

# GAP ANALYSIS BETWEEN PASSENGERS EXPECTATIONS AND PERCEPTIONS OF KMT KOLHAPUR SERVICE QUALITY USING SERVQUAL APPROACH

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# ABSTRACT

A fundamental strategic concern for businesses operating in the service sector is the provision of optimal services that are personalized to the needs, wants, wishes, and preferences of clients. The fundamental focus of management in firms is to raise service quality standards because doing so will increase customer satisfaction, which will then result in sustained competitive advantage. Therefore, in order to survive, maintain their ability to compete, and carry out customer satisfaction procedures, service organizations should evaluate the quality of the services they provide to the customers in order to become aware of the needs of those customers and to propose strategies for improving and promoting their service quality. Various approaches have been brought out to assess service quality in service organizations. The SERVQUAL approach, which is now being employed, is based on a genuine understanding of the customer's perception of the service quality that was supplied in comparison to the ideal circumstance. In order to evaluate the quality of a service, it is crucial to analyze and compare service providers' opinions and determine whether they are consistent with consumers' opinions. The SERVQUAL model is utilized in the current study to identify the discrepancy between expectations and perceptions of the services offered by KMT Public Road Transport, and it makes an effort to suggest some ways to narrow the discrepancy. Using the SERVQUAL methodology, the 5 SERVQUAL dimensions of tangibility, empathy, assurance, reliability, and responsiveness were investigated among 388 customers. Results show that tangibility and reliability consumer expectations are not being met across all dimensions, and there is a large discrepancy between what customers perceive and what they expect.

**Keywords**: Service Quality, Service Gap analysis, SERVQUAL, Reliability, Assurance, Tangibility, Responsiveness and Empathy.

# Introduction

Higher levels of customer satisfaction are correlated with higher levels of service quality. For commercial enterprises all across the world, service quality and customer happiness are rising concerns. Customer satisfaction is regarded as the most crucial component of a product or service in today's business environment. In the case of public transportation by road, service quality and customer satisfaction became deciding factors and helped customers form an impression of public transportation. This is a big possibility for the company to gain a competitive edge because of the growth of a solid relationship with its customers.

The transport landscape is increasingly evolving, and its future path is unknown. We know that mobility will increase as more people and goods travel around towns and across the globe: by 2030. Annual air traffic will reach 80 trillion air-kilometers – an increase of 50 percent compared to 2015; global freight volumes will increase by 70 percent relative to 2015. There will be an extra 1.2 billion cars on the road – twice the amount today. (Sustainable Mobility for All Initiative, 2017)

# Service Quality

The performance, or profitability, of the service sector is thought to be significantly influenced by service quality. Service excellence both lures new clients away from rival businesses and encourages clients to make repeat purchases (Venetis & Ghauri, 2002; Wantara, 2015).

Conformance to client requirements is a common definition of service quality (Berry, 1988). Service quality is described as "a multidimensional term, judged and experienced by consumers, according to a set of key aspects, classified in five areas, namely: tangibility, reliability, responsiveness, assurance, and empathy" (Mauri, 2013). According to Rauch. (2015), the idea of service quality was first applied as a framework for marketing



techniques that put the client first. Due to its crucial connections to expenses, profitability, customer happiness, customer retention, and service guarantees, service quality has emerged as an essential research issue. The importance of service quality in company marketing and financial performance is likewise becoming more widely acknowledged.

#### Service Quality Gap

#### Gap 1: Customer expectation – management perception gap:

This discrepancy can arise when the service provider doesn't know or doesn't understand what customers are expecting. Service provider leaders fail to recognize which types of service can be expected to provide good quality service to customers. As a result, customers' service quality perceptions may be affected (Parasuraman, 1985:44).

#### Gap 2: Management perceptions – service quality specification gap:

As a result of resource constraints, market conditions, and lack of management commitment to service quality, the gap between management perceptions of customers' expectations and the actual specifications established for service that arise. The disparity may affect customers' perceptions of service quality (Siddiquei, 2018).

#### Gap 3: Service quality specifications – service delivery gap:

While Companies may have structured requirements or specifications for maintaining service quality, due to variation in employee efficiency, it may be difficult to conform to those requirements (Parasuraman, 1985:44).

#### Gap 4: Service delivery – external communications gap:

This discrepancy in the differences between service delivery and what the company promises through external communications and/ or lack of knowledge on service delivery aspects will influence the expectations of customers about service quality (Parasuraman, 1985:46).

#### Gap 5: Expected service – perceived service gap:

Gap 5, the most significant gap, can be regarded as a function of the first four gaps and Parasuraman. (1985:46) argue that the relationship between Gap 5 and the first four gaps is still there. The quality that a customer perceive in a service is a function of the magnitude and direction of the gap between expected service and perceived service (Parasuraman, 1985:46) (Mouwen, 2015).

The SERVQUAL methodology measures service quality during the evaluation process, and the difference between the customer's expectations and perceptions is then used to define and compute service quality.

#### **Research Methodology:**

The current study is both descriptive and diagnostic in character. A well-structured questionnaire was created to gauge the passengers' perceptions of and satisfaction with the KMT bus services to get the fullest possible first-hand information on the research problem. More efforts were made to determine gap analysis with respect to the quality of service of KMT with the help of the SERVQUAL model.

#### **Measuring tool**

The SERVQUAL model's determinants were used to create a well-structured questionnaire for the current investigation. The questionnaire that was used to gather information about how passengers felt about the KMT bus service included the five variables of tangibility, reliability, responsibility, assurance, and empathy. Then based on the pilot study, the questionnaire was modified and restructured for the survey. Structured questionnaire has been framed using determinants of SERVQUAL model.

#### **Data Analysis:**

With the use of suitable statistical methods, the acquired data has been processed. The statistical methods like percentage analysis, mean, Cronbach's Alpha, Measure of Sampling Adequacy, and to assess the relevance of various aspects of gauging the perception of the passengers.

#### **Results:**

The service quality gap is calculated as follows:

#### Service quality gap = Perception (experience) - Expectation

A perception of service above the expectation produces satisfaction, while the perception below the expected level makes dissatisfaction.



Т	Tangible Attributes	Perception Mean (P)	Expectation Mean (E)	Service Quality gap (P-E)
T1	Bus Shelters neat and clean	2.91	4.01	-1.1
T2	The environment is clean and hygienic.	2.79	3.86	-1.07
Т3	Proper Seating facilities in bus/bus stand	2.9	3.45	-0.55
T4	It is equipped with modern technology.	2.63	3.93	-1.3
T5	Bus time table.(Arrival and Departure)	2.87	3.64	-0.77
<b>T6</b>	Availability of seats.	3	3.6	-0.6
T7	Leg-space in buses.	3.32	3.99	-0.67
T8	Well cleaned, Buses.	3.04	3.97	-0.93
Т9	Seats reserved for women/physically challenged persons and senior citizens.	3.38	3.7	-0.32
T1 0	Ceiling heights & Ambiance	3.49	3.91	-0.42
T1 1	Buses are well maintained.	3.06	3.62	-0.56
T1 2	The dress of the staff is neat and thoughtful.	3.38	3.79	-0.41
	Average Tangible Attributes	3.07	3.79	-0.72

# Table: 5.1 : Tangibles SERVQUAL Scores:

Source: Primary Data Survey

Table 5.1 indicates customers are highly dissatisfied with the attributes mentioned in the Tangibles aspect. The average SERVQUAL score of 3.07 supports this statement. The total average gap score is (0.72) out of 12 features, three of the critical attributes of 'Bus shelters are clean and tidy (1.10), the hygienic atmosphere (1.07) and advanced technology (1.30) have earned the highest gap score. This means that in the 21st century, KMT needs to change and focus on sanitation, adaptation to new technologies, and cleanliness to draw more passengers to public transport.

R	Reliability Attributes	Perception Mean (P)	Expectation Mean (E)	Service quality gap (P- E)
R1	The timetable is error-free.	3.07	3.80	-0.73
R2	(Punctuality).	2.99	3.86	-0.87
R3	Reach the destination on time.	3.04	3.85	-0.81
R4	Rarely breaks down	3.17	3.77	-0.60
R5	Easily book a ticket	3.39	3.85	-0.46
R6	Seats reserved for women/physically challenged persons, senior citizens are occupied by the deserving passenger.	3.12	3.88	-0.76
	Average Reliability Attributes	3.13	3.84	-0.71

# Table 5.2 Average Reliability SERVQUAL Scores

Source: Primary Data Survey



According to the customer's response (table 5.2), passengers believe that KMT provides its customers' buses with convenient routes and timely facilities and recognizes their basic needs. However, the average gap score is (0.71) out of the six attributes reliability attributes 'ticket booking program' received the lowest gap score (0.46) and Punctuality (On-Time Service) earned the gap score (0.87). This suggests that KMT has to focus on this to satisfy customers.

Re	Responsiveness Attributes	Perceptio n Mean (P)	Expectati on Mean (E)	Service quality gap (P-E)
Re 1	Inform people about the timetable change (arrival and departure) in advance.	2.89	3.78	-0.89
Re 2	Inform people about the change in prices in advance.	3.09	3.69	-0.60
Re 3	Timely and efficient service.	3.19	3.85	-0.66
Re 4	Satisfy passenger's requests right the first time.	3.22	3.64	-0.42
Re 5	The staff is always willing to help passengers.	3.33	3.81	-0.48
Re 6	Prompt and accurately responsive to passengers.	3.22	3.82	-0.60
Re 7	Clarity of announcement (audible)	3.20	3.80	-0.60
Re 8	Announcement inside the bus is effective & guide the passengers.	3.22	3.82	-0.60
	Average Responsiveness Attributes	3.17	3.78	-0.61

# Table 5.3 Responsiveness SERVQUAL Scores:

Source: Primary Data Survey

The study reveals that table (5.3) staff are eager to support customers but cannot deliver timely services when the situation demands. These points shape the average SERVQUAL score under the Responsiveness dimension to 3.17, indicating dissatisfaction in this field. The average Gap score is (0.61) out of the eight sensitive attributes that 'satisfied passengers first-order' has earned the lowest gap sore (0.42), and 'bus arrival and departure time shift details' has the highest gap score (0.89). This means that KMT will have to concentrate on using proper communication channels to inform the passenger's changes in the timetable for some reason.

A	Assurance Attributes	Perception Mean (P)	Expectation Mean (E)	Service quality gap (P-E)
A1	The travel fares are reasonable.	3.47	3.85	-0.38
A2	short travel time	3.19	3.73	-0.54
A3	KMT bus drivers operate the buses safely.	3.34	3.99	-0.65
A4	Safe in their transactions with staff in the bus/bus stand	3.35	3.88	-0.53
A5	In-depth occupational knowledge of their jobs.	3.36	3.83	-0.47



A6	The staff of KMT instills confidence in the Passengers.	3.29	3.78	-0.49
A7	KMT runs a sufficient number of buses in the city	3.16	3.79	-0.63
A8	KMT gives priority to passenger safety.	3.30	3.86	-0.56
A9	Not afraid of being pick-pocketed on the bus.	3.14	3.68	-0.54
	Average Assurance Attributes	3.29	3.82	-0.53

# Table 5.4: Assurance Attributes SERVQUAL score

Source: Primary Data Survey

From the customer's point of view (Table 5.4), KMT is close to instilling trust in the Assurance aspect of attributes. Passengers believe that KMT maintains a safe ride and is consistent in delivering quality services. Yet overall Gap Score (0.53) out of the nine insurance attributes, 'Travel rate is fair' has the lowest gap score (0.38), which means passengers are satisfied with the current KMT ticket price. Nonetheless, 'KMT drivers run the bus safely' obtained the highest gap score (0.65). That means that KMT must concentrate on this part of the service as customers' demands are rising, and they are getting expected service from the KMT.

Em	Empathy Attributes	Perception Mean (P)	Expectation Mean (E)	Service quality gap (P-E)
Em1	KMT always looks after the best interests of their passengers.	3.18	3.68	-0.50
Em2	KMT operating hours are convenient to all their customers.	3.23	3.71	-0.48
Em3	Getting information about the facilities and services of bus companies is easy.	3.19	3.67	-0.48
Em4	It is easy to find and access the bus stand.	3.47	3.74	-0.27
Em5	Bus drivers and conductor shows courtesy to the passengers	3.36	3.72	-0.36
Em6	Bus drivers and conductors are willing to help passengers.	3.41	3.8	-0.39
	Empathy attributes	3.31	3.72	-0.41

# Table 5.5: Empathy Attributes SERVQUAL Scores:

Source: Primary Data source

The findings of the survey indicate (Table 5.5) that consumers are still not entirely pleased. KMT will also strive to concentrate on the best interests of its customers to reach a higher level of customer satisfaction. Overall Gap score for empathic attributes is (0.41) from which 'easy to find a bus stop' has earned the lowest score for the difference (0.27) and 'KMT looks after the needs of the travelers' has the highest score for the distance. That means that this Empathy Attribute will be more concentrated on enhancing the efficiency of the service.



# **Hypothesis Testing:**

H0: There is no significant gap between Passengers' expectations and Satisfaction for KMT services.

H1:There is a significant gap between Passengers' expectations and Satisfaction for KMT services.

To test the hypothesis Paired Sample t-test is used. Descriptive Statistics results are as follows.

Paired Samples Statistics					
		Mean	Ν	Std. Deviation	Std. Error Mean
D-1-1	<b>Tangibles Expectations</b>	3.7685	388	.92223	.04682
Pair 1	Tangibles Satisfactions	3.0483	388	.82618	.04194
Pair 2	<b>Reliability Expectations</b>	3.8170	388	1.13660	.05770
	<b>Reliability Satisfactions</b>	3.1151	388	.89928	.04565
	Responsiveness Expectations	3.7529	388	1.01086	.05132
Pair 3	<b>Responsiveness</b> Satisfactions	3.1511	388	.91574	.04649
Pair 4	Assurance Expectations	3.7938	388	.97939	.04972
rair 4	Assurance Satisfactions	3.2784	388	.87070	.04420
Dain 5	Empathy Expectations	3.6916	388	1.00834	.05119
Pair 5	Empathy Satisfactions	3.2977	388	.90177	.04578

# Table:5.6: Paired samples statistics:

	Paired Samples t test								
	Paired Differences								
		Mean	Std. Deviation	Std. Error	95% Confidence Interval of the Difference		t	df	Sig. (2- tailed)
				Mean	Lower	Upper			
Pai r 1	Tangibles Expectations - Tangibles Satisfactions	.7201 5	.99257	.05039	.62107	.81922	14.29 1	387	.000
Pai r 2	Reliability Expectations - Reliability Satisfactions	.7018 9	1.21002	.06143	.58111	.82267	11.42 6	387	.000
Pai r 3	Responsiveness Expectations - Responsiveness Satisfactions	.6018 0	1.10647	.05617	.49136	.71225	10.71 4	387	.000



Pai r 4	Assurance Expectations - Assurance Satisfactions	.5154 6	1.04258	.05293	.41140	.61953	9.739	387	.000
Pai r 5	Empathy Expectations - Empathy Satisfactions	.3939 0	1.06607	.05412	.28749	.50031	7.278	387	.000

 Table 5.7: Paired samples test: Source: Primary Data Source

Table 5.6 and table 5.7 indicates that

**Tangibility:** The test statistics value is 14.291, and P-value is 0.000. The P-value is lesser than 0.05 (0.000<0.05), the null hypothesis is rejected at a 5% level of significance. It is therefore concluded that there is a significant gap between Passenger expectations and satisfaction for KMT services.

**Reliability:** The test statistics value is 11.42, and P-value is 0.000. The P-value is lesser than 0.05 (0.000<0.05), the null hypothesis is rejected and at a 5% level of significance. It is therefore concluded that there is a significant gap between Passenger expectations and satisfaction for KMT services.

**Responsiveness:** The test statistics value is 10.714, and P-value is 0.000. The P-value is lesser than 0.05 (0.000 < 0.05), the null hypothesis is rejected and at a 5% level of significance. It is therefore concluded that there is a significant gap between Passenger expectations and satisfaction for KMT services.

Assurance: The test statistics value is 9.739 and P-value is 0.000. The P-value is lesser than 0.05 (0.000 < 0.05), the null hypothesis is rejected and at a 5% level of significance. It is therefore concluded that there is a significant gap between Passenger expectations and satisfaction for KMT services.

**Empathy:** The test statistics value is 7.278and P-value is 0.000. The P-value is lesser than 0.05 (0.000<0.05), the null hypothesis is rejected and at a 5% level of significance. It is therefore concluded that there is a significant gap between Passenger expectations and satisfaction for KMT services.

For all the above five parameters, it indicates that there is a significant gap between Passengers' expectations and passenger's satisfaction with reference to the Kolhapur Municipal Transport.

Hypothesis	Variables	H0: Accept or Reject	Decision	Statistical Tool Used
There is no significant gap	Tangibility	Rejected	Relationship	
between Passengers'	Reliability	Rejected	Relationship	
expectations	Empathy	Rejected	Relationship	Paired Sample
and Satisfaction for	Assurance	Rejected	Relationship	t- test
KMT services.	Responsivenes s	Rejected	Relationship	

# Table 5.8 summary of the Hypothesis testing

From the above summary table it can be concluded that there is a significant difference between customer service expected and the actual service perceived. To bridge the gap between expectation and perception of the customer Kolhapur Municipal Transport Management need to work out different marketing and promotional strategies.



Gaps and recommend strategies for service quality improvement.

Gaps	Strategies		
• There is significant gap between Passengers' expectations and Satisfaction for KMT services in terms of tangibility attributes	<ul> <li>✓ Clean and hygiene at bus stops and on board.</li> <li>✓ The bus station premises and the buses have to be equipped with modern technology.</li> <li>✓ Drinking water facility, washrooms and other recreational facilities at bus stops.</li> </ul>		
• There is significant gap between Passengers' expectations and Satisfaction for KMT services in terms of reliability attributes	<ul> <li>✓ Regular maintenance of the buses and bus stops.</li> <li>✓ Punctuality is required to maintain service quality.</li> <li>✓ Frequency of the buses.</li> </ul>		
• There is significant gap between Passengers' expectations and Satisfaction for KMT services in terms of responsiveness attributes	<ul> <li>✓ Proper Communication Skill and public relations.</li> <li>✓ Listen to the voice of the customer.</li> <li>✓ Well trained and dedicated staff. Training should be given after regular intervals.</li> </ul>		
• There is significant gap between Passengers' expectations and Satisfaction for KMT services in terms of assurance attributes	<ul> <li>✓ Priority to Safety and Security.</li> <li>✓ Customer preference.</li> <li>✓ Understanding customer</li> <li>✓ Quick and prompt service.</li> </ul>		
• There is significant gap between Passengers' expectations and Satisfaction for KMT services in terms of empathy attributes	<ul> <li>✓ Following up to customer complaints.</li> <li>✓ CRM needs to be implemented.</li> <li>✓ Conductors and drivers need to give proper training with respect to how to deal with passengers and how to solve their queries.</li> </ul>		

# Table 6.1 : Gaps and recommend strategies for service quality improvement

# **Conclusion:**

The objective of this research is to assess how customers perceive Kolhapur Municipal Transport's (KMT) level of service with regard to Kolhapur. It has been determined that Kolhapur Municipal Transport (KMT) customers have the highest expectations in terms of reliability, which includes punctuality, on-time arrival, and minimal breakdowns, as well as acceptable fleet or bus condition. Additionally, it includes the lowest expectation in terms of the empathy dimension, which consists of the behavior and helpfulness of the crew on board, easy access to information, and convenient bus timetable. It also involves technological intervention in the ticket purchasing system.

The tangibility dimension, which includes the quality and ambiance of the bus stops, the hygienic environment and amenities at the bus stops, the legroom and comfort of the seating on the board, has the highest quality gap. The quality's empathy component has the smallest gap.

# **References:**

Amponsah, C. T., & Adams, S. (2016). Service quality and customer satisfaction in public transport operations. International Journal of Services and Operations Management, 25(4), 531–549.



- Ebrahim Azizi,Davood Jafari,Babak Farhang Moghadam (2014). Gap Analysis between Customer Expectations and Perceptions of ETKA Organization's Service Quality Using SERVQUAL Approach (Case Study: Pamizfam Sugar Company). Journal of Social Issues & Humanities, Volume 2.
- Hermen Jan Van, R. (2009). Service Quality Indicators for Business Support Services. MIS Quarterly Executive, 5(1), 43–53.
- Jain, S. K., & Gupta, G. (2004). Measuring Service Quality: Servqual vs. Servperf Scales. Vikalpa, 29(2), 25–38.
- Khurshid, R., Naeem, H., Ejaz, S., Mukhtar, F., & Batool, T. (2012). Service Quality and Customer Satisfaction intudyn Empirical S. International Journal of Economics and Management Sciences, 1(9), 24–30.
- M. N. P., & -, D. N. K. H. B. (2017). An Empirical Study on Integration of Servqual and Kano Model for Measuring Service Quality of Hospitals in Ahmedabad. Indian Journal of Commerce & Management Studies, VIII(3), 77–95.
- Paper, C., & Shah, M. N. (2016). Measuring Customer Satisfaction Using Service Quality Parameters in Mumbai Metro Transport. January.
- Quality, S., Affecting, A., & Bus, H. C. (2010). Service quality attributes affecting passengers' satisfaction with HIGER city buses. Ethiopian Journal of Business and Economics (The), 1(2), 70–98.
- Rasyida, D. R., Mujiya Ulkhaq, M., Setiowati, P. R., & Setyorini, N. A. (2016). Assessing Service Quality: A Combination of SERVPERF and Importance-Performance Analysis. MATEC Web of Conferences, 68, 6–10. https://doi.org/10.1051/matecconf/20166806003
- Saadon, M. S. I. bin. (2012). The Effectiveness of Integrating Kano Model and Servqual Into Quality Function Deployment (Qfd) for Developing. Journal of WEI Business and Economics-December 2012, 1(1), 1–8.
- Singh, S. K. (2017). State Transport Undertakings in India : Status and Issues. International Journal of Applied Business and Economic Research, 15(January), 279–297.
- Sachs, G. (2020). CHAPTER III DEVELOPMENT OF ROAD TRANSPORT IN INDIA AND KERALA. 52–78.
- Sustainable Mobility for All Initiative. (2017). Global Mobility Report 2017. In Global Mobility Report 2017. https://sum4all.org/publications/global-mobility-report-2017
- Tripathi, V., Kumar, A., & Nema, G. (2012). Measuring Service Quality in Indian Public Transport System : A Comprehensive Review Asia-Pacific Marketing Review. Asia-Pacific Marketing Review, I(June), 113–119.
- Ugwuegbu, C. (2019). Tangibles and empathy dimensions ( of servperf model ) and customer satisfaction in the use of ATMs. Strategic Journal of Business and Social Science (SJBSS), 2(2), 1–23.
- Wojuaden, C. A., & Badiora, A. I. (2017). Users' satisfaction with public transport operations in Ibadan, Nigeria. Journal of Social Sciences Research, 3(9), 88–96.
- Yaya, L. H. P., Fortià, M. F., Canals, C. S., & Marimon, F. (2015). Service quality assessment of public transport and the implication role of demographic characteristics. Public Transport, 7(3), 409–428. https://doi.org/10.1007/s12469-014-0099-7