Making customer satisfaction measures work - 6
Interpreting what we measure

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How to deal with inflated ratings?

In my last article, I reviewed a number of different scales. No matter which numeric scale we use, there is still a possibility that we will end up with scores that are inflated. How do we know if the high scores we got were artificially inflated or genuinely deserved? When a customer satisfaction survey produces high average scores for all the organizations studied, it is quite likely that the scores are artificially inflated. This is not an uncommon situation in customer satisfaction studies. We can minimize this problem by choosing the right metric. If we find ourselves in a situation in which all institutions score high, there are a few options available to us.

First, we may choose to place less emphasis on the average score and concentrate on measures of variability. A common measure of variability is the standard deviation. A high standard deviation would indicate that there are many customers who score considerably lower (or higher) than the mean. In such cases, we may want to plot the actual distribution of ratings to understand the nature of such deviations.

Suppose we carry out a survey that measures the customer satisfaction level with four different organizations. If we find that all the average ratings are high (say over 7.5) and the organizations are not distinguished, we may want to understand the extent of agreement among customers with regard to the average ratings. Coefficient of variation is a suitable measure if we want to understand variability across different organizations or different attributes. It is calculated as follows:

- Calculate the standard deviation of the ratings. (Almost any program that deals with data analysis - including common spreadsheets - will calculate standard deviations.)
- Calculate the coefficient of variation using the formula:

$$CV = (\text{Standard deviation}/\text{Mean}) * 100$$

If the CV is high (say over 30%), then plot the scores. This is done by using the points of the rating scale as the x-axis and the percentage of respondents giving a given rating on the y-axis.

- If the distribution is bimodal or multimodal (i.e., has more than one peak), then the market is probably segmented. Different groups of people have different degrees of satisfaction and this may be related to their needs. You may want to stratify people into different groups and study their specific characteristics.
- If the distribution is almost flat with a large standard deviation, this could mean that there is no real agreement among customers about the type of services you provide. It could also mean that there is considerable variability in the type of services provided. In either case, such results suggest that you examine the process much more closely.
- If no specific patterns are found, you may decide to ignore the mean score and concentrate on customers who show dissatisfaction (for instance, customers whose rating of the service is in the bottom quartile).
- If no specific patterns are found, you may decide to concentrate on customers who show dissatisfaction.

Making the analysis action-specific

Service quality programs do not always produce the expected results. There are several reasons for this. The most important is the difference between what customer expectations are and what management delivers. In spite of its best intentions and effort, management may fail to deliver what the customer wants or expects. Differences between what is achieved and what is assumed to be achieved occur at different points in the system (Exhibit 1). Here are some common gaps (Parasuraman, Zeithaml, and Berry 1985).

Exhibit 1: A Service Quality Model (GAP Model)
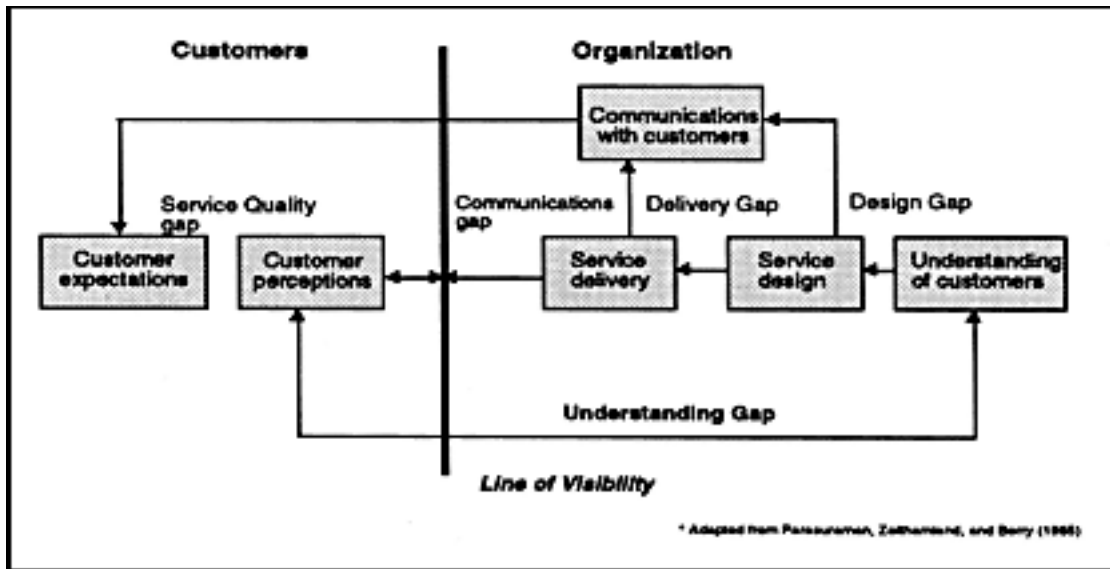
Service quality gap

The gap between what customers expect and what they perceive they are getting is called the service quality gap. For instance, customers may expect to be served within 15 minutes when they go to a retail location but they may perceive that the average service time to be close to 30 minutes.

Understanding gap

Understanding gap is the difference between customer expectations and management's' perception of customer expectations. For instance, management might think that 'efficient service' means that customers have to be served promptly whereas customers could interpret it to mean 'knowledgeable service'.

Design gap

The design gap is the difference between management's perception of what the customer expects and the translation of this perception into service standards. For instance, when the customers complain that they do not have enough time to pay the bills, they could mean that they need at least two weeks to pay their bills. Management might interpret "enough time to pay the bills" to mean one week's lead-time. So while management may be under the impression that it has made progress in terms of customer expectations, customers may not think so.

Delivery gap

The gap between service standards intended by management and service standards delivered is the delivery gap. For instance, management might intend to keep billing errors under 1%, but the actual rate of error could be 2%.

Communication gap

The gap between what is delivered and what is communicated to customers as being delivered can be referred to as the communication gap. For instance, a courier company can promise 9 a.m. delivery by the following day. The customer might believe that this service is available throughout office hours whereas the service may not be available after 3 p.m. While the company may correctly claim that it guarantees 9 a.m. delivery, this is not what is understood by the customer.

Consider a situation in which the customer has had no difficulty in expressing what he or she wants. In such cases, we simply create a framework within which the customer can, for each attribute, express how much of this attribute he or she would like, and where the organization stands with regard to the customer's expectations.

One of the techniques that is suited for this purpose is known as the Semantic Differential. Customers indicate, on a bipolar scale, how much of a given attribute they ideally would like and how the company performs on that attribute.

The difference between expectation and performance can be seen as the gap to be filled. A common way of depicting the above information is through the use of quadrant charts. A quadrant chart is a simple x-y graph. For instance, we can plot the importance of a number of attributes (x) against the performance (y) of the

organization. A typical chart is shown in Exhibit 2.

Exhibit 2: Quadrant analysis of gaps
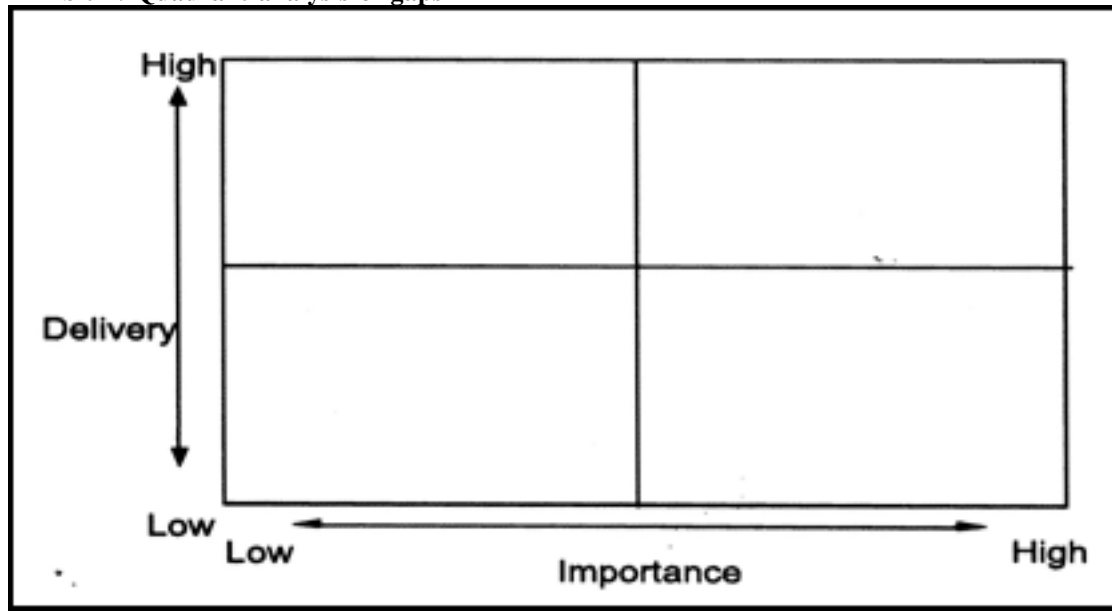
The top right hand quadrant shows attributes that are important to customers on which the firm is delivering well. The top left-hand quadrant contains attributes on which the firm delivers well, even though customers do not consider those as important items. Bottom left quadrant contains non-important items on which the firm does not deliver. Bottom right quadrant contains items which customers consider important on which the firm does not deliver. This quadrant is our competitive weakness. Quadrant analysis, although widely used, can be misleading.

Gap analysis is not restricted to semantic differential or quadrant analysis. Parasuraman (1993), for instance, suggests an approach, which uses three questions for each attribute (see Exhibit 3). The three ratings for each attribute shows where a company stands. Referring to the exhibit,

- If (3) is higher than both (1) and (2), then the company provides a service that exceeds not only the customers' minimum expectation but also the desired level.
- If (3) is above (1) but below (2), then the company provides a service that meets the minimum customer requirement but falls short of the desired level.
- If (3) is below both (1) and (2), then there may be a serious problem in that the company fails to provide even the minimum level of service expected by customers.

Depending on where the gap occurs, we can use different techniques (which could include any of the techniques from focus groups to brainstorming) to assess the gap.

Exhibit 3:

1. Compared to my __minimum service__ level when it comes to
_____ (e.g. prompt service), service performance is

Lower				The same				Higher	No opinion
1	2	3	4	5	6	7	8	9	N

2. Compared to my __desired service__ level when it comes to _____
(e.g. prompt service), service performance is

Lower				The same				Higher	No opinion
1	2	3	4	5	6	7	8	9	N

3. My perception of company X on _____ (e.g. prompt service),
service performance is

Lower				The same				Higher	No opinion
1	2	3	4	5	6	7	8	9	N

A careful gap analysis is a must for instituting and monitoring a quality program. When people complain that "service quality programs don't work, we tried it", the chances are very good that the reason why the quality program did not work was that there was a critical difference between what consumers expected and what management delivered.

When to use gap analysis
This technique is useful when the relevant attributes are well known and well defined. When a bipolar scale is used, it is assumed that, unless customers indicate the extreme points, neither extreme may be desirable. For example, extreme courtesy by staff may very well be interpreted as being overly solicitous and may make the customer uncomfortable. Gap analysis is used to determine how to meet customer expectations. It can also be used to bridge the gap between the standard and current performance.

The main advantage of this type of analysis is that it pinpoints the areas in which actions are needed. For instance, if the analysis shows that there is an understanding gap (the gap between what the customers are getting and management's perception of what they are getting), then our corrective action could be sharpening of the information flow between customers and management. If the analysis shows that there is a delivery gap (service standards intended by management and service standards delivered), then our corrective action could be to pay more attention to internal processes and internal communication.

Bridging the gap is essentially remedial in nature. It is debatable whether excellence can be achieved by continually remedying what our customers see as deficient. It is helpful to think of gap analysis as the minimum we may need to do and as a tool to monitor our performance rather than as a proactive tool to deliver customer satisfaction.

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