Evaluation of perceived quality and customer satisfaction

1- Framework

Service:
Evaluate the perceived quality of products and services and customer satisfaction of the organization through appropriate models, based on the theory of consumer behavior, specific knowledge of the organization studied and on the best international practices.

For what it is useful:
- Identify the drivers of satisfaction and loyalty (like image, price and various aspects of products and services quality) and to quantify the importance of each of them;
- Evaluate the impact of increased levels of service quality on customer satisfaction;
- Identify strong points, constraints and priority areas for action, with the aim of improving customer satisfaction and loyalty and, in this way, the organization’s profitability;
- Define target segments to carry on improvement of actions;
- Evaluate the performance of the company, making national and international benchmarking;
- Understand and quantify the effects of the satisfaction and customer loyalty on profitability.

2- Reports

Qmetrics methodology consists of two main and complementary stages. In first place, it is carried on an inquiry to the customers of the organizations studied. The information provided by these inquiries is explored directly and also used for the estimation of customer satisfaction and loyalty models. The specification and estimation of these models is the second stage of this methodology. The specification of these models has not only considered the theory of consumer behavior and best
international practices in this field, but also and mainly the specific objectives of the organization and characteristics of target populations studied. The use of these models is one of the most innovative features of Qmetrics methodology, which differs from traditional methods of evaluating perceived quality and customer satisfaction that are limited to the first stage, that is, to carry on inquiries to customers.

Qmetrics methodology is internationally regarded as the most advanced for the evaluation of perceived quality and customer satisfaction, and also being compatible with the methodology adopted in the European Customer Satisfaction Index (ECSI) and the American Customer Satisfaction Index (ACSI). Thus, the results obtained by Qmetrics are compatible with those of these projects.

Reports made under the studies of evaluating perceived quality and customer satisfaction, include the analysis and exploitation of responses to inquiries (associated with different market segments), as well as the results of the estimation of customer satisfaction models. Whenever necessary, and in addition to a comprehensive report with compared analysis, Qmetrics also produces specific reports for each segment associated with different business areas or even with the organic structure of the organization.

Synthetically, the reports include the following information:

2.1 Results of the inquiries. This includes an analysis of responses of the questionnaires with identical content to traditional studies of evaluation of perceived quality and customer satisfaction. Thus, among others, this part of the report includes the following analysis:

- Point estimates of the averages or proportions of all questionnaire variables;
- Frequency distribution;
- Crosses between variables, including discussion of the results according to the relevant segments;
- Multivariate analysis, in particular with regard to the application of correspondence and cluster analysis for market segmentation;
- Statistical testing of hypotheses relevant to the study;
- Margins of error in the estimation.
2.2 RESULTS OF THE ESTIMATION OF THE CUSTOMER SATISFACTION MODELS. This part of the report is specific of Qmetrics methodology and contains among others the following results:

- Frequency distributions and average values for the variables of the model for the whole population and for customer segments;
- Estimates of importance of each driver of customer satisfaction and loyalty for all customers and for each segment;
- Importance of each attribute of the drivers of customer satisfaction and loyalty for the whole population and segments;
- Statistical testing of the hypotheses relevant to the study;
- Segmentation market analysis;
- Perception maps for the positioning of companies and market segments in relevant dimensions of analysis;
- Margins of estimation errors and measures of quality of the fitness.

2.3 SUMMARY OF THE MAIN RESULTS, CONCLUSIONS AND RECOMMENDATIONS. This part of the report, that is also specific of the Qmetrics methodology, includes the identification of strong and weak points and priority areas for action. In this context, concrete recommendations are made in order to improve customer satisfaction and loyalty. It is also provided an executive summary that includes the main results. In addition to the main report, the following complementary reports are still produced:

- A fieldwork report with a description of the work carried on, the time schedule followed and the distribution of interviews;
- A report on the pilot inquiry with a description of its results and recommendations about possible changes of the questionnaire;
- A report on interviewers training, indicating the main difficulties encountered and possible suggestions for improving questionnaires;
- A report on the supervision of all fieldwork.
3- Examples of Results

In presenting results, an emphasis is placed on the use of graphics that allow an easy and intuitive analysis. However, tables are always produced with all relevant results, allowing a more detailed analysis. The following examples are anonymous for reasons of confidentiality and are intended to illustrate the presentation and content of reports.

3.1 Results derived from the direct exploration of the inquiries

Figures 1-3 show some samples of results. Figure 1 shows the average values (right axis) and frequency distribution of three variables. Figure 2 exemplifies an attribute, in this case the complaints, and in Figure 3 it is shown the company position in relation to its competitors in several variables. In any case, variables were measured on a scale from 1 (lowest) to 10 (highest).

![Graph showing average values and frequency distribution](image)

**Figure 1 - Average values and frequency distribution**
3.2 Results derived from customer satisfaction and loyalty model

3.2.1 Importance of the drivers of customer satisfaction and loyalty

Figure 4 is a representation of a customer satisfaction and loyalty model, close to the models adopted in projects ACSI and ECSI. It also allows identifying which variables are more important for customer satisfaction and loyalty.
Figure 5 shows how different attributes contribute to the formation of a variable. The example given is the contact center. Note that the contribution of each one of these attributes is obtained here in an objective way, and not in a subjective one as in traditional studies of satisfaction.
3.2.2 Benchmarking and evolution

Figures 6 and 7 show different analysis resulting from the estimation of customer satisfaction models for company A, against the estimation of the same model for two other competitors (companies B and C). In the example shown in Figure 6, company B is the highest ranked in the dimension 'Contact Center', especially in the indicator 'Friendly in Service', in two tenths against Company A. Company A is ranked in the first position in the indicator 'Competence and Professionalism'. In Figure 7, it appears that, despite the fact that Company B is the best one in many dimensions, Company A assumes the first place in the 'Image', which has a high importance to customer satisfaction. On the other hand, Company C takes the first place in the way it handles complaints from its customers but this dimension has little importance for customer satisfaction in the market studied.

FIGURE 6 - Index and attributes of the contact center of the company and evolution in two periods
### 3.2.3 Maps of Recommendations

One of the most interesting analysis from the strategic point of view of the organization concerns the maps of recommendations produced in Qmetrics reports, that allow to identify priority areas, variables and attributes in order to improve the customer perceived quality and satisfaction. For this purpose, there are produced graphs of quadrants that cross the importance of the variables in analysis for customer satisfaction with the company performance in these variables. Based on the positioning of the variables, there will be identified strengths, weaknesses and priority areas for action. Figure 8 shows the relative positioning of the company against the best company in the sector, Company B.

#### FIGURE 7 - Example of a benchmarking analysis for each driver of customer satisfaction

<table>
<thead>
<tr>
<th></th>
<th>Impact on Satisfaction</th>
<th>Average Valuations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Market</td>
<td>Company A</td>
</tr>
<tr>
<td></td>
<td>Image</td>
<td>7.00</td>
</tr>
<tr>
<td></td>
<td>Information Providers</td>
<td>6.14</td>
</tr>
<tr>
<td></td>
<td>Contact Center</td>
<td>6.11</td>
</tr>
<tr>
<td></td>
<td>Installations Quality</td>
<td>6.12</td>
</tr>
<tr>
<td></td>
<td>Price</td>
<td>6.17</td>
</tr>
<tr>
<td></td>
<td>Technical Assistance</td>
<td>6.74</td>
</tr>
<tr>
<td></td>
<td>Complaints handling</td>
<td>8.61</td>
</tr>
<tr>
<td></td>
<td>Overall Satisfaction</td>
<td>7.25</td>
</tr>
</tbody>
</table>
Figure 9 is derived from Figure 8 and identifies priority action variables of our company (Company A), if we want that it reaches the levels of satisfaction and loyalty of the market leader (Company B). Thus, according to the example, 21% of the work should be directed at improving the contact center, 17% to the improvement in Price, 15% to improvement in the perception of the Image, 14% in “Information Provider”, 12% in “Installation Quality” and 8% in “Complaints Handling”. Once identified the dimensions of priority action (in the example we highlight the ‘Contact attendance’), Qmetrics methodology allows to go further and to identify which attributes are more relevant effectively in terms of satisfaction and customer loyalty. According to the example shown, 39% of efforts on improving Contact attendance should be
directed to the *friendly in service*, 32% to the *waiting time* and the remaining 29% to the *competence and professionalism*. A similar analysis can be made for other priority variables.

**FIGURE 9** – Identification of priority areas for action and measures to implement
3.2.4 Market segmentation

The results of evaluating customer perceived quality and satisfaction also integrate several segmentations of the target populations. Cluster Analysis is one of the techniques applied to the output variables of the estimated models. The aim is to produce homogeneous groups of customers based on attitudes of various target populations. The clusters produced are then characterized, based on socio-demographic and user profile information in order to better highlight the composition of the various customer segments. Figure 10 gives an example of a cluster analysis.

FIGURE 10 – Cluster Analysis
3.2.5 Perception maps

Qmetrics also produces maps that represent the various market segments in the space of perceptions expressed by customers. It thus becomes possible to understand the relative positioning of these customer segments in relation to several dimensions of relevant analysis. Figure 11 gives an example of a perception map with satisfaction and perceived quality. São Paulo is the region with the best performance and Rio de Janeiro is the region with the lowest perceived quality and customer satisfaction.

**FIGURE 11** - Example of a perception map to 4 regions
3.3 EXECUTIVE SUMMARY

Qmetrics also produces an executive summary, which provides an overview of the main results (Figure 12).

<table>
<thead>
<tr>
<th>Methodology</th>
<th>Loyalty Index</th>
<th>Overall Satisfaction</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective</td>
<td></td>
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<tr>
<td></td>
<td>Customer service quality and subjective satisfaction of services with</td>
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<tr>
<td></td>
<td>Evaluate the strengths, constraints, and overall service level of services</td>
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<td></td>
<td>Obtain feedback from customers regarding overall satisfaction</td>
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<td></td>
<td>Assess the fulfillment of the various service-quality requirements and verify the</td>
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<td></td>
<td>extent to which these are perceived by customers</td>
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<tr>
<td></td>
<td>Analyze the performance of units, capturing key indicators in key quality-of-service</td>
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<td></td>
<td>services parameters</td>
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<tr>
<td>Baseline</td>
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<tr>
<td></td>
<td>Customer data is extracted to one of the units in the period</td>
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<tr>
<td>Findings</td>
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<tr>
<td></td>
<td>Information collected between February 1, 2019, and March 31, 2019.</td>
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<td>Data Collection</td>
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<tr>
<td>Telephone interviews, CAPI</td>
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<tr>
<td>Quality Control</td>
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<tr>
<td>Service quality in the service infrastructure, as perceived by</td>
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<td>customers, by means of a telephone interview of 10% of the</td>
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<td>population, with 500 respondents, with a 95% confidence range</td>
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<tr>
<td>and a 3.1% margin of error</td>
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</table>

**FIGURE 12** – Executive Summary
4- Case Studies

4.1 Banking

4.1.1 Objectives
A bank hired Qmetrics to assist it in developing a program in order to increase customer satisfaction and retention rate of customers and to implement strategies to increase the portfolio of products per customer.

4.1.2 Qmetrics approach
The program was based on the results of the Qmetrics methodology which identified the main drivers for customer retention. Qmetrics then analyzed the relationship between the profitability of customers (databases provided by the bank) and loyalty (provided by Qmetrics study).

4.1.3 Results
Based on the set of analysis and recommendations provided by Qmetrics, the client:
- Improved the customer retention rate by over 5% per year after the recommendations were implemented;
- Increased substantially the purchase of additional products and services – by over 30%;
- Identified the fundamental role that the quality of the services provided in the branches plays in increasing customer retention;
- Developed training programs and bonus systems to increase the employee satisfaction in the branches;
- Steered action plans towards specific areas that proved to be influential in increasing the portfolio of products purchased by customers;
- Outstripped the national sector average in the customer satisfaction index, supplied by ECSI (European Customer Satisfaction Index), for the banking sector.
4.2 Insurance

4.2.1 Objectives

An insurance company wanted to evaluate the perceived quality by its customers and to segment this analysis by life and non-life insurance. It also wanted to assess the impact of several planned actions addressed to the various segments of its customers. The company hired Qmetrics to assist it in achieving these goals.

4.2.2 Qmetrics approach

Qmetrics methodology was applied to each of the two segments (life and non life). Then we analyzed the differences between these two segments and it was simulated the impacts of planned actions on these segments.

4.2.3 Results

Based on the set of analysis and recommendations provided by Qmetrics, the client:

✓ Determined the drivers that most contributed to the low level of perceived quality;
✓ Implemented actions to improve the drivers identified above and substantially increased the perceived quality by its customers;
✓ Identified customer segments less satisfied with the company, allowing the implementation of measures in accordance with the identified weaknesses;
✓ Identified the most profitable actions planned for each customer segment;
✓ Reached levels of customer satisfaction higher than the national average rates of insurance provided by the ECSI (European Customer Satisfaction Index) for the insurance sector.
4.3 Telecommunications

4.3.1 Objectives

A mobile telecommunication operator hired Qmetrics to help it to improve retention and acquisition of new customers in order to increase its market share.

4.2.2 Qmetrics approach

Qmetrics approach identified the key drivers associated with retention and recommendation by their customers. In this context, the data on Customer satisfaction provided by the studies were related to data on retention and performance indicators available in the databases of the mobile operator.

4.3.2 Results

Based on the set of analysis and recommendations provided by Qmetrics, the client:

- Developed a new brand strategy;
- Restructured and streamlined new tariff plans;
- Implemented a new strategy for a key segment of customers;
- Created a compensation system for managers of the company based on the objectives of customer satisfaction;
- Directed measures to improve the quality of network attributes identified as having the greatest influence on customer retention;
- Redesigned its billing system to customers, simplifying and improving the accuracy of the calculations;
- Increased customer retention rate by 5 percentage points and the rate of new customer acquisition by 10 percentage points, having also increased its market share within one year;
- Reached levels of customer satisfaction above the national average indexes of the telecommunication sector, provided by the ECSI (European Customer Satisfaction Index).