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Customer Satisfaction Evaluation

Methods for Measuring and Implementing Service Quality
The customer orientation philosophy of modern business organizations and the implementation of the main principles of continuous improvement, justifies the importance of evaluating and analyzing customer satisfaction. In fact, customer satisfaction is considered today as a baseline standard of performance and a possible standard of excellence for any business organization.

Extensive research has defined several alternative approaches, which examine the customer satisfaction evaluation problem from very different perspectives. These approaches include simple quantitative tools, statistical and data analysis techniques, consumer behavioral models, etc. and adopt the following main principles:

- The data of the problem are based on the customers’ judgments and are directly collected from them.
- This is a multivariate evaluation problem given that customer’s overall satisfaction depends on a set of variables representing product/service characteristic dimensions.
- Usually, an additive formula is used in order to aggregate partial evaluations in an overall satisfaction measure.

Many of the aforementioned approaches do not consider the qualitative form of customers’ judgments, although this information constitutes the main satisfaction input data. Furthermore, in several cases, the measurements are not sufficient enough to analyze in detail customer satisfaction because models’ results are mainly focused on a simple descriptive analysis.

Taking into account all the above, the aim of this book is to provide a comprehensive discussion of the customer satisfaction evaluation problem, by presenting an overview of the existing methodologies, as well as the development and implementation of an original multicriteria method in the context of this particular problem. The main objective of the proposed multicriteria method is the development of a model able to evaluate the level of customer satisfaction both globally and partially for each of the characteristics/attributes of the offered product/service. Moreover, the method aims at providing an integrated set of results.
capable to analyze customer needs and expectations and to justify their satisfaction level. Finally, the development of a decision support tool emphasizing the understanding and applicability of the results is also examined.

The book is organized in nine chapters aiming to comprehensively present the alternative methodological approaches and the different perspectives of the customer satisfaction evaluation problem.

Chapter 1 is devoted to the presentation of the customer satisfaction measurement problem. Based on the literature, the definitions of “satisfaction” and “customer” are given in detail, while a short historical review and reporting of relevant efforts are discussed.

The problem of measuring customer satisfaction is approached by several different scientific fields. Chapter 2 describes such alternative methodologies, including the most important quantitative techniques, as well as the related consumer behavioral models.

Chapter 3 presents additional quality-based approaches that may be used in the satisfaction measurement and analysis problem. In this context, service quality models are presented and the linkage between customer/employee satisfaction and Total Quality Management is discussed.

Chapter 4 is devoted to the development of the multicriteria method MUSA (MUlticriteria Satisfaction Analysis) aiming at measuring and analyzing customer satisfaction. The MUSA method is a preference disaggregation model following the principles of ordinal regression analysis (inference procedure). The results of the method are able to provide a decision-aid tool and assess an integrated benchmarking system.

Several extensions of the MUSA method are discussed in Chapter 5. These include different formulations of value functions, multiple satisfaction criteria levels, additional constraints, different types of input data, and alternative optimality criteria. Moreover the problem of modeling preference on criteria importance is discussed, and a satisfaction barometer model is described.

Chapter 6 refers to advanced topics on the MUSA method. In this context, computational issues of the method and the selection of appropriate values of model parameters are discussed, while several reliability indicators are proposed. In addition, an experimental simulation process is used in order to compare alternative satisfaction measurement methods.

Chapter 7 is devoted to customer satisfaction surveys and barometers. More specifically, several issues for designing and conducting satisfaction surveys are discussed and the most important national customer satisfaction barometers are presented.

The main aim of Chapter 8 is to present applications of the MUSA method in real-world customer satisfaction surveys. These applications refer to business organizations of several types and demonstrate the implementation process of the method.

Finally, Chapter 9 presents different information technology approaches related to customer satisfaction. These approaches not only focus on measuring and analyzing customer satisfaction, but also refer to the management of rela-
tions/transactions between companies and customers. In this context several cus-
tomer service information systems are discussed, along with the MUSA software.

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Evangelos Grigoroudis
Yannis Siskos
Contents

1. Introduction .................................................................................................... 1
   1.1 Importance of Customer Satisfaction ....................................................... 1
   1.2 Main Definitions ....................................................................................... 4
       1.2.1 Definition of Satisfaction .............................................................. 4
       1.2.2 Identification of Customers .......................................................... 8
   1.3 Evolution of Customer Satisfaction Measurement ................................... 9
   1.4 Satisfaction Measurement Programs ...................................................... 12
       1.4.1 Measurement and Sources of Information .................................. 12
       1.4.2 Satisfaction Measurement Process ............................................. 15
       1.4.3 MUSA Approach ........................................................................ 18

2. Basic Methodological Approaches .............................................................. 21
   2.1 Types of Variables and Multivariate Analysis ....................................... 21
   2.2 Simple Quantitative Models ................................................................... 25
       2.2.1 Descriptive Statistics .................................................................. 25
       2.2.2 Basic Statistical Approaches ...................................................... 28
   2.3 Advanced Quantitative Techniques ........................................................ 30
       2.3.1 Conditional Probability Models .................................................. 30
       2.3.2 Structural Equation Modeling .................................................... 34
       2.3.3 Other Statistical and Data Analysis Models ............................... 40
   2.4 Consumer Behavioral Models ................................................................ 43
       2.4.1 Consumer Psychology and Satisfaction ...................................... 43
       2.4.2 Expectancy Disconfirmation ...................................................... 44
       2.4.3 Fornell’s Model .......................................................................... 45
       2.4.4 Other Behavioral Models ............................................................ 47

3. Other Methodological Approaches ............................................................. 53
   3.1 Quality Approach ................................................................................... 53
       3.1.1 Customer Satisfaction and TQM ................................................ 53
       3.1.2 Quality Management Systems ..................................................... 56
3.1.3 Business Excellence Models .......................................................... 57
3.2 Service Quality ................................................................................. 63
  3.2.1 Ideal Point Approach ................................................................. 63
  3.2.2 Servqual ...................................................................................... 65
  3.2.3 Other Service Quality Models .................................................... 70
3.3 Employee Satisfaction Modeling ..................................................... 72
  3.3.1 Background ................................................................................. 72
  3.3.2 Employee Satisfaction and TQM .................................................. 75
  3.3.3 Employee Satisfaction Approaches ............................................ 75
  3.3.4 Employee Satisfaction Dimensions ............................................ 78
3.4 Other Approaches ............................................................................ 81
  3.4.1 Kano’s Model ............................................................................. 81
  3.4.2 Customer Loyalty ...................................................................... 85

4. MUSA: Multicriteria Satisfaction Analysis ........................................ 91
  4.1 Introduction to Multicriteria Decision Analysis ............................. 91
    4.1.1 Decision Problem Modeling ..................................................... 91
    4.1.2 The Aggregation-Disaggregation Approach .............................. 96
    4.1.3 Multiattribute Utility Theory .................................................... 98
  4.2 The MUSA Method ....................................................................... 101
    4.2.1 Main Principles and Notations ................................................. 101
    4.2.2 Model Development ............................................................... 103
    4.2.3 Stability Analysis .................................................................... 107
  4.3 Results of the MUSA Method ......................................................... 108
    4.3.1 Value Functions and Criteria Weights ..................................... 108
    4.3.2 Average Satisfaction Indices ................................................... 110
    4.3.3 Average Demanding Indices ................................................... 111
    4.3.4 Average Improvement Indices ............................................... 112
    4.3.5 Action Diagrams ................................................................. 113
    4.3.6 Improvement Diagrams .......................................................... 115
  4.4 A Numerical Example .................................................................. 116

5. Extensions of the MUSA Method ....................................................... 123
  5.1 Strictly Increasing Value Functions ................................................. 123
  5.2 Multiple Criteria Levels ................................................................. 126
  5.3 Alternative Objective Functions ..................................................... 129
  5.4 Modeling Preference on Criteria Importance .................................. 132
    5.4.1 Model Development ............................................................... 132
    5.4.2 Derived vs. Stated Importance ............................................... 136
    5.4.3 Combining Performance and Importance Judgments ............... 138
  5.5 Other Extensions .......................................................................... 140
    5.5.1 A Customer Satisfaction Barometer Model .............................. 140
    5.5.2 Combining Cardinal and Ordinal Input Data ........................... 143
    5.5.3 Additional Constraints and Optimality Criteria ........................ 144
  5.6 Discussion and Future Research ..................................................... 146
6. Advanced Topics on the MUSA Method .................................................. 149
   6.1 Computational Issues ........................................................................... 149
   6.2 Reliability Evaluation and Error Indicators ........................................... 151
      6.2.1 Average Fitting Indices ............................................................ 151
      6.2.2 Other Fitting Indicators ............................................................ 154
      6.2.3 Average Stability Index ............................................................ 157
   6.3 Selection of Parameters and Thresholds ................................................ 158
      6.3.1 Preference Thresholds .............................................................. 158
      6.3.2 Post-optimality Thresholds ........................................................ 160
   6.4 Experimental Comparison Analysis ..................................................... 162
      6.4.1 Design of the Simulation Process ............................................. 162
      6.4.2 Simulation Results .................................................................... 165

7. Customer Satisfaction Surveys and Barometers ..................................... 171
   7.1 Research Methodologies ...................................................................... 171
   7.2 Survey Planning and Preliminary Analysis .......................................... 176
   7.3 Questionnaire Design ........................................................................... 179
      7.3.1 Main Principles......................................................................... 179
      7.3.2 Satisfaction Dimensions ........................................................... 182
      7.3.3 Satisfaction Scales .................................................................... 188
   7.4 Critical Issues in Satisfaction Surveys .................................................. 193
      7.4.1 Pilot Survey .............................................................................. 193
      7.4.2 Potential Problems and Errors .................................................. 194
   7.5 Customer Satisfaction Barometers ....................................................... 198
      7.5.1 Developing Satisfaction Barometers ........................................ 198
      7.5.2 Satisfaction Barometers and Economic Growth ....................... 200
   7.6 Examples of Satisfaction Barometers ................................................... 204
      7.6.1 Swedish Customer Satisfaction Barometer ............................... 204
      7.6.2 American Customer Satisfaction Index .................................... 206
      7.6.3 German Customer Satisfaction Barometer ............................... 209
      7.6.4 European Customer Satisfaction Index .................................... 211
      7.6.5 Other Satisfaction Barometers .................................................. 213
      7.6.6 Comparison and Discussion ..................................................... 214

8. Applications in Business Organizations ................................................... 217
   8.1 Satisfaction Analysis for a Commercial Bank ...................................... 217
      8.1.1 Research Background and Survey Details ................................. 217
      8.1.2 Overall Satisfaction Analysis ................................................... 220
      8.1.3 Criteria Satisfaction Analysis ................................................... 222
      8.1.4 Concluding Remarks .............................................................. 222
   8.2 Measuring Satisfaction to the Greek Ferry Industry ............................. 224
      8.2.1 Preliminary Analysis .............................................................. 224
      8.2.2 Overall Satisfaction Analysis ................................................... 224
      8.2.3 Customer Segmentation Analysis .......................................... 228
   8.3 Analyzing Satisfaction for a Publishing Company ................................ 229
9. Customer Satisfaction and Information Systems ........................................... 263
  9.1 IT-based Customer Service ................................................................. 263
  9.2 Customer Service Systems ................................................................. 265
    9.2.1 Helpline Systems ......................................................................... 265
    9.2.2 Automated Response Systems ..................................................... 267
    9.2.3 Electronic Data Interchange ....................................................... 268
  9.3 Customer Satisfaction and Internet ...................................................... 269
  9.4 Survey-based Systems .......................................................................... 271
  9.5 The MUSA System ............................................................................... 273
    9.5.1 Overview of the software .......................................................... 273
    9.5.2 Data Management and Selection of Parameters ......................... 276
    9.5.3 Presentation of Results ............................................................. 279
    9.5.4 Advanced Results and Reliability Analysis ............................... 281
    9.5.5 Future Extensions ..................................................................... 284

References ......................................................................................................... 287

Index .................................................................................................................. 311
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