

**“A Comparative Study of Customer Satisfaction
with reference to Rajasthan State Road
Transport Corporation and Haryana
Roadways”**

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**By
Siddhartha Garg**



**Under the supervision of
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**UNIVERSITY OF KOTA, KOTA (RAJASTHAN)
2020**

CERTIFICATE

I feel great pleasure in certifying that the thesis entitled “**A Comparative Study of Customer Satisfaction with reference to Rajasthan State Road Transport Corporation and Haryana Roadways**” by **Siddhartha Garg** under my guidance. He has completed the following requirements as per Ph.D. regulations of the university:

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ABSTRACT

Transport sector in India is vast and diverse and gratifies the travelling needs of millions of people. The sector contributed about 5.5% to the nation's GDP. As road transport carries almost 85% of the country's passenger traffic and more than 60% of its freight, it plays the dominant role in Indian transport sector. According to Ministry of Statistics and Program Implementation (2018-19), road transport service contributes 3.14 per cent of India's total Gross Value Added (GVA) at current prices. Major improvements in the sector have been done to support the country's continued economic growth and development. Almost all Indian states have their own road transport organization to fulfill transport needs of its people. These organizations provide transit facility within and outside state, authorized by Transportation Ministry or by State Government Authorities. Over all, these organizations are responsible to play a significant role in connecting rural and urban regions of India.

Public bus transport systems in India have not been able to keep pace with the rapid increase in demand of the past few years. Service quality of State transport undertakings in particular has deteriorated, and their market share has been further reduced as passengers have switched towards personalized transport and intermediate public transport. It has been observed that almost all the State-owned transport corporations in India are struggling to survive because of facing severe financial problems. It may be due to inefficiency in functioning, mainly accommodating the passenger needs and expectations in modifying and designing their services. At the same time it is evident that they are the only carrier on majority of the routes in the States and the only good means of transport for the general public especially in rural areas. If these organizations manage the 7P's of marketing in a better way, it will attract a lot more passengers especially urban, which will thereby improve their financial condition and will save these much needed organizations for the general public.

Therefore, the main purpose of this study is to examine the level of customer satisfaction with regard to various services offered by the two organizations, i.e. RSRTC and Haryana Roadways and enable them to make major improvements in their service attributes like price, people, physical evidence, product, etc. in order to provide a big relief to common people in general. The study is meant to compare the level of satisfaction that customers derive from various services offered by the selected organizations. An attempt has also been made to explore strategies that would help in redesigning services offered by public road transport undertakings.

Exploratory and Descriptive research design was used for the present study. In order to develop a strong understanding of the theoretical background of the study, a thorough review of available literature including, dissertations, theses, research papers and journals was done. It served as a guide to designing questionnaire and framing the research design of the study.

Customer survey was done covering all possible dimensions concerned with the problem under study. Stratified Random Sampling has been used to collect data and respondents have been selected from the three districts (each of the State) based in Rajasthan and Haryana. The sample size of the present research work comprises 245 passengers of RSRTC and 232 passengers of HR. This way the study is largely empirical in approach.

Classification and tabulation of the collected data have been done to draw appropriate inferences and then testing of stated hypotheses has been performed. At the final step of this study an assessment of the findings was done. The findings so obtained may provide further support to existing theory and literature explaining customer satisfaction with regard to public road transportation service. Further, the findings may also contribute towards improving the service quality standards of Rajasthan State Road Transport Corporation and Haryana Roadways.

CANDIDATE’S DECLARATION

I, hereby, certify that the work which is being presented in the thesis entitled “**A Comparative Study of Customer Satisfaction with reference to Rajasthan State Road Transport Corporation and Haryana Roadways**” for the partial fulfillment of the requirement for the award of the Degree of Doctor of Philosophy, carried out under the supervision of Dr. Ummed Singh submitted to University of Kota, Kota represents my idea in my own words and where other ideas or words have been included. I have adequately cited and referenced the original sources. The work presented in this thesis has not been submitted elsewhere for the award of any other degree or diploma from any institution.

I also declare that I have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in my submission. I understand that any violation of the above will cause for disciplinary action by the University and can also evoke penal action from the source which have thus not been properly cited or from whom proper permission has not been taken as needed.

Date:

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Place:

This is to certify that the above statements made by Siddhartha Garg (Registration Number RS/283/16) is correct to the best of my knowledge.

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Research Supervisor

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Siddhartha Garg

TABLE OF CONTENTS

PAGES:

LIST OF TABLES	i-iv
LIST OF FIGURES/CHARTS	v
ABBREVIATIONS	vi

S. NO.	CHAPTERS	PAGE NO.
	Chapter 1- INTRODUCTION TO THE FIELD OF STUDY	1 - 27
	Chapter 2 - CONCEPTUAL FRAMEWORK	28 - 69
	Chapter 3 - ORGANIZATIONAL SETUP OF RAJASTHAN STATE ROAD TRANSPORT CORPORATION & HARYANA ROADWAYS	70 - 88
	Chapter 4 - RESEARCH METHODOLOGY & DESIGN	89 - 114
	Chapter 5 - DATA ANALYSIS AND INTERPRETATION	115 - 173
	Chapter 6 - FINDINGS AND CONCLUSION	174 - 187
	Chapter 7 – RECOMMENDATIONS/SUGGESTIONS	188 - 194

SUMMARY	195 - 205
BIBLIOGRAPHY	206 - 212
PAPER PUBLISHED-1	1 - 5
PAPER PUBLISHED-2	6 - 11
QUESTIONNAIRE	

LIST OF TABLES

S. No.	Table No.	Title of the Table	Page No.
1	1.1	Growth of Public Sector in Passenger Bus Transport	6
2	1.2	RSRTC at a Glance	18
3	1.3	Haryana Roadways at a Glance	24
4	5.1	Age Distribution	116
5	5.2	Gender Distribution	117
6	5.3	Occupation Distribution	118
7	5.4	Person with Disability	119
8	5.5	Preferred Mode of Transport	120
9	5.6	Frequency of Travelling	121
10	5.7	Purpose of Journey	122
11	5.8	Reach Destination on Time using Present Mode	123
12	5.9	Alternative Means of Transport	124
13	5.10	Comparison of Customers' Opinion about Drivers/Conductors Taking Care of Customers' Safety and Security	127
14	5.11	Comparison of Customers' Opinion about Effective Performance of Daily Activities by Drivers/Conductors	128
15	5.12	Comparison of Customers' Opinion about Drivers/Conductors having Adequate Means to Handle People with Disability, Elders, Pregnant Women and Children	129
16	5.13	Comparison of Customers' Opinion about Buses having Enough Leg Space	131

17	5.14	Comparison of Customers' Opinion about Buses having Spacious Luggage Racks	132
18	5.15	Comparison of Customers' Opinion about Buses having Comfortable Seats	133
19	5.16	Comparison of Customers' Opinion about Buses having Clean Interiors	134
20	5.17	Comparison of Customers' Opinion about Good Condition of Buses	135
21	5.18	Comparison of Customers' Opinion about Vehicles Meeting Environmental Concerns	136
22	5.19	Comparison of Customers' Opinion about Appearance of Staff in Proper Uniform	137
23	5.20	Comparison of Customers' Opinion about Enough Seating Facilities and Shades at Bus Stations	138
24	5.21	Comparison of Customers' Opinion about Availability of Safe Drinking Water	139
25	5.22	Comparison of Customers' Opinion about Cleanliness of Toilets	140
26	5.23	Comparison of Customers' Opinion about Availability of Enough Parking Spaces	141
27	5.24	Comparison of Customers' Opinion about Notification of Delay in Advance	142
28	5.25	Comparison of Customers' Opinion about Low Probability of Accidents	143
29	5.26	Comparison of Customers' Opinion about Rare Breakdown of Buses on Route	144
30	5.27	Comparison of Customers' Opinion about Easy Booking of Tickets	145

31	5.28	Comparison of Customers' Opinion about Ensuring Security of Passengers and Parcels	146
32	5.29	Comparison of Customers' Opinion about Having Enough Measures for Loading and Off-loading Security	147
33	5.30	Comparison of Customers' Opinion about Consistency in Providing Quality Services	148
34	5.31	Comparison of Customers' Opinion about Proper and Immediate Response to Telephone Enquiry	149
35	5.32	Comparison of Customers' Opinion about Providing Emergency Services	150
36	5.33	Comparison of Customers' Opinion about Drivers/Conductors Having Sufficient Rest Hours between Two Journeys	151
37	5.34	Comparison of Customers' Opinion about Working Experience of Drivers/Conductors	152
38	5.35	Comparison of Customers' Opinion about Drivers having Sufficient Driving Skills	153
39	5.36	Comparison of Customers' Opinion about Customer Contact Personnel being Courteous, Polite, Respectful and Friendly	154
40	5.37	Comparison of Customers' Opinion about Contact Personnel being Credible, Honest and Trustworthy	155
41	5.38	Comparison of Customers' Opinion about Employees' Readiness to Serve Passengers	156
42	5.39	Comparison of Customers' Opinion about Supporting Communal Harmony	157
43	5.40	Comparison of Customers' Opinion about Easy Accessibility of Buses	158
44	5.41	Comparison of Customers' Opinion about No Delay in Arrival and Departure	159

45	5.42	Comparison of Customers' Opinion about Maintaining Regularity of Service	160
46	5.43	Comparison of Customers' Opinion about Arrangements of Alternatives in Excessive Demand	161
47	5.44	Comparison of Customers' Opinion about Reasonable Bus Fare	162
48	5.45	Comparison of Customers' Opinion about Concessional Fare for Underprivileged Passengers	163
49	5.46	Comparison of Customers' Opinion about Standard of Services Delivered	165
50	5.47	Comparison of Customers' Opinion about Handling Passengers' Problems	166
51	5.48	Comparison of Customers' Opinion about Caring of Differently Able People	167
52	5.49	Comparison of Customers' Opinion about Travelling Experience	168
53	5.50	Comparison of Customers' Opinion about Satisfaction with Services Offered	169
54	5.51	Comparison of Customers' Opinion about Recommending Service to Others	170
55	5.52	Comparison of Service Quality Parameters	171
56	5.53	Hypothesis Testing Results	173

LIST OF CHARTS/FIGURES

S.No.	Table No.	Title of the Chart	Page No.
1	1.1	Forms of State Transport Undertakings	9
2	2.1	Model showing Factors affecting Customer Satisfaction	53
3	2.2	Traditional Macro-Model of Customer Satisfaction	55
4	2.3	Model of Linkage of Customer Value Chain to Customer Satisfaction	56
5	2.4	Model of Link between Satisfaction and Value	56
6	2.5	Model of Two Levels of Satisfaction and Perceived Service Quality	57
7	2.6	Model of Sources of Customer Satisfaction	58
8	2.7	Kano's Model	59
9	2.8	ACSI Model	60
10	2.9	SERVQUAL Model	62
11	2.10	Conceptual Framework	66
12	3.1	Organizational Structure of Haryana Roadways (Operational Wing)	72
13	3.2	Depot Level Chart of Haryana Roadways	77
14	3.3	Organizational Structure (Regulatory Wing)	79
15	3.4	Head Office Management RSRTC	83
16	3.5	Depot Level Chart of RSRTC	85
17	5.1	Age Distribution	116
18	5.2	Gender Distribution	117
19	5.3	Occupation Distribution	118
20	5.4	Person with Disability	119
21	5.5	Preferred Mode of Transport	120
22	5.6	Frequency of Travelling	121
23	5.7	Purpose of Journey	122
24	5.8	Reach Destination on Time using Present Mode	123
25	5.9	Alternative Means of Transport	124

ABBREVIATIONS

ACSI	American Customer Satisfaction Index
AMRUT	Atal Mission for Rejuvenation and Urban
ASRTU	Association of State Road Transport Undertakings
BRTS	Bus Rapid Transit System
CIRT	Central Institute of Road Transport
GDP	Gross Domestic Product
GVA	Gross Value Added
HR	Haryana Roadways
HREC	Haryana Roadways Engineering Corporation
ISBT	Inter State Bus Terminal
PEPSU	Patiala and East Punjab States Union
RSRTC	Rajasthan State Road Transport Corporation
SERVPERF	Service Performance Model
SERVQUAL	Service Quality Model
STUs	State Transport Undertakings
TNSTC	Tamil Nadu State Road Transport Corporation
UMTA	Unified Metropolitan Transport Authority
UPSRTC	Uttar Pradesh State Public Transport Corporation
VED	Vital, Essential , Desirable
GPS	Global Positioning System
GSM	Global System for Mobile Communications
IST	Indian Standard Time
CTS	City Transport Services
MIS	Management information System
CCTV	Closed-circuit television
NGO	Non-governmental organizations
IAS	Indian Administrative Service

CHAPTER I

INTRODUCTION TO THE FIELD OF STUDY

1.1 INTRODUCTION

In order to achieve sustained economic development, the importance of infrastructure cannot be overlooked. An economy which has adequate and efficient infrastructure enjoys lower transaction cost, strong backward and forward linkages, better quality of life and sustainable growth and development. Transport is one of the crucial elements of infrastructure. A well-developed transport network facilitates the integration and interdependence of the different sectors by aiding quick and adequate movement of men and material. Transport sector in India is vast and diverse and gratifies the travelling needs of millions of people. The sector contributed about 5.5% to the nation's GDP. As road transport carries almost 85% of the country's passenger traffic and more than 60% of its freight, it plays the dominant role in Indian transport sector. According to Ministry of Statistics and Program Implementation (2018-19), road transport service contributes 3.14 % of India's total Gross Value Added (GVA) at current prices. However, the sector has not been able to keep pace with rising demand and is proving to be a hindrance for the economy. Due to ever increasing population coupled with rapid urbanisation, the demand for transport has also increased rapidly. Transport development helps in the better and optimum utilisation of resources by connecting backward regions with relatively more developed ones and thus resulting in rapid industrialization. Therefore, expansion of transport is essential for a growing economy like India. Major improvements in the sector have been done to support the country's continued economic growth and development. Almost all Indian states have their own road transport organization to fulfill transport needs of its people. These organizations provide transit facility within and outside state, authorized by Transportation Ministry or by State

Government Authorities. Over all, these organizations are responsible to play a significant role in connecting rural and urban regions of India.

1.2 PUBLIC TRANSPORT IN INDIA

Public transport sector plays an important role in fulfilling the travelling needs of a nation and ensures that the needs of every strata of the society are being met. It also enables its customers to meet other peoples and exchange their cultures. It connects cities and villages and facilitates the awareness in the masses. It helps in exchange of knowledge, thoughts, ideas, and also builds the homogeneity among the people. It comprises passengers' transportation services which are available for use by the general public. Public services are usually funded by fares charged to each passenger. Public transport consists of light rail, commuter train, buses, Metro, Mono rail, etc. Among all the means of transport, road transport occupies an essential role in the overall transport system in India. In the road transport service bus is one of the most popular modes of transport. In a country which has not been adequately served by advanced modes of transport, such as railways, airways and water transport, road transport becomes the most significant mode of transport. The most important element of road transport is its flexibility. It can penetrate into the remote corners of the country and can provide service at every step. Whilst other transport means are not economical over shorter distances carrying fewer loads, road transport is the best suitable for this purpose. Without its complementary service, the other sophisticated modes would not be able to achieve the ultimate purpose of transport. The route and schedules in road transport need not be as rigid as in the case of the railways and air transport, and it allows having flexibility to satisfy a variety of transit needs suitable for interior transportation. In terms of investment also, road transport is superior to other modes of transport. Construction of tracks of railways and the very high cost of acquiring airplanes or ships demand huge investments. Road transport has a low-cost technology and the costs of maintenance of vehicles, as well as roads are not as high as other capital-intensive modes of transport.

1.3 EVOLUTION AND GROWTH OF ROAD TRANSPORT IN INDIA

1.3.1 Evolution

Indian road transport has long history proving its existence in the period of Ramayana and Mahabharata depicting chariots and carts used by people for travel, for battle and for transportation. Palanquin was also mentioned as an important mode of transport in ancient period, carried by four or six bearers. During the rule of Chandra Gupta Maurya and Ashok road transport got its glory. They emphasized on developing strong road transport system. Further, Mughals had gigantic empire and for controlling and developing such long spread empire they concentrated on road development. Grand trunk road was built in the era of Sher Shah Suri which was one of the massive road projects of that period. However, modern technology touch to Indian roads was given by East India Company during British rule. Lord Dalhousie the then governor general of India introduced PWD (Public Works Department) in India. Moreover, in the year 1927 Jayakar Committee was formed to study the condition of roads and road transport that time. The committee recommended measures for the development of overall road transport in India. In 1943, the Government organized a conference at Nagpur in which Chief Engineers were invited to extend suggestions to improve the road transport sector. This conference was known as “Nagpur plan” that gave road development program for next 20 years. After independence, Indian government has been continuously focusing upon road development.

1.3.2 Nationalization of Indian Bus Industry

After independence, no attention was paid to bus transportation system in India. Even, it was not a sector to be mentioned among other sectors in the Industrial Policy Resolution of 1948. Afterwards it was considered in Industrial Policy Resolution of 1956 as the eleventh of twelve items in the Schedule B, which listed industries to be “progressively state-owned and in which the State will, therefore, generally take the initiative in establishing new undertakings, but in which private enterprise will also be expected to supplement the efforts of the

State”. Due to the fact that road transport is a state subject and included in the Schedule B of the Industrial Policy Resolution 1956, development of an appropriate national policy in regard to the bus transport has not been possible. The nationalization of bus transport industry was done through Road Transport Corporations Act of 1948 and its legislation was declared ultra virus by the Bombay High Court. According to the court, the rights and privileges of the Corporations were left entirely to the Provincial Government to determine and the latter had also not been given any indication by the Central Legislature as to how they should be guided in settling the rights and privileges of the Corporation. The 1948 legislation was then replaced by a more comprehensive legislation, the Road Transport Corporations Act 1950. Under this Act while States of Gujarat, Maharashtra, Haryana, and Sikkim opted for complete nationalization, in all other States, both the private and public operators were allowed to provide passenger transport services. Under this Act, Union Government provides one-third of the capital as loan through the Indian Railways, whose representatives sit on the board of management of the Road Transport Corporations. The rest two-third capital is provided by the concerned State Government. The Road Transport Corporations Act 1950 not only paved the way for monopoly but also provided the basis for Government ownership. The Government, therefore, became not only the regulator but also an operator, operating along with several other small operators (Padam, 1990).

1.3.3 Establishment of Association of State Road Transport Undertakings (ASRTU)

Ministry of Road Transport & Highways Government of India formed Association of State Road Transport Undertakings on 13th August, 1965. The main purpose behind its formation is to bring closer all the State Road Transport Undertakings on a universal platform to pool their resources and expertise so that their problems can be dealt effectively and their performance can be improved. ASRTU is headed by Secretary, Ministry of Road Transport & Highways Government of India as the ex-officio President. Operational work is managed at the level of Executive Director (ED) CIRT, Pune, the technical organ of ASRTU.

It looks after the testing of spare parts and components at the stage of pre-qualification of rate contract vendors and also for the samples sent by STUs'. The Institute has state of art laboratory and testing facilities. The Institute also conducts training programmes for STUs' personnel and undertakes research and consultancy studies on road transport. It has 226 personnel including officers and scientists. As per the latest data published on its website, it has 62 members (including 6 associate members) which collectively operate 1,50,000 buses and serve 70 million passengers a day and provide efficient, economic, safe and reliable public transport facility in urban, hilly and rural areas across the country.

Following are the main functions of ASRTU are as follows:

- At present, 62 SRTUs' are the backbones of mobility for the urban and rural population across the country and collectively operate about 1,50,000 buses and providing gainful employment to 1.0 million people.
- It provides a common platform for extending suggestion to apply the best measures for dealing various issues relating to SRTU members and help them to improve their performance.
- It also produces a common procurement service via Rate Contract that is decided by the Standing Committee (Supplies & Contracts).
- The association also facilitates testing of components; formulate specifications of various bus spares, besides other general items used for maintenance of bus fleet in SRTUs', in order to ensure quality assurance and extending training to employees.
- It enables the top management of SRTUs' to attend Conferences, Study tours, workshops at National and International level to learn the best practices prevalent in the industry.
- It deals with public transport issues in general and SRTUs' in particular.
- It has strong liaising with various Ministries and other concerned key departments of Government of India and abroad.

- Its main purpose is to promote public transport at par with the international standard.

1.3.4 Growth of Passenger Road Transport in Public Sector

Table 1.1
Growth of Public Sector in Passenger Bus Transport

Indicators	1960-61	1970-71	1980-81	1990-91	2000-01	2010-11	2018-19
Number of STUs'	28	32	54	64	63	52	62
Total Employment ('00000)	1.4	2.8	5.7	7.5	7.4	7.0	10.0
No. of Buses held('000)	18	37	78	104	115	131	150
%age of total buses in India	32	39	55	33	18	8	9.37
Passenger traffic held (BPKm)	26	81	NA	363	434	582	700
Passengers per km per unit of labor ('000)	187	288	NA	484	587	831	NA

Table 1.1 mentions the growth of public sector transport undertakings in India. The number of state-owned STUs' increased from 28 in 1960-61 to 64 in 1990-91; however, number decreased in 2010-11 but again increased to 62 in 2018-19. Output produced by STUs' rose to 700 BPKm in 2018-19 from 26 billion passenger-kms (BPKm) in 1960-61. STUs' labor productivity also showed an extensive growth, from 1,87,000 PKm per unit of labor in 1960-61 to 7,73,000 PKm per unit of labor in 2014-15. Total fleet strength also touched to 1,50,000 in 2018-19. However, the growth rate in fleet strength is not satisfactory because merely 20,000 buses were added to the service. One of the reasons for this situation is the severe financial crisis that the STUs' are facing. Further, the table clearly indicates that STUs' market share in terms of buses owned in India also slipped down from 55% in 1980-81 to nearly 10% in 2018-19 due to facing severe competition from personalized transport, intermediate public transport, and private bus operators.

1.4 ROLE OF PUBLIC ROAD TRANSPORT IN INDIAN ECONOMY

Road Transport is the prime and preferred mode of transport for a majority of the population in India and has been registered as the most heavily utilized system in the world. It has played a key role in the economic development of the country by increasing productivity and competitiveness. The importance of roads in economic development of the country can be understood with the help of following points -

- 1 Roads connect vast rural areas of the country to form the national market and economy thus directly improves productivity and prosperity.
- 2 Connectivity provided by roads is an essential determinant of well being and the quality of life of people.
- 3 The efficiency of the innumerable government programs aimed at rural development, employment generation, and local industrialization is, to large extent, determined by the connectivity provided by roads.
- 4 There is a considerable body of evidence that demonstrates the links between rural road investment and decline in poverty along with improvement in the quality of life. Investments in road development has contributed directly to the growth of agricultural output, increased use of fertilizers and commercial bank expansion.
- 5 Road transport also contributes to economic development through job creation. It creates both direct and indirect employment opportunities. In India, a sizeable portion of the country's working population is directly or indirectly employed in road transport sector.
- 6 It facilitates movement of labours and thereby encourages employment resulting into industrial development and thereby economic development.
- 7 An efficient road network plays a significant role in the defence of a country also. Movement of troops, tanks, armoured cars, and field guns, etc. is possible only through these roads.

Apart from contributing in economic development of the country, road transport system has definite advantages over other modes of transport such as:

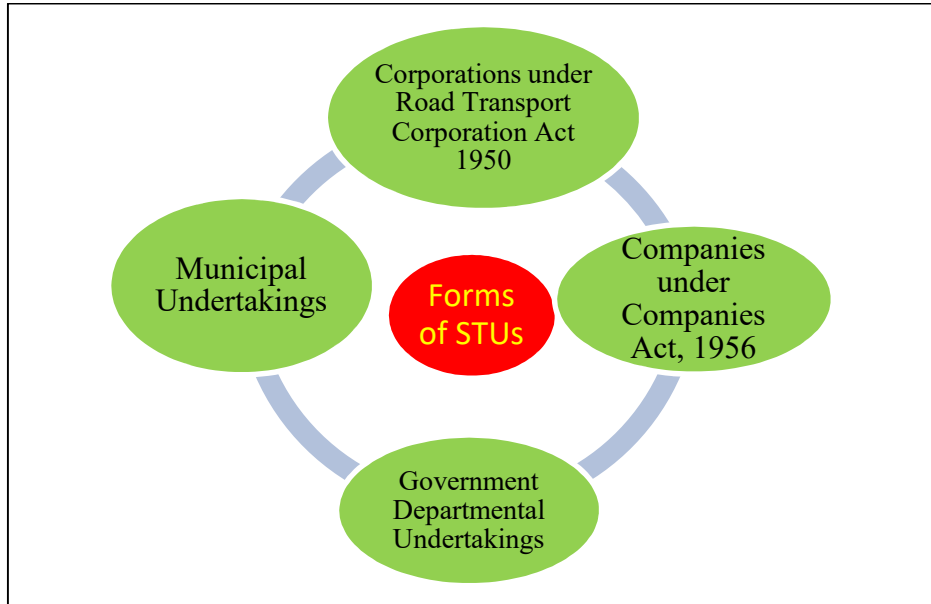
1. Road transport is faster, more expedient and has flexible schedule. It is especially suitable for short distance travel as well as transportation of commodities. It plays an important role in collecting passengers and goods from anywhere and drops them at the desired places.
2. It has flexibility in arranging its routes which is problematic in case of railways where lines are fixed. Passengers can approach road transport modes at multiple locations.
3. Roads are a necessary complement to railways. The present rail network does not cover all villages and remote areas of the country. These can be properly served by a network of feeder roads. If railways are essential for the movement of goods and passengers for long distances, road transport is suitable for such movement for short distances.
4. Road transport is very useful for farmers too. Good roads help the farmers to move their products, particularly the perishable products; like vegetables, quickly to the mandis and towns. Only by developing the road system, the farmer can be assured of a steady market for his products. It is the road system which brings the villagers into contact with the towns and the new ideas and the new systems from the towns.
5. Roads play a very important role in the transportation of goods and passengers for short and medium distances.
6. Construction and maintenance of roads is cheaper as compared to other modes of transport.
7. Unlike other modes of transport roads can be constructed in hilly areas and even at sharp turns also.

1.5 FORMS OF ORGANIZATIONS IN STUs'

RTC Act 1950 did not cover all undertakings established for providing passenger bus transport services. Currently, the country has 56 road transport undertakings owned jointly by the respective state government or the union territory and the central government. Out of these 56 undertakings, 25 are corporation form of organizations, 15 are company type, 9 are government departments, and 7 are municipal undertakings. Some states have more than one road transport undertakings. However, nationalization of passenger road transport is not fully effected in all the states and union territories. For instance, Gujarat, Maharashtra, and Chandigarh have achieved 100% nationalization. On the other hand, nationalization in many states like Uttar Pradesh, Bihar, Rajasthan, etc. is only partial (Thomas, 2000).

Forms of State Transport Undertakings

Chart 1.1



Source: Researcher's own work

- a. **Corporation-type of undertakings:** These are established under the Road Transport Corporation Act, 1950 as wholly-owned state corporations. This type of STUs is the most common form of transport

undertakings in the country. The corporations are managed by the Boards constituted by the concerned state governments (with members from central government, Indian Railways, state government, corporation, etc). Both the central and state governments have contributed capital to the corporations in the agreed ratio. They are empowered to borrow funds from commercial banks and financial institutions. Generally, rural and inter-state transport services are undertaken by these corporations. Few departmental undertakings got converted into corporations after the enactment of the Road Transport Corporations Act, 1950. In general, employees of a Corporation are not civil servants and are recruited under terms and conditions which the Corporation itself determines. A Corporation is not authorized, except with the prior approval of the Government, to involve itself in any activity other than bus transportation. It can't repair, store, or provide any service for any vehicle which does not belong to the Corporation. These restrictions are imposed mainly to see that the Corporation does not stray away from the path of providing passenger transport services for which it is created. It is subject to usual procedures of audit by the Comptroller and Auditor General of India.

- b. Company-type of STUs:** These are formed under the Companies Act, 1956. As per Section 617 of the Indian Companies Act, 1956, “a government company is one in which not less than 51% of paid up share capital is held by the central government and partly by one or more state governments and includes a company which is subsidiary of a government company as defined”. Even a company formed under the Companies Act, 1956 is expected to carry business on commercial principle to earn profit. Company-form of undertakings are governed by the Board of Directors appointed by shareholders. There are a number of undertakings registered under the Indian Companies Act 1956. Currently, 13 out of 54 STUs are public companies. Out of these 13, 8 STUs operate in the southern State of Tamil Nadu alone.

- c. Government Departmental Transport Undertakings:** These STUs are organized as the departments of government. A serious drawback of this type of undertaking is that of red-tapism in taking and implementing decisions. Permanent staffs of the undertakings are civil servants and the methods by which they are recruited and the conditions of service under which they are employed are ordinarily the same as those for other civil servants. These STUs are financed by their respective state governments in their budget. Generally, in this form of management, ruling party's policies will directly reflect in the operation of such undertakings. After the enactment of Road Transport Corporations Act, 1950, departmental undertakings were converted into corporations due to the inherent advantages of corporations.
- d. Municipal Transport Undertakings:** These are formed with the objective of providing transport services to the people living within the municipal limit. These undertakings are governed by the transport committees appointed by the municipal administration. Capital contribution is done by the municipal administration and not from the governments. Moreover, they are empowered to borrow funds from banks and financial institutions. In the context of nationalized sector, the share of municipal undertakings is indeed negligible. Municipal transport undertakings are prevalent only in the States of Maharashtra and Gujarat. Currently, there are seven municipal transport undertakings in India; six of them operate in the State of Maharashtra. Although municipal undertakings are expected to respond to the transportation needs of the urban dwellers, they are suffering due to lack of resources. The result is that several of them are running fleets, which have long out-lived its utility, resulting in poor quality of operation. They are unable to augment services on existing routes and take over more routes as well. Even in respect of management at the top level, in view of the fact that only municipal councillors could constitute the transport sub-committee, there can be no professional expertise at the policy level (Padam, 1990).

In fact, the primary objective of all forms of transport undertakings is same. However, each pattern of management has its own merits and demerits. The suitability of a particular form of management depends on the fleet strength, area of operations, number of routes, undertakings size, etc. It is felt that given the constraint, financial performance of STUs can be improved through improvement in their managerial efficiency along with appropriate pricing mechanism based on economic analysis. STUs' inability to improve their financial performance is a great concern for policy makers. Survival of STUs will largely depend upon their ability to improve their financial performance which will enable them to compete with present as well as potential competitors. The time has come when STUs have to adopt dynamic business principles.

1.6 PRESENT SCENARIO OF PUBLIC ROAD TRANSPORT SECTOR AND GOVERNMENT INITIATIVES

As per the data collected from different Media Reports, Press Releases, Ministry of Road Transport and Highways, Press Information Bureau (PIB), Department of Industrial Policy and Promotion, internet sources, following section describes the present status of public transport sector in India.

1.6.1 Present Status

According to Ministry of Road Transport and Highways, India has one of the largest road networks across the world which spreads over a total of 5.5 million kms. About 64.5% of all goods are transported through this network in the country and among total passengers 90% traffic uses road network to commute. The use of road transportation has increased progressively over the years because of improved connectivity between different parts of the country. Now transportation of heavy vehicles and other freight is also done rapidly through roads.

Public bus transport systems in India have not been able to keep pace with the rapid increase in demand of the past few years. Service quality of State transport

undertakings in particular has deteriorated, and their market share has been further reduced as passengers have switched towards personalized transport and intermediate public transport (Padam and Singh, 2004). In their existence of nearly seven decades, the STUs put together, recorded the deepest loss of over Rs. 9,500 crores during 2014-15. Every bus operated by the STUs results in a loss of around Rs. 6.50 per km. Only two STUs, UPSRTC and OSRTC, could make a profit of Rs. 4 crores and Rs. 5 crores, respectively during the year 2014-15. Across the country, every rural bus incurred a loss of nearly Rs. 3.66 per km, while every urban bus resulted in a loss of Rs. 30.25 km. STUs incurred a loss of Rs. 6,132 crores before tax during 2014-15. The overall cost recovery index of STUs was only 83% during 2014-15. There is a wide gap between total revenue and total cost, particularly, in urban region STUs. Rural STUs recovered 89% of their total cost, hill region STUs recovered 92% of their total cost, but urban STUs could recover only 61% of their total cost. The cost on personnel in STUs is close to 42% of the total cost, though it is more than 47% of the total cost in urban STUs. It is alarming to note that 78% of the revenue goes only on personnel cost in urban STUs, 46% in rural STUs while it is only 43% in case of hill-region STUs. It is well known that the objectives of STUs are to provide adequate, economical and efficient transport services, following, of course, business principles in their operations (Singh, 2014). However, as indicated above, STUs' financial performance has not been very encouraging. Apart from public criticism of inadequate and irregular services provided under unhealthy conditions of overcrowding and with minimal passenger comforts and amenities, STUs' financial performance has also been extremely poor and deteriorating over the years (Singh and Raghav, 2014). The financial crisis in STUs is very much a result of excessive government control. Generally, public transport services work most efficiently with a minimum government control. In particular, the freedom to set fares in response to market forces is more likely to mean that supply and demand balance each other. In addition, the freedom to determine the routes, size of vehicles, and frequency of services, particularly where competition exists enhances the likelihood of economic viability and public satisfaction (Singh and Raghav, 2013). In some cases, of course, an undertaking may operate on non-

profitable routes if it is socially desirable, the government may then decide to subsidize such services.

1.6.2 Government Initiatives to Improve Public Transport in Cities

As per the latest information received from *Vahan* Database, the total number of registered motor vehicles as on 31st March, 2016 were 19,16,73,947. The Compound Annual Growth Rate of total Registered Motor Vehicles in India for the last 5 years, i.e. from 2011 to 2016 was 94.40%. The increase in number of vehicles expected to be on roads during the next five years depends on the new policy of State Government and Government of India.

‘Urban Transport’ is intertwined with Urban Development, which is State Subject. However, Ministry of Urban Development has taken following initiatives to improve the traffic problem in cities/metros:

1. More than 22,500 buses sanctioned to 157 cities/cluster of cities under erstwhile JnNURM (Jawaharlal Nehru National Urban Renewal Mission) Scheme.
2. Ministry has also prepared guidance documents for setting up of Unified Metropolitan Transport Authority (UMTA), Urban Transport Fund (UTF), Bus Operations, Traffic Management Information and Control Centre (TMICC), Public Bike Sharing (PBS), etc. for help of the State Govt/City authorities.
3. More than 1,000 city officials have been trained from all over India on Urban Transport issues.
4. Ministry has issued several advisories such congestion charging, innovative financing, UMTA for million plus cities, etc. for the half of cities.
5. Ministry has also provided financial assistance for Bus Rapid Transit System (BRTS) for 12 cities.

6. Urban Transport component such as BRT, Buses, Footpaths, Cycles, etc have been made important component of AMRUT scheme of the Ministry.
7. In addition, Ministry of Road Transport & Highways has introduced a scheme for providing Central assistance to the States/UTs/State Road Transport Undertakings for strengthening public transport system. The objective of the scheme is to provide financial assistance for use of latest information technology such as GPS/GSM based vehicle tracking system, computerized reservation system, automatic fare collection system, electronic ticket vending machines, passenger information system, etc. for inter-city and rural area operations and also for working out mobility plan. The increased use of public transport will reduce the use of private vehicles which will reduce congestion on road and decrease traffic problems.
8. The ministry of road transport and highways sought the approval of Niti Aayog and introduce six latest mass rapid transportation technologies. These technologies include metrino, stadler buses, hyperloop, pod taxis, hybrid buses and freight rail road. (Economic Times, July 27, 2017). The new technologies are being explored as current public transportation is unable to resolve the increasing traffic crisis in the country. Besides, some of them are more cost effective than the existing ones.

1.7 ROAD TRANSPORT IN RAJASTHAN

The Rajasthan State Road Transport Corporation (RSRTC) was established by the Government of Rajasthan on 1st October 1964 as per the provisions of Road Transport Corporations Act, 1950. Originally, the corporation adopted a three-tier organization structure with head office, divisional offices and depots. However, at present, only two-tier organizational structure is in vogue with central office and depots. Depots are the real operating units which are considered as profit centers and all powers of divisional offices are now vested with depots after the abolition of divisional offices. The RSRTC primarily provides transport services within the

state of Rajasthan and a few long-distance services to the neighboring states. The corporation has grown steadily with continuous improvement in its fleet strength and operational infrastructure.

RSRTC provides following services for its passengers-

- (a) E-Ticket Booking:** RSRTC provide online bus ticket booking for its all major interstate and intercity routes for Volvo-Mercedes, Volvo-LCD, Volvo-Pantry, Volvo-LCD-Pantry, Air-Conditioned Sleeper, Deluxe, Semi-Deluxe, A.C. Gandhi Rath and Express buses. Passenger may book on-line tickets up to 30 days in advance (excluding journey date) between 00:30 and 23:30 IST.
- (b) Concessional Monthly Passes:** RSRTC provide concessional monthly passes for student at 50% and for other people at 40%. Concessional monthly pass holders for three months get additional 5% discount on pass amount and 10% discount for another three months period. Passes can also be issued in mid of month but only with pass for subsequent months.
- (c) Passenger Insurance:** RSTC has introduced an insurance scheme, under which instant assistance up to Rs. 50,000 will be provided in case of an accident. To provide this scheme, RSRTC will charge additional Re. 1 along with ticket fare from passengers, provided the ticket value is more than Rs. 20 or travelling distance is more than 60 kms.
- (d) RSRTC Bus Services**

 - **Pantry with LCD Screen:** It is one of the best luxury bus services in India, introduced by RSRTC between Jaipur and New Delhi and for other major tourist destinations. In this service Volvo buses are used, which are equipped with LCD for showing TV channels and other video movies. Panty service is also available in this service.

- **Volvo/Mercedes Benz Services:** This service is operated by 2x2 air-conditioned Volvo and Mercedes Benz buses. This service is available for passengers seeing ease of travelling and comfort.
- **Gandhi Rath/Semi Deluxe:** 2x2 air-conditioned bus service for providing economical facilities.
- **Air-Conditioned Gold Line Services:** This service is provided between major routes, like New Delhi – Jaipur, Agra - Jaipur, Udaipur – Jaipur.
- **Air-Conditioned Gray Line Sleeper Services:** This is the sleeper AC bus service offered by RSRTC, operated with 10 coaches. Service is available on long routes like Udaipur, Haridwar, Kota, Bikaner, Ganganagar, Jaipur, etc.
- **Long Distance Express and Night Services (Blue Line Services):** This is the express service commonly operated in night. It's a non-AC service.
- **Ordinary Services:** Non-AC service for short distance, this will cover nearby villages, Panchayats, Tehsils Towns and Districts.
- **CTS Services:** This service is for providing travelling facility to colonies and suburban, to travel in and around Jaipur. Under this service more than 200 buses are operated per day.

As per the available data, the present status of the corporation has been shown in the following table.

Table: 1.2
RSRTC at a Glance

Particulars	Figures (Approximate) as on 31st March, 2019
Average number of buses on road	4,000
Number of employees	16,915
Number of schedules	3,666
Number of Depots	52
Workshops	3
Volume of operations	14,70,158 kms/day
Passengers per day	9,50,000
Net Loss	401.64 Crores

Source: Compiled from Statistical and Financial department, RSRTC, Head Office, Jaipur.

Problems faced by RSRTC

Though RSRTC is a corporation but has all the equity owned and managed by the State Government, making it a State Government enterprise by logic and by obligation.

1. **Problems related to finance:** RSRTC is facing an acute problem of funds which in turn makes it unable to pay its dues on time like the salary, retirement benefits, allowances and operational expenses. Similarly, Government is not infusing funds to replace obsolete buses, purchase spare parts for maintenance of the fleet, which is affecting its operations badly and also increasing the disappointment among its employees and passengers.

2. Problems related to Human Resource

- Government is not giving pay hike benefits to the employees like the benefits related to 7th pay commission which other State Government departments are getting. Further, State Government is not allowing the corporation to hire new employees to fill the critical empty vacancies like of conductors, drivers, inspectors, etc.
- Provision of facilities and good working conditions for staff members especially for female staff members and moving staff members like the drivers and the conductors is also not up to the mark which leads to dissatisfaction among them.
- Lack of proper training to staff at all levels especially for those who come in direct contact to passengers.

3. **Competition with private operators:** Recently State Government issued permits on various routes to private operators to run services parallel to RSRTC in the name of 'Rajasthan Lok Parivahan Seva' to enhance the public transport system in the State. Government had a belief that private operators will provide competitive services to the people of the state, but the whole idea was not implemented properly and due to the absence of a robust monitoring and control framework for these private operators it resulted into a waste activity. Private operators are not providing services as expected from them and moreover they are not abiding to the prevailing related rules, laws and business ethics.

4. Problems related to Management

- Problem related to on contract vehicles.
- Problems related to on contract conductors 'Bus Saarthi' and drivers from agencies like 'Sahara', etc.

- Problem related to lack of coordination, co-operation between depots.
- Lack of use of Information Technology like there is no dedicated website, real time MIS software for all inter departmental reporting and communication.

5. Problems related with Physical Evidences:

- Poor state of office equipments and fixtures like furniture, fans, lighting, computers, printers, ETMs' (Electronic Ticketing Machine).
- Poor bus design leads to discomfort to passengers, such as,
 - a. Height of bus floor/Stairs type is not suitable for senior citizens and disabled people.
 - b. Most of the buses are having 3X2 seating which makes the seat size, leg space and the aisle very narrow and uncomfortable to move in out of the bus with luggage and when the occupancy is more.
 - c. There is very less space to put luggage, since most of the buses do not have dedicated boot space and the only place to keep luggage is luggage racks, which are not sufficient at all to accommodate the usual size and amount of luggage that people usually carry with them.
 - d. Most of the buses lack basic safety features like seat belts, firefighting equipments, etc.

6. Other Problems

- Lack of bus stops at convenient locations, especially in urban areas.
- As speed is the most important variable, RSRTC is also lacking on this part.
- There is a non- viable distribution of buses between routes.

1.8 ROAD TRANSPORT IN HARYANA

Government of Haryana is striving to provide efficient, reliable and eco-friendly modern transport services for the safe movement of people and goods with liberal use of modern-day Information Technology and involvement of private sector, which is considered necessary in this era of liberalization and globalization.

Office of the Director General State Transport is responsible for providing well-coordinated, economical, safe and efficient transport action services to the public of the State. Over the years Haryana Roadways, founded on 1st November 1966 has earned a name for itself for the range and quality of services provided by it. In tune with the emerging requirements of the travelling public, Haryana Roadways has undertaken a series of new initiatives to provide better services to its clients. 'Haryana Gaurav' (Deluxe), 'Haryana Uday' (CNG), new Volvo AC bus services 'Saarathi', 'Pragati' (Volvo Multi-axle), 'Executive class' (Mercedes Benz), 'Star Cruise' (Benz Multi-axle) have been introduced on certain routes. Some of the trips are also touching the Indira Gandhi International (IGI) Airport and the domestic Airport Delhi.

Passenger Amenities

The passenger amenities at the Bus Stands have been significantly upgraded to make travel a pleasant experience. New bus stands are proposed to be constructed with a futuristic vision and will be comparable with similar facilities available anywhere in the world. All efforts are being made to ensure that the passengers get hygienic food/eatables at fixed rates at the bus stands. Water coolers with filters are being provided at important bus stands. Haryana Roadways is providing free travelling facility and concessional travel facility to a large number of categories. The Department plans to install GPS in its buses and CCTV Cameras on all major Bus Stands.

Haryana Roadways is providing several basic amenities for the passengers at the bus stands. The amenities include the following: -

1. **Enquiry Counter** for giving essential information to the passengers. Public Address system has also been provided at important bus stands for making announcements for the information of travelling public.
2. **Advance Booking Counters** are provided at all bus stands. Different counters are provided for buses going on different directions.
3. **Time-Table** of all the buses including those of private buses is prominently displayed at all bus stands.
4. **Separate Toilets** are provided for ladies and gents. NGOs have been entrusted the work of maintenance of these toilets who collect a nominal user charge from the passengers.
5. **Waiting Hall** with adequate seating capacity is provided at all bus stands.
6. **Safe Drinking Water** is provided on all bus stands. At all important bus stands water coolers with filters are provided.
7. **Shops** are provided at the bus stands for selling essential items to the passengers at reasonable rates. Shop keepers have to display the approved rates of items for sale.
8. **Cycle/Scooter Stand** as well as Car parking is provided at important bus stands where nominal rates for parking are charged.
9. **Yatri Niwas** are being run at some of the important bus stands for providing night shelter to the passengers at nominal rates. Such shelters have been made operational at Kalka and Ambala Cantt Bus stands.
10. **Cloak Rooms** are also being provided at important bus stands.

Haryana Roadways State Transport (HR) is the Public Transport unit of the Government of Haryana in India. Haryana Roadways is a major part of Haryana Transport Department. It is the principal service provider for passenger transport

in the state. Consistent quality and punctuality of the service provider has earned a name in all neighboring state and has become the first choice of the passengers

Haryana Roadways Engineering Corporation (HREC), Gurgaon

This corporation was incorporated in Nov. 1987 and is registered under the Companies Act 1956. At the time of its incorporation, its authorized Share Capital corporation was Rs. 2.00 crores and it has been gradually increased up to 6.60 Crores.

The main objects of the HREC are: -

1. To promote, establish, administer and manage Bus Body Building Workshop.
2. To manufacture bus bodies according to design and specifications approved by the Company and to import and export buses.
3. To procure chassis from the chassis manufactures and also to procure raw material used in the fabrication of bus bodies.
4. To sell or give on lease completed bus bodies on such terms and conditions as may be approved by the Company.
5. To undertake contract carriage operations.
6. To run or provide operations or services or set up and manage facilities which are in the nature of enabling infrastructure for efficient functioning of Transport Sector.
7. To act as technical consultants to any Indian firm or Company engaged in the fabrication of bus bodies of various applications and also to production units and official agencies for the promotion of such industry.
8. To enter into business as Mechanical Engineers and manufacturers of implements, machinery tools etc. necessary in fabrication of bus bodies.

As per the available data, the present status of the department has been shown in the following table.

Table 1.3

Haryana Roadways at a glance			
(As on 31 st March, 2019 (Approximate figures)			
Buses:	4,048	Passengers carried Per day (In Lacs):	12.5 Lacs
Staff:	19,000	Km operated per day (In Lacs):	12 Lacs
Depots:	24	Departmental Driver Training Schools:	18
Sub Depots:	13	Central Workshops:	3
Bus Stands:	105	Body Building Workshop (HREC):	1
Annual Turnover	1,906 Cr.	Net Loss	678 Crores

Source: Compiled from Statistical department, Haryana Roadways, Head Office, Chandigarh.

Problems faced by Haryana Roadways

Haryana Roadways has been facing some organizational obstacles in its successful working which are discussed as under:

- i. **Centralized organization Structure:** Since Haryana Roadways has centralized structure, all major decisions are taken at Head Office level. It does not allow these undertakings to contribute in the decision-making process. People employed in this type of undertaking do not get opportunity to use their creativity and expertise. As a result, the field staffs feel that higher authorities are ignoring them and, thus, their morale remains low. All this affects the productivity of these units substantially.
- ii. **High Government Intervention in Working of Department:** Transport Department of Haryana Roadways observes a high degree of interference from the Central Government authorities. These officers act as influencers in both policy matters as well as day to day functioning of the department. As the officers at the top level (IAS cadre) get transferred many times in a

year so they cannot give exact feedback for growth and development of the department.

- iii. **Lack of Good Decision-Making:** Presently officers at top take all-important decision without consulting the grass root level staff, although such people know the real circumstances in a better way. Thus, decisions are made on the whims and fancies of the brass level officers and ultimately objectivity in decisions making is spoiled. So, in future some substantial power should be delegated to the operating units. By such measures appropriate decisions could be taken with objectivity and in time.
- iv. **Problem in fixation of Fare Structure:** It has been found that the fare structure of Haryana Roadways is externally fixed by the State Government. This practice leaves no scope for managerial discretion to fix fare and as a result the profitability of the department is adversely affected. The prices of various inputs such as fuel costs, materials cost, etc., are determined by marked mechanism and are increasing rapidly day by day. This mismatch leads to losses to Haryana Roadways.
- v. **Lack of Clarity of Objectives:** The most difficult task for the State Government is to clearly define the objectives of departmental undertakings. The Transport department of Haryana Roadways has been setup to achieve the objectives such as to provide efficient, economical and trouble-free services to the public on commercial lines and to fulfil social responsibility by plying buses on uneconomic routes. However, Haryana Roadways department has not worked out priority among these objectives. The practice of assigning equal weightage to all the objectives helps the management to justify its inefficiency particularly under the objective of meeting social obligations.
- vi. **Others Problems:** Staff behaviour of Haryana Roadways is non-satisfactory.

- Lack of professional personnel at various levels.
- No visible control of higher authority at depot level.
- Employees are not motivated. Performer and non-performer employees are treated in similar line of financial benefits.
- Position of Higher-level staff is prone to transfer, so the capability or specialized knowledge is not fully utilized.
- Weak Management at lower level. Dr. Sanjay Tiwari (2011) in his paper concluded that decline in profit of Haryana Roadways is due to poor management.
- Haryana Roadways lacks in safety and security. Safety and security are a big concern for women and minor aged population of Haryana and neighbouring states. Moreover, it does not have CCTV cameras in its all buses.

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CHAPTER II

CONCEPTUAL FRAMEWORK

2.1 INTRODUCTION

Nowadays the economy of almost every country in the world is transforming into service economy. The main reason behind this transformation is growing importance and contribution of the service sector in the GDP of developed as well as developing countries. In fact, the rise in the share of service sector indicates a country's economic progress. The services sector is the key driver of India's economic growth. It is not only the dominant sector in India's GDP, but has also attracted significant foreign investment flows, raised exports as well as provided large-scale employment. The sector covers diverse fields of activities such as trade, hotel and restaurants, transport, communication, banking & financing, insurance, real estate, business services, community, social and personal services, and services associated with construction. The contribution of this sector in 2018-19 is 54.17% of India's Gross Value Added at current price.

The rapid growth of service sectors around the world and deregulation of many service industries have attracted researchers about quality issues to recognize the significance of acquiring more understanding about service performance. A jump in the service sector is observing a rise in the number of players operating and entering into the services industry. Amidst the increasingly cut throat competitive environment, only those companies who can better satisfy the customer and maintain the quality of their services can survive and prosper. It is increasingly being recognized that high quality service is essential for firms that want to be successful in their business (Parasuraman et al. 1988; Rust and Oliver 1994). The concept of service quality has been viewed in different ways by various authors for last few decades. Service quality is argued to be the function of customer's expectations and experience and is directly linked with their satisfaction and

loyalty. The present study covers the association of service quality with customer satisfaction with reference to public road transport industry. This chapter focuses on various concepts related with service marketing, its components popularly known as service marketing mix, its significance, strategies of service industries and customer satisfaction aspects. The final section of the chapter highlights the conceptual framework of the study focusing service quality attributes and their influence on customer satisfaction with regard to Public Road Transport Sector in India.

2.2 CONCEPT OF MARKETING & SERVICE MARKETING

Marketing encompasses every act a company does to attract customers and maintain relationships with them. Its ultimate goal is to match a company's products and services with the needs of the people that results into profitability to the company. For ensuring business success, effective marketing plays an important role. It does not only mean promoting a product but starts with arousing needs of a product or service among the customers. It is multi-functional because it chooses target market, gets prospective customers through creating, delivering and communicating superior customer value.

Some important definitions are mentioned hereunder -

According to **American Marketing Association**, “Marketing is an organizational function and a set of processes for creating, communicating and delivering value to customers and for managing customer relationships in ways that benefit the organization and its stake holders”.

“Marketing is not only much broader than selling; it is not a specialized activity at all. It encompasses the entire business. It is the whole business seen from the point of view of the final result, that is, from the customer’s point of view. Concern and responsibility for marketing must therefore permeate all areas of the enterprise.” — **Peter Drucker**

“Marketing is the process of anticipating, managing, and satisfying the demand for products, services, and ideas.” — **Wharton School, University of Pennsylvania**

“Marketing is the process by which companies create customer interest in products or services. It generates the strategy that underlies sales techniques, business communication, and business development. It is an integrated process through which companies build strong customer relationships and create value for their customers and for themselves.” — **Wikipedia**

From the above definitions the idea of marketing can be better understood as the approach of marketing is customer centric and its activities are directly concerned with demand stimulating and demand satisfying efforts of a company.

There are two key components of economics: goods and services. In most of the countries services add more economic value than agriculture, raw materials and manufacturing combined. A service is a type of economic activity that is essentially intangible, cannot be stored and does not offer ownership. It is consumed at the point of sale.

SERVICE MARKETING

The **American Marketing Association** defines services as “activities, benefits or satisfactions, which affect sale or are provided in connection with the sale of goods.”

According to **William Stanton**, “Services are those separately identifiable, essential intangible activities which provide want satisfaction and are not necessarily tied to the sale of a product or another service.”

According to **Philip Kotler**, “A service is any activity or benefit that one party can offer to another that is essentially intangible and does not result in the ownership of anything.”

As a service cannot be seen, smelt or touched, the marketer of the service has to face a lot of challenges for communicating the benefits of a service by sketching

parallels with imagery and ideas that are more tangible. With the growing importance of services in the world economy, the need for studying the subject of service marketing separately has been emerging strongly.

Service Marketing is referred to as “the promotion of economic activities offered by a business to its clients”. It might include the process of selling telecommunications, health treatment, financial, hospitality, car rental, air travel, and professional services.

Service marketing includes a broad category of marketing strategies that focuses on selling anything that is not a physical product. This includes everything from personal services like medical care and spa treatments, to the rental of vehicles and spaces, to experiences like concerts and dance lessons.

2.3 CHARACTERISTICS OF SERVICES

Service marketing is marketing based on relationship and value. Marketing of services is different from marketing of goods because of the unique characteristics of services namely, intangibility, variability, perishability and inseparability. These are described here under-

Intangibility – A service cannot be seen as it does not have any physical form; it does not interact with our senses (touch, smell or hold). It becomes difficult for buyer of that service to evaluate the quality of service before consuming it since there are fewer attributes of quality as compared to a product.

Inseparability – The production and consumption of a service cannot be separated as against a product as its production and consumption are entirely different processes. In case of a service the consumer needs to be present at the time of its production, for example a health check-up or tutorial. Further, a service cannot be separated from its provider. That is why a consumer can differentiate one service provider from others and decides from where to avail the service.

Perishability – A service exists temporarily; unlike physical product, it cannot be stored, accumulated, returned or resold once it has been used. Further, the way it has taken place, cannot be repeated exactly the same.

Variability (heterogeneity) – services are delivered by service provider therefore involves variation due to human nature. No two services are completely identical, even if they are delivered by the same provider.

The above-mentioned characteristics of services are unique and give rise to problems and challenges that are rarely found in product marketing. Services are multifaceted, multidimensional and multilayered. It offers multiple benefits and also allows multiplicity of interactions between the customer and the company (service provider) as well as between the customer and other customers.

2.4 CLASSIFICATION OF SERVICES

Classification of services has been done in different ways by different authors. Sometimes the presence of a buyer is essential to deliver a service and sometimes not. Similarly, the service can be provided by the seller or by an equipment/machine.

- 1. People based and Equipment based services:** A service can be performed by a human being or even equipment is used. People based service requires the presence of a human being equipped with set of knowledge and expertise in delivering the service. For example, a lawyer's profession demands his presence. Similarly, a doctor, beautician, mechanic, barber, etc. fall under the same category.

Equipment/machine-based service is provided by automated machines like robots doing car wash, vending machines, etc. Here, the presence of the seller is not needed.

- 2. Consumer services and Industrial/ Business services:** Consumer services are provided to end users and households. The users of these services are individual buyers and households in consumer market like, hotels,

travelling, healthcare, life insurance, entertainment, repairs, personal banking, education, amusement, personal security, etc.

In Business services, a number of services are provided for production, distribution, maintenance and marketing of tangible as well as intangible products. These services are provided to firms involved in production of products for end users like, advertising, engineering, consultancy, market research, warehousing, transportation, training, human resources, market research, etc.

There are few more services which are designed for both consumers as well as business markets like, financial, transportation, consultancy, event management, engineering, hotel, food, etc.

- 3. Buyer's presence and Buyer's absence:** There are services that can be provided only in the presence of the buyer like a haircut, manicure, tourism, hospital, education, fitness, massage, etc.

Certain services don't require the presence of the buyer of that particular service. For example, car repairs, gardening, courier, market research, promotion services, etc.

- 4. Services for Non-Profit and Services for Profit:** There are services from individuals as well as organisations that are inclined towards social cause and not economic gains. Some examples are NGO's in different fields like education, veterinary doctors offering services free of charge for stray animals, animal shelters, etc.

2.5 REASONS FOR PHENOMENAL GROWTH IN MARKETING OF SERVICES

Service industry has accelerated at a very fast pace in last few years. After 1991 due to liberalization, the contribution of service sector has been continuously increasing in the Gross Domestic Product of Indian economy. It now accounts for nearly two-thirds of the economy by income and jobs. Service sector is growing

not only in volume but also in sophistication and complexity. Some of the notable reasons behind this phenomenal growth are,

- **Increasing affluence:** Demand for services has been increasing day by day with a stable middle class and growth in upper-income families. This sector of the economy is becoming less concerned about material needs and has shown increasing demand for services such as health, education, entertainment, etc. Now, people are hiring for those services, which they used to perform earlier by themselves, e.g., gardening, cooking, car driving, etc.
- **More leisure time:** This factor led to an increase in those services which are related to entertainment, because of increase in leisure time in people's life today e.g., tourism industry has grown because of more leisure time available to the people.
- **Greater life expectancy:** With increase in the average life of the people, there has been an increase in the service which is related to field of health care, for example medical services, pathology laboratory, health care services, etc.
- **Greater complexity of the product:** With the growing complexity of the product, there has been an increase in the services which are indirectly supporting the maintenance of these complex products. For example, Air-conditioners, cars, computers, and other complex products require service yearly or even half yearly.
- **Increasing number of working women:** In recent time, more and more women are joining workforce and contributing in family income. This has indirectly led to increase in demand of services like, domestic servants, baby sittings, etc.
- **Increasing complexity in personal life and business as well:** Due to increasing complexity in personal life, the demand for services like,

matrimonial service, legal and income – tax consultants, placement services, etc are rising.

In business too, companies recognize that by outsourcing few services they can concentrate more on the activities that are critical to business success such as, marketing research, promotion, recruitment, etc.

- **Increasing Competition:** With the competition getting intense, services are coupled with product offerings to create differentiation in consumers' mind, e.g. in the education sector, besides delivering basic education, institutes are providing placement, free personality development courses, etc. Hence, by offering extra services a business can differentiate itself from the competitors and attract consumers.

2.5 SERVICE MARKETING MIX

The term marketing mix was quoted by Neil Borden for the first time in 1948 in his article titled, "The Concept of the Marketing Mix". Later on, American marketer McCarthy introduced four Ps' constituting product, price, promotion and place to refine this concept in 1960. In order to deliver processes, experiences, and intangibles to customers against tangible goods, service marketing plays a vital role. For marketing a service, four Ps' of the marketing mix (product, price, promotion, and place) are insufficient. People, process, and physical evidence are additional Ps which are also required to complement 4Ps'.

2.6.1 Product

Services are intangible products. As a matter of fact, consumers do not buy products rather they seek benefits to satisfy their needs. Therefore, marketers wrap the benefits into some attributes that constitute a product. Marketers are used to promote these attributes. A product that someone needs and wants to buy is at the heart of the marketing mix. In traditional marketing, products have a tangible presence; but in services marketing, it is not so easy to hold up the service for scrutiny and examination. The marketers can only ensure that the service they are delivering offers a clear benefit that satisfies an identifiable market need.

In order to understand the customer, provider should think at multi-levels. They are as follows:

- a. **Consumer benefit concept:** While developing the service package, the starting point is obviously the consumer. Consumers are not buying the service; they are only buying specific benefits and values. The service products should be designed to benefit consumer needs. For example, the customer joins a club for getting recreation, entertainment, education and status.
- b. **The service concept:** Services offer specific benefits. The forms and levels of services vary in reference to consumer's need, satisfaction, benefits and attributes. The various levels analyzed by the service provider are Core benefits level, expected service level, Increase level and Potential level.
- c. **The service offer:** Service concept is closely linked with service offer. It spells out, in more details those services to be provided, how they will be provided and to whom. Service offer is the element that makes up the total service package, including both the tangible and intangible components of service. For example, types of dance, the quality and performance of dancer are intangible aspects of the service offer. Physical facilities like dancing hall, sitting capacity, types of seats, air-conditioning, and toilets are the tangible aspects.
- d. **The service forms:** A service product refers to the performer of service in connection to the consumer who buys something from service provider to satisfy a desire. The way service is provided refers to service form. The text may provide knowledge of entire study of a particular subject.
- e. **The service delivery system:** The way the service is provided to the consumer is known as the process of service delivery system. The final dimension of the service product is the service delivery system. The delivery system represents interaction between the service provider and the consumer and between the consumer and the service facility.

2.6.2 Price

It is very difficult to price a service that is profitable for the business, attractive to the consumer and competitive in the marketplace. In case of intangible and people-based services, it is difficult to calculate the cost and determine the price. In professional services, for example, fees of doctors, lawyers, and chartered accountants are not the same. Most service marketers follow competitive price policy pricing their service either at the market price or slightly below it. Sometimes, bargaining between the seller and buyer may settle prices of services. The government fixes prices of public utility service. The practices used in the pricing of services are as follows:

- a. **Differential pricing:** The pricing objectives of service marketers vary, but typically, the pricing goal of the most is to maximize profit on each sale. However, the sale may not necessarily be the wisest pricing practice. It means price differs according to time, place or customer's ability to pay. It causes smooth fluctuations in demand.
- b. **Diversionary pricing:** Sometimes, main product is having a low price and related services have very high charges. This is a strategy to attract to customers. For example, a restaurant may charge low price of regular dish and compensate the loss by charging high prices for ice creams, and cold drinks.
- c. **Discount price:** It is a practice of offering a discount to brokers and intermediates such as stockbrokers, property dealers and advertising agencies for rendering a service. It stimulates demand and promotes services.
- d. **Guaranteed price:** In this strategy, customer is to pay price if he is satisfied with the service. For example, a property dealer charges his commission only after the deal.

- e. **High price maintenance:** This strategy goes with high charged product or branded product. It includes high quality services like that of lawyers, doctors, and other professionals.

2.6.3 Promotion

Promotion is how the customers find out about the service. It includes different ways to communicate, describe and sell the service. When designing the promotional messages, marketers think in terms of the service's benefits rather than its features. However, services are intangible and it is difficult to evaluate the quality and nature of a service before buying it. The main methods of promotion are as below:

- a. **Advertising:** Advertising in some service lines, like telephone, solicitation and even direct mail play an increasingly important role. In advertisements of a service, the focus should be on relevant tangible objects that symbolize the service.
- b. **Personal selling:** In the case of services, the producer and the marketer are virtually inseparable. It is desirable that sellers should be knowledgeable professionals who can give needed advice and counseling. Service often requires detailed explanations and continuing relationship or negotiation. Therefore, personal selling is the backbone of service marketing. Customer contract staff needs training to educate and reassure customers.
- c. **Sales promotion:** The traditional methods of sales promotion are not very useful in service marketing. However, service firms do not use premiums and contests on special occasions and festivals. Use of several sales promotion techniques minimizes intangibility of services. For example, a restaurant may provide some services free of charge along with the food.
- d. **Publicity:** Service oriented products also use market-oriented publicity. No service marketer would miss the chance for positive public opinion. Publicity is the most significant element of service marketing.

2.6.4 Place

Place is where the customers buy the service and it is made available to them to view and evaluate. Marketers need to think about how to reach the customer base and how they will consume the service when they make a decision to purchase it. Due to inseparability, the service provider can serve only a limited number of consumers. In addition, many services require the consumer to go to the service centers like hospitals, universities and theatres. Therefore, location is of key importance in services. The importance of service, nature of service and flexibility of service are the main factors to be considered in deciding the location for services. The other main issue is whether to sell directly or through intermediaries. Direct sale is the only way if the service is inseparable from the performer.

2.6.5 People

Services are often heavily reliant upon the professionalism and abilities of individuals. Any employee who comes into contact with customers whether, in person or on phone or email must be trained for the job. People include the firm's human resource, the customer himself, and other customers present at service station; they all serve as decisive elements regarding the image of the service itself. The appearance of service providers, their attitude and behavior affect customer perceptions. Service personnel are present at two levels within the organization-contact personnel and support personnel. Contact personnel are those individuals whom the consumers see which as receptionists. Consumers judge them through the quality of service they provide. Customers are actively involved in service marketing. The total satisfaction should be more effective because one consumer influences others leading to a chain reaction.

2.6.6 Physical Evidence

It refers to the setting in which the service is delivered; all tangible components that assist service performance also affect customer perception. This includes components such as ambience of service station, testimonials from previous

customers, brochures, letterheads, business cards, report formats, signage, service equipments and the physical facility offered.

The main problem with a service is that a purchaser cannot test it out before buying. It even cannot be produced until it is needed. It is, therefore, important to offer some other means by which a potential customer can make an objective evaluation of the value and quality of the service without committing to buy.

2.6.7 Processes

It may take several different stages of a process to deliver a service to a customer. Unlike tangible goods that can be kept in stock ready for purchase, services often have to be booked in advance and delivery planned to meet customer requirements. Process is required because the production and consumption of a service take place at the same time; hence customers need to be present during the process of delivering the service.

Finally, 'process' includes the operating systems, procedures, mechanisms, and flow of activities involved in service delivery. This P may be perceived as an important factor while deciding the quality of service.

The controllable variables of the firm product, price, place, promotion of product marketing is not equally adequate for marketing services. The special features of service marketing have brought about requirement for the extended marketing mix like people, physical evidence and process. Because of the inseparability of the service production and consumption, the consumer is subject to direct experience of the production process. This also includes the interaction with the front-line staff. Service being intangible needs to be tangible through the physical evidence.

Thus, the marketing mix for services consists of seven elements. It is not enough to define each of these elements in a proper manner. Different elements should function together to achieve a harmonious blend that can fully satisfy the wants of consumers.

2.7 PROBLEMS FACED BY A SERVICE ORGANIZATION

Every service organization faces some challenges that are unique to the industry it belongs to. In order to manage, grow and make profit, an organization has to face some problems that may include:

1. Due to intangibility of services, customers cannot see, touch or feel them before they actually consume it. Therefore, they cannot judge the quality of service and feel they are taking a risk. They are uncertain about the pricing since they are unable to evaluate its performance in advance. On the other hand, sellers too, find it challenging to promote, control quality and set the price of the service they are providing.
2. Unlike product industry, the service provider rarely gets any opportunity to test his services before delivering it to the customers since services are in general produced and consumed simultaneously. Therefore, defining and improving quality in service is a difficult task. It is a big challenge to guarantee customer satisfaction on this front.
3. Service provider needs to develop trust among the customers about the quality of service being offered.
4. In most industries, the service delivery process involves a lot of human interaction. As human behavior is subjective and unpredictable, no two sets of services can be identical in their details and results. A service organization needs to train its staff well, and keep them satisfied in their work—including financially. Staff needs to be constantly motivated and efforts have to make to sustain employee commitment.
5. Perishable nature of a service makes it difficult to manage for a service provider since it cannot be stored or accumulated.
6. Setting prices is not an easy task for service firms.

7. Standardization versus customization is another major issue the service provider has to face.

2.8 SERVICE MARKETING STRATEGIES

Marketing a service is quite different from promoting a physical product because the features of a service cannot be displayed to consumers. They are needed to be taught about a service. To sell a service, it is required to explain the need of the service, its procedure to serve and reasons behind the superiority of an entity to deliver the service. If an entity is having a unique skill, it has lot to do to convince customers about its offerings. Service marketing is most commonly used by firms that deliver services to individuals. They study consumer behaviour to design their promotional strategies to appeal to certain demographics. Specifying certain segments allow them to put concentrated efforts to win over the competitors. In this section, the researcher attempted to compile various strategies which have been suggested by different academicians, researchers and scholars and have been proved successful in marketing of services. The strategies which are commonly used to market a service have been described as follows:

2.8.1 Strategies to match Supply with Demand

Service providers often face uncertainty with respect to the flow of demand. On the other hand, as far as their capacity to fulfill unexpected demand is concerned, it is also certain. They have limited capacity to serve demand. Since a service cannot be stored, unexpected or peak demand cannot be served; marketers design their strategies to match supply with demand.

2.8.1.1 Factors affecting Supply

- **Availability of workforce:** In service operations which have medium and high contact systems, capacity is restricted up to number of people present to render service.
- **Available space for service delivery:** Service stations have finite space. For example, a cinema hall has a fixed number of chairs, a hospital has a limited

number of beds, and public transport vehicles can carry a specified number of passengers.

2.8.1.2 Factors affecting Demand

The factors contributing to uneven demand cannot be predicted. These may include:

- **Trend analysis:** In order to predict demand marketers', analyze trends in demand over longer time frames. Often the trend in sales is related to the stage of the product life cycle. For example, industries in growth stages exhibit rapid increases in sales while industries in maturity may find that sales figures reach a plateau. Long-term demand patterns are stable and relatively easy to predict.
- **Seasonal Factors:** Seasonal fluctuations are recurring, systematic, can be predicted easily and are calendar-related movements in sales. For example, peak and off-peak seasons for a tourist resort. For a restaurant, however, peak seasons might coincide with main meal periods on a daily basis. Other seasonal factors include trading day effects and holiday periods.
- **Irregular Fluctuations:** Irregular fluctuations are unsystematic, most commonly short-term fluctuations. Irregular effects are highly unpredictable, e.g. stormy weather affecting air transport services, forcing local hotels to accommodate thousands of passengers with minimal advance warning; an unexpected thunder storm leads to a surge in demand for umbrellas.

2.8.1.3 Strategies to manage Supply

In order to meet additional demand, service providers can hire additional staff or temporary staff for peak periods; add to space, e.g. extra floor space in retail, hospitality or increased fleet size in transport services. Increasing capacity may require service re-design and presents a longer-term solution to capacity problems. Apart from these, following strategies would also help to manage supply. These are:

- **Reconfigure interior space** – with careful arrangement of interiors, it may be possible to accommodate a larger number of customers, e.g. restaurants add extra tables by covering free spaces.
- **Use customers to boost productivity** – Customers labor can be harnessed to reduce pressures on the system, e.g. self-service, e-ticketing.
- **Transact business at arm's length** – Use internet or virtual delivery systems to transact business.
- **Involving Third Parties** – Where possible, ask customers to use agents or brokers to minimize the number of individual contacts and reduce pressure on the service system.
- **Share capacity** – it may be possible to share capacity with other businesses, e.g. airlines build strategic alliances with other operators so that excess demand can be booked or referred to a known partner (and does not involve passengers losing frequent flyer points).
- **Locate and target market segments with different demand patterns** – e.g. a ski resort could develop fishing and sight-seeing packages for bushwalkers and anglers to build demand during traditional off-peak seasons.
- **Develop innovative products for off peak periods** – e.g. an airline could develop mystery flights, fly over Antarctica specials, singles flights, blues or jazz flights, gourmet flights, fight sensitivity training flights for nervous travelers, Winter wonderland specials, etc. (a medium-term strategy).
- **Use efficiency-based pricing methods** – price incentives, such as demand-based differential pricing (peak and off peak); market-based differential pricing (e.g. economy and business class); price-volume discounts, use pricing to encourage pre-booking which facilitates superior forecasting, e.g. taxi operator Uber uses *surge pricing* during rush periods.

- Use reservations systems to managed and – yield management or dynamic pricing which uses a combination of segment-by-segment demand forecasting alongside subtle price adjustments (requires sophisticated software programs to analyze demand) e.g. hotels and airlines utilize yield management to set prices based on demand patterns.
- **Use stand-by systems** – allow customers the option of taking up last minute vacancies or "no-show" places.

2.8.1.4 Strategies to manage Demand

Management may attempt to shape demand patterns through customer education programs or lobbying, e.g. encourage engaged couples to hold wedding ceremonies on days other than Saturday to spread demand more evenly across the days of the week, lobby different state authorities to stagger scheduled school holiday periods in order to spread demand for holiday services more evenly across the year.

- **Single Line/Single Server Queues:** Single line queues are among the most common. Examples can be found in cafes and sandwich bars around town. At Disneyland, for example, single line queues are employed despite the large numbers of visitors. However, Disney provides wandering entertainers to visit waiting lines to distract visitors.
- **Parallel Lines/Multiple Servers:** Parallel lines are useful when there is more than one service station. However, a major drawback is lines often move at different speeds. When patrons perceive that their line is moving more slowly, it can give rise to a sense of inequity. A variation of this type of queue is to devote some stations to different classes of customer. This variation is used in supermarkets where an express lane can be set up for customers with a small basket of items. It is also used at airport check-in counters where different lines form for economy class passengers and business class passengers.

- **Snake Queue:** The snake queue employs a physical race to guide customers through to the service station. Its main advantage is that all customers will be served on a first-in, first served basis, which for many people is the fairest system.
- **Allot a Number:** In allot a number system customers do not need to form orderly queues once they have been assigned a number. Instead, customers can relax; enjoy the service firm's facilities until their number is called.
- **Other queue systems:** Other types of system can also be found in service environments. Hospital emergency department, for example, use triage in which patients are assessed by a triage nurse who ranks the severity of their condition and assigns them to a doctor based on need.

2.8.2 Other Strategies

- **Word of Mouth:** Word of Mouth is one of the promising methods to market an intangible product or service. A satisfied customer will be eager to share her experiences about the service with her friends and relatives even if she is not being asked and tell them why she prefers that particular provider. Using referral program as an integral part of marketing can give desired outcomes. Service providers offer cash bonus, free service or a reduced rate on service to each referral to increase their customer base.
- **Education:** Another proven method is to educate customers about the service and the way it is delivered. Service providers organize free seminars, educational meetings or offer free trials, membership to the people. Articles for magazines and newspapers and talks at trade shows and conferences can be proved as successful tools to promote a service. An educational marketing strategy does not emphasize features of a service or prices rather it explains the benefits of using the service.
- **Demonstration:** People are generally hesitant or afraid while trying a service offered by a new provider for them. Offering free demonstrations can help those providers to convince and convert them into customers and

achieve desired results. For example, organizing a free of cost session on financial to a large company can help the service provider to promote its services and in this way a lot of people can be made convinced about their service quality and benefits of their services. If a company runs advertising agency, it can suggest some good alternatives to a business owner, and outline the cost to do so.

- **Social Media:** In the era of information exposure through social media, it is very hard to avoid or escape interesting items shared by others on mails, social networking sites or messenger apps. It is a cheaper way to reach people to bring them closer and make an impact. A social media marketing strategy allows service providers to educate people and get them to spread the word to their network of contacts through various tools. With Facebook, for example, you can create a free business page to detail about your service. Testimonials and case histories posted by satisfied customers displayed on your page might create a positive image of your offerings or organizing contests and offering a cash prize or a free session or visit. The number of Likes on your business or web page might encourage visitors to share their experience with their friends. Free tips to interested people can be given through Twitter messages to educate them about your services.
- **High price maintenance:** Some evidence suggests that risk-averse consumers often use high price as a notion to quality. Low prices may therefore be counter-productive since they suggest lower quality. Prestige pricing or premium pricing strategies are more likely to be indicated in service settings.
- **Limited extent trial :** While some services cannot be fully trialled, marketers should think about limited scale trial or a virtual trial, e.g. use computer-aided design to visualize hairstyles, plastic surgery, many virtual brand sites found online have successfully built of the notion of limited trial. Other examples include: test driving.

- **Standardize the Product and Delivery:** This is sometimes known as the McDonald's approach. Since variations in quality contribute to higher levels of perceived risk, one technique is to minimize variations by using production line techniques to control standards. This approach may be limited because many customers expect high levels of flexibility and customization as part of the process. Standardization needs to be fully communicated to customers – existing and potential – to be fully effective.
- **Develop Trust among Customers:** Consumers of services may be more predisposed to use a known, reputable brand as an indicator of quality merchandise. For this reason, service providers are presented with greater opportunities to engage in relationship marketing.

The above-mentioned strategies pertaining to marketing can better help a service provider to manage his business effectively and profitably. These strategies are applicable to every type of service operation whether it is hospitality or travelling or other sort of services. However, the factors affecting demand and supply of different service industries may vary. Marketers need to plan their strategies in the light of all the factors affecting demand and supply of the services offered by their industry.

2.9 CUSTOMER SATISFACTION AND SERVICE QUALITY

Customer satisfaction is the state of mind that customers have about a company when their expectations have been met or exceeded over the lifetime of the product or service. The achievement of customer satisfaction leads to company loyalty and product repurchase. It is one of the most important indicators of a business's performance. On the basis of customers' verdicts, performance of a product or service can be judged and its success largely depends on the satisfaction that customers are deriving. Therefore, an understanding of customer satisfaction has become the most significant aspect in recent times. In order to gain competitive advantage over others, an organization needs to identify factors that cause customer satisfaction or dissatisfaction and consciously measure them.

According to **Gronroos (1990)** Customer satisfaction is a business philosophy which tends creating value for customers, anticipating and managing their expectations, and demonstrating ability and responsibility to satisfy their needs. Qualities of service and customer satisfaction are critical factors for success of any business.

In another definition given by **Kotler and Armstrong (2004;2009)**, Customer expectation is the difference between the expectations of the customers before availing the services and perceptions of the customers after availing it. Customer satisfaction mainly depends on the build-up of the perceived value to which the customers have concerning a product or service.

According to **Oliver (1997)**, satisfaction means customer's fulfillment. It is a judgment that a product or service feature, or the product or service itself, provided (or is providing) a pleasurable level of consumption-related fulfillment, including levels of under- or over-fulfillment. Need fulfillment is a comparative process that results into satisfaction responses. Any gaps lead to disconfirmation; i.e., positive disconfirmations maintain satisfaction and negative disconfirmation create dissatisfaction.

Service quality (**Parasuraman et al. 1988; Gronroos 1984**) is defined as a comparison between customer expectation and perception of service. Service quality generally consists of five distinct dimensions: tangibles (Physical facilities, equipment, and appearance of personnel), reliability (ability to perform the promised service dependably and accurately), responsiveness (willingness to help customer and provide prompt service), assurance (knowledge and courtesy of employees and their ability to inspire trust and confidence), and empathy (caring, individualized attention the firm provide its customer).

As service quality and customer satisfaction are correlated, measuring their correlation is difficult task due to complex interplay between performance dimension used in quality judgments and those used in satisfaction judgments, and due to the differences between encounter-specific and global judgment. Service

quality is designed keeping in view the desired performance that is judged from ideal expectation and from idiosyncratic preference of individual consumer.

In the service area, although developed independently, quality and satisfaction share one notable feature. Both view satisfaction as a function of expectancy disconfirmation and service quality as function of satisfaction.

Thus, quality is one of the key dimensions which are considered into the consumer's satisfaction judgments. Quality is the totality of features and characteristics of a product or service that bear on its ability to satisfy stated and implied needs. In short term, product or service features determine quality which then satisfies consumer needs. Subsequent to this more immediate effect, it will be assumed that satisfaction may reinforce global quality perceptions but only indirectly. Quality is hypothesized as one dimension on which satisfaction is based, and satisfaction is one potential influence on global quality perception.

2.9.1 Measurement of Customer Satisfaction

Customer satisfaction, if not managed efficiently cannot produce desired outcomes to the organization. Competitors that are prospering in the new global economy recognize that measuring customer satisfaction is the key. Only by doing so can they retain the customers they have and understand how to better attract new customers. Successful competitors recognize that customer satisfaction is a critical strategic weapon that can bring increased market share and increased profits. Though it is not easy to measure customer satisfaction, yet it is one of the most essential tasks that an organization must perform. There are following tools which are used to measure customer satisfaction -

1. **Customer Satisfaction Surveys:** The customer satisfaction survey is the standard approach for collecting data on customer opinion on their experience. It consists of asking customers how satisfied they are, with or without follow up questions. The outcome of these surveys clearly indicates what needs to be changed to improve customer experience. In recent times main techniques used are:

- **Field surveys:** Organizations mostly employ external agencies to listen to their customers and provide dedicated feedback in return. The best way is to implement a proper survey which consists of identical questionnaire to collect customer feedback. Customers are given enough time and assistance to answer the questions mentioned in the questionnaire and then their responses are examined thoroughly. These feedbacks can be treated as one of the best way to measure customer satisfaction.
- **In-App Surveys:** In this technique the customer feedback is taken at the very same time when she is engaged with the company. Here a subtle feedback bar is integrated inside the company's website, with usually one or two questions only. It's one of the techniques with the highest response rates and is especially designed to measure standard customer satisfaction on a mass scale.
- **Post Service Surveys:** This type of survey focuses on customer's satisfaction with a specific service just after he experiences the service. It enables the customer to give actual opinion without getting a chance to manipulate it. This can be done in email support with a rating link in the mail, or in live chat with a rating view that appears after the chat. It can also be done over the phone, but it's somewhat problematic because it takes more time from the customer, and she might not feel comfortable sharing an unfiltered opinion.

In certain cases, customers can be asked directly after delivering the service, for example in a restaurant or hair salon. This is an excellent opportunity to collect feedback on the spot.

- **Email Surveys:** The above survey techniques aren't suitable for in-depth insights about customer experience. Email surveys, though they have a drawback of low response rates, they do allow customers to take their time in answering multiple questions. Google Forms is an excellent free tool for this purpose.

2. **Online Communities:** Online community is again integrated in a company's website that enables customers to talk to other customers, give product feedback, and share their thoughts on a product or brand. It empowers the customers to find their own solutions and help each other out, giving them full control over the customer support experience. Moreover, the company can monitor the community to improve its brand and customer service.
3. **Social Media:** Social media is an essential tool for all businesses, no matter their size. But it has to be actively taken care of. These days, a company having an inactive social media profile is like an empty online store of that company. Every company needs to build a social media presence and use it every day to engage with its customers, deliver helpful content, and promptly respond to their questions or issues.
4. **Online Forums:** An internet forum or message board is an online discussion site where ideas and views on a particular topic, product or issue can be exchanged. Depending on the forum's settings, posters can be unidentified or have to get registered to the forum to post. Usually, any existing discussions posted on the site are publicly visible and usually grow in popularity fairly quickly.

In this way, a company can collect and respond to its customer feedback and see how they react to any solutions provided in the forum. They give great insight into how customers truly feel about a product or service, and how a brand can be improved.

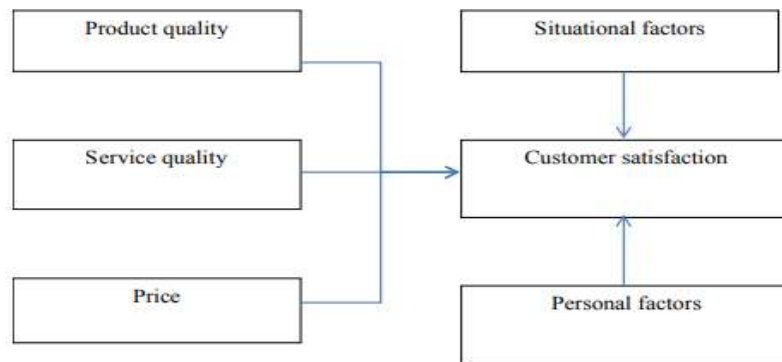
5. **SMS Text Support:** If customer has opted into receiving SMS text support from the company, he bought a product recently, the company can give customers important updates about their purchases or close their customer service cases conveniently via mobile. This is so much faster and easier, as SMS texts will reach customer immediately, even when they're on the go.

2.9.2 Factors Affecting Customer Satisfaction

In 2001, Bel and Chiao stated that product quality, service quality and price are fatal factors that influence customer satisfaction. On the other hand, according to Zeithaml and Bitner (2000) customer satisfaction is influenced not only by product and service quality and price but also by situational factors and personal factors. According to that theory Zeithaml and Bitner (2000) have developed a customer satisfaction model:

Chart 2.1

Model showing Factors affecting Customer Satisfaction



Source: <https://www.researchgate.net/publication/319482431>

According to the model shown above, following are the important factors that could affect customer satisfaction:

Product and Service Quality refers to the totality of features and characteristics of a product or service that bear on its ability to satisfy stated and implied needs of customers.

Price signifies affordability and value for money.

Situational factors include ambience of service station, appearance of staff, their attitude, etc.

Personal factors include personality, attitude, previous experience of customers, etc.

Having discussed the above factors that affect customer satisfaction, it can be said that higher the satisfaction level, higher is the sentimental attachment of customers with the specific brand of product and also with the supplier. This helps in making a strong and healthy customer-supplier bonding. This bonding forces the customer to be loyal with that particular supplier and chances of substitution are very less. Hence customer satisfaction is very important aspect and every supplier should focus on it to establish a strong position in the global market and enhance business and profit.

2.10 CUSTOMER SATISFACTION MODELS

In following sections some of the important models of Customer Satisfaction have been discussed.

2.10.1 Traditional Macro Model

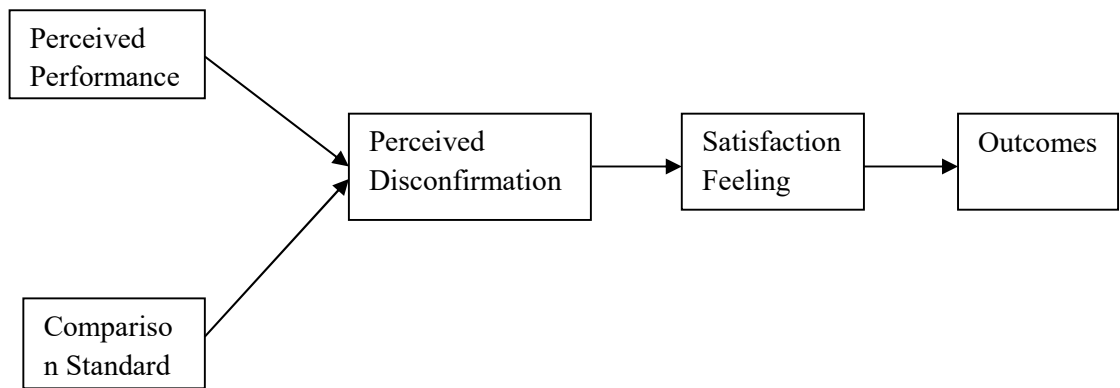
The concept of customer satisfaction extends following ideas -

1. In case where a product is complex, intangible and/or novel, perceived performance does not match with objective or technical performance.
2. Standards of comparison differ usually by individual, by situation, and by product/service type.
3. Perceived disconfirmation arises when perceived performance does not match with comparison standards. Disconfirmation can be positive, i.e. satisfying result (perceived performance exceeds standards); negative, i.e. dissatisfying result (perceived performance is less than standards); or a zero effect.
4. Feeling of satisfaction is a state of mind, an attitude. Here, “mixed feelings” refers different levels of satisfaction for different parts of a product/service experience.

5. Feelings of satisfaction results into intent to repurchase, word-of-mouth, and complaints. These outcomes are moderated by other variables too. For example, extreme dissatisfaction will not necessarily generate complaint behavior, especially if the consumer believes complaining will be ineffective.

Chart 2.2

Traditional Macro-Model of Customer Satisfaction



(adapted from Woodruff & Gardial, 1996)

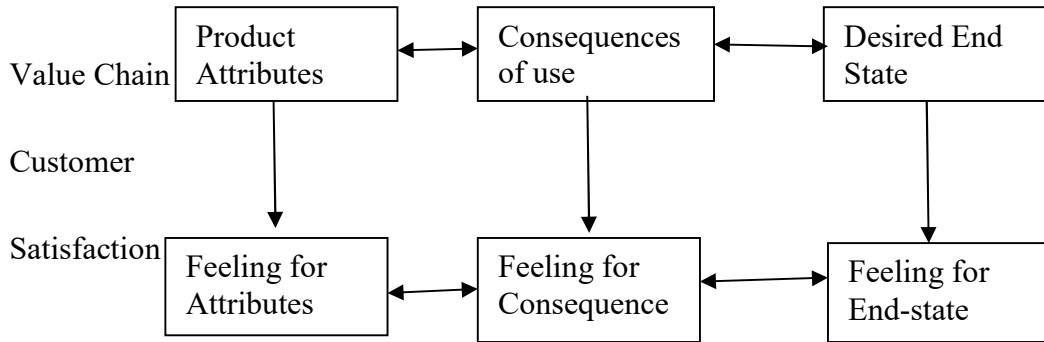
However, the macro model has been extended time to time by various scholars and these models elaborated the link between customer satisfaction and product/service quality. These are as follows -

2.10.1.1 Model of Linkage of Customer Value Chain to Customer Satisfaction

This model highlights the concept of value as a driving force in product choice and relationship of satisfaction to it as a brief psychological reaction to a component of a value chain (or “hierarchy”). As per the model, product attributes decide the outcome of using the product and feeling for the attributes. Further, positive feelings towards product result into customer satisfaction, otherwise dissatisfaction may arise.

Chart 2.3

Model of Linkage of Customer Value Chain to Customer Satisfaction



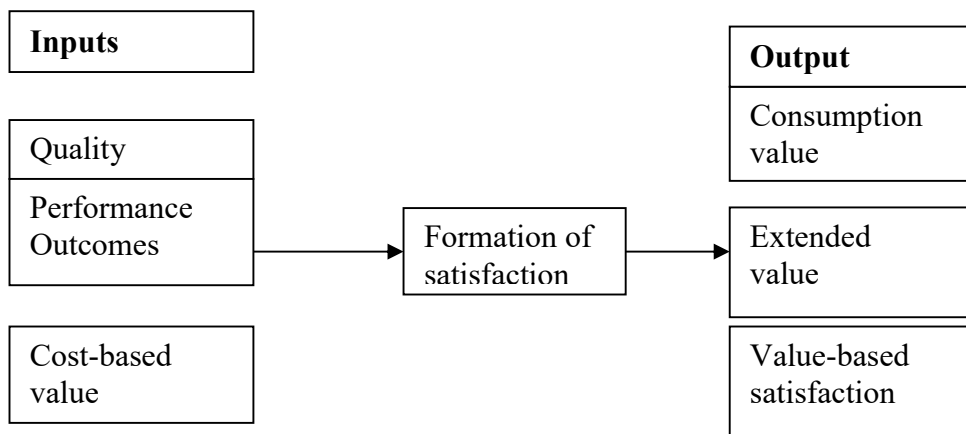
(Adapted from Woodruff & Gardial, 1996)

2.10.1.2 Model of Link between Satisfaction and Value

Oliver (1999) further extended this model, which is a reduced form of the original model as shown below. It establishes the link between inputs and outputs, thus defines the relationship between value to customers and satisfaction derived from the product/service. An important point about customer value models is the use of gross benefit-cost judgments by consumers.

Chart 2.4

Model of Link between Satisfaction and Value



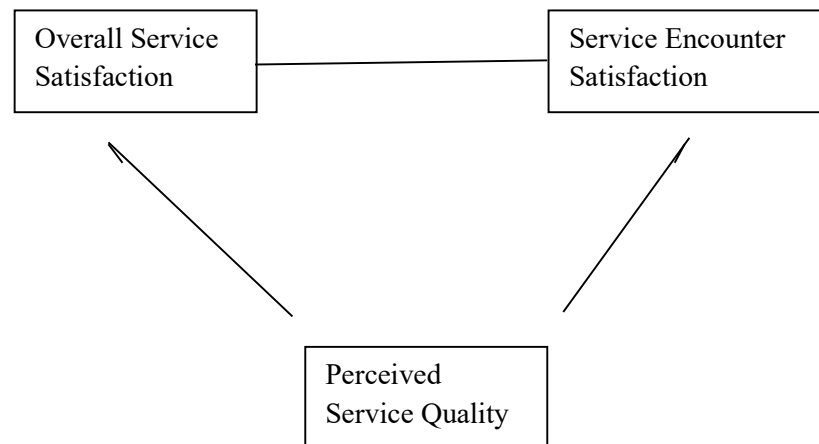
(Adapted from Oliver, 1999)

2.10.1.3 Model of Two Levels of Satisfaction and Perceived Service Quality

This macro-model displays the linkage of overall service satisfaction, encounter satisfaction, and perceived service quality, as per the following diagram. Research for this model supports the conceptualization of perceived quality as a separate construct, distinct from satisfaction (Bitner & Hubbert, 1994). Furthermore, it highlights the construct of a “global” level of satisfaction (the overall service satisfaction) in contrast to the construct of a component level of satisfaction (the encounter service satisfaction) that shows a stronger correlation between Overall Service Satisfaction and Perceived Service Quality. This model helps explain survey results that indicate different levels of satisfaction for a service that one individual may experience.

Chart 2.5

Model of Two Levels of Satisfaction and Perceived Service Quality



(Based on a study by Bitner & Hubbert, 1994)

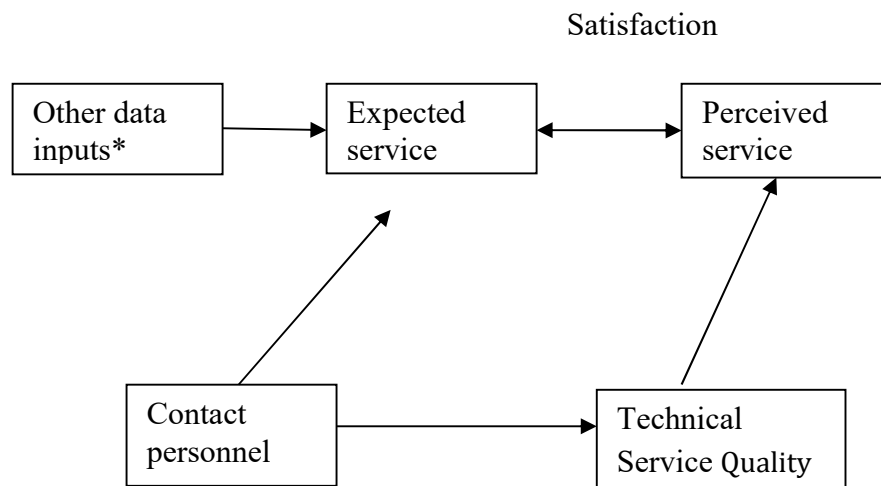
2.10.1.4 Model of Sources of Customer Satisfaction

This model differentiates between technical service quality and perceived service quality. Chart 2.6 shows one such model and how satisfaction results from a comparison between expected service and perceived service (Bateson, 1991). This model is explicit about the cyclical, feedback loop that affects satisfaction. A

consumer's prior experience joins "other data inputs" that include word-of-mouth, past experiences, and advertising to shape current satisfaction with a service.

Chart 2.6

Model of Sources of Customer Satisfaction



(Adapted from Bateson, 1991)

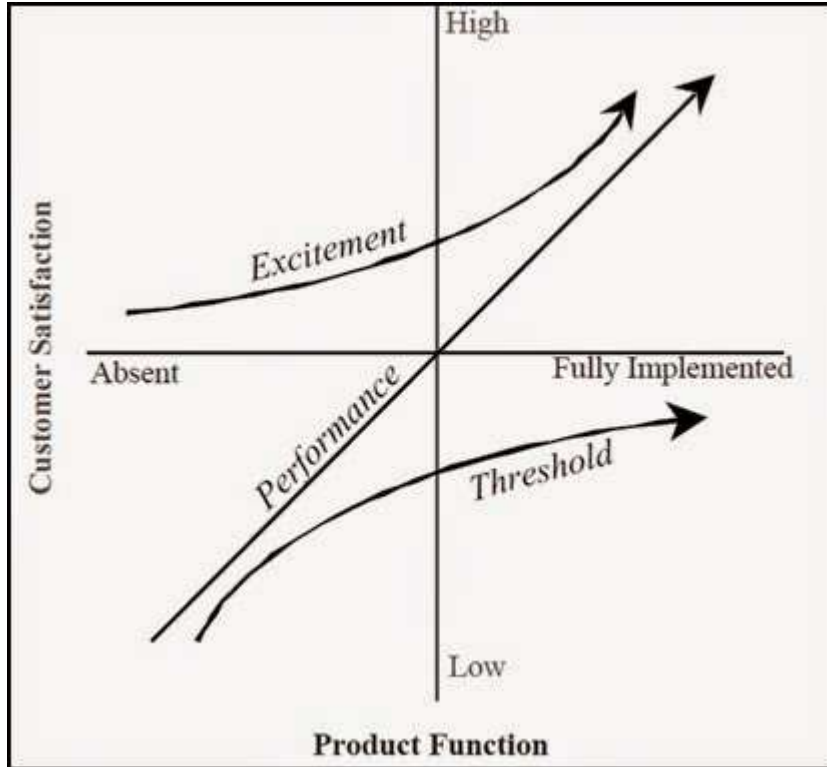
The above models are but a sample of the many models that give the analyst the context for the meaning and analysis of customer satisfaction. In the next section, the researcher has dealt with measurement of customer satisfaction models.

2.10.2 The Kano Model of Customer Satisfaction

The Kano Model of Customer Satisfaction classifies product attributes based on how they are perceived by customers and their effect on customer satisfaction. These classifications are useful for guiding design decisions in that they indicate when good is good enough, and when more is better. The Kano Model is also recognized as "Kano Analysis" and it was created by Japan's Dr. Noriaki Kano in 1984 and still it is a useful instrument in Product and Service Development. The model brings out the nonlinear relationship between the product performance and customer satisfaction. The model divides product attributes into four categories: threshold, performance, excitement and indifferent.

Chart 2.7

Kano's Model



<https://www.isme.in/kano-model-of-customer-satisfaction-and-its-importance/>

In the present times, there is an increasing demand on the firms to come out with innovative products more quickly and more frequently. The time gap between the conception of an idea and the final product is under severe pressure. This phenomenon has caused a shift from post production quality control to design based quality control where the defects in the first place are prevented rather than repairing. The information obtained from the Kano Model Analysis, specifically regarding performance and excitement attributes, provides valuable input for the Quality Function Deployment process. Further, the Kano Model becomes an essential tool when working on a Six Sigma project focusing on customer satisfaction by delivering zero defects product/service.

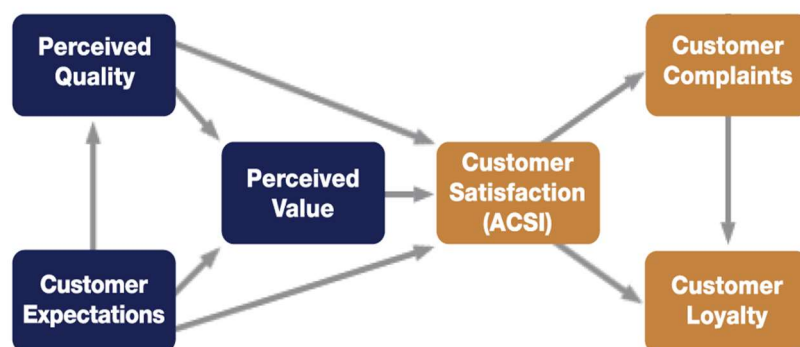
2.10.3 ACSI Model

The American Customer Satisfaction Index considers customer interviews as input to a multi-equation econometric model developed at the University of Michigan's Ross School of Business. The ACSI model is a cause-and-effect model with indexes for causes, i.e. drivers of satisfaction on the left side (customer expectations, perceived quality, and perceived value), satisfaction (ACSI) in the middle, and effects, i.e. outcomes of satisfaction on the right side (customer complaints and customer loyalty, including customer retention and price tolerance).

The indexes (shown in the diagram below) are multivariable components measured by several questions that are weighted within the model. The questions assess customer evaluations of the determinants of each index. Indexes are reported on a 0 to 100 scale. The survey and modelling methodology quantifies the strength of the effect of the index on the left to the one to which the arrow points on the right. These arrows represent “impacts.” The ACSI model is self-weighting to maximize the explanation of customer satisfaction (ACSI) on customer loyalty. Looking at the indexes and impacts, users can determine which drivers of satisfaction, if improved, would have the most effect on customer loyalty.

Chart 2.8

ACSI Model



Source: <https://www.theacsi.org/about-acsi/the-science-of-customer-satisfaction>

2.10.4 SERVQUAL Model

According to Parasuraman, Zeithaml, and Berry (1985), there are some gaps between customer expectations about service and service quality delivered by the provider. These are described as under:

Gap 1: The knowledge gap

It reflects gap between customer expectations regarding service and provider's perception about those expectations. It generates because the provider misinterprets customer expectations.

Gap 2: The service design and standards gap

Due to listening gap the provider translates misinterpreted expectations of customers into service design and on that basis develops standards that again results into a gap between the service design and standards.

Gap 3: The performance gap

Because of the above two gaps another gap arises due to discrepancy between customer-driven service design and standards and actual service delivery. It is called service performance gap.

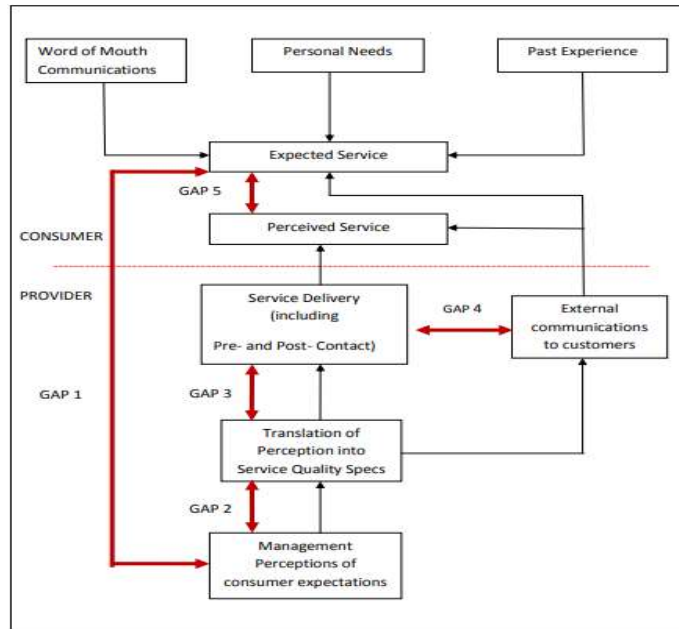
Gap 4: The communication gap

This gap arises due to difference between actual service delivery and message delivered to customers through pricing, advertising, and other means of communications.

Gap 5: These four gaps cause a fifth gap which arises due to the difference between customer expectations and perceptions of the service actually received. Perceived quality of service depends on the size and direction of Gap 5, which in turn depends on the nature of the gaps associated with marketing, design and delivery of services. So, Gap 5 is the product of all the gaps mentioned above. If all these four gaps are closed, gap 5 will get closed automatically.

Chart 2.9

SERVQUAL Model



Source: Parasuraman et al, 1985

They suggested some strategies which are still relevant to service industry.

Strategies for filling the knowledge gap

- Listen to customers in various ways through customer surveys and employee communication.
- Build relationships by understanding and meeting customer needs over time.
- Know and act on what customers expect when they experience a service failure.

Strategies for filling the design and standards gap

- Employ well-defined new service development and innovation practices.
- Understand the total customer experience through service blueprinting.
- Measure service operations via customer-defined rather than company defined standards.

- Incorporate physical evidence in service design.

Strategies for filling the service performance gap

- Align human resource practices (hiring, training, support systems, and rewards) around delivering service excellence.
- Define customers' roles and help them to understand and perform effectively.
- Integrate technology effectively and appropriately to aid service performance.
- Motivate and incentivize intermediaries to perform service according to firm standards.
- Manage fluctuations in supply and demand.

Strategies for filling the communication gap

- Employ integrated services marketing communication strategies around everything and everyone sending a message or signal to the customer.
- Manage customer expectations effectively throughout the experience.
- Develop mechanisms for internal communication to avoid overpromising and ensure successful delivery.
- Manage the service brand.
- Price services appropriately.

2.10.5 SERVPERF Model

The SERVPERF is a modification of SERVQUAL, and thus uses the same categories to assess service quality. Cronin and Tylor proposed that perceptions of performance are the only criteria to measure and define service quality and thus introduced SERVPERF model. They examined the conceptualization and

measurement of service quality and the relationships between service quality, consumer satisfaction and purchase intentions. Their work focused on trying to overcome the “perceptions-minus-expectations” measurement focus of SERVQUAL. The development of the SERVPERF model aimed to provide an alternative method of measuring perceived service quality and the significance of the relationships between service quality, customer satisfaction and purchase intentions. In investigating these concepts and the interrelationships between them the authors argued that:

- A performance-based tool for measuring service quality may be an improved means for measurement.
- Service quality is essential for customer satisfaction
- Consumer satisfaction has a significance effect on purchase intentions and
- Service has less effect on purchase intentions than consumer satisfaction.

As a result, the authors presented a performance-based measurement, SERVPERF. The scale was created mainly to overcome the weaknesses of the SERVQUAL scale. It particularly sought not to use disconfirmation-based measures as that was perceived to be a flaw in the SERVQUAL scale.

2.11 CUSTOMER SATISFACTION IN PUBLIC ROAD TRANSPORT SECTOR IN INDIA

The State Road Transport Undertakings (STUs) have a place of prominence in the road transport sector of the country. They perform a very vital role in the daily life of millions of our countrymen. According to available recent data, STUs carried more than 2,500 crores passengers in a year, nearly 7 crores each and every day during 2014-15. It was found that there was considerable improvement in their overall operational performance and the level of customer satisfaction despite of the unsatisfactory financial position of STUs in India.

Moreover, knowledge from previous research shows that public transport is still an alternative mode of choice for travelling for many people. In order to keep

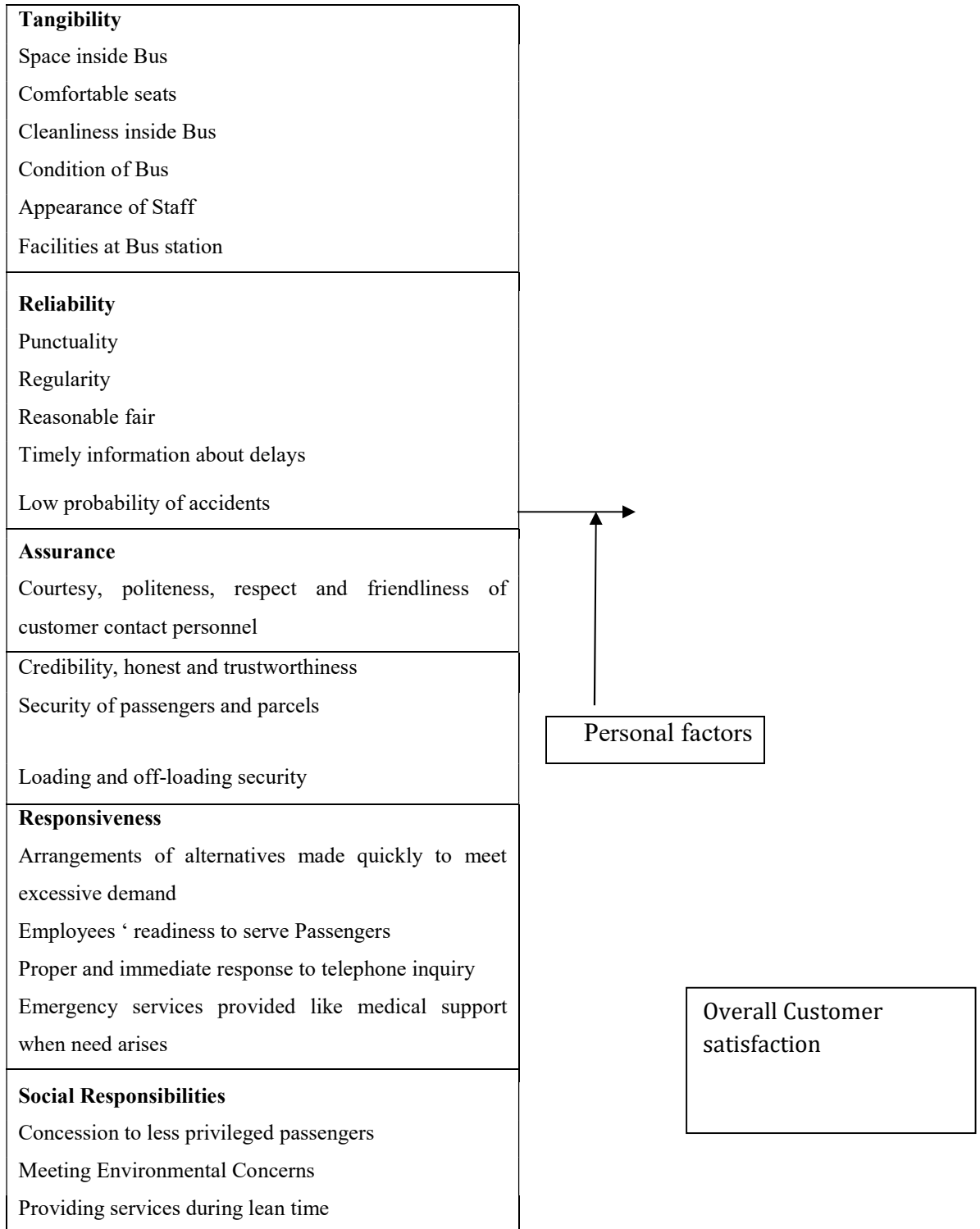
current passenger, public transport has to improve the service to accommodate wide range of customer need and expectation (Beirão & Sarsfield Cabral 2007; Andreassen 1995).

The following model describes the conceptual framework of the study. The dependent variable, i.e. Customer Satisfaction depends on independent variables, i.e. factor affecting customer satisfaction including Tangibility, Reliability, Assurance and social responsibility. These are also called as service quality attributes. Intervening variable also affect customer satisfaction that includes personal factors related to customers.

Chart 2.10
Conceptual Framework

Independent Variables

Dependent Variables



Source: Researcher's own work

For consumers, evaluation and consequently the satisfaction with a service like Bus transportation often depends on their perception of the quality of performance of a number of factors.

Knowledge and understanding of these factors are critical, particularly at a time when competition for attracting and retaining customers is intense. The purpose of this study is to identify and analyse the importance customers attach to the various dimensions of Public Road Transport Services. The study also aims to identify how customers' perception regarding performance of these dimensions affects their satisfaction level. Consequently, the study aims to identify the areas where attention needs to be given by the State Road Transportation authorities in order to increase the satisfaction of its customers.

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CHAPTER III

**ORGANIZATIONAL SETUP OF RAJASTHAN STATE
ROAD TRANSPORT CORPORATION & HARYANA
ROADWAYS**

3.1 INTRODUCTION

Organisation refers to a form of association of people for the attainment of common objectives. Sound organisation is result oriented for every enterprise. Without an effective organisation, management of various operations of an enterprise cannot be done properly. Obviously, the better the organisation, the fuller would be the achievement of the common objectives and similarly, weak organisation of an enterprise implies a dangerous state of affairs. According to Kenneth C Towe, "A sound form of organisation is the answer to every business problem, that a poor organisation could run a good product into the ground and that a good organisation with a poor product could run a good product out of the market."

Each organization has its own external and internal environments that define the nature its relationships according to its specific needs. Organizing is the function that managers undertake to design, structure, and arrange the components of an organization's internal environment to facilitate attainment of organizational goals. Without studying any organization's structure its working can't be examined. This chapter discusses the organizational structure of Rajasthan State Road Transport Corporation (RSRTC) and Haryana Roadways (HR).

RSRTC and HR are providing mobility to passengers in Rajasthan and Haryana by offering various services. But competition in these services itself makes these organizations loss making. There are various variables for which people prefer

one service over another. Haryana Roadways and Rajasthan State Road Transport Corporation have different organizational set up. In the following sections the researcher has tried to describe their organizational structure along with the duties and responsibilities of executives at different positions.

3.2 ORGANIZATIONAL STRUCTURE AND WORKING OF HARYANA ROADWAYS

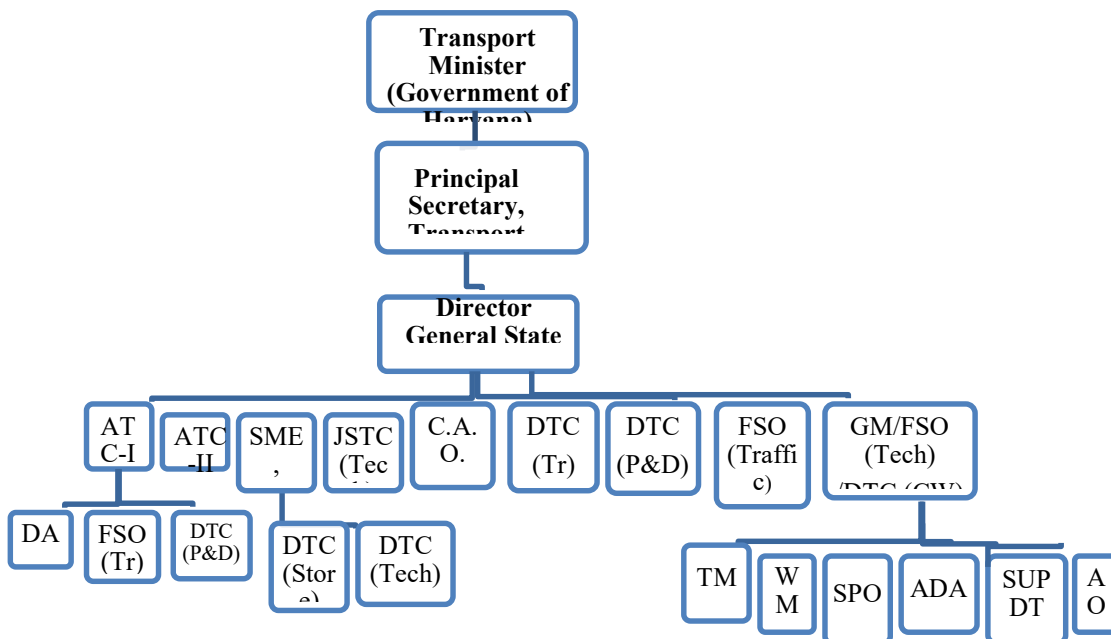
Haryana Roadways is a departmental form of State Transport Undertaking and its Head office is situated in Chandigarh. Transport Minister (Government of Haryana) is the highest authority under whose directions Principal Secretary (Transport) looks after the working of Transport Department of the State. Transport minister and secretary are responsible for policy making, strategic planning, compliance, budget allocation, coordination with central as well as state governments, and ultimately controlling all activities of the department. For administrative purposes, the Transport Department is divided into two wings, i.e., the Operational Wing (Haryana Roadways) and the Regulatory Wing. The Operational Wing is headed by Director General of State Transport Haryana and Regulatory Wing that deals with the regulation and implementation of Motor Vehicle Act/rules, issue of permits and enforcement, etc., is looked after by Transport Commissioner. It is run by the State Government and for its smooth and proper functioning; a separate ministry has been formed.

3.2.1 Operational Wing

The operational wing looks after the operations of Haryana Roadways under the leadership of Director General of State Transport, Haryana. The Director is responsible for providing well-coordinated, cost-effective, safe and efficient transport services to the public of the State. He belongs to Indian Administrative Services cadre.

Chart 3.1

Organizational Structure of Haryana Roadways (Operational Wing)



Source: <http://hartrans.gov.in> (Haryana Transport Department)

- | | |
|---|---------------------------------------|
| ATC-I – Additional Transport Commissioner-I | F.S.O – Flying Squad Officer |
| ATC-II – Additional Transport Commissioner-II | T.M. – Traffic Manager |
| SME – Senior Mechanical Engineer | W.M. – Works Manager |
| JSTC (T) – Joint State Transport Controller (Technical) | S.P.O. – Stores Purchase Officer |
| C.A.O – Chief Accounts Officer | A.D.A. – Additional District Attorney |
| D.A. – District Attorney | D.A. – District Attorney |
| DTC – Deputy Transport Controller | SUPDT. – Superintendent |
| G.M. – General Manager | A.O. – Accounts Officer |

Additional Transport Commissioner (A)

Additional State transport Controller (Administration) is the head of Establishment Branch-I of Haryana Roadways. He is responsible for looking after major policy matters; establishments of Class-I & II officers of headquarter (HQ) and Haryana Roadways; Class-I & II ministerial staff of HQ and Haryana Roadways, Sub-Inspectors, Inspectors, Chief Inspectors and Station Supervisors; union matters; appeal cases of conductors, drivers and workshop staff (whose appointing authority is the GM) of Kurukshetra, Karnal, Panipat, Sonapat, Delhi, ISBT- Delhi, Gurgaon, Faridabad, Rewari, Narnaul and Jhajjar depots etc., and disposal of representations made against the adverse remarks in Annual Confidential Reports (ACRs) of the employees of depots; disposal of appeals under HCS(P&A) Rules.

- i. **Senior Mechanical Engineer (SME):** The duties and responsibilities of Senior Mechanical Engineer are as follows: to look after Ministers Car Section & Government Central workshop of Haryana Roadways and Cases pertaining to State Transport Board.
- ii. **Joint State Transport Controller (JRTC Technical)/Deputy Transport Controller (DTC Technical):** The Joint transport commissioner is responsible for all matters regarding purchase of buses, other components and all types of technical issues of the department, ensuring proper maintenance of fleet and workshops. Some other miscellaneous work regarding monitoring performance of workshops, major assemblies like engine assembly, tyre-tubes and other components, monitoring kmpl of buses, consumption of diesel and other oils etc, Road Safety issues – monitoring job cards, out-shedding of buses, medical/eye check up of drivers, Drivers testing, Drivers Training Schools and inspection of workshops, etc.
- iii. **Chief Account Officer (CAO):** Chief Accounts Officer looks after all matters of accounts, audit, pay bills and other bills of the department, insurance of buses, over time matters, matters pertaining to taxes, etc. He is

also responsible for matters pertaining to Factory Act, Bonus Act, coordination with Finance Department; issues pertaining to the Finance Commission. etc.; reconciliation of accounts/Performa accounts; audit paras/Public Accounts Committees (PACs) paras; coordination with Attorney General (A.G.) & various Vidhan Sabhas committees; and matters regarding free/concessional travel facilities to various categories in Haryana Roadways buses, special booking of buses, etc.

- iv. **Deputy Transport Controller (Traffic)/Flying Squad Officer (Traffic):** To deal with the traffic issues like plying of various bus services, route planning, route rationalization, inter-state agreements, time tables, allotment of routes to various depots, fixing fare stages on various routes, monitoring route wise receipts, ABC analysis of routes, tour diaries of various field officers, deputing Flying Squads and monitoring their performance, coordination with NCR Planning Board regarding provision of services in the NCR; checking of buses/depots, etc.
- v. **Deputy Transport Controller (Planning & Development):** Deputy Transport controller (P&D) is the in-charge of Statistical Branch. The main functions being performed by him are work pertaining to collection and compilation of performance data of Haryana Roadways, Five Years Plans; Annual Plans; Coordination with Planning Department (Haryana Government.) & Planning Commission, Government of India; Activities/Achievements of the department; Computerization matters; Advertising contracts for bus stands and buses; in service training of all the officers/officials; Annual Administration Reports; Auction of shops/booths at the bus stands; monitoring accidents/Road Safety; issues pertaining to ASRTU general body/Standing Committee (Computerization & Management Information System); matters regarding O&M officer; monitoring of CM's Announcements, etc., State Public Information Officer of the office of the Transport Commissioner, Haryana.
- vi. **General Manager (GM):** General Manager is over all in charge of the concerned depots. He is the administrative head and under his command and

control all activities at depot level are being carried. His main duties and functions are to supervise, control, direct, coordinate and maintain smooth functioning of the concerned depot, within the rules and regulations and broad guidelines laid down by the head office from time to time. Many other Officers such as Account Officer, Work Manager, Store-Purchase Officer (SPO), Traffic Manager, Superintendent, Law Officer, assist him so that GM can devote more time and energy to only important issues related to day to day functioning and rest could be left to other subordinates and staff. Further sub-depots are created in smaller areas for providing services such as minor repairs work, maintenance etc. The main aim of these units viz. Depots and Sub-depots is to provide good services to traveling people according to scheduled time and also to make special arrangements during festivals through running buses on contract.

- vii. **District Attorney/Deputy District Attorney:** The main responsibility of the District Attorney is to look after all legal matters of the transport department Haryana Roadways.
- viii. **Deputy Transport Controller (DTC Store):** He is the head of Store branch of Transport Department Haryana Roadways. He has to look after following matters: timely procurement of various materials including tyres & tubes for the Haryana Roadways; coordination with Supplies & Disposal Department and Standing Committee (supplies and contracts) of ASRTUs and payments to ASRTU; procurement of uniforms for the workers of Haryana Roadways; and monitoring performance of various materials, inventory/ quality control, monitoring consumption of various items, VED (Vital, Essential , Desirable) analysis, inspection of stores; etc.
- ix. **Flying Squad Officer (Technical):** He is responsible for inspection of workshops/buses and monitoring performance of various depots with regard to various technical issues.
- x. **Traffic Manager (TM) :** The Traffic Manager has been asked to look after the traffic issues like plying of various bus services, route planning, route

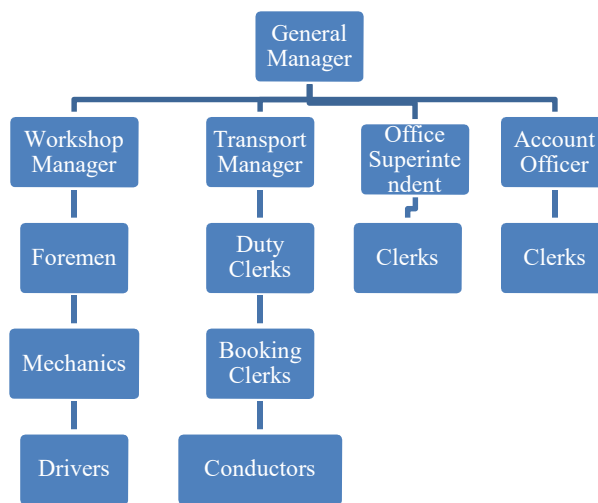
rationalization, inter-state agreements, time tables, allotment of routes to various depots, fixing fare stages on various routes, monitoring route wise receipt, ABC analysis of routes, tour diaries of various field officers, deputing Flying Squads and monitoring their performance, coordination with National Capital Region (NCR) Planning Board regarding provision of services in the NCR; checking of buses /depots, etc.

- xi. **Work Manager (WM):** Work Manager is an official who has been deputed to look after technical affairs at the depot level of Haryana roadways.
- xii. **Store Purchase Officer (SPO):** It is the duty of the SPO to ensure maintenance of all stores registers, ledgers up to date in store and regional store; to prepare critical review on supply and consumption and to suggest ways and means for improvement and economy; to draw out detailed plans for assessment and evaluation of obsolete materials; speedy and efficient disposal of work in the office stores; and to ensure account of sale proceeds of all stores whether sold, obsolete or condemned and all other receipts. He functions under the overall supervision of General Manager.
- xiii. **Additional District Attorney (ADA):** Additional District Attorney at the Headquarters deals with all litigation matters relating to lower posts, in the High Court and Apex Court.
- xiv. **Superintendent:** The office Superintendent at the HQ is the supervisory authority of the ministerial staff of the office.
- xv. **Account Officer (AO):** Account officer is responsible to look after the matters of accounts, audit, pay bills and other bills of the department, insurance of buses, over time matters, matters pertaining to sales tax, passengers tax, VAT, service tax, etc; matters pertaining to factory act, bonus act, coordination with Finance Department; issues pertaining to the Finance Commission, etc.; reconciliation of accounts; audit/PACs ; coordination with A.G. & various Vidhan Sabhas committees in this regard;

and matters regarding free/concessional travel facilities to various categories in Haryana Roadways buses, special booking of buses.

Chart 3.2

Depot Level Chart of Haryana Roadways



Source: Researcher's own work

3.2.2 Regulatory Wing

Transport Commissioner is the head of this wing and its head office is at Chandigarh. There are 21 district offices, each headed by Secretary, Regional Transport Authority. Secretaries, Regional Transport Authority at all 21 district headquarters register transport vehicles and issue learner/driving licenses in respect of such vehicles. Sub Divisional Officers (SDOs Civil) in the State at all 54 sub-divisional 56 headquarters register vehicles for private use (non-transport) except omnibuses and issue learner/driving licenses in respect of such vehicles and also the conductor licenses. They have been notified as Registering & Licensing Authorities for this purpose. Allotment of first 100 numbers of every series to vehicles owned by individuals or State or Central Government is done centrally at Head Office. Thus, total number of locations where registration of motor vehicles is done in the State is 76 (54 SDOs (Civil), 21 District Transport

Officers (DTOs) & Head office, Chandigarh). Learner/driving licenses are issued at 75 locations (54 SDOs (Civil) & 21 DTOs) and conductor licenses are issued at 54 locations.

Transport Commissioner

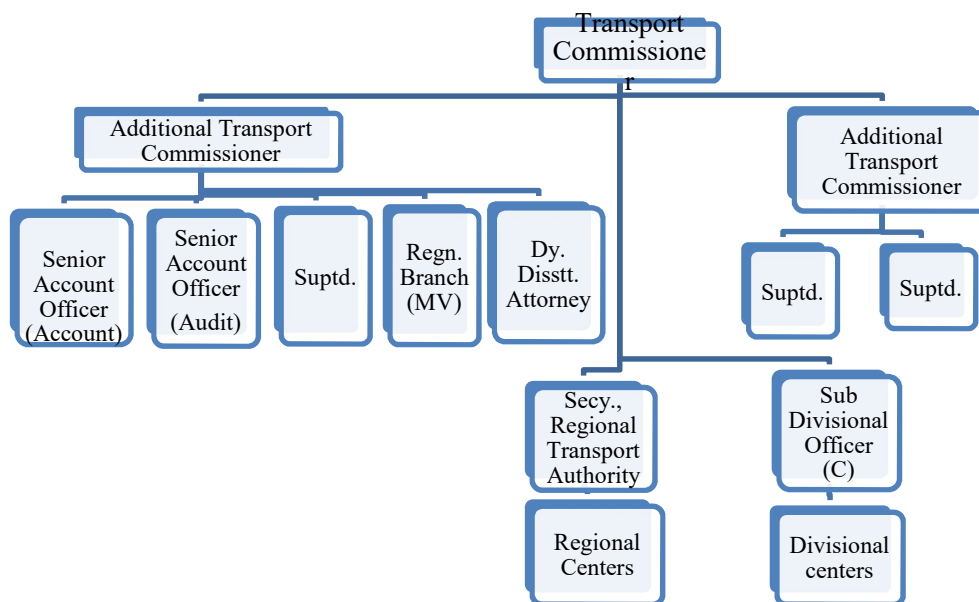
Transfer Commissioner (TC) is the head of this Regulatory Wing. He is at the administrative hierarchy. He is appointed by the State Government and mostly belongs to Indian Administrative Services (IAS) Cadre. He has following duties:

- a. To perform such duties and exercise such powers as or may be vested in him through various rules and regulations of Haryana Roadways.
- b. To attend the meetings of the SRTB, to approve items to be placed in its meetings and as members secretary to present the same in its meetings.
- c. The officers of the Haryana Roadways shall submit all policy matters/cases and important files to him, for decisions.
- d. Issue such directions and orders to his subordinates and staff may be considered expedient for discharging his duties, functions and responsibilities effectively.

Chart 3.3

Organizational Structure (Regulatory Wing)

Office of Transport Commissioner



Source: <http://hartrans.gov.in> (Haryana Transport Department)

Regional Centers

Ambala	Bhiwani	Fatehabad	Faridabad	Gurgaon	Hisar	Jind
Jhajjar at Bahadurgarh	Karnal	Kaithal	Kurukshetra	Mewat at Nuh	Mahendergarh at Narnaul	Palwal
Panchkula	Panipat	Rewari	Rohtak	Sonepat	Sirsa	Yamunanagar

Divisional Centers

Ambala	Assandh	Bahadurgarh	Ballabgarh	Barara	Barwala	Beri
Bhiwani	Bilaspur	Dabwali	Dadri	Ellenabad	Ferozepur Jhirka	Faridabad
Fatehabad	Ganaur	Gauhana	Guhla	Gurgaon (North)	Gurgaon (South)	Hansi
Hathin	Hisar	Hodal	Indri	Jagadhri	Jind	Jhajjar
Kalka	Karnal	Kosli	Kharkhoda	Kaithal	Loharu	Mahendergarh

- i. Senior Account Officer (Audit):** Senior Account officer also knows Senior Audit Officer and he deals with the following matters:

 - a. Audit and inspection of all officers of Transport Department Haryana, including Registering Authorities (Motors) officers situated in Haryana.
 - b. Submission of audit and inspection reports of all type of correspondence relating to audit work of the aforesaid offices.
 - c. Meeting the Estimate Committee and Public Account Committee/ Comptroller and Auditor General of India.
 - d. Embezzlement/theft/robbery in Haryana Roadways and DTOs office.
- ii. Senior Account Officer (Accounts):** The main duties of SAO are to look after the matters of accounts, audit, pay bills and other bills of the department, insurance of buses, over time matters, matters pertaining to Tax etc.; matters pertaining to factory act, bonus act, Coordination with Finance Department; issues pertaining to the Finance Commission etc.; reconciliation of accounts/proforma accounts; audit paras/ PACs paras; coordination with A.G. & various Vidhan Sabha committees in this regard; matters regarding free/concessional travel facilities to various categories in Haryana Roadways buses, special booking of buses etc.
- iii. Registration Transport Authorities & Motor Vehicle Inspector:** The Registration Authorities Divisional Magistrates and Regional Transport Authority are primarily responsible for the enforcement of provisions of the Central Motor Vehicle Act, 1988, Central Motor Vehicles Rules, 1989 and Haryana Motor Vehicle Rules, 1993. The inspection of transport vehicles for grant of fitness certificates to them is done by the Motor Vehicle Inspection Board consisting of the Secretary, RTA and the Motor Vehicle Inspectors at each district headquarter. The inspection is done on specified days of the week at each district headquarter.

3.3 ORGANIZATIONAL SETUP OF RAJASTHAN STATE ROAD TRANSPORT CORPORATION

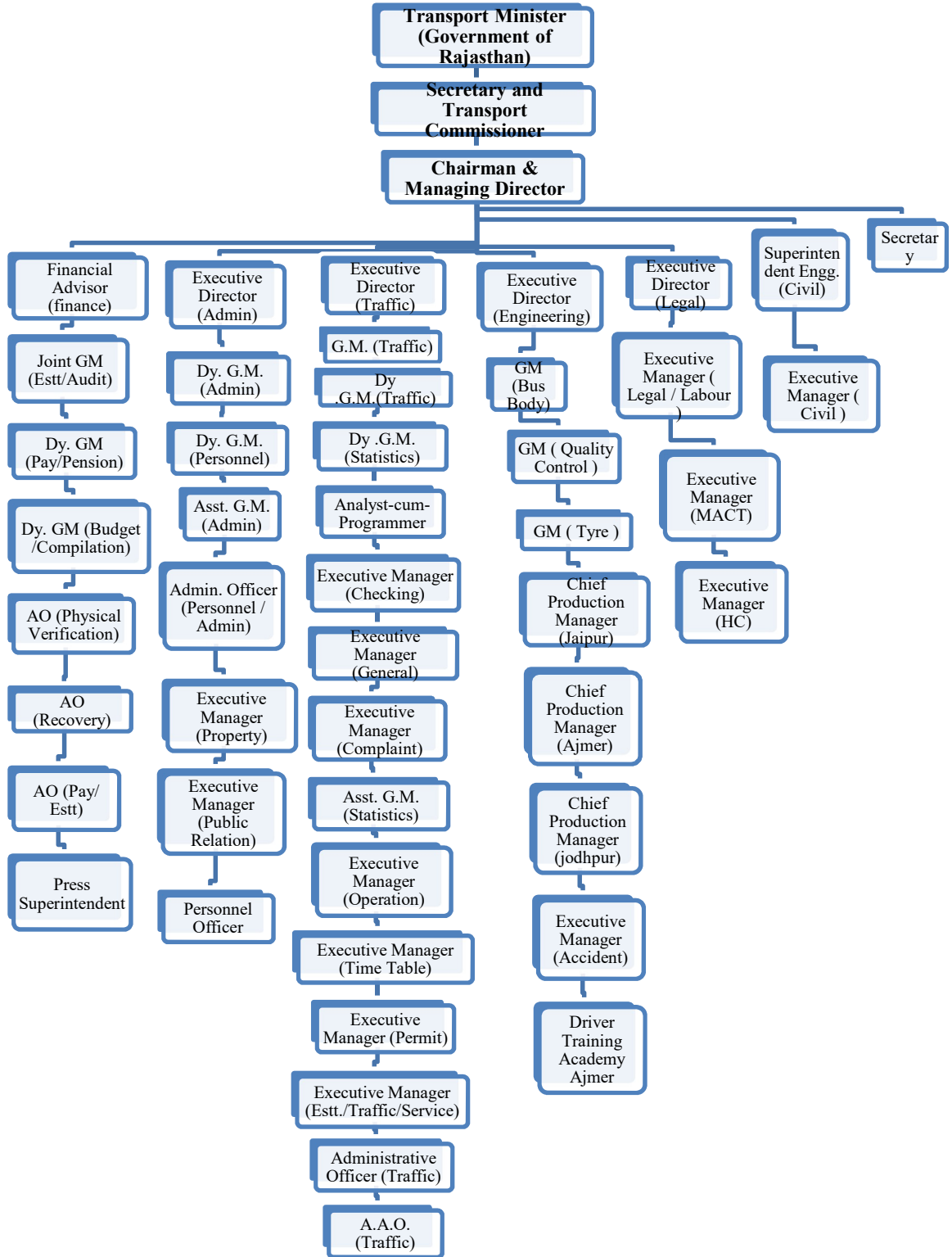
The Road Transport Corporations Act, 1950 (Section 5) provides details about the management of State Transport Undertakings (STUs). Further, the organizational structure is suggested by the Act with flexibility. However, all STUs are managed by Boards of Directors constituted by the concerned state governments which are empowered to nominate chairman, vice-chairman and members of the Boards. A well-planned organization structure is very essential as it defines the management levels, their duties, responsibilities, authority and delegation of power, internal linkage, communication, control, etc. However, in the case of STUs, the organizational structure depends upon the forms of organization. Similar to Haryana Roadways, Transport Minister (Government of Rajasthan) is the highest authority under whose directions Transport Secretary and Commissioner (IAS) looks after the working of the organization. Transport minister and secretary are responsible for policy making, strategic planning, compliance, budget allocation, liaisoning with central as well as state governments, and ultimately controlling all activities of the department. As the principles and procedure of routine functioning of STUs are same, one can find, more or less, a three-tier organizational structure as presented below -

- a. **Central Office (Head Office) or Headquarters Management:** The first tier of the organization is the Board of Directors and is headed by a chairman. It is the apex level of organization of STU. The other first-tier officers are financial advisor, executive directors, superintendent and secretary. The strategic planning, policy decisions, procurement and distribution of resources and investment decisions, etc., are taken by the first-tier officers. Generally, central office is sectionalized into general management, operation of bus services, technical and engineering services, accounts, audit and inspection, maintenance of statistics, planning and development, legal and civil departments too. Each section has its own hierarchy of officials.

- b. **Regional/Divisional/Zonal Office Management:** STU is divided into few regions/divisions/Zones for the efficient administration and control. Each region/ division/Zone is headed by regional manager/divisional controller/Zonal Manager. Zonal offices represent the second tier of the organizational structure of STU. This is an important level of organization as some important decisions are taken at this level. Technical, purchase, stores, management information system, accounts, etc., are the important functional areas at the Zonal level. On an average, each Zone/division is allotted five depots for the efficient functioning and control.
- c. **Depot Management:** This is the third-tier management. Depot management deals with the core activities of the corporations. It is concerned with the activities relating to operation of bus services such as registration of buses, route permits, management of bus stations, preparation of time table and duty schedules, management of operating staff, management of traffic, etc. They are operated with the staff of station superintendent, traffic inspector, assistant traffic inspector and the bus crew of drivers, conductors, and cleaners. Chart 3.4 shows the broader organizational structure and each corporation should evolve a suitable organizational structure by keeping in mind cost, area of operations, size of the organization, fleet strength, etc. But what is important is, all these tiers of organization should function with good coordination for the success of the corporation.

Chart 3.4

Head Office Management



The major responsibilities of the officers at the top positions include:

Financial Advisor

- Monitoring overall expenses
- Audit of all expenses
- Budgeting

Executive Director (Administration)

- All administration related work
- Transfer of Ministerial Staff

Executive Director (Traffic)

- Controls all traffic cadre
- New route time tables, etc.
- Transfer related to traffic cadre

Executive Director (Engineering)

- Control all maintenance work
- Command over central workshops

Executive Director (Legal)

- Controlling of all legal work
- To settle cases related Motor Vehicle Act

Superintendent Engineer (Civil)

- Controlling of all construction work
- Monitoring of construction work

Secretary (Corporation)

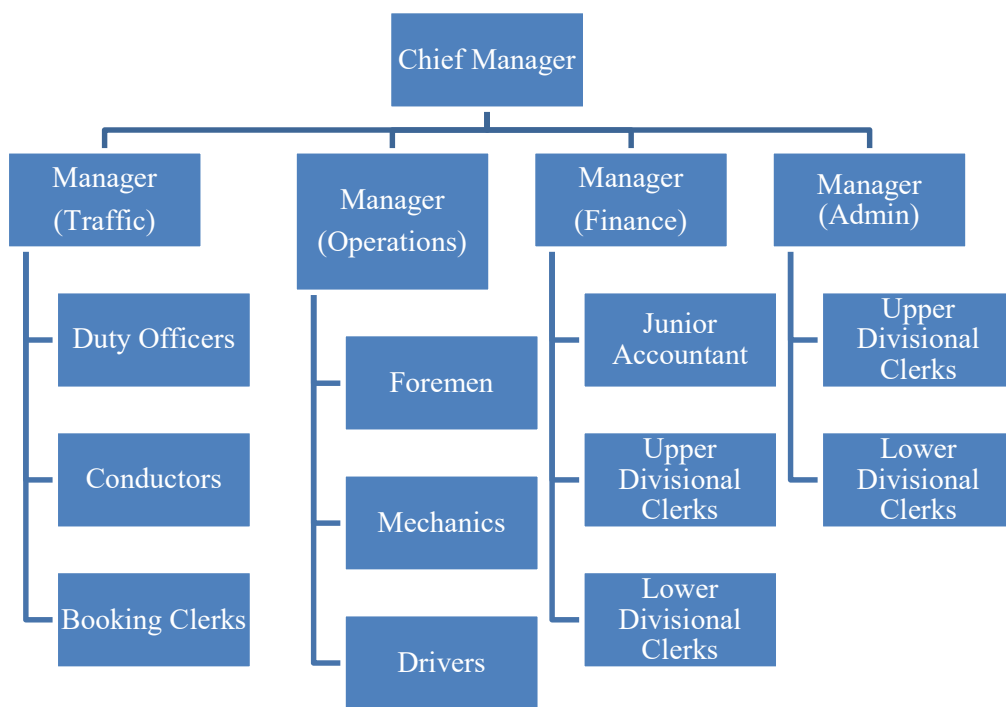
- To filter Chief Manager's decisions
- To dispose Appeals

In continuation to the efforts to make the field level management more effective especially the depot level management, several steps have already been initiated, depots were given some operational independence and were declared profit centers

Now depots have following organizational set-up: -

Chart 3.5

Depot Level Chart of RSRTC



- The chief manager is the in-charge of the depot and responsible for all the activities the depot. All the managers/Supervisors/workmen in the depot are under his charge and function under his instruction.
- Chief Manger can be drawn from any order of the RSRTC and be in any rank or pay-scale. The designation Chief Manager is functional and does not denote any particular level in any cadre or pay scale. Similar is the case for

the managers operation/Traffic/Accounts. These managers can also be drawn from any seniority; cadre or pay scale, suitability of person is the only criteria.

- Chief Managers takes instructions from the Managing Director and Heads of Departments in the Head Office.
- In the re-organized depot set up different functions will be carried out as under-

(1) **Establishment and Administration:** - Chief Manager is the appointing authority for all employees working in the depot except for those belonging to the following cadres: - 1. Depot Manager 2. Senior Foreman 3. Assistant Accounts Officer 4. Junior Engineer Grade 'A'. As appointing authority, he can make appointments whether by direct recruitment or by promotion, only on the recommendation of appropriate service Recruitment Board/Committee of the Head office - on regular basis. He will have no powers to make any appointment on ad-hoc/daily wage/contingency/contract basis.

(2) **Disciplinary Action:** - As appointing authority the Chief Manager has all the disciplinary powers provided in the standing orders/Regulation for employees whose appointing authorities were divisional Manager/Civil /Mechanical Engineers/Dy. General Managers, the Chief Manager has powers of such authority also. However, for meeting any legal requirement, various orders in disciplinary cases may have to be passed by the higher authorities in the head office.

(3) **Enquiries:** - Chief Manager may order preliminary enquiry/departamental enquiry as appointing authority, and assign them to any enquiry officer. Such Enquiry officers will be appointed by head offices.

(4) **Litigation:** - All the litigation arising out of operations at depot level or employees of the depots are looked after by the Chief Manager, however, he is not entitled to enter in any compromise without prior

written clearance from the head office. He may also appoint to contest such cases. The terms & conditions of the counsels will be determined by the head office.

- (5) **Other Administrative Functions:** - Chief Manager will carry out all other miscellaneous administrative functions such as grant of leave, writing of ACRs in respect of all employees of the depot. He will also be authorized to transfer employees within the depot area. He will also be responsible for the management of Corporation property, lands and building assisted by manager (Operations).
- (6) **Accounts:** - All functions relating to ticket stores, civil engineering stores, general stores, revenue audit, audit reports and payments etc. are carried out at depot level and the chief manager is responsible for all these financial activities. However, treasury office, which functions separately under direct control of the chief accounts officer.
- (7) **Miscellaneous Functions:** - Chief Manager is responsible for timely collection of nonoperational revenue. Renewals of existing stall license are carried out only as per directions of Head office. No new licenses, even for short duration, can be granted at depot level.

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CHAPTER IV

RESEARCH METHODOLOGY & DESIGN

INTRODUCTION

Research in general refers to a search for knowledge. It is defined as “a scientific and systematic search for pertinent information on a specific topic”. In fact, research is an art of scientific investigation. According to Clifford Woody, research comprises defining and redefining problems, formulating hypothesis or suggested solutions; collecting, organizing and evaluating data; making deductions and reaching conclusions; and at last carefully testing the conclusions to determine whether they fit the formulating hypothesis. According to Grinnel Richard Jr. (1993), “Research is a structured inquiry that utilizes acceptable scientific methodology to solve problems and create new knowledge that is generally applicable”.

Research methodology involves systematic process of commencement, execution and completion of a research study. It covers formulating a research problem; conceptualizing the research design, constructing valid and reliable tools for data collection, designing sampling process and collecting, processing, analyzing and interpreting data, drawing conclusions and writing the research report.

The main purpose of a research is to explore and examine existing unrecognized problems of any field, finding suitable solutions for those problems and suggesting scope for further studies. Among the various fields of study, customer satisfaction with regard to public road transportation service in India has emerged as an attractive field of study which needs to be examined in order to make tough decisions about whether to run these undertakings in their present form or significant changes are needed in the system. The present study is meant to

compare the level of satisfaction that customers derive from various services offered by the two organizations, i.e. RSRTC and Haryana Roadways. An attempt has also been made to explore strategies that would help in redesigning services offered by public road transport undertakings.

The present chapter details the research design used for the study including research objectives and a suitable methodology to fulfill those objectives. An intensive survey was conducted seeking responses of the passengers using services of any of these selected organizations. The methodology used for the research is given below:

4.1 RESEARCH PROBLEM

It has been observed that almost all the State-owned transport corporations in India are struggling to survive because of facing severe financial problems. It may be due to inefficiency in functioning, mainly accommodating the passenger needs and expectations in modifying and designing their services. At the same time it is evident that they are the only carrier on majority of the routes in the States and the only good means of transport for the general public especially in rural areas and if the findings of the study highlights that these organizations manage the 7Ps' of marketing in a better way, it will attract a lot more passengers especially urban, which will thereby improve their financial condition and will save these much needed organizations for the general public. Therefore, the main purpose of this study is to examine the level of customer satisfaction with regard to various services offered by the selected organizations and enable them to make major improvements in their service attributes like price, people, physical evidence, product, etc. in order to provide a big relief to common people in general.

Since the researcher has to identify various services offered by the selected organizations, i.e. RSRTC and Haryana Roadways; various services offered is a qualitative aspect of the study that entails description of the public transport service system in the States. On the other hand, to ascertain the quantitative aspect, comparative analysis was done for measuring the level of satisfaction

(satisfied or dissatisfied) among the passengers regarding the services offered by the two organizations.

Thus, the topic of the study was identified and titled as-

“A Comparative Study of Customer Satisfaction with reference to Rajasthan State Road Transport Corporation and Haryana Roadways”

4.2 OBJECTIVES OF THE STUDY

Our study has some objectives which are given below:

Primary Objectives:

- 1) To know various services offered by RSRTC and HR to their passengers.
- 2) To measure and compare the level of satisfaction among the passengers regarding the services offered by the two roadways organizations.

Secondary Objectives:

- 1) To examine the opinions of passengers about duties performed by on-route staff of these organizations.
- 2) To ascertain general opinion of the passengers about the services offered by these organizations.
- 3) To explore what are the expectations of the passengers with these organizations (i.e. what they think can be done for improvement or what they think should be there in services like this).
- 4) To explore how do these organizations manage their marketing mix and to examine customers' opinions with regard to the mix.
- 5) To ascertain briefly, the problems of the staff members of the two organizations.
- 6) To extent concrete suggestions in order to enhance customer satisfaction.

4.3 REVIEW OF LITERATURE

The researcher reviewed available literature relevant to the study for the purpose of providing an insight into the work related to customer satisfaction with regard to public road transport service. For better understanding, the chapter has been divided into two sections-

4.3.1 Studies Conducted Abroad

Ojo & Suleman (2014) conducted a study on “Service Quality and Customer Satisfaction of Public Transport on Cape Coast - Accra Route, Ghana” and investigated customer satisfaction using SERVQUAL model with regards to public transportation, specifically intercity bus on Cape Coast- Accra route in Ghana. The results indicate gaps in two of the five dimensions and 15 attributes were ascertained to have influenced perception of service quality leading to customer dissatisfaction.

Kundi Andrew Morris (2013) concluded in his research titled “Factors Influencing Customer’s Satisfaction in Urban Public Transport in Tanzania - A Case Study of Public Buses Transport in Kigoma-Ujiji Urban” that public transport still very important to the community who depend on public transport which is regarded as safe, secured and available information all the time and so economical related to customers with normal income. The study also concluded that proper price set, safety and security, good and comfortable means of transport and availability of information, remain as a challenge factors to satisfy customers from time to time and this should be tackled time to time.

Fellessen and Friman (2008) conducted a transnational comparison of customers’ public transport perceived service satisfaction in eight cities (Stockholm, Barcelona, Copenhagen, Geneva, Helsinki, Vienna, Berlin, Manchester and Oslo) in Europe. The result showed four general factors: system such as traffic supply, reliability and information; bus and bus stop design that makes customer comfortable and enjoy the travel experience; staff skill, knowledge and attitude toward customer; and safety not only both in the bus and bus stop but also safe

from traffic accident. Furthermore, it was concluded that differences in public transport technology and infrastructure may cause differences in individual item loadings.

Eboli and Mazulla (2007) investigated service quality attributes important for customer satisfaction with a bus transit service in Cosenza, Italia. Respondent were asked to rate the importance and satisfaction with 16 service quality attributes (bus stop availability, route characteristic, frequency, reliability, bus stop furniture, bus overcrowding, cleanliness, cost, information, promotion, safety on board, personal security, personnel, complains, environmental protection and bus stop maintenance). The result shows that the latent variable important for global customer satisfaction is service planning which is reflected in reliability, frequency, information, promotion, personnel and complaint.

Beirão & Sarsfield Cabral (2007) summarizes advantages in using public transport according to Portugal public transport users. The result highlights the importance of a cost friendly and less stressful public transport service. It is perceived as less stressful since there is no need to drive, it is possible to relax and one may be able to rest or read. Travel time on exclusive bus lanes is considered faster than the car, there is less exhaust emissions and there are opportunities to talk to fellow passenger while travelling.

Gatersleben and Uzzell (2007) investigated affective experiences of daily commute. Surveys were sending to Surrey University's employees. The results revealed that commuting by car as well as by public transport can be stressful because of delays caused by the traffic volume. Public transport was perceived as unpleasant and public transport users expressed a more negative attitude toward their daily commute than users of other transport modes. The negative attitudes were shown to be related to stress as well as boredom caused by delays and waiting time. They also suggest that public transport is stressful due to unpredictability and longer travel times. This study also acknowledges some sources of pleasure for public transport users. Attributes relating to pleasurable feelings were as the possibility to read during the trip, to listen to music, to interact with other people, and to look at the passing scenery.

Beirão (2007) conducted depth interviews in Porto to find out dissatisfying factors associated with public transport services. Customers reported waste time, too crowded, lack of comfort, time uncertainty, lack of control, unreliability, long waiting times, need to transfer, they cannot change route to avoid traffic congestion, lack of flexibility, and long walking time. Eboli and Mazulla (2007) in their study on “Service Quality attributes affecting customer satisfaction for bus transit” investigated service quality attributes important for customer satisfaction with a bus transit service in Cosenza, Italia. Respondent were asked to rate the importance and satisfaction with service quality attributes like bus stop availability, route characteristic, frequency, reliability, bus stop furniture, bus overcrowding, cleanliness, cost, information, promotion, safety on board, personal security, personnel, complains, environmental protection and bus stop maintenance. The result shows that the latent variable important for global customer satisfaction is service planning which is reflected in reliability, frequency, information, promotion, personnel and complaint.

Agunloye (2005) in his article, “Analysis of the travels of public transport passengers (road) in Ikorodu, Lagos, Nigeria” has made an investigation in the travels of public transport passengers from Ayangburen Taxi Park, Ikorodu, Lagos, Nigeria with a view toward identifying its challenges and contributions to travel demand. The problems faced by the Lagos passengers are long waiting time before boarding, trip distance, unexpected breakdown of vehicles and frequent stops. He has suggested that additional cabs at the motor park are essential in order to eliminate passengers unnecessary wait time and continuous maintenance of the road and efficient repairs of the vehicles can be done to reduce the trip distance and drivers’ seminar and education should be inculcated into the program of the organization in order to prevent accidents in the study area.

UK Department for transport (2003) has also conducted studies regarding customer need in public transport. High frequency of service, services that are reliable and fares that offer value for money are revealed as important needs of UK public transport users. The bus also has to have a broad range of destinations to fulfill travel demand of customer. In this report, the users also reported about

the importance of understandable time table information in bus stop and in local newspaper in order to make them aware of the existence of the service. Simple ticketing arrangement is also important in order to make them use public transport.

Koushki P. A., Al-saleh O. I. Al-lumaia M. (2002) conducted a study on “Management's Awareness of Transit Passenger Needs”. The research study was designed to examine and evaluate management awareness of transit passenger needs in metropolitan Kuwait city. A positive customer/ management satisfaction cycle was presented. While nearly two-thirds of the sample indicated that Kuwait's bus transit system offered a better level of service than that of their home nations, they ranked noise levels inside the bus, low travel speed and lack of air conditioning as top three deficiencies of existing bus service. Measured values of equivalent noise level, percentile levels, traffic noise index and noise pollution level all reflected a very noisy environment inside transit buses. Existence of a strong relationship between passengers' perceived annoyance and actual measured noise levels inside buses was also quantified. In management view bus cleanliness, maintenance and air conditioning were top service deficiencies for improvement.

Fujii et. al. (2001) did an investigation in Osaka (Japan) during a temporary closure of freeway that connected between Osaka and Sakai City. The survey was distributed at three toll gates from 6:00 am to 8:30 am. An important finding was that the closure of the freeway increased public transport use. Second, it was also found that the expected commute time by public transport was overestimated by automobile commuters. Third, after experiences of public transport the overestimates of commute times were corrected. And finally, people who corrected their commute time continued to use public transport when the freeway was reopened.

Friman et al. (2001) conducted a mail survey to investigate factors affecting customer satisfaction in public transport service in Sweden. The results showed that overall cumulative satisfaction related to attribute specific cumulative satisfaction and remembered frequencies of negative critical incidents (e.g., the

driver behaves unexpectedly bad or the bus is leaving before scheduled departure time).

Smith and Clark (2000) found safety issues as a constraint for people to choose public transport as travel mode of choice. Pick pocketing, overcharging facilitates by overcrowding and lack of supervisor is important factors.

4.3.2 Studies Conducted in India

Harshit Jalan (2018) conducted a study on “Comparative Study between Rajasthan State Road Transport Corporation and Haryana Roadways: Exploring Reason for Loss of Rajasthan State Road Transport Corporation”. In this study a public opinion survey was carried out for finding service quality of both the services and to find the variable which affects more level of demand. As per the findings,

- Rajasthan Roadways took almost double time as compared to Haryana Roadways having same travel distance. Rajasthan Government has blocked speed of its buses to decrease fuel consumption.
- Haryana Roadways basically lacks in Staff’s behaviour which is not a big issue but another variable in which Haryana lacks is Safety and Security.
- Rajasthan Roadways is bearing a great loss which is not only due to lack of demand it is also because of non- viable distribution of busses between routes.

Siddiquei (2018) used case study method in his study titled “Service Quality Specification Gap in Public Transport Service: A Case Study of Uttar Pradesh State Road Transport Corporation” to ascertain service quality specification gap by incorporating insights from the interviews of those who are important stakeholders (Regional Managers, Service Managers, Asst. Regional Managers, SSI, Foreman, Conductors, Drivers) in service delivery process of UPSRTC. The research results show significant perception mismatches between Higher Management, Regional Heads, and Frontline Managers & Lower staff. Our

findings provide that Higher Management & Employees were failed to identify service quality attributes that were important for Customers.

Nagasubramaniyan & Jagadeesh (2017) stated in their study titled “Assessment of Service Quality of Public Bus Transport System (TNSTC) Tiruchirappalli” that it is not enough that people reach their destination cheap and quick, but it also involves certain qualitative factors that are difficult to measure, which are of great significance for how passengers experience their trip such as comfort, convenience etc. The service provided by the Bus Transport System is at satisfactory level. Bus is the most preferable mode of travelling for the regular passengers. The attributes which are to be improved include bus shelter condition, comfort level of seats, condition & cleanliness of bus, congestion in bus and late night services. The overall result show that service quality attributes influences overall customer satisfaction in using public bus transport.

Kumar, Anand & Srivastava (2016) conducted a study on “Public Transport Service Quality and Passenger Satisfaction: A Case of UPSRTC, Agra, India”. The study measured the level of customer satisfaction with the quality of services offered by Uttar Pradesh State Public Transport Corporation (UPSRTC), Uttar Pradesh State in India. The study was conducted on over 2,000 passengers in the course of June 2015 and October 2015. The various dimensions that were considered include safety, behavior, facilities, response to quarries, comfort, cost, availability, etc. The study results revealed that the passengers were highly dissatisfied from attributes.

Das & Pandit (2016) in their study on “Methodology to determine service delivery levels for public transportation” demonstrated a method using the concept of ‘user satisfaction levels’ and their ‘zone of tolerance’, along with total utility and marginal utility for service providers, to provide a range of service delivery levels for individual transit service attributes in the city of Kolkata. This range of service levels provides a guideline for service providers within which they can consider making an improvement in service level. However, the final decision on service improvement is an outcome of both financial and infrastructural feasibility.

Isaac K. Baidoo (2015) conducted a study on “A Discrete Choice Modeling of Service Quality Attributes in Public Transport”. This study employs a Discrete Choice Experiment (DCE) and Random Utility Theory (RUT) to measure service quality in public transport. By using the data collected from an experimental survey, a Probit model was calibrated and segmented based on gender. This model is a way of identifying commuter’s attitude on the importance of bus service quality attributes on public transport which provides an operationally appealing measure of current or potential service effectiveness. The magnitude of estimates generally indicates that commuters highly value bus stop facility, reliability and attitude of driver or mate. However, an increase in the walking distance to the bus stop and transport fare will result in a disutility of service quality attributes.

Vijayakanth et. al. (2014) “Customer Satisfaction through Service Quality in Public Service (Volvo Buses) Compared with Private and Government Operators across Karnataka” The purpose of this study is to obtain a improved understanding of the level to which service quality is delivered in Public services and private service by front-line employees (FLE) and customer perceptions of service quality in public Transport (Volvo Buses). The paper explores how closely customer expectations of service and FLE perceptions of customer expectations match. The paper also inspects how well FLE have recognized the expectation of the customers and how well its internal procedures support the delivery of top-quality services.

Shinde, Barharte and Raje Shirke (2011) in their article, “Urban Public Transport – A Study on Service Quality” have studied the service quality of Urban Public Transport with reference to Navi Mumbai City. Their survey revealed that there is an absence of good quality service in public bus transport and which results in traffic congestion. They have suggested that frequency of public transport buses should be increased, seats should be designed for the comfort of the passengers, proper bus routes should be designed, and the Public Transport System should be commuter- oriented.

Zain (2011) in his article, “Keeping pace with Innovation,” he has suggested that monorail system is said to be ideal for urban congested corridors like Mumbai, due to its maneuverability and nimbleness to navigate tight turns and narrow corridors. It essentially covers routes that have little or no scope for road widening. It offers increased cost savings along the whole process of its implementation. Once it starts its operations, it will be cheaper and more efficient than other modes of transportation. The Mumbai monorail the first in India is testimony to the administration’s efforts to plan and provide the best for its citizens.

Bharathi (2010) in his study, “Passenger Attitude and Satisfaction in Railways, Special reference to Coimbatore Region,” has evaluated the passengers’ attitude towards the present conditions of services provided by the Indian Railways and has identified the factors that influence the liking of the railway mode of the transport. His findings show that IR have to pay more attention towards passengers comfort inside the train, cleanliness of waiting halls, platforms, compartments, adequate security arrangement, concession to various sections of the society, excellent lay-out of platforms for restaurant, tea-stalls and cool-bars. He has concluded that the Railways have to transform themselves to market-responsive entities in order to remain in the business.

S. Prema (2009) in her dissertation, “A study on the utilization of the Southern Railway services and satisfaction of the Passengers” has made a study in the area of dissatisfaction of passengers with regard to the amenities of Southern Railways and the awareness and utilization of reservation service and the amenities. Her findings reveal that three-fourths of the respondents are aware of all off-board amenities of Indian Railways, waiting hall, canteen facility, pay and use toilets, parking facility and digital display board. Most of them have utilized the on-board amenities such as pantry-car, newspaper, magazines and night lamp facility. She has suggested that in order to avoid overcrowding of people in front of the ticket counter the number of counters may be increased. As some people are not aware of the modern technology of booking, steps may be taken to create awareness. Quality of food can be maintained by setting standards. There may be at least one

doctor in all the trains. TTE or Railway Police may take steps to avoid the entry of persons with unreserved ticket to occupy the reserved seats or berth. Steps may be taken to clean the toilets at station once in six hours and bathing facility may be provided in all long distance trains.

Agarwal Reeti (2008), found in her research titled “Public Transportation and Customer Satisfaction: The Case of Indian Railways” the factors related to Indian Railway services that have an impact on customer satisfaction. Factor and regression analysis was used to analyze the data and identify the effect of customers’ perception about the quality of performance of various factors on customer satisfaction. The major findings of the study depict that out of the various factors considered; employee behavior has the maximum effect on satisfaction level of customers with Indian Railways as a whole.

Mohan Dinesh (2008), in his article, “Mythologies Metro Rail System and future Urban Transport” has traced the history of urban transport systems, success and failures around the world and the lessons there of. He has also described the attributes of surface public transport systems like bus, light, rail, and tram and grade separated system for metro rail, sky-bus, monorail and light rail and their suitability for 21st century sites. Finally he has commented on urban forms and other issues that affect accessibility and mobility in modern urban areas.

Thamaraikannan & Palaniappan (2007) in their article, “The Indian Railways” listed out various problems faced by the Indian Railways such as level crossing and high accident rates, lack of funds, landslides in the monsoon, ticketless travels, fenceless railways and the like. They have concluded that the numbers of coaches are to be increased up to the satisfactory level, food plazas and vending machines are to be installed at stations to increase the revenues, and to improve the safety, security and punctuality for the successful functioning of railways.

Vishwanathan Vijayalakshmi (2007) former Finance Commissioner, Indian Railways, in her article, “Business Oriented Strategy” shares some views regarding the future prospects and past performance. She states that the infrastructure development is an essential requisite of any country. She adds that,

the Railways as a prime mover of bulk commodities has to plan for sizable investments. The Railways has to take note of the anticipated accelerated growth as per the planning commission's assessment in its 'India Vision 2020' report. She has projected that the passenger traffic is expected to rise to 25 million passengers a day from the existing 15 million now. The performance during the last four years has been impressive. The receipts have increased from Rs.37,837 crores to Rs.54,491 crores. This had happened through a change in outlook and a business oriented strategy. The passenger services continue to incur losses due to low second-class ordinary fares, season ticket concessions and other concessions. Weakness of Railways is poor investment strategy. Railways should provide solutions for passenger services related demands.

V. Kumaravalli (2006) in her study, "A Study on the Railway Passenger Services in Virudhunagar District" has suggested that passengers need information regarding each station's name in the electronic screen, when they are in travel. This will help the passenger to plan for alighting at the destination beforehand. If bathing facility is provided in all express trains, it is most welcome and to improve the overall passenger service which are genuine to the welfare of the railway passengers.

C. Jaganathan (2006) in his Dissertation, "Commuters of Railways – An attitude study with special reference to Tirunelveli - Nagercoil Section" has focused his attention on the choice factors of season ticket, various concessions extended by the Railways and factors affecting the attitudes of the commuters. He has found that in the days of week end and beginning, the number of passengers is considerably large. On such days the regular users of trains find it difficult to find accommodation. He has concluded that more number of compartments may be added, frequency of trains may be increased, convenient working hours in season ticket counters can be made, separate compartments for the students may be introduced and trees may be planted in the platforms for shadow.

Martin David (2005) have done "A study on Urban Transport in Madurai city with special reference to passengers attitude towards various modes of transport" has made an attempt to study the growth of urban transportation in recent times

and the attitude of the passengers towards the various modes of transport, crew behavior and to identify the other problems of passengers. It is found that congested traffic is experienced everywhere, two conductors are essential for all the buses, delay caused due to the change of duty of drivers and the like. Suggestions are given for solving the traffic congestion by constructing highway bridges, flyovers, parking facilities, sub-ways and the like. The operation of Lorries and tri-cycles should be prohibited during peak hours as they add to traffic congestion.

Manohar (2005) in his thesis, “A Study on performance Evaluation of Passenger Transportation in Dindigul Dist.: A Comparative Analysis of State owned public sector & Private bus operators” has made an attempt to evaluate the public sector undertaking- TNSTU-MDU-IV Division - Dindigul for 10 years i.e. 94-95 to 2003-04 and to evaluate customer satisfaction by quality of services offered and service attributes. This evaluation reveals that there has been a substantial growth in the operation of its services. The feasibility of connecting to more villages might have decreased over the years. The passengers are not satisfied with the comforts in government buses when compared to that of privately run buses. He has concluded that more number of buses is to be launched to facilitate the villagers.

S Sumathy (2005) in her dissertation titled, “History of Southern Railways” has pointed out that South India is noted for the large number of important hindu festivals, not less than 175 festivals are held annually. Special trains were activated at festival time. Temporary waiting halls, latrines and the like were provided at Kumbakonam and 17 other stations on festival occasions. Special arrangements were made at Kumbakonam in 1933. Six sheds each containing a book office were provided for pilgrim passengers. Each shed was used for a group of stations and special time tables were drawn out and issued well in time. About 46,000 passengers were transported.

Shinghal Nalin (2005) in his article titled, “Road-Road Competition in Freight Transportation – price and service issues” has compared road and rail freight services from the cost, price and generalized cost perspectives. Analysis shows

that on transport cost basis rail is cheaper for distances greater than 550 and 750 kms respectively for heavy and light cargo. When quality of service parameters such as transit time, service frequency, reliability are taken into account using generalized costs, the break even shifts dramatically in favor of roads. On examining the pricing policies of the two sectors he has found that the road transport sector is highly fragmented and competitive. On the other hand, rail services follow a uniform pricing regime without any directional or seasonal variations. This system of uniform, distance-based pricing, though easy to administer and account for, is also a less efficient pricing system than a 'peak/off peak' type of pricing system. He has contended that from an economic policy perspective, there is a need to arrest the trend of shift of long distance freight from road to rail. He has realized that if this is to be achieved, emphasis needs to be placed on market based pricing as well as improved service quality for rail services in terms of service frequencies and transit time reliability.

Singh (2003) in his study, "Road Transport and Economic Development" has evaluated the critical role played by road transport as a basic infrastructure in economic development and has analyzed the correlation between the development of road transport and that of other vital sectors of the economy in relation to Bihar State. He has pointed out that the condition of road is not satisfactory that most of the roads are unsurfaced and that the development of roads in the State has not been well-planned and coordinated with the economic development. He has also studied the functioning of Bihar State Road Transport Corporation as a case and has suggested certain guidelines for a suitable road development policy for Bihar and the steps to be taken to improve the working and performance of the Bihar State Road Transport corporation.

Agarwal (2002) in his article, "Physical, financial and Operational efficiency analysis of State transport units: a case study" has shown the result of the study conducted regarding the performance of the STUs. He has suggested that vehicle utilization should be raised by searching new beneficial routes with services like punctuality, good seating facilities, providing good condition buses and providing

training and refresher programs in order to improve the good behavior of crew. He has suggested that STUs should ensure the public from accident-free travelling.

Arora S. K. (2002) in his study, “Economics of Management in Road Transport Industry” has focused on the problems of management in the road transport industry in general and has suggested various techniques for the evaluation of STUs. Besides he has made a comparative performance evaluation of privately managed Road Transport Industry vis-à-vis state managed Industry in Punjab State and has concluded that both the public sector undertakings- Punjab Roadways and PEPSU Road Transport Corporation are operating much beyond their equilibrium levels and any further sanctioning of rates to them will only increase losses rather than yield profits. Only the private are operating below the equilibrium level and they have a scope for increasing their capacity utilization and hence returns.

V. Renuga Devi, in her thesis (2002), “Passenger satisfaction in Rural Transport services – A Study of TSTC (Coimbatore Division-II) Ltd. in Erode Dist., Tamil Nadu, has made an attempt to evaluate the rural passenger satisfaction and get their problems enlighten and to compare the passenger satisfaction regarding the quality of services rendered by SRTCs and Private sector. She found that there has been a substantial growth in the operation of its services and the quality of services. In its discharge of social responsibility also an increasing trend is experienced in the study period. But the passengers have experienced more problems because of unpunctuality, irregularity, lack of comfort and convenience and lack of safety and security. Regarding problems with crew the findings show that passengers are more worried about the impolite behavior of the crew and placed it at the top of the list of problems. She has suggested that breakdowns can be reduced by proper utilization of the services of technically qualified and experienced staff. Frequency of bus services can be enhanced and especially ladies bus services can also be introduced. The crew may be given effective and continuous training on behavioral aspects with the public. In order to gauge the opinion of the passengers and public, ‘suggestions and complaints book’ may be kept with the time keeper in the bus stand.

Somayajulu (2002) in his study on “Employee Satisfaction: A Mantra for Profitability in the Transport Sector” stressed for passenger transport services nationalization to prevent exploitations of travelling public by inefficient and unscrupulous private operators. Several individual transport modes have also emerged supported by convenient credit facilities, offering stiff competition to public transport systems. To retain and regain their customer's researcher explored possibility of achieving profitability through passenger satisfaction, employee satisfaction, service quality and empowerment. Researcher analyzed that correlation exists between employee's satisfaction and profitability. Suitable mechanism has been suggested in this study to enhance employee motivation, morale, satisfaction and loyalty as these are key elements of profitability in transport sector.

S. Krishnamurthy, (2001) in his article, “State Transport Undertakings- an analysis” made an analysis regarding the performance of the State Transport Undertakings for the past 30 years. Evaluation has been made to assess the financial status and financial criterions. He has suggested that State transport Undertakings should indulge in cost cutting exercises in all possible manners, to revise the bus fare periodically which is good enough to absorb the total cost of operations, should reimburse the losses suffered by them on account of free and concession facilities extended to certain section of the society Corinne Bret (2000), in her article “Japanese Trains” has outlined the services provided by the Japan Railway inside the train. The information about the next station connecting buses, the express trains, reminding of personal belongings and the like is made through public announcements inside the trains.

To summarize, knowledge from the abovementioned literature shows that public transport is still an alternative as a travel mode of choice for many people. In order to keep current passengers, public transport needs to improve the services to accommodate wide range of customer needs and expectations. Moreover, the review gave the researcher a thorough understanding of the subject and provided better direction to the present research and designing the whole study.

4.4 RESEARCH DESIGN

The research design used by the researcher is in accordance with the empirical study requirements. As such, it covers the following sub-sections:

4.4.1 Type of the study

The type of the present research work is exploratory and descriptive research. Exploratory research is done to explore an area where little is known. The study is an attempt to explore the level of customer satisfaction with regard to service quality provided by public road transport organizations based in Rajasthan and Haryana. It is also a descriptive study in which the researcher has tried to study the existing perceptions of customers of selected public transportation service providers; without manipulating in anyway the scenario as it stands presently.

4.4.2 Methods of data collection

In order to fulfill the objectives of the study, data was collected using primary as well as secondary sources. Being empirical study, it is largely based on primary data collected by the researcher through well designed, structured and comprehensive questionnaires designed by the researcher keeping in view the available theoretical literature and the objectives of the study. The questionnaires contain dichotomous questions, multiple choice questions, scaling questions and ranking questions too.

A. Primary data – The primary data has been collected through the following:

- i. **Questionnaire:** After framing the questionnaire, the same was distributed to the targeted respondents (passengers of RSRTC and HR), who were willing to answer the questions mentioned in the questionnaire. In case, where the respondents were unable to understand and fill up the above said questionnaire, the researcher filled the answers on behalf of the respondents.

- ii. **Observation:** The researcher has also done on the spot study to get first-hand information about the actual working of the said places and its impact on customer satisfaction.
- iii. **Interview:** The researcher also conducted interviews of selected respondents to get meaningful information; this enabled the researcher to collect data for further interpretation.

B. Secondary Data – The sources of collecting secondary data for research study include the following:

- Reports (published and unpublished) and annual proceedings from the RSRTC and Haryana Roadways and other departments of the State Government.
- Articles from Magazines, Journals & Newspapers.
- Research papers
- Concerned websites
- Published and unpublished research projects, surveys and reports.
- Published data from Statistical and Financial departments of RSRTC and Haryana Roadways.

4.5 SAMPLING DESIGN

Though the population of the study is finite but it is neither possible nor desirable to involve the entire population under its gamut. Hence, the researcher has used sampling method in place of census method of enquiry and it is considered appropriate keeping in view the limitations of efforts, money and time. Still, every effort has been made to ensure that the units selected for the sample would represent the entire population.

Population/Universe of the Study – All travelers who use public transportation services offered by Rajasthan and Haryana States.

Sampling Unit - Passengers of Haryana Roadways and Rajasthan State Road Transport Corporation. The respondents have been selected from the three districts each of Rajasthan and Haryana states. For Rajasthan; Kota, Tonk and Bundi and from Haryana Rohtak, Bhiwani and Narnaul (District Mahendragarh).

Sampling Technique - For the selection of sample we used Stratified Random Sampling method.

Sample size – Total 500 sample was selected from Universe (Rajasthan and Haryana states). Questionnaires were distributed among passengers travelling in the buses of RSRTC and HR. However, due to some incomplete questionnaires, the final sample size of the present research work comprises of 477 passengers at bus terminals of urban, semi urban and rural in nature as mentioned here under -

RSRTC: 245 respondents

HR: 232 respondents

4.6 HYPOTHESES OF THE STUDY

As for both of the corporations, customer satisfaction and enhanced services are the prime requisite for the passengers. In the view of the above-mentioned statement, the following hypothesis is formulated for testing the course of the study:

- H_0 (Null Hypothesis): There is no significant difference in the opinions of RSRTC and HR passengers about the performance of On-route Bus Staff.

H_1 (Alternate Hypothesis): There is a significant difference in the opinions of RSRTC and HR passengers about the performance of On-route Bus Staff.

- H_0 (Null Hypothesis): There is no significant difference in the

effectiveness of marketing mix of RSRTC and HR.

H₂ (Alternate Hypothesis): There is a significant difference in the effectiveness of marketing mix of RSRTC and HR.

- H₀ (Null Hypothesis): There is no significant difference in the opinions of RSRTC and HR passengers about satisfaction derived from quality of services delivered.

H₃ (Alternate Hypothesis): There is a significant difference in the opinions of RSRTC and HR passengers about satisfaction derived from quality of services delivered.

- H₀ (Null Hypothesis): There is no significant difference in the opinions of RSRTC and HR passengers about service quality parameters.

H₄ (Alternate Hypothesis): There is a significant difference in the opinions of RSRTC and HR passengers about service quality parameters.

4.7 STATISTICAL TOOLS & TECHNIQUES

The researcher applied statistical tools including percentage analysis, weighted averages, standard deviations and Student's *t-test* for the data analysis. Five-Point Likert type numerical scales ranging from Highly Agree to Highly Disagree were used. Appropriate software packages also been used to facilitate inferences and to draw conclusion. In order to have a better representation of the facts, at appropriate places rating scales. Use of charts, graphs and pictorial diagrams has been done for a comprehensive evaluation and understanding. For the analysis and interpretation we also used MS Excel software.

The Student's *t* test or Independent Samples *t* test was applied to compare the opinions of passengers of RSRTC and HR about services provided by the organization and satisfaction derived from using the services. It is an important parametric test that compares the means of two independent groups in order to

determine whether there is statistical evidence that the associated population means are significantly different.

4.8 LIMITATIONS OF STUDY

1. Since every comprehensive study involves much consumption of travelling, boarding, survey, interviews, etc., the present study also have cost and time limitations.
2. At times, respondents may be under the influence of their mood and cognitive limitations. Sometimes individual respondents interpret the questions in a different manner which results in improper responses.
3. The researcher has no control over the variable of the research. The present study only reports what has happened and what is happening.
4. The present study is based on the reliability of the primary data. The sample units were selected from the population having multidimensional features of a large group.
5. The study is restricted to 3 districts of Rajasthan and 3 districts of Haryana State only.
6. Organizational personnel were unwilling to provide required data.

4.9 SCOPE OF STUDY

1. The survey study has been conducted in the six selected bus terminals of Rajasthan and Haryana State.
2. The area of research is the comparative study of customer satisfaction with reference to Rajasthan State Road Transport Corporation and Haryana Roadways only.
 1. The study covers passengers only who frequently visit here and there while utilizing the services of these two State roadways.

2. The purpose of this study is to conduct a comparative analysis of RSRTC and HR pertaining to customer satisfaction in order to improve the services provided by these two undertakings.

Research Methodology lays foundation for any research work. In this chapter, the researcher has ascertained type of the study, sampling design, and various tools and techniques applied on the collected data. In the next chapter, classification and tabulation of the data have been done to draw appropriate inferences. Further, with the help of SPSS and Microsoft excel, testing of stated hypotheses have been performed. The last section deals with the discussion on outcomes of the study.

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CHAPTER V

DATA ANALYSIS & INTERPRETATION

5.1 INTRODUCTION

The crux of any research endeavor is the analysis of the collected data and the inferences drawn based on the interpretation of the analyzed data. In chapter IV, a brief discussion was made on the research methodology applied for the present study. This chapter presents systematic presentation of collected data and their statistical analysis. It deals with the demographic profile of sample passengers of RSRTC and HR and the outcomes of the study. The analysis reveals passengers' opinion about the services provided by the concerned road transport organization and compares the satisfaction level that they derive from using the services. The data collected through the questionnaire was tabulated and analyzed using data classification tools. Interpretations were made to get the meaningful inferences. Graphical presentation of respondents' profile was done by using suitable charts. In order to test hypotheses of the study various statistical techniques were applied including Percentile analysis, averages and student's t- test.

The data analysis pertaining to the study is presented in following sections -

- Graphical presentation of respondents' profile
- Validation of Hypotheses
- Hypotheses results

5.2 GRAPHICAL PRESENTATION OF RESPONDENTS' PROFILE

5.2.1 Age: The table and graph show the distribution of respondents according to their Age Group. Nearly 33% of sample passengers of HR and 50% of RSRTC fall under the age group 30-40 years. About 25% of sample passengers of HR and

13% of RSRTC fall under the age group 40-50 years whilst, 19% of HR and 27% of RSRTC belong to 20-30 years of age group. Nearly, 22% passengers of HR and 10% of RSRTC fall under the age group 50 and above years.

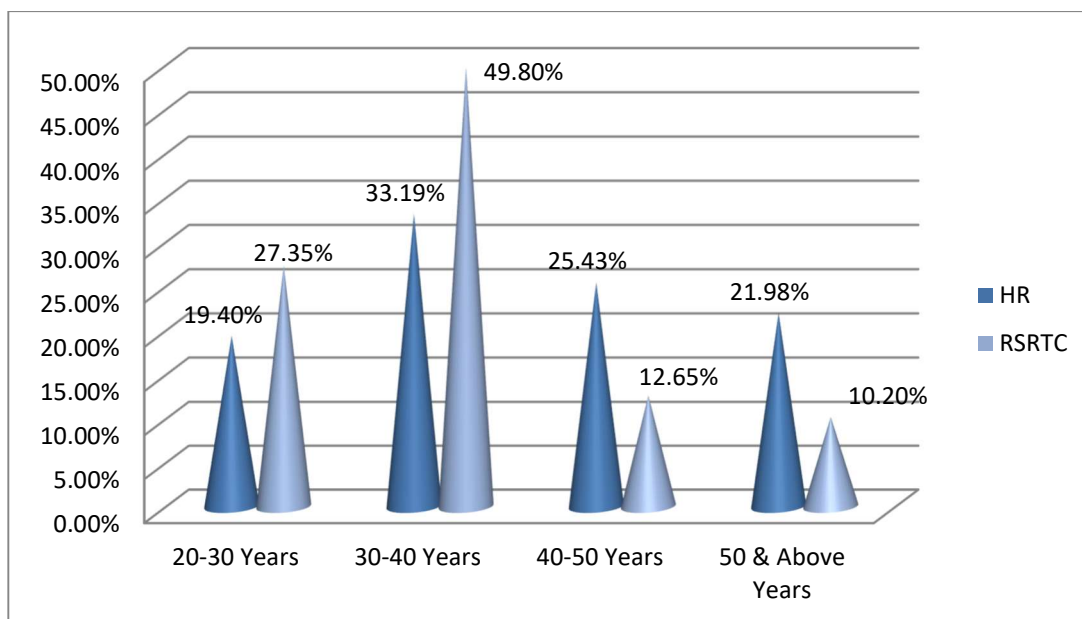
Table 5.1

Age Distribution

Age Group	HR		RSRTC		Grand Total	
	N	%	N	%	N	%
20-30 Years	45	19.40	67	27.35	112	23.48
30-40 Years	77	33.19	122	49.80	199	41.72
40-50 Years	59	25.43	31	12.65	90	18.87
50 & Above Years	51	21.98	25	10.20	76	15.93
Grand Total	232	100.00	245	100.00	477	100.00

Chart 5.1

Age Distribution



5.2.2 Gender The respondents stated their gender as shown in the table and graph below. Nearly 73% of sample passengers of HR and 70% of RSRTC are male whilst, about 27% of HR and 30% of RSRTC are female.

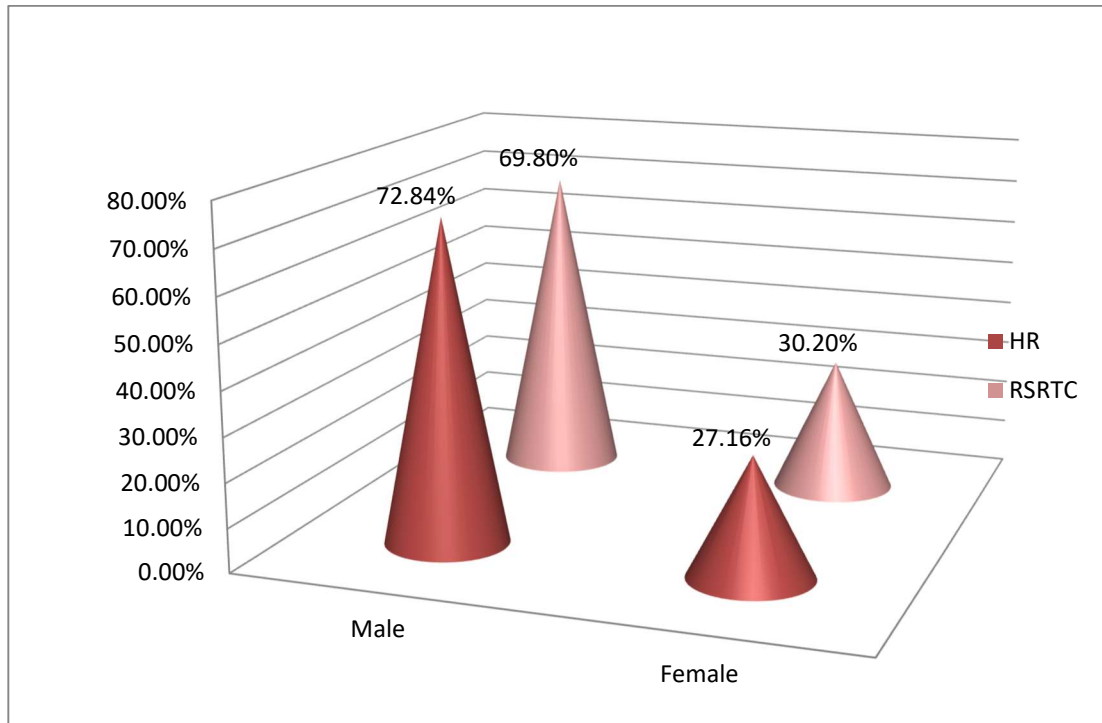
Table 5.2

Gender Distribution

Gender	HR		RSRTC		Grand Total	
	N	%	N	%	N	%
Male	169	72.84	171	69.80	340	71.28
Female	63	27.16	74	30.20	137	28.72
Grand Total	232	100.00	245	100.00	477	100.00

Chart 5.2

Gender Distribution



5.2.3 Occupation

The sample passengers were asked to indicate their present occupation. Nearly 49% of sample passengers of HR and 39% of RSRTC have other occupation. About 17% of sample passengers of HR and 23% of RSRTC are businessman whilst, 17% of HR and 13% of RSRTC are student. Nearly, 13% passengers of HR and 16% of RSRTC are in service whilst, 4% of HR and 9% of RSRTC are professional.

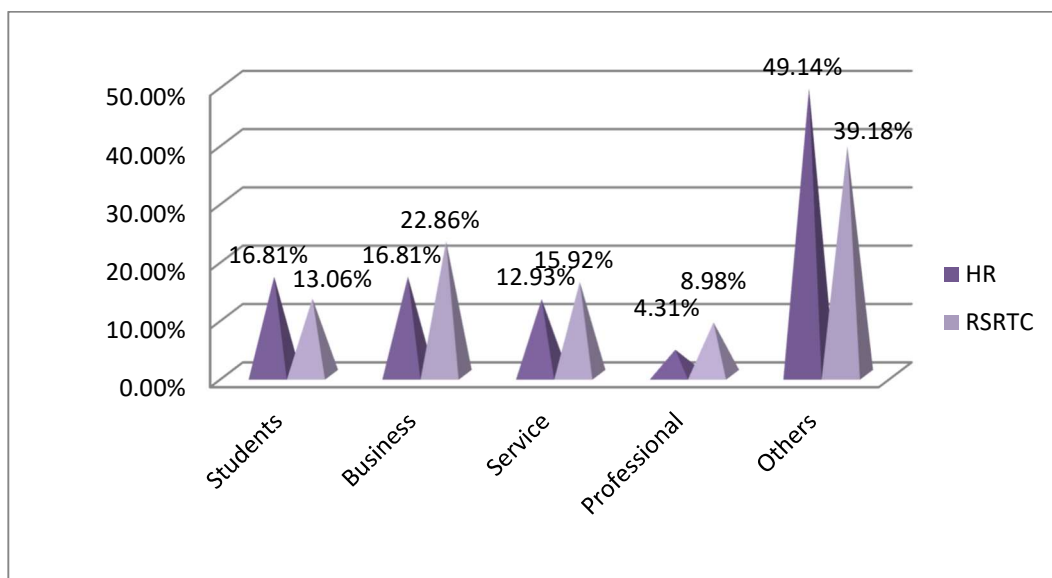
Table 5.3

Occupation Distribution

Occupation	HR		RSRTC		Grand Total	
	N	%	N	%	N	%
Students	39	16.81	32	13.06	71	14.88
Business	39	16.81	56	22.86	95	19.92
Service	30	12.93	39	15.92	69	14.47
Professional	10	4.31	22	8.98	32	6.71
Others	114	49.14	96	39.18	210	44.03
Grand Total	232	100.00	245	100.00	477	100.00

Chart 5.3

Occupation Distribution



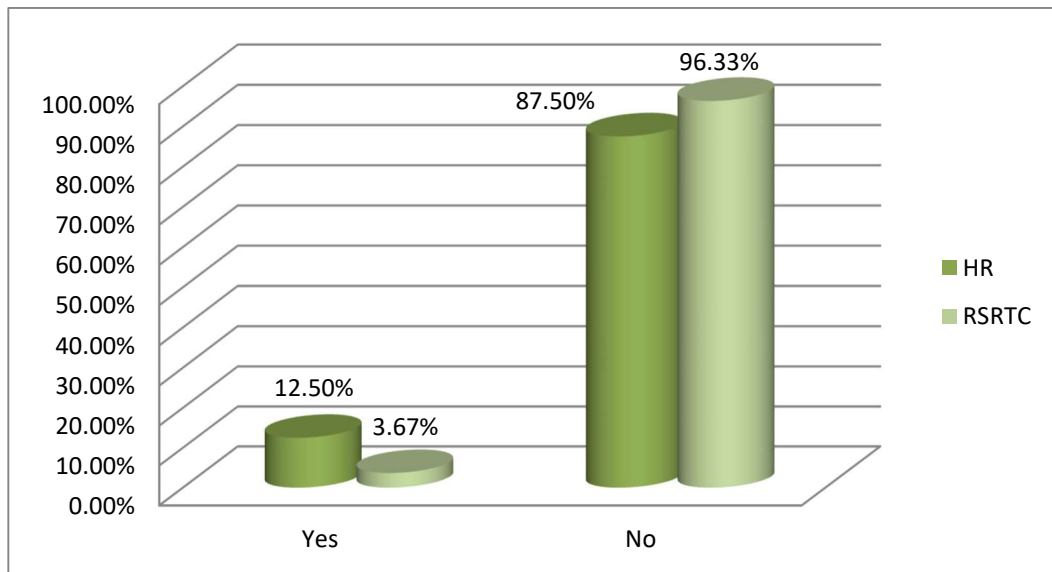
5.2.4 Person with Disability

As per the table and graph presented below, nearly 87% of sample passengers of HR and 96% of RSRTC are not disabled whilst; about 13% of HR and 4% of RSRTC are disabled.

Table 5.4
Person with Disability

Disable	HR		RSRTC		Grand Total	
	N	%	N	%	N	%
Yes	29	12.50	9	3.67	38	7.97
No	203	87.50	236	96.33	439	92.03
Grand Total	232	100.00	245	100.00	477	100.00

Chart 5.4
Person with Disability



5.2.5 Preferred Mode of Transport

The respondents indicated their preferred mode of transport as mentioned in the table and graph shown below. Maximum number of HR passengers (39.7%) and most of the RSRTC passengers (47.8%) prefer to travel by bus. About 32% passengers of HR and 28% passengers of RSRTC prefer train for travelling. Nearly 28% passengers of HR and 25% passengers of RSRTC prefer travelling by personal vehicles.

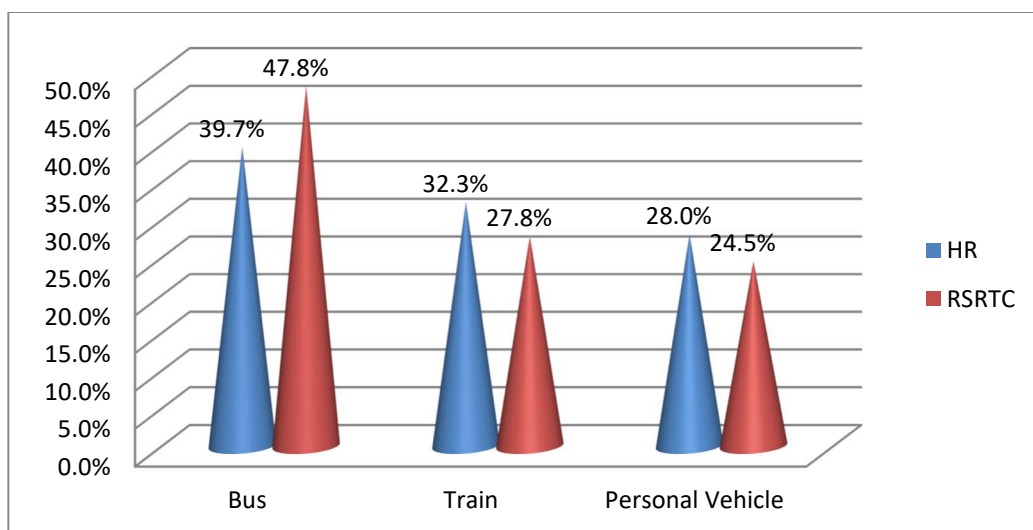
Table 5.5

Preferred Mode of Transport

Mode of Transport	HR		RSRTC		Grand Total	
	N	%	N	%	N	%
Bus	92	39.70	117	47.8	209	43.80
Train	75	32.30	68	27.80	143	30.00
Personal Vehicle	65	28.00	60	24.50	125	26.20
Grand Total	232	100.00	245	100.00	477	100.00

Chart 5.5

Preferred Mode of Transport



5.2.6 Frequency of Travelling

The respondents indicated their frequency of travelling as mentioned in the table and graph shown below. Maximum number of HR passengers (56.9%) and most of the RSRTC passengers (73.5%) travel sometimes in respective buses. About 37% passengers of HR and 22% passengers of RSRTC travel weekly. Nearly 6% passengers of HR and 1.6% passengers of RSRTC travel daily whilst only 2.4% RSRTC passengers travel rarely by bus.

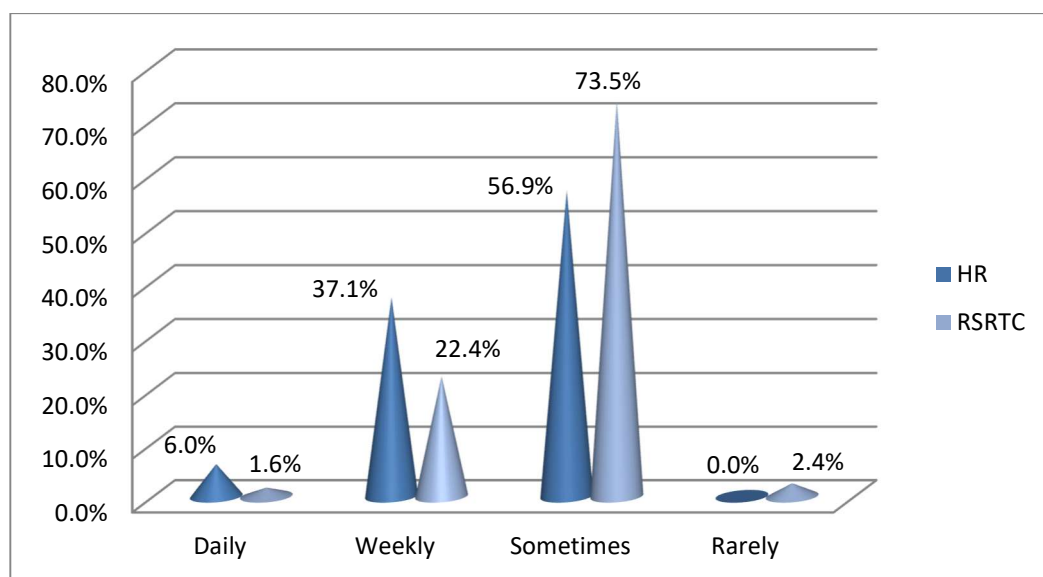
Table 5.6

Frequency of Travelling

Frequency of Travelling	HR		RSRTC		Grand Total	
	N	%	N	%	N	%
Daily	14	6.0	4	1.6	18	3.8
Weekly	86	37.1	55	22.4	141	29.6
Sometimes	132	56.9	180	73.5	312	65.4
Rarely	0	0.0	6	2.4	6	1.3
Grand Total	232	100.00	245	100.00	477	100.00

Chart 5.6

Frequency of Travelling



5.2.7 Purpose of Journey

The respondents indicated their purpose of journey as mentioned in the table and graph shown below. Maximum number of HR passengers (57.8%) and most of the RSRTC passengers (41.6%) travel in respective buses for household purposes. About 36% passengers of RSRTC and 10.3% passengers of HR travel for business purposes. Nearly 32% passengers of HR and 10.6% passengers of RSRTC travel for tourism purposes. About 11% RSRTC passengers travel for education purpose.

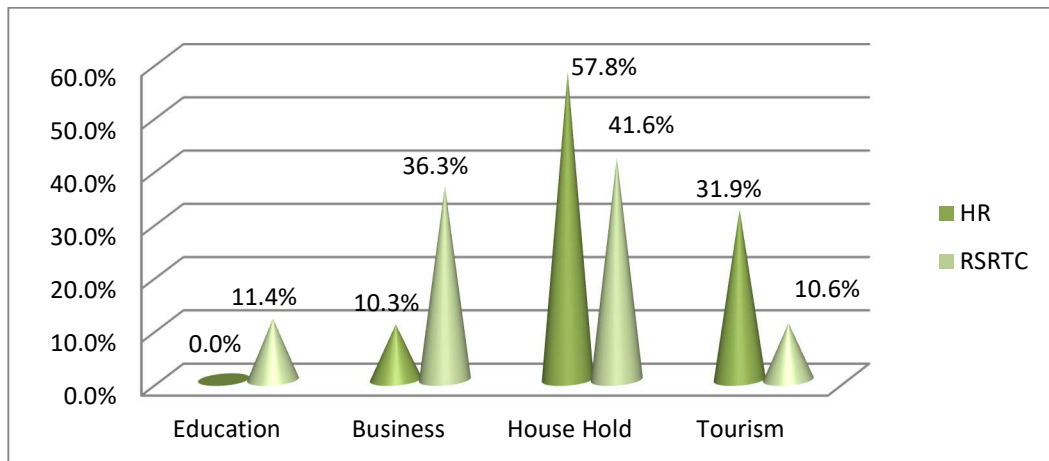
Table 5.7

Purpose of Journey

Purpose of journey	HR		RSRTC		Grand Total	
	N	%	N	%	N	%
Education	0	0.0	28	11.4	28	5.9
Business	24	10.3	89	36.3	113	23.7
House Hold	134	57.8	102	41.6	236	49.5
Tourism	74	31.9	26	10.6	100	21.0
Grand Total	232	100.00	245	100.00	477	100.00

Chart 5.7

Purpose of Journey



5.2.8 Reach Destination on Time using Present Mode

As per the table and graph shown below, maximum number of RSRTC passengers i.e. 97.6 per cent whereas; most of the passengers of HR i.e. 91.8% report to reach their destination on time using their present mode of transport whilst, remaining passengers belong to both the organizations do not reach on time.

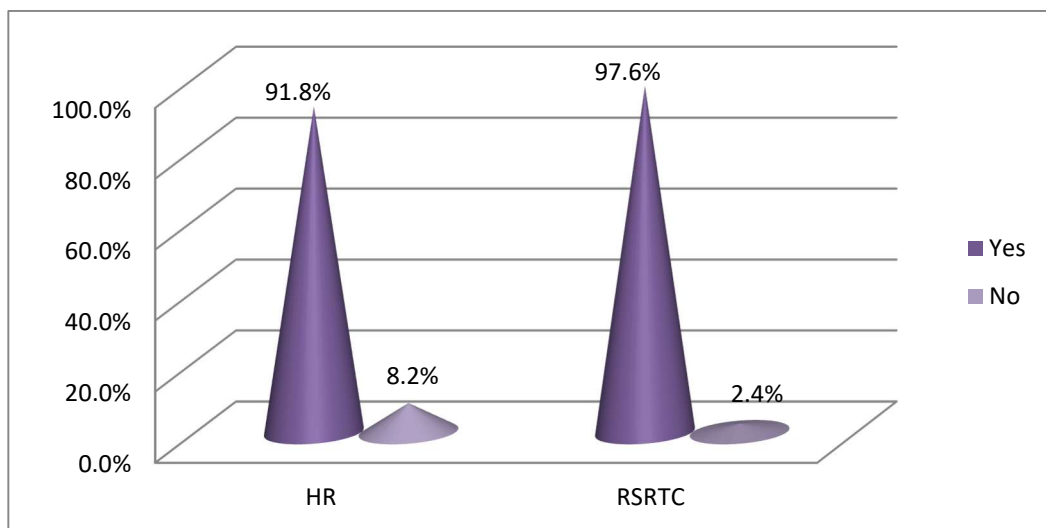
Table 5.8

Reach Destination on Time using Present Mode

Reach Destination on Time using Present Mode	HR		RSRTC		Grand Total	
	N	%	N	%	N	%
Yes	213	91.8	239	97.6	452	94.8
No	19	8.2	6	2.4	25	5.2
Grand Total	232	100.00	245	100.00	477	100.00

Chart 5.8

Reach Destination on Time using Present Mode



5.2.9 Alternative Means of Transport

As per the table and graph shown below, maximum number of HR passengers, i.e. 81.9% whereas; most of the passengers of RSRTC i.e. 81.2% opt private buses to travel whilst, remaining passengers belong to both the organizations travel in other modes of transport.

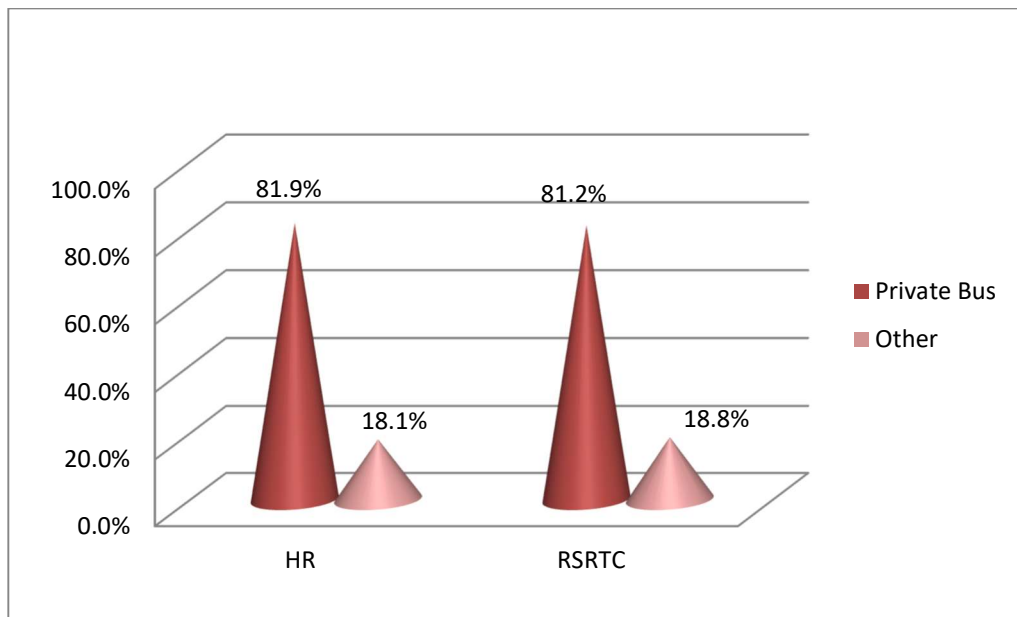
Table 5.9

Alternative Means of Transport

Alternative Means of Transport	HR		RSRTC		Grand Total	
	N	%	N	%	N	%
Private Bus	190	81.9	199	81.2	389	81.6
Other	42	18.1	46	18.80	88	18.4
Grand Total	232	100.00	245	100.00	477	100.00

Chart 5.9

Alternative Means of Transport



5.3 HYPOTHESES VALIDATION

This section encompasses analyses of responses of the sample passengers to get outcome of the study. They were requested to give their responses in appropriate columns of the Questionnaire, a copy of which is enclosed as annexure. In this section, the researcher applied student's t-test to accept or reject the stated hypotheses.

When the two independent sample means are assumed to be drawn from populations with identical variances, the test static t is computed as,

$$t = \frac{\bar{X}_1 - \bar{X}_2}{s_p \cdot \sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}$$

where

$$s_p = \sqrt{\frac{(n_1 - 1) s_{X_1}^2 + (n_2 - 1) s_{X_2}^2}{n_1 + n_2 - 2}}$$

Where,

\bar{x}_1 = Mean of first sample

\bar{x}_2 = Mean of second sample

n_1 = Sample size (i.e., number of observations) of first sample

n_2 = Sample size (i.e., number of observations) of second sample

s_1 = Standard deviation of first sample

s_2 = Standard deviation of second sample

s_p = Pooled standard deviation

The calculated t value is then compared to the critical t value from the t distribution with degrees of freedom $df = n_1 + n_2 - 2$ and chosen confidence level. If the calculated t value is greater than the critical t value, then the null hypothesis gets rejected. This form of the Student's t -test statistic assumes equal variances.

In the table 5.10, the value of t has been calculated by putting following values in the formula as-

$$\bar{x}_1 = 1.543 \quad \bar{x}_2 = 1.720 \quad n_1 = 232 \quad n_2 = 245 \quad s_1 = 0.817 \\ s_2 = 0.845$$

5.3.1 Hypothesis- 1

H₀ (Null Hypothesis): There is no significant difference in the opinions of RSRTC and HR passengers about the performance of On-route Bus Staff.

H₁ (Alternate Hypothesis): There is a significant difference in the opinions of RSRTC and HR passengers about the performance of on-route Bus Staff.

To test this hypothesis, a comparison was made between the opinions of passengers travelling in buses run by RSRTC and HR regarding the performance of on-route bus staff. The hypothesis covers following variables –

5.3.1.1 Drivers/Conductors Taking Care of Customers' Safety and Security

Table 5.10

Comparison of Customers' Opinion about Drivers/Conductors Taking Care of Customers' Safety and Security

Drivers/Conductors taking care of customers' safety and security		Road Transport		Total
		HR	RSRTC	
Yes	Count	124	163	287
	%	53.4%	66.5%	60.2%
No	Count	49	31	80
	%	21.1%	12.7%	16.8%
Can't Say	Count	59	51	110
	%	25.4%	20.8%	23.1%
Total	Count	232	245	477
	%	100.0%	100.0%	100.0%
Mean Score		1.720	1.590	
Std. Deviation		0.845	0.813	
T Test		1.687		Non-Significant
P Value		0.092		

The above table shows the comparison between respondents' opinion about drivers/conductors take care of customers' security and safety based on chosen road transport organizations.

Nearly 67% of respondents belonging to RSRTC favor the fact whereas respondents belonging to HR show a lower percentage (53.4%) in this regard.

Further, the difference in the mean value of opinion about the fact is found to be statistically non-significant ($P > 0.05$) as the mean of HR group (1.720) is slightly higher than that of RSRTC group (1.543).

The results of the analysis show that the mean score for opinion about taking care of customers' security and safety by bus drivers/conductors does not differ with the change in organization.

5.3.1.2 Effective Performance of Daily Activities by Drivers/Conductors

Table 5.11

Comparison of Customers' Opinion about Effective Performance of Daily Activities by Drivers/Conductors

drivers/conductors perform daily activities effectively		Road Transport		Total
		HR	RSRTC	
Yes	Count	70	62	132
	%	30.2%	25.3%	27.7%
No	Count	31	24	55
	%	13.4%	9.8%	11.5%
Can't Say	Count	131	159	290
	%	56.5%	64.9%	60.8%
	Count	232	245	477
	%	100.0%	100.0%	100.0%
Mean Score		2.263	2.396	
Std. Deviation		0.895	0.865	
T Test		1.650		Non-Significant
P Value		0.100		

The above table shows the comparison between respondents' opinion about Effective Performance of Daily Activities by Drivers/Conductors based on chosen road transport organizations.

Respondents travelling in buses of these organizations have almost similar view about effective performance of drivers/conductors. A larger percentage of sample respondents of both the organizations show neutral response in this regard.

The difference in mean value of opinion about this factis found to be statistically non-significant ($P>0.05$) as mean of RSRTC group (2.396) is slightly higher than that of HR group (2.263).

The results of the analysis show that the mean score for opinion about Effective Performance of Daily Activities by Drivers/Conductors does not differ with the change in organization.

5.3.1.3 Drivers/Conductors having Adequate Means to Handle People with Disability, Elders, Pregnant Women and Children

Table 5.12

Comparison of Customers' Opinion about Drivers/Conductors having Adequate Means to Handle People with Disability, Elders, Pregnant Women and Children

Adequate means to handle people with disability, elders, pregnant women and children		Road Transport		Total
		HR	RSRTC	
Yes	Count	10	12	22
	%	4.3%	4.9%	4.6%
No	Count	110	166	276
	%	47.4%	67.8%	57.9%
Can't Say	Count	112	67	179
	%	48.3%	27.3%	37.5%
Total	Count	232	245	477
	%	100.0%	100.0%	100.0%
Mean Score		2.440	2.360	
Std. Deviation		0.578	0.575	
T Test		1.447		Non-Significant
P Value		0.149		

The above table shows the comparison between respondents' opinion about Drivers/Conductors having Adequate Means to Handle People with Disability, Elders, Pregnant Women and Children based on chosen road transport organizations.

Nearly 68% of respondents belonging to RSRTC disagree the fact whereas respondents belonging to HR show a lower percentage (47.4%) in this regard.

Further, the difference in the mean value of opinion about the fact is found to be statistically non-significant ($P > 0.05$) as the mean of HR group (2.440) is slightly higher than that of RSRTC group (2.360).

The results of the analysis show that the mean score for opinion about having Adequate Means to Handle People with Disability, Elders, Pregnant Women and

Children by bus drivers/ conductors does not differ with the change in organization.

Hypothesis Conclusion

As per the abovementioned analyses, a non-significant difference was found in the opinions of sample passengers of HR and RSRTC about the majority of variables pertaining to performance of On-route Bus Staff.

Thus, alternative hypothesis got rejected and null hypothesis got accepted that there is no significant difference in the opinions of RSRTC and HR passengers about the performance of On-route Bus Staff. Passengers of both the organizations RSRTC and HR have similar views towards performance of On-route Bus Staff in meeting customers' expectations.

5.3.2 Hypothesis- 2

H_0 (Null Hypothesis): There is no significant difference in the effectiveness of marketing mix of RSRTC and HR.

H_2 (Alternate Hypothesis): There is a significant difference in the effectiveness of marketing mix of RSRTC and HR.

An analysis of responses of the sample passengers was carried out to examine the comparison between the effectiveness of marketing mix of RSRTC and HR. Since marketing mix of a service organization encompasses 7Ps'- product, price, place, promotion, people, physical evidence and process, the researcher has attempted to cover all the variables pertaining to the mix. However, being public sector organizations, RSRTC and HR do not spend much on promotional activities on a regular basis hence; promotion has been exempted from the analysis of marketing mix. The options ranged from Strongly Disagree to Strongly Agree. To test this hypothesis, the researcher included following variables-

1. Product

5.3.2.1 Buses having Enough Leg Space

Table 5.13

Comparison of Customers' Opinion about Buses having Enough Leg Space

Enough Leg Space		Road Transport		Total
		HR	RSRTC	
Strongly Disagree	Count	0	4	4
	%	0.0%	1.6%	0.8%
Disagree	Count	107	89	196
	%	46.1%	36.3%	41.1%
Neutral	Count	37	31	68
	%	15.9%	12.7%	14.3%
Agree	Count	88	121	209
	%	37.9%	49.4%	43.8%
Strongly Agree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Total	Count	232	245	477
	%	100.0%	100.0%	100.0%
Mean Score		2.918	3.098	
Std. Deviation		0.915	0.957	
T Test		2.095		Significant
P Value		0.037		

The above table shows the comparison between respondents' opinion about Buses having Enough Leg Space based on chosen road transport organizations.

A higher percentage (46.1%) of respondents belonging to HR disagree the fact whereas a majority of respondents (49.4%) belonging to RSRTC agree that Buses having Enough Leg Space.

Further, the difference in the mean value of opinion about the fact is found to be statistically significant ($P < 0.05$) as the mean of RSRTC group (3.098) is significantly higher than that of HR group (2.918).

The results of the analysis show that in terms of Buses having Enough Leg Space, a larger number of passengers of RSRTC opine positively as compared to that of HR.

5.3.2.2 Buses having Spacious Luggage Racks

Table 5.14

Comparison of Customers' Opinion about Buses having Spacious Luggage Racks

Spacious Luggage Racks		Road Transport		Total
		HR	RSRTC	
Strongly Disagree	Count	40	15	55
	%	17.2%	6.1%	11.5%
Disagree	Count	109	118	227
	%	47.0%	48.2%	47.6%
Neutral	Count	19	46	65
	%	8.2%	18.8%	13.6%
Agree	Count	64	66	130
	%	27.6%	26.9%	27.3%
Strongly Agree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Total	Count	232	245	477
	%	100.0%	100.0%	100.0%
Mean Score		2.461	2.665	
Std. Deviation		1.072	0.942	
T Test		2.211		
P Value		0.027		Significant

The above table shows the comparison between respondents' opinion about Buses having Spacious Luggage Racks based on chosen road transport organizations.

A higher percentage (64.2%) of respondents belonging to HR disagree the fact whereas a majority of respondents (54.3%) belonging to RSRTC also disagree that Buses having Spacious Luggage Racks.

Further, the difference in the mean value of opinion about the fact is found to be statistically significant ($P < 0.05$) as the mean of RSRTC group (2.665) is significantly higher than that of HR group (2.461).

The results of the analysis show that in terms of Buses having Spacious Luggage Racks, a larger number of passengers of HR opine negatively as compared to that of RSRTC.

5.3.2.3 Buses having Comfortable Seats

Table 5.15

Comparison of Customers' Opinion about Buses having Comfortable Seats

Seats are Comfortable		Road Transport		Total
		HR	RSRTC	
Strongly Disagree	Count	30	10	40
	%	12.9%	4.1%	8.4%
Disagree	Count	95	122	217
	%	40.9%	49.8%	45.5%
Neutral	Count	11	41	52
	%	4.7%	16.7%	10.9%
Agree	Count	96	72	168
	%	41.4%	29.4%	35.2%
Strongly Agree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Total	Count	232	245	477
	%	100.0%	100.0%	100.0%
Mean Score		2.746	2.714	
Std. Deviation		1.132	.937	
T Test		0.331		Non-Significant
P Value		0.741		

The above table shows the comparison between respondents' opinion about Buses having Comfortable Seats based on chosen road transport organizations.

Respondents travelling in buses of these organizations have almost similar view about the abovementioned fact. Almost 54% sample respondents of both the organizations disagree about Buses having Comfortable Seats.

The difference in mean value of opinion about this factis found to be statistically non-significant ($P>0.05$) as mean of HR group (2.746) is slightly higher than that of RSRTC group (2.714).

The results of the analysis show that the mean score for opinion about Buses having Comfortable Seats does not differ with the change in organization.

5.3.2.4 Buses having Clean Interiors

Table 5.16

Comparison of Customers' Opinion about Buses having Clean Interiors

Clean Interiors		Road Transport		Total
		HR	RSRTC	
Strongly Disagree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Disagree	Count	83	176	259
	%	35.8%	71.8%	54.3%
Neutral	Count	63	51	114
	%	27.2%	20.8%	23.9%
Agree	Count	86	18	104
	%	37.1%	7.3%	21.8%
Strongly Agree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Total	Count	232	245	477
	%	100.0%	100.0%	100.0%
Mean Score		3.013	2.355	
Std. Deviation		0.855	0.614	
T Test		9.686		Significant
P Value		0.000		

The above table shows the comparison between respondents' opinion about Buses having Clean Interiors based on chosen road transport organizations.

A higher percentage (71.8%) of respondents belonging to RSRTC disagree the fact whereas a majority of respondents (37.1%) belonging to HR agree that Buses having Clean Interiors.

Further, the difference in the mean value of opinion about the fact is found to be statistically significant ($P < 0.05$) as the mean of HR group (3.013) is significantly higher than that of RSRTC group (2.355).

The results of the analysis show that in terms of Buses having Clean Interiors, a larger number of passengers of RSRTC opine negatively as compared to that of HR.

5.3.2.5 Good Condition of Buses

Table 5.17

Comparison of Customers' Opinion about Good Condition of Buses

Bus is in Good Condition		Road Transport		Total
		HR	RSRTC	
Strongly Disagree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Disagree	Count	66	105	171
	%	28.4%	42.9%	35.8%
Neutral	Count	64	117	181
	%	27.6%	47.8%	37.9%
Agree	Count	102	23	125
	%	44.0%	9.4%	26.2%
Strongly Agree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Total	Count	232	245	477
	%	100.0%	100.0%	100.0%
Mean Score		3.155	2.665	
Std. Deviation		0.839	0.642	
T Test		7.187		Significant
P Value		0.000		

The above table shows the comparison between respondents' opinion about Good Condition of Buses based on chosen road transport organizations.

A higher percentage (47.8%) of respondents belonging to RSRTC show neutral response to the fact whereas a majority of respondents (44%) belonging to HR agree about Good Condition of Buses.

Further, the difference in the mean value of opinion about the fact is found to be statistically significant ($P < 0.05$) as the mean of HR group (3.155) is significantly higher than that of RSRTC group (2.665).

The results of the analysis show that in terms of Good Condition of Buses, a larger number of passengers of HR opine positively as compared to that of RSRTC.

5.3.2.6 Vehicles Meeting Environmental Concerns

Table 5.18

Comparison of Customers' Opinion about Vehicles Meeting Environmental Concerns

Vehicles Meeting Environmental Concerns		Road Transport		Total
		HR	RSRTC	
Strongly Disagree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Disagree	Count	74	183	257
	%	31.9%	74.7%	53.9%
Neutral	Count	158	62	220
	%	68.1%	25.3%	46.1%
Agree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Strongly Agree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Total	Count	232	245	477
	%	100.0%	100.0%	100.0%
Mean Score		3.319	3.747	
Std. Deviation		0.467	0.436	
T Test		10.354		Significant
P Value		0.000		

The above table shows the comparison between respondents' opinion about Vehicles Meeting Environmental Concerns based on chosen road transport organizations.

A higher percentage (74.7%) of respondents belonging to RSRTC disagree the fact whereas a majority of respondents (68.1%) belonging to HR show neutral response about Vehicles Meeting Environmental Concerns.

Further, the difference in the mean value of opinion about the fact is found to be statistically significant ($P < 0.05$) as the mean of RSRTC group (3.747) is significantly higher than that of HR group (3.319).

The results of the analysis show that in terms of Vehicles Meeting Environmental Concerns, a larger number of passengers of RSRTC opine negatively as compared to that of HR.

After analyzing abovementioned variables, it is clear that passengers of both the organizations are not satisfied with the product (bus) and its features including seats, luggage racks, interior, etc. However, passengers of HR opine more positively with regard to majority of the variables.

II Physical Evidence

5.3.2.7 Appearance of Staff in Proper Uniform

Table 5.19

Comparison of Customers' Opinion about Appearance of Staff in Proper Uniform

Staff appears in proper uniform		Road Transport		Total
		HR	RSRTC	
Strongly Disagree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Disagree	Count	0	27	27
	%	0.0%	11.0%	5.7%
Neutral	Count	212	212	424
	%	91.4%	86.5%	88.9%
Agree	Count	20	6	26
	%	8.6%	2.4%	5.5%
Strongly Agree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Total	Count	232	245	477
	%	100.0%	100.0%	100.0%
Mean Score		3.086	2.914	
Std. Deviation		0.281	0.358	
T Test		5.815		Significant
P Value		0.000		

The above table shows the comparison between respondents' opinion about Appearance of Staff in Proper Uniform based on chosen road transport organizations.

A higher percentage (91.4%) of respondents belonging to HR show neutral response to the fact whereas a majority of respondents (86.5%) belonging to RSRTC also give the same response to Appearance of Staff in Proper Uniform.

Further, the difference in the mean value of opinion about the fact is found to be statistically significant ($P < 0.05$) as the mean of HR group (3.086) is significantly higher than that of RSRTC group (2.914).

The results of the analysis show that in terms of Appearance of Staff in Proper Uniform, a larger number of passengers of HR opine indifferent as compared to that of RSRTC.

5.3.2.8 Enough Seating Facilities and Shades at Bus Stations

Table 5.20

Comparison of Customers' Opinion about Enough Seating Facilities and Shades at Bus Stations

Enough Seating Facilities and Shades at Bus Stations		Road Transport		Total
		HR	RSRTC	
Strongly Disagree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Disagree	Count	147	64	211
	%	63.4%	26.1%	44.2%
Neutral	Count	10	57	67
	%	4.3%	23.3%	14.0%
Agree	Count	75	124	199
	%	32.3%	50.6%	41.7%
Strongly Agree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Total	Count	232	245	477
	%	100.0%	100.0%	100.0%
Mean Score		2.690	3.245	
Std. Deviation		0.930	0.843	
T Test		6.840		Significant
P Value		0.000		

The above table shows the comparison between respondents' opinion about Enough Seating Facilities and Shades at Bus Stations based on chosen road transport organizations.

A higher percentage (63.4%) of respondents belonging to HR disagree the fact whereas a majority of respondents (50.6%) belonging to RSRTC agree about Enough Seating Facilities and Shades at Bus Stations.

Further, the difference in the mean value of opinion about the fact is found to be statistically significant ($P < 0.05$) as the mean of RSRTC group (3.245) is significantly higher than that of HR group (2.690).

The results of the analysis show that in terms of Enough Seating Facilities and Shades at Bus Stations, a larger number of passengers of RSRTC opine positively as compared to that of HR.

5.3.2.9 Availability of Safe Drinking Water

Table 5.21

Comparison of Customers' Opinion about Availability of Safe Drinking Water

Availability of Safe Drinking Water		Road Transport		Total
		HR	RSRTC	
Strongly Disagree	Count	8	0	8
	%	3.4%	0.0%	1.7%
Disagree	Count	128	64	192
	%	55.2%	26.1%	40.3%
Neutral	Count	10	69	79
	%	4.3%	28.2%	16.6%
Agree	Count	86	112	198
	%	37.1%	45.7%	41.5%
Strongly Agree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Total	Count	232	245	477
	%	100.0%	100.0%	100.0%
Mean Score		2.750	3.196	
Std. Deviation		1.001	0.826	
T Test		5.317		Significant
P Value		0.000		

The above table shows the comparison between respondents' opinion about Availability of Safe Drinking Water based on chosen road transport organizations.

A higher percentage (55.2%) of respondents belonging to HR disagree the fact whereas a majority of respondents (45.7%) belonging to RSRTC agree about Availability of Safe Drinking Water.

Further, the difference in the mean value of opinion about the fact is found to be statistically significant ($P < 0.05$) as the mean of RSRTC group (3.196) is significantly higher than that of HR group (2.750).

The results of the analysis show that in terms of Availability of Safe Drinking Water, a larger number of passengers of RSRTC opine positively as compared to that of HR.

5.3.2.10 Cleanliness of Toilets

Table 5.22

Comparison of Customers' Opinion about Cleanliness of Toilets

Cleanliness of Toilets		Road Transport		Total
		HR	RSRTC	
Strongly Disagree	Count	46	13	59
	%	19.8%	5.3%	12.4%
Disagree	Count	106	142	248
	%	45.7%	58.0%	52.0%
Neutral	Count	15	84	99
	%	6.5%	34.3%	20.8%
Agree	Count	65	6	71
	%	28.0%	2.4%	14.9%
Strongly Agree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Total	Count	232	245	477
	%	100.0%	100.0%	100.0%
Mean Score		2.427	2.339	
Std. Deviation		1.099	0.617	
T Test		1.085		Non-Significant
P Value		0.278		

The above table shows the comparison between respondents' opinion about Cleanliness of Toilets based on chosen road transport organizations.

Respondents travelling in buses of these organizations have almost similar view about the abovementioned fact. A majority of sample respondents of both the organizations disagree about Cleanliness of Toilets.

The difference in mean value of opinion about this factis found to be statistically non-significant ($P>0.05$) as mean of HR group (2.427) is slightly higher than that of RSRTC group (2.339).

The results of the analysis show that the mean score for opinion about Cleanliness of Toilets does not differ with the change in organization.

5.3.2.11 Availability of Enough Parking Spaces

Table 5.23

Comparison of Customers' Opinion about Availability of Enough Parking Spaces

Enough Parking Space		Road Transport		Total
		HR	RSRTC	
Strongly Disagree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Disagree	Count	40	26	66
	%	17.2%	10.6%	13.8%
Neutral	Count	177	196	373
	%	76.3%	80.0%	78.2%
Agree	Count	15	23	38
	%	6.5%	9.4%	8.0%
Strongly Agree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Total	Count	232	245	477
	%	100.0%	100.0%	100.0%
Mean Score		2.892	2.988	
Std. Deviation		0.476	0.488	
T Test		2.258		Significant
P Value		0.024		

The above table shows the comparison between respondents' opinion about Availability of Enough Parking Space based on chosen road transport organizations.

A higher percentage (80%) of respondents belonging to RSRTC show neutral response to the fact whereas a majority of respondents (76.3%) belonging to HR also show neutral response about Availability of Enough Parking Space.

Further, the difference in the mean value of opinion about the fact is found to be statistically significant ($P < 0.05$) as the mean of RSRTC group (2.988) is significantly higher than that of HR group (2.892).

The results of the analysis show that in terms of Availability of Enough Parking Space, a larger number of passengers of RSRTC opine neutral as compared to that of HR.

After analyzing abovementioned variables, it is clear that passengers of both the organizations are not satisfied with the physical evidences including facilities at station, appearance of staff, etc. However, passengers of RSRTC opine more positively with regard to majority of the variables.

III. Process

5.3.2.12 Notification of Delay in Advance

Table 5.24

Comparison of Customers' Opinion about Notification of Delay in Advance

Notification of Delay in Advance		Road Transport		Total
		HR	RSRTC	
Strongly Disagree	Count	5	0	5
	%	2.2%	0.0%	1.0%
Disagree	Count	67	122	189
	%	28.9%	49.8%	39.6%
Neutral	Count	94	106	200
	%	40.5%	43.3%	41.9%
Agree	Count	66	17	83
	%	28.4%	6.9%	17.4%
Strongly Agree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Total	Count	232	245	477
	%	100.0%	100.0%	100.0%
Mean Score		2.953	2.571	
Std. Deviation		0.812	0.621	
T Test		5.776		Significant
P Value		0.000		

The above table shows the comparison between respondents' opinion about Notification of Delay in Advance based on chosen road transport organizations.

A higher percentage (49.8%) of respondents belonging to RSRTC disagree the fact whereas a majority of respondents (40.5%) belonging to HR show neutral response about Notification of Delay in Advance.

Further, the difference in the mean value of opinion about the fact is found to be statistically significant ($P < 0.05$) as the mean of HR group (2.953) is significantly higher than that of RSRTC group (2.571).

The results of the analysis show that in terms of Notification of Delay in Advance, a larger number of passengers of HR opine positively as compared to that of RSRTC.

5.3.2.13 Low Probability of Accidents

Table 5.25

Comparison of Customers' Opinion about Low Probability of Accidents

Low Probability of Accidents		Road Transport		Total
		HR	RSRTC	
Strongly Disagree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Disagree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Neutral	Count	20	0	20
	%	8.6%	0.0%	4.2%
Agree	Count	212	163	375
	%	91.4%	66.5%	78.6%
Strongly Agree	Count	0	82	82
	%	0.0%	33.5%	17.2%
Total	Count	232	245	477
	%	100.0%	100.0%	100.0%
Mean Score		3.914	4.335	
Std. Deviation		0.281	0.473	
T Test		11.734		Significant
P Value		0.000		

The above table shows the comparison between respondents' opinion about Low Probability of Accidents based on chosen road transport organizations.

A higher percentage (100%) of respondents belonging to RSRTC agree the fact whereas a majority of respondents (91.4%) belonging to HR agree about Low Probability of Accidents.

Further, the difference in the mean value of opinion about the fact is found to be statistically significant ($P < 0.05$) as the mean of RSRTC group (4.335) is significantly higher than that of HR group (3.914).

The results of the analysis show that in terms of Low Probability of Accidents, a larger number of passengers of RSRTC opine positively as compared to that of HR.

5.3.2.14 Rare Breakdown of Buses on Route

Table 5.26

Comparison of Customers' Opinion about Rare Breakdown of Buses on Route

Buses hardly breakdown on route		Road Transport		Total
		HR	RSRTC	
Strongly Disagree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Disagree	Count	9	9	18
	%	3.9%	3.7%	3.8%
Neutral	Count	110	147	257
	%	47.4%	60.0%	53.9%
Agree	Count	113	89	202
	%	48.7%	36.3%	42.3%
Strongly Agree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Total	Count	232	245	477
	%	100.0%	100.0%	100.0%
Mean Score		3.448	3.327	
Std. Deviation		0.571	0.543	
T Test		2.387		Significant
P Value		0.017		

The above table shows the comparison between respondents' opinion about Rare Breakdown of Buses on Route based on chosen road transport organizations.

A higher percentage (60%) of respondents belonging to RSRTC show neutral response to the fact whereas a majority of respondents (48.7%) belonging to HR agree about Rare Breakdown of Buses on Route.

Further, the difference in the mean value of opinion about the fact is found to be statistically significant ($P < 0.05$) as the mean of HR group (3.448) is significantly higher than that of RSRTC group (3.327).

The results of the analysis show that in terms of Rare Breakdown of Buses on Route, a larger number of passengers of HR opine positively as compared to that of RSRTC.

5.3.2.15 Easy Booking of Tickets

Table 5.27

Comparison of Customers' Opinion about Easy Booking of Tickets

Easy Booking of Tickets		Road Transport		Total
		HR	RSRTC	
Strongly Disagree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Disagree	Count	11	0	11
	%	4.7%	0.0%	2.3%
Neutral	Count	9	0	9
	%	3.9%	0.0%	1.9%
Agree	Count	212	245	457
	%	91.4%	100.0%	95.8%
Strongly Agree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Total	Count	232	245	477
	%	100.0%	100.0%	100.0%
Mean Score		3.866	4.000	
Std. Deviation		0.460	0.000	
T Test		4.548		Significant
P Value		0.000		

The above table shows the comparison between respondents' opinion about Easy Booking of Tickets based on chosen road transport organizations.

A higher percentage (100%) of respondents belonging to RSRTC agree the fact whereas a majority of respondents (91.4%) belonging to HR agree about Easy Booking of Tickets.

Further, the difference in the mean value of opinion about the fact is found to be statistically significant ($P < 0.05$) as the mean of RSRTC group (4.000) is significantly higher than that of HR group (3.866).

The results of the analysis show that in terms of Easy Booking of Tickets, a larger number of passengers of RSRTC opine positively as compared to that of HR.

5.3.2.16 Ensuring Security of Passengers and Parcels

Table 5.28

Comparison of Customers' Opinion about Ensuring Security of Passengers and Parcels

Ensuring Security of Passengers and Parcels		Road Transport		Total
		HR	RSRTC	
Strongly Disagree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Disagree	Count	122	75	197
	%	52.6%	30.6%	41.3%
Neutral	Count	30	42	72
	%	12.9%	17.1%	15.1%
Agree	Count	80	128	208
	%	34.5%	52.2%	43.6%
Strongly Agree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Total	Count	232	245	477
	%	100.0%	100.0%	100.0%
Mean Score		2.819	3.216	
Std. Deviation		0.917	0.886	
T Test		4.812		Significant
P Value		0.000		

The above table shows the comparison between respondents' opinion about Ensuring Security of Passengers and Parcels based on chosen road transport organizations.

A higher percentage (52.6%) of respondents belonging to HR disagree the fact whereas a majority of respondents (52.2%) belonging to RSRTC agree with Ensuring Security of Passengers and Parcels.

Further, the difference in the mean value of opinion about the fact is found to be statistically significant ($P < 0.05$) as the mean of RSRTC group (3.216) is significantly higher than that of HR group (2.819).

The results of the analysis show that in terms of Ensuring Security of Passengers and Parcels, a larger number of passengers of RSRTC opine positively as compared to that of HR.

5.3.2.17 Enough Measures for Loading and Off-loading Security

Table 5.29

Comparison of Customers' Opinion about Having Enough Measures for Loading and Off-loading Security

Enough Measures for Loading and Off-loading Security		Road Transport		Total
		HR	RSRTC	
Strongly Disagree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Disagree	Count	52	5	57
	%	22.4%	2.0%	11.9%
Neutral	Count	175	223	398
	%	75.4%	91.0%	83.4%
Agree	Count	5	17	22
	%	2.2%	6.9%	4.6%
Strongly Agree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Total	Count	232	245	477
	%	100.0%	100.0%	100.0%
Mean Score		2.797	3.049	
Std. Deviation		0.453	0.296	
T Test		7.211		Significant
P Value		0.000		

The above table shows the comparison between respondents' opinion about Having Enough Measures for Loading and Off-loading Security based on chosen road transport organizations.

A higher percentage (91%) of respondents belonging to RSRTC show neutral response to the fact whereas a majority of respondents (75.4%) belonging to HR also show neutral response about Having Enough Measures for Loading and Off-loading Security.

Further, the difference in the mean value of opinion about the fact is found to be statistically significant ($P < 0.05$) as the mean of RSRTC group (3.049) is significantly higher than that of HR group (2.797).

The results of the analysis show that in terms of Having Enough Measures for Loading and Off-loading Security, a larger number of passengers of HR opine negatively as compared to that of RSRTC.

5.3.2.18 Consistency in Providing Quality Services

Table 5.30

Comparison of Customers' Opinion about Consistency in Providing Quality Services

Consistency in Providing Quality Services		Road Transport		Total
		HR	RSRTC	
Strongly Disagree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Disagree	Count	71	135	206
	%	30.6%	55.1%	43.2%
Neutral	Count	76	92	168
	%	32.8%	37.6%	35.2%
Agree	Count	85	18	103
	%	36.6%	7.3%	21.6%
Strongly Agree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Total	Count	232	245	477
	%	100.0%	100.0%	100.0%
Mean Score		3.060	2.522	
Std. Deviation		0.820	0.631	
T Test		8.057		Significant
P Value		0.000		

The above table shows the comparison between respondents' opinion about Consistency in Providing Quality Services based on chosen road transport organizations.

A higher percentage (55.1%) of respondents belonging to RSRTC disagree the fact whereas a majority of respondents (36.6%) belonging to HR agree about Consistency in Providing Quality Services.

Further, the difference in the mean value of opinion about the fact is found to be statistically significant ($P < 0.05$) as the mean of HR group (3.060) is significantly higher than that of RSRTC group (2.522).

The results of the analysis show that in terms of Consistency in Providing Quality Services, a larger number of passengers of HR opine positively as compared to that of RSRTC.

5.3.2.19 Proper and Immediate Response to Telephone Enquiry

Table 5.31

Comparison of Customers' Opinion about Proper and Immediate Response to Telephone Enquiry

Proper and Immediate Response to Telephone Enquiry		Road Transport		Total
		HR	RSRTC	
Strongly Disagree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Disagree	Count	95	60	155
	%	40.9%	24.5%	32.5%
Neutral	Count	107	173	280
	%	46.1%	70.6%	58.7%
Agree	Count	30	12	42
	%	12.9%	4.9%	8.8%
Strongly Agree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Total	Count	232	245	477
	%	100.0%	100.0%	100.0%
Mean Score		2.720	2.804	
Std. Deviation		0.680	0.506	
T Test		1.540		Non-Significant
P Value		0.124		

The above table shows the comparison between respondents' opinion about Proper and Immediate Response to Telephone Enquiry based on chosen road transport organizations.

Respondents travelling in buses of these organizations have almost similar view about the abovementioned fact. A majority of sample respondents of both the organizations are neutral about Proper and Immediate Response to Telephone Enquiry.

The difference in mean value of opinion about this factis found to be statistically non-significant ($P>0.05$) as mean of RSRTC group (2.804) is slightly higher than that of HR group (2.720).

The results of the analysis show that the mean score for opinion about Proper and Immediate Response to Telephone Enquiry does not differ with the change in organization.

5.3.2.20 Providing Emergency Services (Medical facility, etc.)

Table 5.32

Comparison of Customers' Opinion about Providing Emergency Services

Providing Emergency Services		Road Transport		Total
		HR	RSRTC	
Strongly Disagree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Disagree	Count	0	5	5
	%	0.0%	2.0%	1.0%
Neutral	Count	222	240	462
	%	95.7%	98.0%	96.9%
Agree	Count	10	0	10
	%	4.3%	0.0%	2.1%
Strongly agree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Total	Count	232	245	477
	%	100.0%	100.0%	100.0%
Mean Score		3.043	2.980	
Std. Deviation		0.204	0.142	
T Test		3.973		Significant
P Value		0.000		

The above table shows the comparison between respondents' opinion about Providing Emergency Services based on chosen road transport organizations.

A higher percentage (98%) of respondents belonging to RSRTC show neutral response to the fact whereas a majority of respondents (95.7%) belonging to HR also show neutral response about Providing Emergency Services.

Further, the difference in the mean value of opinion about the fact is found to be statistically significant ($P < 0.05$) as the mean of HR group (3.043) is significantly higher than that of RSRTC group (2.980).

The results of the analysis show that in terms of Providing Emergency Services, a larger number of passengers of RSRTC opine neutral as compared to that of HR.

5.3.2.21 Drivers/Conductors Having Sufficient Rest Hours between Two Journeys

Table 5.33

Comparison of Customers' Opinion about Drivers/Conductors Having Sufficient Rest Hours between Two Journeys

Sufficient rest hours between two journeys		Road Transport		Total
		HR	RSRTC	
Yes	Count	10	20	30
	%	4.3%	8.2%	6.3%
No	Count	0	0	0
	%	0.0%	0.0%	0.0%
Can't Say	Count	222	225	447
	%	95.7%	91.8%	93.7%
Total	Count	232	245	477
	%	100.0%	100.0%	100.0%
Mean Score		2.837	2.914	
Std Deviation		0.549	0.407	
T Test		-1.734		Non-Significant
P Value		0.084		

The above table shows the comparison between respondents' opinion about Drivers/Conductors Having Sufficient Rest Hours between Two Journeys based on chosen road transport organizations.

Respondents travelling in buses of these organizations have almost similar view about the abovementioned fact. More than 90% sample passengers of both the organizations show neutral response in this regard.

The difference in mean value of opinion is found to be statistically non-significant ($P > 0.05$) as mean of RSRTC group (2.914) is slightly higher than that of HR group (2.837).

The results of the analysis show that the mean score for opinion about Drivers/Conductors Having Sufficient Rest Hours between Two Journeys does not differ with the change in organization.

After analyzing abovementioned variables, it is clear that passengers of both the organizations are somewhat satisfied with the process including managing services, adopting measures for safety and security, etc. However, passengers of RSRTC opine more positively with regard to majority of the variables.

IV People

5.3.2.22 Working Experience of Drivers/Conductors

Table 5.34

Comparison of Customers' Opinion about Working Experience of Drivers/Conductors

Working experience of drivers/conductors		Road Transport		Total
		HR	RSRTC	
Up to 5 Years	Count	0	0	0
	%	0.0%	0.0%	0.0%
>5 Years	Count	75	74	149
	%	32.3%	30.2%	31.2%
Can't Say	Count	157	171	328
	%	67.7%	69.8%	68.8%
Total	Count	232	245	477
	%	100.0%	100.0%	100.0%
Mean Score		2.698	2.677	
Std. Deviation		0.460	0.469	
T Test		0.499		Non-Significant
P Value		0.618		

The above table shows the comparison between respondents' opinion about working experience of drivers/conductors based on chosen road transport organizations.

Respondents travelling in buses of these organizations have almost similar view about working experience of drivers/conductors. Almost 30% believe that drivers/conductors of these buses have more than 5 years of experience.

The difference in mean value of opinion about working experience of drivers/conductors is found to be statistically non-significant ($P > 0.05$) as mean of RSRTC group (2.7) is slightly higher than that of HR group (2.68).

The results of the analysis show that the mean score for opinion about working experience of drivers/conductors does not differ with the change in organization.

5.3.2.23 Drivers having Sufficient Driving Skills

Table 5.35

Comparison of Customers' Opinion about Drivers having Sufficient Driving Skills

Drivers having Sufficient Driving skills		Road Transport		Total
		HR	RSRTC	
Strongly Disagree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Disagree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Neutral	Count	17	0	17
	%	7.3%	0.0%	3.6%
Agree	Count	215	191	406
	%	92.7%	78.0%	85.1%
Strongly Agree	Count	0	54	54
	%	0.0%	22.0%	11.3%
Total	Count	232	245	477
	%	100.0%	100.0%	100.0%
Mean Score		3.927	4.220	
Std. Deviation		0.261	0.415	
T Test		9.186		Significant
P Value		0.000		

The above table shows the comparison between respondents' opinion about Drivers having Sufficient Driving Skills based on chosen road transport organizations.

A higher percentage (92.7%) of respondents belonging to HR agree the fact whereas all the respondents (100%) belonging to RSRTC agree about Drivers having Sufficient Driving Skills.

Further, the difference in the mean value of opinion about the fact is found to be statistically significant ($P < 0.05$) as the mean of RSRTC group (4.220) is significantly higher than that of HR group (3.927).

The results of the analysis show that in terms of Drivers having Sufficient Driving Skills, a larger number of passengers of RSRTC opine positively as compared to that of HR.

5.3.2.24 Customer Contact Personnel being Courteous, Polite, Respectful and Friendly

Table 5.36

Comparison of Customers' Opinion about Customer Contact Personnel being Courteous, Polite, Respectful and Friendly

Customer Contact Personnel being Courteous, Polite, Respectful and Friendly		Road Transport		Total
		HR	RSRTC	
Strongly Disagree	Count	0	11	11
	%	0.0%	4.5%	2.3%
Disagree	Count	152	91	243
	%	65.5%	37.1%	50.9%
Neutral	Count	15	66	1
	%	6.5%	26.9%	0.2%
Agree	Count	65	77	142
	%	28.0%	31.4%	29.8%
Strongly agree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Total	Count	232	245	477
	%	100.0%	100.0%	100.0%
Mean Score		2.625	2.853	
Std. Deviation		0.893	0.920	
T Test		2.744		Significant
P Value		0.006		

The above table shows the comparison between respondents' opinion about Customer Contact Personnel being Courteous, Polite, Respectful and Friendly based on chosen road transport organizations.

A higher percentage (65.5%) of respondents belonging to HR disagree the fact whereas a majority of respondents (41.6%) belonging to RSRTC disagree about Customer Contact Personnel being Courteous, Polite, Respectful and Friendly.

Further, the difference in the mean value of opinion about the fact is found to be statistically significant ($P < 0.05$) as the mean of RSRTC group (2.853) is significantly higher than that of HR group (2.625).

The results of the analysis show that in terms of Customer Contact Personnel being Courteous, Polite, Respectful and Friendly, a larger number of passengers of RSRTC opine positively as compared to that of HR.

5.3.2.25 Contact Personnel being Credible, Honest and Trustworthy

Table 5.37

Comparison of Customers' Opinion about Contact Personnel being Credible, Honest and Trustworthy

Contact Personnel being Credible, Honest and Trustworthy		Road Transport		Total
		HR	RSRTC	
Strongly Disagree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Disagree	Count	75	0	75
	%	32.3%	0.0%	15.7%
Neutral	Count	147	222	369
	%	63.4%	90.6%	77.4%
Agree	Count	10	23	33
	%	4.3%	9.4%	6.9%
Strongly Agree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Total	Count	232	245	477
	%	100.0%	100.0%	100.0%
Mean Score		2.720	3.094	
Std. Deviation		0.538	0.292	
T Test		9.506		Significant
P Value		0.000		

The above table shows the comparison between respondents' opinion about Customer Contact Personnel being Credible, Honest and Trustworthy based on chosen road transport organizations.

A higher percentage (90.6%) of respondents belonging to RSRTC show neutral response to the fact whereas a majority of respondents (63.4%) belonging to HR also show neutral response about Customer Contact Personnel being Credible, Honest and Trustworthy.

Further, the difference in the mean value of opinion about the fact is found to be statistically significant ($P < 0.05$) as the mean of RSRTC group (3.094) is significantly higher than that of HR group (2.720).

The results of the analysis show that in terms of Customer Contact Personnel being Credible, Honest and Trustworthy, a larger number of passengers of HR opine negatively as compared to that of RSRTC.

5.3.2.26 Employees' Readiness to Serve Passengers

Table 5.38

Comparison of Customers' Opinion about Employees' Readiness to Serve Passengers

Employees' Readiness to Serve Passengers		Road Transport		Total
		HR	RSRTC	
Strongly Disagree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Disagree	Count	107	85	192
	%	46.1%	34.7%	40.3%
Neutral	Count	100	131	231
	%	43.1%	53.5%	48.4%
Agree	Count	25	29	54
	%	10.8%	11.8%	11.3%
Strongly Agree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Total	Count	232	245	477
	%	100.0%	100.0%	100.0%
Mean Score		2.647	2.771	
Std. Deviation		0.668	0.644	
T Test		2.079		Significant
P Value		0.038		

The above table shows the comparison between respondents' opinion about Employees' Readiness to Serve Passengers based on chosen road transport organizations.

A higher percentage (53.5%) of respondents belonging to RSRTC show neutral response to the fact whereas a majority of respondents (46.1%) belonging to HR disagree about Employees' Readiness to Serve Passengers.

Further, the difference in the mean value of opinion about the fact is found to be statistically significant ($P < 0.05$) as the mean of RSRTC group (2.771) is significantly higher than that of HR group (2.647).

The results of the analysis show that in terms of Employees' Readiness to Serve Passengers, a larger number of passengers of HR opine negatively as compared to that of RSRTC.

5.3.2.27 Supporting Communal Harmony

Table 5.39

Comparison of Customers' Opinion about Supporting Communal Harmony

Supporting Communal Harmony		Road Transport		Total
		HR	RSRTC	
Strongly Disagree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Disagree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Neutral	Count	73	6	79
	%	31.5%	2.4%	16.6%
Agree	Count	159	167	326
	%	68.5%	68.2%	68.3%
Strongly Agree	Count	0	72	72
	%	0.0%	29.4%	15.1%
Total	Count	232	245	477
	%	100.0%	100.0%	100.0%
Mean Score		3.685	4.269	
Std. Deviation		0.465	0.497	
T Test		13.233		Significant
P Value		0.000		

The above table shows the comparison between respondents' opinion about Supporting Communal Harmony based on chosen road transport organizations.

A higher percentage (97.6%) of respondents belonging to RSRTC agree the fact whereas a majority of respondents (68.5%) belonging to HR agree about Supporting Communal Harmony.

Further, the difference in the mean value of opinion about the fact is found to be statistically significant ($P < 0.05$) as the mean of RSRTC group (4.269) is significantly higher than that of HR group (3.685).

The results of the analysis show that in terms of Supporting Communal Harmony, a larger number of passengers of RSRTC opine positively as compared to that of HR.

After analyzing abovementioned variables, it is clear that passengers of both the organizations are somewhat satisfied with the People component of marketing mix including employees behaviors, their responsiveness, etc. However, passengers of RSRTC opine more positively with regard to majority of the variables.

V Place

5.3.2.28 Easy Accessibility of Buses

Table 5.40

Comparison of Customers' Opinion about Easy Accessibility of Buses

Easy Accessibility of Buses		Road Transport		Total
		HR	RSRTC	
Strongly Disagree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Disagree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Neutral	Count	37	11	48
	%	15.9%	4.5%	10.1%
Agree	Count	195	145	340
	%	84.1%	59.2%	71.3%
Strongly Agree	Count	0	89	89
	%	0.0%	36.3%	18.7%
Total	Count	232	245	477
	%	100.0%	100.0%	100.0%
Mean Score		3.841	4.318	
Std. Deviation		0.367	0.555	
T Test		11.028		Significant
P Value		0.000		

The above table shows the comparison between respondents' opinion about Easy Accessibility of Buses based on chosen road transport organizations.

A higher percentage (95.5%) of respondents belonging to RSRTC agree the fact whereas a majority of respondents (84.1%) belonging to HR also agree about Easy Accessibility of Buses.

Further, the difference in the mean value of opinion about the fact is found to be statistically significant ($P < 0.05$) as the mean of RSRTC group (4.318) is significantly higher than that of HR group (3.841).

The results of the analysis show that in terms of Easy Accessibility of Buses, a larger number of passengers of RSRTC opine positively as compared to that of HR.

5.3.2.29 No Delay in Arrival and Departure

Table 5.41

Comparison of Customers' Opinion about No Delay in Arrival and Departure

No Delay in Arrival and Departure		Road Transport		Total
		HR	RSRTC	
Strongly Disagree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Disagree	Count	95	96	191
	%	40.9%	39.2%	40.0%
Neutral	Count	41	48	89
	%	17.7%	19.6%	18.7%
Agree	Count	96	101	197
	%	41.4%	41.2%	41.3%
Strongly agree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Total	Count	232	245	477
	%	100.0%	100.0%	100.0%
Mean Score		3.004	3.020	
Std. Deviation		0.909	0.898	
T Test		0.194		Non-Significant
P Value		0.846		

The above table shows the comparison between respondents' opinion about No Delay in Arrival and Departure based on chosen road transport organizations.

Respondents travelling in buses of these organizations have almost similar view about the abovementioned fact. A majority of sample respondents of both the organizations agree about No Delay in Arrival and Departure.

The difference in mean value of opinion about this factis found to be statistically non-significant ($P>0.05$) as mean of RSRTC group (3.020) is slightly higher than that of HR group (3.004).

The results of the analysis show that the mean score for opinion about No Delay in Arrival and Departure does not differ with the change in organization.

5.3.2.30 Maintaining Regularity of Service

Table 5.42

Comparison of Customers' Opinion about Maintaining Regularity of Service

Maintaining Regularity of Service		Road Transport		Total
		HR	RSRTC	
Strongly Disagree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Disagree	Count	71	29	100
	%	30.6%	11.8%	21.0%
Neutral	Count	65	67	132
	%	28.0%	27.3%	27.7%
Agree	Count	96	149	245
	%	41.4%	60.8%	51.4%
Strongly agree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Total	Count	232	245	477
	%	100.0%	100.0%	100.0%
Mean Score		3.108	3.490	
Std. Deviation		0.843	0.699	
T Test		5.398		Significant
P Value		0.000		

The above table shows the comparison between respondents' opinion about Maintaining Regularity of Service based on chosen road transport organizations.

A higher percentage (60.8%) of respondents belonging to RSRTC agree the fact whereas a majority of respondents (41.4%) belonging to HR agree about Maintaining Regularity of Service.

Further, the difference in the mean value of opinion about the fact is found to be statistically significant ($P < 0.05$) as the mean of RSRTC group (3.490) is significantly higher than that of HR group (3.108).

The results of the analysis show that in terms of Maintaining Regularity of Service, a larger number of passengers of RSRTC opine positively as compared to that of HR.

5.3.2.31 Arrangements of Alternatives in Excessive Demand

Table 5.43

Comparison of Customers' Opinion about Arrangements of Alternatives in Excessive Demand

Arrangements of Alternatives in Excessive Demand		Road Transport		Total
		HR	RSRTC	
Strongly Disagree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Disagree	Count	41	4	45
	%	17.7%	1.6%	9.4%
Neutral	Count	73	11	84
	%	31.5%	4.5%	17.6%
Agree	Count	118	212	330
	%	50.9%	86.5%	69.2%
Strongly agree	Count	0	18	18
	%	0.0%	7.3%	3.8%
Total	Count	232	245	477
	%	100.0%	100.0%	100.0%
Mean Score		3.332	3.996	
Std. Deviation		0.760	0.429	
T Test		11.826		Significant
P Value		0.000		

The above table shows the comparison between respondents' opinion about Arrangements of Alternatives in Excessive Demand based on chosen road transport organizations.

A higher percentage (93.8%) of respondents belonging to RSRTC agree the fact whereas a majority of respondents (50.9%) belonging to HR also agree about Arrangements of Alternatives in Excessive Demand.

Further, the difference in the mean value of opinion about the fact is found to be statistically significant ($P < 0.05$) as the mean of RSRTC group (3.996) is significantly higher than that of HR group (3.332).

The results of the analysis show that in terms of Arrangements of Alternatives in Excessive Demand, a larger number of passengers of RSRTC opine positively as compared to that of HR.

After analyzing abovementioned variables, it is clear that passengers of both the organizations are somewhat satisfied with the Place component of marketing mix including accessibility of bus services, its regularity, etc. However, passengers of RSRTC opine more positively with regard to majority of the variables.

VI Price

5.3.2.32 Reasonable Bus Fare

Table 5.44

Comparison of Customers' Opinion about Reasonable Bus Fare

Fare is reasonable		Road Transport		Total
		HR	RSRTC	
Strongly Disagree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Disagree	Count	110	6	116
	%	47.4%	2.4%	24.3%
Neutral	Count	18	16	34
	%	7.8%	6.5%	7.1%
Agree	Count	104	223	327
	%	44.8%	91.0%	68.6%
Strongly agree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Total	Count	232	245	477
	%	100.0%	100.0%	100.0%
Mean Score		2.974	3.886	
Std. Deviation		0.962	0.388	
T Test		13.699		Significant
P Value		0.000		

The above table shows the comparison between respondents' opinion about Reasonable Bus Fare based on chosen road transport organizations.

A higher percentage (91%) of respondents belonging to RSRTC agree the fact whereas a majority of respondents (47.4%) belonging to HR disagree about Reasonable Bus Fare.

Further, the difference in the mean value of opinion about the fact is found to be statistically significant ($P < 0.05$) as the mean of RSRTC group (3.886) is significantly higher than that of HR group (2.974).

The results of the analysis show that in terms of Reasonable Bus Fare, a larger number of passengers of RSRTC opine positively as compared to that of HR.

5.3.2.33 Concessional Fare for Underprivileged Passengers

Table 5.45

Comparison of Customers' Opinion about Concessional Fare for Underprivileged Passengers

Concessional Fare for Underprivileged Passengers		Road Transport		Total
		HR	RSRTC	
Strongly Disagree	Count	0	0	0
	%	0.0%	0.0%	0.0%
Disagree	Count	11	0	11
	%	4.7%	0.0%	2.3%
Neutral	Count	40	5	45
	%	17.2%	2.0%	9.4%
Agree	Count	181	234	415
	%	78.0%	95.5%	87.0%
Strongly agree	Count	0	6	6
	%	0.0%	2.4%	1.3%
Total	Count	232	245	477
	%	100.0%	100.0%	100.0%
Mean Score		3.733	4.004	
Std. Deviation		0.540	0.212	
T Test		7.289		Significant
P Value		0.000		

The above table shows the comparison between respondents' opinion about Concessional Fare for Underprivileged Passengers based on chosen road transport organizations.

A higher percentage (97.9%) of respondents belonging to RSRTC agree the fact whereas a majority of respondents (78%) belonging to HR also agree about Concessional Fare for Underprivileged Passengers.

Further, the difference in the mean value of opinion about the fact is found to be statistically significant ($P < 0.05$) as the mean of RSRTC group (4.004) is significantly higher than that of HR group (3.733).

The results of the analysis show that in terms of Concessional Fare for Underprivileged Passengers, a larger number of passengers of RSRTC opine positively as compared to that of HR.

After analyzing abovementioned variables, it is clear that passengers of RSRTC are more satisfied with the Price component of marketing mix including bus fare, concessional fare, etc. Hence, passengers of RSRTC opine more positively with regard to fare of its buses.

Conclusion

It can be concluded from the abovementioned analyses that both the organizations are lagging behind in managing their marketing mix successfully. However, among the 6 Ps', RSRTC has been doing better in terms of all the Ps'.

Thus, null hypothesis was rejected and alternate hypothesis was accepted that there is a significant difference between the effectiveness of marketing mix of RSRTC and HR.

5.3.3 Hypothesis- 3

H₀ (Null Hypothesis): There is no significant difference in the opinions of RSRTC and HR passengers about satisfaction derived from quality of services delivered.

H₃ (Alternate Hypothesis): There is a significant difference in the opinions of RSRTC and HR passengers about satisfaction derived from quality of services delivered.

5.3.3.1 Standard of Services Delivered

Table 5.46

Comparison of Customers' Opinion about Standard of Services Delivered

Standard of Services Delivered		Road Transport		Total
		HR	RSRTC	
Excellent	Count	9	108	117
	%	3.70%	46.60%	24.50%
Good	Count	0	0	0
	%	0.00%	0.00%	0.00%
Average	Count	151	94	245
	%	61.60%	40.50%	51.40%
Poor	Count	85	30	115
	%	34.70%	12.90%	24.10%
Very Poor	Count	0	0	0
	%	0.00%	0.00%	0.00%
Total	Count	245	232	477
	%	100.00%	100.00%	100.00%
Mean Score		2.664	3.31	
Std. Deviation		0.696	0.537	
T Test		11.393		Significant
P Value		0.000		

The above table shows the comparison between respondents' opinion about Standard of Services Provided based on chosen road transport organizations.

A higher percentage (61.6%) of respondents belonging to HR respond Average to the fact whereas a majority of respondents (46.60%) belonging to RSRTC give Excellent to Standard of Services Provided.

Further, the difference in the mean value of opinion about the fact is found to be statistically significant ($P < 0.05$) as the mean of RSRTC group (3.310) is significantly higher than that of HR group (2.664).

The results of the analysis show that in terms of Standard of Services Provided, a larger number of passengers of RSRTC give excellent response as compared to that of HR.

5.3.3.2 Handling Passengers' Problems

Table 5.47

Comparison of Customers' Opinion about Handling Passengers' Problems

Handling Passenger's Problems		Road Transport		Total
		HR	RSRTC	
Excellent	Count	112	114	226
	%	45.70%	49.10%	47.40%
Good	Count	15	0	15
	%	6.10%	0.00%	3.10%
Average	Count	82	113	195
	%	33.50%	48.70%	40.90%
Poor	Count	36	5	41
	%	14.70%	2.20%	8.60%
Very Poor	Count	0	0	0
	%	0.00%	0.00%	0.00%
Total	Count	245	232	477
	%	100.00%	100.00%	100.00%
Mean Score		2.53	2.567	
Std. Deviation		0.542	0.815	
T Test		0.583		Non-Significant
P Value		0.560		

The above table shows the comparison between respondents' opinion about Handling Passengers' Problems based on chosen road transport organizations.

Respondents travelling in buses of these organizations have almost similar view about the abovementioned fact. A majority of sample respondents of both the organizations says excellent to Handling Passengers' Problems.

The difference in mean value of opinion about this factis found to be statistically non-significant ($P>0.05$) as mean of RSRTC group (2.567) is slightly higher than that of HR group (2.530).

The results of the analysis show that the mean score for opinion about Handling Passengers' Problems does not differ with the change in organization.

5.3.3.3 Caring of Differently Able People

Table 5.48

Comparison of Customers' Opinion about Caring of Differently Able People

Caring of Differently Able People		Road Transport		Total
		HR	RSRTC	
Excellent	Count	62	112	174
	%	25.30%	48.30%	36.50%
Good	Count	19	0	19
	%	7.80%	0.00%	4.00%
Average	Count	110	110	220
	%	44.90%	47.40%	46.10%
Poor	Count	54	10	64
	%	22.00%	4.30%	13.40%
Very Poor	Count	0	0	0
	%	0.00%	0.00%	0.00%
Total	Count	245	232	477
	%	100.00%	100.00%	100.00%
Mean Score		2.56	2.812	
Std. Deviation		0.578	0.867	
T Test		3.713		Significant
P Value		0.000		

The above table shows the comparison between respondents' opinion about Caring of Differently Able People based on chosen road transport organizations.

A higher percentage (48.3%) of respondents belonging to RSRTC respond Excellent to the fact whereas a majority of respondents (44.9%) belonging to HR give Average score to Caring of Differently Able People.

Further, the difference in the mean value of opinion about the fact is found to be statistically significant ($P < 0.05$) as the mean of RSRTC group (2.812) is significantly higher than that of HR group (2.560).

The results of the analysis show that in terms of Caring of Differently Able People, a larger number of passengers of RSRTC give excellent response as compared to that of HR.

5.3.3.4 Travelling Experience

Table 5.49

Comparison of Customers' Opinion about Travelling Experience

Travelling Experience		Road Transport		Total
		HR	RSRTC	
Excellent	Count	35	96	131
	%	14.30%	41.40%	27.50%
Good	Count	0	0	0
	%	0.00%	0.00%	0.00%
Average	Count	138	106	244
	%	56.30%	45.70%	51.20%
Poor	Count	72	30	102
	%	29.40%	12.90%	21.40%
Very Poor	Count	0	0	0
	%	0.00%	0.00%	0.00%
Total	Count	245	232	477
	%	100.00%	100.00%	100.00%
Mean Score		2.716	3.151	
Std. Deviation		0.681	0.645	
T Test		7.173		Significant
P Value		0.000		

The above table shows the comparison between respondents' opinion about Travelling Experience based on chosen road transport organizations.

A higher percentage (56.3%) of respondents belonging to HR respond Average to the fact whereas a majority of respondents (41.4%) belonging to RSRTC say Excellent to Travelling Experience.

Further, the difference in the mean value of opinion about the fact is found to be statistically significant ($P < 0.05$) as the mean of RSRTC group (3.151) is significantly higher than that of HR group (2.716).

The results of the analysis show that in terms of Travelling Experience, a larger number of passengers of RSRTC give excellent response as compared to that of HR.

5.3.3.5 Satisfaction with Services Offered

Table 5.50

Comparison of Customers' Opinion about Satisfaction with Services Offered

Satisfaction with Services Offered		Road Transport		Total
		HR	RSRTC	
Yes	Count	30	85	115
	%	12.20%	36.60%	24.10%
No	Count	23	30	53
	%	9.40%	12.90%	11.10%
Little Bit	Count	192	117	309
	%	78.40%	50.40%	64.80%
Total	Count	245	232	477
	%	100.00%	100.00%	100.00%
Mean Score		2.138	2.661	
Std. Deviation		0.925	0.686	
T Test		7.043		Significant
P Value		0.000		

The above table shows the comparison between respondents' opinion about Satisfaction with Services Offered based on chosen road transport organizations.

A higher percentage (78.4%) of respondents belonging to HR and a majority of respondents (50.4%) belonging to RSRTC are satisfied little bit with the Services Offered.

Further, the difference in the mean value of opinion about the fact is found to be statistically significant ($P < 0.05$) as the mean of RSRTC group (2.661) is significantly higher than that of HR group (2.138).

The results of the analysis show that in terms of Satisfaction with Services Offered, a larger number of passengers of RSRTC give positive response as compared to that of HR.

5.3.3.6 Recommending Service to Others

Table 5.51

Comparison of Customers' Opinion about Recommending Service to Others

Recommending Service to Others		Road Transport		Total
		HR	RSRTC	
Yes	Count	107	149	256
	%	46.1%	60.8%	53.7%
No	Count	0	0	0
	%	0.0%	0.0%	0.0%
Can't Say	Count	125	96	221
	%	53.9%	39.2%	46.3%
Total	Count	232	245	477
	%	100.0%	100.0%	100.0%
Mean Score		2.078	1.784	
Std. Deviation		0.999	0.978	
T Test		3.246		Significant
P Value		0.001		

The above table shows the comparison between respondents' opinion about Recommending Service to Others based on chosen road transport organizations.

A higher percentage (60.8%) of respondents belonging to RSRTC say yes to the fact whereas a majority of respondents (53.9%) belonging to HR are neutral about recommending the service to others.

Further, the difference in the mean value of opinion about the fact is found to be statistically significant ($P < 0.05$) as the mean of HR group (2.078) is significantly higher than that of RSRTC group (1.784).

The results of the analysis show that in terms of Recommending Service to Others, a larger number of passengers of RSRTC give positive response as compared to that of HR.

Hypothesis Conclusion

As per the abovementioned analyses, with regard to overall satisfaction derived from the services delivered, passengers of both the organizations are not satisfied much. However, it has been observed that passengers of RSRTC are more satisfied with the services delivered as compared to HR.

Thus, null hypothesis was rejected and alternate hypothesis was accepted that there is a significant difference in the opinions of RSRTC and HR passengers about satisfaction derived from quality of services delivered.

5.3.4 Hypothesis- 4

H₀ (Null Hypothesis): There is no significant difference in the opinions of RSRTC and HR passengers about service quality parameters.

H₄ (Alternate Hypothesis): There is a significant difference in the opinions of RSRTC and HR passengers about service quality parameters.

Table 5.52
Comparison of Service Quality Parameters

Parameters	Road Transport Organization	N	Mean Score	Std. Deviation	T Test	P Value
Tangible	RSRTC	245	28.180	4.973	0.074	0.941
	HR	232	28.138	7.140		
Reliability	RSRTC	245	28.849	2.425	5.525	0.000*
	HR	232	27.194	3.972		
Assurance	RSRTC	245	19.053	2.192	5.066	0.001*
	HR	232	17.797	3.159		
Responsiveness	RSRTC	245	12.551	1.294	5.540	0.000*
	HR	232	11.741	1.862		
Social Responsibility	RSRTC	245	12.020	0.817	14.460	0.000*
	HR	232	10.737	1.106		

Student t Test Applied, P Value < 0.05 * Significant

The above table shows the comparison of mean value of service quality parameters based on two different transport organizations.

The difference in mean value of Tangibility is found to be non-significant ($P>0.05$) as mean scores of both the organizations are similar.

On the other hand, the difference in mean values of Reliability, Assurance, Responsiveness and Social Responsibility are found to be significant ($P<0.05$) as means of RSRTC group are significantly higher than that of HR group. Hence, on these parameters RSRTC performs better than HR.

Thus, null hypothesis was rejected and alternate hypothesis was accepted that there is a significant difference in the opinions of RSRTC and HR passengers about service quality parameters.

5.4 HYPOTHESIS TESTING RESULTS

Table 5.53

Hypothesis Testing Results at a glance

Hypothesis			Result
H1	Null	There is no significant difference in the opinions of RSRTC and HR passengers about the performance of On-route Bus Staff.	Accept
	Alternate	There is a significant difference in the opinions of RSRTC and HR passengers about the performance of On-route Bus Staff.	Reject
H2	Null	There is no significant difference in the effectiveness of marketing mix of RSRTC and HR.	Reject
	Alternate	There is a significant difference in the effectiveness of marketing mix of RSRTC and HR.	Accept
H3	Null	There is no significant difference in the opinions of RSRTC and HR passengers about satisfaction derived from quality of services delivered.	Reject
	Alternate	There is a significant difference in the opinions of RSRTC and HR passengers about satisfaction derived from quality of services delivered.	Accept
H4	Null	There is no significant difference in the opinions of RSRTC and HR passengers about service quality parameters.	Reject
	Alternate	There is a significant difference in the opinions of RSRTC and HR passengers about service quality parameters.	Accept

CHAPTER VI

FINDINGS & CONCLUSION

6.1 INTRODUCTION

Rajasthan State Road Transport Corporation and Haryana Roadways are providing mobility to passengers in their respective states by offering various services. The present study aims to perform a comparative study of these two organizations with reference to customer satisfaction. Since a lot of factors affect customer satisfaction, the researcher has attempted to cover important factors that are relevant to get the meaningful outcomes of the study.

In chapter V, the researcher has provided empirical evidences for fulfilling the objectives of the study and for validating stated hypotheses. This chapter presents the major findings based on the analyses in the previous chapter and conclusion that is in line with the research objectives and hypotheses. Respondents' opinions were sought on various service quality dimensions and variables pertaining to customer satisfaction. The chosen service quality variables were taken as marketing mix variables in order to validate one of the stated hypotheses using appropriate statistical tools.

Moreover, this chapter sheds light on the parameters on which one organization is delivering better services than the other as per their passengers' opinions. The findings so obtained may provide further support to existing theory and literature explaining customer satisfaction with regard to public road transportation service. Further, the findings may also contribute towards improving the service quality standards of Rajasthan State Road Transport Corporation and Haryana Roadways.

6.2 MAJOR FINDINGS

This section presents major findings derived from statistical data analysis. It depicts respondents' opinions on variables pertaining to the study. Major findings of the study are as hereunder:

6.2.1 General Information

- **Age groups:**

HR 30-40 Yrs-33.19%, 40-50 Yrs-25.43%, 50 & Above - 21.98%,
20-30 Yrs-19.40%

RSRTC 30-40 Yrs-41.72%, 40-50 Yrs - 18.87%, 50 & Above Yrs- 15.93%,
20-30 Yrs -23.48%

- **Gender:**

HR Male-72.84%, Female-27.16%

RSRTC Male-71.28%, Female-28.72%

- **Occupation:**

HR Others-49.14%, Students-16.81%, Business-16.81%,
Service-12.93%, Professional - 4.31%

RSRTC Others-44.03%, Students-14.88%, Business-19.92%,
Service-14.47%, Professional-6.71%

- **Person with Disability**

HR No-87.50%, Yes-12.50%

RSRTC No-92.03%, Yes-7.97%

- **Preferred Mode of Transport:** Most of the respondents belonging to both the road transport organizations prefer to travel by Bus followed by respondents who prefer to travel by Train and personal vehicle.
- **Frequency of Travelling:** Most of the respondents belonging to both the road transport organizations sometimes travel in respective buses followed by respondents who travel weekly, daily and rarely.
- **Purpose of Journey:** A majority of respondents travel in the buses of RSRTC and HR for household purposes. On the other hand, the least number of passengers travel for Education purpose.
- **Reach Destination on Time using Present Mode:** Most of the respondents belonging to both the road transport organizations agree that they reach to their destination on time using their present mode of transport. It implies that they are satisfied with their preferred mode of transport.
- **Alternative Means of Transport:** Most of the respondents belonging to both the road transport organizations opt to travel in trains as their alternative mode of transport.

6.2.2 Passengers' Opinions towards the Performance of On-Route Staff

- **Drivers/Conductors Taking Care of Customers' Safety and Security:** Most of the sample passengers favor the above-mentioned fact irrespective of the transport service provider (RSRTC/HR), they usually travel in. However, a significant difference was found in the opinion of RSRTC and HR passengers about taking care of customers' security and safety by bus drivers/conductors as a larger number of passengers of RSRTC opine positively as compared to that of HR.
- **Effective Performance of Daily Activities by Drivers/Conductors:** A larger percentage of sample passengers of both the organizations show neutral response in this regard. Moreover, their opinion about Effective

Performance of Daily Activities by Drivers/Conductors does not differ with the organization, they used to travel in.

- **Drivers/Conductors having Adequate Means to Handle People with Disability, Elders, Pregnant Women and Children** : A majority of sample passengers do not agree the above-mentioned fact however, As per the above-mentioned analyses, a non-significant difference was found in the opinions of sample passengers of HR and RSRTC about the majority of variables pertaining to performance of On-route Bus Staff.

6.2.2 Passengers' Opinions towards the effectiveness of Marketing Mix of RSRTC and HR

To compare the effectiveness of marketing mix of RSRTC and HR, the researcher has attempted to cover all the variables pertaining to the mix. However, being public sector organizations, RSRTC and HR do not spend much on promotional activities on a regular basis hence; promotion has been exempted from the analysis. The following section reveals the opinions of passengers on the ingredients of the marketing mix-

6.2.2.1 Product

- With regard to buses having enough leg space, most of the passengers belonging to RSRTC agree while, a majority of HR passengers disagree the fact. Hence, it can be said that a larger number of passengers of RSRTC opine positively as compared to that of HR.
- Most of the passengers of both the organizations agreed that buses do not have Spacious Luggage Racks. However, a larger number of passengers of HR opine negatively as compared to that of RSRTC.
- Passengers travelling in buses of these organizations have almost similar view about the buses having Comfortable Seats. Maximum number of respondents of both the organizations disagree the fact.

- A significantly larger number of RSRTC passengers opined negatively about buses having Clean Interiors while, a majority of HR passengers agree the fact. Thus, it can be said that Buses of Haryana Roadways have better clean interiors.
- Most of the RSRTC passengers show neutral response to the fact that Buses are in Good Condition whereas a majority of HR passengers agree with this. A larger number of passengers of HR opine positively as compared to that of RSRTC.
- With regard to Vehicles Meeting Environmental Concerns, most of RSRTC passengers disagree the fact whereas a majority of HR passengers show neutral response. Hence, it can be said that a larger number of passengers of RSRTC opine negatively as compared to that of HR.

As per the findings, it can be concluded that the product element of marketing mix of both the organizations is not as per the expectations of the customers. However, HR passengers opine more positively with majority of the variables pertaining to Product element of the marketing mix.

6.2.2.2 Physical Evidence

- Passengers travelling in buses of these organizations have almost similar view about Appearance of Staff in Proper Uniform. Maximum number of respondents of both the organizations was neutral to the fact.
- A significantly larger number of HR passengers opined negatively about availability of Enough Seating Facilities and Shades at Bus Stations while, a majority of RSRTC passengers agree the fact. Thus, it can be said that a larger number of passengers of RSRTC opine positively as compared to that of HR.
- With regard to availability of Safe Drinking Water, most of the passengers belonging to RSRTC agree while, a majority of HR

passengers disagree the fact. Hence, it can be said that a larger number of passengers of RSRTC opine positively as compared to that of HR.

- Passengers travelling in buses of these organizations have almost similar view about Cleanliness of Toilets. A majority of sample respondents of both the organizations disagree the fact.
- Most of the passengers of both the organizations show neutral response about availability of Enough Parking Space. However, a larger number of passengers of HR opine negatively as compared to that of RSRTC.

After analyzing abovementioned variables, it is clear that passengers of both the organizations are not satisfied with the physical evidences including facilities at station, appearance of staff, etc. However, passengers of RSRTC opine more positively with regard to majority of the variables pertaining to Physical Evidence.

6.2.2.3 Process

- A higher percentage of RSRTC passengers disagree the fact whereas a majority of HR passengers show neutral response about Notification of Delay in Advance. Thus, it can be said that a larger number of passengers of HR opine positively as compared to that of RSRTC.
- Most of the passengers of both the organizations agreed that there is Low Probability of Accidents. However, a significantly larger number of passengers of RSRTC opine positively as compared to that of HR.
- A higher percentage of RSRTC passengers show neutral response to Rare Breakdown of Buses on Routewhereas a majority of HR passengers agree the fact. Hence it can be stated that a larger number of passengers of HR opine positively as compared to that of RSRTC.
- All of the sample passengers of RSRTC agree with Easy Booking of Tickets whereas a majority of HR passengers also agree the fact. Thus,

to conclude, a larger number of passengers of RSRTC opine positively as compared to that of HR.

- A higher percentage of HR passengers disagree the fact whereas a majority of RSRTC passengers agree Ensuring Security of Passengers and Parcels. Hence, it can be said that a larger number of passengers of RSRTC opine positively as compared to that of HR.
- Most of the passengers of both the organizations agree with Having Enough Measures for Loading and Off-loading Security. However, a larger number of passengers of HR opine negatively as compared to that of RSRTC.
- With regard to Consistency in Providing Quality Services, most of RSRTC passengers disagree the fact whereas a majority of HR passengers agree the fact. Thus, it can be stated that a larger number of passengers of RSRTC opine negatively as compared to that of HR.
- Respondents travelling in buses of these organizations have almost similar view about getting Proper and Immediate Response to Telephone Enquiry. A majority of sample respondents of both the organizations are neutral about the fact.
- Most of the passengers of both the organizations show neutral response to Providing Emergency Services. However, a larger number of passengers of HR were indifferent to the fact as compared to that of RSRTC.
- Respondents travelling in buses of these organizations have almost similar view about Drivers/Conductors get Sufficient Rest Hours between Two Journeys. Most of the sample passengers of both the organizations show neutral response in this regard.

After analyzing abovementioned variables, it is clear that passengers of both the organizations are somewhat satisfied with the process including managing

services, adopting measures for safety and security etc. However, passengers of RSRTC opine more positively with regard to majority of the variables pertaining to Process.

6.2.2.4 People

- Respondents travelling in buses of these organizations have almost similar view about working experience of drivers/conductors. Most of the sample passengers of both the organizations show neutral response in this regard.
- All of the sample passengers of RSRTC agree with Drivers having Sufficient Driving Skills whereas a majority of HR passengers also agree the fact. Thus, to conclude, a larger number of passengers of RSRTC opine positively as compared to that of HR.
- Most of the passengers of both the organizations disagree about Customer Contact Personnel being Courteous, Polite, Respectful and Friendly. However, a larger number of passengers of RSRTC opine positively as compared to that of HR.
- With regard to Customer Contact Personnel being Credible, Honest and Trustworthy, most of the passengers of both the organizations show neutral response to the fact. However, a larger number of passengers of HR opine negatively as compared to that of RSRTC.
- A higher percentage of HR passengers disagree the fact whereas a majority of RSRTC passengers are neutral to Employees' Readiness to Serve Passengers. Hence, it can be said that a larger number of passengers of HR opine negatively as compared to that of RSRTC.
- Most of the passengers of both the organizations agree about Supporting Communal Harmony. However, a larger number of passengers of RSRTC opine positively as compared to that of HR.

After analyzing abovementioned variables, it is clear that passengers of both the organizations are somewhat satisfied with the People component of marketing mix including employees' behaviors, their responsiveness, etc. However, passengers of RSRTC opine more positively with regard to majority of the variables pertaining to People.

6.2.2.5 Place

- Most of the passengers of both the organizations agree about Easy Accessibility of Buses. However, a larger number of passengers of RSRTC opine positively as compared to that of HR.
- Respondents travelling in buses of these organizations have almost similar view about No Delay in Arrival and Departure. A majority of sample respondents of both the organizations agree the fact.
- Most of the passengers of both the organizations agree about Maintaining Regularity of Service. However, a larger number of passengers of RSRTC opine positively as compared to that of HR.
- With regard to Arrangements of Alternatives in Excessive Demand, most of the passengers of both the organizations agree the fact. However, a larger number of passengers of RSRTC opine positively as compared to that of HR.

After analyzing abovementioned variables, it is clear that passengers of both the organizations are satisfied with the Place component of marketing mix including accessibility of bus services, its regularity etc. However, passengers of RSRTC opine more positively with regard to majority of the variables pertaining to Place.

6.2.2.6 Price

- A higher percentage of RSRTC passengers agree the fact whereas a majority of HR passengers disagree about Reasonable Bus Fare. Hence, it can be said that a larger number of RSRTC opine positively as compared to that of HR.

- Most of the passengers of both the organizations agree about Concessional Fare for Underprivileged Passengers. However, a larger number of passengers of RSRTC opine positively as compared to that of HR.

After analyzing abovementioned variables, it is clear that passengers of RSRTC are more satisfied with the Price component of marketing mix including bus fare, concessional fare, etc. Hence, passengers of RSRTC opine more positively with regard to fare of its buses.

6.2.3 Passengers' Opinions towards Satisfaction derived from Quality of Services Delivered by their concerned Organization

- A higher percentage of HR passengers say Average to Standard of Services Provided whereas a majority of RSRTC passengers respond Excellent to the fact. Hence, it can be said that a larger number of RSRTC opine positively as compared to that of HR.
- Passengers travelling in buses of these organizations have almost similar views about Handling Passengers' Problems. Maximum number of respondents of both the organizations says Excellent to the fact.
- A higher percentage of RSRTC passengers say Excellent to Caring of Differently Able People whereas a majority of HR passengers respond Average to the fact. Hence, it can be said that a larger number of RSRTC opine positively as compared to that of HR.
- A higher percentage of HR passengers say Average to Travelling Experience whereas a majority of RSRTC passengers respond Excellent to the fact. Hence, it can be said that a larger number of RSRTC opine positively as compared to that of HR.
- A majority of passengers of both the organizations are satisfied little bit with the Services Offered. However, a larger number of passengers of RSRTC give positive response as compared to that of HR.

- A higher percentage of RSRTC passengers say yes to Recommending the service to others whereas a majority of HR passengers are neutral to the fact. Thus, it can be said that a larger number of RSRTC passengers give positive response as compared to that of HR.

As per the abovementioned analyses, with regard to overall satisfaction derived from the services delivered, passengers of both the organizations are not satisfied much. However, it has been observed that passengers of RSRTC are more satisfied with the services delivered as compared to HR.

6.2.4 Passengers' Opinions towards Service Quality Parameters

The performance of both the road transport organizations was assessed on the basis of some standard service quality parameters viz., Tangibility, Reliability, Assurance, Responsiveness and Social Responsibility.

In terms of Tangibility a non-significant difference was found between the opinions of passengers both the organizations are similar. Maximum passengers of both the organizations do not found most of the tangibility factors satisfactory.

On the other hand, with regard to Reliability, Assurance, Responsiveness and Social Responsibility opinions of passengers of both the organizations differ significantly. As per the analysis, RSRTC performs better than HR on these parameters.

6.3 CONCLUSION

It is one of the prime responsibilities of the central as well as state government to provide a comprehensive and efficient transportation system to support a well-functioning and prosperous community. Despite a lot of challenges, public road transport is still an important mode for daily transportation to millions of people in India. In order to public road transport organization to operate smoothly, all stakeholders such as drivers, conductors, passengers, employees and Government as well must be aware of the factors which determine overall customer satisfaction.

The main objective of the present study was to assess customer satisfaction regarding service quality management and to compare the same between the two organizations selected for the study. The study reveals that customers' expectations of service quality have not been accurately predicted by the management of these organizations. With regard to the performance of on-route bus staff, customers of both the organizations have similar views agreeing that their performance is not much satisfactory and there are many things to improve.

Furthermore, customers' opinions about marketing mix of RSRTC and HR differ significantly. Most of the passengers of RSRTC favor its product (Bus) in terms of Enough Leg Space only while, majority of HR passengers agree about the product being in Good Condition and having Clean Interiors. Thus, product of HR is found better in comparison to RSRTC. It might be due to having newer crew of buses in HR in comparison to RSRTC.

With regard to Physical Evidences, a majority of RSRTC passengers agree about Enough Seating Facilities and Shades at Bus Stations and availability of Safe Drinking Water while, most of HR passengers do not agree about having any positive physical evidence.

In terms of process, a majority of RSRTC passengers agree about Low Probability of Accidents, Easy Booking of Tickets, Ensuring Security of Passengers and Parcels, and Having Enough Measures for Loading and Off-loading Security while, majority of HR passengers agree about Low Probability of Accidents, Rare Breakdown of Buses on Route, Easy Booking of Tickets and Providing Quality Services. However, passengers of RSRTC opine more positively with regard to majority of the variables pertaining to Process.

For the element People, a majority of passengers of both the organizations agree about only few factors, viz., Drivers having Sufficient Driving Skills and Supporting Communal Harmony. However, passengers of RSRTC opine more positively in comparison to HR.

About Place element, passengers of both the organizations agree about all variables however, passengers of RSRTC opine more positively in comparison to HR.

With regard to Price, a majority of RSRTC passengers agree about Reasonable Bus Fare and Concessional Fare for Underprivileged Passengers while, most of HR passengers do not agree about Reasonable Bus Fare.

Hence, it can be concluded that out of six elements of marketing mix, customers give positive opinions about Place and Price only, other five Ps'- Product, Physical Evidence, People and Process need to be managed effectively in order to meet customers' expectations.

On the other hand, with regard to satisfaction derived from Quality of Services delivered most of the passengers of RSRTC are highly satisfied with Standard of Services Provided, Handling Passengers' Problems, Caring of Differently Able People and Travelling Experience and they agree to recommend its services to others whilst, HR passengers are not much satisfied with majority of the variables and are neutral about recommending to others.

Moreover, the results of hypotheses testing also support the aforesaid discussion-

1. Null hypothesis is accepted that passengers of both the organizations have similar views about the performance of on-route staff. It also fulfills our objective to examine the opinions of passengers about duties performed by on-route staff of these organizations.
2. Alternate hypothesis gets accepted that a significant difference lies in the effectiveness of marketing mix of RSRTC and HR. Validation of this hypothesis supports our objective to explore how these organizations manage their marketing mix and to examine customers' opinions with regard to the mix.
3. Alternate hypothesis has been proved true that passengers' opinions about satisfaction derived from quality of services delivered vary with

organization they belong to. It fulfills one of the primary objectives of the study to measure and compare the level of satisfaction among the passengers regarding the services offered by the two roadways organizations.

4. We accept our alternate hypothesis that there is a significant difference in the opinions of RSRTC and HR passengers about service quality parameters. The hypothesis is in line with the objective to ascertain general opinion of the passengers about the services offered by these organizations. Hence it reveals which service quality factors satisfy customers and which do not.

CHAPTER VII

RECOMMENDATIONS/SUGGESTIONS

The findings discussed in the previous chapter depict a clear picture of comparison between RSRTC and HR with regard to their customers' satisfaction. The study reveals that a significant difference exists between the opinions of passengers of both the organizations. They are not much satisfied with the maximum of factors pertaining to service quality however, RSRTC passengers opine more positively in comparison to that of HR. It led to extending recommendations and suggesting scope for further studies. This chapter attempts to compile suggestions stated by respondents and suggestions arouse from the findings of the study.

The suggestions given here may prove beneficial for both passengers and organizations. It may provide useful implications for the management of these organizations to resolve existing complaints of customers and to offer complete satisfaction to customers. However, applying these suggestions might require altering the process by which the service is delivered, purchasing new equipments and technology, investing in human resource etc. In doing this management should consider long run benefits.

- It has come out from the survey that the cleanliness of tangibles i.e. buses and facilities at bus staff including waiting area, toilets, parking area, etc. is an important factor that helps in developing a positive attitude among passengers thus it should be taken seriously by the management of these organizations. A proper system must be developed to supervise the cleanliness and maintenance of these tangibles. The maintenance work of these services may be given on contractual basis.

Moreover, general public too, should be made aware about cleanliness aspects. A feeling of responsibility should be developed among them with making announcements at regular intervals regarding the same and displaying attractive posters depicting importance of cleanliness.

- It has been observed that passengers are not satisfied with the interiors of buses including, seats, luggage racks, leg space, etc. They have complained about discomfort caused by seats during long journey. Moreover, seats are not in good condition due to wear and tear. There is a need to check, repair and maintain the interiors of bus at regular intervals in order to keep it in good condition.

Further, most of the passengers find it difficult to keep their luggage in bus because luggage racks are not spacious. The extra space for big luggage can be provided on chargeable basis in order to discourage passengers to carry unnecessary weight.

Inadequate leg space in bus also causes troubles to passengers. It becomes very difficult to get in or come out of the window seat. It can be increased in upcoming buses.

- Passengers have complained about invisibility of contact numbers of managers and other responsible authorities inside buses. Although, the numbers have been written on the walls, they are not visible properly due to wear and tear. Thus, it should be made properly visible in order to facilitate customers.
- Passengers are not satisfied with the seating facilities and shades at bus stands. They also face problems due to inadequate lighting at waiting area and in toilets at bus stands. These issues also cause dissatisfaction among customers and thus should be taken care off.

Moreover, passengers also complained about unavailability of safe and cold drinking water. Although water coolers have been installed on bus stands, some are not working properly. Maintenance of this facility should also be ensured.

Reasonable and hygienic food should be made available at canteens at bus stands to provide better experience to customers.

- Since customers do not get proper notification of delay in advance they suffer lots of discomforts. It causes inconvenience to passengers if there is any change in the fixed schedule. Reasons for delay should be investigated on a regular basis. A proper system should be developed to notify delay in the scheduled arrival and departure. However, announcements are made for notifying delay, yet low audibility of announcements is another issue which does not help much. Thus, a prompt announcement and visual notification system can be helpful in improving customer satisfaction. Display of information must be done on charts and on sign boards to complement announcements.

Further, in case of longer delay, arrangement of alternative vehicles can be made in order to handle rush.

- Smoking by some people at bus stands or even in buses cause uneasiness to other passengers. People who do so may be penalised since smoking at public places is not permitted under law.
- Customer belonging to rural areas complained that buses don't stop at small villages, thus, they can not avail public transport facility at their way. The management should run more buses for rural areas/routes in order to extend their services to every corner of the state.
- Customers' expectations and their needs must be understood clearly and a regular feedback mechanism should be developed so that passengers can register their complaints if they are not satisfied with any service. Suggestions boxes at bus stands, specific columns at web page of the organization, or a toll free number must be made available to customers to book their complaints and a system must be developed so that they can track the process. It may drag attention of the management towards issues causing dissatisfaction among customers.

- Since security of passengers and parcels is a serious issue, due attention should be given to solve it. Buses and bus stands must be equipped with CCTV cameras and number of security guards can be increased at bus stands to avoid theft and crime. It must be ensured that these equipments are in working condition.
- It has been observed that vehicles are not environment friendly due to causing air and noise pollution. Environmental care should be taken care of; thus, the management must ensure that buses are fit in condition and do not cause pollution.
- Insufficiency of parking space is another issue causing discomfort among customers. It can be enhanced to accommodate a greater number of vehicles by constructing roof parking facility.
- People with disability, elders, pregnant women, and children need special attention and care while travelling. It has been found that they do not get privilege in having seat, loading and unloading luggage, getting in and out of the bus etc. On-route bus staff members need to make sure that they have adequate means to handle these type of passengers with due care and in good manner.

Moreover, effective performance of daily duties including preventive maintenance of buses is also desirable. At the time of emergency viz., medical assistance etc., on-route staff should be active and capable to handle the situation in the best possible manner. For this, training programs should be designed to train them to handle emergency situations. They must ensure that the bus is having first-aid box and it is checked regularly and contains all necessary items.

Further, passengers are not satisfied with the behavior of on-route bus staff. Passengers expect them to be polite and receptive to understand their problems. Thus, they should attend training programs on regular basis for their professional and personal development.

- In order to prevent accidents, it must be ensured that drivers and conductors do get sufficient rest between two journeys. Rest room facility with all necessary stuff including fans, beds, etc. should be provided to them. It would enable them to perform their duties in an effective way.
- On-route staff should wear proper uniform with their identity card every time they are on duty for easy identification.
- Sometimes customers do not get proper and immediate response to telephone enquiry. The management must ensure effective performance of this responsibility to avoid unnecessary hassle to customers.

Moreover, being a public transport organization, the behavior of its customer contact personnel is always in question. Special training sessions can be arranged for them and reward system can be introduced to motivate them to perform better. Regular interaction with the staff and crew will also help the management in understanding and overcoming their problems by implementing effective solutions.

- Passengers also complained about paying bus fare in cash during journey. Most of the time they do not have change and thus become unable to deal with the conductor. In order to ease the process, these organizations can develop a mechanism to accept digital cash and other such payment options, like Paytm, etc.
- It has come out from the survey that most of the passengers suffer problem of urinating during long journey. Stoppages of bus should be at specific intervals to facilitate customers for urinating.
- The management should monitor customer satisfaction regularly by carrying market surveys to determine customer requirements, since customer needs and wants keep on changing from time to time and within different age groups, so the surveys should be as frequent as possible, so as to enable them to provide the right service at every time.

- Fares should be revised timely so that the organization can meet its expenditure and put less burden on passengers.
- It has been observed that buses take more than scheduled time to complete a trip because of damaged and poor condition of roads. Moreover, it may result into more accidents and increased maintenance cost of buses. Management and concerned Government authorities must coordinate in order to repair and maintenance of roads on urgent basis and keep them serviceable every time.
- In a recent move, these organizations have stopped providing night bus service. The reason behind this action is inability to attract enough number of passengers to run a trip profitably. It may be due to customer dissatisfaction with regard to the services provided by these organizations. Since customers are satisfied with the fare and services provided by private bus service operators, they have been diverted towards these operators.

In order to compete with private players, these public sector organizations should infuse funds for purchasing buses that can provide comfortable and pleasing experience to passengers during night journey. This way it will not only enrich its product mix but attract large number of customers also.

It has also been observed that these organizations are facing shortage of competent man power especially running staff. It affects the performance of various services and lead to frequent cancellation of trips and inability to start new schedules/routes. A lot of positions of drivers, conductors and supporting staff are vacant since long. If these posts are being filled it will definitely improve the service quality standard of these organizations and the moral of the existing employees.

FUTURE SCOPE OF THE STUDY

1. A comparative study between public and private bus transport service providers with reference to customer satisfaction can be done to find weak areas of their services.

2. A study on comparison of financial performance of RSRTC and HR can be done to examine their financial status and potential for future developments.
3. The study can be extended to compare employee satisfaction at RSRTC and HR.
4. Further studies may cover road transport organizations of other states to make comparison among them regarding service quality delivered and customer satisfaction.
5. More researches may be undertaken on different demographic variables viz. Age of passengers, gender, locality, etc. so that their needs can be addressed too.
6. Future study may undertake issues related to employees at different levels viz. recruitment, training and development, performance appraisal, etc. in its purview.

SUMMARY

In order to achieve sustained economic development, the importance of infrastructure cannot be overlooked. An economy which has adequate and efficient infrastructure enjoys lower transaction cost, strong backward and forward linkages, better quality of life and sustainable growth and development. Transport sector in India is vast and diverse and gratifies the travelling needs of millions of people. However, the sector has not been able to keep pace with rising demand and is proving to be a hindrance for the economy. Due to ever increasing population coupled with rapid urbanisation, the demand for transport has also increased rapidly. Therefore, expansion of transport is essential for a growing economy like India. Major improvements in the sector have been done to support the country's continued economic growth and development. Almost all Indian states have their own road transport organization to fulfill transport needs of its people. These organizations provide transit facility within and outside state, authorized by Transportation Ministry or by State Government Authorities. Over all, these organizations are responsible to play a significant role in connecting rural and urban regions of India.

ROAD TRANSPORT IN RAJASTHAN

The Rajasthan State Road Transport Corporation (RSRTC) was established by the Government of Rajasthan on 1st October 1964 as per the provisions of Road Transport Corporations Act, 1950. Originally, the corporation adopted a three-tier organization structure with head office, divisional offices and depots. However, at present, only two-tier organizational structure is in vogue with central office and depots. Depots are the real operating units which are considered as profit centers and all powers of divisional offices are now vested with depots after the abolition of divisional offices. The RSRTC primarily provides transport services within the state of Rajasthan and a few long-distance services to the neighboring states.

ROAD TRANSPORT IN HARYANA

Government of Haryana is striving to provide efficient, reliable and eco-friendly modern transport services for the safe movement of people and goods with liberal use of modern-day Information Technology and involvement of private sector, which is considered necessary in this era of liberalization and globalization.

Office of the Director General State Transport is responsible for providing well-coordinated, economical, safe and efficient transport action services to the public of the State

OBJECTIVES OF THE STUDY

Primary Objectives:

1. To know various services offered by RSRTC and HR to their passengers.
2. To measure and compare the level of satisfaction among the passengers regarding the services offered by the two roadways organizations.

Secondary Objectives:

1. To examine the opinions of passengers about duties performed by on-route staff of these organizations.
2. To ascertain general opinion of the passengers about the services offered by these organizations.
3. To explore what are the expectations of the passengers with these organizations (i.e. what they think can be done for improvement or what they think should be there in services like this).
4. To explore how do these organizations manage their marketing mix and to examine customers' opinions with regard to the mix.

5. To ascertain briefly, the problems of the staff members of the two organizations.
6. To extent concrete suggestions in order to enhance customer satisfaction.

TYPE OF THE STUDY

The type of the present research work is exploratory and descriptive research.

HYPOTHESES OF THE STUDY

- H₁ (Alternate Hypothesis): There is a significant difference in the opinions of RSRTC and HR passengers about the performance of On-route Bus Staff.
- H₂ (Alternate Hypothesis): There is a significant difference in the effectiveness of marketing mix of RSRTC and HR.
- H₃ (Alternate Hypothesis): There is a significant difference in the opinions of RSRTC and HR passengers about satisfaction derived from quality of services delivered.
- H₄ (Alternate Hypothesis): There is a significant difference in the opinions of RSRTC and HR passengers about service quality parameters.

HYPOTHESIS TESTING RESULTS AT A GLANCE

Hypothesis			Result
H1	Null	There is no significant difference in the opinions of RSRTC and HR passengers about the performance of On-route Bus Staff.	Accept
	Alternate	There is a significant difference in the opinions of RSRTC and HR passengers about the performance of On-route Bus Staff.	Reject
H2	Null	There is no significant difference in the effectiveness of marketing mix of RSRTC and HR.	Reject
	Alternate	There is a significant difference in the effectiveness of marketing mix of RSRTC and HR.	Accept
H3	Null	There is no significant difference in the opinions of RSRTC and HR passengers about satisfaction derived from quality of services delivered.	Reject
	Alternate	There is a significant difference in the opinions of RSRTC and HR passengers about satisfaction derived from quality of services delivered.	Accept
H4	Null	There is no significant difference in the opinions of RSRTC and HR passengers about service quality parameters.	Reject
	Alternate	There is a significant difference in the opinions of RSRTC and HR passengers about service quality parameters.	Accept

FINDINGS & CONCLUSION

This chapter presents the major findings based on the analyses in the previous chapter and conclusion that is in line with the research objectives and hypotheses.

Passengers' Opinions towards the Performance of On-Route Staff

A non-significant difference was found in the opinions of sample passengers of HR and RSRTC about the majority of variables pertaining to performance of On-route Bus Staff.

Passengers' Opinions towards the effectiveness of Marketing Mix of RSRTC and HR

- The product element of marketing mix of both the organizations is not as per the expectations of the customers. However, HR passengers opine more positively with majority of the variables pertaining to Product element of the marketing mix.
- Passengers of both the organizations are not satisfied with the physical evidences including facilities at station, appearance of staff, etc. However, passengers of RSRTC opine more positively with regard to majority of the variables pertaining to Physical Evidence.
- Passengers of both the organizations are somewhat satisfied with the process including managing services, adopting measures for safety and security, etc. However, passengers of RSRTC opine more positively with regard to majority of the variables pertaining to Process.
- Passengers of both the organizations are somewhat satisfied with the People component of marketing mix including employees' behaviors, their responsiveness, etc. However, passengers of RSRTC opine more positively with regard to majority of the variables pertaining to People.
- Passengers of both the organizations are satisfied with the Place component of marketing mix including accessibility of bus services, its regularity, etc. However, passengers of RSRTC opine more positively with regard to majority of the variables pertaining to Place.
- Passengers of RSRTC are more satisfied with the Price component of marketing mix including bus fare, concessional fare, etc. Hence, passengers of RSRTC opine more positively with regard to fare of its buses.

Passengers' Opinions towards Satisfaction derived from Quality of Services Delivered by their concerned Organization:

With regard to overall satisfaction derived from the services delivered, passengers of both the organizations are not satisfied much. However, it has been observed that passengers of RSRTC are more satisfied with the services delivered as compared to HR.

Passengers' Opinions towards Service Quality Parameters

In terms of Tangibility a non-significant difference was found between the opinions of passengers both the organizations are similar. Maximum passengers of both the organizations do not found most of the tangibility factors satisfactory.

On the other hand, with regard to Reliability, Assurance, Responsiveness and Social Responsibility opinions of passengers of both the organizations differ significantly. As per the analysis, RSRTC performs better than HR on these parameters.

CONCLUSION

It is one of the prime responsibilities of the central as well as state government to provide a comprehensive and efficient transportation system to support a well-functioning and prosperous community. Despite a lot of challenges, public road transport is still an important mode for daily transportation to millions of people in India. In order to public road transport organization to operate smoothly, all stakeholders such as drivers, conductors, passengers, employees and Government as well must be aware of the factors which determine overall customer satisfaction.

The study reveals that customers' expectations of service quality have not been accurately predicted by the management of these organizations. With regard to the performance of on-route bus staff, customers of both the organizations have similar views agreeing that their performance is not much satisfactory and there are many things to improve.

Furthermore, customers' opinions about marketing mix of RSRTC and HR differ significantly. Most of the passengers of RSRTC favor its product (Bus) in terms of Enough Leg Space only while, majority of HR passengers agree about the product being in Good Condition and having Clean Interiors. Thus, product of HR is found better in comparison to RSRTC. It might be due to having newer crew of buses in HR in comparison to RSRTC.

With regard to Physical Evidences, a majority of RSRTC passengers agree about Enough Seating Facilities and Shades at Bus Stations and availability of Safe Drinking Water while, most of HR passengers do not agree about having any positive physical evidence.

In terms of process, a majority of RSRTC passengers agree about Low Probability of Accidents, Easy Booking of Tickets, Ensuring Security of Passengers and Parcels, and Having Enough Measures for Loading and Off-loading Security while, majority of HR passengers agree about Low Probability of Accidents, Rare Breakdown of Buses on Route, Easy Booking of Tickets and Providing Quality Services. However, passengers of RSRTC opine more positively with regard to majority of the variables pertaining to Process.

For the element People, a majority of passengers of both the organizations agree about only few factors, viz., Drivers having Sufficient Driving Skills and Supporting Communal Harmony. However, passengers of RSRTC opine more positively in comparison to HR.

About Place element, passengers of both the organizations agree about all variables however, passengers of RSRTC opine more positively in comparison to HR.

With regard to Price, a majority of RSRTC passengers agree about Reasonable Bus Fare and Concessional Fare for Underprivileged Passengers while, most of HR passengers do not agree about Reasonable Bus Fare.

Hence, it can be concluded that out of six elements of marketing mix, customers give positive opinions about Place and Price only, other four Ps'- Product,

Physical Evidence, People and Process need to be managed effectively in order to meet customers' expectations.

On the other hand, with regard to satisfaction derived from Quality of Services delivered most of the passengers of RSRTC are highly satisfied with Standard of Services Provided, Handling Passengers' Problems, Caring of Differently Able People and Travelling Experience and they agree to recommend its services to others whilst, HR passengers are not much satisfied with majority of the variables and are neutral about recommending to others.

RECOMMENDATIONS/SUGGESTIONS

- A proper system must be developed to supervise the cleanliness and maintenance of these tangibles. The maintenance work of these services may be given on contractual basis. Moreover, general public too, should be made aware about cleanliness aspects. A feeling of responsibility should be developed among them with making announcements at regular intervals regarding the same and displaying attractive posters depicting importance of cleanliness.
- There is a need to check, repair and maintain the interiors of bus at regular intervals in order to keep it in good condition. The extra space for big luggage can be provided on chargeable basis in order to discourage passengers to carry unnecessary weight. Inadequate leg space in bus also causes troubles to passengers. It becomes very difficult to get in or come out of the window seat. It can be increased in upcoming buses.
- Contact numbers of managers and other responsible should be made properly visible in order to facilitate customers.
- Issues regarding seating facilities, shades at bus stands, and inadequate lighting at waiting area and in toilets at bus stands also cause dissatisfaction among customers and thus should be taken care off. Maintenance of Water coolers facility should also be ensured. Reasonable

and hygienic food should be made available at canteens at bus stands to provide better experience to customers.

- Reasons for delay of buses should be investigated on a regular basis. A proper system should be developed to notify delay in the scheduled arrival and departure. A prompt announcement and visual notification system can be helpful in improving customer satisfaction. Display of information must be done on charts and on sign boards to complement announcements. Further, in case of longer delay, arrangement of alternative vehicles can be made in order to handle rush.
- Smoking by some people at bus stands or even in buses cause uneasiness to other passengers. People who do so may be penalised since smoking at public places is not permitted under law.
- The management should run more buses for rural areas/routes in order to extend their services to every corner of the state.
- Suggestions boxes at bus stands, specific columns at web page of the organization, or a toll-free number must be made available to customers to book their complaints and a system must be developed so that they can track the process
- Buses and bus stands must be equipped with CCTV cameras and number of security guards can be increased at bus stands to avoid theft and crime. It must be ensured that these equipments are in working condition.
- Environmental care should be taken care of; thus, the management must ensure that buses are fit in condition and do not cause pollution.
- Parking space can be enhanced to accommodate a greater number of vehicles by constructing roof parking facility.

- On-route bus staff members need to make sure that they have adequate means to handle people with disability, elders, pregnant women, and children with due care and in good manner.

Moreover, effective performance of daily duties including preventive maintenance of buses is also desirable. At the time of emergency viz., medical assistance, etc., on-route staff should be active and capable to handle the situation in the best possible manner. For this, training programs should be designed to train them to handle emergency situations. They must ensure that the bus is having first-aid box and it is checked regularly and contains all necessary items.

Further, passengers are not satisfied with the behavior of on-route bus staff. Thus, they should attend training programs on regular basis for their professional and personal development.

- In order to prevent accidents, it must be ensured that drivers and conductors do get sufficient rest between two journeys. Rest room facility with all necessary stuff including fans, beds, etc. should be provided to them. It would enable them to perform their duties in an effective way.
- On-route staff should wear proper uniform with their identity card every time they are on duty for easy identification.
- Sometimes customers do not get proper and immediate response to telephone enquiry. The management must ensure effective performance of this responsibility to avoid unnecessary hassle to customers. Special training sessions can be arranged for them and reward system can be introduced to motivate them to perform better. Regular interaction with the staff and crew will also help the management in understanding and overcoming their problems by implementing effective solutions.
- Passengers also complained about paying bus fare in cash during journey. In order to ease the process, these organizations can develop a mechanism to accept digital cash and other such payment options, like Paytm, etc.

- Stoppages of bus should be at specific intervals to facilitate customers for urinating.
- The management should monitor customer satisfaction regularly by carrying market surveys to determine customer requirements.
- Fares should be revised timely so that the organization can meet its expenditure and put less burden on passengers.
- It has been observed that buses take more than scheduled time to complete a trip because of damaged and poor condition of roads. Management and concerned Government authorities must coordinate in order to repair and maintenance of roads on urgent basis and keep them serviceable every time.
- In a recent move, these organizations have stopped providing night bus service. In order to compete with private players, these public sector organizations should infuse funds for purchasing buses that can provide comfortable and pleasing experience to passengers during night journey.
- If the vacant posts are being filled it will definitely improve the service quality standard of these organizations.

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STUDY OF CHALLENGES RSRTC IS FACING AND THE WAY OUT

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Abstract - Public Transport Sector especially surface transport through roads performs an essential role in the economic development of the state and the country. Now days, public transport is engaged and present in various forms like inter-city, intra-city, inter-state, etc. offering variety of services to huge number of customers/passengers. These customers/passengers need safe, reliable, convenient and economical services that will lead to high customer/passenger satisfaction and loyalty and that will lead to high earnings, growth and overall development. Operating and designing new services, up gradation/improvement in existing services, infrastructure, inclusion of technology, improving customer relations, improving employee's know-How can be key strategic initiatives/activities which public transport service providers especially Government or State owned service providers should focus upon to survive in the changing economic scenario, customer/passenger needs and parallel competition. The more sound the Public transport system will be, the more will be the healthy and growing economy.

Today almost all the STUs' especially RSRTC is facing many difficulties making its present and future miserable.

Keywords: Public Transport, State Transport Units, RSRTC.

1 INTRODUCTION

1.1 About RSRTC

(Rajasthan State Road Transport Corporation)
Rajasthan State Road Transport Corporation
(RSRTC) Rajasthan State Road Transport
Corporation (Hindi:राजस्थान राज्य पथ
परिवहन निगम,

RSRTC) is the largest provider of intercity bus transportation in the state of Rajasthan. It is headquartered in Jaipur Rajasthan. The corporation has been established by Government of Rajasthan on 1 October 1964 under the Road Transport Act 1950. RSRTC has incorporated Ordinary, Express, Deluxe, A.G. Gandhi Rath, A.C., A.G. Sleeper, Volvo-Mercedes, Volvo-Pantry, Volvo-LCD, Volvo-LCD-Pantry bus services in fleet for all category of passengers. Established on 1st October 1964 and before that State Government started it as a department in year 1959 with the name 'Rajasthan State Roadways'. It is the largest provider of intercity bus transportation in

Rajasthan. The Corporation has its Head Office in Jaipur.

It operates with 52 depots, 4,700 buses, carries 9,50,000 passengers per day and runs 18,00,000 Kms. per day.

2 FEATURES AND OBJECTIVES OF RSRTC

1. It offers complementary economical fares for passenger's everyday life with spacious and convenient bus stands with all amenities for waiting and in-transit passengers.
2. On some routes it is the only operator which offers the means of regularly scheduled intercity transportation to most cities, towns and small villages across the State and neighboring States.
3. It offers reservation facilities for most of the buses and also provides additional seats and buses during peak travel periods especially during festive season to accommodate extra passengers.
4. It fulfills its social responsibility very well by offering fare concessions and facilities

to physically challenged, sick, freedom fighters, war-widows and their families and many more. Today RSRTC is facing various challenges and problems and recent long strike is evidence to it.

3 THE MAJOR PROBLEMS AND CHALLENGES OF RSRTC ARE

1. Though RSRTC is a corporation but has all the equity and Management of the State Government, making it a State Government enterprise by logic so as promised and by obligation by the State Government, the Government is not infusing the necessary funds into RSRTC.
2. RSRTC is not able to pay its dues on time like the salary, retirement benefits, allowances and operational expenses.
3. Government is not infusing funds to replace obsolete buses, purchase spare parts for maintenance of the fleet, today a major percentage of buses are not roadworthy which is affecting its operations badly and also increasing the disappointment among its employees and passengers.
4. Government is not giving the pay hike benefits to the employees like the benefits related to 7th pay commission which other State Government departments are getting.
5. State Government is not allowing the corporation to hire new employees to fill the critical empty vacancies like of conductors, drivers, inspectors, etc.
6. Recently State Government issued permits on various routes to private operators to run services parallel to RSRTC with name 'Rajasthan LokParivahanSeva'.

Though the State Governments aim was to enhance the public transport system in the State, since they had a belief that private operators will provide competitive services to the people of the state, but since the whole idea was not implemented properly and with the absence of a robust monitoring and control framework for these private operators resulted in a waste activity since these private operators are not providing the services as expected from them and moreover they are not abiding to the prevailing related rules, laws and business ethics.

7. Lack of facilities and good working

conditions for most of the staff members' especially female staff members and the moving staff members like the drivers and the conductors.

8. Lack of proper training to staff at all levels especially for those who come in direct contact to passengers'.
9. Problem related to on contract vehicles.
10. Problems related to on contract conductors 'Bus Saarthi' and drivers from agencies like 'sahara', etc.
11. Problem related to lack of co- ordination, co- operation between depots'.
12. Lack of use of Information Technology like there is no dedicated website, real time MIS software for all inter departmental reporting and communication.
13. Poor state of office equipment and fixtures like Furniture, fans, lighting, computers, printers, ETMs' (Electronic Ticketing Machine).
14. Lack of Bus stops at convenient locations, especially in urban areas.
15. Poor Bus design, like they are not comfortable since they lack:
 - a. Height of bus floor/Stairs type is not suitable for senior citizens and disabled people.
 - b. Most of the buses are having 3X2 seating which makes the seat size, leg space and the aisle very narrow and uncomfortable to move in out of the bus with luggage and when the occupancy is more.
 - c. There is very less space to put luggage, since most of the buses do not have dedicated boot space and the only place to keep luggage is luggage racks, which are not sufficient at all to accommodate the usual size and amount of luggage that people usually carry with them.
 - d. Most of the buses lack basic safety features like seat belts, firefighting equipments, etc.

4 WHAT CAN BE THE WAY OUT (THE PROBABLE SOLUTIONS)

1. The State Government should infuse necessary funds into RSRTC, though RSRTC is a corporation by nature but still it is wholly owned by State Government since all its equity is of State Government and also it is run and controlled totally by its IAS, RAS Management.
2. Apart from funds provided by the State Government RSRTC should explore other revenue streams like:

- on the tickets.
- a. Rent from kiosks/shops inside the premises of their bus stands.
 - b. Renting buses for marriages, etc.,
 - c. Starting their own luggage/parcel service.
 - d. Operating holiday/package tour services. This will probably enable it to generate additional revenue to meet its dues. Also once the corporation starts generating additional revenue, probably the State Government will also fulfill the demands like 7th pay commission hike, new buses, parts, recruitment, etc. Though corporation is doing some of these efforts already, but they are needed to be done with deeper intent and with continuous improvisation.
3. The State Government should:
 - a. Draw a line to make the operating routes clear for both the corporation and private operators.
 - b. State Government should set the accountability of State Transport Department (RTOs') regarding the operations of both the corporation buses and the private operators.
 - c. State Government should develop a mechanism which can check and ensure that both corporation and private operators are meeting the customer expectations, quality and safety standards each and every time.
 4. Corporation should try to emphasize on the facilities and the suitable working conditions for the employees, especially female and the moving employees like drivers and the conductors so that they feel motivated, reduce attrition, attract talented and dedicated employees and they will provide good travel experience to the passengers.
 5. Corporation should develop good training mechanism with detailed training manuals to train staff, especially for those who come in direct contact with passengers frequently.
 6. Corporation should make clear and strict rules and service quality benchmarks for the buses taken on contract, but since buses are the key asset in this business so
 7. Corporation should try to rely more on obtaining their own buses.
 7. Corporation should make clear and strict rules and performance indicators for the conductors and drivers taken on contract, but since these are the critical staff members who come in direct contact with passengers, so a lot depends on their performance so corporation should rely more on recruiting their own drivers and conductors. Though taking buses, drivers and conductors on contract may be a part of cost reduction initiative, but corporation should/can outsource vehicle maintenance work, etc. instead, which are more critical and cost involving.
 8. Corporation should try to develop different activities to enhance co-operation and co-ordination between depots' like conducting monthly Chief Manager level meetings, setting combined performance indicators and revenue sharing mechanism between depots', etc.
 9. It is surprising that corporation still does not have a dedicated website of its own where they can share and gather vital information with public and passengers, where it can provide correct information related to routes, fares, tickets, bus timings to passengers. Also corporation should have its own online MIS system for inter-departmental reporting and information sharing to make its working more fast and accurate, today it is relying mainly on Emails' for this purpose which is not adequate for this purpose.
 10. Corporation should develop a replacement mechanism for the office equipment's, furniture, lighting, computers, ETMs', etc. like corporation can set a time span (5/10 years) for their use and after that there should be a compulsory replacement drive for them as they improve overall performance of the organization.
 11. Corporation should try to develop newer spots for bus stops which are more convenient for public to

get down and catch the buses, and for this there should be a continuous review mechanism accommodating the vital feedback from passengers’.

12. Though corporation is having buses with compliance to standards of ARAI (Automotive Research Association of India, Research Institute of the Automotive Industry with the Ministry of Heavy Industries & Public Enterprises, Govt. of India) but still many things are missing with regard to passenger expectations like:
 - a. Buses should have stair design to be convenient for senior citizens, disabled people, etc.
 - b. Seat size and leg space should be more and up to the actual comfort level of the passengers, also the aisle should be wide enough so that two people can move side by side and also any person can move in and out of the bus with his/her luggage in hands.
 - c. Buses should have more provision to accommodate luggage of passengers’ since certain amount of luggage is inevitable while travelling and especially to distant places especially with whole family.
 - d. Buses should have all the safety equipments’ with them and they should be maintained regularly and properly, for example buses should have seat belts to hold the passengers in case of sudden braking and accidents, firefighting equipments’ to deal with the in vehicle fire, etc.

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12. Informal discussions with anonymous passengers' and staff members of the corporation.

SERVICE QUALITY ATTRIBUTES AFFECTING CUSTOMER SATISFACTION (WITH SPECIAL REFERENCE TO PUBLIC ROAD TRANSPORT IN INDIA)

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Abstract: - Service quality has been viewed as a determinant of customer satisfaction. Service quality is one of the key dimensions which are considered into the consumer's satisfaction judgments. Quality is the totality of features and characteristics of a product or service that bear on its ability to satisfy stated and implied needs. Different attributes of service quality have been considered by various researchers. This paper identifies components of service quality of Indian Public Road Transport Service. Assessing and improving quality of public bus transport service is important to address the needs of customers. For consumers, evaluation and consequently the satisfaction with a service like Bus transportation often depends on their perception of the quality of performance of a number of factors. Knowledge and understanding of these factors is critical, particularly at a time when competition for attracting and retaining customers is intense. An overall aim is to gain a better understanding of overall customer satisfaction in Indian public bus transport sector.

Keywords: - Customer Satisfaction, Service Quality, Public Road Transport.

1. INTRODUCTION

Customer satisfaction is the state of mind that customers have about a company when their expectations have been met or exceeded over the lifetime of the product or service. The achievement of customer satisfaction leads to company loyalty and product repurchase. It is one of the most important indicators of a business's performance. On the basis of customers' verdicts, performance of a product or service can be judged and its success largely depends on the satisfaction that customers are deriving. Therefore, an understanding of customer satisfaction has become the most significant aspect in recent times. In order to gain competitive advantage over others, an organization needs to identify factors that cause customer satisfaction or dissatisfaction and consciously measure them.

According to Gronoos (1990) Customer satisfaction is a business philosophy which tends creating value for customers, anticipating and managing their expectations, and demonstrating ability and responsibility to satisfy their needs. Qualities of service and customer satisfaction are critical factors for success of any business. In another definition given by Kotler and Armstrong (2004; 2009), Customer expectation is the difference between the expectations of the customers before availing the services and perceptions of the customers

after availing it.

Customer satisfaction mainly depends on the build-up of the perceived value to which the customers have concerning a product or service. According to Oliver (1997), satisfaction means customer's fulfillment. It is a judgment that a product or service feature, or the product or service itself, provided (or is providing) a pleasurable level of consumption-related fulfillment, including levels of under- or over-fulfillment. Need fulfillment is a comparative process giving rise to the satisfaction responses. Any gaps lead to disconfirmation; i.e., positive disconfirmations maintain satisfaction and negative disconfirmation create dissatisfaction.

2. SERVICE QUALITY AND CUSTOMER SATISFACTION

Service quality (Parasuraman et al. 1988; Gronroos 1984) is defined as a comparison between customer expectation and perception of service. Service quality generally consists of five distinct dimensions: tangibles (Physical facilities, equipment, and appearance of personnel), reliability (ability to perform the promised service dependably and accurately), responsiveness (willingness to help customer and provide prompt service), assurance (knowledge and courtesy of employees and their ability to inspire trust and confidence), and empathy (caring, individualized attention the firm provide its customer).

As service quality and customer satisfaction are correlated, measuring their correlation is difficult task due to complex interplay between performance dimension used in quality judgments and those used in satisfaction judgments, and due to the differences between encounter-specific and global judgment. Service quality is designed keeping in view the desired performance that is judged from ideal expectation and from idiosyncratic preference of individual consumer. In the service area, although developed independently, quality and satisfaction share one notable feature. Both view satisfaction as a function of expectancy disconfirmation and service quality as function of satisfaction.

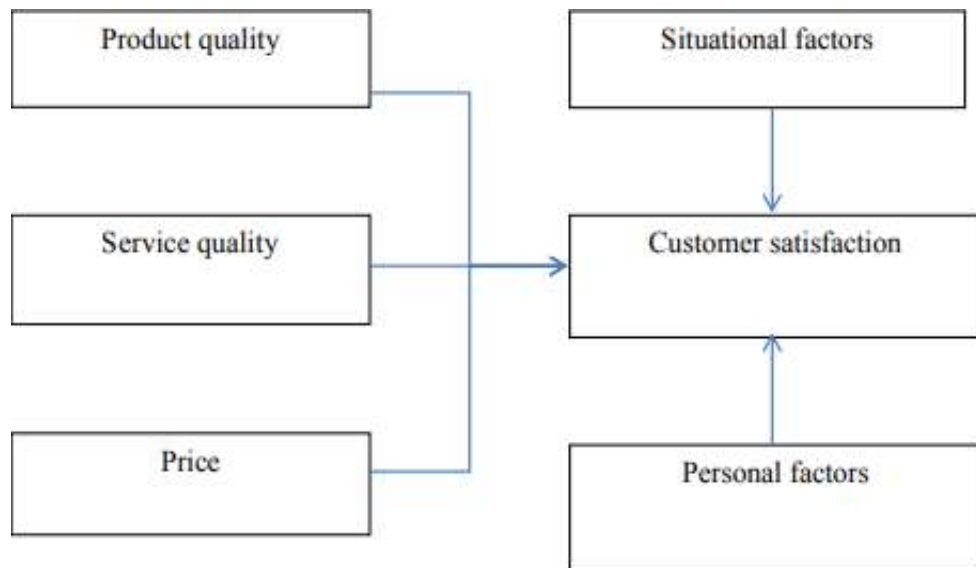
Thus, quality is one of the key dimensions which are considered into the consumer's satisfaction judgments. Quality is the totality of features and characteristics of a product or service that bear on its ability to satisfy stated and implied needs. In short term, product or service features determine quality which then satisfies consumer needs. Subsequent to this more immediate effect, it will be assumed that satisfaction may reinforce global quality perceptions but only indirectly. Quality is hypothesized as one dimension on which satisfaction is based, and satisfaction is one potential influence on global quality perceptions.

3. FACTORS AFFECTING CUSTOMER SATISFACTION

In 2001, Bel and Chiao stated that product quality, service quality and price are fatal factors that influence customer satisfaction. On the other hand, according to Zeithaml and Bitner (2000) customer satisfaction is influenced not only by product and service quality and price but also by situational factors and personal factors. According to that theory Zeithaml and Bitner (2000) have developed a

customer satisfaction model:

Chart 1: A Model of Customer Satisfaction



Source: <https://www.researchgate.net/publication/319482431>

According to the model shown above, following are the important factors that could affect customer satisfaction:

- **Product and Service Quality** refers to the totality of features and characteristics of a product or service that bear on its ability to satisfy stated and implied needs of customers.
- **Price** signifies affordability and value for money.
- **Situational factors** include ambience of service station, appearance of staff, their attitude, etc.
- **Personal factors** include personality, attitude, previous experience of customers etc. Having discussed the above factors that affect customer satisfaction we can say that higher the satisfaction level, higher is the sentimental attachment of customers with the specific brand of product and also with the supplier. This helps in making a strong and healthy

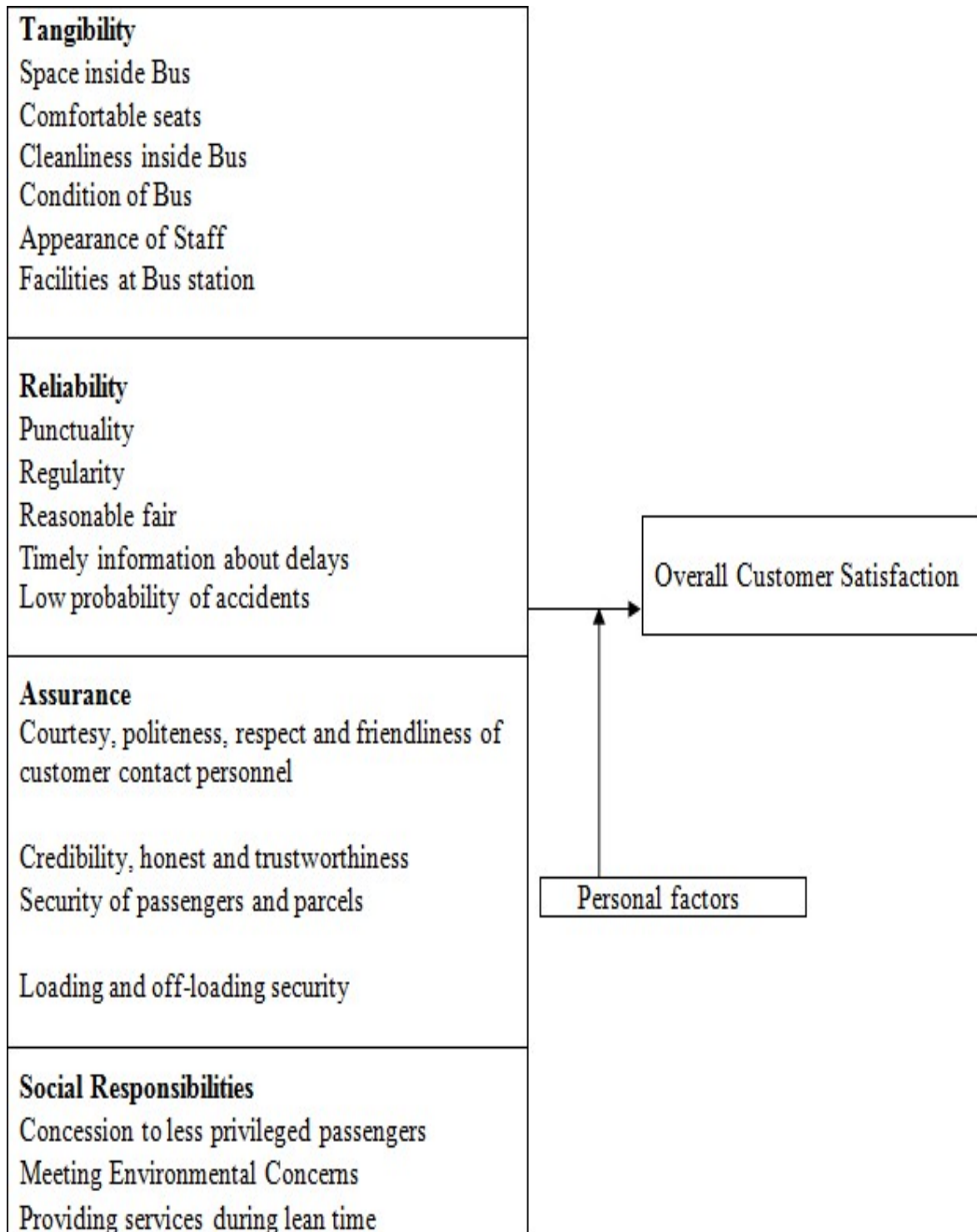
4. CUSTOMER SATISFACTION IN PUBLIC ROAD TRANSPORT SECTOR IN INDIA

The State Road Transport Undertakings (STUs) have a place of prominence in the road transport sector of the country. They perform very vital role in the daily life of millions of our country men. According to available recent data, STUs carried more than 2500 crores passengers in a year, nearly 7 crores each and every day during 2014-15. It was found that there was considerable improvement in their overall operational performance and the level of customer satisfaction despite of the unsatisfactory financial position of STUs in India. Moreover, knowledge from previous research shows that public transport is still an alternative mode of choice for travelling for many people.

In order to maintain current passengers, public transport has to improve the service to accommodate wide range of customer need and expectation (Beirão & Sarsfield Cabral 2007; Andreessen 1995). The following model describes the conceptual framework of the study. The dependent variable i.e. Customer Satisfaction depends on independent variables

i.e. factor affecting customer satisfaction that includes Tangibility, Reliability, Assurance and social responsibility. These are also called as service quality attributes. Intervening variable i.e. also affect customer satisfaction that includes personal factors related to customers.

Chart 2: Impact of Service Quality Attributes on Customer Satisfaction



Source: Researcher's own work

For consumers, evaluation and consequently the satisfaction with a service like Bus transportation often depends on their perception of the quality of performance of a number of factors. Knowledge and understanding of these factors are critical, particularly at a time when competition for attracting and retaining customers is intense. The purpose of this paper is to identify and analyze the importance customers attach to the various dimensions of Public Road Transport Services.

The study also aims to identify how customers' perception of performance of these dimensions affects their satisfaction level with these services. Consequently, the study aims to identify the areas where attention needs to be given by the State Road Transportation authorities in order to increase the satisfaction of its customers.

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COVERING LETTER

To whomsoever it may concern

I Siddhartha Garg is a registered research scholar for Ph.D., enrolled under “The University of Kota (Kota, Rajasthan)”. The topic of my research is “**A Comparative Study of Customer Satisfaction with reference to Rajasthan State Road Transport Corporation and Haryana Roadways**”

The following set of questions is to ascertain and acknowledge respondent’s perception towards customer satisfaction with the services of RSRTC and Haryana roadways.

Siddhartha Garg

QUESTIONNAIRE

GENERAL INFORMATION

1. Respondent’s name.....
2. Gender-
 - a) Male
 - b) Female
3. Age group in years-
 - a) Below 20
 - b) 20-30
 - c) 30-40
 - d) 40-50
 - e) 50 & above
4. Person with disability-
 - a) Yes
 - b) No
5. Occupation-
 - a) Student
 - b) Business
 - c) Service
 - d) Professional
 - e) Others
6. Mode of transport used frequently-
 - a) Bus
 - b) Train
 - c) Personal
 - d) Other

7. How frequently do you avail the services of RSRTC/HR?-
a) Daily b) Weekly c) Occasionally d) Rarely e)
Never
8. Purpose of journey-
a) Study b) Employment c) Household matters d) Tourism
9. Are you able to reach your destination on time using RSRTC/HR-
a) Yes b) No
10. Which road transport do you use?
a) RSRTC b) HR c) Private d) Others

PASSENGER'S PERCEPTION TOWARDS DRIVERS/ CONDUCTORS

11. What is the working experience of drivers/conductors with RSRTC/HR
a) 1-5 years b) 5 years & above c) Can't say
12. Does the RSRTC/HR takes care of safety and security of customers?
a) Yes b) No c) Can't say
13. Do the drivers/conductors performs daily activities effectively?
a) Yes b) No c) Can't say
14. Do the drivers and conductors have adequate means to handle people with
disability, elders, pregnant women and children?
a) Yes b) No c) Can't say
15. Do the derivers/conductors are provided sufficient rest hours between two
journeys?
a) Yes b) No c) Can't say

SERVICE QUALITY PARAMETERS

1. Tangible factors

Tangibility Factors	Strongly Agree (5)	Agree (4)	Uncertain (3)	Disagree (2)	Strongly Disagree (1)
There is enough leg space in bus					
Spacious luggage racks are available					
Seats are comfortable and good in condition					
The interiors are sufficiently clean					
Bus is in good condition					
Staff appears in proper uniform/dress code.					
Enough seating facilities and shades are available at bus stations					
Safe drinking water facility is available					
Cleanliness of toilets is maintained					
Enough Parking space					

2. Reliability factors

Reliability Factors	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
There is no delay in arrival and departure time					
Regularity of service is strictly maintained					
Bus fare is reasonable					
Notification of delay is made in advance					
There is low probability of accidents					
Drivers have sufficient driving skills					
Buses hardly breakdown on route					
Passengers can book tickets easily					

3. Assurance factors

Assurance Factors	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
Easy Accessibility of Buses					
Customer contact personnel are courteous, polite, respectful and friendly					
Customer contact personnel are credible, honest and trustworthy					
Security of passengers and parcels is ensured					
There are enough measures for loading and off-loading securely					
Consistency in providing quality services					

4. Responsiveness factors

Responsiveness Factors	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
Arrangements of alternatives made quickly when there is excessive demand					
Employees' readiness to serve Passengers					
Proper and immediate response to telephone enquiry					
Emergency services provided like medical support when need arises					

5. Social responsibility factors

Social Responsibilities Factors	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
Vehicles meet environmental concerns					
The organization provides services during lean time					
Communal harmony is taken care off					

OVERALL CUSTOMER SATISFACTION

1. How do you rate the following services provided by RSRTC/HR?

Standard of services provided	Good	Very good	Average	Poor	Very poor
Handling problems of passengers					
Caring of differently able people, women, elderly people and children					
Your experience of travelling in RSRTC/HR					

1. Does the services offered by the RSRTC/HR satisfies you?
 - a) Yes b) No c) To some extent d) Can't say

2. Would you recommend the bus transport services by RSRTC/HR to others?
 - a) Yes b) No c) Can't say

3. What do you think can be done in order to make sure that public transport offers better service to its customers?

Explain.....

.....

.....



Two Days National Workshop & Seminar On "Latest Trends In Physical Education & Sports"

6th - 7th Feb., 2019


Organized by:

Department of Physical Education & Sports
University of Kota, Kota (Rajasthan)

CERTIFICATE

This is to certify that Prof./Dr./Mr./Mrs./Ms. SIDDHARTHA GARG.....
Designation Research Scholar.....Institution University of Kota, Kota.....participated as a Resource
Person/Registered Delegate/Student in the Two days National Workshop & Seminar on "Latest Trends in
Physical Education & Sports" held at University of Kota, Kota (Rajasthan) on 6th - 7th Feb., 2019. He /She
attended/presented a paper/delivered extension lecture on "A study of stress Manage-
-ment Through 'YOGA' in RERTC ".....


Prof. N. K. Jaiman
Chairman

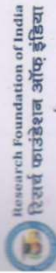

Dr. Vijay Singh
Convener



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13th International Conference

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*"Sustainable Development Through Social, Science, Management, Smart Education,
Agriculture Technologies & Advanced Engineering Applications in Global Environment"*

Venue : Om Kothari Institute of Management & Research, Kota, Raj., India

It is Certified that Prof./Dr./Mr./Ms./Mrs. Siddhkantha Ganga (Research Scholar)
of Dept. of Com. And Mgmt. University of Kota, Rajasthan, India
Participated in The 13th International Conference on "Sustainable Development Through Social, Science, Management,
Smart Education, Agriculture Technologies & Advanced Engineering Applications in Global Environment" held at
Om Kothari Institute of Management & Research, Kota, India on 23-24 February 2019 as Session Chairperson / Co-chairperson/
Mentor/ Resource Person / Invited Guest / Invited Speaker / Delegate and Presented / "Study of Challenges RRTC Is
Facing And The Way Out"
in Technical Session.....



ICOSD/2019/493

Dr. Sourabh Jain
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Prof. (Dr.) Nayan Gandhi
OKIMR Kota
Organizing Secretary-ICOSD-2019

Prof. (Dr.) Ashok Kumar Gupta
South Asia Chapter Head
Research Foundation of India

Prof. (Dr.) Amit Singh Rathore
Director, OKGEI Kota
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CERTIFICATE

2nd INTERNATIONAL CONFERENCE

On

“Innovative Research In Science, Technology and Management” (IC-IRSTM-2019)

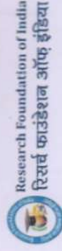
Venue: Modi Institute of Management & Technology, Kota, Rajasthan, India

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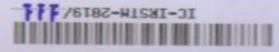
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It is Certified that Prof./Dr./Mr./Ms./Mrs.
of
Participated in The 2nd International Conference on “Innovative Research In Science, Technology and Management” (IC-IRSTM-2019) held at Modi Institute of Management & Technology, Kota, Rajasthan India on 20-21 April 2019 as Session Chairperson / Co-chairperson / Resource Person / Invited Guest / Invited Speaker / Delegate and Presented / Participated Paper title.....

P. Dikshartha Ganga (Acharya)

University Of Kota
Quality Attributes Affecting System Satisfaction (With Special Reference To Public Road Transport In India)
shared in technical session..... I.....



Ashok Kumar Gupta

Dr. Ashok Kumar Gupta
South Asia Chapter Head
Research Foundation of India

P. Agnihotri

Dr. Priyadarshini Agnihotri
Organising Secretary IC-IRSTM-2019
Chapter Head, MP
Research Foundation of India

N. Joshi

Prof. N. K. Joshi
Chairman IC-IRSTM-2019
Director, MIMT, Kota, Raj.

20-21 April 2019