IDENTIFICATION OF KEY DETERMINANTS OF SATISFACTION OF USERS OF ELECTRONIC BANKING SERVICES

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Abstract: Under the conditions of increased competition, imperatives for banking institutions are focusing on the provision of better quality services, meeting the needs of clients and adjusting to their specific demands, as these are the conditions for achieving satisfaction. Satisfaction has a consequent effect on the realisation of communication, but also economic business goals of market players. In accordance with these facts, the significance of measuring the quality of services needs to be pointed out. In recent years, the tendency of increase in the number of bank clients who use electronic banking services has been perceived in the Republic of Serbia. Advantages of this modern service are numerous, and the ones that stand out among them are saving time, more favourable price, comfortable and fast transaction execution. The purpose of this paper is to examine the satisfaction of clients in relation to electronic banking services, i.e. to come to a conclusion which elements of service quality have an impact on satisfaction, as well as to assess the intensity of such impact. In order to obtain the necessary information, we have used the measures of descriptive statistical analysis, reliability analysis, correlation and regression analysis. The data have been collected using the survey method and the questionnaire distributed to respondents for the purpose of specific research has been created on the basis of previous research in the quality of service field. The results have shown that three dimensions of modified SERVQUAL model (security, ease of use and responsibility) have a statistically significant impact on satisfaction, while other factors (reliability, empathy and website

content) have, in their joint effect, indicated a non-significant impact on satisfaction. The contribution of this paper is reflected in the fact that the identification of factors (reliability, empathy, website content) that have not achieved a significant impact in their joint effect on the satisfaction of clients with electronic banking can be a signal for the management of financial institutions to take action in order to reduce the perceived risk, maintain trust, provide training and development of employees, modernize website appearance.

1. Introduction

The banking market in the Republic of Serbia has in recent years been marked by intense and dynamic changes. Institutional reforms, expansion of the portfolio of banking products and services, globalisation of banking activities are just a few examples of changes the banking sector has been facing lately (Marinković, Obradović, 2012). In addition to these changes, a major impact on bank operations is achieved through new trends in client behaviour. As in other service sectors, this refers primarily to savings and rationality that are becoming significant characteristics of their behavior (Jeary, 2009). Lack of time and the general dynamics of everyday life affect clients in such sense that they look for more comfortable and faster ways of transaction execution. In this respect, we point out the significant changes in client behaviour caused by the Internet as a global interactive medium (Stanković et al., 2012) and the phenomenon of the modern age that impacts all aspects of people's life and work.

Apart from the fact that the Internet exercises its impact at social, legal and consumer level, companies and the banking sector are also under pressure to apply new information-communication technologies more intensively (Liébana et al., 2013).

Four factors affecting the acceptance or non-acceptance of electronic banking are (Parasuraman, 2000):

• Optimism - extent to which people have a positive outlook on technology and believe it brings them greater control, flexibility and efficiency in life,

• Innovativeness – extent to which people are technological leaders and opinion leaders,

• Discomfort – extent to which people perceive the lack of control over technology and feel overwhelmed by it and

•   Uncertainty – extent to which people do not trust technology and doubt its ability to function properly.

If the level of optimism and innovativeness is higher, the extent of acceptance of electronic banking is also higher. On the other hand, greater discomfort and uncertainty affect the end result in such a manner that the extent of non-acceptance of this on-line service is greater.

Data of the Statistical Office of the Republic of Serbia at the end of the third quarter of 2014 show a tendency of increase in the number of households owning a computer (63.2%) and also an increase in the number of households with the Internet access (62.8%) (www.stat.gov.rs). According to data obtained from the National Bank of Serbia, there has been an increase in the number of users of Internet banking in the Republic of Serbia.

Table 1 Total number of bank clients and total number of users of Internet banking

Quarter	I/2013	II/2013	III/203	IV/2013	I/2014	II/2014
Total number of clients	8.446.666	8.408.376	8.452.502	8.475.949	8.517.231	8.561.581
Internet banking	892.905	924.730	962.684	991.424	1.019.637	1.061.917

Source: Customized according to: www.nbs.rs, National Bank of Serbia, date of access Sept. 17th, 2014.

The number of users of Internet banking in relation to the total number of bank clients at the end of the second quarter of 2014 amounted to approximately 12,40%. In developed countries such as the United States, for example, this percentage amounted to approx. 40% in 2010 (Nilay Yajnik, 2013).

Banks offer their financial services via the Internet and want to accelerate the process of adoption of this business method since they are aware that the costs of providing services in this way are lower in comparison to the traditional way of going to the bank and paying over the counter (Polatoglu, Ekin, 2001). Also, in line with the general trend present when it comes to consumer behavior, consumers/clients in the Republic of Serbia today have high demands regarding the quality of products and/or services they use, while additional competition among the offering parties imposes the need for continuous quality improvement in order to increase the level of satisfaction (Maričić et al., 2012).

This research has been created in order to determine the degree of satisfaction of users of on-line banking services as well as the factors that determine satisfaction to the greatest extent. The preparation of this paper included the application of a SERVQUAL model adapted in accordance with the specifics of electronic banking services. Although the influence of

SERVQUAL model dimensions on client satisfaction was researched extensively in the past, a lesser number of researches focused on the analysis of the said variables in the field of electronic banking. Empirical research by applying the surveying method was used to collect data from 108 clients of banks operating within the territory of the Republic of Serbia. The results of this research are useful in multiple ways since they provide the management with an insight into the attitudes of clients regarding the quality of services. In this way it is possible, on the one hand, to undertake corrective measures to improve certain satisfaction determinants, or improve the quality of those determinants with which they are already satisfied, and provide the quality that will thrill them.

2. Literature Overview

2.1. Quality of Services

Quality of services is a concept that has attracted much attention and discussion in research literature because there have been difficulties in defining the quality of services and also there is no general consensus when it comes to measuring the quality of services (Wisniewski, 2001).

Difficulties in defining the quality of services arise from certain characteristics of services such as intangibility, a high degree of contact between the service provider and consumer (client), the fact that the process of providing services is visible to a large extent, simultaneous production and use of a service.

Personal views of users play an important role in efforts to define the quality of services, and also participate in a certain way in the creation of additional difficulties. Namely, what one user assesses as top quality may seem average or even below average to another (Marinković et al., 2011). Accordingly (Garvin, 1984), concludes that quality lies in the eye of the beholder. Specifically, the elements that include habits, attitudes, experiences, value set or social class of an individual are just some of the factors that determine the manner in which a person can perceive quality (Marinković, Senić, 2012).

In the service sector, the definitions of quality of services are focused on meeting consumer needs and demands, and how well a delivered service meets consumer expectations (Lam, Zhang, 1999). In line with this, the quality of services can be defined as the difference between customer expectations and their actual experiences. If expectations are greater than performance, such quality is regarded as unsatisfactory which further affects the creation of dissatisfaction" (Parasuraman et al., 1985; Lewis, Mitchell, 1990).

When speaking of quality, quality of service is inextricably linked to the quality of the service provider. This means that utility workers will treat consumers well if they themselves feel that their company treats them well. It is therefore very important to choose adequate people who will primarily be able to satisfy consumers and solve their problems. Physical environment refers to the natural environment in which a service is provided. In this sense, researches are focused on the ambience of space in which the service is "received", general atmosphere, décor, effect of colours, brightness. The process is related to procedures, mechanisms and activity flow based on which services are delivered to consumers. The time of waiting for service execution can affect satisfaction and loyalty (Salai, Božidarević, 2009). In terms of production processes, customers are actually those who are quite often directly involved in the transaction and represent a part of the overall service delivery system. If the customers are perceived as service co-producers but are not doing their job well, the overall quality of service can be compromised significantly (Marinković et al., 2011).

Generally speaking, there are two general approaches to the quality of services. According to the first, the quality of services is based on a comparison of customer expectations regarding the service to be delivered and actual perceptions in relation to the service delivered. (Grönroos, 1984; Parasuraman et al., 1985). Another approach suggests that measuring the quality of services should include only customer perceptions (Caro, García, 2007).

Certain authors believe that quality consists of two dimensions, functional and technical. The functional dimension refers to how a service is delivered, while the technical relates to what the customer receives as a result of the service provided (Grönroos, 1982).

Delivery of financial services over the Internet should be observed as a partial part of the overall customer service and distribution strategy. In addition to the fact that client migration to electronic banking system results in significant savings for the bank, clients themselves obtain a number of benefits (Sathye, 1999). Banks have in mind the increasing customer expectations in terms of service quality, which express the need for instant access to information at any time and from any location (Li**é**bana et al., 2013).

The most significant advantages of electronic banking are convenience, security, efficiency and cost effectiveness and they largely exceed the benefits of traditional banking. Leading Chinese banks have also implemented on-line banking as an additional service, expressing their three advantages for clients, such as guarantee of safety of client funds, service accessible 24/7 and favourable price for each successful transaction, while the unsuccessful ones are not charged, and the entire process is completed within seconds after the user sends his/her message (Xiaoyan Li S.L., 2005).

Over the years, in literature that deals with research of services, a large number of models has been developed with an aim to explain what affects the quality of services, as well as to measure the overall quality of service. Most of these models are a comparison of expected and delivered service (Grönroos, 1982). Based on this model Parasuraman et al. (1985) created a model with five gaps, which was later used to create a model that contains 22 questions/findings for evaluating the quality of service-SERVQUAL (Parasuraman et al., 1988). This model comes down to measuring reliability, responsibility, security, empathy and tangibility which have been identified as the five most critical dimensions of the quality of service.

When it comes to researches on the quality of services in banking, especially in the field of electronic banking, one could say that the majority of researches applied the SERVQUAL model or some of its modifications. Certain authors advocate that the SERVQUAL model is not applicable in all service areas, and some of them suggest a multidimensional and hierarchical model where quality is seen as a construct of the highest order, defined by three dimensions of the second order – personal interaction, physical environment and outcome, which are further defined by seven dimensions of the third order – behaviour, expertise, problem solving, equipment, ambience, waiting time and valencies (Caro, Garcìa, 2007). Despite the criticism, the SERVQUAL model was applied in this research (Marinković et al., 2011).

2.2. Satisfaction and Measuring Satisfaction

Customer satisfaction in modern business management is one of the key factors of growth of competitive advantage and profitability of a company (Maričić, 2011). In addition, satisfaction is regarded as one of the main objectives of marketing, but also means to achieve other goals such as profit, market share, loyalty (Maričić et al., 2012). Satisfaction is a directly experienced by purchasing and using products and services as a result of created and delivered value (Johson, Wenhstein, 2007). Satisfaction depends directly on the benefits of a product or service to consumers (Maričić et al., 2012).

Expectations of customers are often referred to in connection with the concept of satisfaction. Specifically, expectations are thought to create a frame of reference about which one makes a comparative judgment. Thus, outcomes poorer than expected (a negative disconfirmation) are rated below this reference point, whereas those better than expected (a positive disconfirmation) are evaluated above this base.Authors Oh and Parks (1997) propose a model of non-confirmation of expectations. The reaction of consumers to the assessment of the difference between previous expectations and actual performance of service offer corresponds to realized satisfaction. Positive confirmation occurs if the product is better than the consumer expects, and the consequence of that is

user satisfaction. However, performance poorer than expected provide negative confirmation, i.e. dissatisfaction (Lam, Zhang, 1999). In this regard, the delivery of service offer achieves satisfaction if the previous expectations of product consumers/service users are at least fulfilled, or even exceeded if possible (Grubor, 2011).

From a marketing perspective, consumer/client satisfaction is achieved when his needs and desires are fulfilled. Electronic banking, as an integral part of the general bank business strategy, provides higher quality services and thus a higher level of client satisfaction. New relationships with clients are built in this way with an aim to learn about their needs. Satisfaction is a determinant that facilitates the personalisation/customerisation of banking services, assists the development and maintenance of long-term relationships and improvement of profitability, enhancement of loyalty, reduction in the rate of departures (Liébana et al., 2013).

In many cases, financial institutions are not concerned about the assessment and measurement of satisfaction of users with electronic banking service, but also are not interested to improve their effectiveness and efficiency, which would later lead to achieving higher rates of satisfaction and profitability (Liébana et al., 2013).

Measuring satisfaction is sometimes difficult since it is a latent variable that depends on the subjective perception of the customer on the quality of a product or service. During measuring, it is very important to identify the adequate variables, i.e. attributes to be measured (Marinković et al., 2011). Measuring satisfaction is very important because the conditions for successful marketing management and determining the effectiveness and efficiency of various marketing programs, concepts and instruments are created in this manner. Effects can be reviewed and adequate measures of business improvement can be reviewed based on results.

The current level of client satisfaction with banking services worldwide is perhaps best evidenced by the results of a research conducted by a famous company, "Ernst & Young", published in 2011. The research which included more than 20,500 individuals from Europe, the USA, Canada, China, Japan, India, Latin American countries and South Africa, revealed, among other things, that internet banking, ATMs and branches are channels for the provision of banking services which clients around the world are mostly satisfied with.

According to the American Customer Satisfaction Index (2011) report, the on-line banking is preferred in relation to other channels available to bank clients. The data imply that this percentage amounts to 55%, branches were chosen by 28% of clients, ATMs 13%, where only 2% opted for calling call centers and mobile banking (Liébana et al., 2013). This report states that, despite the complicated situation in the banking sector, primarily referring to the

financial crisis and the creation of mergers and acquisitions, the general level of user satisfaction with electronic banking has increased in the previous years, reaching a level of over 80%. Also, the report cites that the level of satisfaction with electronic banking is approximately 20% higher than satisfaction with banking in general.

Finally, it is very important to measure consumer satisfaction and have knowledge of the determinants that define it. In this sense, this is important for banks as well, since in this way they can obtain returns on investment (Liébana et al., 2013).

2.3. Demographic Profile of Users of Electronic Banking

Dynamism that is evident in the business world largely influences the behaviour of consumers, i.e. users of certain services. Results of numerous studies have created a profile of an average user of electronic banking.

Howcroft et al. (2002) found that younger users valued more those benefits of electronic banking which are reflected in convenience and time saving, compared to older consumers. Younger consumers consider the lack of face-to-face contact to be less important, in comparison to older clients. On the other hand, a lower degree of face-to-face contact that is typical for the electronic banking field is the basis for maintaining strong relationships with clients (Marinković, Obradović, 2012).

Howcroft et al. (2002) conducted a research which also found that the level of education does not affect the use of electronic banking. However, Karjaluoto et al. (2002) obtained information that a typical user of electronic banking in Finland is a highly educated, relatively young and wealthy person with good knowledge of computers, especially the Internet. Research conducted by authors Sarel and Marmorstein (2003a,b) proved that household income and education have a significant impact on the acceptance of electronic banking among mature Finnish clients. Singh (2004) used his study to obtain information that, in South Africa, Internet banking is applied more among men than women, and that users belong to the category of employed people with high earnings.

Certain authors (Gerrard et al., 2006) found that those who accept Internet banking perceive this service as something that is compatible with their lifestyle. On the other hand, those who do not accept these services perceive them as more complex, and also believe that their application requires a higher level of computer skills.

Empirical results show that satisfaction with electronic banking services is a specific phenomenon and that it varies among certain client segments. For example, the highest level of confidence in the banking system in general can be

found in Malta, Finland and Luxembourg and the lowest in Spain (Järvinen, R.A., 2014). As for the situation in the Republic of Serbia, research from 2008 showed that SMS notifications and electronic banking was mostly used by persons under 40 years of age, highly educated, students or employees, mostly with higher earnings. (TNS Medium Gallup (2008) The results of this research show that an average user of electronic banking in the Republic of Serbia is a highly educated female person, age 26-35. They are mostly employed people living in urban areas.

3. Research Methodology

In order to measure the level of bank client satisfaction with electronic banking, but also to obtain information about the extent to which satisfaction is determined by certain aspects of service offer, field research was conducted using the survey method.

The research included 108 respondents who were clients of one of 16 banks that appeared within this research as service suppliers. The data were collected during the period from September 11th, 2014 to September 27th, 2014 in the city of Novi Sad. The content of the questionnaire was divided into two parts. In the first part, the respondents stated their basic demographic characteristics (gender, age, qualifications), and also which bank was their choice when it comes to using electronic banking services. The second part of the questionnaire consisted of 28 statements divided into 7 groups. The findings were related to the assessment of quality of services and were tailored to the specific research based on researches of eminent authors in the field of assessing the quality of services.

The basis for the creation and evaluation of four dimensions of quality of service (reliability, responsibility, security and empathy) was the SERVQUAL model (Parasuraman et al, 1988; Lam, Zhang, 1999). Also, the research covered two more dimensions of quality of services relating to the ease of use of electronic banking service and website contents, designed based on studies conducted by Liébanaet et al. (2013). Satisfaction was measured using the parameters applied in ACSI (American Customer Satisfaction Index) model (Fornell et al., 1996).

Certain authors (Maričićet.al., 2012) state that it is necessary to measure the impact of each variable on the degree of satisfaction with 2-6 findings, and this recommendation was applied in this research where the number of findings ranges from 3 to 5. The degree of agreement with the above findings was marked by respondents using the five-point Likert scale, where score 1 meant "strongly disagree" while score 5 meant "strongly agree". The SPSS package (The Statistical Package for the Social Sciences) was used for processing and

analysis of data collected. Statistical methods used in this study were descriptive statistical analysis, analysis of value of the Cronbach's alpha coefficient, correlation and regression analysis.

The first step included the application of descriptive statistical analysis to the whole sample and calculation of arithmetic mean and standard deviation for each finding. The degree of bank client satisfaction with various elements of electronic banking services was measured in this way, along with the establishment of homogeneity of respondent attitudes. In the next step, the reliability and internal consistency of variables were measured on the basis of Cronbach's alpha coefficient. The degree of mutual dependence of newly formed variables of the model was established via correlation analysis in the third step. The fourth task was related to regression analysis. Simple regression analysis examines the individual impact of each of the dimensions of quality of service on satisfaction. That is, it examines the effect of each independent variable on dependent variables. Multiple regression analysis was applied in order to examine the impact of all the dimensions of quality of electronic banking service on client satisfaction. The multicollinearity problem was examined by measuring the value of VIF (variance inflation factor).

The sample included more female respondents (55.6%) compared to the number of surveyed male respondents (44.4%).

As for age structure, half of the respondents belonged to the 26-35 years of age category (50.9%), followed by respondents aged 36-45 (35.2%). Respondents aged 46-65 amounted to 10.2%, while the smallest number of respondents belonged to the 25 or less years of age category with only 3.7%.

Regarding their qualifications, most respondents were highly educated persons (42.6%), followed by persons with Master's/doctoral degree (25%), then respondents having high school diplomas (23.1%) while the smallest number of respondents had university degrees (9.3%).

Table 2 Sample structure (n=108)

Demographic profile	Number of respondents (n)	Percentage (%)
Gender		
Men	48	44,4
Women	60	55,6
Age		
To 25 years	4	3,7
26-35 years	55	50,9
36-45 years	38	35,2
46-65 years	11	10,2
Over 65 years	0	
Professional qualifications		
Primary school	0	0
High school	25	23,1
University degrees	10	9,3
Highly educated	46	42,6
Master's/doctor's degree	27	25,0

Source: Authors' calculation

4. Research Results

The values of arithmetic mean and standard deviation based on 28 selected findings were calculated by applying descriptive statistical analysis. Using the entire sample, the results indicate that respondents are generally moderately satisfied with the quality of electronic banking service.

The most favourable client attitude was expressed for the claim that Internet banking is user friendly (arithmetic mean = 4.47), while the least favourable attitude was expressed in the case of the finding that the application of electronic banking gives an impression that the best things for the client are always the bank's priority (arithmetic mean = 3.30. The lowest degree of disagreement was found with the said claim (standard deviation = 0.618). The highest degree of disagreement was found with the claim that electronic banking provides information on when the service shall be executed (standard deviation = 1.240). Generally speaking, the respondents assessed their attitudes towards the quality of service offers of banks relating to electronic banking in the range between 3.30 do 4.47 (Table 3).

Table 3 Results of descriptive statistical analysis

Findings	M	SD
Electronic banking provides information on when the service shall be executed.	3.65	1.240
Employees (customer service) show sincere efforts in solving clients' problems.	3.91	0.892
The bank provides electronic banking services without errors.	4.04	0.906
Electronic banking is precise.	4.32	0.747
Electronic banking gives confidence to clients.	3.75	0.898
Employees (customer service) are never too busy to respond to clients' questions.	3.50	0.859
Employees (customer service) are ready to assist clients at any time.	3.74	0.715
Employees (customer service) have enough knowledge to answer all questions asked by clients.	3.72	0.926
Clients feel safe in relation to all elements of realization of a particular transaction.	3.75	0.948
Data and operations carried out using electronic banking services are confidential.	3.68	1.066
I believe that electronic banking services are secure.	3.82	0.926
There is agility-speed/urgency/resourcefulness in the completion of transactions/queries.	4.11	0.801
Internet banking is user friendly.	4.47	0.618
Internet banking is easy to use.	4.44	0.646
Navigation and management of electronic banking services are easy.	4.35	0.715
Electronic banking services are easily accessible.	4.44	0.777
Electronic banking has convenient working hours-nonstop.	4.44	0.846
Using electronic banking services leaves the impression that the best things for the client are always the bank's priority.	3.30	1.061
Electronic banking website provides up to date information – new/fresh/corrected information.	3.94	0.926
The content of information on electronic banking website meets my needs.	4.10	0.808
Electronic banking website provides reports that meet my needs.	4.13	0.855
Electronic banking website provides enough information.	4.14	0.891
The website contains clear and comprehensive information.	3.96	0.946
Information provided by electronic banking website is helpful.	4.19	0.880

Rate your overall level of satisfaction with electronic banking services.	4.17	0.704
Summing up your overall experience with electronic banking, your general impression is that you are very satisfied with e-banking.	4.07	0.720
Complete electronic banking service is highly above the anticipated one.	3.65	0.868
Imagine an ideal way of functioning of electronic banking. The electronic banking that you use is close to the provision of such a service.	3.82	0.841
M – arithmetic mean; SD – standard deviation		

Source: Authors' calculation

The findings that were used in the questionnaire were grouped into 7 factors.

The first factor *Reliability* includes those findings that reflect the precision of electronic banking service, i.e. execution of transactions without errors, as well as providing information about the time necessary for service rendering. In addition, it includes the finding that is related to the readiness of employees in customer service to resolve clients' problems.

The second factor *Responsibility* is related to client findings that reflect their attitudes towards employees (customer service), which primarily include the readiness of employees to assist clients at any time, answer the clients' questions, and respondents also stated whether the employees have the necessary knowledge to answer all questions and in general to what extent does electronic banking give confidence to clients.

The third factor *Security* takes into account the findings pertaining to security, confidentiality and safety in relation to the implementation of a specific transaction. Also, one of the findings within this factor measures the attitudes of respondents in terms of the speed of transaction execution.

The fourth factor *Ease of use* includes those findings by which respondents express their attitudes as to whether electronic banking is user friendly, to what extent it is easy to use, whether the management of this service is easy and eventually whether electronic banking services are readily available.

The fifth factor is *Empathy* and includes elements related to working hours, attitudes of respondents on whether they believe that the bank operates in the best interest of its clients and whether it provides them with up-to-date information.

The sixth factor entitled *Website content* is associated with findings that respondents used to express their attitudes on the content, scope, clarity and usefulness of information available on the electronic banking website. Also, one

of the findings is linked to the statement on whether the reports provided by the website meet the clients' needs.

The last, seventh factor is *Satisfaction* and includes elements that, based on experience, show the total level of satisfaction, attitudes in relation to expectations and attitude expressed by respondents regarding the ideal electronic banking service.

Checking the internal consistency of claims in the context of new variables, as well as the reliability of newly formed variables is achieved using Cronbach's alpha coefficient. The values of this coefficient obtained in the present research range from 0.718 (empathy) to 0.955 (website content). The high values of this coefficient shown in Table 4 indicate a high degree of factor reliability, and also prove the internal consistency of findings grouped around these seven factors.

Table 4 Reliability of variables – values of Cronbach's alpha coefficient

Variables	Cronbach's alpha
Reliability	0,762
Responsibility	0,728
Security	0,848
Ease of use	0,880
Empathy	0,718
Website content	0,955
Satisfaction	0,914

Source: Authors' calculation

Correlation analysis results are presented in Table 5. A statistically significant degree of correlation appears among all variables within the model.

The values of Pearson coefficient were used to determine the degree of linear dependence between the model variables. If this coefficient is greater than 0.6 then there is a strong correlation between the variables of the model, if its value is within the range of 0.4 to 0.6, then the correlation is of moderate intensity, and values ranging between 0 and 0.4 indicate a weak correlation between the variables.

Table 5 Correlation analysis

Variables	1	2	3	4	5	6	7
Reliability	1	0,694***	0,617***	0,513***	0,163*	0,428***	0,594***
Responsibility	0,694***	1	0,667***	0,563***	0,255***	0,387***	0,636***
Security	0,617***	0,667***	1	0,510***	0,162*	0,284***	0,616***
Ease of use	0,513***	0,563***	0,510***	1	0,276***	0,475***	0,580***
Empathy	0,163*	0,255***	0,162*	0,276***	1	,549***	0,306***
Website content	0,428***	0,387***	0,284***	0,475***	0,549***	1	0,461***
Satisfaction	0,594***	0,636***	0,616***	0,580***	0,306***	0,461***	1

Note: $p<0.01$ (***); $p<0.1$ (*);

Source: Authors' calculation

The results of correlation analysis indicate that the greatest degree of correlation is found between reliability and responsibility (0.694) and the lowest between responsibility and empathy (0.255).

Finally, regression analysis was used for the processing of data obtained. Simple regression analysis aims to determine the effect of *one* independent variable on the dependent variable. The results indicate that all independent variables (observed individually) have a significant effect on client satisfaction which the dependent variable. Responsibility has the greatest impact on satisfaction: ß = 0.636, t = 8.476, $p<0.01$, while empathy has the smallest impact on satisfaction of clients that use electronic banking: ß = 0.306, t = 3.309, $p<0.05$.

Table 6 Simple regression analysis (Dependent variable: Total satisfaction)

Variables	β	t	Sig.	R²	F
Reliability	0,594	7,598	0,000**	0,353	57,727
Responsibility	0,636	8,476	0,000**	0,404	71,836
Security	0,616	8,051	0,000**	0,379	64,825
Ease of use	0,580	7,322	0,000**	0,336	53,608
Empathy	0,306	3,309	0,001*	0,094	10,952
Website content	0,461	5,343	0,000**	0,212	28,547

Note: $p<0.01$ (**), $p<0.05$(*)

Source: Authors' calculation

Multiple regression analysis was used to examine the *joint* impact of independent variables on consumer satisfaction, which appeared in the model as a dependent variable. The results of this analysis are presented in Table 7.

The coefficient of determination r^2 is 0.553 which means that 55.3% of variability in client satisfaction is described using independent variables that appear in the model, while the rest of variability is under the influence of other factors.

The results have shown that three variables have a statistically significant impact on client satisfaction: security: ß = 0.257, t = 2.711, p<0.01; ease of use: ß = 0.189, t = 2.148, p<0.05 and responsibility: ß = 0.196, t = 1,848, p<0.1. The reliability, empathy and website content factors showed insignificant impact on satisfaction in their joint effect.

Table 7 Multiple regression analysis (Dependent variable: Total satisfaction)

Variables	β	t	Sig.	VIF
Reliability	0,137	1,358	0,178	2,308
Responsibility	0,196	1,848	0,068[*]	2,547
Security	0,257	2,711	0,008[***]	2,039
Ease of use	0,189	2,148	0,034[**]	1,746
Empathy	0,072	0,889	0,376	1,477
Website content	0,124	1,368	0,174	1,853

Note: p<0.01 ([***]); p<0.05 ([**]); p<0.1 ([*]); R^2=0.553

Source: Authors' calculation

Multicollinearity through VIF factor was tested prior to conducting regression analysis. As these values for all variables range from 1.447 to 2.547, this was actually a sign that performing regression analysis was justified, i.e. that multicollinearity did not represent a serious problem within this study.

5. Conclusion

There have been numerous changes observed in the field of banking operations, and special concern is directed towards the sensitivity of bank clients, and thus it is imperative to provide high quality services that will ensure their satisfaction. The aim of this research was to analyse the attitudes of clients regarding the impact of certain dimensions of quality of electronic banking services on satisfaction.

The results obtained by multiple regression analysis have shown that three dimensions of SERVQUAL model (security, ease of use and responsibility)

have a statistically significant impact on satisfaction, while other factors (reliability, empathy and website content) have, in their joint effect, indicated a non-significant impact on satisfaction. These results in some way reflect the profile of an average user of electronic banking in the Republic of Serbia that, despite the progress of technology in the field of data and transaction protection, show a certain amount of skepticism since security is their greatest concern. The results have also shown that it is important to work more actively on the promotion of ease of use.

The contribution of this paper is reflected in the fact that the identification of factors (reliability, empathy, website content) that have not achieved a significant impact in their joint effect on the satisfaction of clients with electronic banking can be a signal for the management of financial institutions to take action in order to reduce the perceived risk, maintain trust, provide training and development of employees, modernize website appearance. Findings about which factor the clients are most dissatisfied with is actually important information for marketers in banking since, based on that, they can create better designed marketing campaigns (Gerrard et al., 2006).

Bank managers may be engaged in other fields by identifying a large number of non-users, i.e. they can plan and implement adequate promotional activities and thus highlight the advantages of electronic banking and persuade non-users that the use of electronic banking is in their interest. This is a difficult but challenging task because it is rather difficult to change habits which influence the clients to still use banking services in a traditional way on a much larger scale.

In the forthcoming period, it would be interesting to explore the attitudes of users in order to learn which characteristics should an ideal system of electronic banking have, and the model that could be applied is pooled analysis. This method is applicable given that it does not consider the impact of one characteristic on the selection, but jointly observes several characteristics at a time.

Practical implications indicate that data obtained provide a framework for improving the promotional strategy, highlighting the factors that respondents marked as dominant (security, ease of use, responsibility).

Eventually, it should be noted that banking institutions should focus on the creation of CRM systems that would be able to combine satisfaction and service characteristics, and thus would secure the return of customers (Liébana et al., 2013). Therefore, it is of utter importance for any bank to retain its clients and their satisfaction (Levesque et al., 1996).

The limitation of this research is related to the selection of the sample. Applicable sample selection was used in this research. In addition, the use of a

larger sample of respondents was suggested in order to obtain more detailed data. Also, this research is limited to data obtained by surveying the clients in one city and therefore these results should not be generalized.

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IDENTIFIKACIJA KLJUČNIH DETERMINANTI SATISFAKCIJE KORISNIKA USLUGA ELEKTRONSKOG BANKARSTVA

Apstrakt: U uslovima pojačane konkurencije, bankarskim institucijama se kao imperativ postavlja fokusiranje na pružanje kvalitetnijih usluga, zadovoljavanje potreba klijenata i prilagođavanje njihovim specifičnim zahtevima jer su to uslovi za postizanje satisfakcije. Satisfakcija posledično deluje na ostvarenje komunikacionih ali i ekonomskih ciljeva poslovanja tržišnih aktera. U skladu sa ovim činjenicama ukazuje se na značaj merenja kvaliteta usluga. U Republici Srbiji poslednjih godina uočava se tendencija povećanja broja klijenata banaka koji koriste uslugu elektronskog bankarstva. Mnogobrojne su prednosti ovog modernog servisa a među najznačajnijim se ističu ušteda vremena, povoljnija cena, komforno i brzo obavljanje transakcije. Svrha rada je da se ispita satisfakcija klijenata uslugom elektronskog bankarstva, odnosno da se dođe do saznanja koji elementi kvaliteta usluge imaju uticaj na satisfakciju i da se ispita intenzitet tog uticaja. Kako bi dobili neophodne informacije korišćene su mere deskriptivne statističke analize, analiza pouzdanosti, korelacija i regresiona analiza. Podaci su prikupljeni korišćenjem metode anketiranja, a upitnik koji je distribuiran ispitanicima za potrebe konkretnog istraživanja kreiran je na osnovu ranijih istraživanja u oblasti kvaliteta usluga. Rezultati su pokazali da tri dimenzije modifikovanog SERVQUAL modela (bezbednosti, lakoća korišćenja i odgovornost) imaju statistički značajan uticaj na satisfakciju, dok su ostali faktori (pouzdanost, empatija i sadržaj veb-sajta) u svom zajedničkom dejstvu na satisfakciju pokazali nesignifikantan uticaj. Doprinos rada ogleda se u tome da identifikacija faktora (pouzdanost, empatija, sadržaj veb-sajta) koji u zajedničkom dejstvu nisu ostvarili signifikantan uticaj na satisfakciju klijenata elektronskim bankarsvom može biti signal menadžmentu finansijskih institucija da preduzmu aktivnosti na smanjenju percipiranog rizika, održavanju poverenja, obuke i usavršavanja zaposlenih, modernizaciji izgleda veb-sajta.

Ključne reči: kvalitet usluga, satisfakcija, elektronsko bankarstvo, SERVQUAL model

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