

# MEASUREMENT OF SERVICE QUALITY BY SERVQUAL METHOD IN BANKING SECTOR

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## **ABSTRACT**

**Problem:** Some characteristic features of services that separate services from goods such as intangible, instability, production and consumption at the same time makes it difficult to measure the service quality.

**Aim of the Study:** Servqual method is used to evaluate the service-related expectations and perceptions of bank customers. In this context, the main subject of the study is to evaluate the quality of banking services.

**Scope and Constraints of the Study:** Various methods are used in the measurement of service quality. The most common and widely used method is the servqual method. Five dimensions that form service quality are handled as the physical properties, reliability, responsiveness, confidence and empathy. The questionnaire that created within the context of Servqual scale is applied to bank customers. The data obtained is analyzed by using SPSS 16 program and findings are analyzed.

**Findings of the study:** Participants are the customers of a private bank who are in the branch for transaction. In general, the majority of respondents are male and in 26-30 years age group, has a graduate degree, have the income in the range of 1001-2500 and respondents are workers and civil servants.

**Conclusion:** Bank's service quality level is lower than expected level. When the dimensions are compared with each other, customers perceive physical appearance of bank positive but customers think that bank can not empathize.

**Key words:** Service Quality, Servqual, Banking Services

## **BANKACILIK SEKTÖRÜNDE HİZMET KALİTESİNİN SERVQUAL YÖNTEMİ İLE ÖLÇÜLMESİ**

### **ÖZ**

**Problem:** Hizmetleri mallardan ayıran soyutluk, dayanıksızlık, eş zamanlı üretim ve tüketim gibi karakteristik özellikler, hizmet kalitesinin ölçülmesini zorlaştırmaktadır.

**Araştırmanın Amacı:** Servqual yöntemi, bankada işlem yapan müşterilerin, sunulan hizmetle ilgili beklenti ve algılamalarının değerlendirilmesinde

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kullanılmaktadır. Bu bağlamda, çalışmanın temel konusu bankacılık hizmetlerinin kalitesinin değerlendirilmesidir.

**Araştırmanın Yöntemi:** Hizmet kalitesinin ölçümünde çeşitli yöntemler kullanılmaktadır. Bu yöntemler içinde en sık ve yaygın kullanılanı servqual yöntemidir. Hizmet kalitesinin değerlendirilmesinde, hizmet kalitesini oluşturan beş boyut fiziksel özellikler, güvenilirlik, heveslilik, güven ve empati olarak ele alınmıştır. Servqual ölçeğinde yer alan ifadeler kapsamında oluşturulan anket formu, bankada hizmet alan müşterilere uygulanmıştır. Elde edilen veriler SPSS 16 programında analiz edilmiş ve bulgular değerlendirilmiştir.

**Araştırmanın Bulguları:** Katılımcılar İzmir ilinde, özel bir bankanın şubesinde işlem yapmak üzere gelmiş kişilerdir. Genel olarak, anketi cevaplayanların büyük bir kısmı erkek, 26-30 yaş grubunda, lisans mezunu, 1001-2500 gelir aralığında, işçi ve memur kişilerden oluşmaktadır.

**Sonuç:** bankanın hizmet kalitesinin beklenen düzeyde olmadığını göstermektedir. Boyutlar kendi içinde karşılaştırıldığında, müşteriler en çok bankanın fiziki özelliklerini olumlu olarak algılamakta ancak bankanın kendileri ile empati kurmadığını düşünmektedir.

**Anahtar Kelimeler:** Hizmet Kalitesi, Servqual, Bankacılık Hizmetleri

## 1. INTRODUCTION

Today marketing of services has become at least as important as the marketing of goods. Customers pay attention to various factors while evaluating services taken. Physical characteristics of the business, behavior of employees, the atmosphere of the business and trust to the business are some features that are effective.

There are distinctive features of services from goods. These features in general are being touched, being heterogeneous, being nondurable, being unclaimed and simultaneously production and consumption (Grönroos, 1990). Services do not have physical presence, so they are intangible, invisible and can not be formed an opinion by taste, hearing and smelling senses, in short “abstract” goods. Service is provided by human so standardization of service is impossible. Therefore, the service varies depending on the person servicing. So, services are heterogeneous. Goods are produced and stocked whereas services are produced and obliged to consume at the time of production. Services do not have the physical strength and life in contrast to goods. With them, in the service sector there is no possibility of ownership transfer of a property.

The quality of service is more difficult to measure because of listed distinctive features. However, quality must be measurable for the improvement. In fact, some features such as the physical characteristics of the goods, durability and meeting the function of the expected features can be used as a hint during the evaluation process to make the measurement of the quality of the goods. However, this measurement is getting more difficult because of the peculiar features of the services. Businesses use service quality to make a difference, provide a competitive advantage, increase productivity, ensure customer loyalty, protect price competition and create a positive image for public. (Atlan, Atan and Ediz, 2003).

The difficulty of measuring service quality depends on impossibility of predicting customers' expectations all the time because the service quality depends on the customer's perception. Service quality is affected from service offering people, technical features of service and general corporate image of business that provide service. (Terpstra and Sarathy, 1993).

In the study, service quality of the bank is evaluated as a result of matching customers' expectations and perceptions about bank service provided. In this context, firstly concept of service quality is mentioned and later service quality is measured by servqual scale.

## **2. SERVICE QUALITY**

Service Quality is the comparison of customers' expectations before service taken and service performance after service benefited and forms the direction and degree of expected and perceived performance (Parasuraman, Zeithaml and Berry, 1988). According to a further recognition, service quality is the evaluation of process between customer and service providers (Oral and Yuksel 2006).

In addition, service quality is composed of technical and functional quality. Technical quality is what the customer takes about service whereas functional quality is about service delivery process (Grönroos, 1984).

In the light of all these definitions service quality is the comparison of customers' expectations about service delivery and evaluation of this service taken. When customers compare expectations and actual service delivery, service is perceived as qualified if actual service delivery exceeds expectations. But, service is evaluated as poor quality unless actual service meets expectations.

The important point of service quality is the meeting customer's service quality expectations. Definition, measurement, control, communication and

management of quality are difficult. Service quality is determined by the consumer not by manufacturer-dealer (Küçükaltan, 2007).

Service Quality dimensions are physical features, reliability, responsiveness, competence, courtesy, credibility, confidence, accessibility, communication and empathy. From these dimensions five of them are included in this study; physical features, reliability, responsiveness, confidence and empathy. Physical features dimension consist of buildings, facilities, equipment, personnel and appearance of communication materials. Reliability dimension means providing the service as promised reliably and accurately, responsiveness dimension means helping customers and providing service timely, confidence dimension means being away from risk, danger and suspicion and having qualified and polite employees, empathy dimension means business to show interest and be sensitive to customers (Zeithaml, Parasuraman and Berry, 1990). Listed five dimensions are used by Servqual scale. For this reason, in this study five dimensions of service quality are discussed because of using servqual scale.

Reliability and validity of a Servqual scale is proven and this scale is applied in many areas of the service sector. This scale can be applied to organizations which provide service more than one point and to assess and compare services on every point. For instance, services provided in bank branches. Servqual scale is used within the business, and also used to compare situation among competitors (Alakavuk, 2007).

### **3. MEASUREMENT OF SERVICE QUALITY BY SERVQUAL METHOD IN BANKING SECTOR**

This study is about determination of customers' expectations and perceptions about their private banks that they operate. In this context, survey forms are created according to phrases in the context of Servqual scale and the data are analyzed by using SPSS 16 program and the results are interpreted.

Furthermore, recent service quality studies have expressed the need to measure the whole spectrum of service quality and have recommended SERVQUAL as the possible measurement (Kettinger and Lee, 1994; 1997; Pitt et al., 1995, 1997). The recommendation however has not been without reservation prompting further assessment of the applicability of SERVQUAL (Van Dyke et al., 1997, 1999).

#### **3.1. Aim of the Study**

Servqual method that is commonly used to measure quality of services applied to a private bank's customers in the banking sector. The five dimensions of service

quality; physical features, reliability, responsiveness, confidence and empathy are included in the study. In this context, the purpose of this study is evaluating private bank customers' expectations and perceptions of the services provided by the bank in the framework of these five dimensions.

### **3.2. Method of Study**

Questionnaire form compose with serqual scale in study. Questionnaire form implemented face to face to bank customers. Parasuraman, Zeihaml, Berry (1988) developed such a mesasurement tool, servqual, to be used in a variety of service industries. ts purpose was to provide an instrument for measuring service quality that would apply across a broad range of services with minor modifications in the scale. SERVQUAL provides a foundation for a growing body of research that pertains to the creation of quality among service industries. The scale was developed and tested across four service environments: banking, credit card services, repair and maintenance, and long distance telephone services.

### **3.3. Scope and Constraints of the Study**

The study covers customers of a private bank that operate in branch in İzmir. It is impossible to reach all the customers that operate in branch when expenses of research, personnel needs and time constraint are taken into account. Therefore, the systematic sampling method is applied to one of every 5 customer who come to bank branch for operations and waiting on the line and survey is applied to customers sampled. For this purpose, 500 questionnaires is produced, distributed, and 392 of these questionnaires are returned. Return rate is  $392/500 = 78.4\%$ . As a result of investigations it is found that 52 of the questionnaire are incomplete, inaccurate and contradictory filled so they are excluded from the scope of research. Therefore, 340 questionnaires are included in the study. The sample volume is confirmed as 340.

### **3.4. Findings of the study**

Findings of the research consist of demographic features findings and service quality findings. First of all reliability analysis enforced to statement of scale. Result of analysis alpha value is 0,83. It means that scale is reliable.

### 3.4.1 Findings About Demographic Features

**Table 1**

37% of the participants are female and 63% are male. According to findings most of the survey respondents are male. According to this finding, men use more banking transactions more than women. The distribution of respondents by age groups are as follows: 21-25 age group is 16% of respondents, 26-30 years age group is 25%, 31-35 age group is 19%, 36-40 age group is 8% percent, 41-45 age group is 11%, 46-50 age group is 9%, 51-60 age group is 10% and over 60 age group is 2% of the respondents. According to these findings, most respondents are in 26–30 age group and they are young people. 6% of the respondents are primary school graduates, 30% of them are high school graduates, 14% of them are associate degree, 34% of them undergraduate and 16% of them graduate degree. According to these findings, most respondents have undergraduate education. This situation indicates that education levels of respondents are high. 9% of respondents earn less than 1000, 42% of the respondents earn 1001–2500, 34% of the respondents earn 2501–4500, 10% of the respondents earn 4501–7500, 3% of the respondents earn 7501–10000 and 3% of the respondents earn more than 10000. This findings indicate that majority of the respondents have income between 1001 and 2500. The respondents are in middle-income group. 2% of the respondents are business partner, 14 % of them are self-employed, 25% of them are civil servants, 25% of them are workers, 12% of them are retired, 5% of them are housewife, 1% of them are unemployed and 16% of them are students. These findings indicate that the respondents consist of workers and civil servants in general. Participants are workers and civil servants so it is normal that they are in middle-income group.

### 3.4. 2 Findings About Service Quality

Phrases of servqual scale that is prepared to reveal customers' perceptions and expectations related to bank services are evaluated by 5-point Likert scale. Customers compare the features of the bank that they make transactions with an ideal bank-owned feature. As a result of comparison servqual score is calculated.

$$\text{Servqual Score} = \text{Perception Score} - \text{Expectation Score}$$

**Table 2**

The negative (-) servqual score that is the difference between average perception score and average expectation score indicates that bank can not meet

the expectations of customers and service quality is low. Table 2 has the evaluation distribution of expectation and perception questions for the five dimensions and there are average and servqual scores. For each phrases, expectation scores exceeds perception scores. This result shows that service quality of bank is not at expectation level.

### **Table 3**

As shown in Table 3, perception, expectation and sevqual scores of five dimensions of service quality (physical features, reliability, responsiveness, confidence and empathy), were determined.

There are four expressions in physical feature dimension. When Servqual differences of the four expressions are examined, all are found negative. The expression that least meet the expectations is “Advertisements and hand-outs are clear and easy to understand” with the value of -0,9412, and the minimum difference is “Working environment and buildings of banks seem nice” with the value of -0,4971. According to these findings, advertisements and hand-outs distributed by the banks do not meet the customers’ expectations. Banks should pay attention to advertisements and hand-outs to be descriptive, basic, easy to understand and detailed. Weight of expectation and perception are compared for physical features and it is found that expectation weight is 20.03%, while perception weight is 22%. This situation indicates that the expectations of customers are met in terms of physical features.

There are six expressions in reliability dimension. In these expressions, the maximum difference between expectations and perceptions is “Bank that I take service does not make mistake about bank transactions.” with the value of -1.7294, the minimum difference is “The bank that I take service meets the commitments in time” with the value of -0.7412. According to findings, bank should pay more attention to bank transactions. In general, the reliability dimension expectation weight is 20.86%, while perception weight is 21.32%. This situation indicates that bank meets the expectations of customers in terms of reliability, bank even exceeds expectations.

There are seven expressions in responsiveness dimension. The maximum difference between perception and expectation is “Employees of the bank that I take the service eliminates long waiting queue” with value of -1.6177, the minimum difference is “The bank behaves sincerely to solve the problem when one of the customers have problem” with the value of -0.8529. According to the findings,

customers are not satisfied to wait on the queue. Bank should prevent long queue. Bank should make attractive promotions and prizes to make transactions by internet banking and ATM's instead of having transactions in the bank branch. In general, the responsiveness dimension expectation weight is 19.80%, while perception weight is 18.94%. This situation indicates that customers' expectations are not met exactly.

There are six expressions in confidence dimension. In these expressions, the maximum difference between perception and expectation is "Employees of the bank that I take service, see the interest of customers' above everything" with the value of -1.2942, the minimum value is "Technological infrastructure of the bank that I take service is adequate" with the value of -0.7236. According to the findings, customers think that their interests are neglected by the bank. Customers should feel that bank deals with them. However, the technological infrastructure of the bank meets customers' expectations. Customer expectation weight is 19.98%, while perception weight is 19.82%. This situation indicates that bank can not meet customers' expectations in terms of confidence fully. Bank should have operations to ensure confidence to customers. For instance, bank can tend to have social responsibility campaigns to show interest to customers and society.

There are four expressions in empathy dimension. The maximum difference between perception and expectation is "The bank that I take service informs customers about alternative investment instruments" with the value of -1.2794, the minimum difference is "The bank that I take service form a portfolio in order to decrease risk while assessing savings" with value of -1.1471. According to the result obtained, the bank gives insufficient information to customers about alternative investment instruments. However, bank directs customers to alternative investment instrument to avoid further damage and to distribute risk. In this regard, customers perceive the service positively. In general, the empathy dimension expectation weight is 19.32%, while perception weight is 17.90%. This situation indicates that bank can not meet customers' expectations in terms of empathy exactly.

As a result of comparison of Servqual scores in terms of service quality, physical features dimension has the lowest score with -0.6426 while empathy dimension has the highest score with -1.2155. According to the findings obtained, customers perceive physical appearance of employees, working environment and buildings positively from physical features. However, bank customers think that bank operations are not sufficient about avoiding customer interests, informing about alternative investment instruments and especially informing about account decrease and increases.



#### **4. CONCLUSION AND RECOMMENDATIONS**

Today the concept of service has broadened and the intense competitive environment between organizations make service to be given more qualified. Due to the development of the concept of service, quality concept has also become more important for businesses. Compared with manufacturing firms, service businesses should pay more attention to quality.

Ensuring and improving service quality is an important strategy for businesses to have competitive advantage. This strategy of the business provides positive perception of corporate image and prestige, increase profitability, create customer satisfaction and customer loyalty in the long-term.

Measurement of service quality is more difficult for services because of distinctive features from goods. Many methods and models have improved for the measurement of service quality. From these models, Servqual is the most known and widely used method.

In the study, participants are the customers of a private bank who are in the branch for transaction. In general, the majority of respondents are male and in 26-30 years age group, has a graduate degree, have the income in the range of 1001-2500 and respondents are workers and civil servants.

For each of the phrase that takes place in Servqual scale, customers' expectations values exceed perception. This situation shows that bank's service quality level is lower than expected level. The bank's services can meet customers' expectations for physical features and reliability dimensions while bank can not meet he customers' expectations exactly for responsiveness, confidence and empathy dimensions. When the dimensions are compared with each other, customers perceive physical appearance of bank positive but customers think that bank can not empathize.

Banks in general should provide more confidence to customers. Confidence is very important in the banking sector. Customers' confidence to employees is valuable in terms of investment trust. For this reason banks should educate employees continuously. Banks should train employees in certain periods and should inform them about the new investment instruments. Employees should have motivating activities for working responsively. The banks that fail to create confidence and think about customers' interests are always one step behind the competition. Changing the physical appearance of the bank is not sufficient for the service to be perceived as qualified. As well as physical features, other features should be emphasized.

## REFERENCES

- Alakavuk E. D., (2007) Hizmet Kalitesi Değerlendirme Ölçeği-Servqual, **Hizmet Kalitesi Kavramlar, Yaklaşımlar Ve Uygulamalar**, Detay Yayıncılık, Editörler: Şevkinaz GÜMÜŞOĞLU; İge PIRNAR, Perran AKAN, Atilla AKBABA, Ankara, , s.330-342
- Atlan Ş., Atan M., Ediz A., (2003) Servqual Analizi İle Toplam Hizmet Kalitesinin Ölçümü Ve Yüksek Eğitimde Bir Uygulama, **12. Ulusal Kalite Kongresi Bildiriler Kitabı**, Kalder-Türkiye Kalite Derneği, Lütfi Kırdar Kongre Ve Sergi Sarayı, İstanbul, 13-15 Ekim, s.1-13
- Gronroos C., (1984) Service Quality Model And Its Market Implications, **European Journal Of Marketing**, Vol. 8, pp.60-69
- Gronroos C., (1990) **Service Management And Marketing**, (Massachusetts: Lexington Boks
- Kettinger WJ, Lee CC. Perceived service quality and user satisfaction with the information services function, **Decision Science** 1994;25(5/6):737 – 66
- Kettinger WJ, Lee CC. Pragmatic perspectives on the measurement of information systems service quality. **MIS Q** 1997;21(2):223 – 40 (June)
- Küçükaltan G., (2007) Hizmet Kalitesi Kavramına Genel Bir Yaklaşım Ve Hizmet Kalitesinin Önemi, **Hizmet Kalitesi Kavramlar, Yaklaşımlar Ve Uygulamalar**, Detay Yayıncılık, Editörler: Şevkinaz GÜMÜŞOĞLU; İge PIRNAR, Perran AKAN, Atilla AKBABA, Ankara, ss. 57-71
- Oral S., Yüksel H., (2006) **Hizmet İşlemleri Yönetimi**, Kanyılmaz Matbaası, İzmir
- Parasuraman A., Zeithaml V. A., Berry L.L., (1988) SERVQUAL: A Multiple-İtem Scale For Measuring Customer Perceptions Of Service Quality, **Journal Of Retailing**, Vol. 64, pp. 12-40
- Pitt LF, Watson RT, Kavan CB. Service quality: a measure of information systems effectiveness, **MIS Q** 1995; 19(2):173 – 85 (June)
- Pitt LF, Watson RT, Kavan CB. Measuring information systems service quality: concerns for a complete canvas, **MIS Q** 1997;21(2):209 – 21 (June)
- Terpstra V., Sarathy R., (1993) **International Marketing**, Dryden Press, 6th Edition
- Van Dyke TP, Kappelman LA, Prybutok VR. Measuring information systems service quality: concerns on the use of the SERVQUAL questionnaire, **MIS Q** 1997;21(2):195 – 201 (June).

Van Dyke TP, Prybutok VR, Kappelman LA. Cautions on the use of the SERVQUAL measure to assess the quality of information systems services, *Decis Sci*, 1999;30/3:877 – 91

Zeithaml V. A., Parasuraman A., Berry L. L., (1990) **Delivering Quality Service: Balancing Customer Perceptions And Expectations**, New York: Free Press

## TABLES

**Table 1:** Demographic Features of Participants

GENDER	NUMBER	PERCENTAGE	OCCUPATION	NUMBER	PERCENTAGE
Female	124	36,5	Business Partner	8	2,3
Male	216	63,5	Self-employed	48	14,1
AGE GROUPS			Worker	86	25,3
21-25	54	15,9	Retired	42	12,4
26-30	86	25,3	Housewife	18	5,3
31-35	65	19,1	Unemployed	2	0,6
36-40	27	7,9	Student	53	15,6
46-50	29	8,5	<b>INCOME</b>		
51-60	34	10,0	Less than 1000	30	8,8
60-	6	1,8	1001-2500	142	41,7
EDUCATION			4501-7500	34	10
Primary School	21	6,2	7501-10000	11	3,4
High School	101	29,7	More than 10000	9	2,6
Undergraduate	117	34,4			
Graduate	55	16,2			

**Table 2:** Perception, Expectation and Servqual Scores of Customers About Bank’s Service Quality

	PERCEPTION			EXPECTATION			SERVQUAL SCORE			
	N	MIN	MAK	AVE.	MIN	MAK	AVE.	DIFF.	SIZE	TOTAL
A1	340	1	5	4,0765	3	5	4,7088	-0,6323	-0,6426	-0,9559
A2	340	1	5	4,0647	2	5	4,5618	-0,4971		
A3	340	1	5	3,9265	2	5	4,4265	-0,5		
A4	340	1	5	3,7059	2	5	4,6471	-0,9412		
A5	340	1	5	3,9176	2	5	4,7647	-0,8471		
A6	340	1	5	3,0500	2	5	4,7794	-1,7294		
A7	340	1	5	4,0206	2	5	4,7618	-0,7412		
A8	340	1	5	3,9912	3	5	4,7765	-0,7853		
A9	340	2	5	3,9176	3	5	4,7559	-0,8383		
A10	340	2	5	4,0206	3	5	4,8147	-0,7941		
A11	340	1	5	3,8353	2	5	4,6882	-0,8529	-1,1386	
A12	340	1	5	3,2824	1	5	4,4824	-1,2		
A13	340	1	5	3,0147	3	5	4,6324	-1,6177		
A14	340	1	5	3,4059	3	5	4,5412	-1,1353		
A15	340	1	5	3,2941	2	5	4,4941	-1,2		
A16	340	1	5	3,6471	1	5	4,5529	-0,9058		
A17	340	1	5	3,2824	1	5	4,3412	-1,0588		
A18	340	1	5	3,1029	1	5	4,3971	-1,2942	-1,0226	
A19	340	1	5	3,4235	2	5	4,5147	-1,0912		
A20	340	1	5	3,7765	3	5	4,7294	-0,9529		
A21	340	1	5	3,7000	3	5	4,6765	-0,9765		
A22	340	1	5	3,8676	2	5	4,5912	-0,7236		
A23	340	1	5	3,4441	2	5	4,5412	-1,0971		
A24	340	1	5	3,1412	1	5	4,3706	-1,2294	-1,2155	
A25	340	1	5	3,2941	2	5	4,4412	-1,1471		
A26	340	1	5	3,1412	2	5	4,4206	-1,2794		
A27	340	1	5	3,2559	1	5	4,4618	-1,2059		

**Table 3:** Perception, Expectation, Average and SERVQUAL Scores of Service Quality Dimentions

	PERCEPTION			%	EXPECTATION		%	SQ
	N	AVE.	ST. DEV.		AVE.	ST. DEV.		
PHYSICAL PROPERTIES	340	3,9434	0,9686	22	4,5860	0,6692	20,03	-0,6426
RELIABILITY	340	3,8196	0,9007	21,32	4,7755	0,5135	20,86	-0,9559
RESPONSIVENESS	340	3,3945	1,1498	18,94	4,5332	0,7043	19,80	-1,1386
CONFIDENCE	340	3,5524	1,0707	19,82	4,5750	0,6555	19,98	-1,0226
EMPATHY	340	3,2081	1,2106	17,90	4,4235	0,7631	19,32	-1,2155