Edition #2

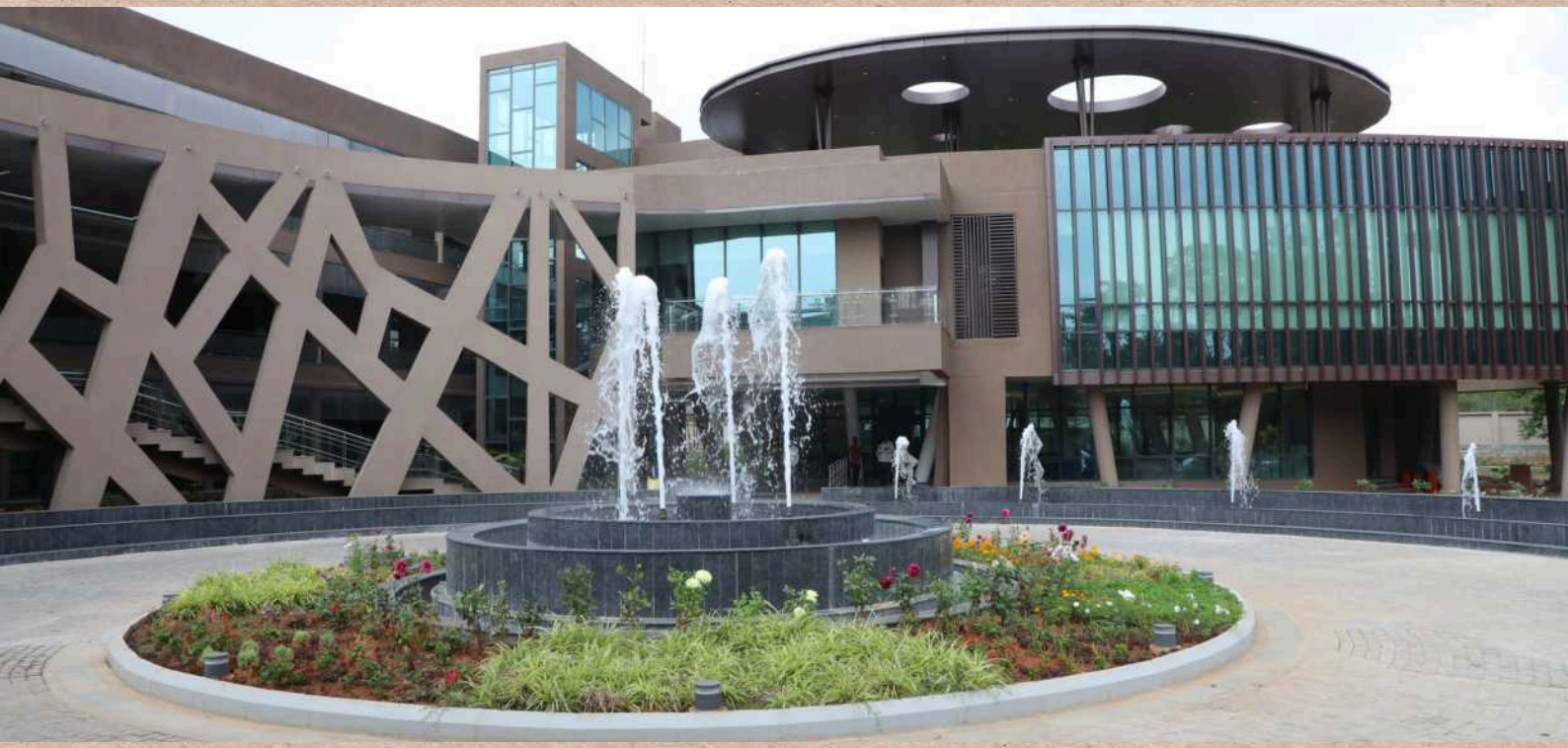
IRIFM

February 2025

INDIAN RAILWAYS INSTITUTE OF FINANCIAL MANAGEMENT(IRIFM)

THE FISCAL TRACK

www.irifm.indianrailways.gov.in



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"Who sows must reap," they say, "and cause must bring
The sure effect;
good, good; bad, bad; and none
Escape the law. But whoso wears a form
Must wear the chain."

-Swami Vivekananda

FROM DG'S DESK

Dear friends and esteemed readers,

The functions of Railway Finance and Accounts are very closely integrated with the executive at all levels. The department plays a very significant role in the functioning of IR. Here are a few lines to capture the spirit of our service in this edition of our e-Newsletter.

IRAS – The glory & story...since 1929

In the heart of India, tracks unwind,
Where trains run fast and stories bind,
A silent force behind the wheel,
Finance and accounts, they seal the deal.

On every route, from dawn to dusk,
Funds are tracked with discipline, just,
For locos run, and stations gleam,
All powered by a financial dream.

Budgets plan, and audit trail,
Every line, a holy grail,
From rolling stock to signals bright,
Each expense ensures safe train flight.

The fare that's paid, the freight that's hauled,
By accounts, the system's called,
To balance books with every mile,
Goods and Coaching in style.

Capex flows for tracks and speed,
Infrastructure built with care, indeed,
Maintenance and running costs a 'fair,
All managed with meticulous flair.

In ledgers deep, the numbers lie,
Where balance sheets do testify,
Assets grow, and liabilities fall,
In the world of finance, we stand tall.

Debits dance and credits sing,
Cash flows like a steady spring,
Revenues rise, expenses meet,
With careful hands, the books complete.

Outstanding amounts and taxes due,
In Finance maze we see it through.
With Indian Railways, Nation thrives
Through numbers, vision comes alive,

From USBRL lights to Pamban shore,
We ensure the trains run more.
It's finance and accounts that steer,
Indian Railways, year by year.

So, here's to numbers, crisp and true,
In every column, something new,
For canons of financial propriety, our guide,
In their precision, we confide.

In the evolving mandate, we are glad that IRAS as a service will continue to thrive in the Railway ecosystem albeit with Accounts inside the parenthesis and management taking the centre stage. This will be challenging as well as fulfilling. It calls for new thrust in training. As IR navigates to become the growth engine of Economy in times to come, functional, behavioural and digital competency will be the key to deliver on the ground. More than 50% of new recruits in 2022 batch of IRMS have opted for Accounts which is very heartening. As we look at their educational qualifications, they are an interesting mix from science, engineering, humanities and law streams.

It remains our sincere endeavour to ignite and inspire the officers as they steer their respective units to fulfil the targets and beyond.

I will also exhort you to write and send articles which can be put in our forthcoming issues. It will serve as an interesting forum to document your works and increase its reach. It will open up forum for exchange of views and benefit many.

Warm regards,

Aparna Garg
Director General,
Indian Railways Institute of Financial Management.

RAILWAY BUDGET AT A GLANCE

Indian Railways (IR) has received a total outlay of Rs 2.65 Lakh crore (Including EBR of 0.10 Lakh Cr) in the Union Budget 2025-26. The main focus is on passenger safety, implementation of Kavach apart from infrastructural works such as redeveloping of railway stations, expansion of network to the remotest corner of the country, etc.

CAPEX Budget At A Glance

2025-26

Figs. In Rs Cr

Plan Head	2023-24 (Actuals)	2024-25 (Budget)	2025-26 (Budget)	% diff over Budget 24-25
11 - New Lines	33702.18	34602.75	32235.24	-6.84
14 - Guage Conversion	4487.62	4719.50	4550.00	-3.59
15 - Doubling	36806.07	29312.19	32000.00	9.17
16 - Traffic Facilities-Yard Remodelling & Others	7374.67	8982.94	8601.00	-4.25
17 - Computerisation	480.89	735.62	428.00	-41.82
18 - Railway Research	28.34	72.01	60.60	-15.85
21- Rolling Stock	53957.52	52313.78	58894.93	12.58
22 - Leased Assets - Payment of Capital Component	20741.37	24270.00	27904.65	14.98
29 - Road Safety Works-Level Crossings	564.62	705.18	706.00	0.12

RAILWAY BUDGET AT A GLANCE

Figs. In Rs Cr

Plan Head	2023-24 (Actuals)	2024-25 (Budget)	2025-26 (Budget)	% diff over Budget 24-25
30 - Road Safety Works-Road Over/Under Bridges	6097.39	9274.69	7000.00	-24.53
31 - Track Renewals	17850.25	17651.98	22800.00	29.16
32 - Bridge Works, Tunnel Works and Approaches	1906.52	2137.46	2169.00	1.48
33 - Signalling and Telecommunication Works	3750.97	4647.28	6800.00	46.32
35 - Electrification Projects	5806.98	6472.30	6150.00	-4.98
36 - Other Electrical Works, incl TRD	1434.41	1681.87	1650.50	-1.87
41 - Machinery & Plant	523.61	715.02	505.00	-29.37
42 -Workshops Including Production Units	4514.70	4903.68	4623.50	-5.71
51 - Staff Welfare	669.46	815.32	833.00	2.17
53 - Customer Amenities	8121.73	15510.75	12118.39	-21.87

RAILWAY BUDGET AT A GLANCE

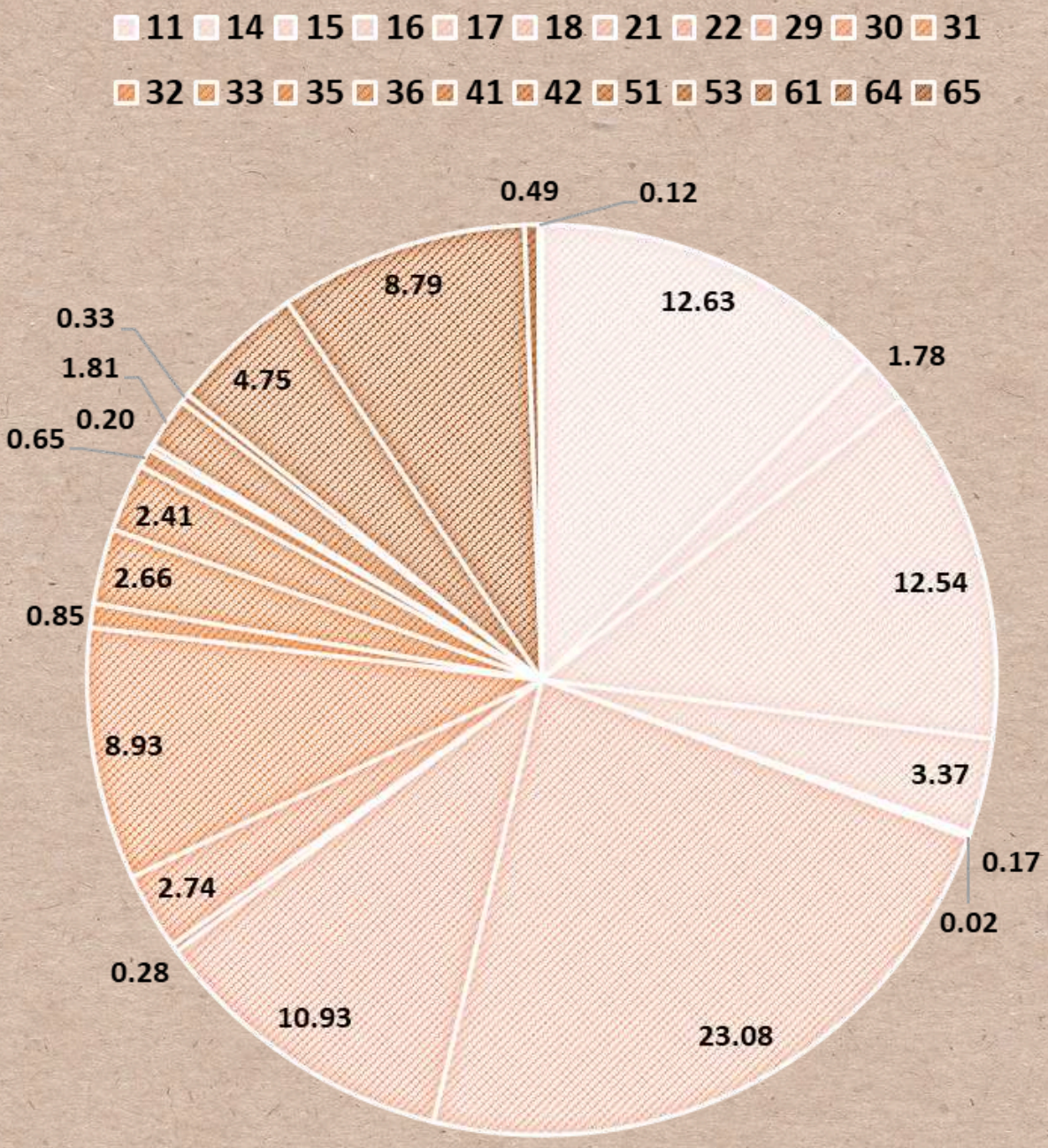
Figs. In Rs Cr

Plan Head	2023-24 (Actuals)	2024-25 (Budget)	2025-26 (Budget)	% diff over Budget 24-25
61 - Investment in Government Commercial Undertakings/Public Undertakings/JVs/SPVs	31909.37	32760.58	22444.33	-31.49
64 - Other Specified Works	794.60	1222.26	1241.00	1.53
65 - Training/HRD	101.93	416.83	301.00	-27.79
Net Inventories	2406.77	250.00	250.00	0
Credits Excluding MTP Credits	2921.21	3050.10	3049.42	-0.02
Total	**241110.76**	**251123.89**	**251216.72**	**0.04**
Metropolitan Transport Projects(MTP)	4486.84	4090.12	4003.22	-2.12
MTP (excluding Suspense) Credit or Recoveries	6.03	14.01	19.94	42.33
Total Capital Outlay (Budgetary Sources)	**245591.57**	**255200.00**	**255200.00**	**0.00**

Source: www.indiabudget.gov.in

RAILWAY BUDGET AT A GLANCE

PH WISE % SHARE IN TOTAL OUTLAY (Excl. EBR)



- The % share of PH-11, PH-15 & PH- 21 is highest which shows the importance given to capacity augmentation, expansion of network and rolling stock augmentation
- The next highest allocation of funds was made to PH-31 followed by PH-53 which shows the increased focus on safety and development of customer amenities

INDIAN RAILWAYS NETWORK AS A GEOGRAPHICAL INFORMATION SYSTEM - METRO RAIL SERVICE ANALYSIS THROUGH ISOCHRONE

- By Sundar Balakrishna, IFoS

The article delves into the application of Geographic Information System (GIS) in Indian Railways. Using the Kochi Metro as a case study, it examines how GIS-based analysis, including isochrone mapping, can enhance travel efficiency and accessibility. The study underscores the broader implications of GIS in optimizing railway operations and improving commuter experience.

A "Geographic Information System (GIS)", or sometimes referred to as a geospatial information system, is a computer system for storing, analysing, and displaying geographic data and associated attributes which are spatially referenced to the earth. From a mathematical perspective, GIS provides a method to mark events occurring on the Earth's space and time dimensions, with longitude(x), latitude(y), and elevation (z). Thus, Earth-based location and extent references are relatable to one another, and subsequently, to a real physical location and geographical extent by the GIS.

Research studies show that educators and students who apply spatial thinking to real-world issues at a range of scale through GIS are efficient spatial thinkers. Some of these studies consider GIS as one of the twenty-five most important technologies that impacted, and continue to positively impact societies in the twentieth and twenty-first centuries. People cutting across gender, and age-groups use geospatial information for a variety of activities of daily living. In contemporary times, children and adults use information technology (IT)-powered geospatial information stored in their digital devices (that include smart phones, tablet devices and computers) to search for routes while driving, to find the nearest restaurant of their choice to eat food, and for a variety of leisure and social pursuits. The public sector and the private businesses use similar geospatial information to pin the location of physical assets like rivers, railways, airports, and roads with scientific precision which renders them useful for a variety of business, and public applications.

This article explores how data of the Indian Railways (IR) can be harnessed through GIS analysis to derive useful output. More specifically, we adopt a case study approach and attempt to answer the following questions:

1. Is open-source data for the IR available? What are the different data formats?

2. What technical GIS artifacts can be employed on the IR data to generate output that is beneficial for the user from the socioeconomic perspective?

"Indian Railways", for purposes of this article, is defined as an undertaking of the Ministry of Railways, Government of India that operates the national railway system within the geographical boundaries of India, covering a track length of 1,32,310 kilometers.

A few earlier studies used GIS to visualize the railway network in the form of Google Earth images in the state of Jammu and Kashmir (Chaturvedi et al., 2013), and to study the impact of rail network on wetland habitat in Assam state (Mitra & Bezbaruah, 2014), but more recent studies that harness the power of GIS analysis on the IR network is not discernible. The present study addresses this research gap by exploring GIS analysis of the IR in some economic dimensions like service area analysis and herein lies the contribution.

I. GIS Data and Indian Railways

1. Fundamental features of GIS data representation

In general, data for GIS appears in the "vector" and "raster" formats. Vector data represents the features of the earth as a point, or as a line, or areas (or polygons), or some combination of points, lines, and areas. Raster data, on the other hand, comprises of a two-dimensional matrix of picture elements ("pixels") or cells, organized as definitive rows and columns. Each cell represents information, such as humidity, altitude, and so on.

The computer stores GIS vector data in the "shapefile" format, denoted as .shp in the computer. Each shapefile is a combination of the following component files: (i) file with .shp extension which describes the vector object and its geometry; (ii) file with .dbf extension which describes the attributes (for example, a vector file containing railway route might have the number of trains per day as an attribute); (iii) file with .shx extension which contains index information to enable faster search; (iv) file with. prj extension denoting projection and coordinates information.

On the other hand, the computer stores raster files in the .gif (graphics interchange format), .jpeg (joint photographic experts group), or the .tiff (tagged image file format) formats.

The world is ellipsoid-shaped, but computers are mostly flat-screened. The coordinate reference systems (CRS) enable GIS to represent the curved surface of the Earth on a flat surface, be it paper or the computer. CRS are classified into two groups: (i) Geographical coordinate systems where a location on earth is represented by its latitude and longitude; (ii) Projected coordinate systems which use distance from an origin point to represent the location. The CRS is represented by the European Petroleum Survey Group (EPSG) number. For example, the ESPG 4326 (World Geodetic System 1984) is a widely used coordinate system to represent GIS datasets.

2. The Kochi Metro Railway Limited (KMRL) Dataset

Amongst the many websites explored, the author of this article identified, and selected the KMRL dataset for purposes of GIS analysis. The KMRL dataset is open source, and this dataset is available for developers to freely download and develop applications on a variety of online platforms to enable commuters and other users to make travel decisions.

Some special features mark the KMRL dataset. For starters, the KMRL dataset is available online in the "General Transit Feed Specification - static (GTFS)" format, which is a popular format for specifying scheduled public transport services' information and connected geographical attributes. A GTFS file contains a minimum of six comma separated value (CSV) file with .txt extension, packed as a .zip file, and contains information of the transport system's scheduled route operations as visible to commuters, and allows analysis of service levels and performance.

The KMRL dataset describes information about 16 stations covering a distance of 18.1 kilometres from Aluva metro station to Maharaja college metro station. This dataset contains the following files:

i. agency.txt ; this file contains agency identity code, agency name, agency url (uniform resource locator), and agency time zone (Asia/Kolkata);

ii. calender.txt; this file contains service identity code, and services available on weekdays, and sunday, and the service start date (1 January 2018) and the service end date (1 January 2099);

iii. fare_attributes.txt; this file contains information of "fare identity" code, fare price, currency (rupees), and payment method;

iv. fare_rules.txt; this file, linked through the primary key "fare identity" code, describes fares for various points of origin and destination;

v. routes.txt; this file contains data on "route identity" code, and identifies the distinct route (from Aluva to Maharaja college);

vi. shapes.txt; this file contains information on the train routes by defining each station's latitude, longitude, distance between the present and previous station in kilometres, and the station sequence;

vii. stop_times.txt; this file comprises information on trip identity, arrival time, departure time, stop identity code, and distance between the previous and present stop;

viii. stops.txt; this file provides information on stop identity code, the latitude and longitude of each stop, the zone identity code, and whether wheel chair facility is available;

ix. translations.txt; this file contains information on each stop's English name, the language of translation (Malayalam), and the name of the stop in Malayalam; and finally,

x. trips.txt; this file contains information on the trip-, service-, and route- identity codes, head sign, and wheel chair availability.

The KMRL dataset does not contain personal information, logo and office symbols of KMRL, and other identity documents.

Out of the ten files described above, two files, that is, the shapes.txt (which contains information of the physical path the train takes), and the stops.txt (location details of each transit stop) contain GIS data that enables further analysis.

Tracing back to the questions identified in section I, the contents of this section provides some answers to the research question 1.

II.GIS-powered Applications on KMRL Data.

Using the KMRL dataset as described above, this article now explores useful GIS artefacts that can be generated.

The shapes.txt and stops.txt files from the KMRL dataset is processed for services analysis using QGIS version 3.20.3, which is an open source, and freely downloadable software.

1. Generating the metro railway path

The shapes.txt point data is first converted to a line representing the railway path of the metro train between Aluva metro station and Maharaja College metro station using the "Points to Path" processing tool in QGIS. The "OpenStreetMap" base layer, which is available as a plug-in in the QGIS software is used as the base map. See Figure 1 for details.

Figure 1. The 16 Metro Stations of Kochi Metro Rail Limited between Aluva and Maharaja College, Kochi Metro, Kerala, India.

2. Isochrones for service area analysis

An "Isochrone" map is defined as a line drawn on a map which depicts all those areas that can be accessible from a fixed location within a pre-fixed time threshold. In transport engineering applications, isochrones maps are used to describe areas reachable within equal travel time.

Given the definition, one is prone to imagine an isochrone map as roughly circular, with the starting point located at the center. Variables like road curves, traffic density, speed limits, and so on may impart various shapes to isochrones maps. Hence, isochrones maps are usually more precise than "distance-radius maps". Two end-points may be 10 kilometers apart from a starting location, but one path may take much longer time to travel due to winding roads and higher traffic density. These ground realities are accounted for, when constructing isochrone maps.

Thus, isochrones are extremely useful for comparing travel times using different modes of transportation (like public transport, bicycle, or car).

In QGIS 3.20.3., the isochrones tool allows the analyst to construct isochrones maps for several transportation modes, which include:

i. Car driving;
ii. Cycling-regular;
iii. Cycling-electric;
iv. Foot walking; and
v. Wheelchair.

The above analysis shows how isochrones maps are useful to a wide variety of commuters using the Kochi Metro Rail for their travel plans.

In doing so, this article is touching only the tip of the iceberg, indicating that **GIS analysis of the IR network could yield immense benefits to the commuters, the Government, and other stakeholders.**

III. Conclusions

Some inferences are in order. First, the Railways data, when viewed through the GIS lens, provides exciting perspectives that transcend the engineering and accounting focus.

Two, the economic and social dimensions of the metro services brought out through GIS analysis using open-source data and software technologies that are freely available online, as demonstrated in this article, have immense implications for innovations in the railways industry, if replicated at scale.

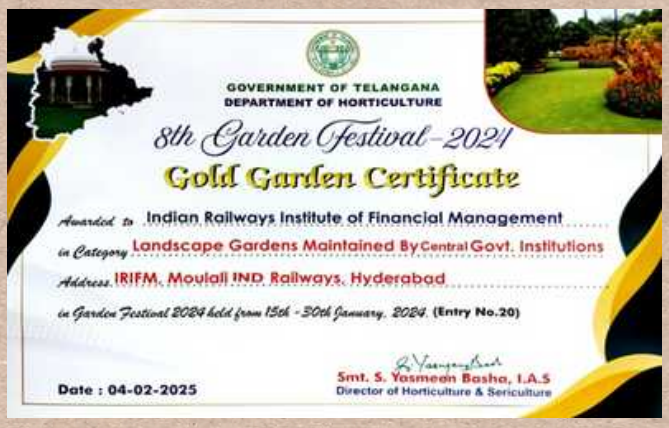
Three, providing useful travel information to various categories of commuters that may include people using bicycles or people using wheel chairs, as shown in this article, can have a positive impact on the quality of life interfacing with the sustainable development goal (SDG) 9 (Industry, Innovation, and Infrastructure), and SDG 15 (Life on land).

EVENTS AT IRIFM

Successful completion of Management Development Program for Officers of Indian Railways

IRMS (A) Probationers reported to IRIFM

ACHIEVEMENTS


GOVERNMENT OF TELANGANA
DEPARTMENT OF HORTICULTURE

8th Garden Festival-2024

Gold Garden Certificate

Awarded to Indian Railways Institute of Financial Management

in Category Landscape Gardens Maintained By Central Govt. Institutions

Address IRIFM, Moulali IND Railways, Hyderabad

in Garden Festival 2024 held from 15th - 30th January, 2024. (Entry No.20)

Date : 04-02-2025

Smt. S. Yasmeen Basha, I.A.S
Director of Horticulture & Sericulture

IRIFM bags the Prestigious Gold Garden Certificate (First Prize) from Telangana Govt. during the 8th Garden festival for the garden maintenance in the category of Gardens having more than 5 acres run by State/Central Govt. Institutions.

SUPPLY CHAIN MANAGEMENT IN INDIAN RAILWAYS- THE ROLE OF ASSOCIATE FINANCE

- DR. S K PATTANAYAK, IRAS(RETD)& APARNA GARG, IRAS

Efficient supply chain management (SCM) is essential for Indian Railways to enhance operational effectiveness, optimize costs, and improve service delivery. This article explores the critical role of Associate Finance in SCM, highlighting key aspects such as financial planning, risk management, technology adoption, and sustainability. A well-integrated approach to SCM can strengthen railway operations, ensuring resilience, cost efficiency, and long-term sustainability.

"Supply chains compete, not companies," as Martin Christopher aptly stated, underscores the critical role of supply chain management (SCM) in determining a business's competitive edge. SCM involves the coordination and optimization of activities from procurement of raw materials to the delivery of finished goods and services to end customers. Core components of SCM include procurement, production, inventory management, warehousing, distribution, and customer service. There is a general misconception that this is more applicable to delivery of goods than services.

National Rail Plan (NRP)envisions to increase the modal share of Railways in freight traffic to 45% by 2047. For Railways to be an efficient provider of transport services, it has to leverage on effective SCM. Each component i.e. department must work in harmony to ensure effectiveness and responsiveness.

Effective SCM requires strategic planning, including lean manufacturing to reduce waste, just-in-time inventory to minimize holding costs, and collaborative planning with suppliers and partners to enhance efficiency. Current trends in SCM emphasize the integration of advanced technologies such as artificial intelligence (AI), the Internet of Things (IoT), and blockchain. AI enhances demand forecasting, inventory management, and predictive maintenance, enabling data-driven decision-making. IoT provides real-time tracking and monitoring of goods, improving visibility and control throughout the supply chain. Blockchain ensures transparency, security, and traceability, reducing the risk of fraud and enhancing trust among stakeholders. Additionally, there is a growing focus on sustainability, with organizations adopting green logistics practices and circular economy principles to reduce their environmental impact. By effectively managing these components and adopting innovative strategies and technologies, organizations can create resilient, efficient, and sustainable supply chains that meet the evolving demands of the market.

Financial planning and Budgeting, investment in technology, risk management, supplier and inventory management, performance monitoring, collaboration, and sustainability initiatives by IR can optimize its supply chain performance. By taking pro-active roles, Financial Advisers (FA) in Railways can significantly contribute not only to improved resource utilization, operational excellence, but cost optimization and enhanced customer satisfaction. They serve as strategic partners in bolstering supply chain resilience.

Let us examine each of the following aspects related to SCM with examples, which have significant bearing on railway's supply chain performance:

1. Financial Planning and Budgeting

Strategic budgetary allocation and capex booking are closely interrelated. Timely capex booking without time overruns leads to utilization of budgetary allocation, thereby making a case for increased allotment and vice-a versa. On the contrary lack of pinpointed financial scrutiny delays incidence of expenditure and consequent cost overruns eroding the purpose of strategic allocation. Fund utilization is not the prerogative of Executive alone. Finance can ensure efficient allocation of funds across various supply chain activities, prioritizing critical areas such as maintenance, procurement, and technology upgrades.

Applying 'time value of money' not only in project scrutiny but in all activities in Accounts office can give rich dividends in terms of cost reduction. Overlooking the concept in processes proves counter productive to the system. A fixed timeframe and system monitored timeline to deal with estimates and proposals is thus an important variant to gain competitive edge. The system of delays and abject indifference of departments to the cause of rightful expenditure needs objective analysis.

Example: Indian Railways prepares an annual budget that allocates funds to various projects (Plan heads) and operational needs. For instance, if significant portion of its budget is allocated to the development of dedicated freight corridors, which aim to decongest existing tracks and improve freight efficiency, that strategic allocation will help to optimize resource utilization and ensures that critical projects receive the necessary funding. Synchronizing allocation and expenditure in real time is the need of the hour.

2. Investment in Technology

FA can always critically evaluate the executive's proposal for investments in advanced technologies such as AI, IoT, and blockchain to enhance supply chain visibility, efficiency, and security. While concurring such proposals initiated by the executives, FAs need to factor return on investment (ROI) for technology to ensure that they contribute to overall supply chain performance and cost savings.

Example: Indian Railways has invested in Radio Frequency Identification (RFID) technology to track and monitor the movement of wagons across its network. This technology provides real-time data on wagon locations, enabling better logistics planning and reducing transit times. By investing in RFID, IR can always enhance supply chain visibility and improve operational efficiency.

3. Cost Optimization

It is said that 'What cannot be measured, cannot be manged'. Introduction and addition to Primary Units (PU's)in Finance code over time is a good example of segregating all major expenditure heads, so as to have detailed data on cost components of IR. Once robust data is available, many unused opportunities for cost reduction can be identified.

Introduction of a separate PU for 'AI and ML Technology' will serve as great aid to assess its role in Productivity.

4. Risk Management

Identifying potential risks in the supply chain, such as failure on account of i) Bid document design, supplier/ contractor disruptions on account of cash flows or ii) natural disasters, and geopolitical issues. Developing mitigation strategies are key to risk management in railway's complex supply chain. Contingency Planning therefore holds the key to mitigate such risks by maintaining financial reserves to address unexpected disruptions and ensure continuity of operations.

Example: Indian Railways faces risks from natural disasters such as floods and landslides, which can disrupt operations. To mitigate these risks, IR has developed contingency plans that include alternate routing, pre-positioning of repair crews, and stockpiling critical spare parts. These measures help ensure continuity of operations and minimize the impact of disruptions. Close involvement in such planning and allocation will be a win-win proposition for all.

Failure of many a new project execution and funding models can be minimized if the Finance member plays an active role in designing/ drafting/ scrutinizing Bid documents. Projecting cash requirements and timely clearance of liabilities in the spirit of contractual obligations on either side are important parameters of maintaining Supply chain.

5. *Supplier Management*

In all purchase tenders, supplier valuation needs to be given primacy while evaluating and selecting suppliers based on financial stability, performance, and compliance with quality standards. Negotiating favourable terms with suppliers and managing contracts to ensure cost-effective procurement and timely delivery of materials.

Example: Indian Railways engages in long-term contracts with key suppliers for essential materials like steel, fuel, and components. For instance, securing a long-term contract with a steel manufacturer ensures a steady supply of materials for track maintenance and construction projects. This approach helps stabilize costs and ensures timely availability of critical supplies.

6. Inventory Management

While it is essentially required for the stores executives to determine optimal inventory levels that balance cost and availability besides reducing excess stock and stockouts, FAs need to explore the financing options for inventory management, such as inventory financing and supply chain finance, to improve cash flow and reduce carrying costs. Developing and leasing storage space within railway premise (if land parcel permits) and applying 'just in time' concept for high value consumables/ raw material can reduce cost for high inventory pile up. Finance has an important role in keeping Inventory of finished products also to optimum level.

Example: Indian Railways has implemented an automated inventory replenishment system for its maintenance depots. This system uses predefined thresholds to trigger automatic reorders of consumables and spare parts. By ensuring optimal inventory levels, IR can reduce stockouts, minimize excess inventory, avoid technological obsolescence leading to cost savings and improved resource utilization.

7. Performance Monitoring

Developing and monitoring key performance indicators (KPIs) are crucial to track supply chain performance, including metrics such as on-time delivery, cost per unit, and customer satisfaction. It is equally important for the FAs to prepare and provide regular financial reports and analysis to stakeholders, highlighting areas for improvement and cost-saving opportunities.

By regularly monitoring KPIs such as train punctuality, on-time delivery of goods, and maintenance turnaround times, IR identifies areas for improvement and takes corrective actions to enhance service quality and operational efficiency.

For instance, analyzing train punctuality data helps identify bottlenecks and improve scheduling practices. Finance department should develop a feedback loop to streamline its services in the macro supply chain setup.

8. Collaboration and Communication

Financial Heads' can lend support in fostering collaboration between finance, procurement, logistics, and other departments to ensure alignment and coordination in supply chain activities. Such

collaborative efforts can open communication with stakeholders, including suppliers, customers, and internal teams, to address issues promptly and improve overall performance.

9. *Sustainability Initiatives*

It is important to make regular assessment of environmental impact on supply chain activities and implement measures to reduce carbon footprint and waste.

Example: Indian Railways is investing in electric locomotives to reduce its carbon footprint and promote environmental sustainability. By replacing diesel locomotives with electric ones, greenhouse gas emissions will come down and dependence on fossil fuels will reduce. This sustainability initiative aligns with global environmental goals and enhances the organization's public image.

Associate Finance can always support sustainability initiatives by exploring PPP, green financing options and investing in eco-friendly practices and technologies.

Understanding finer nuances of SCM is the key to achieving operational excellence, cost efficiency, customer satisfaction, and sustainability for IR. Therefore, concerted efforts across the functional domains in Railways at different levels is the need of the hour. By integrating financial flows in to supply chain delivery, IR can enhance its performance both in passenger and freight services and excel as a key player in India's transportation network

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SPECIAL FOCUS

The Rail Enthusiasts' Society was incorporated on the 28th of December 2015 (Registration No. S-E/792/Distt. South-EAST/2015). Its aims and objectives include, inter alia, to provide a platform for rail enthusiasts to disseminate knowledge, air their views and exchange ideas regarding the railways in India or overseas and to publish a magazine for all rail enthusiasts, whether they are members of the society or not. **5th Global Conference of RES (in virtual mode) is going to be organized on 8th and 9th of March 2025 @ 12.00 hrs (IST). The theme of the conference is "RAIL 200".** Details are provided in this special focus for the benefit of all Rail Enthusiasts.

Link for registration(free):
https://docs.google.com/forms/d/e/1FAIpQLSdBQR25kwrysZ-lXTsLiAo9NPI50cJgvN2dBOmep4-RJ5YICQ/viewform?usp=sharing
(Prior registration is mandatory)

Speakers and Topics

Sr. No	Speaker Name	Title of The Talk
1	Aditya Khakse	How Hyperloop Technologies will help India Develop
2	Benjamin Kletzer	Development of Super Power American Steam Locomotives
3	Charlotte Kingston	Celebrating Britain's Railway History: Railway 200, S&DR 200 and the 50th birthday of the National Railway Museum
4	Craig MacKey	ARHS Archives, A Collection of National (and Global) Significance
5	Heimo Echensperger	Operating Heritage Railways in a Liberalised Railway Market
6	Jaideep Gupta	100 Glorious Years of Railway Electrification
7	Jit Sondhi	China Railway – Progress in Decade 2014-2013 and the Way Forward

SPECIAL FOCUS

Sr. No	Speaker Name	Title of The Talk
8	Manikandan Vekataramanan	Two Centuries of Railway Signalling
9	Paul Whittle	Britain's Heritage Railways – Change and Challenges
10	Rajesh Prasad	Developing India
11	Sanjay Chadha	The Story of Indian Railways: Tracks of Time
12	Shubhranshu	Vande Bharat Express – A Train that Happened
13	V K Singh	Development of Regional Rapid Transit System in India
14	William Blaylock	America's First Transcontinental Railroad and its Effects

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Our mind is enriched by what we receive, Our heart by what we give.

-Victor Hugo

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