

A STUDY USING CUSTOMERS PERCEPTION AND SERVICE QUALITY GAPS ON INTERNET BANKING SERVICES IN BURDWAN DISTRICT

Souvik Singha¹ & Tanmoy Dasgupta²

¹Assistant Professor, Department of Computer Science & Engineering, Techno India University, West Bengal, India

²Professor, Department of Business Administration, The University of Burdwan, West Bengal, India

ABSTRACT

The study investigate the factors affecting the service quality gap using Internet banking services in Burdwan district. Based on prior studies, this study identified Customer Expectation, Service Specification and Service performance of Internet banking services in Burdwan district. The gap between Customers' Expectation and Internet banking Perception of Customers' Expectation effect Internet banking services in Burdwan district has been found in this study. The gap between external communication and services Performance have negative effect on Customers' satisfaction has also been revealed from this study.

KEYWORDS: Customer Expectation, Gap Analysis Model, Internet Banking, Perception

Article History

Received: 10 Feb 2020 / Revised: 15 Feb 2020 / Accepted: 03 Mar 2020

INTRODUCTION

The word quality represents the properties of the product and/or service that are valued by the customers. Quality is an attribute of product or service that fulfills the need of customers and satisfy customer expectations. In the growing service sector, there exists most problematic challenge on how to deal with service quality. Quality is one of the most expected by customer's aspect of almost all service products. High and unique quality is a way to win customers and make them loyal for a long time. Management literature proposes many concepts and approaches concerning how to deal with service quality. There are also many different concepts how the notion service quality should be understood.

Among many concepts of service quality, the service quality gaps model plays an unquestionably significant role in the service management literature. Gaps approach proposes precious propositions on how the notion service quality might be understood and how the service quality emerges across a service organization.

Technology in particular information technology, has influenced the nature of services themselves, how they are delivered and the practice of service innovation and service management. Many security concerns for the customers have been created, as technology paved the way for many service innovations, thus widening the customer service quality gap.

The customer gap forms the crux of the Gap Model by differentiating between customer expectations and perceptions of service performance. The model suggests that a better service quality, from customer's perspective, may be achieved by matching or exceeding customer expectations, thus closing the gap. The progress of technology has

significantly affected the customer gap over the past two decades. Services nowadays are delivered via technology as self-service or technology-assisted service. However, the lack of physical touch in the service delivery has raised some issues for the customer regarding the trustworthiness of the service providers.

Self-service technology has shifted the nature of service delivery by putting customers in a coproduction role. This shift results in customers having expectations and perceptions related to their own abilities and performance that will influence their overall assessment of service excellence beyond what the employee or service provider may do.

IMPORTANCE OF SERVICE QUALITY IN BANKS:

Many businesses are being forced into reviewing their customer service strategy due to increased competition, highly educated consumers and increase in standard of living. As acquiring new customer is costlier than retention, more business firms are channeling their efforts towards this goal.

The strategic benefits of quality in contributing towards market share and return on investment is strongly supported in literature. The maximization of customer satisfaction through quality customer service is described as 'the ultimate weapon' by Davidow and Vital (2009).

In all industries, competitors are roughly matched based on customer's service. In such a scenario, analysis of service quality perceptions from customer's point of view is much needed. Such an analysis will provide a quantitative estimate of the services to the banks, especially intricate details such as but not limited to meeting the expectations of customers.

MEASURING SERVICE QUALITY IN BANKING SECTOR

Customer is vital for the development of trade, industry and service sector, as stated by Achumba (2003). This is even more prevalent in the financial domain. Therefore, the significance of customer service in the banking sector came to force to compete in a market driven environment. Particularly difficult is the measurement of service quality as opposed to measurement of manufactured goods. The service sector as a whole is very heterogeneous. The tautology of the definition of heterogeneity in one service may not hold for another service.

Each bank is having a variety of services. The standardization of services has been a major concern primarily due to differentiation in heterogeneity as well as intangible nature of these services. The concept of customer satisfaction and service quality is interrelated with each other. Additionally, customer satisfaction depends upon service quality, which is increasingly becoming a strategy by marketers to position themselves more effectively in the market place. The advent of Internet Banking has significantly improved the quality of service as compared to traditional banking services in recent times.

SERVICE QUALITY GAPs ANALYSIS

For almost two decades, the Gap model of service quality, developed by Parasuraman, Barry and Zeithaml in 1985 and more recently described in Zeithaml and Bitner (2003), has served as a framework for research in services marketing, including hospitality marketing. The primary aspect of the model is the identification of four specific gaps which leads to a fifth overall gap between customer's expectations and perceived service.

- Customers have expectations for service experiences and they use them to measure against the perceived service performance in their judgment of service quality. The determination of these expectations by the managers is essential when designing the service, lack of which leads to the first gap in service quality. This is referred to as the knowledge gap. Specifically, it is the difference in customer expectations and management’s perception of customer expectations.
- The second gap, referred as the design gap, is measured by matching the service design specifications with the management’s perception of customer expectations. The extent of this gap is dependent on management’s belief on the importance of service quality and its possibility, against the availability of the resources required for the provision of the service.
- Gap three represents the performance gap, which is the variation in service design and service delivery. Its extent is a function of many variables involved in the provision of the service. The quality of the service may be affected by factors such as skill level, type of training, degree of role agreeability or conflict and job fit; primarily due to dependence on individual performance.

The complication further increases by the participation of the customer in the service encounter. For example, the room type reservation originally made by a customer might be changed on a special request or a menu item might be requested after the initial order has been placed. Such variations make it more difficult to perform the service as intended.

- The fourth gap is called the communications gap. It is the difference between what is promised to customers, either explicitly or implicitly and what is being delivered. The size of the gap is often times affected by the extent of communications between the company and the advertising agencies. Overpromising is commonly responsible for the communication gap. Each gap has a cumulative effect from the preceding gap.
- Gap five is the total accumulation of variation in gap one through four and represents the difference between expectations and perceived service.

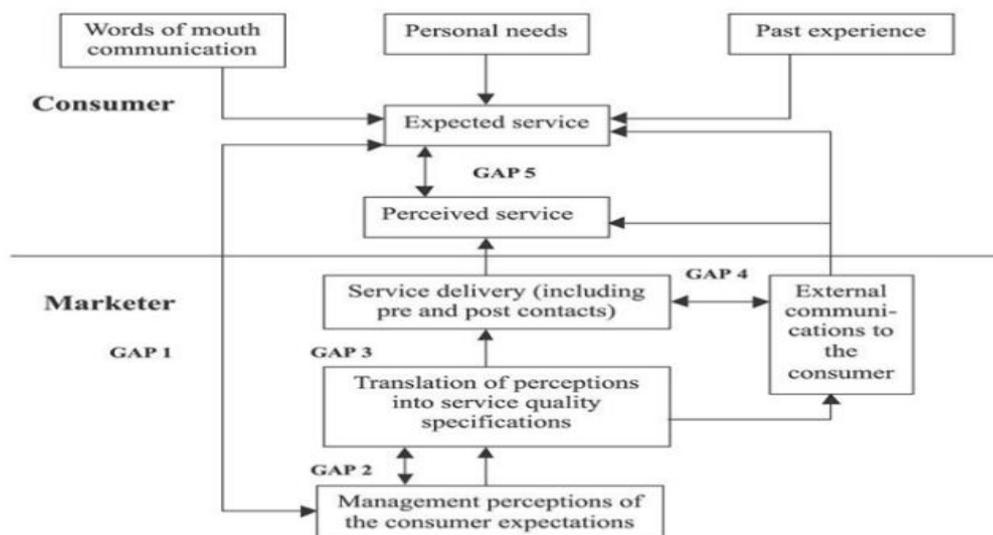


Figure 1: Service Quality Gap Analysis Model.

Source: Parasuraman et al. (1985)

DATA COLLECTION AND RESEARCH QUESTIONNAIRE

In this study, the data was collected through survey conducted in Burdwan district, West Bengal. Total 250 questionnaires were distributed through mail and Google drive in the Burdwan district regarding their usage of Internet Banking (IB) services, of which only 130 respondents provided their response to this survey. The questionnaire consisted of two sections, in the first section, it is concerned with the personal details of the respondents whereas in the second section, it consisted of only likert five point scale (1= strongly disagree, SD; 2 = disagree, D; 3= neutral, N; 4= agree, A; 5= strongly agree, SA).

METHODOLOGY

Microsoft Excel and SPSS (Statistical Package for Social Sciences) version 12 was used as the analysis tool to determine the results for this research study. This SPSS software helped us to determine the impact of all the factors on adoption of internet banking and also to understand the relationship between the various factors on the adoption of internet banking.

QUESTIONNAIRE DESIGN

The questionnaire for the different constructions was validated using a 5- point Liker- Scale. The statements were modified based on Customer Expectation, Service Specification and Service Performance to match the context of the perception of internet banking. Shows in Table 1.

Table 1: Constructs and Corresponding Items

Constructs	Corresponding Items	SA	A	N	D	SD
Customer Expectation	Financial transactions more quickly Using Internet Banking					
	Convenience since it is available 24 hours, 7days of the week.					
	Internet Banking saves time compared to traditional banking.					
Service Specification	It easier to conduct banking transactions.					
	Learning to use Internet Banking is easy.					
	Aware of the services that could be done using Internet Banking.					
Service Performance	Using Internet Banking is as safe of operation					
	Transactions is reliable					
	Aware of the security and privacy issues of Internet Banking.					

TEST OF HYPOTHESIS AND RESULT FINDINGS

Five hypothesis formulated and tested through SPSS 2.1 using t- test, Correlation Analysis, KMO and Bartlett's Test. Hypothesis First one and Second were tested using t- test, while hypothesis Third and Fourth were tested with t- test and Correlation analysis. Hypothesis fifth was tested using KMO and Bartlett's Test.

Hypothesis of Gap One

H0: Customers' Expectations and Perception of Internet Banking of Customer Expectation cannot affect Internet Banking services in Burdwan district.

H1: Customers' Expectations and Perception of Internet Banking of Customers' Expectation affects Internet Banking services in Burdwan district.

Having analyzes the data from the questionnaire using t- test to examine the gap between Customers’ Expectations and Internet banking Perception of Customers’ Expectation affects Internet banking Services in Burdwan district. Table- 2 reveals that the result of t- test. If $t\text{-Stat} < -t\text{ critical two-tail}$ or $t\text{ stat} > t\text{ critical two-tail}$ then we reject the Null hypothesis. In Table 2, the value of t- stat is 45.65 and the value of t- critical two- tail is 1.97. Due to this observation, we reject the Null hypothesis and accept the alternate one, which states that Gap between Customers’ Expectations and Internet banking Perception of Customer Expectation affects Internet banking services in Burdwan district.

Table 2: Two- Sample Test

t-Test: Two-Sample Assuming Unequal Variances		
	Perception	CUSTOMER EXPECTATION
Mean	37.08661417	13.39370079
Variance	30.54005749	3.669166354
Observations	127	127
Hypothesized Mean Difference	0	
df	156	
t Stat	45.65083408	
P(T<=t) one-tail	1.83449E-92	
t Critical one-tail	1.654679996	
P(T<=t) two-tail	3.66898E-92	
t Critical two-tail	1.975287508	

Hypothesis of Gap Two

H0: Perception of Internet Banking Customers’ Expectations and Bank Service Specification do not have significant impact on Perception of Internet Banking in Burdwan district.

H1: Perception of Internet Banking Customers’ Expectations and Bank Service Specification has significant impact on Perception of Internet Banking in Burdwan district.

Having analyzes the data from the questionnaire using t- Test shown in to Table 3 examines that the value of t- Stat 4.06 and the value of t critical two- tail is 1.96. So $4.06 > 1.96$ or $4.06 < -1.96$, as shown in Table 3. Due to the observation value of t- Stat and t- Critical two- tail, we reject the null hypothesis and accept the alternate one which state that, Gap between Internet banking Perception of Customers’ Expectations and Bank Service Specification have significant impact on Perception of Internet Banking in Burdwan district.

Table 3: Sample Result of t- Test

t-Test: Two-Sample Assuming Unequal Variances		
	CUSTOMERS' EXPECTATION	SERVICE SPECIFICATION
Mean	13.39370079	12.41732283
Variance	3.669166354	3.673665792
Observations	127	127
Hypothesized Mean Difference	0	
df	252	
t Stat	4.060579562	
P(T<=t) one-tail	3.2694E-05	
t Critical one-tail	1.650922755	
P(T<=t) two-tail	6.5388E-05	
t Critical two-tail	1.969422365	

Hypothesis of Gap Three

H0: External Communication and Service Performance has negative effect on Customer’s Satisfaction.

H1: External Communication and Service Performance has positive effect on Customer Satisfaction.

Data were obtained from responses from the questionnaire. Correlation analysis was used to test the validity of service performances and its impact effects on customer satisfaction of Internet banking in Burdwan district. The significant level is .054. Due to the observation value of t- Stat and t critical two- tail respectively 39.25 and 1.97, shown in Table 4. The observation difference between the samples means (11.27 and 2.03). In this observation, t Stat > t critical two- tail. We reject the null hypothesis.

Table 4: Result of Two Sample t- Test

t-Test: Two-Sample Assuming Unequal Variances		
	SERVICE PERFORMANCE	Adoption
Mean	11.27559055	2.031496
Variance	5.883764529	1.15773
Observations	127	127
Hypothesized Mean Difference	0	
df	174	
t Stat	39.25850928	
P(T<=t) one-tail	1.10838E-88	
t Critical one-tail	1.653658017	
P(T<=t) two-tail	2.21675E-88	
t Critical two-tail	1.97369144	

Hypothesis of Gap Four

H0: The Gap between External Communication and Service Specification has negative effect on Customers' Satisfaction of Internet Banking in Burdwan District.

H1: The Gap between External Communication and Service Specification has positive effect on Customers' Satisfaction of Internet Banking in Burdwan District.

Data for the test of this hypothesis were obtained from responses from the questionnaire. T- Test analysis was used to test the validity of service specification and its effects on perception of Internet banking in Burdwan district. The results are shown in Table 5. Due to the T- Test analysis, we reject the null hypothesis and accept the alternate one which state that the Gap between External Communication and Service Specification has positive effect on Customers' Satisfaction of Internet Banking in Burdwan District.

Table 5: t- Test Analysis

t-Test: Two-Sample Assuming Unequal Variances		
	SERVICE SPECIFICATION	Adoption
Mean	12.41732283	2.535433071
Variance	3.673665792	0.631671041
Observations	127	127
Hypothesized Mean Difference	0	
df	168	
t Stat	53.67082833	
P(T<=t) one-tail	5.7785E-108	
t Critical one-tail	1.653974208	
P(T<=t) two-tail	1.1557E-107	
t Critical two-tail	1.974185191	

Hypothesis of Gap Five

H0: Service Specification and Service Performance has negatively impacted on the productivity of Internet Banking in Burdwan district.

HA: Service Specification and Service Performance has positively impacted on the productivity of Internet Banking in Burdwan district.

In this research, the Gap analysis using PCA has stored the items V1 to V6. The factor loading $>.054$ are retained. The components are EBT (Easy Banking Transaction), IBETU (Internet Banking Easy To Use), IBSA (Aware of the services that could be done using Internet banking), SAFETY (Internet banking is as safe as using other modes of banking), IBREL (Internet banking is reliable and can be used for my banking transactions), AWSEC (Aware of the security and privacy issues of Internet banking).

This is the determinant of the matrix (6X6) and the value is located under the correlation matrix shown in Table 6. We got a value of .054, its neither exact zero or exact one, which is greater than the cut- off value of 0.00001. Therefore, we can conclude that the correlation matrix is neither an identity matrix nor a singular matrix. This value confirms the assumption that there are sufficient interrelationships among our study items.

Table 6: Correlation Matrix^a

		EBT	IBETU	IBSA	SAFETY	IBREL	AWSEC
Correlation	EBT	1.000	.504	.589	.424	.517	.383
	IBETU	.504	1.000	.556	.567	.503	.377
	IBSA	.589	.556	1.000	.473	.558	.692
	SAFETY	.424	.567	.473	1.000	.725	.337
	IBREL	.517	.503	.558	.725	1.000	.447
	AWSEC	.383	.377	.692	.337	.447	1.000

Determinant =.054

Table 7 has shown the results of KMO and Bartlett’s test (Bartlett 1950). Bartlett’s test of sphere city tests the null hypothesis that the correlation matrix is an identity matrix means there is no relationship between items and follows Chi Square distribution. Large the value of Bartlett’s test indicates greater like hood the correlation matrix is not an identity matrix and null hypothesis will be rejected. In this study, The Bartlett’s test value (Chi Square: 359.158; df: 15, Sig:.000) is significant. (i.e. a significance value of less than 0.01). This means that we may reject the null hypothesis that our correlation matrix is an identity matrix and will conclude that the variables are correlated highly enough to provide a reasonable basis for factor analysis.

Table 7: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.797	
Bartlett's Test of Sphericity	Approx. Chi-Square	359.158
	df	15
	Sig.	.000

The KMO measure should be greater than 0.70 and is inadequate if less than 0.60. Here, we got a KMO measure of .797 which indicates that adequate sample was used for the text. All the three measures (Determinant, Bartlett’s test and KMO) show the evidence that there are good interrelationship between study items and measures.

CONCLUSIONS

Our primary focus of work in this study was to identify the service quality gap in Internet Banking domain in Burdwan district. The present work confirms the validity of the gap analysis model to guide management for finding the gaps and to devise ways of closing the identified gaps. The reliability factor is also a positive factor in Internet Banking perceptions. It can be concluded from this study that a height gap in the dimension of Service Specification and Service Performance of Internet Banking users in Burdwan district has been found.

REFERENCES

1. Achumba, I.C. (2003), *Consumer Behaviour*. Lagos, Nigeria: university Press Ltd.
2. Davidow, J. & Vital, B.G (2009), "Service Quality and e-commerce: An exploratory analysis", *Managing Service Quality*, Vol. 11(2). 121-131.
3. Ghobadcan S. (1994), "Assessing service quality on the web: evidence from business-to-consumer portals", *Journal of Services marketing*, 17(5), 529-48.
4. Parasuraman, A., Zeithmal, V.A. & Berry, L. L. (1985), "A conceptual model of service quality and its implications for future research", *Journal of Marketing*. 49(4), 41-50.
5. Seth, N., & Deshmukh, S.G. (2005), "Service Quality models: A Critical Discussion", *Business Management and Strategy*, 1(1), 1-11.
6. Zeithmal, V.A., Parasuraman, A & Berry, L (1988), "SERVQUAL: A Multiple- Item Scale for Measuring Consumer Perceptions of Service Quality", *Journal of Retailing*, 64(1), 12-40.
7. Choudhuri, Partha Sarathi, and Tanmoy Dasgupta. "Relative importance of service quality dimensions from life insurance customers' perspective: A study on life insurance corporation of India, Burdwan." *SIT Journal of Management* 3.1 (2013): 258-272.
8. HM, RAKESH, and TJ RAMYA. "A STUDY ON FACTORS INFLUENCING CONSUMER ADOPTION OF INTERNET BANKING IN INDIA." *International Journal of Business and General Management(IJBGGM)* (2014): 49-56
9. Chavan, Jayshree. "Internet banking-benefits and challenges in an emerging economy." *International Journal of Research in Business Management* 1.1 (2013): 19-26.
10. Souvik Singha & Tanmoy Dasgupta, "ADOPTION AND ACCEPTANCE OF INTERNET BANKING IN BURDWAN DISTRICT" *IMPACT : International Journal of Research in Humanities, Arts and Literature(IMPACT : IJRHAL)*(2018): 353-360
11. S.Suriyamurthi et al., "A Study on Customer Perception towards Internet Banking" *International Journal of Sales & Marketing Management Research and Development*(2012): 15-34
12. SINGHA, SOUVIK, and TANMOY DASGUPTA. "FACTORS INFLUENCING CUSTOMER SATISFACTION OF INTERNET BANKING ADOPTION IN BURDWAN DISTRICT." *BEST: International Journal of Management, Information Technology and Engineering (BEST: IJMITE)* 3.11 (2015): 53-62.
13. K. Durgalakshmi, "A Study on Security Concerns among Internet Banking Customers" *International Journal of Business Management & Research*(2020): 15–20