SERVICE QUALITY ANALYSIS: EXAMINING VARIATIONS BETWEEN EXPECTED AND PERCEIVED SCORES ACROSS DIMENSIONS

.

Dr Kiran Menghani

Assistant Professor, School of Business, Woxsen University

Dr Vishal R Tomar,

Professor, MMK college

Abstract

This study investigates the service quality of Ola Cabs in Mumbai, focusing on the dimensions of the SERVQUAL model: tangibility, reliability, responsiveness, assurance, and empathy. A survey was conducted with 100 respondents who have used Ola Cabs at least once. The results were analyzed using t-tests to compare the customers' perceptions and expectations and regression analysis to determine the impact of service quality dimensions on customer satisfaction. The findings indicate significant differences between expected and perceived service quality in the dimensions of tangibility and responsiveness. Furthermore, responsiveness, assurance, and empathy significantly influence customer satisfaction, with responsiveness showing the strongest positive effect. These insights can guide Ola Cabs in improving specific service quality aspects to enhance overall customer satisfaction.

Introduction

Bhavish Aggarwal founded Olatrip.com, a travel agency that serves the Delhi area, in 2010. Ola Cabs is a taxi aggregation company that was founded in January 2011 by Aggarwal and co-founder Ankit Bhati in response to the growing demand for on-demand taxi services.(Forbes, India, 2024) Bookings could first be made over the phone, and in June 2012, the company released its mobile app.(*SN, Vikas, 2012)*. According to reports, Uber, which debuted in 2013, TaxiForSure, Meru Cabs, and Ola had the largest market share by early 2015(Business Today, 2015)

Ola Cabs provides several service levels, from budget-friendly to high-end travel. Both cash and internet payments are accepted by the service, and reservations for the taxis can be made via their website or mobile app. As of 2014, it claimed to average over 150,000 bookings per day and have 60% of the Indian market share. (Abudheen, Sainul K, 2014) In 250 locations, the organization now boasts a network of over 1.5 million drivers as of 2019.(ETCIO.com, 2019)

In 2004, the idea of organized rental cars was introduced to the Indian market. Following utility-based condominium service was introduced to the Indian market six years after Meru Cab was introduced in the majority of India's major cities. Cab services have gained popularity among

other kinds of transportation because of its advantages, door-to-door service, and currently because of modern technological progress Customers can use their smart phones to book taxis online at a fair price with only one click. With the help of ANI Technology Pvt. Ltd., Ola Cabs launched its service in Mumbai in 2010. The company's primary foundation was the idea of an online taxi aggregator. From cutting-edge luxury vehicles to Ola auto, Ola offers a variety of affordable transportation options. Currently, 450,000 automobiles are driven daily in 102 locations.

Ola cabs were more successful and frequently demanded cabs than any other cabs operating in Mumbai. The reason must be its efficient services so this paper aims at measuring service quality of olacabs services by undertaking customers' survey in Mumbai.

Service quality as perceived by customers, can be defined as 'the extent of discrepancy between customers' expectations or desires and their perception' (Zeithaml, Parasuraman and Berry, 1990) . Quality is whatever customers say it is, and the quality of particular product or service is whatever the customer perceives it to be (Buzzel and Gale, 1987) . Service quality is the delivery of excellent or superior service relative to customer expectations (Zeitharnl and Bitner, 1996)

Parasuraman, Zeithaml and Berry (PZB) have done extensive work in the area of service quality. According to them Perceived Service Quality can be defined as the extent of discrepancy between customers' expectations or desires and their perceptions. Put simply, Perceived Service Quality = Perceived Service - Expected Service. (Zeithaml, Parasuraman and Berry, 1990)

 Based on their research work, they identified that customers consider five dimensions in their assessment of service quality, as given below:

Reliability : Ability to perform the promised service dependably and accurately (example: Cab service on time).
Responsiveness : Willingness to help customers and provide prompt service (example: no waiting time).
Assurance : Employee's knowledge and courtesy and their ability to inspire trust and confidence. (example : knowledgeable drivers).
Empathy : Caring, individualised attention given to customers (example: specific type of service provided , acknowledges customer by name)
Tangibles : Appearance of physical facilities, equipment, personnel and written materials (example: seating and air conditioning in a cab). This research is to study customers' perception and customers' expectations of service quality based on above variables of servqual of Ola cab services.

Literature Review

According to Parasuraman, Zeithaml, and Berry (1994), service quality is a fundamental factor in determining customer Satisfaction. These results so indicate that there is a substantial correlation between customer satisfaction and service quality.

The "SERVQUAL" measure of Parasuraman, Zeithaml, and Berry (1985) has been the most widely used measure of service quality. It was developed and validated using service providers in four service sectors: retail banking, credit cards, securities brokerage, and product repair and maintenance. The scale's developers acknowledge that the five service quality dimensions are general dimensions that relate to most of the services.

Ten dimensions of service quality were initially identified by Parasuraman, Zeithaml, and Berry (1985) based on a number of focus group investigations. They distilled these ten criteria down to five in 1988: tangibles, certainty, responsiveness, empathy, and reliability. The "product" part of the service—items that are sensed and touched—is covered by the first dimension, "tangibles," which includes things like classroom furnishings. The "intangible" components of the service—those that can only be felt but not touched—are covered by the final four dimensions.
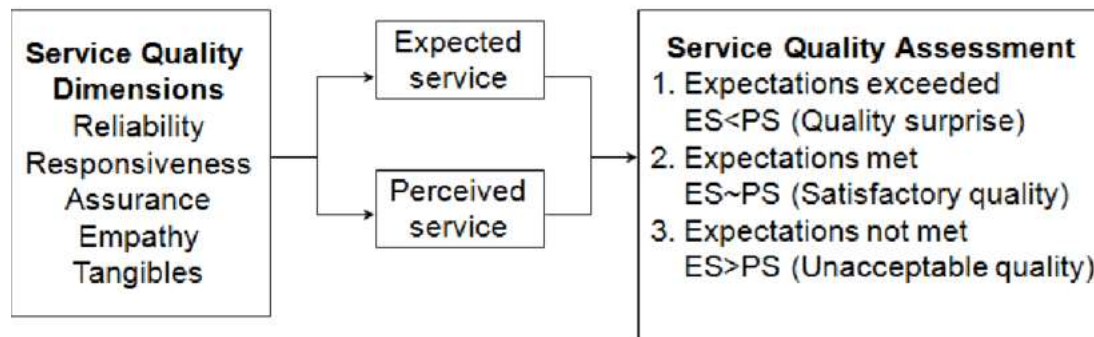
Expectation and perception in service quality assessment

Source: Zeithaml, V., Parasuraman, A. and Berry, L. L. (1990). Delivering service quality-balancing customer perceptions and expectations. New York: The Free Press.

Objectives

1. To measure the service quality of Ola Cabs in Mumbai based on customers' perceptions and expectations.
2. To identify the dimensions of service quality that significantly impact customer satisfaction.
3. To compare the perceived and expected service quality of Ola Cabs using the SERVQUAL model.
4. To provide recommendations for improving the service quality of Ola Cabs.

Hypotheses

1. **H1:** There is a significant difference between customers' expected and perceived service quality for Ola Cabs.

2. **H2:** The dimensions of service quality (tangibility, reliability, responsiveness, assurance, and empathy) significantly impact customer satisfaction with Ola Cabs.

Research Methodology

Research Design:

Research design is descriptive in nature.

Data Collection:

Data is collected from primary source of information through survey method.

Sample size and type:

Sample size is 100 respondents belonging to Mumbai and commuting through Olacabs atleast for once. Sampling technique is convenient sampling. Total 175 questionnaire were circulated, out of which 108 were recorded themselves as Olacab Users, and only 100 of them are used as they filled the instruments fully and correctly.

Tool for Data Collection:

Structured Questionnaire having section I containing Profile of Respondent and Section II consisting of Service Quality Variables and Overall Satisfaction.

Analysis of Data:

Data was analysed by using T test – Comparing Perception and Expectations of Customers and Regression for measuring Impact of SERVQUAL(IV) on Customer Satisfaction(DV).

Results and discussion

Table 1: Comparison of Customers' Expectations and Perceptions of Ola Cabs' Service Quality

Statistics	T_Exp	T_Per	R_Exp	R_Per	Res_Exp	Res_Per	A_Exp	A_Per	Emp_Exp	Emp_Per
Mean	4.14	3.95	4.02	4.00	4.01	4.11	4.02	4.00	4.02	3.96
Variance	0.36440404	0.371212	0.504646	0.525253	0.494848	0.48227273	0.262222	0.383838	0.504646	0.402424
Observations	100	100	100	100	100	100	100	100	100	100
Pearson Correlation	0.78807374		0.72592		0.865741		0.76413		0.651814	
Hypothesized Mean	0		0		0		0		0	

Difference					
Df	99	99	99	99	99
t Stat	4.818944098	0.376339	-2.75966	0.498117	1.06133
P(T<=t) one-tail	2.60548E-06	0.353735	0.003448	0.309753	0.145561
t Critical one-tail	1.660391156	1.660391	1.660391	1.660391	1.660391
P(T<=t) two-tail	5.21097E-06	0.70747	0.006896	0.619507	0.291122
t Critical two-tail	1.984216952	1.984217	1.984217	1.984217	1.984217

The analysis compared the expected (Exp) and perceived (Per) scores across five dimensions: Tangibility, Reliability, Responsiveness, Assurance, and Empathy. Tangibility showed a significant difference with a mean score difference and a strong positive correlation (0.789), supported by a significant t-statistic (4.819) and very low p-values. Reliability, despite a strong correlation (0.726), did not show a significant difference, with a t-statistic (0.376) and non-significant p-values. Responsiveness also exhibited a significant difference, with a strong correlation (0.866), a significant t-statistic (-2.760), and low p-values. Assurance, although having a strong correlation (0.764), showed no significant difference with identical mean scores and a non-significant t-statistic (0.498). Lastly, Empathy demonstrated a moderate correlation (0.652) and no significant difference with a t-statistic (1.061) and non-significant p-values. Overall, Tangibility and Responsiveness were the only dimensions with significant differences between expected and perceived scores.

- **Significant Differences**: Tangibility and Responsiveness show significant differences between their respective expectations and perception scores.
- **No Significant Differences**: Reliability, Assurance, and Empathy do not show significant differences between their respective expectations and perception scores.

These results can be used to understand which aspects of the evaluated parameters differ significantly between their expected and perceived values, guiding areas for improvement or further investigation.

Regression

Table 2: Regression Analysis Statistics

Regression Statistics	
Multiple R	0.923432
R Square	0.852727
Adjusted R Square	0.844893
Standard Error	0.279775
Observations	100

Table 3: ANOVA for Regression Analysis

ANOVA					
	Df	*SS*	*MS*	*F*	*Significance F*
Regression	5	42.60224	8.520447	108.854	1.59E-37
Residual	94	7.357763	0.078274		
Total	99	49.96			

Table 4: Regression Coefficients and Significance Levels

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Satisfaction	-0.05948	0.204213	-0.29125	0.771505	-0.46495	0.345994	-0.46495	0.345994
Tangibility	-0.00722	0.09237	-0.07811	0.937903	-0.19062	0.176187	-0.19062	0.176187

Reliability	0.227357	0.122212	1.860356	0.065962	-0.0153	0.470011	-0.0153	0.470011
Responsiveness	1.099339	0.095356	11.52881	1.09E-19	0.910008	1.28867	0.910008	1.28867
Assurance	0.248049	0.114757	2.161523	0.033195	0.020197	0.475902	0.020197	0.475902
Empathy	0.58086	0.105241	5.51934	3E-07	0.78982	0.3719	0.78982	0.3719

Significant Predictors: Responsiveness, Assurance, and Empathy are significant predictors of the dependent variable.

- o   Responsiveness has the strongest positive effect.
- o   Assurance also has a positive effect.
- o   Empathy has a strong effect.

Non-Significant Predictors: Tangibility is not significant predictors.

Reliability is borderline significant (p-value close to 0.05) and shows a positive relationship with the dependent variable.

- **Model Fit**: The model explains a substantial portion of the variance in the dependent variable ($R^2 = 0.853$), indicating a good fit. The high F-statistic and very low significance F value support this conclusion.

These results help identify which factors (Tangibility, Reliability, Responsiveness, Assurance, and Empathy) significantly contribute to the dependent variable and to what extent.

Implications

1. **Service Enhancement:** Ola Cabs should focus on improving the physical aspects of their service, such as the appearance and condition of vehicles, to enhance tangibility.
2. **Training Programs:** Implementing comprehensive training programs for drivers to improve responsiveness and assurance can help in meeting customer expectations and building trust.
3. **Customer Engagement:** Developing strategies to provide more personalized and empathetic service can positively influence customer perceptions and satisfaction.

4. **Technological Upgrades:** Continuously upgrading the app and booking systems to ensure reliability and prompt service can help reduce discrepancies between expected and perceived service quality.
5. **Regular Feedback:** Regularly collecting and analyzing customer feedback can provide insights into areas needing improvement and help maintain high service quality standards.

By addressing these areas, Ola Cabs can enhance their service quality, leading to higher customer satisfaction and a stronger competitive position in the market.

Conclusion

The study reveals that there are significant differences between customers' expectations and perceptions of Ola Cabs' service quality in the dimensions of tangibility and responsiveness. Responsiveness, assurance, and empathy are significant predictors of customer satisfaction, with responsiveness and Empathy having the strongest positive effect. These findings suggest that while Ola Cabs performs well in certain areas, there is room for improvement in tangibility and responsiveness to meet customer expectations better.

References

1. *"Ola: Taking India On A Ride". Forbes India. Retrieved 12 January 2024.*
2. *SN, Vikas (13 June 2012). "Olacabs Offers Real-Time Cab Booking On Mobile; Single Click; Our Take". MediaNama. Retrieved 12 January 2024.*
3. *"How Ola and Uber are making other taxi companies irrelevant in India". Business Today. 12 August 2015. Retrieved 12 January 2024.*
4. *"Ola aims to counter Uber with its Biz-class service". The Economic Times. 2 September 2014.*
5. *Abudheen, Sainul K (19 November 2014). "Ola now has $250-300M annual gross transaction run rate; peek at its numbers - VCCircle". VCCircle.com.*
6. *"Inside the data driven model of Ola with Sanjay Kharb, VP- Engineering, Ola - ET CIO". ETCIO.com. Retrieved 2 November 2019.*
7. Zeithaml, Parasuraman and Berry, "Delivering Quality Service - Balancing Customer Perceptions and Expectations," Free Press, NY, 1990.
8. Zeithaml V, "Communicating with Customer about Service Quality in Service Management Effectiveness", Ed. Bowen, Chase and Cummings, Jossey Bass, San Francisco, 1990, pp. 369-383.