

Kolyada, A. A. (2025). Features of applying the customer satisfaction index (CSI) in business modelling, strategic planning, and strategic management. *Actual Issues of Modern Science. The Proceedings of the European Institute for Innovation Development International Conference. European Scientific e-Journal*, 36, 137–144. Ostrava–Ragusa.

TOI: man2025-05-x DOI: 10.61726/8260.2025.53.34.001

The paper is published in Web of Science, Crossref, ICI Copernicus, BASE, Zenodo, OpenAIRE, OJS, LORY, Academic Resource Index ResearchBib, J-Gate, ISI International Scientific Indexing, ADL, JournalsPedia, Scilit, EBSCO, Mendeley, and WebArchive databases.



**Andrey A. Kolyada**, Nizhny Novgorod, Doctor of Business Administration, Rector, Eurasian Management and Administration School (EMAS Business School), Applicant, National Research Lobachevsky State University. Nizhny Novgorod, Russia.  
ORCID 0009-0005-9725-9370

## **Features of Applying the Customer Satisfaction Index (CSI) in Business Modelling, Strategic Planning, and Strategic Management**

### **Abstract:**

Customer Satisfaction Index (CSI) is one of the most powerful tools for measuring customer satisfaction. The relevance of the study aimed at enhancing the effectiveness of this instrument is beyond question. The scientific novelty of the study lies in the discussion of the specific features of developing and applying the CSI in business modelling, strategic planning, and strategic management. The study's object is the phenomenon of monitoring and managing customer loyalty within an organisation, along with the associated strategic issues. The study's subject is the development and application of the CSI in strategic operations. The study is based on managerial, consulting, and educational projects of the EMAS Business School, as well as on academic articles by other authors. The study explores methodological aspects of the development and application of the CSI, its areas of use, and the limitations of its application in business modelling, strategic planning, and strategic management. The findings highlight the importance of strictly adhering to methodological requirements in the development and implementation of this tool, as well as the value of utilising its potential not only for measuring customer satisfaction but also across other strategic domains.

**Keywords:** customer satisfaction, Customer Satisfaction Index, CSI, NPS, price satisfaction, customer satisfaction management, brand management, USP, strategic management, business modelling, strategic planning, price competitiveness, business model innovation.

---

### **Abbreviations:**

*CSI* is Customer Satisfaction Index,

*EMAS* is Eurasian School of Management and Administration,

*NPS* is Net Promoter Score,

*USP* is Unique Selling Proposition.

## Introduction

The economic performance of an organisation operating in a competitive market largely depends on customer satisfaction with its activities—namely, the goods and services it produces. In cases where the nature of the organisation's activity involves repeat purchases by the customer, this satisfaction becomes a critical success factor. Under such conditions, tools that enable regular measurement of customer satisfaction—and the subsequent adoption of strategic decisions to improve it—become essential components of the management toolkit used by effective senior executives.

One such tool for measuring customer satisfaction is the CSI, which represents a more advanced version of the NPS, i.e., an index of customer loyalty (*Reichheld, 2003*). Although, methodologically, CSI is more complex to apply in practice (requiring considerable analytical work) (*Lavrova, 2024, p. 190*) than NPS, it is a more informative instrument and brings substantial practical value. It is one of the key tools in strategic management and business modelling. At the very least, this tool underpins quality management within an organisation and the development (*Kolyada, 2023, pp. 184–220*) of a USP (*Kolyada, 2023, pp. 371–383*), brand management (*Kolyada, 2023, pp. 221–233*), and serves as a vital component in sales forecasting systems.

The application of CSI in strategic marketing enables the management of brand-related advertising campaigns on an analytical basis (this refers to the marketing aspect of brand management, which is narrower in scope than strategic management). The high relevance of this tool underscores the importance of research—such as the findings presented in this article—aimed at supporting methodological development and expanding the range of CSI applications.

Accordingly, the object of this study is the phenomenon of customer loyalty monitoring and management. The subject of the research is the development and application of CSI as one of the most widely used tools for measuring customer satisfaction. Special attention is devoted to discussing the tool's areas of application and its associated limitations. The scientific novelty lies in the formulation of methodological recommendations for the development and implementation of CSI, the identification of its areas of application and related constraints, and the justification for the impossibility of assessing price satisfaction using the CSI.

The scientific novelty of the study lies in the discussion of the specific features of developing and applying the CSI in business modelling, strategic planning, and strategic management.

The study's object is the phenomenon of monitoring and managing customer loyalty within an organisation, along with the associated strategic issues.

The study's subject is the development and application of the CSI in strategic operations.

The study aims to analyse the practices of developing and applying the CSI across various industries.

Based on this aim, the following study objectives have been formulated:

- examine the methodological aspects of CSI development;
- describe the areas of CSI application in strategic management and business modelling;
- substantiate the limitations of CSI application.

## Methods

The study was conducted using methods of observation, comparison, and analysis. The empirical base comprised 297 projects in the fields of business modelling and strategic planning.

These projects were performed under the academic supervision of the author by participants of the Executive MBA and DBA programmes at the Eurasian School of Management and Administration (EMAS Business School) between January 1, 2021, and December 31, 2024. In addition, scholarly publications by Russian and international authors were used.

In the course of the projects, participants, following the specified methodology (*Kolyada & Plekhorova, 2023*), developed a digital version of the business model and strategy of an organisation, and also designed a CSI for a given product group in a selected market. The projects were conducted for real organisations operating in various sectors of the economy (goods and services), using actual products and market data. They were carried out in both Russian and English for organisations based in Russia, Belarus, Kazakhstan, and further abroad.

During the implementation of the projects, participants discussed the challenges associated with the creation and application of the CSI, its areas of use, and the limitations of the tool. In this context, the participants were senior and mid-level managers of the organisations on whose basis the projects were implemented.

The study was conducted within the framework of developing the Russian academic school of business modelling, strategic planning, and strategic management, carried out by the research institute “Eurasian School of Management and Administration” (EMAS Business School).

## Results

### Methodological Specifics of CSI Development

From a methodological perspective, the development of the CSI is a complex process comprising several stages. At each of these stages, the developer encounters a number of challenges, and the validity of the final index largely depends on how competently these are overcome. The development process involves the following key steps:

1. Identification of the Target Cluster (*Kolyada, 2023, p. 42*), Target Segment (*Tretyakov et al., 2005, p. 5*), and, if necessary, a specific customer group within the target segment whose satisfaction will be measured (hereinafter referred to as the “customer group under assessment”).

2. Qualitative Research to Identify CSI Characteristics—Conducting a series of focus groups or in-depth interviews with representatives of the customer group under assessment. These studies aim to identify product features and related organisational activities evaluated by customers during the acquisition, use, and disposal of the product, which collectively determine customer satisfaction.

3. Selection of Index Ideology.

The CSI may take the form of a syncretic model, which is the most common. In this model, a unified index structure combines various aspects of the customer experience: satisfaction with the product itself, satisfaction with organisational business processes encountered during purchase, usage, and disposal, and satisfaction with personnel.

Despite its prevalence, this model is not particularly effective from the standpoint of strategic management and business modelling. The issue lies in the conflation of characteristics from different types of consumer experience (e.g., product usage versus purchasing experience), which undermines the comparability and relative significance of these characteristics.

A more effective approach is the discrete model, previously proposed by the author of this article (*Kolyada, 2023, pp. 184–220*). Here, the index is divided into sub-indices, each reflecting a homogenous area of consumer experience. Recommended sub-indices include:

- Product CSI (in the narrow sense)—characteristics related to direct product usage experience;
- Process CSI—characteristics reflecting experience with the organisation’s business processes during acquisition, use, and disposal;
- Personnel CSI—characteristics related to interaction with the organisation’s staff.

The final CSI may be calculated as the sum of these sub-indices or via a weighted formula, assigning individual weights to each sub-index, multiplying them accordingly, and summing the results.

4. Quantitative Research to Determine the Significance (Weights) of Characteristics—Conducting a survey among a representative sample of the customer group under assessment to determine the perceived importance (weights) of the identified characteristics. Sampling and survey procedures must strictly comply with sociological research standards to ensure data validity.

As the above stages demonstrate, the primary challenges faced by a CSI developer lie in the rigorous adherence to methodological requirements at each step and the selection of an appropriate index ideology. These methodological standards, established by marketing and sociological science, govern both the execution and validity of the outcomes. The choice of ideology depends on the developer’s judgement regarding the relative merits of syncretic versus discrete models.

*Thus*, CSI development involves a broad range of interrelated issues. Deviations from the proper sequence or logic of the process may call into question the index’s overall validity and render it unsuitable for assessing customer satisfaction.

For instance, mistakes at Stage 1 can make the index fundamentally unusable.

Errors in Stage 2 (a common one being the developer “inventing” characteristics without research) can compromise the adequacy and completeness of the index in capturing the full phenomenon of customer satisfaction.

A poorly chosen ideology at Stage 3, one that does not support effective satisfaction-based management, can lead to the undervaluation of critical information.

Finally, mistakes at Stage 4—such as incorrect weightings—can distort the interpretation of satisfaction levels, as the weighted values directly affect the final index score.

### **Methodological Specifics of Data Collection and Management of the CSI**

The regular collection of data for calculating the CSI also requires adherence to a number of stages:

1. Quantitative research (measurements) to obtain data for the index. This involves conducting a survey among a representative sample of the customer group whose satisfaction is being measured. The sampling and survey must be carried out strictly in accordance with sociological research standards. Data must be collected regularly and at clearly defined intervals. Depending on the industry, this interval is selected individually and depends on the frequency

with which the customer uses the product and interacts with the organisation's business processes and staff.

2. Index calculation. This stage consists of analytical calculations to determine the average scores for the index characteristics (based on the responses collected in the previous stage), multiplying them by the weights assigned to these characteristics, and calculating the final index (including sub-indices and the main index).

It is evident that the challenges faced by the analyst at the first stage of data collection are similar to those described earlier. The second stage contains relatively few risks, except for the possibility that a manager might overlook the fact that the chosen calculation ideology influences the resulting index value. In the case of a synergistic model, this may lead to a distorted weighting of certain characteristics of the evaluated customer experience.

*Thus*, the collection and management of CSI data requires strict compliance with the principles of sociological research, along with a focused attention on the chosen index methodology and its implications.

### **Areas of Application of CSI in Strategic Management and Business Modelling**

The applications of CSI in strategic management and business modelling are far broader than might appear at first glance. At the very least, CSI can serve as a valuable analytical foundation for decision-making in the following areas:

1. Measuring customer satisfaction and improving it. This is the primary purpose for which the CSI tool was originally created. CSI helps to identify dissatisfied customers and the reasons behind their dissatisfaction, enabling targeted actions to improve satisfaction (e.g., contacting the dissatisfied customer, correcting mistakes, implementing corrective measures, etc.).

2. Quality management within the organisation. CSI provides an analytical foundation for strategic decisions concerning the quality of the organisation's performance as a whole—including product quality in the narrow sense, quality of supporting business processes, and personnel quality. CSI has a key analytical advantage over complaints analysis and other types of customer feedback: it not only identifies problematic characteristics, but also highlights those most important to the organisation's customer base (provided that all customer groups are adequately represented in the index). When combined with an assessment of the costs involved in addressing these issues, this prioritisation of significant characteristics enables highly effective strategic decision-making—directly impacting customer satisfaction and, therefore, competitiveness.

3. Business model innovation. Since CSI determines the importance of specific characteristics of the customer experience—especially when a discrete index model is used—it becomes a critical tool in business model innovation. Analysing the significance of different features allows organisations to modify their product, business processes and staff focus, emphasising competitive advantages in areas most valued by customers and downplaying less relevant ones. In this sense, CSI offers an invaluable foundation for business modelling as understood by authors such as W. Chan Kim and Renée Mauborgne (2015). It becomes particularly useful when the index is discrete, containing sub-indices for satisfaction with the product, business processes, and staff.

4. Development of a USP. Similar to its use in business modelling, CSI can inform the creation of a USP by reflecting the importance of various aspects of the customer experience. This enables businesses to focus on what matters most to customers and reduce attention to less important aspects (*Ilieska, 2013*). A discrete CSI model is especially advantageous here. Conducting a survey within a representative sample from the target cluster or segment may include competitors' customers, allowing for a CSI measurement of competing organisations and a comparative analysis of strengths and weaknesses. This enables the development of a USP tailored to actual market conditions. CSI can guide product adjustments that ignore low-importance features and achieve superiority in those most valued by the target audience.

5. Brand management. David Aaker, in his concept of brand equity, identified perceived brand quality as one of its key components (*Aaker, 1996*). The present author proposes breaking this down further into three components: perceived product quality (in the narrow sense), perceived quality of supporting business processes, and perceived quality of staff (*Kobyada, 2023, pp. 221–233*). This approach aligns closely with the previously described discrete CSI model. In terms of brand equity, the structure of these components mirrors that of the CSI sub-indices. The difference lies in the survey methodology: CSI involves surveying a representative sample of customers whose satisfaction is being measured, whereas brand equity measurement requires surveying a representative sample of customers across the entire target cluster or segment (including customers of competitors). Thus, CSI reflects how satisfied customers are with an organisation's performance (in terms of product, processes, and personnel), while the three brand equity components reflect the perception of all customers in the target segment (including those choosing competitors' products) regarding the quality of the organisation's performance.

In conclusion, CSI is a powerful strategic management and business modelling tool. It is effectively used not only in its original domain (customer satisfaction monitoring and organisational quality management), but also in areas that, at first glance, may seem unrelated to customer satisfaction. Its application significantly enhances the quality of strategic operations within an organisation.

### **Limitations of CSI Application**

Despite its versatility and adaptability, the CSI cannot measure all aspects of customer satisfaction. One area where the use of CSI is not advisable—and may even be counterproductive—is the measurement of customer satisfaction with product pricing. Observations from the practice of CSI development show that when evaluating the importance of the “price” attribute, respondents typically assign it the highest level of importance compared to other characteristics determining product satisfaction. However, evidence suggests that the actual significance of price to customers is not always as high as they claim.

For instance, the housing market is largely driven by purchases made through mortgage financing. When mortgage loans are accessible, the price of residential property becomes a secondary concern, and even significant price increases do not deter buyers. Between 2014 and 2024, the average price per square metre of residential property in Russia rose from 51,700 to 97,500 roubles (an 88.59% increase) (*Dachenkova, 2024*), yet sales continued due to the availability of mortgages. A similar pattern is observed in the automotive market and other sectors where

credit-based purchasing is common. Thus, respondents' claims that price is of utmost importance are clearly at odds with actual consumer behaviour.

Equally noteworthy are the results of CSI surveys that include the "price" attribute. It has been found that many customers who regularly make repeat purchases—thereby demonstrating loyalty—often express dissatisfaction with price. In reality, these customers are satisfied enough with the price to continue purchasing the product. Their expressed dissatisfaction is likely driven by a psychological desire to prompt price reductions by "complaining" that prices are too high. This behaviour does not reflect their actual satisfaction with pricing but is instead a strategic move aimed at gaining financial benefit. As such, these "complaints" should not be interpreted as genuine indicators of dissatisfaction.

Consequently, it is not advisable to include "satisfaction with price" as a component of CSI. Price satisfaction—or more accurately, price competitiveness—is worth assessing using alternative methods, such as comparative scoring that benchmarks the organisation's pricing against that of its competitors (*Kohyada, 2023, pp. 266–268*).

Thus, in developing and applying CSI, it is crucial to consider the psychological characteristics of customers and their ability to provide realistic evaluations across the various attributes that may be included in the index. Characteristics for which importance ratings or satisfaction assessments do not correspond to real behaviour is worth excluding on methodological grounds.

### **Discussion**

Unfortunately, research on the use of CSI has predominantly relied on empirical methods. This is largely due to the closed nature of the corporate world, where concerns over commercial confidentiality often preclude the possibility of conducting comprehensive quantitative studies on the subject. As a result, the conclusions that can be drawn on this topic—including those presented in this article—are necessarily limited. When assessing the findings presented here, managers are advised to consider the specific characteristics of their sectors.

Nevertheless, the extensive empirical observations performed using qualitative methods, the results of which are detailed in this article, provide a sufficient basis for understanding the essence of the issue.

### **Conclusion**

Analysis of CSI development and application across different sectors demonstrates that this tool is one of the most powerful available for an organisation's strategic development. For this reason, it has been incorporated—within a discrete model—into the business modelling and strategic planning methodology developed by the author of this article (*Kohyada, 2023; Kohyada & Plekhnova, 2023*). Despite certain complexities in developing and maintaining this tool, CSI offers more opportunities for identifying problem areas and growth potential than other comparable instruments, such as the NPS.

However, CSI also presents several specific features that must be considered. During both its development and application, adherence to methodological requirements is essential. This includes correctly identifying the target cluster, segment, and client group whose satisfaction is being measured, as well as conducting thorough qualitative and quantitative research. When

applying the tool, researchers must comply with standards for quantitative analysis and ensure that the original conceptual framework underpinning the index is reflected in the calculations.

CSI should be used to its full potential—across all areas where it can be beneficial: measuring customer satisfaction and making decisions to enhance it, managing organisational quality, innovating business models, developing USPs, and brand management. The application of CSI in these domains can significantly improve the effectiveness of business modelling, strategic planning, and strategic management within an organisation.

Finally, one must remain mindful of the limitations inherent to CSI. For example, measuring satisfaction with price using CSI is not recommended; other tools are worth employing for this purpose.

Overall, the use of CSI is not worth restricting to customer satisfaction measurement alone. In strategic work, its full potential should be harnessed across all the domains outlined in this article.

### Conflict of Interest

The author declares that there is no conflict of interest.

---

### References:

- Aaker, D. A. (1996). *Building strong brands*. Free Press.
- Dachenkova, T. (2024, February 19). How has the real estate market changed over the past 10 years. *Novostroy*. <https://www.novostroy.ru/articles/market/kak-rynok-nedvizhimosti-izmenilsya-za-poslednie-10-let-sravnili-tseny-stavki-vliyanie-bankov-i-sdelali-prognozy/> (In Russ.)
- Ilieska, K. (2009). *Services Marketing*. Bitola.
- Ilieska, K. (2013). Customer Satisfaction Index — as a Base for Strategic Marketing Management. *TEM Journal*, 2(4), 327–331.
- Kim, W. C., & Mauborgne, R. (2015). *Blue ocean strategy: How to create uncontested market space and make competition irrelevant*. Harvard Business Review Press.
- Kolyada, A. A. (2023). *Next level: strategic management of the new era. How to build an effective business model and develop an effective strategy for the growth of your company*. Moscow: Alpina PRO LLC, Eurasian School of Management and Administration LLC. EDN FUTPBY. (In Russ.)
- Kolyada, A. A., & Plekhova, Y. O. (2023). Methodology for developing an organization's business model and forecasting its economic efficiency. *Theory and Practice of Social Development*, 8(184), 101–112. EDN JWIWXI. (In Russ.)
- Lavrova, A. P. (2024). The main methods of assessing customer satisfaction in modern conditions. *Humanities, Socio-Economic and Social Sciences*, 5, 188–193. (In Russ.)
- Reichheld, F. F. (2003). The one number you need to grow. *Harvard Business Review*, 81(12), 46–54.
- Tretyakov, V. P., Kolesneva, E. P., & Lyubetsky, P. B. (2005). *Market segmentation: Guidelines*. Gorky: Belarusian State Agricultural Academy. (In Russ.)