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## KNOWLEDGE FOR CUSTOMER SATISFACTION – AS A BASE FOR NEW STRATEGIC MANAGEMENT

**Abstract:** *Satisfying customers is one of the main objectives of every business. The message is obvious – satisfied customers improve business and dissatisfied customers impair business.*

*Customer satisfaction is an asset that should be monitored and managed just like any physical asset. Therefore, businesses that hope to prosper will realize the importance of this concept, putting together a functional and appropriate operational definition. This further extends into the effective collection, analysis, and application of customer satisfaction information. There are several possible uses of information about customer satisfaction:*

- to present the current standing of customer satisfaction;*
- to identify important customer requirements;*
- to monitor customer satisfaction results over time;*
- to provide comparisons to other organizations;*
- to determine the effectiveness of business practices;*

*Development of consumer satisfaction indicators- One way of approaching this issue is by creating a 'hierarchy' of factors:*

- First of all, there are the measurable 'factors' or 'criteria' related to consumer satisfaction. These are called the manifest variables.*
- Secondly, a number of related manifest variables have been aggregated into 'latent variables'. A latent variable reflects a relatively complex dimension of consumer satisfaction that cannot be measured directly.*

*Most existing national customer satisfaction measurement systems produce such an index for consumer satisfaction.*

*CSI results provide:*

- an economic indicator of the quality of economic output;*
- calculation of the net present value of their company's customer base as an asset over time;*
- information for strategic business applications;*
- a predictor of consumer spending & corporate earnings.*

*The model for measurement of customer satisfaction is a cause-and-effect model with indices for drivers of satisfaction on the left side (customer expectations, perceived quality, and perceived value), satisfaction in the center, and outcomes of satisfaction on the right side (customer complaints and customer loyalty, including customer retention and price tolerance).*

**Key words:** *knowledge, customer, satisfaction, strategic management, model*

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# POZNAVANJE POTREBA KUPACA KAO OSNOVA ZA NOVI STRATEŠKI MENADŽMENT

**Sažetak:** *Udovoljavanje kupcima je osnovni cilj svakog posla. Poruka je jasna, zadovoljne mušterije unapređuju posao, a nezadovoljne mušterije ga usporavaju. Zadovoljstvo kupaca je imovina koju treba nadgledati i kontrolisati baš kao i bilo koju fizičku imovinu. Stoga kompanije koje žele da napreduju moraju da shvate važnost ovog koncepta, spajajući zajedno funkcionalnu i odgovarajuću radnu definiciju. Ovo se nadalje proširuje u efikasno sakupljanje, analizu i primenu informacija vezanih za potrebe kupaca. Postoji nekoliko mogućih upotreba informacija o potrebama kupaca:*

- prikazivanje trenutnog stanja zadovoljstva kupaca
- prepoznavanje važnih zahteva kupaca
- nadgledanje rezultata postignutih u oblasti zadovoljstva kupaca tokom vremena
- pružanje poređenja drugim organizacijama
- utvrđivanje uspešnosti poslovnih praksi.

*Razvoj pokazatelja zadovoljstva kupaca – jedan od pristupa ovom problemu je stvaranje hijerarhije faktora:*

- Prvo, postoje merljivi faktori ili kriterijumi povezani sa zadovoljstvom kupaca. Oni se zovu manifestovane promenljive.
- Kao drugo, određeni broj manifestovanih promenljivih grupisan je u latentne promenljive. Latentna promenljiva odnosi se na relativno kompleksnu dimenziju zadovoljstva kupaca koja ne može da bude direktno izmerena.

*Većina postojećih nacionalnih sistema za merenje zadovoljstva kupaca daje takav indeks zadovoljstva kupaca.*

*IZK rezultati pružaju:*

- ekonomske pokazatelje kvaliteta ekonomskog dohotka
- proračunavanje trenutne neto vrednosti baze kupaca njihove kompanije kao imovine tokom vremena
- informacije za strateške poslovne primene
- predviđanje potrošnje kupaca i zarade korporacije.

*Model merenja zadovoljstva kupaca je uzročno-posledični model sa pokazateljima motivacije zadovoljstva sa leve strane (očekivanja kupaca, vidljivi kvalitet i vidljiva cena), zadovoljstvom u sredini, a ishodima zadovoljstva sa desne strane (žalbe kupaca, lojalnost kupaca, uključujući i zadržavanje kupaca i toleranciju prema cenama).*

**Ključne reči:** *poznavanje, kupac, zadovoljstvo, strateški menadžment, model*

## 1. INTRODUCTION

Satisfying customers is one of the main objectives of every business. Businesses recognize that keeping current customers is more profitable than having to win new ones to replace those lost.

Customer satisfaction is an asset that should be monitored and managed just like any physical asset.

Management and marketing theorists underscore the importance of customer satisfaction for a business's success (McColl-Kennedy & Schneider, 2000; Reichheld & Sasser, 1990). Accordingly, the prestigious Malcolm Baldrige National Quality Award recognizes the role of customer satisfaction as the central component of the award process (Dutka, 1993). Some recent statistics demonstrate the benefits of good customer satisfaction and the costs of poor customer satisfaction on businesses.

Good customer satisfaction has an effect on the profitability of nearly every business. For example, when customers perceive good product/service, each will typically tell nine to ten people. It is estimated that nearly one half of American business is built upon this informal, "word-of-mouth" communication (Gitomer, 1998; Reck, 1991). Improvement in customer retention by even a few percentage points can increase profits by 25 percent or more (Griffin, 1995).

Therefore, businesses that hope to prosper will realize the importance of this concept, putting together a functional and appropriate operational definition.

The primary issue with developing an operational definition with the specific components of customer satisfaction is to clearly identify the nature of the organization's business.

## 2. WHAT IS CUSTOMER SATISFACTION?

A widely accepted definition of 'satisfaction' is: 'Satisfaction is the consumer's fulfilment response. It is a judgement that a product or service feature, or the product of service itself, provided (or is providing) a pleasurable level of consumption-related fulfilment, including levels of under-or-over fulfilment.

In less 'technical' terms: satisfaction is the consumer's assessment of a product or service in terms of the extent to which that product or service has met his/her needs or expectations.

Failure to meet needs and expectations is assumed to result in dissatisfaction with the product or service.

Depending on the context, the meaning of 'consumer satisfaction' may differ:

Consumer satisfaction may relate to a particular feature or characteristic of a product or service, or alternatively it may relate to the product/service as a whole.

In general, it is the satisfaction about the product/service as a whole that merits attention, since this satisfaction influences the consumers' future buying and consuming behaviour. Yet it is also important to understand the factors that contribute to (dis)satisfaction.

Often, dissatisfaction about one particular feature of a service (e.g. the unfriendliness of staff) leads to dissatisfaction about the service as a whole, even if the satisfaction about the other features is high.

Another conceptual distinction within measures of consumer satisfaction is whether they relate to satisfaction about a single 'service encounter' or rather reflect 'cumulative satisfaction'.

Most existing national customer satisfaction indexes are based on the measurement of cumulative satisfaction. This implies that different elements are part of the consumer's assessment, from their pre-purchase intentions up to their loyalty towards a particular provider.

Another potentially important distinction is between consumer satisfaction about a particular supplier, and consumer satisfaction about the sector as a whole. For instance, one may be quite satisfied with the offerings and performance level of a particular mobile phone operator, but in general feel uncomfortable with the pricing and marketing strategy as a whole.

Most national customer satisfaction indexes measure the satisfaction level for the sector as a whole. Yet they do this by calculating a weighted average for the satisfaction about individual suppliers.

### 3. USES OF CUSTOMER SATISFACTION INFORMATION

There are several possible uses of information about customer satisfaction (Dutka, 1993). Some include:

1. Customer satisfaction results can help to present the current standing of customer satisfaction.

This utilization often goes beyond reporting statistical data such as mean, range, and standard deviation. These descriptive data can assist in identifying specific strengths and weaknesses in satisfaction dimensions, the specific items under each, as well as information about overall scores. However, different types of data analysis can be used to identify not only aggregate but also individual information. From here emerges the distinct patterns or gaps between different individuals, groups, or among particular items.

2. Customer satisfaction results can help to identify important customer requirements.

Identification of the specific customer requirements for achieving satisfaction is useful at a very fundamental level. An organization is able to clearly focus efforts in those areas that are most important to the customer. Distinguishing those requirements most

valued by customers allows for pinpointing efforts for service modifications as well as further data collection. Comparisons of specific items to the satisfaction dimension or overall score can assist in determination of those items that are more closely linked with satisfaction.

3. Customer satisfaction results can help to monitor customer satisfaction results over time.

Quite simply, the same information gathered at different points in time can assist in identification of trends and patterns that develop as an organization evolves and changes. Furthermore, this can be helpful in demonstrating the levels of effectiveness of interventions, services and so forth at particular points in history. What may work during a certain point in time may not at another. This temporal collection and comparison of information allows for an organization to adapt and modify services and products to meet the changing requirements of its customers.

4. Customer satisfaction results can help to provide comparisons to other organizations.

Comparisons either within an organization by department or sub-group as well as with outside agencies can provide a wealth of information. This includes not only structural and organizational strengths and weaknesses, but also effectiveness of product/service components and product/service delivery. This can assist in coordination of planned changes specific to each area, as opposed to general, “blanket” approaches. Also, this can give a perspective of how one organization is performing in relation to others, namely one’s competition. This gives the customer the information necessary to make informed choices and selections.

5. Customer satisfaction results can help to determine the effectiveness of business practices.

Data gathered from customer satisfaction studies can provide valuable and accurate information that can assist in evaluation of product/service components and delivery. Products/services can be altered to become more effective, and business practices can be altered to meet the standards of excellence within a certain business. In essence this is the comparison of a particular item against a standard predetermined by the customer. Those scores above the standard are positive, while those below are in need of improvement. This enables more thoughtful and considered prioritization of any possible plans of action.

The message is clear: customer satisfaction is essential for the success – and continued success – of any business. Not only does positive customer satisfaction help business, but also a lack of satisfaction takes an even bigger toll on the bottom line. For an organization to remain solvent, information regarding customer satisfaction must be adequately collected and analyzed.

### 3.1 MANIFEST AND LATENT VARIABLES

Measuring consumer satisfaction is, in principle, relatively straightforward: a representative sample of consumers is asked to what extent they are satisfied or dissatisfied about a particular product/service. In general, such satisfaction is measured on ordinal scales (e.g. not at all satisfied – not fully satisfied – more or less satisfied – quite satisfied – very satisfied) or simple numerical scales (e.g. from 0 to 4 or from 1 to 10).

Often it is also useful to know why consumers are (dis)satisfied, i.e. to understand which factors or criteria contribute positively or negatively to the measured level of satisfaction. Understanding what makes a consumer happy or unhappy allows suppliers and policy-makers to implement appropriate action.

Those who are interested in measuring consumer satisfaction are usually also interested in its implications. For instance, will a consumer continue to use the same supplier or will he/she switch to an alternative? Currently, the prediction of consumer behaviour – in particular their loyalty towards the supplier – is what most suppliers are interested in, rather than the satisfaction itself.

Identifying and measuring such factors is, however, not straightforward. Indeed, there are many factors that affect and/or are related to consumer satisfaction. For a typical product/service, as many as thirty or so of these factors may have to be considered. Moreover, these factors differ between products, services and sectors; and individuals may rank the relative importance of these factors in different ways.

Whilst these problems can be overcome when focusing on a particular environment (e.g. a specific product or service for a specific target group), some trade-offs have to be made when designing a tool that allows valid comparisons across user groups, countries and sectors.

One way of approaching this issue is by creating a 'hierarchy' of factors:

First of all, there are the measurable 'factors' or 'criteria' related to consumer satisfaction (e.g. prompt service, adequate opening hours, competitive pricing, etc). These are called the manifest variables. Each manifest variable corresponds to a question in the survey to the consumers. Many of these manifest variables are similar across sectors, but some are specific. Even if they are identical, their importance may vary between sectors.

Secondly, a number of related manifest variables have been aggregated into 'latent variables'. A latent variable reflects a relatively complex dimension of consumer satisfaction that cannot be measured directly. Examples of such latent variables are quality, price and image.

This approach is consistent with methodologies used elsewhere. It has several advantages.

Firstly, at the level of the latent variables, a model can be constructed that is identical across sectors and countries. Thus, it becomes meaningful to make comparisons between countries and sectors.

Secondly, when using latent variables, the model can remain stable over a considerable period of time, hence increasing comparability of results. Specific survey questions and manifest variables may change over time and across sectors, but the model at the level of latent variables remains unaffected.

Lastly, provided the latent variables have been chosen appropriately and have been labelled in a meaningful way, the use of latent variables makes it possible to explain the key elements affecting consumer satisfaction, without undue reference to a long list of very specific characteristics.

From a practical point of view, it is also useful to qualify the latent variables (and the underlying manifest variables) according to their explanatory power. They can be categorised into three groups:

‘Explanatory variables’: these are the factors that directly influence consumer satisfaction. In the literature, these explanatory variables are also referred to as ‘antecedents’, ‘causes of satisfaction’ or ‘input factors’.

‘Resultant variables’: these are the measures of overall consumer satisfaction. In general, there are only a very few such manifest variables.

‘Consequent variables’: these represent the consequences of the consumer (dis)satisfaction, and express concretely the outcomes from the consumer satisfaction/dissatisfaction.

Other terms that can be found are ‘consequences’ or ‘outcomes of satisfaction’.

#### 4. INDICATORS AND INDEXES

Most existing national customer satisfaction measurement systems produce such an index for consumer satisfaction. The index is often available at several levels, which are then aggregated to produce an overall, nationwide and cross-sector index.

For instance, the American Customer Satisfaction Index (ACSI) includes four levels:

- A national customer satisfaction index
- Indices for seven broad areas of the economy
- Indices for 39 economic sectors

- Indices for over 200 major companies and government agencies within these sectors.

An 'indicator' is also a statistical figure capturing a given situation. The term 'indicator' refers to a quantitative measure that provides a simple and reliable basis for assessing a feature (e.g. consumer satisfaction or an aspect of it) and measuring the related performance, processes and outcomes over time. A useful indicator allows comparisons over time, across sectors and countries. An indicator could be derived from a single quantitative measure, or rather be based on the measures of several manifest variables. An indicator may even be related to a single customer.

Again, we found no agreed and universally accepted definition of both terms – and their difference. What is it...?

An economic tool:

- For creating Industry standards
- For companies to use as a benchmark
- For consumers to use to make better informed purchasing decisions

The ACSI is based upon information compiled from customer evaluations of goods and services. Later we will learn from the ACSI Model how customer satisfaction can lead to either customer loyalty or complaints.

The Result:

- ACSI produces company-level satisfaction scores
- Produces scores for the causes and consequences of customer satisfaction, and their relationships.

ACSI results provide:

- an economic indicator of the quality of economic output
- calculation of the net present value of their company's customer base as an asset over time information for strategic business applications
- a predictor of consumer spending & corporate earnings

The ACSI approach includes a number of features that can also be found in other similar national indexes:

- It is based on an econometric model with measures of an index of satisfaction and measures of related indices for latent variables that are general enough to be comparable across companies, industries and sectors.



- Customer satisfaction itself is measured as a latent variable using several manifest variables (questions).
- Customer satisfaction is embedded in a system of cause-and-effect relationships. This serves to validate the index.
- Finally, a primary objective is to estimate the effect of ACSI on customer loyalty, a construct of universal importance for future business performance.

## 5. THE ACSI MODEL

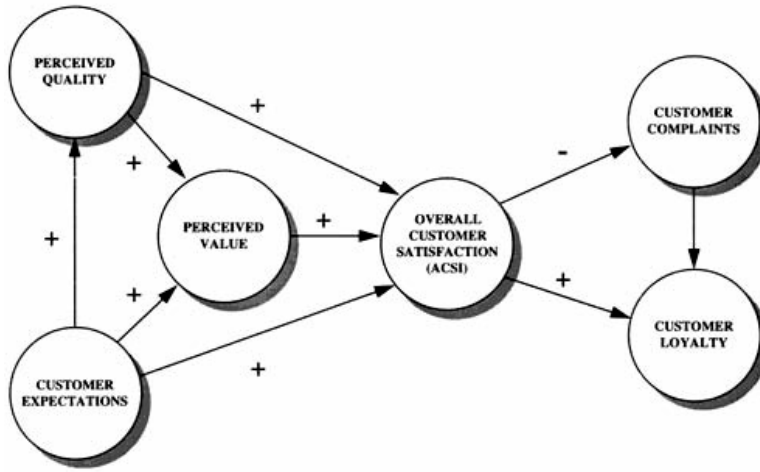
The American Customer Satisfaction Index uses customer interviews as input to a multi-equation econometric model developed at the University of Michigan's Ross School of Business. The model for measurement of customer satisfaction is a cause-and-effect model with indices for drivers of satisfaction on the left side (customer expectations, perceived quality, and perceived value), satisfaction in the center, and outcomes of satisfaction on the right side (customer complaints and customer loyalty, including customer retention and price tolerance).

However there was one text by Professor Claes Fornell and his colleagues in their research on American Customer Satisfaction Index (ACSI) (Fornell et al., (1996). Referring to Anderson & Fornell (2000), the ACSI framework was mathematically notated as:

$$ACSI = \frac{\sum_{i=1}^3 w_i \bar{x}_i - \sum_{i=1}^3 w_i}{9 \sum_{i=1}^3 w_i} \times 100 \quad (1)$$

where  $w_i$ s are the unstandardised regression weights and  $\bar{x}_i$ s are the manifesting variables.

The ACSI was based on an exogenous construct for customer satisfaction, ie customer expectations. Since customer expectations were the only exogenous construct in the model, equation (1) prevailed. To make it short but concise, the ACSI was equated based on a single exogenous construct. Should there be more than one exogenous construct; equation (1) required further extension. The construction of the service quality index was fundamentally based on the framework of ACSI.



**Figure 1:** The ACSI model

Source: Fornell et al. (1996)

Referring to Figure 1, the structural model of this paper had 2 exogenous constructs. When calculating the index encompassing 2 correlated exogenous constructs, it was crucial to highlight the partial effects of one another on the criterion. The correlation among exogenous constructs effected the multiple correlations ( $R$ ) on the criterion. As a result, the total variance explained ( $R^2$ ) of the criterion had to be adjusted for  $R$  as well. First let this equation be notated as:

$$\hat{s} = \gamma_z s_z + \gamma_x s_x \quad (2)$$

where  $s_z$  and  $s_x$  were the standardised estimates on constructs 1 and 2 respectively (note: They represented the constructs Intangible and Tangible).  $\hat{s}$  was the standardised predicted estimates for the criterion while  $\gamma_z$  and  $\gamma_x$  were the standardised regressions weights for exogenous constructs 1 and 2 respectively. Then let  $\gamma_z$  and  $\gamma_x$  be respectively notated as:

$$\gamma_z = \frac{r_{yz} - r_{yx} \phi_{zx}}{1 - \phi_{zx}^2} \quad (3)$$

$$\gamma_x = \frac{r_{yx} - r_{yz} \phi_{zx}}{1 - \phi_{zx}^2} \quad (4)$$

where  $\phi$  was the correlation of exogenous constructs and  $r_y$  was the bivariate correlations of constructs 1 and 2 respectively.

Assuming the  $R^2$  of customer satisfaction (criterion) was linearly regressed on the exogenous constructs, the degree of changes in service quality would depend of the changes in these constructs. Consequently, the product/service quality index would also change based on the impact of these exogenous constructs. Therefore let the product/service quality index be expressed as a function of  $\Gamma$ ,  $\Phi$  and  $I$ . Consequently, let

$$\frac{\sum_{i=1}^3 w_i \bar{z}_i - \sum_{i=1}^3 w_i}{9 \sum_{i=1}^3 w_i} \times 100 = I_z \quad \text{and} \quad \frac{\sum_{i=1}^3 w_i \bar{x}_i - \sum_{i=1}^3 w_i}{9 \sum_{i=1}^3 w_i} \times 100 = I_x \quad (5)$$

Hence the notation:

$$SQI = \frac{\gamma_z r_{yz}}{\gamma_z r_{yz} + \gamma_x r_{yx}} (I_z) + \frac{\gamma_x r_{yx}}{\gamma_z r_{yz} + \gamma_x r_{yx}} (I_x) \quad (6)$$

or

$$SQI = \left( \frac{1}{\gamma_z r_{yz} + \gamma_x r_{yx}} \right) (\gamma_z r_{yz} I_z + \gamma_x r_{yx} I_x) \quad (7)$$

The indexes are multivariable components measured by several questions that are weighted within the model. The questions assess customer evaluations of the determinants of each index. Indexes are reported on a 0 to 100 scale. The survey and modeling methodology quantifies the strength of the effect of the index on the left to the one to which the arrow points on the right. These arrows represent “impacts.” The ACSI model is self-weighting to maximize the explanation of customer satisfaction (ACSI) on customer loyalty. Looking at the indexes and impacts, users can determine which drivers of satisfaction, if improved, would have the most effect on customer loyalty.

## 5.1 ELEMENTS OF THE ACSI MODEL

1. Customer Expectations-Customer expectations is a measure of the customer's anticipation of the quality of a company's products or services. Expectations represent both prior consumption experience, which includes some nonexperiential information like advertising and word-of-mouth, and a forecast of the company's ability to deliver quality in the future.

Customer expectation -customers experiences with product or service and information about it: media, advertising, salesperson, word of mouth from other customers, customers expectation influence the evaluation of quality and forecast how well the product or service will perform.

2. Perceived Quality-Perceived quality is a measure of the customer's evaluation via recent consumption experience of the quality of a company's products or services. Quality is measured in terms of both customization, which is the degree to which a

product or service meets the customer's individual needs, and reliability, which is the frequency with which things go wrong with the product or service. Three questions measure the perceived quality: overall quality, reliability, the extent to which a product or service meets the customers needs. Perceived quality proves to have the greatest impact on customer satisfaction.

3. Perceived Value- Perceived value is a measure of quality relative to price paid. Although price (value for money) is often very important to the customer's first purchase, it usually has a somewhat smaller impact on satisfaction for repeat purchases. Two questions measure the perceived value: overall price given quality, overall quality given price. Perceived price is usually only important in the first purchase decision.

4. Customer Complaints- Customer complaints are measured as a percentage of respondents who indicate they have complained to a company directly about a product or service within a specified time frame. Satisfaction has a negative relationship with customer complaints, as the more satisfied the customers, the less likely they are to complain. Customer complaint activity is measured as the percentage of respondents who reported a problem with a company's product or service within a specified time frame. Satisfaction has an inverse relationship to customer complaints.

## 5. Customer Loyalty

Customer loyalty is a combination of the customer's professed likelihood to repurchase from the same supplier in the future, and the likelihood to purchase a company's products or services at various price points (price tolerance). Customer loyalty is the critical component of the model as it stands as a proxy for profitability.

Customer loyalty is measured through questions on the likelihood to purchase a company's products or services at various price points. Customer satisfaction has a positive effect on loyalty, but the magnitude of that effect varies greatly across companies and industries

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