System of Customer Satisfaction Monitoring by New Cars in View of Perceived Quality

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Abstract

Development and implementation of the integrated customer satisfaction management systems within the framework of existing quality management systems of the world automotive corporations are the critical tasks today. Solution of these tasks ensures achievement of new horizons of competitiveness. In modern conditions, quality determines competitiveness. It is therefore so important to ensure the creation of quality product that best meets the customer wishes. And for this, an integrated customer satisfaction management system is needed, among other things. The article presents results of development and implementation the system of customer satisfaction monitoring by new cars taking into account perceived quality. This study is based on results the first months of cars operation.

Keywords: perceived quality, customer satisfaction, questionnaire survey, quality indicators, SWOT analysis, automotive industry.

1. Introduction

It cannot be said that over the past decades, the enterprises of the Russian automotive industry have not dealt with issues of measuring customer satisfaction with product quality, as well as evaluating their own competitive positions in terms of the enterprise brand and the main products and services. Such work has been carried out in the past as well. Is it always systemic? The lack of competition in the market provides for the cultivation of monopolies, for which customer preferences are not in the first place.

Ten years ago, Russian automakers have dominated the domestic market. And today only individual carmodels of Russian brands can be seen in tops and sales ratings. In this connection there are still a considerable number of actual questions:

- ☐ What to do when the customers' preferences are changing?
- How will change the customers' preferences?
- □ How will develop the Russian car market?

These questions are the keys. They are united by a common denominator in the person of customer, who is the absolute magnitude and absolute dominant.

Of course, situation in the market may change due to macroeconomic indicators, but if customer is focused on the product, then the sale will be guaranteed. In the Russian market, the proof of this thesis is the success of the Korean automakers, which showed only a slight decline in the crisis years. It should be noted the success of the Russian brand UAZ Patriot, which also has a significant stability of sales.

It should be said that established quality indicators, such as reliability, maintainability, cost of car ownership, etc., are added by new indicators. These include innovative and fashionable

design, organicity and functionality of the location of tools for controlling the operating modes of on-board systems, etc. Although a few years ago, these indicators were not a priority, but today they are significant factors in assessing the quality of new cars in operation. In this context, it is useful to give the results of an analysis of what is happening in the world's largest automobile markets. In other words, the Russian automotive market is no longer an exception to the rules. Despite economic problems, it becomes a part of the global market. In this regard, there is a rapid transformation of customer preferences into a coordinate system, where an emotional estimate of customer satisfaction becomes extremely important along with reliability issues.

The most important indicator is the price of product. Although at first glance, this indicator has nothing to do with quality. Russian manufacturers are losing positions, including because the prices of Russian cars are close to the average prices for European or Korean brands. Of course, it can be explained by the fact that the localization of production of some new domestic cars does not exceed 30-40%. Some Russian automakers realized in time that domestic product is not always the best in quality. Understanding this fact provided them with stability of sales volumes of new cars in the recent crisis years.

Accordingly, today the price aspect and the emotional coloring of the perceived quality are the keys to the buyer's heart. They can be selected through the development and implementation of a system for assessing customer satisfaction with product quality.

In the context of this study, let's note a number of noteworthy books and articles regarding:

- ☐ perceived quality (Garvin, 1984; Aaker, 1991; Aaker, 2009; Zeithaml, 1988; Mitra & Golder, 2006; Jin & Yong, 2005);
 - ☐ perceived quality in the automotive industry (Wiedmann

et al., 2011; Stylidis et al., 2014; Homer, 2008; Hazra et al., 2013; Forslund & Söderberg, 2009; Petiot et al., 2009; Ersal et al., 2011);

□ customer satisfaction and loyalty (Kondo, 2001; Goodman, Broetzmann & Adamson, 1992; Giese & Cote, 2000; Yu, 2007; Ažman & Gomišček, 2015; Hayes, 2008; Yu, 2005; Kumar et al., 2006).

2. Results and discussion

In today's highly competitive market, quality determines competitiveness. Therefore, the world's largest automakers believe that quality assessment is one of the basic processes. All processes of the company are implemented in accordance with the quality assessment. And quality research is conducted by corporate services of quality management.

In Russia, there is some experience in conducting such assessments. Since 2003, one of the largest Russian automakers annually conducts a study "Assessment of customer satisfaction of cars" in five positions.

- 1. Cost of car ownership:
 - · car price, credit cost, purchasing expenses;
 - · safety provision expenses;
 - · operation costs, spare parts cost;
 - car price after operation.
- 2. Service:
 - maintenance possibility without outside help;
 - · availability of spare parts, presence/absence of a chain of spare parts stores;
 - presence/absence of a network of service stations;
 - quality of warranty service.
- 3. Technical specifications:
 - · acceleration dynamics;
 - · controllability, maneuverability;
 - running smoothness;
 - · fuel consumption;
 - · reliability.
- 4. Equipping, safety and convenience:
 - · convenience of loading/unloading luggage;
 - · volume of trunk;
 - · convenience of embarkation/disembarkation of driver and passengers;
 - · possibility of salon transformation;
 - · visibility;
 - · effectiveness of brakes;
 - · ergonomics;
 - · convenience and comfort of salon, sound insulation;
 - passive/active safety;
 - adaptability to bad roads;
 - · corrosion protection.
- 5. Emotional factors:
 - · prestigiousness of car;
 - · importance of owning a new car;
 - · attractive appearance of car (body design).

The undeniable merit of such study is the substantial annual volume of data received from customers in the form of correctly and fully completed questionnaires submitted on a paper carrier. Based on the results of the first months of operation, customers are surveyed across the entire range of sold cars. The disadvantage of such a "classical" assessment system is its preferential orientation to a formal quantitative assessment and, accordingly, there is a relatively weak qualitative part of study that determines the emotional coloring of customer satisfaction. In addition, a study conducted solely on own products can't fully provide opportunities for competitive positioning of products on the market in terms of quality.

Figure 1 presents the study results, in the form of a diagram reflecting the changes dynamics of the individual satisfaction indicators. Each indicator shows a satisfaction assessment for

three years, and the last score presented graphically and in points.

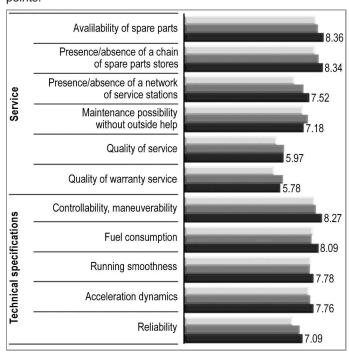


Figure 1. Numerical score of customer satisfaction

A significant step forward in comparison with the "classical" study is the attempt by the same automaker to make the study "Reasons for the refusal of customers to purchase cars" in a crisis of sales. It was a single experience of organizing a personal interview of several thousand car owners. Studies carried out within the framework of a uniform sampling of the most mass brands provide a more complete volume of information about customer satisfaction.

As we have already mentioned, a customer satisfaction assessment, conducted by Russian automakers, is non-systemic. Foreign competitors more clearly monitor the customer's opinion and take into account the key factors that affect the decline in sales, as well as the emotional coloring of customer satisfaction.

The current stage of development the customer satisfaction assessment by new cars quality is associated with the active introduction into practice of the largest national automakers of powerful analytical quantitative and qualitative surveys based on best practices of the world's leading corporations. In our opinion, the most significant and interesting research methodology is concentrated in the complexes developed by ESTEL, First Buyer Satisfaction Survey, J.D. Power VQS, SOFRES, NCBS and NVQS.

Assessing the methodological essence of modern research complexes of customer satisfaction, it is necessary to single out several main aspects:

- modern questionnaires are developed on common patterns in order to enable the joint analysis of results, including the comparison of reports on studies covering only own product, with reports on multi-brand research;
- ☐ development and use of questionnaires should be accompanied by comfortable communication conditions for the interviewed customer in order to provide the most complete and emotional answers to the questions asked;
- questionnaires should be detailed in order to obtain the maximum amount of both quantitative and qualitative information on all major issues related to the product and its environment, which leads to an increase in the complexity of the research implementation;
- ☐ in the survey base it is necessary to provide for the presence of unexpected questions affecting the emotional aspects of quality, in order to obtain spontaneous responses,

which, as a rule, reflect emotions;

☐ it is necessary to clearly differentiate between issues requiring quantitative scoring and questions providing written explanations to prevent speculation and establishing of a causal relationship between these assessments by the interviewee;

questionnaire must necessarily contain questions reflecting the expectations of customers, as the results of the research determine the current situation and create prerequisites for predicting customer satisfaction in the future;

☐ it is necessary to conduct a monthly monitoring of customer satisfaction with the quality of new cars based on the results of 3, 6, 12, 24 months of operation.

The next diagrams present the differences between classical and new studies on the assessment of customer satisfaction by

cars quality (Figure 2, Figure 3 and Figure 4).

Figure 2 shows a comparing diagram reflecting the scores of customer satisfaction ratings for three cars models of different brands:

- 1 base model (car model of a well-known European brand);
- 2 car model of the Russian production;
- 3 car model of one of the Eastern automakers.

Comparison of individual satisfaction indicators is performed relative to the base model. Analyzing this diagram, one of the important conclusions is the great stability of customers' assessments with respect to the European brand. As can be seen in the implementation of new studies, the degree of detail of the score of customer satisfaction by cars quality is much higher compared with the results of classical assessments.

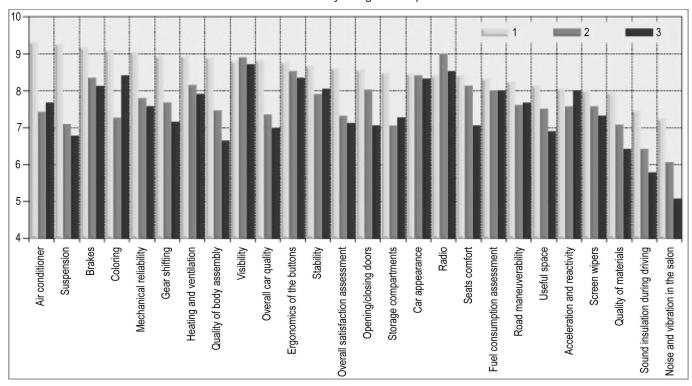


Figure 2. Numerical score of customer satisfaction by perceived quality of cars based on the results of modern studies

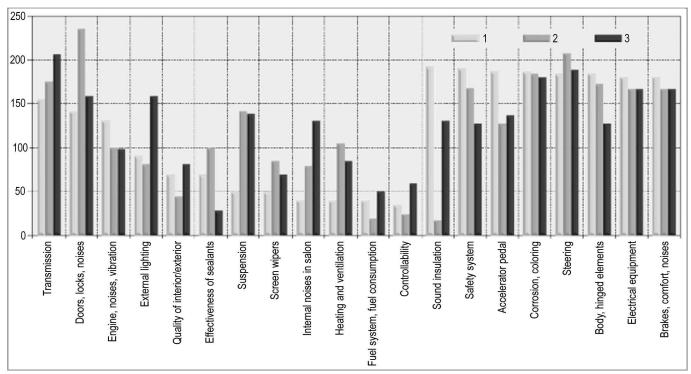


Figure 3. Emotional assessment of customer satisfaction by perceived quality of new cars

In the world practice, the level of satisfaction is often determined by the number of customer complaints received during questionnaires and presented for one thousand cars. The indicator E% is the basis for the analysis of customer satisfaction with cars of the same brands (*Figure 3*).

Quantitative satisfaction assessment is derived from analysis of written responses of consumers. This leads to the conclusion that quality department of the enterprise needs an institute of experts-"interpreters". These employees provide translation of requests from the customer language into the engineering language. We emphasize that analytical departments of the enterprise should carry out the development and implementation of the customer satisfaction problems codifier, which provides an appropriate assessment of the indicator E%.

The higher the emotional assessment of customer satisfac-

tion by cars quality, the less the complaints, i.e. lower the indicator E%. *Figure 3* shows that European cars have a greater stability and smaller range of changes in satisfaction rates, as in the case of numerical score. Although the Russian brand already has more positions with a better satisfaction rating.

SWOT analysis is another tool, logically built into the framework of presented article. The results of SWOT analysis, taking into account the advantages and disadvantages of the studied model of Russian production, are presented in *Figure 4*.

A reference point in the coordinate system is defined as the average value of customer satisfaction and the corresponding average value of importance the quality assessment criteria. All presented single assessments of the satisfaction/dissatisfaction factors have its strict location in accordance with the point coordinate determined by satisfaction and importance.

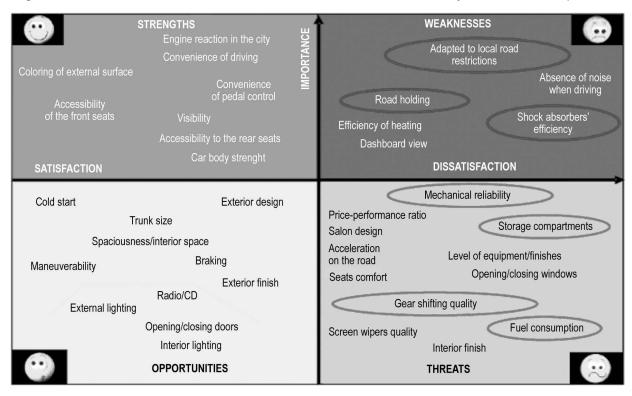


Figure 4. SWOT analysis results on example the studied car model of Russian production

3. Conclusions

In today's highly competitive market, quality determines competitiveness. Therefore, the world's largest automakers believe that quality assessment is one of the basic processes. All processes of the company are implemented in accordance with the quality assessment. And quality research is conducted by corporate services of quality management.

The current stage of development the customer satisfaction assessment by new cars quality is associated with the active introduction into practice of the largest national automakers of powerful analytical quantitative and qualitative surveys based on best practices of the world's leading corporations.

Analysis the differences between classical and new studies on assessment of customer satisfaction by cars opens up wide opportunities for solving key quality problems of new cars from the point of view perceived quality. **Q-as**

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