



Service Quality in Banking Sector of Andhra Pradesh, India – A Structural Equation Modelling with Amos

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ABSTRACT

The main aim of this paper is to compare the service quality between SBI and ICICI bank customers in YSR Kadapa District of Andhra Pradesh. Sample size of 450 from SBI and 250 from ICICI bank by using Convenience sampling method. To gauge service quality, the SERVQUAL model created by Parasuraman et al. in 1988 has been employed. Based on primary data gathered from SBI and ICICI bank clients in Andhra Pradesh's YSR Kadapa District, this analytical analysis was conducted. Primary data has been gathered using a standardized questionnaire. The questionnaire has been personally and online managing on sampling and chosen non-random basis in YSR Kadapa District of Andhra Pradesh. The study was conducted to find the "service quality gap," or discrepancy between bank customers' perceptions and expectations, and to incorporate consumer expectations into service quality improvement. The result of this study indicated that there is no significant difference between SBI and ICICI banks in terms of customer satisfaction and service quality metrics.

Introduction:

The LPG (Liberalization, Privatization, and Globalization) program has made the service sector vulnerable to competition-related challenges. The viability of service providers in the Indian banking industry will be largely dependent on service quality.

In today's cutthroat business environment, providing customers with high-quality services is an essential component of any company's long-term strategy to achieve and sustain a position of market leadership (Phillips, Chang, & Buzzell, 1983, Parasuraman et al., 1985; Reichheld and Sasser, 1990).

Analysis of Factors of Service Quality

Examining the factors that contribute to the overall quality of the service is the focus of this section. In this section, the researcher makes an effort to answer the following research question: 1) Which factors have the most impact on overall customer satisfaction? In the YSR Kadapa district of Andhra Pradesh, the Gap model of SERVQUAL, which was developed by Parasuraman et al. (1985, 1986, 1988, 1991, 1993, and 1994; Zeithaml et al., 1990), was used to identify the underlying factors affecting the service quality of retail banking services. This was done in order to improve the quality of these services. This model measures two different constructs: the expectations and perceptions of the respondents. After that, the quality of the service is evaluated by determining the gap that exists between the customer's expectations and their perceptions of the service that is being provided.

Objective:

To determine the difference between customers' expectations and their perceptions of service quality (Tangibility).

Need for the study:

Because of the onset of international banks, causing cut-through competition among public, private sector, and foreign banks and hence there is great need for the improvement in the service quality of indigenous banks must be improved to have survival and growth and to sustain market share. Hence, the present study is conducted taking SBI and ICICI bank as sample to investigate the profile of service quality and offer ideas for ways to stay ahead of foreign banks.

Hypothesis:

H0: There is no significant difference between customer expectations and perceptions of service quality (Tangibility)

H1: There is significant difference between customer expectations and perceptions of service quality (Tangibility).

Review of Literature:

Murari Krishna, (2018) Implied that satisfaction of customer is must to gather the attention of customers. Right product & services and right mix of dimensions of financial service quality can make a customer happy and delighted. Along with the four dimensions (empathy, responsiveness, assurance and tangibles) of SERVQUAL model another important more important dimension is "Technology". When we compare private & public sector banks with the extracted dimensions these banks have difference in Empathy & Assurance. In short Empathy and Technology is the key asset to engage the more customers. Empathy and Technology is the key asset to engage the more customers.

Harchekar Suraj Jyoti Mrs (2018) Concluded that mobile and wireless technology is one of the fastest growing market and given a new platform to banking industry. To maintain or to increase customer base, they have to accommodate all the customer needs. Need to meet up all challenges like security and safety. Banks must embrace new technologies and customize them accordingly for customer.

Hemalatha (2015) Conducted research in the Customers were pleased with the public sector banks' level of customer service.. A random Tiruvarur district of Tamil Nadu to determine the extent to which sample was taken from a total of 300 individuals, which included representatives from the Indian Overseas bank, the Indian bank, and the State bank of India, which are the three largest public sector banks in India. Evaluation of the sample banks' service quality was carried out using the SERVQUAL model. Chi-square, ANOVA, and regression were the statistical methods that were utilised for the analysis. The findings of the research show that the degree of client happiness and the caliber of the services offered are positively correlated at each of the public sector banks that were surveyed. According to the findings of the research, the quality of the service is an excellent predictor of the degree to which customers are satisfied. According to the study's findings, clients have an unfavourable impression of the quality of service they receive across all dimensions of service quality, including tangibles, reliability, responsiveness, assurance, and empathy.

Expectation and Perception of individual Factors of SERVQUAL Dimensions on SQ(Service Quality)

This section examines all 28 statements that make up the SERVQUAL model's five dimensions—namely, tangibility, reliability, responsiveness, assurance, and empathy—in order to determine how customer expectations and perceptions of quality service in the YSR Kadapa district of Andhra Pradesh are influenced by these factors. Five dimensions were chosen from a total of 28 statements and among

the five tangible attributes of expectations and perceptions that were taken into consideration for this research paper.

Statistical tools used:

The IBM SPSS v21 is used for primary data analysis, with statistical procedures such as the. Inferential and multivariate analyses were carried out using Path Analysis, Mean, Standard Deviation, Regression Analysis, Structural Equation Modeling (SEM), and Confirmatory Factor Analysis (CFA).

Data Analysis and Interpretation:

In the second part of this section, the same pattern of analysis is used to determine how these five dimensions specifically, responsiveness, empathy, reliability, assurance, and tangibility, collectively impact customer perception. Tangibility, reliability, responsiveness, assurance, and empathy are the five attributes mentioned here. When there are both direct and indirect effects between model variables, it is appropriate to make use of the structural equation modelling (SEM) technique because it enables simultaneous examination of multiple dependence relationships. The following is how the path model shown in the figures should be read: The larger oval represents the latent, independent, or unobserved variable, which in this case are the expectation, perception, and SQ, depending on the category of analysis. In addition, the smaller oval represents the observed variable. The effect of the latent variable on the observed variable is depicted as a rectangle, and the effect is indicated by a single-headed arrow that points away from the latent variable. The curved arrow with two heads stands for the covariance or correlation with the latent variable, whereas the arrow with one head stands for the factor loading of the independent or observed variables (Schreiber et al, 2006).

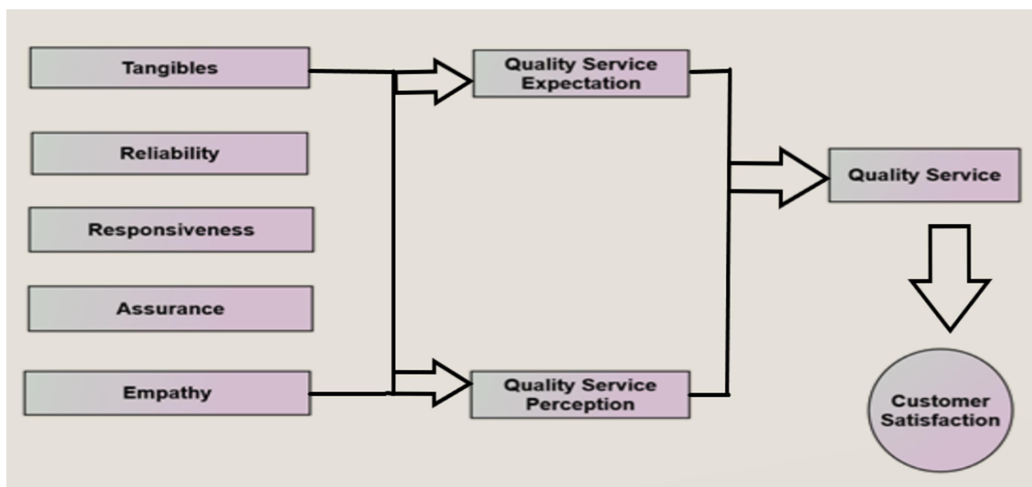


Figure 1 Servqual model of Five key dimensions

Tangible Dimension:

The capacity of a service provider to offer clients aesthetically pleasing physical spaces is referred to as tangibles. Tangible premises can include things like physical facilities, equipment, the appearance of personnel, and other tangible material. The tangibles of a service are its physical components, such as the location where it is provided to customers. The table provides a coding breakdown for the two primary constructs that fall under these dimensions of expectation and perception, as well as the Five variables (Tangibles).

Table 1: Variable Codes for Tangible Dimension of Service Quality

	Tangibles –Expectation		Tangibles - Perception
TE1	Excellent financial institutions will have contemporary-looking equipment.	TP1	Your preferred financial institution has modern-looking equipment.
TE2	The physical facilities of superior banks will be aesthetically pleasing.	TP2	Your most preferred Bank’s physical facilities are visually appealing.
TE3	Excellent banks have well dressed, presentable employees.	TP3	The receptionists at the bank are well-groomed and presentable.
TE4	Service-related materials (such as pamphlets or statements) will be aesthetically appealing.	TP4	Preferred service-related materials (such as pamphlets or statements) are aesthetically pleasing.
TE5	Have personal safety and security	TP5	Have personal safety and security

(Compiled by Researcher)

(i) Tangible - Expectation

Using CFA, the following hypothesis will test the impact of the independent variable tangible on the dependent variable expectation.

H₀: TE1 to TE5 have no impact on Tangibles Expectation

H₁: TE1 to TE5 have impact on Tangibles Expectation

In order to determine whether or not the hypotheses are correct, the regression coefficient of the observed constructs is utilised. If the regression coefficient is greater than 0.40, it is presumed that the observed constructs have a significant impact on the latent variable. This is because the observed constructs are being used to predict the latent variable.

Table 2 : Hypothetical CFA Model fit Tangibles –Expectation

Tangibles Expectation	χ^2	D F	P	Normed χ^2	GFI	AGFI	NFI	TLI	CFI	RM R	RMS EA
	276.36	5	.000	.509	.858	.575	.825	0.654	0.827	.188	.0279

(Source: Primary Data)

Where, GFI=Goodness of fit index; AGFI=Adjusted GFI; NFI=Normal Fit Index; TLI= Tucker Lewis Index; SRMR= Standardised Root Mean Residual; RMSEA=Root Mean Square Error Approximation; DF=Degree of Freedom.

Each attribute was significantly loaded onto the latent constructs. Based on the value of the fit indices, the conclusion that the measurement model provides a fair fit to the data. The regression coefficient that was computed for each different variable that was based on an accurate forecast is presented in the table below

Table 3: Regression Analysis of Tangibles Expectation

DV	IV	Reg Coeff	C.R.	P	Variance(%)
Tangibles Expectation	TE1	1.103	11.843	0.000	72.10
	TE2	1.166	23.278	0.000	43.10
	TE3	.817	18.692	0.000	86.50

TE4	.748	15.681	0.000	123.2
TE5	.676	13.676	0.000	144.5

(Source: Primary Data)

Where

DV=Dependent Variable; IV= Independent Variable; C.R=Critical Ratio.

It was discovered that all of the constructs had regression coefficients that were greater than 0.4 and p-values that were lower than 0.5. As a result, we must accept the alternative hypothesis and conclude that the null hypothesis cannot be correct. Even though all tangible factors have an effect on the service expectations of customers, the physical facilities, such as up-to-date equipment, have the greatest impact, whereas employees who are appropriately dressed have the least impact. According to the percentage of variance that can be attributed to each factor, the first factor, which states that excellent banking companies will have equipment that looks modern, accounts for 72.10 percent of the variance, the second factor, which refers to the visual appeal of physical facilities, accounts for 43.10 percent of the variance, the third factor, which refers to well-dressed employees, accounts for 86.50 percent of the variance, the fourth factor, which refers to customer service, accounts for 123 percent of the variance and fifth factor personal safety and security accounts for 144.5 percent of variance.

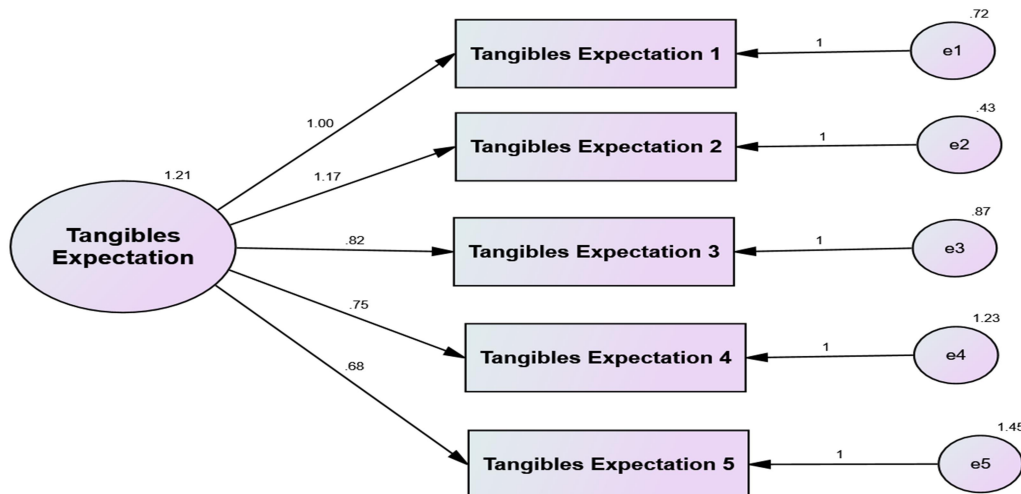


Figure 2: CFA Model - Tangibles Expectation

The preceding analysis makes it abundantly clear that all of the sub-variables that comprise the tangible dimensions have a major impact on bank clients' expectations for the level of customer service in the YSR Kadapa district, with employee attire and presentation having the smallest amount of impact.

Table 4: Ranking of Tangible Factors of SQ Expectation

Code	Constructs	R - value	Rank
TE1	Excellent financial institutions will have contemporary-looking equipment.	1.103	2
TE2	The physical facilities of superior banks will be aesthetically pleasing.	1.166	1
TE3	Excellent banks have well-dressed, presentable employees.	.817	3
TE4	Service-related materials (such as pamphlets or statements) will be aesthetically appealing.	.748	4
TE5	Have personal safety and security	.676	5

(Compiled by Researcher)

The customer expectation variables on the construct tangibility depicted in table have been ranked according to their r-value, with the highest r-value receiving first place, followed by the next highest, and so on. Based on the analysis, it can be said that the most important factor that determines how a customer perceives service quality. The tangible dimension is the aesthetically pleasing physical facilities of superior banks, followed by the availability and appearance of contemporary-looking equipment in the bank, followed by the fact that excellent banks have well-dressed, presentable employees, then pamphlets and brochures designed to provide service information, and finally the seating and other physical amenities.

Tangibles - Perception

The following hypothesis is formulated in order to validate the impact that the independent variable of the tangible dimension of SQ has on the dependent variable of customers' perceptions of QS, and the validation is carried out with the help of CFA.

H0: TP1 to TP5 has no impact on Tangibles Perception

H1: TP1 to TP5 has impact on Tangibles Perception

Table 5: Hypothetical CFA Model fit Tangibles – Perception

Tangibles Expectation	χ^2	D.F	P	Normalized χ^2	GFI	AGFI	NFI	TLI	CFI	RMSEA	RMS EA
	30.979	5	.000	6.196	.982	.947	.970	0.950	0.975	.057	.086

(Source: Primary Data)

Each attribute was significantly loaded onto the latent constructs. Based on the value of the fit indices, the conclusion that the measurement model provides a fair fit to the data. The regression coefficient that was computed for each different variable that was based on an accurate forecast is presented in the table below.

Table 6: Regression Analysis of Tangibles Perception

DV	IV	Reg Coeff	C.R.	P	Variance(%)
Tangibles Expectation	TP1	1.000	7.583	0.000	1.286
	TP2	1.241	12.564	0.000	.831
	TP3	1.020	12.668	0.000	.678
	TP4	1.299	13.877	0.000	.852
	TP5	1.278	13.515	0.000	1.183

(Source: Primary Data)

Each of the constructs has a p-value that is less than 0.50 and a regression coefficient that is greater than 0.40. Therefore, the alternative hypothesis is accepted, and it is concluded that all variables under tangible perception have a significant effect on the perception of SQ by banking customers in the YSR Kadapa district of Andhra Pradesh. This means that the null hypothesis has been rejected, and the alternative hypothesis has been accepted.

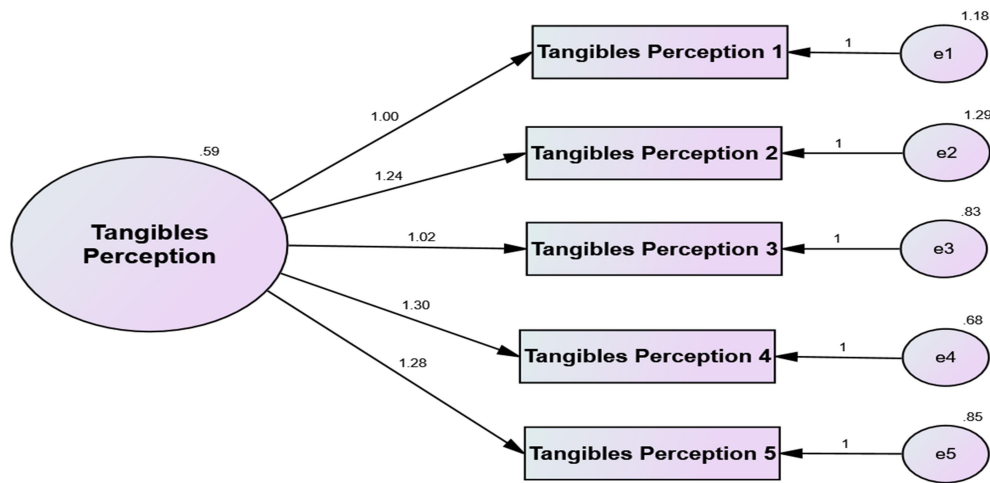


Figure 3: CFA Model Tangibles Perception

All variables of the tangible dimensions significantly affect the perception of SQ among bank customers in the YSR Kadapa district of Andhra Pradesh.

Ranking of Tangible Perception

A ranking of the construct is done based on the calculated regression coefficient, which is presented in Table. This is done on the basis of the analysis in Table because there is variation between the dimensional factors. Table presents this ranking.

Table 7: Ranking of Tangibles – Quality Service Perception

Code	Constructs	R - value	Rank
TP1	Your preferred financial institution has modern-looking equipment.	1.000	5
TP2	Your most preferred Bank’s physical facilities are visually appealing.	1.241	3
TP3	The receptionists at the bank are well-groomed and presentable.	1.020	4

TP4	Preferred service-related materials (such as pamphlets or statements) are aesthetically pleasing.	1.299	1
TP5	Have personal safety and security	1.278	2

(Compiled by Researcher)

According to Table 7, ranked regression coefficients of tangible factors, it is evident that, most significant factor Preferred service-related materials (such as pamphlets or statements) are aesthetically pleasing. Secondly, personal safety and security and Third, Bank’s physical facilities are visually appealing.

Conclusion:

Tangibles -Expectation

It was discovered that all of the constructs had regression coefficients that were greater than 0.4 and p-values that were lower than 0.5. As a result, we must accept the alternative hypothesis and conclude that the null hypothesis cannot be correct. Even though all tangible factors have an effect on the service expectations of customers, the physical facilities, such as up-to-date equipment, have the greatest impact, whereas employees who are appropriately dressed have the least impact. The customer expectation variables on the construct tangibility depicted in Table have been ranked according to their r-value, with the highest r-value receiving first place, followed by the next highest, and so on. Thus, based on the preceding analysis, it is possible to draw the following conclusion factor that affects a customer's expectation of SQ in the tangible dimension is the aesthetically pleasing physical facilities of superior banks, followed by the availability and appearance of contemporary-looking equipment in the bank, followed by the fact that excellent banks have well-dressed, presentable employees, then pamphlets and brochures designed to provide service information, and finally the seating and other physical amenities.

Tangibles -Perception

Each of the constructs has a p-value that is less than 0.50 and a regression coefficient that is greater than 0.40. As a result, it is determined that the alternative hypothesis is acceptable. All variables under

tangible perception have a significant effect on the perception of SQ by banking customers in the YSR Kadapa district of Andhra Pradesh. This indicates that the alternative hypothesis has been accepted and the null hypothesis has been rejected. All variables of the tangible dimensions have a significant impact on the perception of SQ among bank customers in the YSR Kadapa district of Andhra Pradesh.

Suggestions:

Redesigning bank's physical facilities consistent with the preferences and expectations of Customers in the Generation Y is necessary if the organization is to increase its appeal to customers on the basis of its tangible dimension. In addition, financial institutions are required to investigate new methods, such as the use of social networking tools, for communicating product and service brochures to customers. Transaction alerts can be sent via new-age communication tools such as Whats App for a more personalised service, which could go a long way toward boosting customer satisfaction as cyber threats cause an increase in transaction fraud.

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