

Elements of The Customer Satisfaction Model in The Republic of Serbia's Economy

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Abstract: The objective of this paper is to present the research results in modelling the process for providing satisfaction of company's customers and their requirements. This model implies a process approach, acceptable marketing research and appropriate evaluation at the end. The research was conducted in the first quarter of 2008. and included an interview with 84 companies (more than two-thirds from SMEs) as the primary group and 37 experts from the relevant field of work as the control group of the research. The interviewing was primarily carried out by an e-mail survey (one questionnaire per company/expert).

I. INTRODUCTION

A. Customer satisfaction and related concepts - review of literature

Customer satisfaction (CS) is the level of a person's felt state resulting from comparing a product's perceived performance (or outcome) in relation to the person's expectations [1]. In addition, satisfied customers tend to be less influenced by competitors, less price sensitive, and stay loyal longer [2].

There is a large amount of available technical (or marketing) literature [3] which supports moves towards formalizing the measurement of CS. In fact, CS measurement has proved to be one of the most successful products for market research agencies in times of recession [4].

This field represents the base of, at least, three concepts: quality management (QM), total quality management (TQM) and business excellence (BE), as well as relationship marketing (RM). This is conceptually the subject of the wider analysis of this paper.

Quality components such as dealing with complaints, cooperation between company representatives and customers, the availability of products and services, cost and price policy and activities related to making contracts all exert a considerable influence on CS [5]. On the other hand, CS influences the company's characteristics, such as spreading positive information about the company and its services and products [6].

The concept of TQM and BE as a business strategy, extends well beyond the marketing customer-perceived

view of quality [7] to include all key requirements that contribute to customer-perceived quality and CS. TQM broadens prior notions of quality in that it includes consideration of business processes for providing complete CS on the full range of product and service needs [8].

The term RM was first introduced by Berry [9] in a services marketing context. RM, defined as marketing activities that attract, develop, maintain, and enhance customer relationships, has changed the focus of marketing orientation from attracting short-term, discrete transactional customers to retaining long-lasting, intimate customer relationships. Evans and Laskin [10] present the model of effective marketing process which is cyclic in form, with three sub-processes: (1) inputs, (2) positive outputs and (3) checking phase. This point towards constant improvement the PDCA cycle [11] i.e. to QM concept. The authors define RM as a "process by which a company builds a long-lasting relationship with possible and existing customers in such a way that both sides (sellers and buyers) are focused on commonly defined objectives.

B. Serbian background

Companies from transitional countries, like those of the Western Balkans (Serbia among them), have problems with the quality of their business practices and production productivity. Inherited inefficient production systems and transitional recession, which are common to all countries in transition, affect these companies and can be blamed for their insufficient competitive capacity. The problem is especially obvious in companies dominated by autochthonous private capital. The reason why only a relatively small number of Serbian companies have implemented a quality system can be found in the difficult financial situation facing the domestic economy and the fact that the implementation of QMS calls for considerable effort on the part of management. What is of greatest concern is that, while almost all big companies have already implemented QMS, the majority of companies in Serbia are small to medium sized enterprises (SMEs). Taking all the above into account, it is not surprising that the concept of integrated management systems is the most common on the Serbian market while the elements of BE serve more as a theoretic-methodological base. The concept of relationship marketing exists, but only on a

basic level and in a small number of companies (those under foreign ownership). Furthermore, there are no clear indicators concerning this.

In Republic of Serbia small and medium-size enterprises participate in the total number of enterprises with 99.8%, with 65.5% in employment, with 67.6% in turnover and with about 36% in gross national product (GNP). In the total export, SMEs participates with 50.2%, in the import with 64% and with 51.2% in investments in non-financial sector. Micro enterprises are dominant in SMEs – they participate with 95.6% in the total number and employ almost 50% of the total number of the employed [12].

In accordance with the above, the modelling of an acceptable concept that would satisfy customer requirements by integrating QMS, BE and RM seems a possible solution in a transitional context. Therefore, the objective of the research was to create and present a qualitative theoretical model of a system for providing satisfaction of a company's (firm's) customer needs. The model assumes a process approach, with appropriate marketing research in the beginning and corresponding evaluation at the end. The model was created to facilitate the management of these processes, with the aim of achieving BE.

II. METHODOLOGY SETTINGS OF THE RESEARCH

The research starts from at least three key pre-conditions:

1. It is possible to carry out a systemic synthesis of a theoretic model for providing satisfaction of customer requirements that integrates: the criteria of BE in modern business conditions, the requirements of marketing research and the quality requirements set out in the ISO 9000:2000 series of standards.
2. The existence of the model is justifiable, but there are requirements, elements and activities that were not considered during the preparation of the proposed model although they are specific and important for companies' work (productive and non-productive) in the Republic of Serbia.
3. Certain deviations in requirements related to the model can be expected, in other words, certain differences between the answers given by SMEs and big enterprises. We can estimate that this will be caused by strategic orientation of the theoretic model and organisational set-up.

Argumentation of these pre-conditions would be enough to show justifiability and acceptance of the model.

Target groups in the research were:

- companies (production and/or services) which are certified according to the ISO 9000 standards and which work and/or have residence in Republic of Serbia; managers in quality and/or marketing sector in these companies, as primary group,

- experts, in the sphere of quality and/or marketing (with reference to the subject sphere, published works and/or cited), as a control group. They were to confirm the companies' attitudes. It was interesting to see whether considerable differences would appear in the companies' answers and the answers of those who were dealing with this matter from academic (university professors) or some other standpoint (ex. consultants).

Surveying of available companies and experts was primarily realized by e-mail survey. The survey included about 600 companies and 100 experts. Data base of Serbian Chamber of Commerce was primarily used during the selection of companies and at selecting the sample of experts it was used data base and contacts in JUSK – United Association of Serbia for Quality, as independent and sufficiently representative body for Serbia. Totally 84 companies accepted the call to participate in the research (which was between 4.5 and 5.5% out of all certified companies in Serbia) and 37 experts from the subject sphere. For the sake of survey it was created a special questionnaire (taking care of methodology of the research); communication principle was: one questionnaire – one company/expert. The survey was mainly realized at the first quarter of 2008.

The structure of the surveyed companies was: according to ownership structure the companies were mainly private (61 (72.6%)) and public (10 (11.9%)); according to the field of work: agriculture, hunting, forestry and water management 3 (3.4%), ore and stone mining 1 (1.1%), manufacturing industry 46 (52.3%), electrical, gas and water generation and supply 5 (5.7%), building construction 9 (10.2%) wholesale and retail trade ; motor vehicles, motorcycles and houseware/personal repair 8 (9.1%), traffic, warehousing and connection 3 (3.4%), administration and defence ; compulsory social insurance 2 (2.3%), education 3 (3.4%), health and social care 3 (3.4%), other communal, social and individual services 5 (5.7%); according to the size: micro and small 14 (16.7%), medium 38 (45.2%) and big 32 (38.1%); position of the interviewed: mainly directors 10 (11.9%), leading managers 49 (58.3%), and consultants 3 (3.6%).

The structure of the interviewed experts was: the majority of the interviewed were male (31 (83.8%)); the greatest number of the interviewed were over 50 years of age 13 (41.9%) and between 30 and 40 11 (35.5%); level of education: the majority were PhD (15 (40.6%)), Master's degree and Bachelors (10 (27%)); occupation (answered 22 (59.5%)): the majority (11) were university professors/college professors and 5 experts were employed as consultants; work position of the interviewed in their organizations (answered 36 (97.3%)): directors and/or owners and leading managers.

III. CS MODEL

A. A presentation of the theoretical model

The model for providing customer satisfaction, shown in **Figure 1**, has been harmonized according to

its basic function and primary structure with the requirements of the ISO 9001:2000 series of standards, as well as with relevant proposals and criteria of business excellence and marketing requirements.

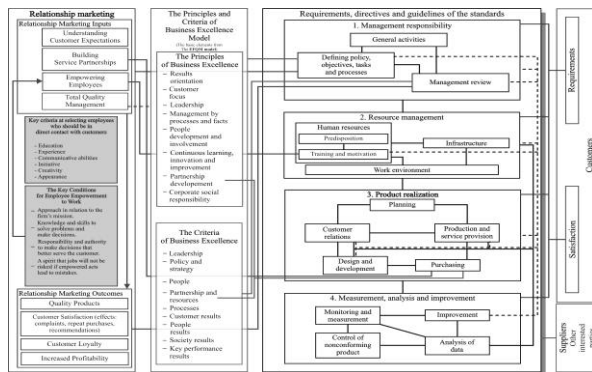


Figure 1. The Customer Satisfaction Model

B. The statistical indicators - a review

TABLE I. A COMPARATIVE SURVEY OF THE AVERAGE SIGNIFICANCE GRADE THAT SHOULD BE PAID TO THE PRINCIPLES OF BE WHEN DEFINING POLICY, OBJECTIVES AND TASKS WITHIN AN ORGANIZATION.

PRINCIPLES of BE	Average grade of those interviewed in companies	Average grade of the experts
Results Orientation	4.17	4.39
Customer Focus	4.42	4.61
Leadership	3.82	4.18
Management by Processes and Facts	3.80	4.06
People Development and Involvement	3.76	3.88
Continuous Learning, Innovation and Improvement	3.68	3.79
Partnership Development	3.94	3.94
Corporate Social Responsibility	3.58	3.39

66 (85.7%) of the interviewed companies and 33 (91.7%) experts gave the answers. The Likert 5-point scale was used in the research survey.

TABLE II. A COMPARATIVE SURVEY OF THE AVERAGE SIGNIFICANCE GRADE WHICH SHOULD BE PAID TO THE CRITERIA OF BE WHEN DEFINING POLICY, OBJECTIVES AND TASKS WITHIN AN ORGANIZATION.

CRITERIA of BE	Average grade of those interviewed in companies	Average grade of the experts
Leadership	3.73	4.00
Policy and Strategy	3.87	4.24
People	3.68	4.21
Partnership and Resources	3.65	3.97
Processes	3.90	4.15
Customer Results	4.47	4.48
People Results	3.58	4.15
Society Results	3.52	3.70
Key Performance Results	4.23	4.27

74 (88.1%) of the interviewed companies and 36 (97.3%) experts gave the answers. The Likert 5-point scale was used in the research survey.

TABLE III. A COMPARATIVE SURVEY OF THE AVERAGE SIGNIFICANCE GRADE PAID, AND THAT WHICH SHOULD BE PAID TO THE CRITERIA OF BE DURING MANAGEMENT REVIEW BY THE LEADING MANAGEMENT.

CRITERIA of BE	Average grade of those interviewed in companies			Average grade of the experts
	1	2	3	
Leadership	3.67	3.54	3.73	4.00
Policy and Strategy	4.08	4.04	3.88	4.24
People	4.33	3.69	3.50	4.21
Partnership and Resources	4.17	3.69	3.62	3.97
Processes	4.17	3.73	4.04	4.15
Customer Results	4.67	4.42	4.23	4.48
People Results	3.92	3.81	3.50	4.15
Society Results	3.92	3.46	3.62	3.70
Key Performance Results	4.67	4.35	4.12	4.27

78 (92.9%) of the interviewed companies and 36 (97.3%) experts gave the answers. The Likert 5-point scale was used in the research survey. Here, a statistically significant difference was noted in the answers of the different-type companies ($p = 0.043 < 0.05$) and the grades are shown separately.

TABLE IV. A COMPARATIVE SURVEY OF THE AVERAGE SIGNIFICANCE GRADE OF THE INPUT ELEMENTS IN THE RM CONCEPT.

Input Elements of The RM Concept	Average grade of the interviewed in companies	Average grade of the experts
Understanding Customers Expectations	4.31	3.88
Building Service Partnerships	3.92	3.42
Empowering Employees	3.66	3.71
TQM	3.76	3.26

The Likert 5-point scale was used in the research survey.

TABLE V. A COMPARATIVE SURVEY OF THE AVERAGE SIGNIFICANCE GRADE OF THE OUTPUT ELEMENTS IN THE RM CONCEPT..

Output Elements in The RM Concept	Average grades of the interviewed in companies	Average grades of experts
Quality Product	4.64	4.06
CS (effects: complaints, recommendations, re-buying)	4.44	4.26
Customer Loyalty	4.04	4.09
Increased Profitability	4.19	3.91

81 (96.4%) of the interviewed companies and 35 (94.6%) experts gave the answers. The Likert 5-point scale was used in the research survey

When asked to say whether they had a particularly defined process for the identification of customer expectations and requirements, the majority of those interviewed, 66 (79.5%) out of 83 (98.8%) from the

companies gave positive answers. One part, 14 (16.9%) of them, linked this process with some other process in the organization and only in 3 (3.6%) companies was this process not defined at all. The experts' answers followed a similar structure; 31 (83.8%) thought it was important to define this process, and 6 (16.2%) thought that this process could be joined to some other process, with a note that they insisted on its existence.

The process of monitoring, measuring and analysing CS is similar to the previous one. 69 (82.1%) of those interviewed in companies stated that this process already existed as particularly defined, 14 (16.7%) said

that it was part of some other process, and only 1 (1.2%) said that it did not exist. The experts were, this time, practically unique in thinking that this process had to be particularly defined with only 3 (8.1%) of those interviewed stating that it could be part of some other process.

For compiling documentation for the identification of expectations process, we received answers from 81 interviewees (96.4%), and for the monitoring, measuring and analysing process we received answers from 83 (98.8%) companies.

TABLE VI. A SURVEY OF THE PHASES IN WHICH RESEARCH INTO NEEDS AND CS IS/SHOULD BE PERFORMED.

Offered answers		RESEARCH INTO NEEDS AND EXPECTATIONS			
		Companies (Firms)			Experts
		1	2	3	
(a)	Defining quality policy, objectives and tasks	5 (20.8%)	23 (18.7%)	18 (16.5%)	13 (11.7%)
(b)	Research into requirements and expectations	6 (25%)	17 (13.8%)	17 (15.6%)	30 (27%)
(c)	Defining resources for the realisation of product or service	1 (4.2%)	9 (7.3%)	15 (13.8%)	7 (6.3%)
(d)	During the review of requirements related to the product	5 (20.8%)	18 (14.6%)	15 (13.8%)	12 (10.8%)
(e)	Through validation of results (within a phase or the project)	6 (25%)	14 (11.4%)	13 (11.9%)	11 (9.9%)
(f)	During the performance of activities (products and services realization)	-	20 (16.3%)	10 (9.2%)	10 (9%)
(g)	After realization or product delivery	-	17 (13.8%)	8 (7.3%)	6 (5.4%)
(h)	Through post-delivery and servicing activities	1 (4.2%)	5 (4.1%)	13 (11.9%)	18 (16.2%)

83 (98.8%) of those interviewed answered the question concerning the identification of expectations process. A statistically significant difference in the answers of different-type companies was noted concerning the questions about the phases in which research into the needs and expectations ($p = 0.001 < 0.05$) is performed, therefore the answers are given separately.

TABLE VII. A SURVEY OF THE PHASES IN WHICH THE MEASURING OF CS IS/SHOULD BE PERFORMED

Offered answers		MEASURING SATISFACTION			
		Companies (Firms)			Experts
		1	2	3	
(a)	Defining quality policy, objectives and tasks	2 (6.5%)	10 (10.8%)	11 (11.6%)	14 (11.9%)
(b)	Research into requirements and expectations	6 (19.4%)	9 (9.7%)	18 (18.9%)	20 (16.9%)
(c)	Defining resources for the realisation of product or service	-	8 (8.6%)	5 (5.3%)	7 (5.9%)
(d)	During the review of requirements related to the product	5 (16.1%)	11 (11.8%)	10 (10.5%)	10 (8.5%)
(e)	Through validation of results (within a phase or the project)	9 (29%)	10 (10.8%)	6 (6.3%)	14 (11.9%)
(f)	During the performance of activities (products and services realization)	-	8 (8.6%)	14 (14.8%)	9 (7.6%)
(g)	After realization or product delivery	6 (19.4%)	27 (29%)	18 (18.9%)	21 (17.8%)
(h)	Through post-delivery and servicing activities	3 (9.7%)	10 (10.8%)	13 (13.7%)	23 (19.5%)

80 (95.2%) companies answered the question concerning the monitoring, measuring and analysing process. A statistically significant difference in the answers of different-type companies was noted concerning the questions about the phases in which measuring of satisfaction ($p = 0.002 < 0.05$) is performed, therefore the answers are given separately.

TABLE VIII. A COMPARATIVE SURVEY OF THE WAYS IN WHICH THE RESULTS OF ANALYSIS- CS - INFLUENCE/SHOULD INFLUENCE THE IMPROVEMENT OF QMS.

Offered answers	Firms	Experts
Corrective and/or preventive actions	64 (31.8%)	20 (21.3%)
(Re)definition of quality policy, objectives and tasks	35 (17.4%)	19 (20.2%)
Planning future quality	48 (23.9%)	24 (25.5%)
Training personnel	33 (16.4%)	20 (21.3%)
"Good practice" – collective experience	16 (8%)	11 (11.7%)

81 (96.4%) companies and 36 (97.3%) experts in their answers to the offered questions.

With a certain difference, the companies and experts give advantage to corrective and/or preventive measures in planning quality for the future period, while they give the least attention to shared values.

IV. DISCUSSION

There are certain problems concerning the acceptance of BE and RM in the Serbian economy. The consequences of these problems are the following: the concept of IMS is mainly applied on the Serbian market based on the ISO 9000 series of standards while the elements of the BE concept are mostly used as its theoretic - methodological base. However, it is also obvious that an orientation towards CS and other stakeholders' requirements is present in certified domestic companies. This is confirmed by the acceptance of the principles and criteria of BE (the input and output elements of RM) in defining policy, objectives and tasks in the organization, in other words, in the sphere of planning quality for the future. According to the research results, the criteria of BE and the output elements of the RM concept should also be incorporated in the reconsideration phase on the management side (management review). Taking all this into account, it is not surprising that considerable significance is paid to CS. Namely, particular significance is paid to the principles, criteria and elements which are directly oriented towards customers (the lowest average grade is 4.23); which shows the readiness of the organizations to devote themselves to their customers, as well as the importance which the experts gave to this question.

The greater part of Serbian companies had defined customer-related processes (79.5% of those which participated in the survey), mainly as part of some other process. For the documentation of this part of the product realization process the most widespread method is procedural, i.e. as a segment in the reference book (Handbook) of quality. The experts gave advantage to methodology over integration – which is the opposite of the opinion expressed in the companies. This does not, however, diminish the significance of the biggest part in which there is agreement in the given statements. Feedback information from customers, including their complaints were considered as highly effective solutions in communication with customers.

Validation of results within a phase or project is present as the phase in which research into customer needs and satisfaction is/should be performed. However, only micro and small companies pay more importance to this (in 25% of the surveyed companies), probably because of the more simplified operational realisation,

Partnership development with suppliers belongs to the four best appraised principles/criteria when the experts and companies had to provide their opinion on the concept of BE, i.e. this is the second best estimated of the input elements in the RM concept. It is interesting to note that it was the micro and small companies which paid particular attention to the partnership relations with suppliers, perhaps because they in fact are frequently the suppliers in the chain of the realisation of production

and/or in the provision of services, thus they expect such a relationship with their 'big' partners.

A study of the phases in which research into customer needs and satisfaction is/should be performed established that this is carried out: during the performance of activities (products and services realization), after realization or product delivery and through post-delivery and servicing activities. However, those phases are not usually foreseen for the realisation of those activities. Performing activities in product realization is only the second most important phase in the research into customer needs and satisfaction for medium-sized firms. Thus, we can say that the theoretical model is partially reduced.

The majority of those companies which participated in the research (82.1%) had a particularly defined process of monitoring, measuring and analysing CS. For the documentation of this sub-process the most widespread method is a procedural one. However, here the focus of the activities ranges from defining policy and objectives of quality to post-selling and service activities, thus they gain in importance respectively: dealing with complaints about products, dealing with complaints, monitoring proposals for improvement and monitoring product defects during usage.

The analysis of CS influences the improvement of QMS and the business of a whole organization in general. The research has shown that this is simultaneously both a demand imposed by the standard and the practice of Serbian companies. The ways in which this is performed, or should be performed was demonstrated by 96.4% companies and 97.3% experts in their answers respectively: corrective and/or preventive actions and planning future quality. It is encouraging to note that the "system of award and punishment" has almost completely disappeared in companies.

Although it was to be expected given the strategic orientation of the theoretic model and organisational set-up, there are no statistical differences between the answers given by micro, small, medium-sized and large enterprises except in three cases:

- The level of significance given to the criteria of BE during management reviews; two of the three criteria given the greatest attention are the same (Key Performance Results, Customer Results). The third, key criterion, however, varies significantly; People with micro and small enterprises; Policy and Strategy with medium-sized and Processes with large enterprises.
- The phases in which research into needs and CS is/should be performed. Here one of the three most significant answers is the same for all types of company; defining quality policy, objectives and tasks. The answers are in keeping with the size and organisational structure of the companies and any deviations are related to the phases the same companies may implement: research of requirements and expectations, through validation of results (within a phase or the project) and during the performance of activities (products and services realization).

- The phases in which measuring CS is/should be performed. Here one of the three most significant answers is the same for all types of company; after realization or product delivery. The answers are in keeping with the size and organisational structure of the companies in question and any deviation is related to these factors: research of requirements and expectations and during the review of product related requirements.

Finally, it can be noted from the analysis and discussion that the theoretic model for providing satisfaction of customer requirements proved to be acceptable for Serbian companies in relation to the context presented here.

V. CONCLUSIONS

The structure of the theoretic model follows the bases of the ISO 9001:2000 standard, as well as recommendations concerning managing quality, costs and the process of dealing with customer complaints. The elements, including the criteria of BE and marketing requirements which are also integrated in the model, broaden and fulfil the model thus performing its basic function.

The theoretic model served as the base for further research of companies (productive and services), which operate and have their seats on the territory of the Republic of Serbia – first of all their leaders, owners or employees who are in charge of the implementation of QMS as the primary group, and experts from this sphere as the control group in the research.

The model itself has not been applied in practice or tested but, in our opinion, its usage would contribute to more complete and wider acceptance of the concept of BE and/or RM on the part of certified companies (standards ISO 9000 series) in the Republic of Serbia. In relation to limitations, we think that the model's validity would be more complete if the research included a greater number of domestic companies in the sample, even better if this research could cross the borders of Serbian territory and transfer to the countries of the Western Balkans.

Those companies which are ISO 9000 certified and experts in general suggest the justifiability of the theoretic model of providing CS. The model for providing

CS has been harmonized according to its basic function and primary structure with the requirements of the ISO 9001:2000 series of standards, as well as with relevant proposals and criteria of BE, marketing requirements and specific characteristics and the requirements of the Republic of Serbia's economy.

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