ANALYSIS OF THE EFFECT OF PERCEIVED SERVICE QUALITY TO THE RELATIONSHIP QUALITY ON THE BUSINESS-TO-BUSINESS MARKET

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The topic of the paper is focused on elaborating the impact of perceived service quality on the relationship quality at the business-to-business market. The purpose of the research is twofold. First is to expand the findings of only a few studies on the relationship between these variables, as there is no consensus on the nature of their relationship. The second is to deepen the theoretical understanding of the impact of service quality model on the relationship quality. The main research problem is how and to what extent the perceived service quality affects the relationship quality at the B2B market. The investigation of the use of financial services was conducted on a basic set of all hotels in Croatia. The model was tested using correlation analysis. The results of the research confirm the value and applicability of the conceptual model tested at the under-researched field of "service to service" marketing.

1. INTRODUCTION

In the business market as compared to the consumer market, there is a small number of users of financial services that the providers develop stronger relationships with by frequently interacting with them and having a better understanding of their needs. The mutual interdependence between users and

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service providers is a crucial feature of the business market created because of the complexity and risks of the service product and because there is a small number of both alternative providers and quality users of the service (Harrison, 2000).

Providing a quality service is extremely important to the quality of the relationship between providers and users at the business-to-business market. Both concepts are a part of a broader concept of holistic marketing. Service quality is an integral part of the integrated marketing, while the relationship quality is a component of the collaboration and relationship marketing. However, except for a few papers (Caceres and Paparoidamis, 2007, Woo and Ennew, 2004, Wong and Sohal, 2002), there has been no significant interest among researchers in the nature of this relationship.

This paper analyzes the influence of the quality of financial services on the relationship quality of financial institutions and hotels in Croatia. The main source of funding for the real sector in the Republic of Croatia is the banking sector, instead of the capital market. Great development possibilities of Croatian economy, especially of the tourism sector, will direct financial institutions to invest more into the development of the hospitality and into the hospitality industry as such and to develop stronger relationship with those business entities.

An economy that depends on tourism, an unfavorable structure of hotel accommodation and accommodation in general, seasonality of operations and liquidity problems all point to the importance of building and maintaining relationships between hotels and financial institutions. Since considerable investments in new and modern accommodation are needed, the quality of their relationship will determine the long-term fate of the entire Croatian economy. Moreover, since the investments in question are large, it is all the more important that the cooperation among the subjects within the two business entities is based on satisfaction, trust and loyalty so that any possible uncertainty, caused by the actions of a business entity, is reduced to its minimum.

2. LITERATURE REVIEW

During the last several decades, service quality has received more attention from researchers (Duffy, Miller and Bexley, 2006, Arasli, Mehtap-Smadi and Katircioglu, 2005, Gounaris, 2005, Bahia and Nantel, 2000, Cronin and Taylor 1992, Bolton and Drew, 1991, Parasuraman, Berry and Zeithaml, 1990) than relationship quality (Woo and Ennew, 2004, Boles, Johnson and Barksdale, 2000, Crosby, Evans and Cowles, 1990).

There is still no clear definition of service quality although it is important for the strategic planning of a business. Parasuraman, Berry and Zeithaml (1990) argue that the area of service quality is still quite undefined and unexplored, and point out that:

1. service quality is more difficult to evaluate than product quality;
2. the perception of service quality results from the comparison of customers' expectations with the actual service performance;
3. quality assessment is carried out not only on the final result of a service but it also includes an evaluation of the distribution services process.

Different authors propose different definitions, but still agree that "service quality is not something that everyone does well" (Rahman, 2004). Service quality is extremely important at the business-to-business market because of the impact it has on the services that the business entity provides to its end users. Vickery et al. (2004) emphasize the distinction between retail services and industrial services that are much more complex and uncertain and are characterized by mutual interdependence with other services. The level of quality service that the company provides to its business customers largely determines their business relationship. As business relationship is extremely important, services at the business-to-business market are provided only by highly skilled professionals who constantly interact with the managers of the business partners in order to be able to offer a completely unique solution of specific problems.

Service quality has a strong impact on the quality of the relationship between banks and hotels at the business-to-business market. Arasli, Mehtap-Smadi and Katircioglu (2005) say that "service quality is an abstract concept and as such difficult to measure" and that care should be taken when selecting measuring instrument whose characteristics could best cover all the specific elements of using financial services at the business-to-business market.

A conceptual model of this study (Figure 1) heavily relies on a research by Gounaris (2005). The author analyzed for the first time the perceived service quality at the business-to-business market uniting all four dimensions of service quality previously suggested in the literature at the business-to-business market. The nature of the professional services is more complex at the B2B market as compared to the consumer market consumption primarily due to the wider social importance of the service results. Gounaris (2005) modeled the concept of service quality as a higher order construct, which comprises of four dimensions, namely: potential quality, soft process quality, hard process quality, and quality of results.

Only a few papers have explored the relationship between service quality and relationship quality (Caceres and Paparoidamis, 2007, Woo and Ennew, 2004,

Wong and Sohal, 2002), and there is no consensus among researchers on the nature of the relationship between these two concepts. Woo and Ennew (2004) argue that the relationship quality precedes and has a positive impact on service quality, satisfaction and behavioral intentions of business customers. The results of their study show a positive and direct impact of the relationship quality on the service quality. The authors suggest there is a linear chain of influences between variables where the relationship quality has a positive effect on service quality, service quality has a positive effect on the satisfaction of business customers, and satisfaction has a positive effect on their subsequent behavioral intentions. Paparoidamis and Caceres (2007) have a contrary opinion on the cause-effect relationship between these two variables. The authors refer to a multitude of scientific studies which confirm the service quality as a precursor of satisfaction (Cronin and Brady, 2001, Parasuraman, 1998, Cronin and Taylor, 1992) and raise and prove the proposition that service quality has a positive and direct impact on the relationship quality. Before them, Wong and Sohal (2002) also proved that there is a positive and direct relationship between the service quality and the relationship quality.

However, an important starting difference between these papers is that Woo and Ennew (2004) define the relationship quality as an integral part of the overall service quality, while Caceres and Paparoidamis (2007) make a clear distinction between the variables. Consequently, Woo and Ennew (2004) define the relationship quality as a higher-order construct, which consists of three dimensions: cooperation, adaptation, and atmosphere, as opposed to Caceres and Paparoidamis (2007) who see the variable as a component of trust, commitment and relationship satisfaction. Caceres and Paparoidamis (2007) empirically verify that relationship satisfaction has a mediating role between quality service on one side and trust, commitment and loyalty on the other side of the conceptual model. Therefore, the following main and auxiliary hypotheses were developed (see also Figure 1).

Hypothesis 1. There is a positive correlation between service quality and relationship quality at the business-to-business market.

Hypothesis 1.1. There is a relationship between service quality and satisfaction with the relationship at the business-to-business market.

Hypothesis 1.2. There is a relationship between service quality and trust at the business-to-business market.

Hypothesis 1.3. There is a relationship between service quality and commitment at the business-to-business market.
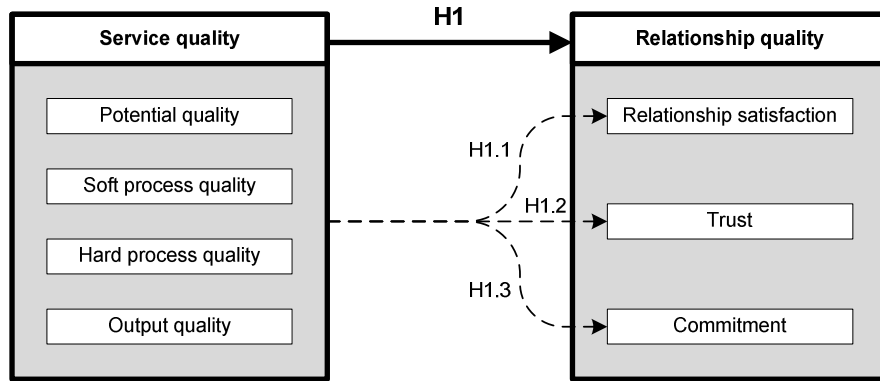
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Figure 1. Theoretical framework

3. RESEARCH METHODOLOGY

Empirical research was carried out by the survey method. The data were collected using a questionnaire consisting of three different measurement scales, previously used and named in the professional literature, which include the following:

1. scales for measuring service quality (Gounaris, 2005),
2. scales for measuring trust and commitment (Morgan and Hunt, 1994), and
3. scales for measuring relationship satisfaction (Kekre, Krishnan and Srinivasan, 1995).

Measurement scales have been slightly modified and adjusted to the requirements of our research. The research model was tested using correlation analysis. The study was conducted on the total sample of 698 tourist facilities. The questionnaire respondents were financial managers of the tourist facilities responsible for negotiating the use of different financial products or services offered by financial institutions. The actual number of questionnaires analyzed was 356, which equals a response rate of 51%.

4. EMPIRICAL FINDINGS

The main and auxiliary hypotheses were tested empirically. The results of canonical correlation analysis of the relationship between the perceived service quality and relationship quality at the business-to-business market are presented in tables 1-6.

Each of the dimensions of service quality (SQ) was formed using principal component analysis (PCA) so that the canonical correlation analysis could be conducted between the dimensions of service quality and the dimensions of relationship quality. First, the relationship between the variables of service quality and relationship satisfaction was analyzed.

Table 1. Canonical correlation between the dimensions of service quality and relationship satisfaction

	Eigenvalue	Canonical correlation	Wilks' Lambda	Chi-Square	Degrees of freedom	p-value
1	0.789611	0.888601	0.210389	548.697	4	0.0000

Source: Authors' calculation.

Results of the canonical analysis (see Table 1 and Figure 2) show that there is a linear combination between the two sets of canonical variables i.e. between the dimensions of service quality and relationship satisfaction.
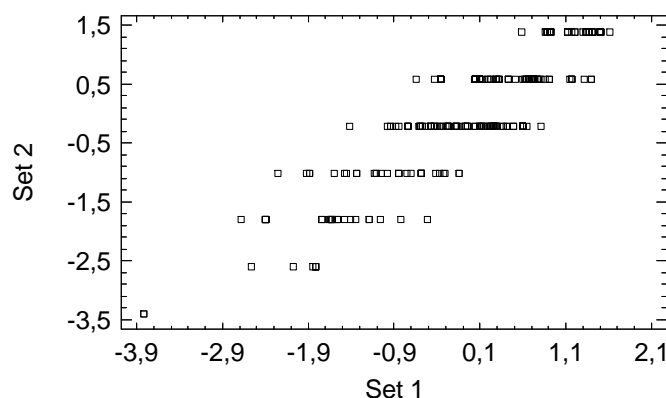

Figure 2. Scatter plot with two sets of variables (service quality and relationship satisfaction)

Note: Values of canonical variables are standardized in all the graphs (Figures 2, 3 and 4). A positive correlation of relatively high intensity can be observed on all graphs.

Based on the value of the canonical correlation coefficient of 0.88860, we can say that these sets have a statistically significant correlation with a confidence level of 95%. The correlation between these variables is positive and strong. Therefore, the **auxiliary hypothesis H1.1 can be considered as valid.**

The results of canonical correlation analysis (see Figure 3 and Table 2) show that there are four linear combinations between two sets of variables (service quality and trust) that possess the highest mutual correlation.
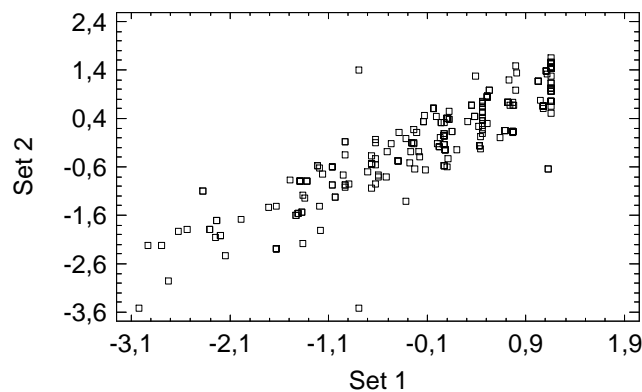

Figure 3. Scatter plot with two sets of variables: service quality and trust

Table 2 shows the correlation of the estimated value of all linear combinations of sets of canonical variables.

Table 2. Canonical correlation between the dimensions of service quality and trust

	Eigenvalue	Canonical correlation	Wilks' Lambda	Chi-Square	Degrees of freedom	p-value
1	0.792184	0.890047	0.146759	670.678	24	0.0000
2	0.181383	0.425891	0.706198	121.577	15	0.0000
3	0.123516	0.351448	0.862672	51.6284	8	0.0000
4	0.015759	0.125535	0.984241	5.55165	3	0.1356

Source: Authors' calculation.

Based on the value of the total canonical coefficient R of 0.89005 (see Table 3), and given that three out of the four linear combinations of canonical variables have the empirical significance level (p-value) of less than 0.05, one can conclude that there is a strong observed correlation between the two sets of canonical variables and a strong correlation between the dimensions of service quality and trust. Therefore, **the second auxiliary hypothesis H1.2. can be considered as valid.**

Table 3. Summary of the results of the canonical correlation analysis between the dimensions of service quality and trust

Summary of canonical analysis			Set: trust	Set: psychological contract
Canonical R	0.89005	**Number of variables**	6	4
Chi-Square	670.68	**Average variance extracted**	95.9226%	100.000%
p-value	0.0000	**Overall redundancy**	67.0523%	68.3741%

Source: Authors' calculation.

A canonical correlation analysis was conducted between the sets of variables of service quality and commitment. The results of canonical correlation analysis (see Figure 4 and Table 4) show that there are four linear combinations between two sets of variables (service quality and commitment) that have the highest mutual correlation.
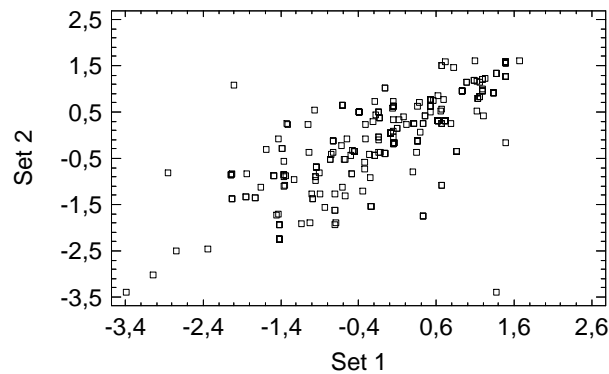

Figure 4. Scatter plot with two sets of variables: the service quality and commitment

Table 4 shows estimated values of correlations of all linear combinations of sets of canonical variables.

Table 4. Canonical correlation between the dimensions of service quality and commitment

	Eigenvalue	Canonical correlation	Wilks' Lambda	Chi-Square	Degrees of freedom	p-value
1	0.580003	0.761579	0.330298	387.162	24	0.0000
2	0.178335	0.422298	0.786429	83.9684	15	0.0000
3	0.0259604	0.161122	0.957117	15.3185	8	0.0532
4	0.0173739	0.13181	0.982626	6.12554	3	0.1057

Source: Authors' calculation.

Based on the value of the total canonical coefficient R = 0.76158 (see Table 5), and given that most of the linear combinations of canonical variables have the empirical significance level (p-value) of less than 0.1, we can say that there is a medium intensity correlation between the two observed sets of canonical variables i.e. a medium intensity correlation between the dimensions of service quality and commitment. Therefore, **the auxiliary hypothesis H1.3 and, ultimately, the hypothesis H1 can be considered as valid.**

Table 5. Summary of the results of the canonical correlation analysis between the dimensions of service quality and commitment

Summary of canonical analysis			Set: commitment	Set: service quality
Canonical R	0.76158	**Number of variables**	6	4
Chi-Square	387.16	**Average variance extracted**	88.7642%	100.000%
p-value	0.0000	**Overall redundancy**	40.3501%	47.3059%

Source: Authors' calculation.

After conducting canonical correlation analysis between the two sets of variables (service quality and relationship quality), a further correlation analysis was conducted between the four individual dimensions (latent variables) of service quality pre-calculated using principal components analysis, and the three-dimensional relationship quality.

Table 6. Canonical correlation between the dimensions of service quality and relationship quality

	Relationship quality	Trust	Commitment
Potential quality	0.7879	0.7432	0.5785
Hard quality	0.8639	0.8503	0.6795
Soft quality	0.8168	0.8073	0.5939
Quality of the results	0.8393	0.8305	0.7384

Source: Authors' calculation.
Note: p-value of all correlations is 0.000 and the sample size is 356.

Table 6 shows that three out of four dimensions of service quality (hard and soft quality and the quality of the results) have a statistically significant correlation (with a confidence level of 95%). The dimensions of relationship satisfaction and trust are positive and of strong intensity. The same dimensions of service quality have a statistically significant correlation with commitment and are positive and of

medium intensity. "Potential quality", the fourth dimension of service quality, has a statistically significant correlation with all dimensions of quality relationships that are positive and of medium intensity.

5. HYPOTHESES ANALYSIS

The relationship between service quality and the dimensions of relationship quality was analyzed using canonical correlation analysis, in order to accept or reject the main hypothesis (H1) and the associated auxiliary hypotheses. Testing the first auxiliary hypothesis (H1.1) proved the existence of a statistically significant relationship of a positive direction and high intensity (R = 0.88860) between the perceived service quality and satisfaction with the relationship. It can therefore be concluded that the hotels that perceive higher quality of banking services are more satisfied with their mutual relationship. Therefore, the auxiliary hypothesis (H1.1) can be considered as valid. Furthermore, the results of the canonical correlation analysis used to test the second auxiliary hypothesis (H1.2) show that there is a statistically significant, strong correlation (r = 0.89005) of a positive direction between the perceived service quality and trust, which means the auxiliary hypothesis (H1. 2) can be considered as valid. The results of the research show that the hotels that perceive a higher quality of banking services have more confidence in their main bank. In addition, the relationship between perceived service quality and commitment (H1.3) was also analyzed. The results show that it is a statistically significant relationship of a positive direction and of medium intensity (r=0.76158). The conclusion is: the bigger the perception of the quality of banking services in hotels, the more they believe in the importance of ongoing relationships with banks and will invest maximum efforts in order to maintain a long-term business relationship. Based on these results, the auxiliary hypothesis (H1.3) is accepted. **Finally, by accepting the auxiliary hypotheses (H1.1), (H1.2) and (H1.3), the hypothesis (H1) on the existence of a relationship between the service quality and relationship quality in the business-to-business market is confirmed,** which is in line with the results obtained by Caceres and Paparoidamis (2007).

6. CONCLUSION

This study examined the relationship between service quality and relationship quality among the sample of Croatian tourist facilities active in the financial services market. The major finding is that service quality, and especially its dimensions- hard and soft quality and the quality of the results, is an important predictor of the development of relationship quality, which is a crucial part of business networking especially between the firms in the professional services context.

As the presented results indicate, marketing activities in competitive business networks mainly depend on the dimensions of relationship quality: trust, commitment and relationship satisfaction. In order to improve the relationship, marketers have to develop and maintain all aspects of services and relationships under their control.

The sample used in this study is appropriate and highly representative of the Croatian hotel industry. However, there are some limitations of the research which need to be considered. First, the presented study used data collected in one country, thus limiting generalization of the findings. This study attempted to examine the relationship between hotels and banks on the financial services market. Therefore, the results might be relevant in the financial services context. Further studies should apply the theoretical model used in this paper to analyze other types of professional relationships on the service to service market in different countries in order to be able to generalize the results of this study. General limitation of any survey-based method, including the one used in this study, involves measurement error. Finally, to improve the understanding of the relationship on the business to business market, more variables could be included in the model such as customer satisfaction, loyalty, psychological contract, etc.

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ANALIZA UTJECAJA PERCIPIRANE KVALITETE USLUGA NA KVALITETU ODNOSA NA TRŽIŠTU POSLOVNE POTROŠNJE

Sažetak

Tema rada je usmjerena na elaboriranje utjecaja percipirane kvalitete usluga na kvalitetu odnosa na tržištu poslovne potrošnje. Svrha istraživanja je dvojaka. Nadograditi se na do sada svega nekoliko radova u kojima je istraživana veza između navedenih varijabli, a gdje nema konsenzusa među autorima o prirodi njihova odnosa te produbiti teorijske spoznaje o modelu utjecaja kvalitete usluga na kvalitetu odnosa. Slijedom navedenog, glavni problem istraživanja je kako i u kolikoj mjeri percipirana kvaliteta usluga utječe na kvalitetu odnosa na tržištu poslovne potrošnje. Empirijsko istraživanje korištenja financijskih usluga provedeno je na osnovnom skupu svih hotela u Republici Hrvatskoj. Model je testiran korelacijskom analizom. Rezultati istraživanja potvrđuju vrijednost i primjenljivost testiranog konceptualnog modela na još uvijek nedovoljno istraženom području „service to service" marketinga.