

Passenger Amenities of Indian Railways: A Study of Guntur Division of South Central Railway

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Railway organisations worldwide have traditionally evolved as vertically integrated transport operating enterprises under public ownership and control, to the extent that they have been sheltered from competition by government regulatory controls, they have been able to grow to dominant positions in the domestic transportation activity of many countries. However, over the past two decades, rail dominance of domestic transport has been challenged by the dynamic growth of road networks and of commercial motor vehicles. This growth has been assisted by the commitment of a major and increasing share of public infrastructure development funds to the development of highway networks. Public support of road transport at the expense of rail transport development has usually been justified on the basis of the greater flexibility of the road transport mode. Competition from this source cannot therefore be expected to reduce its intensity for the foreseeable future, and will only be effectively counteracted if rail can offer a standard service which at the same time satisfies the needs of customers and is superior to that of its competitors. Clearly this poses rail with a substantial challenge. It will require a major change in the outlook of railway managements and in the culture of railway organisations. Henceforth, the activities of railway managements will have to be directed at: identifying, understanding and responding to the needs of their existing and potential customers; identifying and understanding the cost causation and profit potential associated with individual traffics or market segments; and bringing about the organisational change which will ensure that railways will satisfy new commercial goals.

Introduction

Railways have been a vital component of the social, political and economic life of the country. Indian Railways transportation network has played a key role in weaving India into a nation. This network has not only integrated markets but also people across length and breadth of the country. It has bound the economic life of

the country and helped in accelerating the development of industry and agriculture. From a very modest beginning in 1853, the first train steamed off from Mumbai to Thane a distance of 34 kilometres. Indian Railways have grown into a vast network of 6,856 stations spread over a route length of 63,140 kilometers with a fleet of 7,739 locomotives, 39,236 passenger service vehicles, 4,827 author coaching vehicles

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and 2,16,717 wagons as on March, 31 sth 2002. The growth of Indian Railways since 1853 is thus phenomenal. It has played vital role in the economic, industrial and social development of the country. The Indian Railways constitute the largest transport agency intimately connected with the development of the national economy, the main objectives of Railways have been to develop the transport infrastructure to carry the projected quantum of traffic and meet the developmental needs of the economy with efficient railway transport system.

Need for the Study

In the service industry where situations as to a promise is sold it is very difficult to assess situations as to where and when these promises fail. Building credibility takes time and requires strategic planning. This makes it clear that it is a difficult proposition to sell these services.

Today marketing has emerged as a strategic tool to ensue customers' satisfaction. The organisational goals like satisfying the customers and generating profits need to be accomplished through innovative and dynamic marketing strategies. The services sector if marketed in 'right fashion contributes substantially to the process of development. The speed of socio-economic transformation can be increased sizably if the innovative principles 'are practiced. The fact can not be denied that in the years to come the services sector would get a conducive environment with profitable opportunities.

If the services are marketed in right direction, the available opportunities can be capitalised optimally.

The emergence of the marketing concept in respect of services is a recent phenomenon. It is important to produce what the potential market wants, following which the sales department will manage to sell. This was the focus prior to the emerging marketing concepts developed for these services. The end of 1950' s opened up vast avenues for marketing these concepts on customer satisfaction received due weightage. Service organisations appreciated the application of marketing strategies for managing and selling the services - making it possible for initiating qualitative improvements which would sub-serve the interest 'by both providers and consumers. Emphasis on selling these services in the best interest of consumers is the perception of services marketing. Scientific and well planned management of services ensures a fine fusion of the interests of both producers and consumers. The process of service marketing involves problems and so persons and institutions associated with the marketing of services have to consider many issues.

Guntur Division

Guntur Division was formed on April, 1 S\ 2003 with a length of 588 route kilometres. The total sections of Guntur Division are seven. Out of 7 sections, 5 sections are from Vijayawada Division and the remaining two sections are from Guntakal Division and Secundrabad Division. These five sections were part of

Vijayawada Division earlier (i.e., before 1st April 2003). The sections that are deleted from Vijayawada Division are : (i) Krishna Canal- Guntur with 241 route kilometres, (ii) Guntur-Tenali with 25 route kilometres, (iii) Guntur-Macherla with 130 route kilometres, (iv) Guntur-Dornakal with 120 route kilometres and (v) Miryalguda-Nadikude with 38 route kilometres. All the above sections are included in the newly formed Guntur Division.

Objectives

The chief objective of the study is to make a comprehensive analysis of marketing of services in Indian Railways with reference to amenities provided by Indian Railways to passengers at stations and on board and thereby, to identify and bring into light certain of the problems hidden in this regard.

1. To analyse the passenger amenities provided by Indian Railways at stations and on board the train in India in general and in Guntur Division in particular.
2. To analyse opinions of selected sample passengers of Guntur Railway Division on various amenities provided by Indian Railways and thereby.
3. To suggest such measures and strategies that would go a long way for improvement of passenger amenities in Guntur Division in particular and Indian Railways in general.

Data Collection

The research study involved both primary and secondary data. Secondary data was collected from the official records,

circulars, annual reports, year books and personal discussions with officers and staff in various departments of the Indian Railways. The data from Internet also was used for the study. The primary source of data was obtained by administering two types of questionnaires to the passengers in order to elicit information on various passenger amenities and facilities provided by Indian Railways. The first type of questionnaire was administered to a sample of 250 passengers while they are travelling in express and passenger trains in sleeper class, I class AC III tier, AC II Tier and AC Chair car. The opinions were collected from 250 passengers at random covering all sections of people. The opinion survey was carried out on rail passengers while passengers are on-board the train.

Topics Covered

The issues covered in the opinion survey of rail passengers on-board the trains are : profile of passengers, opinions of passengers on pantry car and catering facilities, security arrangements made by Government Railway Police (GRP), medical facilities, complaints and suggestions. Passenger amenities and facilities in trains like seats and berths, water supply, cleanliness of compartments, working of electrical fittings, etc., are also covered. Similarly another questionnaire was administered to 250 respondents at random covering different sections of the society. This opinion survey of rail passengers was carried out on 250 respondents when they are at home. The various topics covered in the survey apart from the profile of respondents include,

opinion of respondents on waiting halls, retiring rooms and dormitories, platforms, sanitation, water facilities, booking office and reservation system, passenger guidance and help system, pantry car and catering facilities, concessions given by Railways to various sections of the society.

Use of Statistical Tools

In order to achieve the objectives of the study an analysis is made to understand the opinions of passengers on various amenities. One of the statistical techniques applied in the study is Chi-Square Test for testing of independence between two attributes.

Survey Results

1. Age Vs Opinion on First Aid Facility in Trains:

From the cross table of opinion on First aid facility in trains and Age of the respondent, we may conclude that there is association between age and opinion on first aid facility in trains. The calculated χ^2 value 117.54 is greater than the Table χ^2 value which is 31.41. (See Table No.1 below)

Table No.1

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	117.5428	20	.000
Likelihood Ratio	126.674	20	.000
Linear-by-Linear Association	.032	1	.859
N of Valid Cases	250		

a.13 cells (43.3%) have expected count less than 5.

The minimum expected count is .76.

2. Education Vs Opinion on Cleanliness of Trains:

From the cross table of Education and opinion on cleanliness of trains, it can be concluded that the two attributes - Education and Opinion on Cleanliness of trains are not independent (as χ^2 value 119.29 is more than the Table χ^2 value 16.91). (See Table No.2 below)

Table No.2

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	119.2978	9	.000
Likelihood Ratio	115.045	9	.000
Linear-by-Linear Association	29.213	1	.000
N of Valid Cases	250		

a.1 cells (6.3%) have expected count less than 5.

The minimum expected count is 4.37.

3. Frequency of Travel Vs Opinion on Working of Electrical Fittings in Trains:

It can be concluded from the Chi-Square Test, that the two attributes: frequency of travel and opinion on working of electrical fittings in trains are dependent, because the calculated χ^2 value 46.10 is greater than the Table χ^2 value 15.51. (See Table No.3. below)

Table No.3

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	46.1088	8	.000
Likelihood Ratio	49.860	8	.000
Linear-by-Linear Association	3.169	1	.075
N of Valid Cases	250		

a.2 celis (13.3%) have expected count less than 5. The minimum expected count is 2.38.

4. Frequency of Travel V s Opinion on Entry of Unauthorised Vendors and Hawkers:

It can be concluded from the Chi-Square Test result that the two attributes - frequency of travel and opinion on entry of unauthorised vendors are not independent as the calculated χ^2 value 25.33 is greater than the Table χ^2 value 15.51. (See Table No.4 below)

Table No.4

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	25.3368	8	.001
Likelihood Ratio	24.216	8	.002
Linear-by-Linear Association	1.112	1	.292
N of Valid Cases	250		

a.5 celis (33.3%) have expected count less than 5. The minimum expected count is .72.

5. Frequency of Travel Vs Opinion on Provision of Public Address System in Trains:

It can be concluded from the Chi-Square Test results that there is no independency between the two attributes

frequency of travel and opinion on provision of public address system in trains, as the calculated χ^2 value 21.32 is greater than Table χ^2 value 9.49. (See Table No.5 below)

Table No.5

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	21.3248	4	.000
Likelihood Ratio	22.807	4	.000
Linear-by-Linear Association	8.330	1	.004
N of Valid Cases	250		

a.1 cells (10.0%) have expected count less than 5. The minimum expected count is 4.03.

6. Occupation V s Opinion on Duties of TTEs in Trains:

In case of the attributes occupation and opinion on duties of TIE in trains, from the Chi-Square test results we can conclude that there is association between the attributes calculated χ^2 value 66.01 is greater than the Table X2 value 36.42). (See Table No.6 below)

Table No.6

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	66.0148	24	.000
Likelihood Ratio	79.239	24	.000
Linear-by-Linear Association	.015	1	.903
N of Valid Cases	250		

a.19 cells (54.3%) have expected count less than 5. The minimum expected count is .05.

7. Objective of Journey Vs Opinion on Percentage of General Bogies to Total Number of Bogies in Trains:

It can be concluded from the Chi-Square test results that there is impact of the attribute objective of journey on the attribute opinion on percentage of general bogies to total bogies, as the calculated χ^2 value 74.39 is greater than the Table χ^2 value 21.03. (See Table No.7 below)

Table No.7

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	74.3948	12	.000
Likelihood Ratio	65.051	12	.000
Linear-by-Linear Association	5.165	1	.023
N of Valid Cases	250		

a.9 cells (45.0%) have expected count less than 5. The minimum expected count is .52.

8. Education Vs Opinion on Amenities provided by Indian Railways:

The Chi-Square test results reveal that the two attributes education and opinion on amenities provided by railways have association, as the calculated χ^2 value 30.85 is greater than Table χ^2 value 21.03. (See Table No.8 below)

Table No.8

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	30.8538	12	.002
Likelihood Ratio	41.047	12	.000
Linear-by-Linear Association	1.187	1	.276
N of Valid Cases	250		

a. 9 cells (45.0%) have expected count less than 5. The minimum expected count is .78.

9. Occupation Vs Opinion on Amenities Provided by Indian Railways:

From the Chi-Square test results we can draw a conclusion that there is dependency between the two attributes occupation and opinion on amenities, as the calculated χ^2 value 53.54 is greater than the Table χ^2 value 36.42. (See Table No.9 below)

Table No.9

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	53.5468	24	.000
Likelihood Ratio	57.753	24	.000
Linear-by-Linear Association	1.599	1	.206
N of Valid Cases	250		

a.26 cells (74.3%) have expected count less than 5. The minimum expected count is .02.

10. Objective of Journey Vs Opinion on Amenities Provided by Indian Railways:

It can be concluded from the Chi-Square test results that the two attributes: objective of journey and opinion on amenities provided are not independent. In other words it means that there is association between the two attributes (as calculated χ^2 value 34.51 is greater than Table χ^2 value 26.30). (See Table No.10 below)

Table No. 10

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	34.,5188	16	.005
Likelihood Ratio	32.508	16	.009
Linear-by-Linear Association	.689	1	.406
N of Valid Cases	250		

a.16 cells (64.0%) have expected count less than 5. The minimum expected count is .10.

Findings of the study:

1. The survey which was conducted on 250 respondents, indicated that a majority of respondents are Professionals (41 per cent) followed by passengers who are business people (17 per cent).
2. 54 per cent of 250 respondents are travelling on family related work.
3. Passengers who travel 6-12 times a year are more in number (40 per cent) i.e. with regard to frequency of travel. Passengers who travel more than 12 times a year are 20 per cent (of 250 respondents).
4. A considerable group of passengers opined that security arrangements have to be improved at station, on train and particularly during night times.
5. It can be inferred from the study that around 48 per cent of the respondents have poor opinion on the supply of water in trains. Some passengers opined that the water supply is not continuous. Some opined that water has some smell there by becoming useless for utilisation.
6. It is clear from the study that around 48 per cent of the respondents have poor opinion on the supply of water in trains. Some passengers opined that the water supply is not continuous. Some opined that water has some smell there by becoming useless for utilisation.
7. A large group of respondents (47 per cent) opined that the cleanliness of train compartments is poor. The passengers expressed that the compartments are not cleaned and maintained properly and regularly resulting in lot of discomfort to passengers while on travel.
8. When the passengers were asked to give their opinion on provision of set of new facilities like lending library, hair cutting saloon, public address system and entertainment in trains, a majority of respondents said yes to the provision of lending library and public address system in trains. While a large number of respondents (72 per cent) said no to the provision of hair cutting saloon in trains. With respect to provision of entertainment in trains the respondents have two opinions. Some responded in favour of the facility, while 54 per cent said no to the provision of entertainment in trains.
9. As regards to opinions of respondents on percentage of general bogies to total bogies in trains a majority (44 per

cent) opined that 25 per cent of the train, should comprise general bogies. From this it is clear that the existing number of general bogies is not sufficient to cater to the needs of passengers.

10. The respondents are asked to opine on the privatisation of catering, sanitation and pantry car facilities. Around 50 per cent of the respondents are in favour of privatisation while another 50 per cent are not in favour of privatisation of the said three heads.
11. The study results indicate that a very large group of respondents (70 per cent) expressed that they are satisfied with the amenities provided by Indian Railways.

Suggestions

1. Drinking water in trains has to be provided by railways to the passengers. A plastic tank can be fixed in the compartment to serve the needs of the passengers of that compartment. The tanks have to be filled up with pure drinking water at important junctions.
2. Suitable measures have to be taken to enhance the quality of fast food items sold in the pantry car and at refreshment stalls on platforms. This is with special reference to coffee and tea being sold by the vendors. Similarly the quality of the casserole meals has to be increased.
3. All the compartments of trains should have First-Aid boxes. These boxes should comprise antiseptic creams, lotions, pain relievers, cotton bandage, etc. The TIE should be in-charge of First-Aid box. The medicines in the box are to be replaced on expiry.
4. The passengers who travel by train usually from some bad odor even after the journey. This may be because of the material used in making the coach, rexene used for seats and berths, material used for flooring of the compartment. To avoid the problem of 'train smell' quality material, which is of latest origin, should be used in making and finishing the coaches.
5. The design of the iron shutters of the window should be modified. Passengers who travel during night find it difficult to see the names of the stations when they pull down the iron shutters. Strong mesh-type window shutters with bigger holes or shutters with a provision to see through the window without opening should be provided.
6. The window shutters especially the glass panes should be fitted properly in such a way that they are water leak proof. During rainy season passengers face lot of difficulties as the water spills on seats and some times the entire compartment gets wet.
7. In AC Chair Car seating arrangement should be modified, as it is inconvenient to sit so close to one another. Seats should be arranged in such a way that passengers have adequate leg space.
8. Some research has to go in proper alignment of side lower berths in air conditioned and sleeper classes. In

some express trains the back rests when made as berth have no proper alignment thereby causing back pain to the passenger. This non alignment is causing severe inconvenience to passengers especially in long distance trains.

9. The provision to keep luggage in chair car compartments of inter-city express trains should be modified. The existing provision to keep luggage is too high and small to place and hold luggage.
10. A personal luggage delivery system can be developed in which the passenger will give his luggage to the staff of the luggage coach while boarding the train. At the destination point the luggage will be delivered to the passenger. This avoids carrying luggage while in the train, there would be more space in the coach bays and above all the passenger can have a peaceful journey. This system if developed can be more useful in long distance trains.
11. Passenger coaches including toilet facilities must be ergonomically designed. Noise reduction, dust prevention and convenience for the disabled must be kept in consideration.
12. The flush arranged in the toilets must be modified in such a way as to spill water all over the commode so that the miserable odor can be avoided.
13. Rechargeable electric lights have to be fitted in compartments and their functioning has to be monitored regularly. In times of emergency or an accident or when the power is off due to technical slack these emergency lamps will be of great use.
14. Fire extinguishers must be provided in each compartment and coach attendant and TIEs have to be trained to use them.
15. The railway authorities must study the provision of lending library facility in long distance express trains. In pantry car or at a suitable location in train books, novels, and magazines can be made available. The passengers may be asked to deposit a refundable amount and books and magazines can be issued at nominal rental fee. Before the passenger evacuates the train he returns the books and gets back his deposit amount. This minimises expenditure of passengers on purchase of books and magazines during travel.
16. The number of unreserved compartments has to be increased to 30 per cent of the total number of compartments of a train. The existing number of unreserved compartments is not sufficient to meet the passenger traffic.
17. The seats and berths in the unreserved compartments also must be cushioned as in case of the reserved compartments.
18. The lighting of the unreserved compartments should also be

modified. Tube lights must be provided in all unreserved compartments of all passenger and express trains.

19. The platform level has to be increased in majority stations in the division. Rail level platform will enable the passengers to board the train comfortably.
20. Separate reservation counter exclusively for ladies should be provided. According to the existing system, senior citizens, freedom fighters and passengers who reserve tickets through credit cards are issued tickets at one counter.
21. Sign boards should be fixed on platforms giving direction to passengers who get down from the trains. The boards may give directions to main gate or the exit point, enquiry counters, booking counters, reservation counters, etc.
22. Signboards indicating the coach number have to be fixed inside the compartment. This avoids confusion to passengers who move inside vestibule long distance trains.
23. A board comprising list of important doctors, hospitals with telephone numbers has to be fixed at an important location in the station. It is better if the board is written in English and Telugu languages at all important stations.

Conclusion

A well managed transport system proves to be a catalyst of socio-economic

transformation. Transportation system is considered to be a de facto barometer of social, economic, commercial and cultural advances. In the Indian perspective, rail transportation contributes substantially to the development process. In the process of bearing high social costs, Indian Railways have the problem of financial crunch which has been making an assault on their potentials of serving the socio-economic infrastructure. This makes it essential that Indian Railways conceptualise marketing and innovate the strategic decision to activate the process of qualitative-cum-quantitative improvements.

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