7.1 Introduction

Railways have indeed brought about spectacular changes in the political, social and economic life of the country. It promotes economy by facilitating agricultural and industrial development and ensuring balanced regional development.

Railways, being a public transport service, have to bear social burden in the form of loss on coaching services and loss on lower freight rates for food grains, fodder, coal, fruits and vegetables. It is further observed that the politicization of business decisions resulted in abnormal hike in freight rate for other products and neglect of customer oriented services. This in turn led to giving up of its market share to roadways and ultimately brought it to the verge of bankruptcy in 2001. Certain strategies including differential pricing policies for value added services aimed at improved resource management and cost reduction was applied to recover from the crisis. This brought IR
from the acute financial crisis to perceptible success in 2005-06, which is technically known as ‘turnaround’.

The turnaround had great relevance and it drew the attention of economists and management experts across the world, because it was achieved without pinching the rail users by increasing fares. On the contrary, a reduction in rail fare was effected and better quality services were provided during that period without any compromise in fulfilling its social obligations. It is understood that along with other factors, the political leadership during the period has also contributed to turnaround. The policies taken by his predecessors were continued and with a strong will and follow-up, the then Minister has executed all the policy decisions to increase the revenue and to reduce the cost. Consistency of direction and follow-up made the axle load and automatic up gradation a reality.

For operational convenience, IR is divided into seventeen zones and SR is the first zone formed in 1951. Since 1973, SR has been witnessing continuous losses. Even during the period of turnaround in IR, SR’s operating ratio was greater than 100. Therefore, the present work attempts to study the financial performance of SR in relation to turnaround in IR. Financial performance is always linked with customer satisfaction and employee satisfaction. While passengers are the beneficiaries, employees are the real providers of the services. Only a satisfied employee can discharge his/her duties according to the expectation of customers. The study is multidimensional which takes stock on the financial performance of SR in terms of revenue and expenditure, passenger satisfaction on improvement of service quality and the employees’ satisfaction in relation to turnaround.
The present study was envisaged in a situation where there were controversies and dilemmas as to reasons for turnaround in IR and no single study has been taken up for finding out the reasons for poor financial performance in SR considering the passenger satisfaction in respect of service quality dimensions and employee satisfaction in relation to turnaround. Financial performance is studied in terms of revenue and expenditure, operating ratio and the ratio of net revenue to capital during the pre (2000-04) and post turnaround period (2005-10). Passenger satisfaction is assessed in terms of fare and other charges, ticketing and facilities at the counter, facilities in stations and trains, behaviour of employees and also in respect of punctuality of trains. In case of employees, the study focused on the general profile of employees and their perception in terms of organization environment, attitude of superiors, turnaround strategies, passenger amenities and attitude of passengers towards employees.

The study concentrates on the impact of turnaround initiatives in IR with special reference to SR. With this aim, the study attempts to realize the following specific objectives:

1. To identify the strategies taken by IR to achieve its turnaround and to trace out the reasons for turnaround.
2. To analyze the financial performance of SR during the pre and post turnaround period.
3. To study the passenger satisfaction based on various service quality dimensions in SR.
4. To study the perceptions of employees in relation to turnaround in SR.
Based on the objectives, the following hypotheses were formulated.

1) There is no significant difference in the financial performance of SR in terms of earnings and expenditure during the pre and post turnaround period. {Passenger earnings (H1a), Goods earnings (H1b), other coaching (H1c), Sundry earnings (H1d) and working expenses (H1e).

2) There is no significant difference in the operating ratio and ratio of net revenue to capital during the pre and post turnaround period.

3) There is no significant difference in the perception of passengers on various service quality dimensions across divisions.

4) There is no significant difference in the perception of passengers on various service quality dimensions across user demographic variables. {Age (H4a), Gender (H4b), Occupation (H4c)}.

5) There is no significant difference in the perception of passengers on various service quality dimensions on the basis of different travel behaviour. {Type of train (H5a), Class of travel (H5b) and Frequency of travel (H5c)}.

6) There is no significant difference in the opinion among employees belonging to four divisions in relation to the changing organizational environment, attitude of superiors, turnaround related factors and passenger amenities and cooperation of passengers with employees.

7) There is no significant difference in the satisfaction of employees across different departments in relation to the changing organizational environment, attitude of superiors, turnaround related factors and passenger amenities and cooperation of passengers with employees.
8) There is no significant difference in the satisfaction of employees with different years of service in respect of changing organizational environment, attitude of superiors, turnaround related factors and passenger amenities and cooperation of passengers with employees.

7.2 Methodology

The present study covers a period of ten years commencing from 2000-01 to 2009-10 i.e. five years before and five years after the commencement of turnaround. The required data relevant to the study were collected from both primary and secondary sources in order to understand the multi-dimensional aspects. The data required for financial analysis was collected through personal interviews with senior officials, published annual reports and other publications. In addition, journals, articles, websites, survey reports of Government and other agencies were also made use of.

The researcher has adopted convenience sampling to select samples. Sampling involves the selection of divisions for the primary data relating to passenger satisfaction and employee satisfaction. Palakkad and Thiruvananthapuram divisions from Kerala and Chennai and Salem divisions from Tamil Nadu have been taken for the study of level of satisfaction of employees and passengers. A survey of 750 passengers was conducted to know their perception on the passenger services provided by SR.

For the purpose of collection of primary data of employees, the persons who are directly involved in the operation of trains like, loco pilots, guards, train ticket examiners, booking or reservation clerks and station masters were taken for the purpose of study. The researcher has collected 200 samples from these employees (50 each from all the four divisions). Interviews of frontline staff were also made to understand their operational
constraints. The analysis and interpretations are done by suitably incorporating the views expressed by these groups.

Both descriptive and analytical methods are used in the study. To simplify complexities, the data collected have been presented in the form of tables and diagrams. The study made use of arithmetic mean, standard deviation and mean per cent age score for analysis and interpretation. Ratios and per cent ages are also used to explain the growth of revenue and working expenses. A comparative study of financial performance during the pre and post turnaround period is made. The hypotheses are tested using ‘t’ test. Perception of passengers and employees are tested using one-way ANOVA. Post-hoc test was applied to determine which means differ in the group. Confirmatory Factor Analysis is used to analyze the factors which determine customer satisfaction and which factors contribute to employee satisfaction. The major findings and observations emerged from the study are summarized below:

7.3 Findings and Observations

7.3.1 Strategies Adopted for Turnaround in IR

The strategies adopted for turnaround mainly focused on effective utilization of assets to enhance revenue and to reduce costs, outsourcing of non-core activities, discovering new source of revenue, prevention of leakage of revenue, balancing social obligation and commercial consideration, modernisation of rail infrastructure, improvement in passenger amenities with special focus on cleanliness, safety and security and changes in accounting system. All these strategies resulted in increase in earnings and contributed to a turnaround in IR.
7.3.1.1 Increase in Coaching Revenue

Turnaround in passenger segment was more challenging in IR because of three factors, viz. competition from low cost airlines, higher fare structure in higher classes and more time for travel. However, it is observed that upholding social obligations for political reasons seems to be more dominating in fare fixing, which poses the greatest challenge in turnaround of passenger segment.

The increase in passenger earnings during the turnaround period was due to increase in number of passengers in all the classes especially in AC classes where there is increase of average lead coupled with increase in average rate / PKM. It is observed that the Second class sleeper also registered an increase in passenger earnings. It is learnt that a reduction in AC class fare was offset by an increase in average lead and number of passengers. Maintaining a low fare in passenger segment, IR is found to have made a dramatic turnaround by the effective utilisation of its existing assets.

7.3.1.2: Increase in Other Coaching Revenue

It is observed that the turnaround happened in the freight sector is mainly due to the strategy of increasing axle load coupled with increase in rate/NTKM due to rationalization of commodity classification. There was significant increase in loading and average lead of iron ore, fertilizers and cement. Drop in food grain movement (both in loading and lead) was offset by increase in rate/NTKM. Railways have a competitive edge in freight, because of their ability to carry large loads over long distances. Moreover, freight segment is free from political interference and can be managed on commercial principles.
From the year 2001 to 2004, goods revenue registered a growth of 18.51 per cent and passenger revenue with a growth rate of 26.47 per cent. However, during the period 2005 to 2008, goods revenue rose to 54.12 per cent and passenger revenue to 40.61 per cent. These changes resulted in an increase of total revenue from 21.41 per cent to 52.31 per cent during the relevant period. Between 2005-06 and 2009-10, there was an increase in rate of earnings, (56.8%) tons carried (33.7%) and in NTKM (36.28%).

Increase in Sundry earnings was made through areas of business that have not been explored, such as leasing of parcel vans and commercial advertising and publicity in station premises and rolling stock. The Sundry earnings grew from ₹ 1157.03 crores to 2879.68 crores during 2004-05 to 2009-10. Other coaching earnings increased from 990.28 crores to 2235.72 crores in the post-turnaround period. (125.77 % increase).

7.3.1.3: Improvement in Operating Ratio:

Operating ratio shows the relationship between total revenue and total working expenses which indicates the cost incurred to earn one rupee of revenue.

It is found that after 1990’s IR expenses (12.01%) grew one per cent faster than its earnings (11.17) leading it towards bankruptcy. However, between 2001 and 2008, IR became solvent by inverting this relationship i.e., earnings (10.85%) grow four per cent faster than expenses (6.67%). The operating ratio decreased from 98.1 per cent in 2001 to 75.8 per cent in 2008 and the net surplus increased from ₹ 763 crores to 13, 431 crores for the respective period. Hence, the performance indicators also show that a turnaround has taken place in IR.
The study reveals that the improvement in financial performance indicators was mainly due to increase in operating efficiency achieved by effective utilization of assets such as, economies of scale in passenger and freight operations, reduction in wagon turnaround and market oriented strategies. It is observed that the strategies taken during the period were to grab the opportunities in the transport sector due to the boom in economy. The political leadership, change in accounting method and the economic condition also favoured the situation.

7.3.2 Financial performance of SR in relation to Turnaround Strategies.

The study is confined to the financial performance of SR only. Considering the fact that each regional railway differs from other railway in its topography, geographical location, nature of traffic, industrial locations etc, the findings of the study may not be applicable to the entire railway system. The financial performance is pursued on the basis of data from records and reports during the period 2000-01 to 2009-10. The study attempted a look into the problem and made a thorough analysis of its earnings and cost, changes in accounting policies and the managerial approach.

7.3.2.1 Increase in Passenger Earnings

It is found that SR, being a passenger dominated railway, has taken measures to increase the passenger revenue by attracting more number of passengers in all the travel classes. It is also observed that SR is concentrating on upgrading station, tracks, locos, coaches and services with modern amenities. However, as majority of passengers are season ticket holders or availing concession in one way or other. In spite of this, the
average earnings from passengers in the upper class during the pre-period is ₹ 159 crores, which is increased to 261 crores during the post period. The average earnings from the passenger second class also increased from ₹1031 to 1534 during the post-turnaround period. The annual average growth rate of earnings from the passengers in the upper class during the pre-turnaround period is 7.36 percent which doubles to 15.87 percent in the post turn around period. The Passenger earnings in the second class and goods earnings have increased three times during the study period. The PKM in all the segments except in the MG section is seen increasing in the post turnaround period and the growth rate of Average rate/ PKM in case of non-suburban BG decreased from 5.35 to 1.68.

### 7.3.2.2 Increase in Other Coaching Segment

It is observed that most of the freight schemes were not in operation in SR in the initial years of turnaround. Fertilizer and food grains constitute the major loading items. SR fell short of targets of loading of fertilizers in 2007-08 and 2008-09. It is observed that the RO-RO scheme envisaged in 2005, efficiently followed in Konkan Railway, has still not materialized in SR. All developments in the freight sector are still in the preliminary stage. In spite of all these shortcomings, goods earnings are higher during the post turnaround period with an AAG of 9.29 per cent with a mean of ₹ 596.58 crores, compared to an AAG of -3.74 per cent with a mean of 1167.74 crores during the pre turnaround period.

Other coaching earnings show an increase of 75 per cent during the period 2004-05 to 2009-10 (₹ 127.57 crores to 223.54 crores). During the pre-turnaround period, Sundry earnings showed an AAG of 2.26 per cent, which increased to 14.66 per cent in the post turnaround period. The average
earnings also increased from ₹ 106.39 crores in the pre turnaround period to 134.96 crores during the post turnaround period.

**7.3.2.3 Increase in Working Expenses**

It is observed that with increasing working expenses, SR has been finding it extremely difficult to generate enough revenue to finance their already sanctioned and ongoing capital projects, replace and renew existing capital assets and to take up projects for technology upgradation. Fuel price has been hiked seven times during the study period and the ordinary fare has not been increased. It is learnt that even after seven years of bifurcation of South Western Railway, training cost of staff, cost of manning AC coaches and cost of running the EDP department is borne by SR. On analysing the operational expenses it is revealed that as the density of population in Kerala is very high, the number of stoppages is more and for each stoppage of a train, the additional cost incurred varies from ₹ 5000 to 6000. Skyrocketing of repairs and maintenance expenses, operating expenses and the impact of Pay Commission resulted in high working expenses which, in turn, resulted in a negative operating ratio.

To cut down the unit cost of operation, instead of burdening customers, the strategy of putting its assets harder was followed during the turnaround period. This resulted in abnormal wear and tear to the tracks and rolling stock and increase in repairs. R&M of Permanent ways mainly includes repairs to rails and sleepers, fittings for maintenance of track etc. These expenses are prone to be very high at coastal areas where heavy corrosion takes place for tracks. Similarly, at places with sharp curves and steep gradients, excessive depreciation takes place. SR, with considerable lines through coastal and hilly areas, has to face these two disadvantages.
Hence, R&M to permanent way is always on the increase along with the expansion of track.

By comparing AAG, it is found that there is massive growth in all expenses, especially in PF, pension and others during the post period. Earnings have shown an increase in AAG of -3.08 during the pre-period to 10.02 in the post period, compared to an increase in expense from -0.25 to 18.56 in the corresponding period. (vide table 5.45).

7.3.4 Reduction in Performance Ratios

Performance ratios considered here are operating ratio and ratio of net revenue to capital. The reduction in operating ratio is the real indicator of turnaround. The study reveals that SR was not an exception to the trend exhibited by the operating ratio pertaining to IR with the exception that in SR, expenses overshoot earnings. The operating ratio of SR remains at the same percentage (120%) with a slight increase and decrease in between during 2000-04. From 2004 to 2007, the operating ratio of SR declined from 120 per cent to 105.07 per cent in tune with the trend in IR. It rose to 126.06 per cent in 2008 and in 2009 to 137.47 per cent like that of IR mainly due to the implementation of Sixth Pay Commission. Moreover, SR is at the terminal point of IR and therefore it has more terminating traffic and terminal expenses. During the period under study, the ratio of net revenue to capital has improved much in 2006 and 2007 due to the effect of strategies. However, it rose to (-) 20.37 per cent in 2008 despite the increase in Capital at charge and Gross traffic receipts.

It is observed that the formation of South Western Railway in 2003-04, the changes in accounting practice in 2005-06 and the formation of Salem division in 2007-08 and promotion of infrastructure development also
influenced the change in operating ratio of SR. On examining the operating ratio during the pre- and post turnaround periods of IR and SR, it is observed that the positive impact of the strategies responsible for the turnaround of IR is reflected in the operating ratio of SR also. However, this could not bring the operating ratio of SR below 100 due to inherent handicaps.

The upward growth of TU/route km despite the very little increase in route km indicates the growth in freight and passenger, which is achieved with the optimum use of assets in the existing routes. Route km growth is negative in certain years due to the closure of MG lines for conversion. The year 2003-04 is an exception to the general trend due to the separation of two divisions from SR to form SW Railway.

SR’s position has become worse in 2009-10 and will again head for a financial crisis unless strict measures are taken to increase revenue in accordance with the increase in working expenses. The percentage growth of gross traffic receipts is at a slower rate in the pre-period and it showed a sudden increase during the post-turnaround period and it reached up to 70.86 per cent in the year 2009-10. (170.86-100). The percentage growth in working expenses is almost in the same trend as that of traffic receipts and in certain years immediately after the turnaround, it is at a declining trend and in the last two years of the study period it increased at a higher rate than that of traffic receipts. Regarding net miscellaneous receipts, there is a declining trend throughout the study period and during the post turnaround period, it started showing negative. It indicates that the cost of earning such revenue exceeds the revenue. As the total working expenses is always greater than the gross revenue, (traffic receipts + miscellaneous receipts) net revenue figure shows a negative value throughout the study period.
It is observed that in running special trains, only the earnings is accounted and the cost of running such trains is not exhibited anywhere in the published accounts. It is also observed that in the pre-period, lack of proper publicity with regard to running of special trains reduced the occupancy rate, which also resulted in loss of passenger earnings.

Enhancing the efficiency and effectiveness of railway requires a complex multi-pronged approach because of the inter-dependent and inter-woven structure of railways’ functioning. Further, co-ordination and co-operation is required between various zonal railway and various divisions within zones as well. It is found that unnecessary political interference and lack of efficient leadership also lead to inefficiencies in Railway.

7.4 Passenger Satisfaction on various Service quality Dimensions

SR is a passenger dominated railway and it carries more than 650 million passengers a year. The main objective of the Railway is to render services to both passengers and freight customers. In the present study, only the opinion of passengers in SR is sought and analyzed in order to see whether the passengers are satisfied with the amenities provided and services rendered. As the customers vary in number and their expectations and their perceptions on service quality differ, the assessment of service quality is applicable only on a particular date. It also examines whether there is any difference in perception of passengers across the selected four divisions of SR and also among passengers on the basis of demographic and travel behaviour variables.

7.4.1 Sample Profile of Respondents

The personal profile includes demographic variables like age, gender, and occupation. The study reveals that majority of rail passengers are in the
age group of 40-49 with 58.7 per cent and below 30 with 24 per cent. 67.5 per cent of the total passengers constitute men and 73.8 per cent of the total passengers constitute salaried class and professionals.

Travel behaviour includes frequency of travel, type of train and the travelling class preferred. The passengers in all the divisions prefer rail transport because of its low fare followed by speed and comforts. It is found that the majority of passengers travel daily in trains for their employment purpose, (68.5%) followed by study (15.2%) and touring purposes (9.7%). 36.7 per cent of the passengers travel in second ordinary followed by 26.7 per cent in sleeper class and 17.3 per cent in second express. Only 8 per cent travel in AC class and 11.3 per cent travel in all classes.

7.4.2 Service Dimensions

A: Fare and Other Charges

Majority of passengers (74.7%) opined that regarding fare, (except AC class), and other charges (except superfast charges) is either moderate or low. In case of superfast charges, 54.7 per cent have expressed it as high or very high.

83.1 per cent of the total passengers are availing concessions and out of which 74.7 per cent season tickets and 5.7 per cent senior citizens’ concession. Only 16.9 per cent are not availing any concession and travel with full fare.

B: Ticketing and Facilities at the Counter

It is found that 90 per cent of the passengers feel either satisfied or moderate with the number of ticketing/booking counters, working hours of the reservation counter and also with the advance booking period. Season ticket holders are not satisfied with the number of unreserved coaches in trains.
Ticket counter is the most preferred form of getting tickets. Sale of tickets through post-offices and vending machines are not so popularized in all divisions of SR. Majority of passengers opined that connectivity is the most difficult problem in e-ticketing. The growing popularity of e-ticketing is an indication that it may become the most preferred mode of ticketing in the coming years. Majority of passengers (66.7%) are not aware of automatic up gradation scheme and are either satisfied or feel moderate with the Tatkal scheme (92%).

C: Facilities at Stations and Platforms

Majority of the passengers are satisfied with the essential facilities provided at stations and platforms viz. waiting rooms and retiring rooms, seating facility, lighting and fans, ATM facility, refreshment, cleanliness, touch screen, signage, parking space, taxi, auto/buses and porter facility. It is observed that most of these facilities were either improved or introduced during the turnaround period. However, passengers are not satisfied with the adequacy and maintenance of pay and use toilets, safe drinking water as well as the security provisions at stations.

D: Facilities in Trains

It is found that passengers’ level of satisfaction in essential amenities in trains is generally low and 52 per cent of the passengers are dissatisfied in respect of proper maintenance of coaches, watering and catering facilities and medical assistance during emergencies. The perception of passengers regarding cleanliness and security in trains is also dissatisfactory. With regard to modern amenities, majority of passengers (62.7%) are not satisfied with the mobile charging facility, which is introduced responding to the need of the time.
Regarding availability of ladies coaches and facilities provided for the physically handicapped, majority of passengers expressed their opinion as moderate.

**E: Behaviour of Employees and Handling of Complaints**

It is found that 60 per cent of passengers have expressed their opinion as moderate or satisfied with the employee’s behaviour at the counter and 76 per cent have expressed their opinion as satisfied and moderate with employees’ behaviour at stations and trains. Dissatisfaction is high in respect of employees’ behaviour at the counter. 34 per cent of passengers feel dissatisfied or highly dissatisfied with the behaviour of employees at the counter. It is concluded that at stations and in trains, where there is maximum contact with the passengers and both the passengers and employees are abnormally tensed, their satisfaction level is considered good.

With regard to handling of complaints, 40.7 per cent of the total passengers receive assurance from the authorities to take corrective measures, 25.9 per cent receive no reply and 22.2 per cent receive reply with excuses. Response to complaint depends on the nature and validity of the complaint. However, passengers expect some form of response, at least in the form of an acknowledgement or if possible, consoling replies.

**F: Punctuality of Trains**

It is observed that late running of trains is a serious problem especially in passenger/suburban trains followed by express or superfast trains. The passengers are of the view that the service provider should inform the beneficiaries about the reasons for inordinate delay/detention of trains. It is evident from the survey that 90.7 per cent of passengers are rarely informed of the causes of detention of trains.
7.5 Employees’ Perceptions

Employees are the channels of service delivery and its promotion. The real wealth of an organization is its employees and therefore, the role of employees and their satisfaction needs to be fully scrutinized to ensure high quality delivery of service. The study attempts to find out whether employees belonging to Traffic, Commercial and Mechanical departments, who are at the operating level, are satisfied with the organization environment, attitude of superiors, turnaround related factors and also with the passenger amenities in stations/trains and their cooperation with employees.

It is observed that though SR administration is not lagging behind in providing staff welfare schemes, the employees are not fully satisfied. It is found that the turnaround strategies have overburdened them. However they are of the opinion that the organizational culture and attitude of the superiors have not changed to their expectations. It is further observed that the open line staff has a different work environment and it is not taken into consideration in their welfare schemes.

7.5.1 Sample Profile of Employees

Age-wise classification shows that 78.5 per cent of the total employees belong to 30-50 age group. Gender-wise classification shows that 86.5 per cent are male employees and 71 per cent of the employees are PG and professional or technical graduates. 63.5 per cent of the total employees have more than 20 years service.

7.5.2 Organisational Environment

40.5 per cent of the total employees feel that the present pay is either less than they deserve or very low in relation to other jobs. 37.5 per cent of
the employees opined it as moderate and 22 per cent of the employees have the opinion as either well paid or commensurate with work. While 72.7 per cent of the total employees stated that training is given on seniority basis, 20.1 per cent mentioned that there is no basis. 40.5 per cent of the total employees participate in trade union activities.

7.5.3 Attitude of Superiors

Attitude of superiors has an influence on the employees’ satisfaction and hence it is also studied. It is learnt from the table that none of the employees of both Traffic and Mechanical department have viewed it as excellent and 28 per cent of the total employees have stated it as poor. Almost all the employees (98%) report their grievances to superiors and 66.3 per cent of the total employees are of the opinion that the authorities respond only with repeated reminders. 51.5 per cent of the total employees are dissatisfied as they are not given with the opportunity to give suggestions. 67.7 per cent of the total employees opined that punitive action is taken for lapse of duty and safety violation.

Majority of the operating staff are frontline employees and they have to deal with the problems of passengers and it is found that 77.3 per cent of the total employees face the fury of passengers. The worst affected are the employees of Traffic department (91.3%), compared to the employees of Commercial department with 84.2 per cent and that of Mechanical department with 63.2 per cent. 56 per cent of the employees rarely face physical assault from the passengers. All the employees of the Traffic department face verbal abuse from the passengers, rarely or occasionally. As the Commercial department employees are the front-line employees, they frequently face verbal abuse (43.5%) compared to other departments. When
they report this grievance to superiors, 47.1 per cent of the total employees get poor response from the superiors and nearly 17 per cent of the employees get immediate response by RPF, moral support and measures to avoid such occurrence.

7.5.4 Turnaround Related Factors

Majority employees (73.7%) of the three departments agree that there occurred a turnaround in SR. The perceptions of employees regarding reasons and impact of turnaround are studied using ranking method. Employees belonging to all the three departments are of the opinion that the turnaround was occurred at the cost of over burdening employees and with the boom in economy.

With regard to the impact of turnaround, increase in workload is mainly due to the increase in traffic as far as Traffic and Commercial departments are concerned. However, according to the employees of Mechanical department, increase in workload is mainly due to the extended duty hours followed by increase in traffic. As far as reduction in employees’ strength is concerned, all the employees have the same opinion that it is due to unfilled vacancies, followed by outsourcing and advancement of IT and communication and the last rank goes to modernization of equipments.

Regarding the reason for risk and stress, all the employees have opined that lack of proper rest and leave is the major reason for risk and stress, followed by more number of night duties and reluctance to adopt modern technology in LC gates. 94 per cent of the total employees opined that safety is affected and almost all the employees of Mechanical and Commercial departments, who are actually engaged in running the trains, stated that safety is badly affected due to turnaround strategies.
Concerning the outcome of turnaround, 83 per cent of the employees disagree that turnaround resulted in increase in bonus and incentives and 77 per cent have agreed that turnaround resulted in increase in revenue. 49 per cent of the total employees agree to the statement that turnaround resulted in increase in repairs and maintenance and 52.2 per cent of the total employees feel that turnaround resulted in improvement of service quality.

Punctuality of trains depends on several factors in addition to the involvement of these three departments. Therefore, 44.8 per cent of the total employees expressed no opinion about the improvement in punctuality of trains, 32 per cent have agreed that it resulted in improvement in punctuality and 23 per cent disagreed with the statement.

7.5.5 Passenger Amenities and their Attitude towards Employees

Regarding basic passenger amenities, 77 per cent of the total employees have expressed their view that basic passenger amenities in trains and stations as good and satisfactory and 15 per cent as very good. As regards modern amenities, 80 per cent of the total employees are satisfied or feel good or very good with the touch screen facility. ‘139’ telephone enquiry system is not so efficient and 35.1 per cent of the total employees perceived it as poor. Traffic and Commercial department employees are more aware of the number of trains run in the section, compared to Mechanical department. Therefore, majority of employees of traffic (52.6%) and commercial departments (75%) have expressed that traffic density is high or very high. 70 per cent of the total employees stated that passengers are poor in observing cleanliness in stations and trains.

In order to find out the overall satisfaction of employees in various
factors like, organizational environment, attitude of superiors, turnaround related measures and the attitude and amenities of passengers in SR, Mean, Standard Deviation, Co-efficient of Variation and Mean Score is calculated. By comparing the mean percentage score, it is found that employees are least satisfied with the turnaround related factors, (39.94) followed by passenger amenities and attitude of passengers (49.76) and most satisfied with the attitude of superiors (57.15) followed by organization environment (50.46).

7.6 Conclusions

7.6.1 Financial Performance of SR

The study reveals that the Passenger earnings in the Second class, other coaching, Goods and Sundry earnings have increased by three times during the study period. Therefore, it is proved that the strategies adopted for increasing the earnings have contributed to the turnaround.

To know whether this increase is significant, \( t \) test is done and is found significant at 5 per cent in respect of all the earnings except sundry earnings during the pre and post turnaround period. Hence the hypothesis that there is no significant difference in the total earnings during the pre and post-turnaround period is true in case of sundry earnings (H1d) and is not true in case of all other earnings. Hence the hypothesis is partially accepted.

To test whether the difference in working expenses is significant; \( t \)-test is done and found that there is difference in respect of general superintendence charges, fuel expenses, PF pension and retirement benefits. Hence, the hypothesis that there is no significant difference in the working expenses during pre and post turnaround period is also partially accepted. Significant difference is found in major expenses like, fuel, general superintendence charges PF, pension and retirement benefits.
To find out whether there is any significant difference in Operating ratio and Net revenue to capital during pre and post turnaround period, t-test is done and found that there exists significant difference in operating ratio and ratio of net revenue to capital. Hence the hypothesis is rejected.

7.6.2 Passenger Satisfaction in Respect of Service Quality Dimensions

A) Division-wise analysis shows that there is significant difference in the perception of passengers regarding fare and other charges, (F(3,746)=13.48, P=0.00), ticketing and facilities at the counter (F(3,746)=12.38,P=0.00), Facilities in stations and platforms, (F(3,746)=3.15,P=0.24), Facilities in trains (F(3,746)=4.62,P=0.003), behaviour of railway employees (F(3,746)= 17.05,P=0.00) and also in punctuality of trains (F(3,746)=4.20, P=0.006).

It is observed that passengers of SA division are the most satisfied group in respect of fare and other charges and also with the behaviour of employees. The passengers of TVC division are the most satisfied group in respect of facilities in stations and trains. In respect of ticketing and facilities at the counter and also with regard to punctuality of trains, passengers of MAS division are relatively more satisfied, as they are provided with better amenities for ticketing and facilities at the counter.

B) Age-wise analysis shows that there is significant difference among different age groups in respect of fare and other charges, (F(4,745)=14.64, P=0.001), ticketing and facilities at the counter, (F(4,745)=6.99, P=0.001), facilities in stations and platforms, (F(4,745)=4.27, P=0.002) facilities in trains, (F(4,745)=6.09, P=0.001) behaviour of employees (F(4,745)=2.63, P=0.033) and also
in respect of punctuality of trains. \(F(4,745) = 10.15, P=0.001\). The below 30 age group are more satisfied with facilities in stations, behaviour of employees and with the punctuality of trains. With regard to fare and other charges, 60 and above age group are more satisfied, which is said to be due to the senior citizen concessions and preferences given to them. In respect of ticketing and facilities at the counter, 40-49 age group, who belong to salaried class are more satisfied due to the innovations in ticketing. 30-39 age groups are more satisfied with the facilities in trains.

C) **Gender-wise analysis** shows that there is significant difference in the perception of male and female passengers in respect of fare and other charges \(Z=2.87, \text{Sig.} 0.004\), facilities in train \(Z=-2.88, \text{Sig.} 0.004\) and behaviour of railway employees \(Z=3.58, \text{Sig.001}\). Male passengers are more satisfied with fare and other charges. However, the level of satisfaction in terms of facilities in trains is the highest among female counterparts. It is also noted that the level of satisfaction with regard to employees’ behaviour is lower among female passengers and they are relatively more satisfied with punctuality of trains.

D) **Occupation-wise analysis** indicates that there is significant difference in the perception of passengers regarding fare and other charges, \(F(4,745)=3.49, P=0.000\), ticketing and facilities at the counter\(F(4,745)=9.32, P=0.000\), Facilities in stations and platforms, \(F(4,745)=3.102, P=0.015\), Facilities in trains \(F(4,745)=4.395, P=0.002\), behaviour of railway employees \(F(4,745)=12.14, P=0.00\) and also in punctuality of trains \(F(4,745)=3.922, P=0.004\)
It is observed that students are the most satisfied group in respect of fare and other charges and also with the punctuality of trains. With the advancement in ticketing and dispersion of ticketing sources, salaried class are the most satisfied group in respect of ticketing and facilities at the counter. Passengers belonging to other category are the most satisfied group in respect of facilities in trains and behaviour of employees. Salaried class and business groups, who constitute the majority of passengers, are the least satisfied group.

E) Analysis on the basis of frequency of travel shows that there is significant difference in the perception of passengers regarding fare and other charges, (F(3,746)=3.49, P=0.000), ticketing and facilities at the counter(F(3,746)=9.32,P=0.000), Facilities in stations and platforms, (F(3,746)=3.102,P=0.015), Facilities in trains (F=(3,746),P=0.002), behaviour of railway employees (F(3,746)=12.14,P=0.00) and also in punctuality of trains (F(3,746)=3.922,P=0.004)

It is found that passengers who travel rarely are relatively the most satisfied group in respect of fare and other charges and with the punctuality of trains. However, daily travellers are satisfied with the ticketing and facilities at the counter and also with facilities in stations and dissatisfied with fare and other charges and punctuality of trains. The weekly travellers are relatively the most satisfied group in respect of facility in trains and also with the behaviour of employees.

F) The analysis on the basis of class of travel shows that there is significant difference in the perception of passengers regarding fare and other charges, (F(4,745)=6.186, P=0.000), ticketing and facilities at the counter(F(4,745)=14.591,P=0.000), Facilities in stations and
platforms, \( F(4,745)=13.175, P=0.000 \), Facilities in trains \( F(4,745)=8.463, P=0.000 \), behaviour of railway employees \( F(4,745)=3.231, P=0.012 \) and also in punctuality of trains \( F(4,745)=24.931, P=0.000 \).

The study reveals that passengers who travel in combination of all classes of travel are more satisfied with the fare and other charges and those who travel in second express are the satisfied group in respect of ticketing and facilities at the counter. Second ordinary passengers are the most satisfied group in respect of facilities at stations and trains and AC class passengers are the most satisfied group with the employees’ behaviour, Sleeper class passengers are the most satisfied group in respect of punctuality of trains.

The ANOVA table values on the basis of type of train shows that there is significant difference in the perception of passengers in respect of all the six variables viz. Fare and other charges \( F(4,745)=5.341, P=0.000 \), Ticketing and facilities at the counter \( F(4,745)=23.073, P=0.000 \), Facilities in stations and platforms, \( F(4,745)=8.260, P=0.000 \), Facilities in trains \( F(4,745)=8.105, P=0.000 \), behaviour of railway employees \( F(4,745)=11.793, P=0.000 \) and also in punctuality of trains \( F(4,745)=20.101, P=0.000 \).

The analysis reveals that passengers travelling in passenger trains are more satisfied with the fare and other charges, ticketing and facilities at the counter, facilities in trains and with the behaviour of employees and passengers travelling in express trains are satisfied with the facilities in stations and platforms. However, passengers travelling in superfast trains only are satisfied with the punctuality of trains and they are dissatisfied with the fare and other charges, facility in stations and trains and also with the
behaviour of employees. This is due to the reason that they are paying extra charges without getting any additional amenities. With regard to ticketing and facilities at the counter, passengers of Jan shatabdi trains are highly dissatisfied, which may be due to the absence of special counter for tickets.

The analysis of service dimensions across different travel behaviour of passengers reveals that there is significant difference in their perception in respect of all the variables across frequency of travel, type of train and class of travel.

Therefore, it is understood that there is significant difference in the perception of passengers across different divisions, age, occupation, frequency of travel, class of travel and also on the basis of type of train in all the variables under study. Hence, the hypothesis is rejected. However, Gender-wise analysis shows that there is significant difference in the perception of passengers only in respect of fare and other charges, facilities in trains and in respect of employees’ behaviour.

Though the Railway is providing various amenities to the travelling public at the counter, stations and in trains, the analysis proved that passengers are satisfied only with the fare and other charges, ticketing and facilities at the counter and stations. Majority of passengers are found to be not satisfied with the facilities provided in trains.

Service quality is a stronger contributor to the customer satisfaction. To confirm which factors have a significant role in customer satisfaction, CFA is used and it is found that employees’ behaviour, facilities in trains, stations and platforms have a significant role in customer satisfaction and the other three factors viz. fare and other charges, ticketing and facilities at the counter and punctuality of trains have no role in determining the service
quality of SR. The regression weight of the behaviour of railway employees is 0.869, which indicates that customer satisfaction depends mostly on the behaviour of railway employees, followed by facilities in train with regression weight 0.698 and facilities in platform and station with weight 0.690. Fare and other charges, ticketing and facilities at the counter and punctuality have no role in determining the passenger satisfaction. Therefore, it is suggested that the Railway has to increase the facilities in trains and facilities at platforms and stations considerably with a slight improvement in employees’ behaviour.

7.6.3 Employees’ Perceptions

A: Division-wise Analysis

It is found that the employees of all the four divisions are satisfied with the attitude of superiors with a mean score of 57.15 per cent and are not satisfied with the turnaround related factors, as the mean percentage score is far below 50 per cent (39.94%). In respect of passenger amenities and cooperation of passengers with employees, employees of MAS division are satisfied with a mean score of 54.51 per cent.

To find out whether there exists a significant difference in the opinion of employees of four different divisions, one-way ANOVA is done which indicates that there is significant difference in the perception of employees across divisions regarding attitude of superiors, (F (3,196) =7.104, P=<0.001) and also in passenger amenities and cooperation with employees. (F (3,196) =3.463, P= 0.017). There is no significant difference in the opinion of employees of four divisions under study in respect of organization environment and turnaround related factors. Post-hoc analysis shows that
employees of MAS division are more satisfied with the attitude of superiors and with the passenger amenities and co-operation of passengers with employees.

**B: Department-wise Analysis**

All the employees are satisfied with the attitude of superiors with a mean score of 57.15 per cent and are dissatisfied with the turnaround related factors with a mean score of 39.94 per cent. With regard to organizational environment, except traffic department, the other two department employees are satisfied. It also reveals that employees of Commercial department are more satisfied with the organizational environment, (54.68%) attitude of superiors (63.44%) and also with the passenger amenities and attitude towards employees (59.13%). The Traffic department employees are satisfied only with the attitude of superiors.

One-way ANOVA shows that there is significant difference in the opinion of employees in respect of organizational environment, \( F(2,197) = 15.895, P =<0.001 \), attitude of superiors \( F(2,197) = 8.263, P =<0.001 \) and passenger amenities and passenger attitude to employees \( F(2,197) = 13.522, P =<0.001 \). However, in respect of turnaround related factors, there is no difference in the perception of employees and all the employees are dissatisfied.

Post-hoc Tukeys analysis is done to find out whichever department is more significant and it reveals that the difference is between Commercial with Traffic and Mechanical.

**C: Analysis on the Basis of Length of Service**

It reveals that all the employees are satisfied with the attitude of superiors, (57.15%) and organization environment, (50.46%). Employees with less than 5 years of experience are more satisfied with organization
culture, attitude of superiors and passenger amenities, compared to the other
groups and the employees with more than fifteen years of experience are the
least satisfied (33.59%). All the employees are highly dissatisfied with the
turnaround related factors. (39.94%)

To find out whether the difference is significant, one-way ANOVA is
done and found that there is significant difference among employees with
different years of service in the organization environment related factors
only. (F (4,195) =34.661, P=<0.001) Post Hoc test reveals that in respect of
organization environment, employees with less than five years of service are
more satisfied compared to the employees with more than 10 years of service.

In short, it is understood that the employees of different divisions,
departments and with different years of service are highly dissatisfaction with
turnaround related factors and proved statistically insignificant. Similarly, all
the three category of employees are satisfied with the attitude of superiors.
However, CFA analysis shows that employees are satisfied only with the
passenger amenities and their attitude towards employees with a regression
weight of 0.844 and highly dissatisfied with the turnaround related factors
with a regression weight of 0.322. Under both the analysis employees are
highly dissatisfied with the turnaround related factors.

To conclude, the financial performance of SR has improved by
adopting the turnaround strategies. However, the improvements were not
comparable with IR since SR is passenger centric and the turnaround
measures were focused on the profitable goods traffic. Though several
measures were taken to improve the service quality and for the welfare of
employees, passengers and employees have not been fully satisfied with
them. Most of the passengers are dissatisfied with the essential amenities in
trains and stations. Similarly, most of the employees feel that turnaround measures have affected their working environment, which in turn, ruined their morale.

7.7 Practical Contributions of the Study (Suggestions)

7.7.1 To improve Financial Performance

1. Since it is revealed that the number of upper class passengers is on the rise every year, SR should introduce lengthy trains with modified passenger coaches and increased seating capacity on dense routes. Double-decker AC coaches for inter-city travel, and full AC trains between state capitals should be introduced to accommodate the increasing number of high end passengers. By adding more AC coaches every year, based on demand (season or trains), the passenger revenue in the Upper class can further be increased.

2. In the passenger segment, as the major portion of revenue comes from Sleeper class and Upper-class segment and railways have competitive edge on this sector, a slight increase in the fare for these segments can improve its financial performance. In TVC and PGT divisions, de-reserved tickets are issued to travel in sleeper classes during day time. This facility is to be allowed in other divisions to enhance revenue.

3. It is observed that fare fixation is influenced by political decisions of the ruling governments and if it is done on cost-benefit analysis, the passenger segment can be made profitable, considering its social obligation as well. The passenger fare should at least cover the repairs, operation and maintenance cost of trains.
4. It is found that more than 70 per cent of passengers are season ticket holders and they travel mostly in express trains. Therefore, season tickets shall be issued under two categories— for Passenger and Express trains and season ticket fare for express trains are to be fixed at a higher rate.

5. It is learnt that out of the total accommodation available in sleeper and AC classes, about 12 per cent has been earmarked for tatkal passengers. However, Tatkal facility is not provided in all trains and the seats earmarked in tatkal quota are not the same for trains in the up and down directions. Especially for trains originating from SR, the quota is less. It is also observed that in all classes of travel, there exist heavy waiting lists for tatkal. This indicates that people are ready to pay higher prices and the Railway should take this matter into consideration while fixing the quota for tatkal and adding extra coaches to clear the waiting list.

6. The increase in number of experimental stopping result in reduced speed, loss of punctuality, increased fuel consumption which leads to escalation in working expenses. Hence experimental stopping should be given on station-wise cost-benefit analysis. Similarly, uneconomic stoppages are to be provided only at needy places to reduce working expenses.

7. Promote MRTS or metro services for urban and semi-urban passengers and it should be undertaken by the Ministry of Urban Development or by the local bodies.
8. It is found that majority of passengers are daily travellers and therefore, slow moving passenger trains on main routes are to be replaced with Mainline Electric Multiple Unit (MEMU) trains.

9. Considering the fuel hike for several times and increased staff cost due to the VI pay commission, 10 to 15 per cent increase in basic fare is needed for second class. Similarly, to meet social responsibility, concessions to deserving group only be given. The fares should be comparable/competitive with other modes of transportation, particularly the Roadways and also should keep pace with the cost of operations.

10. It is understood that 20 per cent of revenue is lost on senior citizen concessions. Considering the profitability and demand of the upper class segment, senior citizen concessions in this segment is either to be discontinued or limited to a certain percentage of the total seats.

11. Prevent misuse of concessional services by the passengers. Many of the passengers are misusing Izzat concession. To reduce the loss of revenue on account of this concession, it may be insisted to produce income certificate from the Tahsildar.

12. Running railways receiving the proportionate revenue should be made to bear the proportionate cost.

13. To keep down cost, punctuality of trains should be maintained by avoiding overtime allowance to staff, minimising usage of wagons, coaches and engines. However, minimisation of cost should no way affect the commercial viability and quality of service.

14. Costs are incurred at the functional level and are compiled by the Accounts department. As Hasan Iqbal Committee reported, a long
term solution to cost control lies in development of Activity Based Unit Costing System combined with earnings.

15. The divisions are not concentrating on revenue generation, as it is not designated as a profit centre. Moreover, they are always instructed by the top authorities to concentrate on cost reduction, particularly by staff reduction, which may, adversely affect the safety in train operations and leakage of revenue.

16. The aggregate costs for different operations in a zone as a whole is produced under traffic costing data, whereas, financial accounts are prepared division-wise. Therefore, division-wise costing is to be done. Thus the divisions could be monitored and assessed against the targets set and the profits made.

17. To provide valuable information for financial decision making at different levels, there should be meaningful and effective integration of all accounts maintained by Physical, Commercial and Operating statistics departments.

18. Application of Financial, Costing and Management accounting techniques for collection, compilation, analysis and delivery of information for policy making and decision making is highly required in Railways.

19. Whenever value added services like on-board cleaning, bio-toilets etc. are introduced, impose surcharge on passengers. Premium services like Emergency Quota (EQ) and bulk booking for long distance trains are to be charged extra.

20. Since SR is a terminal and passenger dominated railway terminal detention can be reduced by developing coach maintenance
Findings, Conclusions and Suggestions

terminals in Nemam and Kochu veli. Develop more bearthing tracks to avoid congestion in major stations due to the increase in number of trains and number of passengers. The existing Emakulam-Trivandrum rail line doubling should be speeded up and more facilities for pilgrims should be provided at the nearby Railway stations.

21. Reduced wagon turn around should be effectively used for asset utilization.

22. Pre-departure detention of goods trains is to be avoided. “Money saved is money earned”. If an electric loco is detained for one hour, the loss of revenue is ₹ 8430, and for Diesel loco, it is ₹ 6500. Idling of AC coach for one hour reduces the revenue to the extent of ₹ 990.

23. Value added services in the freight are to be charged at a premium.

24. Customer-centric workshops or seminars are to be held periodically in the freight segment to discuss the needs of customers.

25. Road Rail co-ordination (RO-RO) as is efficiently followed in Konkan Railway is to be done to regain lost traffic.

26. Freight earnings can be considerably increased if DRMs are assigned targeted freight revenue from transport of goods and farm products originating from their division. E.g. Alappuzha is blessed with coir products and there is greater chance for transport of coir products.

27. During the turnaround period, it is found that there is a Scrap Management Cell and its functioning is to be improved for the timely disposal of scrap to avoid theft, damage etc.
28. Follow-up is to be done for the timely completion of projects in progress, rather than taking up new projects. Undue delay in completion of projects results in cost escalation.

29. Land acquisition for gauge conversion and construction of ROB/RUBs should be done with adequate support by the State government and local authorities concerned. Cost sharing is also to be done by state government.

30. Sundry earnings constitute only five per cent of the total earnings, and as a sunrise opportunity, SR has to increase its share by leasing its surplus land for cultivation or for planting trees. SR has a lot of surplus land particularly in Perambur and Villivakkam in Chennai.

31. Vision 2020 document envisages that use of renewable energy sources like solar power for signalling, wind mills, solar and wind hybrid plant etc. which can save energy up to 15 per cent. SR should take initiative in using these energy sources.

32. Adequate publicity through telecast media or print media should be made whenever attractive packages are offered or special trains are introduced.

33. Earnings from Tatkal services and superfast charges are to be accounted separately as in the case of earnings from extra coaches.

34. Over aged assets are to be dropped from books to project a more realistic picture. Poulose Committee highlights the existence of several unproductive and redundant assets acquired by technological innovations, operational improvements and policy changes.

35. The additional financial burden on railways in the form of enhanced
salaries and pension as a result of the implementation of the VI Central Pay Commission got reflected in the years the liability had actually met. Had the entire amount of liability been treated as that of respective years, such a situation would not have happened. Therefore, Railway should set up a new fund for salary and pension arrears called "Salary and Pension Arrears Fund" and transfer an estimated amount every year from the year in which the Pay Commission is set up and till the time the Pay Commission amount is declared.

36. Depreciation and the written down value of the asset is not shown in the balance sheet, which leads to massive overcapitalization. The provision for depreciation could be made on scientific basis depending upon the assets owned by the Railway.

37. The principal amount of lease that is acquired to increase the line capacity should only be added to Block Assets Account. Moreover, principal component of lease that is towards renewals/replacements should be treated as ordinary working expenses.

38. It is found that inter-railway adjustment of earnings and working expenses is not scientific and tends to vitiate the performance of individual railways. Therefore, an appropriate criterion for allocation of overheads is to be done among different zones. Instead of the present practice of charging the entire costs to the originating railway and sharing earnings among all the railways(originating and running), both cost and revenue should be proportionately shared.

39. The present system of accounting does not depict a true and a fair view of income & expenditure and balance sheet items. Therefore, the presentation of financial results is to be changed.
40. Financial appraisal of each individual railway’s performance is to be made, so that greater efficiency can be achieved through additional resource generation.

7.7.2 To Improve Service Quality

41. Safety to commuters is inevitable for both the interests of the Railways and the commuters. The greater the safety and confidence is provided to customers, the more the revenue generation. Safety represents safety in operation of trains to prevent accidents and security represents protection to passengers by prevention of crimes and maintenance of law and order in trains and in station premises. Since most of the accidents with maximum casualties are taking place at level crossings, the Railway should at least utilize the allocated amounts to implement improved safety measures.

42. Security has become a major concern in trains, particularly in trains passing through the terrorist regions. Security in running trains would be improved to avoid the threat of accidents from miscreant’s activity with expert opinion. To provide better security to the travelling passengers in trains and in passenger areas, RPF is deployed to escort important trains to effectively supplement the efforts of state government.

43. Passenger amenities are not commensurate with the increase in traffic. Many stations are yet to be provided with minimum essential amenities. During rail travel, passengers expect better amenities at stations and trains and therefore supervision and maintenance is highly required for amenities provided in stations and trains.
44. Women passengers feel discomfort in queuing up with male passengers in the common queue system. Therefore, separate queue should be provided for ladies at the ticket counter.

45. Women RPF squads need to be deployed for security of women passengers particularly in sections and trains where a large number of women travel alone regularly. In recent years, crime against women is on the rise and therefore, it is necessary to redefine the role of RPF and GRP in providing security to railway passengers.

46. Sensible positioning of women compartments in trains to ensure the safety of women and frequent police patrolling is to be done for the safety of women passengers.

47. Passengers also have complaints regarding presence of cockroaches and rats even in AC coaches of prestigious trains. Therefore, Railway should ensure effective supervision. Similarly, garbage disposal mechanism is to be improved in collaboration with local bodies or by obtaining expert opinion from IITs or IIMs.

48. Rail services are prone to delays and very little consideration is given to the affected passengers. The delays are to be properly communicated to the passengers so that they can make alternate arrangements.

49. While introducing new trains to accommodate the passengers in selected routes, density of traffic and freight movement should be considered.

50. To reduce the staff and overcrowding at the counter, more ATVMs and JTBSs must be opened.
51. Railway should develop a system to receive novel ideas and suggestions from employees, general public and railway users who are in direct contact with the service. After evaluation, better suggestions should be considered.

52. R&D Department should concentrate more on customer expectations and perception towards various services. Railway, which seeks to serve multiple types of customers, a Strategic Business Unit (SBU) is to be created to serve a particular market segment.

53. Key Result Areas (KRAs) are to be identified and SR, being a passenger oriented railway, the prime responsibility is to reach passengers safe and secure to their destinations.

54. Rationalize and simplify all interface processes like, refund, communication process and claims, which would make the Railway the most preferred mode of transport.

55. Enquiry counter is to be located near the Ticket counter and a list of concessions available to the eligible persons and penalties imposed for violation of Railway rules is to be displayed.

7.7.3 To Improve Employee Satisfaction

56. Timely filling up of vacancies of safety category staff, especially of loco pilots and station masters. With the increase in number of passengers, sufficient staff should be employed to reduce their stress so that their behaviour and attitude towards passengers can be improved.

57. It is observed that the operating staff are under great stress as they are denied of proper rest and leave on account of unfilled vacancies. By reducing the number of staff at the ticket counter, SMs are overburdened
with the additional responsibility of issuing tickets. Running staff (Loco pilots and Guards) are exposed to severe mental and physical stress arising out of heavy responsibility, sustained attention at work, uncertain working hours and poor working conditions. Hence, it is highly required to improve their working environment and to fill up the vacancies. As fatigue enhances probability of accidents, measures are to be taken by Railway to improve working conditions of drivers and guards.

58. It is also learnt from the discussions with the loco pilots that many of them often resort to unwanted application of brakes which result in increase in repairs to rolling stock and track and fuel consumption. All these happen because of loss of morale and overburdened work. Therefore, it is suggested to provide good working environment and amenities at all levels of employees to increase morale, which in turn, will improve the productivity.

59. Proper training should be given to develop both hard and soft skills among employees and create a motivational climate for better performance. Training should be given to the employees (particularly to the station staff, reservation/enquiry clerks and to the TTEs who are in direct contact with the passengers) in collaboration and cooperation with professional training institutes. Greater professionalism is required in providing training rather than maintaining the status quo. Human Resource Reforms Committee, set up in railways in 2009, should be strengthened to impart training to all the cadres including supervisory staff and should identify the gap in the existing training programme. It is also suggested that Railway should conduct a study to know the effectiveness of behavioural training.
60. It is found that the employees are not satisfied with the attitude of superiors in redressing their grievances. Therefore, grievance redressal mechanism is to be strengthened. Bureaucratic hurdles should be removed and a change in approach, attitude and behaviour of superiors conducive to encourage a team spirit among the employees should be brought out.

61. PREM is not effective in Railway and the employees are not given any participation in management. Periodical joint meetings of the employees and management should be held to discuss the problems relating to employees at the operating level and welcome their suggestions. The practical suggestions given by the employees should be given due weightage for decision making.

62. Trade unions should actively participate in redressing the grievances of employees, which has to be done in consultation with categorical associations.

63. Identify the competence of employees and encourage their initiatives to utilize their multi-skills for the development of the organization and also for their welfare and betterment. Performance Related Incentive (PRI) helps to retain talented employees at the management level. Better performance can be achieved when pay is related to performance in Railway. Along with Assured Career Promotion based on seniority, weightage should also be given to their performance and skill.

64. The administration should inculcate the habit of making the redundant workers to work who are placed under supernumerary posts.
7.8 Scope for Further Research

Since the study is multi-faceted, the researcher could not concentrate on all the dimensions. Therefore, there is more scope for further research.

1. It is observed that policy decisions are taken on the basis of personal or political considerations. Therefore, cost-benefit analysis related to the turnaround decisions is an important area for further research.

2. More than 80 per cent of the people in Kerala depend on rail as their mode of transport. Every year, with the addition of more number of trains, most of the lines are running with a higher traffic density. Therefore, a scientific study for resolving the problems of traffic density can be taken as a subject for further research.

3. The present study focused only on various service quality dimensions in the passenger segment. It is found that fare fixation is influenced by policy decisions of the ruling governments and passenger segment is not commercially viable. However, freight segment is commercially viable and there is a greater chance to improve revenue. Hence there is scope for future research in the areas of freight services like axle load and its impact, unauthorised loading and service quality.

4. Though there are revolutionary changes in the field of ticketing such as JTBS, ATVMs and E-ticketing, there are many practical difficulties and problems beset with each of these methods. Besides, the chances of ticketless travel have considerably increased owing to the increase in number of passengers and decrease in ticket checking staff. Hence, there is ample scope for further research in the field of ticketing and ticketless travel.

5. A closer examination of the functioning of railways reveals that there has been greater technological progress during the period under study,
especially in areas of signalling, traffic, enquiry service, level crossing etc. But a scientific study is a dire need to make it more effective.

6. There are many places of tourist centres in SR, and has greater prospects for studying possibilities of rail tourism in SR.

7. Safety is a major concern to protect the interests of all the stakeholders. ‘Safety’ represents safety in train operation to prevent accidents and ‘security’ represents protection to passengers by prevention of crimes and maintenance of law and order in trains and in stations. The present study unfolds that passengers are worried about security in trains and stations, which warrants an extensive research work on the topic.

8. SR has more number of level crossing gates with 411 in Kerala and 92 in Tamil Nadu. Interlocking of LC gates is done in 181 gates. In Kerala, total unmanned level crossing comes to 147, out of which 115 is under Thiruvananthapuram Division (TVC) and the remaining 32 under PGT Division (PGT). The number of unmanned level crossings is highest in TVC division (28) particularly in Ernakulam- Alleppey-Kayamkulam section. There is scope for further research on level crossings and accidents in SR, particularly in TVC division.

9. Employees at the operating level, who are engaged in running of trains, are taken for the purpose of study. It is found that they are under great stress and tension, which may lead to poor performance. Stress among employees at all levels and the attitude of superiors towards employees can be taken as a subject for further research.