship over several years, involving many transactions per year. Additionally, the banking anecdotes in Johnston and Silvestro contained, in almost equal numbers, both satisfying and dissatisfying anecdotes. One major UK high-street bank agreed to be involved and to provide direct access, by questionnaire, to some of its personal account customers.

The critical incident technique which had been used in many of the earlier studies was chosen because it allows customers to express their perceptions in their own words and classify them into satisfying and dissatisfying factors. CIT does have a number of disadvantages for this type of study. For example, the incidents may have taken place some time before the collection of the data and so respondents' perceptions may have been modified or reinterpreted in the light of some further event. As the technique requires respondents to take time and effort to describe situations in words, a low response rate is likely. It must also be recognized that CIT collects only extreme views and may not gather service quality "incidents" close to, or within, the zone of tolerance. An additional disadvantage is the difficulty in processing and analysing anecdotal material (Stauss, 1993).

Based on the earlier studies by, for example, Smith *et al.* (1992), the questionnaire comprised two questions. The first question asked customers to think of a time when they felt very pleased and satisfied with the service received and to describe the service situation and why they felt so happy. The second question required customers to think of a time when they were unhappy and dissatisfied with the service they received and to ask them to describe, in a few sentences, why they felt this way. The questionnaire also included a request for some demographic details including sex, age and level of education.

It was necessary to choose more than one branch to allow for internal consistency checks between the branches to see if there were any undue biases in the sample. The bank asked for the study to be limited to four branches, and it was agreed that these would cover two large and two small branches; one in each category was chosen to be a rural branch and the other an urban branch. The bank agreed to provide the names and addresses of a 10 per cent sample of its customers at the four branches. The sample of customers was identified by selecting every tenth customer from the alphabetical computer records in each area (this avoided selecting customers with multiple bank accounts). If a selection was a company account, the previous account was selected.

More than 10 per cent of the questionnaires were returned, yielding 431 completed questionnaires. There was a high level of correlation between the

locations regarding the sex, level of education and age of respondents. With the exception of age range, these demographics were consistent with the population of over 16 year-olds with bank accounts. However, there was a disproportionate number of respondents in the 60+ category. Either all the samples in all four branches were biased towards this age group, or perhaps this age group included more people who were prepared to give the time needed to complete these questionnaires. Given the high degree of correlation between the age profiles between the branches (variance ratio was 0.39), one is tempted to conclude that the latter explanation is the more likely.

Classification of anecdotes

A number of the responses were found to be unusable. Some of the respondents had left one or other of the categories blank. Just five had left the two main questions blank but completed the demographic questions. Others, in the satisfaction category, had written that they were "satisfied" or that they were "always satisfied" or that they "had never felt *very* satisfied". In the dissatisfaction category some again had been left blank, and other respondents had said that at no time had they felt "very dissatisfied". These responses were excluded, so the net number of usable satisfaction anecdotes was 323 and the number of dissatisfaction anecdotes was 256.

The richness of the remaining anecdotes was surprising. Most respondents described in considerable detail their experiences of the incident in question. Many of the respondents provided anecdotes exceeding 100 words in length; some, however, were very short – on occasions, just a few words. The average anecdote length was just over 30 words.

Each anecdote was numbered and summarized into a list of key words and phrases which encapsulated the customer's experience of the service. This was then recorded on an index card. Two sets of cards were created, one for the anecdotes relating experience of good service (the satisfiers) and one for the anecdotes of poor service (the dissatisfiers).

The summaries were then classified independently by two researchers, using the 17 quality determinants provided by Johnston and Silvestro (1990) as a base. Discrepancies were identified, discussed and resolved. In most cases, this was a straightforward, though time-consuming, activity. However, three problems arose.

First, many respondents had used the word "helpful" or "helpfulness", particularly in relating satisfactory experiences. This actual provision of assistance did not fit precisely with any of the categories. The closest definition was contained under attentiveness: "the extent to which the service, particularly contact staff, give the customer the impression of being interested in the customer and show a willingness to serve". The impression of being willing, however, is not quite the same as actually providing help. As the difficulty is primarily the difference between the "impression" of willingness to serve and the "actual" provision of help, it was proposed to include "helpful" (the actual or apparent provision of help) in the attentiveness category. The title and definition of this quality determinant was amended (see the Appendix).

Second, there was an overlap between security and integrity that was highlighted by a difficulty in deciding on the final classification in a number of cases. Both definitions had some concern for confidentiality. Integrity included “the ability to maintain confidence” and security included “the maintenance of confidentiality”. To remove this overlap, it was decided to define integrity as being concerned primarily with honesty, justice, fairness and trustworthiness, and security as being concerned with feelings of safety and the maintenance of confidentiality (see the Appendix).

Third, five anecdotes did not fit, even closely, with any of the categories. These were cases where the service workers involved were felt to have gone out of their way to respond to customers’ requests. In some cases the worker has taken the initiative and changed the service or the product in some way to suit the particular needs of the customer. In three cases, the service workers were reported as having “gone beyond the call of duty” to help customers who had lost, or had stolen, credit cards or cheque books. In another situation, although it was bank policy not to give cheque accounts to children under a certain age, the service worker was able to make a special arrangement for the child involved.

These examples are of service that goes beyond attentiveness (the actual or apparent willingness to serve), or the availability of goods and services, or responsiveness (the prompt response to a request for service) and, indeed, beyond competence and commitment (the carrying out of correct procedures and the expertise and professionalism with which they are carried out). These were situations where the service worker demonstrated some degree of flexibility in responding to the customer’s needs which was beyond the routine service provided by the organization. To deal with these situations a further determinant was added – flexibility (see the Appendix).

The notion of flexibility exercised by service workers is not new to the literature. The customization of a service for an individual customer has been used as a key dimension in classifying services (see, for example, Chase, 1978; Johnston and Morris, 1985; Maister and Lovelock, 1982). The idea of flexibility as a strategy has also been discussed in the manufacturing literature (see, for example, Slack, 1983, 1987) and more recently in the service literature (see, for example, Fitzgerald *et al.*, 1991).

Analysis and discussion

It is interesting to note that out of the 431 returns, there were more anecdotes relating to satisfaction (323) than there were to dissatisfaction (256). Forty-one per cent were either unable or unwilling to think of a time when they were dissatisfied with the bank’s services. Furthermore, several respondents explained that they had to go back ten or 20 years to find an incident that led to a feeling of dissatisfaction. This should be compared with just 12 per cent who left the very satisfied question blank or said they had never felt very satisfied. Thirteen per cent gave very brief replies to this question, stating that they were satisfied with the service but not explaining why.

One might conclude that much of the work of the bank falls into the zone of tolerance, maybe in part because of the overall low response rate, and also

because of the relatively large proportion of returned “blanks”. This, however, makes analysis of the satisfaction and dissatisfaction anecdotes more significant, as over 5 per cent of the dissatisfaction anecdotes expressed either a desire or an intention to change banks, and a small proportion had just done so. Furthermore, a number of the satisfaction stories resulted from people’s treatment by this bank after having left another bank. The amount of high levels of satisfaction and dissatisfaction encountered might be small, but their results could be seen to be significant for the retention and capture of customers.

The frequency of mention for each of the quality determinants, both satisfying and dissatisfying, were compared between the four branches using Spearman’s coefficient of rank correlation. There was no significant difference between any of the locations at over the 99 per cent confidence level. (Pairwise comparisons of variances yielded r_s of between 0.87 and 0.95.)

The frequency of mention for the four locations were then combined (see Table I). In all, there were 877 references covering 17 of the 18 quality determinants. The physical comfort of the service environment and facilities was not mentioned in any of the 579 anecdotes. Most of the references (543) were satisfying. Overall, there was an average of 1.5 determinants per anecdote.

In the case of the bank’s personal customers, some determinants are clearly prevalent. Just seven determinants accounted for 80 per cent of the mentions and eight accounted for less than 5 per cent. Attentiveness was mentioned 163

Determinants	Satisfying	Dissatisfying	Total
Attentiveness/helpfulness	156	7	163
Responsiveness	107	54	161
Care	78	18	96
Availability	31	43	74
Reliability	10	58	68
Integrity	0	63	63
Friendliness	59	2	61
Courtesy	34	10	44
Communication	19	20	39
Competence	19	18	37
Functionality	2	28	30
Commitment	20	0	20
Access	2	4	6
Flexibility	3	1	5
Aesthetics	0	3	3
Cleanliness/tidiness	1	0	1
Comfort	0	0	0
Security	1	5	6
Total	543	334	877
<i>N</i>	323	256	579
Average (Total/ <i>N</i>)	1.7	1.3	1.5

Table I.
Summary of results

times whereas, in this sample, comfort was not mentioned at all and cleanliness only once.

Although some determinants appeared to have little impact on perceived service quality in the bank – for example, comfort, cleanliness, aesthetics, security, flexibility and access – it is conceivable that there may be some situations in the bank, and certainly in other service industries, where these might be crucial determinants.

Satisfiers versus dissatisfiers

As there were more satisfying than dissatisfying incidents, and more mentions made of satisfying determinants, Figure 1 depicts the relative frequency of reference to the 18 quality determinants according to whether they resulted in satisfaction or dissatisfaction.

Spearman's coefficient of rank correlation was used to compare the difference between the rank orders of the frequency of mentions of the two categories. The null hypothesis was that there was no difference between the satisfiers and dissatisfiers. The null hypothesis was rejected at the 90 per cent level, suggesting that the determinants associated with dissatisfaction are significantly different from those that create satisfaction.

Furthermore r_s was about 0.1. This suggests no correlation rather than an inverse correlation. Berry *et al.* (1985) implied that the determinants that tend to satisfy are the obverse of those that dissatisfy; for example, friendliness will satisfy but unfriendliness will dissatisfy. This does not seem to be the case, e.g.

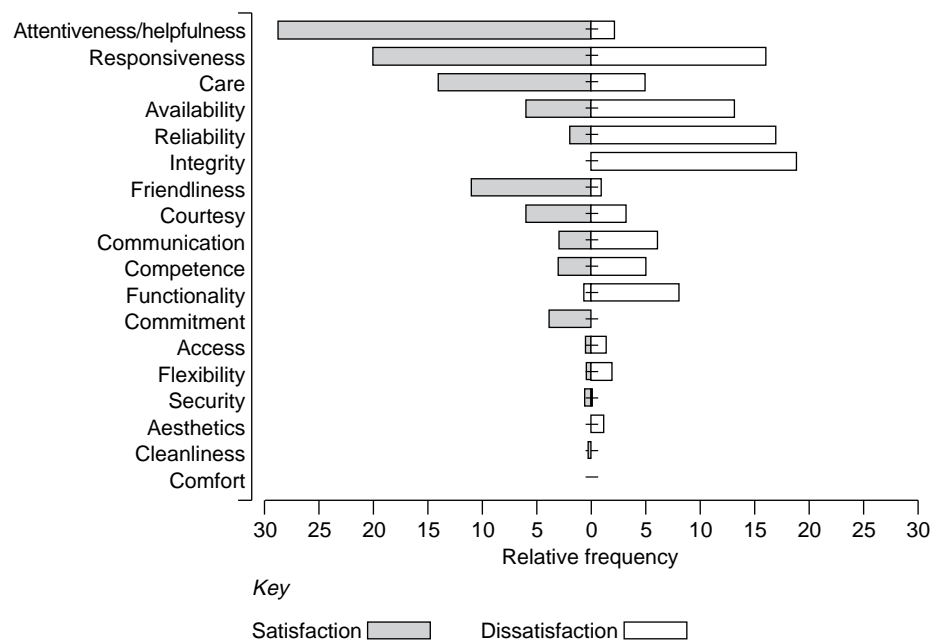


Figure 1.
The sources of satisfaction and dissatisfaction

friendliness may satisfy, but unfriendliness does not necessarily dissatisfy; functionality does not lead to very satisfied customers, but a lack of functionality will dissatisfy.

There were only four exclusive determinants of satisfaction or dissatisfaction with the bank:

- (1) integrity (dissatisfaction);
- (2) commitment (satisfaction);
- (3) aesthetics (dissatisfaction); and
- (4) cleanliness (satisfaction).

Given that aesthetics and cleanliness had very few mentions and that the other 13 determinants lead to some level of dissatisfaction or satisfaction, it would appear that most determinants can be a source either of satisfaction or of dissatisfaction.

The most frequently mentioned sources of satisfaction were attentiveness, responsiveness, care and friendliness (accounting for 400 out of the 543 mentions – 74 per cent). All of these determinants concern the intangible nature of the service and correspond to Berry *et al.*'s (1985) empathy, assurance and responsiveness dimensions. This seems to be somewhat at odds with their later contention that empathy was the least important of the five dimensions (Zeithaml *et al.*, 1990).

The main source of dissatisfaction with the bank was integrity: the honesty, justice, fairness and trust with which customers are treated by the service organization. This includes the ability to maintain confidence and mutual trust between customer and service provider. The other predominant dissatisfiers were reliability, responsiveness and availability – which have both tangible and intangible aspects – and functionality, which is purely tangible.

Other more tangible aspects – comfort, cleanliness/tidiness, security, access – accounted for a very small proportion of the references. This would add some support to Zeithaml *et al.*'s (1990) contention that the “tangibles” comprise the least important dimension in service quality.

It is interesting to note that the top ten determinants in terms of frequency of mention are concerned primarily with the intangible side of service (reliability and availability, which in some cases referred to the reliability or availability of associated goods or equipment). It would seem that the intangible aspects of the staff-customer interface have significant effect, both negative and positive, on service quality.

Responsiveness, as Berry *et al.* (1985) identified, is a key quality determinant. This study not only supports that contention, but emphasizes that it is a crucial factor, as it is a key component in providing satisfaction and the lack of it is a major source of dissatisfaction.

Reliability, however, was tenth on the list of satisfiers, accounting for only 2 per cent of mentions, and second in importance as a dissatisfier. This partly conflicts with Berry *et al.* (1985) who identified reliability as the main source of

service quality. However, Berry *et al.*'s (1985) SERVQUAL instrument ascertained what was important to customers, but did not *distinguish* between what satisfied or dissatisfied. Reliability is important, but affects dissatisfaction more than it does satisfaction. As "a main source of service quality", managers might be tempted to assume that reliability might give them an edge over competitors, whereas this study suggests that if it fails it will only detract. There is a need to try to provide as reliable a service as possible, but moving an unreliable one to a reliable one will not necessarily result in a high level of customer satisfaction.

The quality determinants identified as predominantly satisfying or dissatisfying were the same as those in the earlier study by Johnston and Silvestro (1990), though the ordering was slightly different. One key difference between this study and that was that the percentages were much more pronounced in this single industry survey.

Conclusion

In brief, this study has demonstrated that:

- Some determinants of quality predominate over others.
- For the personal customers of the bank, the main sources of satisfaction are attentiveness, responsiveness, care and friendliness. The main sources of dissatisfaction are integrity, reliability, responsiveness, availability and functionality.
- The sources of dissatisfaction are not necessarily the obverse of the sources of satisfaction.
- The intangible aspects of the staff-customer interface have significant effects, both negative and positive, on service quality.
- Responsiveness is a crucial determinant of quality, as it is a key component in providing satisfaction and the lack of it is a major source of dissatisfaction.
- Reliability is predominantly a source of dissatisfaction not satisfaction.

Furthermore, this investigation into a subset of customers – personal bank account holders – in a single organization not only provided similar results to the broader-based study by Johnston and Silvestro (1990), but gave more pronounced frequencies. This might suggest that for a single organization, although the same satisfying and dissatisfying factors might apply, a number of the factors are relatively more important than others.

Implications for service managers

It would appear that increasing the number of satisfying experiences is a relatively easy and self-supporting recipe for success. There is a need to engender a helpful, caring, friendly and committed approach in staff. While the

lack of such attributes does not dissatisfy the bank's customers, their presence appears to delight them. Additional satisfaction can also be gained by providing the service more quickly than expected. The presence of these satisfying factors may also create positive, virtuous circles, reinforcing the bond between contact staff and customers.

Reducing the number of dissatisfying experiences may be less easy. Dissatisfaction is usually elicited by tangibility or integrity problems. It would appear that the bank's customers expect and require a reliable, functioning service that is delivered, not too slowly, by competent and honest staff. For the bank, this would suggest that there is a need to consider the stocking policies of currencies, the selection and maintenance of equipment, the removal of potential errors from the complex cheque-processing and standing-order systems, for example. These are complex issues requiring more systemic solutions than merely the encouragement of appropriate traits in front-office staff.

Attempts to increase satisfaction rather than the removal of dissatisfaction maybe has been the downfall of many quality improvement or so-called TQM programmes. Some such programmes have focused on the activities of the front-office staff – smile campaigns, for example, without getting to grips with the, albeit more difficult, issues of dissatisfaction removal. Maybe without a strategy that includes both dissatisfaction removal and satisfaction increase, or at least dissatisfaction removal first, staff and, indeed, customers could become justly cynical of the organization's attempt to improve service quality.

Limitations

The study has several limitations and was based on a number of assumptions which need to be recognized and perhaps overcome in future research.

It is not appropriate for this study to make the claim that the findings are applicable to all industries. However, it is hoped that the study can be reproduced to test the extent of the applicability of the findings.

A major assumption in the work is that service quality can be described and captured by the 18 quality determinants. This may not be the case. Other determinants either may have gone unnoticed in the analysis of the anecdotes or those factors may not have been relevant to the particular service situations included in this study. One important dimension not discussed is price. There could be others – for example, the monopolistic position of a service provider, or the perceived image of that organization for innovation or for its personnel policies – any of which might influence the customer's expectations and/or perceptions of service quality.

Furthermore, it must be recognized that the use of the 18 determinants has constrained the results. The use of other sets of determinants based on alternative definitions would have yielded different results; that is to say, the results are a function of the classification scheme. Eighteen factors have been used here, a greater number than in any similar study. This has had the effect of segregating the construct of service quality into as many components as

possible. The purpose of this was twofold: first, to allow as much precision as possible; and, second, to permit operations managers, particularly at the bank, to identify as precisely as possible what they have to do to maximize satisfaction and minimize dissatisfaction.

The point of using the 18 factors is to be confident that the definitions are sufficiently clear and precise to ensure that there are clear boundaries between the factors and that all possible quality statements from the anecdotes have been included in them. When similar studies are conducted, covering more parts of the service sector, no doubt other factors will emerge. As yet the language, or the required understanding of the nature of service quality, does not appear to exist in the service management literature.

Another underlying assumption of the study is that critical incidents during a service lead to a feeling of satisfaction or dissatisfaction. It is possible that the sources of satisfaction and dissatisfaction are indeed things other than critical incidents. It could be that a service process that is provided just below the satisfaction threshold, giving no critical incidents and thus never crossing this threshold, could lead to an overall feeling of satisfaction. It could be that an overall feeling of satisfaction could have little to do with the service process itself or expectations of it, but in fact be a function of the customer's personal disposition on entering the system.

The critical incident explanation, however, does appear to have been accepted, at least implicitly, by other researchers. Indeed, it would seem not unreasonable to assume that these conscious events during the service process do have at least some impact on the final outcome. Moreover, the CIT construct does provide us with some structure with which to begin understanding this complex mental process.

The study also collected customers' views of past events. It has been assumed that the customers were telling the truth about their feelings regarding those events. It is possible that their stated feelings, after the event, resulted from *post hoc* rationalization of the event in the context of other events and activities, and may actually not relate to their feelings about the event in question at the time. It does not seem unreasonable, however, to assume that there is a link between what they said and the event itself, e.g., if a customer claims that an inoperative cash machine dissatisfied them, it would seem reasonable to assume that it being put right will reduce the dissatisfaction experienced by future customers.

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Appendix: definitions of the 18 determinants of service quality

Access: the physical approachability of service location, including the ease of finding one's way around the service environment and the clarity of route.

Aesthetics: extent to which the components of the service package are agreeable or pleasing to the customer, including both the appearance and the ambience of the service environment, the appearance and presentation of service facilities, goods and staff.

Attentiveness/helpfulness: the extent to which the service, particularly of contact staff, either provides help to the customer or gives the impression of interest in the customer and shows a willingness to serve.

Availability: the availability of service facilities, staff and goods to the customer. In the case of contact staff, this means both the staff/customer ratio and the amount of time each staff member has available to spend with each customer. In the case of service goods, availability includes both the quantity and the range of products made available to the customer.

Care: the concern, consideration, sympathy and patience shown to the customer. This includes the extent to which the customer is put at ease by the service and made to feel emotionally (rather than physically) comfortable.

Cleanliness/tidiness: the cleanliness, and the neat and tidy appearance of the tangible components of the service package, including the service environment, facilities, goods and contact staff.

Comfort: the physical comfort of the service environment and facilities.

Commitment: staff's apparent commitment to their work, including the pride and satisfaction they apparently take in their job, their diligence and thoroughness.

Communication: the ability of the service providers to communicate with the customer in a way he or she will understand. This includes the clarity, completeness and accuracy of both verbal and written information communicated to the customer and the ability of staff to listen to and understand the customer.

Competence: the skill, expertise and professionalism with which the service is executed. This includes the carrying out of correct procedures, correct execution of customer instructions, degree of product or service knowledge exhibited by contact staff, the rendering of good, sound advice and the general ability to do a good job.

Courtesy: the politeness, respect and propriety shown by the service, usually contact staff, in dealing with the customer and his or her property. This includes the ability of staff to be unobtrusive and uninterfering when appropriate.

Flexibility: a willingness and ability on the part of the service worker to amend or alter the nature of the service or product to meet the needs of the customer.

Friendliness: the warmth and personal approachability (rather than physical approachability) of the service providers, particularly of contact staff, including cheerful attitude and the ability to make the customer feel welcome.

Functionality: the serviceability and fitness for purpose or "product quality" of service facilities and goods.

Integrity: the honesty, justice, fairness and trust with which customers are treated by the service organization.

Reliability: the reliability and consistency of performance of service facilities, goods and staff. This includes punctual service delivery and an ability to keep to agreements made with the customer.

Responsiveness: speed and timeliness of service delivery. This includes the speed of throughput and the ability of the service providers to respond promptly to customer requests, with minimal waiting and queuing time.

Security: personal safety of the customer and his or her possessions while participating in or benefiting from the service process. This includes the maintenance of confidentiality.

Determinants of service quality