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## Article

# Customer Satisfaction, Product Quality and Performance of Companies

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## Customer Satisfaction, Product Quality and Performance of Companies<sup>1</sup>

Petr Suchánek, Jiří Richter, Maria Králová<sup>2</sup>

**Abstract:** This paper presents an analysis of quality, customer satisfaction and business performance in food industry. The main objective of the research is to determine the influence of quality on customer satisfaction and on business performance and competitiveness. In particular, this paper answers the following research question: Does the quality of a product result in a satisfied customer and thereby in a well-performing business? Customer satisfaction is defined as the satisfaction of the customer with a product and the business performance as a capability to generate profit. Therefore, satisfaction was examined by the means of a survey using questionnaires, and the performance was measured by financial data. We managed to find a correlation between the main factors, although partial results were due more factors mostly statistically insignificant.

**Key words:** Customer satisfaction, product quality, performance of a company

**JEL Classification:** L15, L25

### Introduction

The aim of the article is to analyse the relationship between customer satisfaction and performance of a company. The authors assume that customer satisfaction affects corporate performance since it is surmised that customers will buy a product from companies they will be satisfied with, i.e. such products that will meet their expectations (in all aspects). These customers will not only buy the product again later (in case that their expectations concerning the satisfaction with the product are met) but will also recommend other (prospective) customers to buy it.

The aforementioned assumption clearly indicates that customer satisfaction can be observed from various perspectives and during various time intervals. In the research, the authors took a long-term perspective to observe performance (a five-year interval was analysed) in order to detect the influence of diverse variables (concerning customer satisfaction with a company's products) on the performance of a company.

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<sup>1</sup> The article represents a partial outcome of a research called The Influence of Quality on Performance and Competitiveness of a Company (MUNI/A/0738/2012), carried out by the authors of this article.

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The article therefore aims to establish whether customer satisfaction (within the defined variables) influences performance of a company (within the defined variables). Customer satisfaction is constructed as satisfaction of the customer with a product as such (general); quality of a product (as perceived by the customer); with customers' requirements of a product; willingness to repurchase the product; recommendation of the product to other customers; and finally, as a comparison of a product with its competition. The performance of a company was assessed on the basis of two indicators – ROA and ROE, since the profitability aspect is crucial when considering corporate performance.

### Theoretical Framework

Quality is defined as a zero error rate, i.e. the ability to produce a perfect product on the first try (Parasuraman et al., 1985). Crosby defines quality as the producer's ability to meet expectations (Crosby, 1979 quoted in Parasuraman et al., 1985). This definition of quality is the core of the definition contained in the ISO 9001 standard (cf. ČSN EN ISO 9001, 2010). As far as the customer's (consumer's) point of view is concerned, quality can be defined as the quality perceived upon the basis of the consumer's decision on the overall excellence or superiority of the product (Zeithaml, 1988). All definitions mentioned above apply to the quality of a product, which is consistent with the focus of the research into the foodstuffs industry. Widespread approach of Nenadál's team understands quality as a degree to which satisfaction is met, measured by a set of inherent signs (Nenadál et al., 2002). Customer satisfaction can be defined in different ways - as a comparison of previously held expectations with perceived product or service performance (Homburg et al., 2005, Anderson et al., 1994). Alternatively, customer satisfaction can be defined and measured as consumer ratings of specific attributes (Gómez et al., 2004). With respect to the focus of the paper on company's product quality, we have defined customer satisfaction as a reflection of this quality. It is an easier view of satisfaction because sales policy, company's marketing and price policy were omitted, although they can be considered as factors affecting customer satisfaction and business profit (Zeithaml, 2000). So we did not proceed in accordance with satisfaction - profit chain (satisfaction → share of wallet → revenue profit) (Cooil et al., 2007, cf. Anderson, Mittal, 2000), but we have focused on the product and its impact on customer satisfaction, and consequently the profit of the company. Of course, we also understand the relationship of product quality and customer satisfaction over the long term, i.e. that should a satisfied customer influence profitability positively (through the purchase of a quality product), he or she must be attracted and held, which is consistent with findings of Anderson and Mittal (Anderson, Mittal, 2000) or Cooil (Cooil et al., 2007).

Zamazalová (Zamazalová, 2008) also mentions the key factors that affect customer satisfaction and which can be used to measure customer satisfaction. These factors are product (in terms of its quality, availability etc.); price (convenient payment conditions and others); services; distribution; and image of a product. In cases where the determination of customer satisfaction is through product quality, with that satisfaction simultaneously affecting quality, a situation arises, where that certain factor affects quality and is itself affected by it. This problem does not arise in cases of a dynamic perception of customer satisfaction and quality itself, it only happens when customer satisfaction and quality are considered to be a process. Quality (both perceived and technical) affects

customer satisfaction and companies examine that satisfaction and may react to it by innovating products to increase customer satisfaction further.

The definitions stated above show that the extent to which customer requirements are met determines customer satisfaction and the degree of meeting them then becomes the degree of product quality. Every company should therefore struggle to reach the optimal level of quality of its products to meet the expectations of their customers. In this paper, quality is defined to be quality as subjectively perceived by customers. Therefore, the main factor (measure) of product quality is customer satisfaction itself. To achieve high customer satisfaction, it is crucial for companies to make a product that fulfils the customer's requirements.

By definition, performance of a company is linked to productivity, i.e. to a realised output of a particular company and it can therefore be calculated and analysed further. There is a range of approaches to evaluating the performance of a company.

The first numerous group of corporate performance assessment studies used in this research are those based on argumentatively substantiated use of a particular financial indicator. Comparative indicators of profitability are frequently used for the given purpose, which is due to their simplicity and extensive information value. Return on investments (ROI) used in their research by e.g. Smith, Bracker and Miner (Smith et al., 1987) or Duchesneau and Gartner (Duchesneau, Gartner, 1990) is the most frequently used indicator of this kind. Almost identical and used just as frequently in evaluating corporate performance is the indicator of return on assets (ROA), used in their work by, e.g. a team of professor Blažek (Blažek, 2008), or in Bernolak's paper (Bernolak, 1997), Berman's studies (Berman, 1999), or Liargovas (Liargovas, 2010). Traditionally, return on equity (ROE), used for the evaluation of corporate performance by e.g. Richard (Richard, 2000) or Barney (Barney, 1991), is the third frequently used indicator. Return on sales (ROS) is another potential comparative indicator, and is used in Kean's analysis (Kean et al., 1998). Comparative indicators of profitability are not, however, the only measures of corporate performance. Gu and Gao (Gu, Gao, 2006) Habib (Habib, 2006) or Viaene (Viaene et al., 1998) used return on assets (ROA) to evaluate the performance of a company. Many global studies also use the number of employees of a company and other indicators (see Orser et al., 2000; Mohr, Spekman, 1994; Robinson, Sexton, 1994; Srinivasan, Woo, Cooper, 1994; Loscocco, Leicht, 1993; Davidson, 1991; O'Farrel, 1986).

However, when measuring corporate performance, the explicit emphasis on a particular variable - the variable of time - has been missing so far. Should an objective corporate performance be examined, a company has to reach and maintain that performance over a specifically defined period of time. Numerous studies reflect this significant aspect in evaluating corporate performance. For instance, Denison and Alexander (Denison, Alexander, 1986), Dollinger (Dollinger, 1985), Sexton and Robinson (Sexton, Robinson, 1989) or Smith, Bracker a Miner (Smith et al., 1987) use the trend of total revenues per entrepreneur. The trend of profitability per employee is used by Miller, Wilson and Adams (Miller et al., 1988), and the development of earnings per employee in time is the focus of work of Johannison (Johannison, 1993) or Bade (Bade, 1986).

Last but not least, it must be mentioned that , many authors use a range of specifically constructed sets of indicators to evaluate performance of companies, i.e. an artificially created overall indicator (index), combining the aspect of several partial measures. The authors using this approach are, among others, e.g. Karnani (Karnani, 1982), Oral (Oral, 1993; Oral et al., 1986).

In this paper, quality is linked to the ability of a product to satisfy requirements of a customer, with customer satisfaction being determined by transaction-specific and cumulative concepts. The transaction-specific concept defines customer satisfaction as an evaluation of a particular purchase opportunity following a prior selection (and purchase, if made) of a product. The cumulative concept, on the other hand, determines customer satisfaction as an overall evaluation of a complete purchase and the experience of a consumer with that particular good or service over a specific time period (Anderson et al., 1994). Since the research focuses on examining customer satisfaction with a specific product (the aim of the research is not to examine customer satisfaction with the purchase as a whole), the paper mainly focuses on the transaction-specific concept.

### Methodology

Two questionnaires were used in order to investigate company performance and customer satisfaction. The first questionnaire focused on examining the quality of a company (including a collection of financial data that provided a basis for analysing corporate performance by using comparative indicators), whilst the second one focused on investigating satisfaction of those customers of the companies that were subject to the research.

The research samples were set and data were collected during the period January – February 2013. The method used was a face-to-face survey using printed questionnaires containing scale and semi-opened questions (for both samples). The financial data were obtained from compulsorily published financial statements.

As for the content, both questionnaires corresponded with each other so that potential deviations in the results of both pieces of research could be analysed. However, this paper only deals with the financial results of the companies which are linked to qualitative characteristics of evaluating customer satisfaction.

Due to the fact that the source financial data are often significantly affected by the environment development, the companies' performance was expressed as a weighted mean of the last five years (2008-2012) data. This procedure was based on previous research (Blažek, 2008) and the ability to express a long-term business performance.

Based on their financial indicators, companies were first divided into performing and non-performing ones. In the research, emphasis was put on those causal relationships where strong correlations were expected. The statistical significance of the differences in the variables under this study, categorised according to financial performance, was also tested.

In the ensuing analyses, financial performance is assessed by ROA and ROE indicators. Companies where at least one of the financial indicators of ROA and ROE are above their median will be considered as performing. (There are ten such companies in the

sample). As for non-performing companies, those companies will be so designated, for which both financial indicators (ROA and ROE) fall below their median. (There are eight such companies in the sample).

In addition to considering the effect of individual variables on financial performance separately when assessing customer satisfaction, the effect was also considered from a complex perspective. For this purpose, two classification methods – Discriminant Analysis and Cluster Analysis were used. The goal of both was to categorise the companies into two groups based on six variables evaluating customer satisfaction. These two groups were subsequently compared with groups of performing and non-performing companies as classified according to ROA and ROE. Discrimination analysis (DA) was more successful as it, among others, enabled a plentiful interpretation of results. Among others, it enables to establish which of the variables evaluating satisfaction bear information substantial for discrimination. The conclusions of DA will be further described in the chapter of Results.

### **The Research Sample**

The food industry is the sector researched since its products often directly engage in final consumption. Consumers tend to have an overview of a wide range of products, buy them often and in significant quantities. This makes it relatively easier to determine customer satisfaction with the offered products. The basic set of food businesses according to their main activity (principal activity corresponding to CZ-NACE - Subsection 10: Manufacture of food products, or 11: Manufacture of beverages) and legal form (private limited company and limited liability company) consists of 4033 enterprises. Since the research is focused on QM, it was necessary to eliminate those companies that only resell their products from foreign manufacturing floors or act in this country solely as commercial representation. CPV classification criteria resulted in the selection of 458 companies. Businesses that do not report independent financial data and businesses focused on intermediate food products intended for industrial processing rather than for final consumption were removed from the sample. The questionnaires were filled by QM management.

The research sample consisted of 18 enterprises in the area of the food industry (specifically, according to CZ-NACE classification, group 10 - Manufacturers of food products and 11 - Manufacturers of beverages). With regard to legal form, 6 of the companies were limited liability companies and 12 of the sample were publicly listed companies. The number of employees was the basic criterion of assessing the size of the manufacturing companies, and in the study, 4 of companies were small (with up to 50 employees), 11 were middle-sized companies (50-249 employees) and 3 were large companies (over 250 employees).

The second study sample consisted of the customers of the aforementioned companies with the only criterion of choosing respondents based on their familiarity with the products of those companies. The questionnaires were distributed to customers through students of the university, which led to a significant share of young people among respondents. We received a total of 13,683 correctly and fully completed questionnaires which were further processed.

Male (50.91%) and female respondents (49.09%) were represented proportionately. The age group of 16-25 year olds was dominant (62.31%), and was followed, as expected, by other age groups in ascending order in terms of age, i.e. 26-35 year olds (12.14%), 36-45 (9.87%), 46-55 (9.42%) and the age group of over 55 (4.89%). The age group of 10-15 year olds had only a minor representation (1.37%), which suits the research purpose as these respondents, as a rule, do not manifest characteristic purchasing behaviour and cannot select adequately among various products. In terms of profession, students are the most numerous group (60.07%), followed by employees in the private (17.62%) and public (10.31%) sectors. Approximately 12% of the sample was made up of less represented groups of entrepreneurs (5.72%), the unemployed (2.43%) and pensioners (3.84%).

The basic sample (latest data from year 2012) consists of 49.11% males and 50.89% females. The age group of 16-25 years old represents just 17.89% of Czech population and the group of students 13.75%. Therefore, it is appropriate to present the research findings as satisfaction of dominant group of students aged 16-25 years.

### Results

This chapter presents the results of the research in customer satisfaction with products of selected food companies and the performance of the companies. With regard to the tools used and construction of questions used in the questionnaire, we only used results of scale questions. The variables examined were:

- Requirements – these state to what extent the respondents (customers) were satisfied with the fulfilment of requirements that they had expected of a product;
- Evaluation – states to what extent the respondents (customers) were satisfied with the quality (technical level) of a product;
- Satisfaction – states to what extent the respondents (customers) were satisfied with a provided product;
- Repeated purchase – states whether the respondents (customers) would buy the product again;
- Recommendation – states whether respondents (customers) would recommend other people to buy the product;
- Comparison – states how the product is doing in comparison with comparable products on the market.

**Table 1 Characteristics of Evaluation of Individual Variables of Customer Satisfaction for the Companies Examined**

Variable	ValidN	Mean	Minimum	Maximum	Variance	Std.Dev.
Requirements	18	7.4133	8.4444	8.4353	0.2053	0.4531
Evaluation	18	7.2385	6.6977	7.7212	0.0919	0.3032
Satisfaction	18	7.5781	6.8888	8.3469	0.1321	0.3635
Repeated Purchase	18	7.4956	6.3333	8.6394	0.2712	0.5208
Recommendation	18	7.4414	5.8888	8.2857	0.2913	0.5397
Comparison	18	6.8353	6.2248	7.6694	0.1905	0.4365

*Source: Own calculations.*

First, we determined the average values (of the above stated variables) of the responses (evaluations) provided by respondents (customers) for all companies (products). The results are shown in table 1.

The results clearly show that a typical answer of respondents (customers) to all the stated questions is around the value of 7. This means that the respondents were very satisfied with the degree of a product's compliance with requirements (on the scale value 1 represented the minimum and the value of 10 the maximum compliance with customer requirements). The variable of *Recommendation* manifested the highest variability, while *Evaluation* showed the lowest. The highest value was reached for *Repeated purchase* while *Recommendation* scored the lowest. *Comparison* reached the lowest mean.

As a next step we examined whether there were statistically significant differences in respondents' (customers') evaluations when evaluating the performance of companies according to ROA and ROE. Table 2 shows the results of two-sample t-tests.

The results show that differences in respondents' (customers') evaluations of individual questions for performing and non-performing companies are not particularly distinctive. It is therefore not surprising that these results are not statistically significant either. Thus on their own individual questions cannot differentiate between performing and non-performing companies (with respect to ROA and ROE). In follow-up analyses we try to assess their combined influence when distinguishing performing from non-performing companies.

**Table 2 Statistical Evaluation of Results of Customer Satisfaction Evaluation According to Individual Variables and Company's Performance - Performing (Cluster 1) and Non-Performing (Cluster 0)**

Group 1: 1 High performance businesses based on ROA and ROE

Group 2: 0 Low performance businesses based on ROA and ROE

Variable	Mean 1	Mean 0	t-value	df	p	Valid N 1	Valid N 0	Std Dev 1	Std Dev 0	F-ratio Variances	p Variances
Requirements	7.4633	7.3508	0.5120	16	0.6156	10	8	0.5220	0.3743	1.9452	0.3924
Evaluation	7.1979	7.2891	-0.6225	16	5.423	10	8	0.3235	0.2888	1.2553	0.7815
Satisfaction	7.6180	7.5283	0.5082	16	6.182	10	8	0.3987	0.3338	1.4261	0.6542
Repeated purchase	7.5191	7.4662	0.2081	16	0.8377	10	8	0.6025	0.4361	1.9087	0.4062
Recommendation	7.4082	7.4828	-0.2832	16	0.7805	10	8	0.6440	0.4132	2.4294	0.2549
Comparison	6.7918	6.8897	-0.4613	16	0.6507	10	8	0.3627	0.5362	2.1845	0.2727

Source: Own calculations.

The next step consisted in establishing whether corporate performance (according to ROA and ROE) correlates with the evaluation of customer satisfaction as a whole, i.e. on the basis of evaluations of all the six above stated characteristics. In this research,



companies were first divided into two clusters – those where respondents (customers) are satisfied, and those where they are dissatisfied (based on the six variables). Subsequently, these clusters were compared to clusters which we gained in sorting companies according to ROA and ROE so that we could assess to what extent these two clusters overlap.

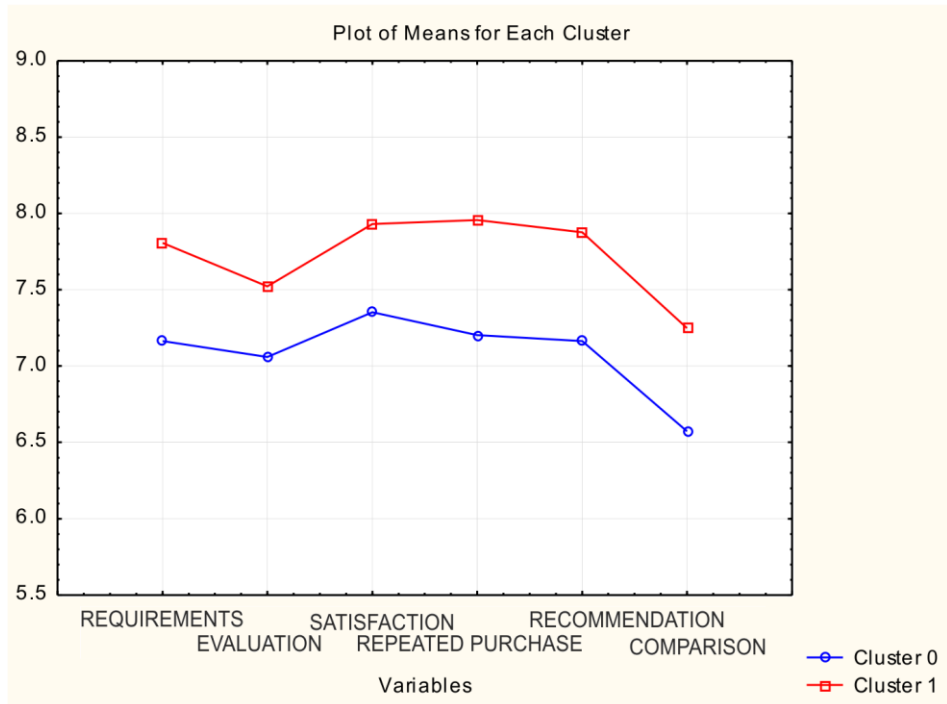
In order to cluster companies, a k-mean method was used, where the target number of clusters was set to the value of 2, and the clustering algorithm started on the 2 first observations. Alternative algorithm with constant distances provided the same results. The two clusters which have arisen can be graphically interpreted by the means of six research questions (see figure 1).

The red cluster in figure 1 can be considered as a cluster of better companies (as seen from the perspective of customer evaluations) since higher values for the six research questions (*Requirements ... Comparison*) are considered desirable. When comparing results received for the clusters based on evaluating customer satisfaction with those of evaluating companies according to ROA and ROE (i.e. their performance level), we have discovered a 61% agreement. This means that in 61% of cases, sorting companies into performing and non-performing according to ROA and ROE brings the same results as when sorting companies by the six questions evaluating respondent (customer) satisfaction. We can therefore assume (although not in terms of statistical significance) that both groups of variables correlate with each other, i.e. customer satisfaction is linked to company performance. The differences detected by cluster analysis served as a motivator for us to use discrimination analysis (as a more precise tool) to investigate the same task as cluster analysis. We assume (due to higher precision of the tool) that the results will be more conclusive.

The last step consists in applying discrimination analysis which will examine whether the studied variables affecting customer satisfaction (variables of *Requirements ... Comparison*) have sufficient power to sort companies into performing and non-performing by using the financial indicators of ROA and ROE. This is therefore a more exact method than the clustering described above as it offers exact tests providing, e.g., p value. The method also enables to establish which of the analysed variables can best sort companies, i.e., which are the most substantial for discrimination.

The six variables related to customer satisfaction were subject to discrimination analysis carried out in order to establish whether they were able to divide companies into two groups; to a significant extent similar to the groups determined by ROA and ROE. That would indicate that the six variables can distinguish between performing and non-performing companies – from the perspective of customer satisfaction. Dividing companies into two groups was subsequently used to form one new canonical variable that is a linear combination of the original six. Thus instead of six, only one value (the so-called canonical score) will be used for each company. Should this value be higher than the defined border value, a company will be placed into the “right” group (among performing companies – according to customer satisfaction), and should the value be lower, then the company will be placed into the “left” group (among non-performing companies – according to customer satisfaction). At the same time, the coefficients for a standardized canonical variable determining the significance of the examined variables of customer satisfaction evaluation can be ascertained (see table 3).

**Figure 1 Division of Companies Into Performing (Cluster 1) and Non-Performing (Cluster 0) According to Variables Affecting Customer Satisfaction**



Source: Own calculations.

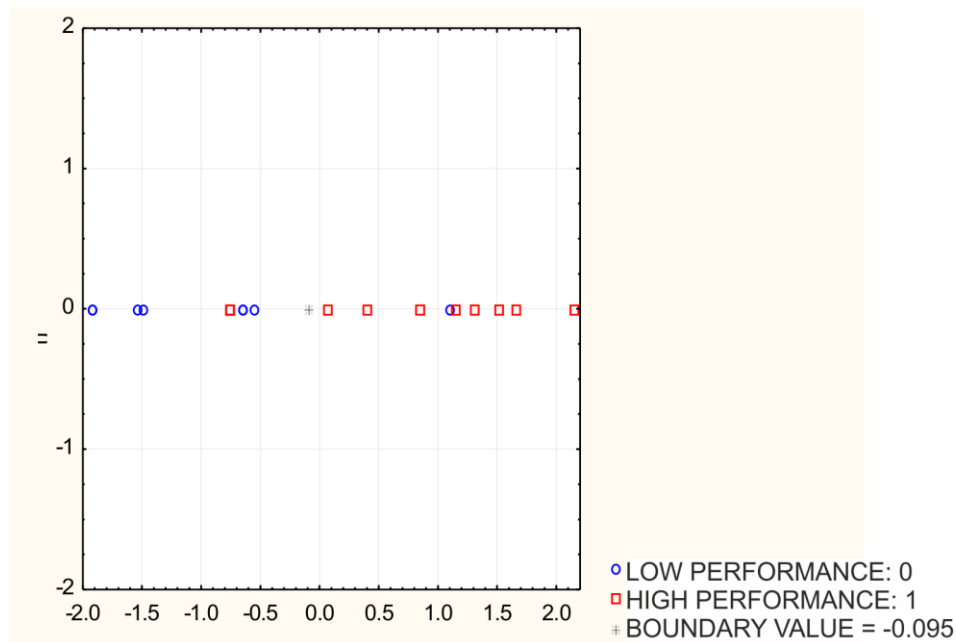
Table 3 shows that variables of Satisfaction and Recommendation are of the highest absolute significance. These two variables (within the sample of companies) thus affect the value of the score most and consequently also the sorting of companies.

The statistical significance of the canonical score of the given variables can be tested further when sorting companies into performing and non-performing. The test is assumed to show multidimensional normality, which can be accepted (bar minor reservations). Even though the test did not prove significance of the canonical score (the value of  $p$  of 0.258 is not lower than 5%, or 10% respectively of significance level), it is smaller than values of  $p$  shown in table 2. Provided the examined variables are considered as a single unit (and not examined separately), they seem to be distinguishing between performing and non-performing companies better. Despite the  $p$  value not emerging as significant, we can expect that from a larger data sample in the future it will be (see figure 2).

**Table 3 Standardised Canonical Variable Coefficients**

	Root 1
Requirements	0.4866
Evaluation	-0.4281
Satisfaction	3.2849
Repeated Purchase	0.2635
Recommendation	-2.3068
Comparison	-1.5460
Eigen val	0.8131
Cum. Prop	1.0000

Source: Own calculations.

**Figure 2 Scores of Companies Split Into Performing (on the Right-Hand Side of the Boundary Value) and Non-Performing (on the Left-Hand Side of the Boundary Value)**

Source: Own calculations.

Figure 2 shows the scores of individual companies where the boundary value of -0.095 separates two groups of companies. The group of companies on the left-hand side of the borderline (the blue circles) are, apart from exceptions (the two companies whose red squares overlap) non-performing companies. With one exception, the companies on the right-hand side of the borderline (red squares) are performing companies. The “left” group (sorted according to *Requirements ... Comparison* evaluating customer satisfac-

tion) is thus almost identical with the group of non-performing companies (sorted by ROA and ROE). Similarly, the group to the right is almost identical with the group of performing companies. Only 3 out of 18 companies were misclassified, meaning that 83% of the companies were sorted identically by customer satisfaction as well as indicators of ROA and ROE. This can be considered to be an excellent (even though, due to low number of companies, not statistically significant) result.

## Discussion

The research shows that respondents (customers) evaluated companies highly (above average) in all parameters studied. The factor of *Repeat purchase*, i.e. the will to buy a product again, was rated highest by the respondents. This is probably linked with the high rating of the *Satisfaction* variable (reaching the highest average score).

On the other hand, the factor of *Recommendation* scored the lowest value, which might reflect the general aversion of people to recommend any kind of product to other customers (in case of satisfaction with a product) or there may be a link with *Comparison*, which reached the lowest levels on average. Despite the positive evaluation of the products of companies under this study, respondents (customers) perceive that these products provide room for improvement in various aspects in comparison with competitors' products. The second worst average scoring of *Evaluation* may be linked with it.

The results show that the aspects of evaluating customer satisfaction individually do not have any significant impact on the performance of a company. The six abovementioned quantities combined, however, seem to affect the performance of a company. Based on this we can conclude that customer satisfaction can be understood in a broader sense as a sum of several factors; here, this is a combination of general customer satisfaction with a product, satisfaction with meeting customer requirements of a product, satisfaction with the technical parameters – with quality. These partial aspects are apparently reflected in the future purchase of the product and with recommending other customers to buy that product. Last but not least, the degree of customer satisfaction can be demonstrated by comparing the product to that of a competitor.

From a long-term perspective, it is apparent that the first three factors (directly linked to customer satisfaction) impact the immediate performance of a company while *Repeat purchase* and *Recommendation* affect future performance of a company. *Comparison of product with competition* serves as a measure of performance because it determines the gap in performance, indicating room for customer satisfaction improvement with a perspective to increase corporate performance.

We believe that these inferences correspond to the findings that the most important factors assessing customer satisfaction with the capacity of dividing companies into well-performing and non-performing are simply those of *Satisfaction* and *Recommendation*. In the long run immediate performance (linked to general satisfaction of customers with a product) and future performance (linked to a recommendation to buy a product) unite.

### Conclusion

As far as the statistical significance of the results is concerned, we cannot regard the connection between customer satisfaction and company performance as proven. However, the results suggest that there indeed is a correlation. More extensive research (in terms of the number of companies in sample) will have to be conducted to verify this.

We assume that despite the statistical insignificance of the results, this paper brings interesting findings. Customer satisfaction does not seem to be a simple (basic) variable; on the contrary, it is composed of several partial variables that affect the company and its performance in a complex manner. Only in this way is the power of the effect sufficient to influence corporate performance.

At the same time, the variables related to customer satisfaction seem to be exerting influence at various time intervals, so the complexity of their effect can best be monitored over a long period of time. For companies this is an important finding since, if they intend to maintain long-term performance, they have to watch not only immediate customer satisfaction but also ensure that customers are satisfied in the future as well. The companies ensure such satisfaction, among others, by the quality of their products, and they logically have to continuously improve that quality (based on the requirements of customers).

Further research should thus examine the influence of the abovementioned factors on company performance as well as mutual relationships and links of individual factors so that it is possible to create a compact unit and a complex model comprising product quality, customer satisfaction and corporate performance. The range of factors might be further extended by price, for example, which affects customer satisfaction on the one hand and company performance on the other, and which is one of the most important factors influencing customer decision-making when buying a product (at least in the Czech Republic).

It is obvious that the characteristics tested are not the only customer satisfaction characteristics, i.e. that there are other factors that influence the satisfaction. With respect to studies by Cooil (Cooil et al, 2007) it can be assumed that these are demographic characteristics (age, income, education) and situational characteristics (expertise and length of relationship). It appears that it is no longer sufficient to have a product tailored just to the needs of the customer (in the technical meaning), but even price and customer service should be taken into consideration (in addition to product quality itself) (Gómez et al, 2004).

It seems that it is necessary to act comprehensively (on a much broader scale) and strategically (long-term) on the customer satisfaction. It is also possible to choose different strategies, i.e. different mix of marketing tools, although the firm must consider the specific impact of this strategy on firm performance (compare to Gómez et al., 2004).

To achieve higher customer satisfaction, it is necessary to determine the optimal mix of marketing tools (i.e. not just the product) and not only with respect to competition, but in particular with regard to the character, preferences and options of the customer. This is not possible without sophisticated research of customer customs, values and preferences. Many Czech businesses are not aware of it and constantly underestimate these

facts (Suchánek et. al, 2013). That is what the cause may be of a different perspective on product quality by the business and its customer.

### Research Limitations

As far as statistical significance of the results is concerned, no link between customer satisfaction and business performance was proven. On the other hand, the results suggest that such a correlation does exist. Nevertheless, it would be necessary to conduct a broader research in which the sample of companies examined would be increased. Despite the statistical insignificance of the results, the article offers interesting findings: It seems that customer satisfaction is not a simple (basic) variable, but rather a composition of several sub-variables arising from a particular company and its performance. Only then is the effect of customer satisfaction strong enough to affect the corporate performance.

As concluded by the findings, conclusions and current researches, the concept of customer satisfaction must be broader and not focused just on the product quality: significant factors influencing satisfaction are omitted and missing in the final models. The product quality has to be better defined with respect to the factors mentioned (price, customer service, specifications). It is also necessary to formulate the questionnaires in order to avoid different understanding of concepts such as satisfaction, quality, expectations, etc. Finally, it was not possible to obtain data from more businesses, which, however, was corrected in subsequent research. In a similar way, it is appropriate to try to get a representative data from consumers. Although the findings are not statistically significant, it can be assumed that the findings will be proved with research which is currently being carried out.

### References

- ANDERSON, E. W., FORMELO, C., LEHMANN, D. R. (1994). Customer Satisfaction, Market Share, and Profitability: Findings from Sweden. *Journal of Marketing*, Vol. 58, No. 3, pp. 53-66.
- ANDERSON, E. MITTAL V. (2000) Strengthening the Satisfaction-Profit Chain. *Journal of Service Research* 3 (2): 107-120.
- BADE, F. J. (1986). The Economic Importance of Small Business and Medium Firms in the Federal Republic of Germany. *New Firms and Regional Development in Europe*. London: Croom Helm, pp. 256–274.
- BARNEY, J. (1991). Firm Resource and Sustained Competitive Advantage. *Journal of Management*. Vol. 17, No. 1, pp. 99–120.
- BERMAN, S. L. et al. (1999). Does stakeholders rientation matter? The relationship between stakeholder management models and firm financial performance. *Academy of Management Journal*. Vol. 42, No. 5, pp. 488 – 506.
- BERNOLAK, I. (1997). Effective measurement and successful elements of company productivity: The basis of competitiveness and world prosperity. *International Journal of Production Economics*. Vol. 52, No. 1, pp. 203 – 213.

BLAŽEK, L. et al. (2008). Konkurenční schopnost podniků (Analýza faktorů hospodářské úspěšnosti). Brno: Masaryk university.

COOIL ET AL. (2007) A Longitudinal Analysis of Customer Satisfaction and Share of Wallet: Investigating the Moderating Effect of Customer Characteristics. *Journal of Marketing* 71, (1): 67-83.

CROSBY, P. B. (1979). *Quality is free: The art of making quality certain*. New York: McGraw Hill Custom Publishing.

ČSN EN ISO 9001 ed. 2, 2010. 56 p.

DAVIDSON, P. (1991). Continued Entrepreneurship: Ability, Need and Opportunity as Determinants of Small Firm Growth. *Journal of Business Venturing*. Vol. 6, pp. 405–429.

DENISON, D. R., ALEXANDER, J. M. (1986). Patterns and Profiles of Entrepreneurs: Data from entrepreneurship Forums. In KIRCHHOFF, B. et al. *Frontiers of Entrepreneurship Research*. Wellesley: Babson College.

DOLLINGER, M. J. (1985). Environmental Contacts and Financial Performance of the Small Firm. *Journal of Small Management*. Vol. 23, No. 1, pp. 24–30.

DUCHESNEAU, D. A., GARTNER, W. B. A. (1990). Profile of New Venture Success and Failure in an Emerging Industry. *Journal of Business Venturing*. Vol. 5, pp. 297–312.

GÓMEZ ET AL. (2004) Customer satisfaction and retail sales performance: an empirical investigation. *Journal of Retailing* 80(4): 265-278.

GU, Z., GAO, J. (2006). Financial Competitiveness of Macau in Comparison with Other Gaming Destinations. *UNLV Gaming Research and Review Journal*. Vol. 10, No. 2, pp. 1-12.

GUPTA, S. (1997). The Dynamics of Competitiveness – Interactive Process between Markets and Assets. *Economic and Political Weekly*. M92-M98.

HABIB, A. (2006). Disaggregated earnings and prediction of future profitability: evidence from industrial groups in Japan. *Review of Accounting and Finance*. Vol. 5, No. 4., pp. 355-369.

HOMBURG ET AL. (2005) Do Satisfied Customers Really Pay More? A Study of the Relationship Between Customer Satisfaction and Willingness to Pay. *Journal of Marketing* 69(2): 84-96.

JOHANNISSON, B. (1993). Designing supportive contexts for emerging enterprises. In KARLSSON, C. B., JOHANNISSON, D. *Small Business Dynamics: International, National and Regional Perspectives*. London: Routledge.

KARNANI, A. (1982). Equilibrium Market Share – A Measure of Competitive Strength. *Strategic Management Journal*, Vol. 3, pp. 43-51.

KEAN, R., GASKILL, L., LEISTRITZ, L., JASPER, C., BASTOW-SHOOP, H., JOLLY, L., STERNQUIST, B. (1998). Effects of Community Characteristics, Business

Environment and Competitive Strategies on Rural Retail Business Performance. *Journal of Small Business Management*. Vol. 36, No. 2, pp. 45–57.

LOSCOCO, K. A., LEICHT, K. T. (1993). Gender, Work-Family Linkages and Economic among Small Business Owners. *Journal of Marriage and The Family*. Vol. 5, pp. 875–887.

LIARGOVAS, P., SKANDALIS, K. (2010). Factors Affecting Firm Competitiveness: The Case of Greek Industry. *European institute Journal*. Vol. 2, No. 2, pp. 184-197.

MILLER, A., WILLSON, B., ADAMS, M. (1988). Financial Performance Patterns of New Corporate Ventures: An Alternative to Traditional Measures. *Journal of Business Venturing*. Vol. 3, No. 4, pp. 287–299.

MOHR, J., SPEKMAN, R. (1994). Characteristics of Partnership Success: Partnership Attributes, Communication Behavior and Conflict Resolution Techniques. *Strategic Management Journal*. Vol. 15, pp. 135–152.

NENADÁL, J. et al. (2002). *Moderní management jakosti – principy, postupy, metody*. Praha: MP production.

O'FARREL, P. (1986). The Nature of New Firms in Ireland: Empirical Evidence and Policy Implications. In KEELE, D., WEVER, E. (Eds.). *New Firms and Regional Development in Europe*, London: Croom Helm.

ORAL, M. (1993). A methodology for competitiveness analysis and strategy formulation in glass industry. *European Journal of Operational Research*. Vol. 68, pp. 9-22.

ORAL, M., OZKAN, A. (1986). An Empirical Study on Measuring Industrial Competitiveness. *Journal of Operational Research Society*. Vol. 37, No. 4, pp. 345-356.

ORSER, B. J., HOGARTH-SCOTT, S., RIDING, A. L. (2000). Performance, Firm Size and Management Problem Solving. *Journal of Small Business Management*. Vol. 38, No. 4, pp. 42–58.

PARASURAMAN, A., ZEITHAML (1985). V. A., Berry, L. L. A Conceptual Model of Service Quality and its Implications for Future Research. *The journal of Marketing*. Vol. 49, No. 4, pp. 41–50.

RICHARD, O. C. (2000). Racial Diversity, Business Strategy and Firm Performance: A resource Based View. *Academy of Management Journal*. Vol. 43, No. 2, pp. 164–177.

ROBINSON, P. B., SEXTON, E. A. (1994). The Effect of Education and Experience of Self-Employment Success. *Journal of Business Venturing*. Vol. 9, No. 2, pp. 141–156.

SEXTON, E. A., ROBINSON, P. B. (1989). The Economic and Demographic Determinants of Self Employment. *Frontiers of Entrepreneurship Research: Babson College Press*. pp. 28–42.

SMITH, N. R., BRACKER, J. S., MINER, J. B. (1987). Correlates of Firms and Entrepreneur Success in Technologically Innovative Companies. *Frontiers of Entrepreneurship Research: Babson Collage Press*. pp. 57–71.



SRINIVASAN, R., WOO, C. Y., COOPER, A. C. (1994). Performance Determinants for Men and Female Entrepreneurs. *Frontiers of Entrepreneurship Research*, Babson College Press. Vol. 1, pp. 43-56.

SUCHÁNEK, Petr et. all. (2013). Vliv kvality na výkonnost a konkurenceschopnost podniku. 1. vyd. Brno: Masaryk University.

VIANE, J., GELLYNCK, X. (1998). Small firms, old traditions equals low profit: pig-meat processing in Belgium. London: Blackie and Professional.

ZAMAZALOVÁ, M. (2008). Spokojenost zákazníka. *Acta Oeconomica Pragensia*, Vol. 16, No. 4, pp. 76-82.

ZEITHAML, V. A., PARASURAMAN, A., BERRY, L. (1988) Delivering Quality Service: Balancing Customer Perceptions and Expectations. New York: The Free Press,

ZEITHAML, V. A. (2000). Service Quality, Profitability, and the Economic Worth of Customers: What We Know and What We Need to Learn. *Journal of the Academy of Marketing Science*. Vol. 28, Iss. 1, pp. 67-85.