

CUSTOMER SATISFACTION TOWARDS KMRL – A STUDY

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ABSTRACT

Whenever a business starts the customers comes the 'first', then only comes the profit i.e. only when the customers are happy then only a business can earn profit. So, it is important for an organisation to look into the needs and wants of the customer, to survive and to success in the market. That's how customer satisfaction became the key component for the success of any business. Therefore, the organisation has to identify the factors which influences customer satisfaction and has to nurture them.

Keywords: *Customer satisfaction, Public transportation, Amenities, Service quality, Kochi metro*

I. INTRODUCTION

Customer satisfaction is defined as a measurement that determines how happy customers are with a company's products, services, and capabilities. Customer satisfaction information, including surveys and ratings, can help a company determine how best to improve or changes its products and services. An unsatisfied customer's word of mouth is more dangerous than a satisfied customer's silence. That's why customer satisfaction is considered to be an important objective of an organisation to sustain in the market and to achieve its goals. Customers perception is one another element which plays a significant role in the determination of customers satisfaction. Satisfaction will influence by perception of service quality, price, and other personal expectations regards to service. Only when the customers perceptions are properly identified and served then only long-term customer retention is possible. Even though the sale or market share of the product gives information about the current performance of the organisation, satisfaction gives an idea about how likely the customers will repurchase in the future.

Service quality and customer satisfaction involve a comparison between expected and perceived service, but while satisfaction refers to the predicted service (expectations of what the service is likely to be), service quality deals with the ideal or desire (what the service should be).SERVQUAL is a service quality framework that has been incorporated into customer satisfaction surveys to fill the gap between and improve out the customer

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expectations and experiences. , organisations brand strength depends on the perception of its customers. Satisfied and loyal customers indicate positive perceptions of organisation's brand.

In the above context, it is decided to study the satisfaction level of customers visiting Kochi Metro. As a part of study, it decided to obtain customer perception about various facilities provided in Kochi Metro to the passengers. The Kochi Metro is a rapid transit system serving the city of Kochi in Kerala, India. It was opened to the public within four years of starting construction on 17th June 2017, which is the fastest completed metro project in India after the Lucknow Metro .The Kochi metro project is the first metro in the country which connects rail, road and water transport facilities. At the end of this study we want to analyse customer satisfaction level, perception about facilities provided, customer needs to improve the relation between customer and service provider (Kochi Metro).

II. REVIEW OF LITERATURE

Richard Anderson, Benjamin Condry, Nicholas Findlay, Ruben Brage-Ardao, Haojie Li (2013) on their study "A Review of Global Practices and Challenges from the Public Transport Sector". The study reviews current standards and practical experience of measuring and valuing convenience in two transport sectors: the operations of public transport systems in urban areas, and the railway industry in Great Britain. And how much of such operations varies globally. The paper concludes by considering the implications and opportunities for public transport operators, authorities and regulators worldwide in better measuring, valuing and managing public transport convenience in order to better meet mobility need.

Shankar Kumar. S and Dr B Jayaprabha (2018) studied that "An Empirical Study on Commuters Satisfaction Towards Chennai Metro Rail Limited". Transportation plays a vital role in the growth of our country's economy. It is essential to identify the level of commuter's satisfaction and also to know the demographic profile of the commuters of metro. The main aim is to identify the factors influencing the commuter's satisfaction and the service provided by metro. The service providers should bring more innovative services to the people with affordable cost.

Nawazuddin Kabardian, Balan Sundarakani, Mohammad Nabhan (2018) on their paper " Study of service operations of metro-action research embedded with case study" explains that the growing demand for the public transport among the major cities around the world has fuelled the need for metro transportation. The main objective of this project is to analyse the operational strategies of metro service in Dubai. The growing demand of these systems can be cited to the problem of traffic and pollution among the major cities.

Dr Som Sankar Sen (2017) in their paper "Kolkata metro railway and customers satisfaction: an empirical study" discuss about the importance of identifying the factors which influences the commuters and bringing changes in those factors as per the consumer's perception and demand.

A Appu, SG Balaji (2017) on their study” An experiential study of contemporary metro rail services: Commuters experience journey in modern Chennai city” According to this study the main objective is to analyze the direction and magnitude of the effect of those factors on commuters overall journey experience with reference to metro rail service in Chennai city. It used the descriptive method as the research design. With Multiple Regression Analysis it was found that the experience of the journey depends only on the age, occupation and income of commuters.

Kenneth R. Stuart, Marc Mednick, and Johanna Buckman (1735) studied that “An Empirical Study on Structural Equation Model of Customer Satisfaction for the New York City Subway System”. The study focuses on the subway system of New York city. The main aim was to develop a more complete model than heretofore used to describe casual factors leading to customer satisfaction within a key element of the transportation industry. It also describes the potential uses for the model in strategic planning and resource allocation.

Govind Nath Srivastava (2017) in his research “Understanding Customer Orientation Delhi Metro’s Service Personnel and Impact on Customer Satisfaction: An Empirical Study” aims to investigate customer orientation of employees of Delhi Metro. They intend to analyse the behavioural dimension of services of Delhi metro and its impact on customer satisfaction. This study proposes to arrange the factors which influence passenger satisfaction in a hierarchical order.

Yuning Wang, Zhe Zhang, Mengyuan Zhu, and Hexian Wang (2020) on their paper “The Impact of Service Quality and Customer Satisfaction on Reuse Intention in Urban Rail Transit in Tianjin, China”. The purpose of the study was to assess the important dimensions of service quality and customer satisfaction on rail transit passengers reuse intention using Structural Equation Model (SEM). The conclusions from the study refines the interrelationship among service quality, customer satisfaction and reuse intention.

Nishant Chung Disha Thanai (2017) in their paper “Customer Satisfaction towards Delhi metro Rail Corporation, It explains that service quality and customer satisfaction play an important role in marketing of any concern. The survey concludes that, there exist a positive relationship between reliability with customer satisfaction. Also considering other attributes such as assurance, tangibles, empathy and responsiveness all have positive relationship with customer satisfaction.

STATEMENT OF PROBLEM

The Kochi Metro is a rapid transit system serving the city of Kochi. The Kochi metro project is the first metro in the country which connects rail, road and water transport facilities. The service quality of Kochi Metro Rail Limited influences commuter’s experiences and so the outcome of the Kochi Metro Rail Limited services and its relationship with commuter’s experience to be studied. The present study has been undertaken with a view to identify that level of satisfaction the commuter’s experience with Kochi Metro Rail Limited .

OBJECTIVES OF THE STUDY

- 1) To identify the factors influencing satisfaction of customers of Kochi Metro.
- 2) To identify the most influencing factor of customer satisfaction towards Kochi Metro.
- 3) To analyse the impact of amenities provided in Stations, Train Specific Services, Ticketing Services, Security services and Employees driven Services over satisfaction of Commuters of Kochi Metro.

SCOPE OF THE STUDY

This study is mainly focused on the commuter's experience of journey level from the services offered by metro rail transport system. It is to study every aspect related to metro railway services like amenities provided, quality of travel, staff behaviour, safety, cleanliness, etc. The sample population is chosen from Edapally, Aluva, Thykoodam, Ernakulam South Metro Stat. The study is conducted to know the commuter's satisfaction towards Kochi Metro.

III. RESEARCH METHODOLOGY

Research methodology provides a clear-cut path to achieve the predetermined objectives. It mentions about the process of research, method of data collection, tools required for analysis of data and results. Hence, it's a blue print of collecting, measuring and analysing the data collected for the study. Primary data gathering instrument in this study is a structured questionnaire, which was distributed directly to the commuters. And secondary data was collected from various websites, magazines, books.

Among the various statistical tools for data analysis, Percentage Method is used in this study. For better understanding of data collected, it is presented in the form of tables. The sample size of the study is 100 which consist students, both public and private sector employees, tourists etc. While conducting the study, different variables regards to different services of Kochi Metro were identified through detailed group discussion and comprehensive review of literature.

IV. ANALYSIS AND INTERPRETATIONS

TABLE 1 AGE WISE DISTRIBUTION OF RESPONDENTS

SL No.	Age	No. of respondents	% of respondents
1	Below 18	4	4%
2	18-30	46	46%
3	30-50	35	35%
4	50 Above	15	15%

	Total	100	100%
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Interpretation The above table shows the study received a mixed response from the age group of 18-30 and 30-50. Also, in the age group of below 18 only 4% of passengers are using metro which need to be improved. It's found that 15% of the passengers belongs to the age group of above 50.

TABLE 2 MODE OF TRANSPORT FROM HOME TO KOCHI METRO

SL No.	Mode of transport from home to metro	No. of respondents	% of respondents
1	Bus	40	40%
2	Auto/online taxi	13	13%
3	Personal vehicle	23	23%
4	By walk	24	24%
	Total	100	100%

Interpretation Out of 100 more than half of the passengers depends on public transportation i.e. 40% of the passengers uses buses and 13% uses auto to access Kochi Metro. And the chart shows that 23% of the passengers uses own vehicle to reach metro station.

TABLE 3 OPINION ABOUT METRO'S OPERATION AFTER 10.PM

SL.No	Metro operation after 10.pm	No. of respondents	% of respondents
1	Yes	81	81%
2	No	19	19%
	Total	100	100%

Interpretation From the above chart, it can be seen that 81% of the passengers wanted to increase the metro's time of operations even after 10.00 pm. But 19% of the respondents have a different opinion on this.

TABLE 4 IMPACT ON KOCHI METRO ON PUBLIC TRANSPORTATION

SL No.	Impact on public transportation	No. of respondent	% of respondents
1	Yes	90	90%
2	No	10	10%
	Total	100	100%

Interpretation From the above table it can be seen that, Kochi metro has created a large impact on public transport.90% of the customers are agree with this statement. The remaining 10% responded that there is no impact on public transportation by Kochi Metro.

TABLE 5 SAFETY AND TECHNICAL MEASURE

SL No.	Safety & technical measures	No. of respondents	% of respondents
1	Yes	98	98%
2	No	2	2%
	Total	100	100%

Interpretation Based upon the above table its evident that 98%of the customers are highly satisfied with the safety and technical measures provided by the Kochi metro and 2% are not satisfied

TABLE 6 KOCHI1 CARD USERS

SL No.	No. of people using kochi1cards	No. of respondents	% of respondents
1	Yes	15	15%
2	No	85	85%
	Total	100	100%

Interpretation The above table shows that the maximum number of customers in Kochi Metro were using ticket. Only 15% of the customers are using metro smart cards. Tickets were used by 85% of the customers.

TABLE 7 AMENITIES PROVIDED BY KOCHI METRO:

Sl No	Response	AC		Lighting		Space allocation		No. of coaches & seats	
		No of responde nt	% of responde nt	No of responde nt	% of responde nt	No of responde nt	% of responde nt	No of responde nt	% of responde nt
1	Strongly agree	79	79%	84	84%	75	75%	55	55%
2	Agree	12	12%	11	11%	16	16%	17	17%
3	Neutral	4	4%	4	4%	3	3%	6	6%
4	Disagree	5	5%	1	1%	6	6%	21	21%
5	Strongly disagree	0	0%	0	0%	0	0%	1	1%
	Total	100	100%	100	100	100%	100%	100	100%

Interpretation Table shows that 32% customers are highly satisfied, and 18% of people are satisfied with the drinking water facilities, and 15% are neutral, while 24% are dissatisfied. And 44% customers are highly satisfied, and 25% of people are satisfied, while 13% are dissatisfied with the ATM facilities. 70% customers are highly satisfied, and 15% of people are satisfied with the washroom facilities, and 6% are neutral, while 21% are dissatisfied.

TABLE 8 FACILITIES PROVIDED BY KOCHI METRO

Sl. No	Response	Drinking water		ATM		Washroom	
		No of respondent	% of respondent	No of respondent	% of respondent	No of respondent	% of respondent
1	Strongly agree	32	32%	44	44%	70	70%
2	Agree	18	18%	25	25%	15	15%
3	Neutral	15	15%	17	17%	6	6%
4	Disagree	24	24%	13	13%	21	21%
5	Strongly disagree	11	11%	1	1%	1	1%
	Total	100	100%	100	100%	100	100%

Interpretation Table shows that 79% customers are highly satisfied, and 12% of people are satisfied with the AC facilities, and 4% are neutral, while 5% are dissatisfied. 84% customers are highly satisfied, and 11% of people are satisfied with the lighting facilities, and 4% are neutral, while 1% are dissatisfied. And 75% customers are highly satisfied, and 16% of people are satisfied with the washroom facilities, and 3% are neutral, while 6% are dissatisfied. For space allocation, 55% of people are highly satisfied, and 17% of people are satisfied and 6% are neutral whereas 21% are dissatisfied.

TABLE 9 CLEANLINESS:

Sl. No	Response	Ticket counter		Station/platform premises		Train coaches	
		No of respondent	% of respondent	No of respondent	% of respondent	No of respondent	% of respondent
1	Strongly agree	84	84%	82	82%	86	86%
2	Agree	13	13%	17	17%	12	12%
3	Neutral	2	2%	1	1%	2	2%
4	Disagree	1	1%	0	0%	0	0%

5	Strongly disagree	0	0%	0	0%	0	0%
	Total	100	100%	100	100%	100	100%

Interpretation Out of 100, 84% customers are highly satisfied, and 13% of people are satisfied with the cleanliness, and 2% are neutral, while 1% are dissatisfied. that 82% customers are highly satisfied, and 17% of people are satisfied with the station cleanliness , and 1% is neutral. 86% customers are highly satisfied, and 12% of people are satisfied with the cleanliness of train coaches, and 2% are neutral.

TABLE 10 SAFETY IN METRO PREMISES

SL.No.	Response	In platform		Train coach	
		No of respondent	% of respondent	No of respondent	% of respondent
1	Strongly agree	87	87%	87	87%
2	Agree	8	8%	9	9%
3	Neutral	4	4%	3	3%
4	Disagree	1	1%	1	1%
5	Strongly disagree	0	0%	0	0%
	Total	100	100%	100	100%

Interpretation Out of 100, 87% customers are highly satisfied, and 8% of people are satisfied with the safety in platform premises, and 4% are neutral, while 1% are dissatisfied. that 87% customers are highly satisfied, and 9% of people are satisfied with the safety in train coach, and 3% are neutral, while 1% are dissatisfied.

TABLE 11 PERSONAL INTERACTION

Sl. No	Response	Staff's Behaviour		Management's attitude		Attentiveness & resolve queries	
		No of respondent	% of respondent	No of respondent	% of respondent	No of respondent	% of respondent
1	Strongly agree	76	76%	71	71%	73	73%
2	Agree	18	18%	19	19%	17	17%
3	Neutral	5	5%	9	9%	9	9%
4	Disagree	0	0%	1	1%	1	1%
5	Strongly disagree	1	1%	0	0%	0	0%
	Total	100	100%	100	100%	100	100%

Interpretation The table shows that, 76% customers are highly satisfied, and 18% of people are satisfied with the personal interaction of staff's behaviour, and 5% are neutral, and 1% highly dissatisfied. 71% customers are highly satisfied, and 19% of people are satisfied with the management's attitude, and 9% are neutral. 73% customers are highly satisfied, 17% of people are satisfied with the staffs' efficiency in solving queries.

V. FINDINGS

➤ The study received a mixed response from the age group of 18- 30 and 30-50. It's found that 15% of the passengers belongs to the age group of above 50.

➤ 53% of the passengers depends on public transportation to reach the metro stations and 23% uses their personal vehicles.

➤ 81% of the travellers had the opinion that the metro's operation is need to be continued even after 10.00 pm.

➤ 90% of the respondents agrees that Kochi metro became an inevitable part of public transportation system in Kochi.

➤ 98% of the respondents are highly satisfied with the safety and technical measure implemented by Kochi metro, only 2% are not satisfied with this.

➤ Only 15% of the respondents are using KOCHI1 card and rest 85% uses tickets while traveling in metro.

➤ Since most of the passengers were unaware of the drinking water facility provided by metro only 32% of passengers are satisfied with this facility and 11% highly dissatisfied, 24% dissatisfied and 11% neutral.

- More than half of the respondents are satisfied with the ATM facilities inside the metro stations, 17% neutral, 13% dissatisfied with this facility.
- 70% of the respondents were highly satisfied with the washroom facilities but 21% were dissatisfied.
- Majority of the 79% of the respondents are satisfied with AC facility inside the train coaches and 75% of the respondents are highly satisfied with the space allocated to each metro station.
- Only 55% of the customers are highly satisfied with the number of seats and coaches in the train and rest of them have the opinion of increasing the seats and coaches.
- When asked about the cleanliness 84% of the respondents were highly satisfied and only 1% was not satisfied with cleanliness in ticket counters.
- 82% of the respondents were highly satisfied with the cleanliness inside the station platform and premises, 1% was dissatisfied.
- More than 95% of the customers are satisfied with the cleanliness of train coaches only 2% had a neutral opinion.
- In platform safety, 87% of the customers were highly satisfied, 8% satisfied and 4% had a neutral opinion.
- In train coach safety, 87% customers were highly satisfied, 9% satisfied and 3% were neutral.
- When asked about the metro's staffs' behaviour 76% were highly satisfied. 71% of highly satisfied with management's attitude, 9% had neutral opinion since they never had a direct interaction with the management.
- 73% of the commuters are highly satisfied with the staff's skills in solving the queries, 9% had neutral opinion.

VI. SUGGESTIONS

- Majority respondents prefer personal vehicles and by walk to reach metro stations its suggested to create dedicated pathways and enough parking space near metro stations
- From the feedback on drinking water facility provided by metro stations it was observed that most of the passengers were either unaware or couldn't able to figure out the location of drinking water. So, its suggested to standardize the location of drinking water in a common place for easy access.
- Another major suggestion is increasing the metro operations after 10.00pm and providing Wi Fi facilities inside the metro stations
- From responses of KOCHI1 card users it was found that KOCHI1 card validation process is time consuming, so its suggested to consider the technical issues with priority for retention of passengers.

VII. CONCLUSION

Kochi being the financial, investment and commercial capital of Kerala where the migrant population of age group from 18 – 30 years comes in search of better job and better lives. So, the transportation plays an important role such largest and most populous metropolitan area. Kochi Metro was introduced in the right time to eliminate the main problem of traffic congestion of the city and to an extend the Kochi Metro succeeded in that. Kochi. As a part of this study, both positive and negative impacts of the metro were assessed in detail. On the basis of this study, some suggestions have been made. If the suggestions are taken into account by Kochi Metro Rail Limited, it is hoped that the it will help them to shine in a staggering way.

References

- 1) Nishant Chung {2017} “Customer Satisfaction Towards Delhi Metro Rail Corporation”
- 2) Richard Anderson, Benjamin Condry, Nicholas Findlay, Ruben Brage-Ardao, Haojie Li (2013): “A Review of Global Practices and Challenges from the Public Transport Sector”
- 3) Shankar Kumar. S and Dr B Jayaprabha (2018): “An Empirical Study on Commuters Satisfaction Towards Chennai Metro Rail Limited”
- 4) Govind Nath Srivastava (2017): “Understanding Customer Orientation Delhi Metro’s Service Personnel and Impact on Customer Satisfaction: An Empirical Study”
- 5) Kenneth R. Stuart, Marc Mednick, and Johanna Buckman (1735): “An Empirical Study on Structural Equation Model of Customer Satisfaction for the New York City Subway System”.
- 6) An Appu, SG Balaji (2017):” An experiential study of contemporary metro rail services: Commuters experience journey in modern Chennai city”
- 7) Dr Som Sankar Sen (2017): “Kolkata metro railway and respondent’s satisfaction: an empirical study”