

INDUSTRY

NOVEMBER 2023

Insights

MEMBERS IN INDUSTRY COMMITTEE



THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

Statutory Body under an Act of Parliament

www.icmai.in

Behind every successful business decision, there is always a **CMA**

Vision Statement

“The Institute of Cost Accountants of India would be the preferred source of resources and professionals for the financial leadership of enterprises globally.”

Mission Statement

“The CMA Professionals would ethically drive enterprises globally by creating value to stakeholders in the socio-economic context through competencies drawn from the integration of strategy, management and accounting.”

Institute Motto

असतोमा सदगमय
तमसोमा ज्योतिर् गमय
मृत्योर्मा मृतं गमय
ॐ शान्ति शान्ति शान्तिः

From ignorance, lead me to truth
From darkness, lead me to light
From death, lead me to immortality
Peace, Peace, Peace

About the Institute

The Institute of Cost Accountants of India is a statutory body set up under an Act of Parliament in the year 1959. The Institute as a part of its obligation, regulates the profession of Cost and Management Accountancy, enrolls students for its courses, provides coaching facilities to the students, organises professional development programmes for the members and undertakes research programmes in the field of Cost and Management Accountancy. The Institute pursues the vision of cost competitiveness, cost management, efficient use of resources and structured approach to cost accounting as the key drivers of the profession. In today's world, the profession of conventional accounting and auditing has taken a back seat and cost and management accountants are increasingly contributing toward the management of scarce resources and apply strategic decisions. This has opened up further scope and tremendous opportunities for cost accountants in India and abroad.

After an amendment passed by Parliament of India, the Institute is now renamed as "The Institute of Cost

Accountants of India" from "The Institute of Cost and Works Accountants of India". This step is aimed towards synergising with the global management accounting bodies, sharing the best practices which will be useful to large number of trans-national Indian companies operating from India and abroad to remain competitive. With the current emphasis on management of resources, the specialized knowledge of evaluating operating efficiency and strategic management the professionals are known as "Cost and Management Accountants (CMAs)". The Institute is the largest Cost & Management Accounting body in the world, having approximately 5,00,000 students and 1,00,000 members all over the globe. The Institution headquartered at Kolkata operates through four regional councils at Kolkata, Delhi, Mumbai and Chennai and 116 Chapters situated at important cities in the country as well as 11 Overseas Centres. It is under the administrative control of Ministry of Corporate Affairs, Government of India.

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CMA TCA Srinivasa Prasad
Chairman
Members in Industry Committee
The Institute of Cost Accountants of India

FOREWORD

As Chairman of the Members in Industry Committee at ICMAI, it is with great pleasure and pride that I extend my heartfelt greetings to the distinguished readers of the November 2023 edition of 'Industry Insights'. As we move to this edition of insightful publication, it is a moment to reflect upon the strides we have made in advancing knowledge, fostering innovation and enriching the discourse within the multifaceted realms of industry.

In the ever-evolving landscape of commerce, the 'Industry Insights' has emerged as a beacon of intellectual excellence, delivering a diverse array of perspectives, analyses and thought leadership. This edition, like its predecessors, is a testament to our unwavering commitment to disseminating knowledge that transcends boundaries, contributes to strategic decision-making and empowers professionals across industries.

The collaborative efforts of the Members in Industry Committee and the dedicated editorial team have been instrumental in curating content that not only reflects the pulse of current industry trends but also anticipates the challenges and opportunities that lie ahead. Through the pages of this publication, we aim to provide our readers with a nuanced understanding of the intricacies of contemporary business, from financial management intricacies to the transformative impact of technological disruptions.

Looking forward, our commitment remains steadfast—to continue fostering a platform for knowledge exchange, intellectual discourse and the cross-pollination of ideas. It is our hope that the insights shared within these pages inspire thoughtful dialogue, strategic thinking and most importantly, contribute to the collective wisdom that propels our industries toward sustainable growth and success.

We extend our gratitude to the members of the committee, the dedicated contributors and the entire ICMAI community for their unwavering support in making 'Industry Insights' a valuable repository of industry knowledge.

Wishing you an enlightening and enriching reading experience.

Sincerely,



CMA TCA Srinivasa Prasad



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Indian Metro Railway: Transformation of Urban Landscape

Introduction

The increasing focus on metro rail projects in urban areas stems from the pressing need for efficient and interconnected transportation to support economic growth and enhance the quality of life. With a commitment to high performance, reliability, and accuracy, metro rail systems offer innovative solutions to urban transit challenges. Strategic partnerships, combining global expertise and local know-how, are pivotal in developing sustainable and effective transportation networks that prioritize safety and multi-modal integration. The expansion of metro networks across various cities in the past decade, with 862.16 km operational as of 2022, reflects a national commitment to fostering economic development, reducing traffic congestion, and providing a safe and cost-efficient mode of public transportation.

The metro railway landscape in the country is marked by significant growth and development, with a current operational network spanning an impressive 862.16 km. In addition to the operational routes, there is a robust pipeline of expansion, with 663.12 km of routes under construction, showcasing a commitment to continuous infrastructure improvement. Furthermore, the approval of an additional 244.77 km of routes indicates a strategic vision for future expansion. The ambitious scope of proposed routes underscores a forward-looking approach to meeting the escalating demands of urbanization and facilitating enhanced connectivity. This comprehensive overview reflects a concerted effort to bolster the

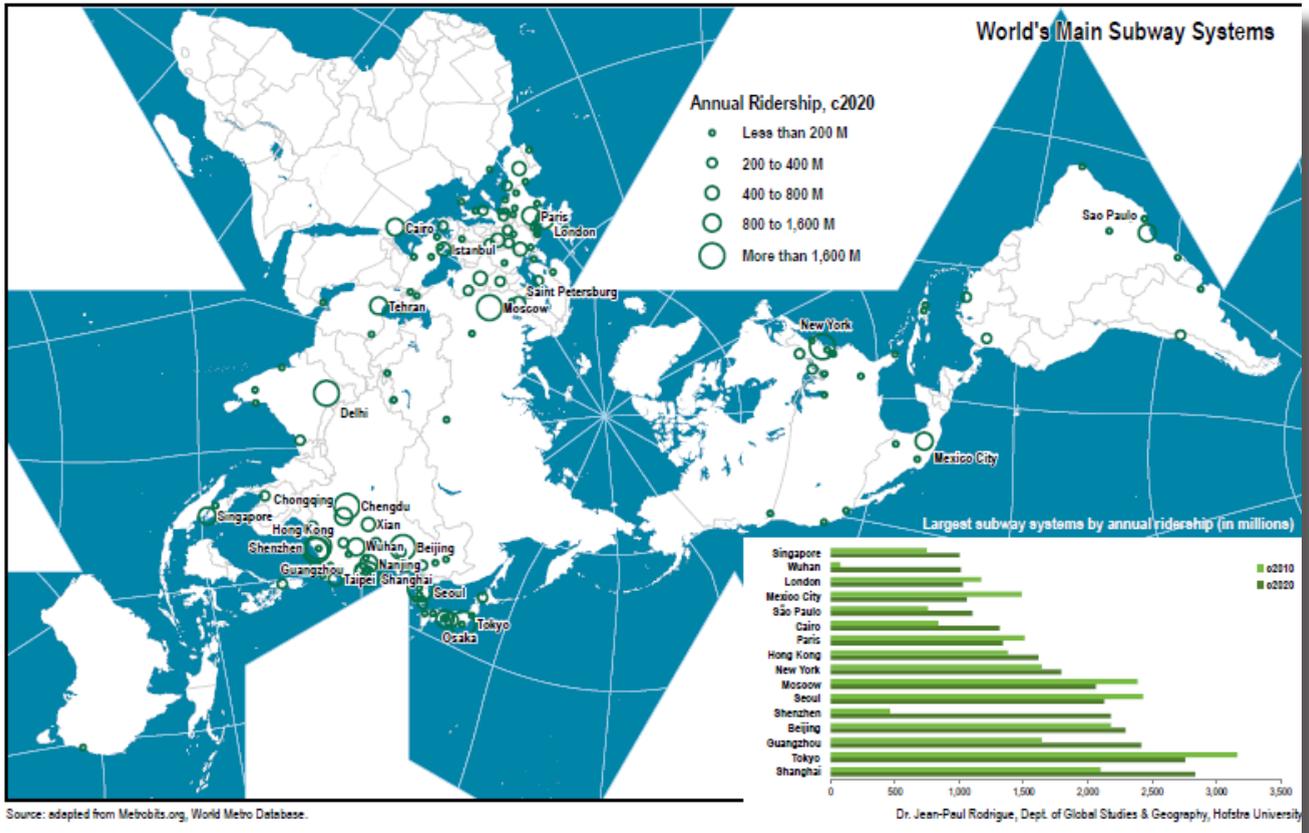
metro railway network, contributing to the efficient and sustainable movement of people within cities.

As of 2022, Chennai Metro Phase II had the largest under construction metro lines in India with rail length of 119 kilometers. It was followed by Kolkata Metro with around 85 kilometers. India's urban rail transportation consisted of suburban rail, which was operated by Indian Railways, and rapid transit, also known as metro, mostly operated by the respective local metro corporations.

Global Perspective

Subway systems have proliferated globally, numbering around 194, and some surpass a billion passengers annually. Notably, cities in developing economies like China and India have witnessed a surge in subway construction as a key strategy to enhance urban mobility and tackle congestion. The scale of ridership is intricately tied to geographical and economic factors. Cities like Moscow, Beijing, and Shanghai, with substantial ridership, often boast a history of subsidized public transportation and transit-oriented urban planning.

In high-density urban hubs such as London, Hong Kong, Osaka, Paris, Seoul, and Tokyo, subway ridership aligns proportionally with the population, representing 25% to 50% of commuting. Conversely, cities where ridership falls below this ratio may have a significant portion of the population relying on informal transit due to economic constraints or may be affluent enough to prioritize private automobiles.



The Evolution of Metro Rail Systems in India

The concept of metro rail systems in India dates back to the early 1900s, with the first proposal for a metro line in Kolkata emerging in 1924. However, it was not until the 1980s that the first metro line in India became operational, connecting Esplanade and Bhawanipur in Kolkata. This marked a turning point in India’s urban transportation landscape, paving the way for the development of metro systems in other cities.

Over the subsequent decades, metro rail systems have witnessed a meteoric rise across India, with 16 cities now boasting operational metro networks. These systems have expanded rapidly, connecting major suburbs, commercial centers, and tourist destinations, transforming the way people move around urban areas. Today, the Indian Metro Rail network spans over 600 kilometers and serves over 3 million commuters daily.

Key Figures

- Operational metro systems in India: 18
- Total metro network length: Over 862 kilometers
- Daily ridership: Over 3 million
- Largest metro system: Delhi Metro (390 kilometers)
- Cities with upcoming metro projects: Bangalore, Ahmedabad, Lucknow, Navi Mumbai, Kanpur, Madhya Pradesh, Chennai, Delhi, Gurgaon, Gujarat, Hyderabad, Jaipur, Kochi, Mumbai, Nagpur, Noida, Pune, and Agra

The Impact of Metro Rail Systems on Indian Cities

The impact of metro rail systems on Indian cities has been profound, extending far beyond the mere provision of transportation. These systems have become catalysts for urban development, driving economic growth, creating employment opportunities, and enhancing the overall liveability of urban spaces.

1. Economic Growth and Job Creation:

Metro rail systems have emerged as engines of economic growth, stimulating local businesses, attracting investments, and creating numerous employment opportunities. The construction and operation of metro projects generate direct and indirect employment, involving a wide range of professions, from engineers and construction workers to train operators and maintenance personnel.

According to a report by the Federation of Indian Chambers of Commerce and Industry (FICCI), the Indian metro rail sector is expected to create over 100,000 direct and indirect jobs by 2025. The report also states that the sector is expected to generate an annual turnover of ₹ 1.5 lakh crore by 2025.

2. Urban Regeneration and liveability:

Metro rail systems have played a significant role in revitalizing urban neighbourhoods and improving the quality of life for city dwellers. The development of metro stations has spurred real estate growth, leading to the creation of vibrant commercial hubs and the transformation of once-dilapidated areas.

A study by the World Resources Institute (WRI) found that metro rail projects in India have led to a 10-20% increase in property values in areas surrounding metro stations. The study also found that metro rail systems have reduced travel times by up to 50%, leading to improved access to jobs, education, and healthcare.

3. Traffic Congestion and Environmental Benefits:

Metro rail systems have significantly reduced traffic congestion in Indian cities, leading to shorter commute times, reduced fuel consumption, and improved air quality. The shift from private vehicles to metro rail has contributed to a reduction in greenhouse gas emissions, promoting environmental sustainability.

According to a study by the Central Road Research

Institute (CRRRI), metro rail systems in India have helped to reduce traffic congestion by up to 30%. The study also found that metro rail systems have helped to reduce carbon dioxide emissions by up to 20%.

4. Integration with Other Modes of Transportation:

Metro rail systems are being integrated with other modes of transportation, such as buses, auto-rickshaws, and feeder railways, to create a seamless and multimodal transportation network. This will further enhance accessibility and convenience for commuters.

5. Social Impact:

Metro rail systems have also had a positive impact on social inclusion, providing affordable and accessible transportation for people from all walks of life. They have also contributed to a sense of community and connection among urban residents.

6. Technological Advancements:

Metro rail systems in India are constantly evolving, incorporating the latest technological advancements to improve operational efficiency, safety, and passenger experience. This includes the adoption of intelligent signalling systems, automated train operations, and smart card ticketing systems.

Cost-Effectiveness Strategy of Indian Metro Railways

The cost-effectiveness of Indian metro railways is a result of a combination of factors, including:

- Standardization and use of proven technology: Indian metro railways use standardized designs and proven technology, which helps to reduce costs. For example, all metro lines in India use the same gauge, which reduces the need for custom-made trains and track.
- Economies of scale: The Indian government has been investing heavily in metro rail projects, which has led to economies of scale. This means that the cost per kilometer of metro line has been decreasing over time.



- Public-private partnerships (PPPs): The Indian government has been increasingly using PPPs to finance and construct metro projects. PPPs can help to reduce the government’s upfront costs and share risks with the private sector.
- Localization of manufacturing: Indian companies are increasingly manufacturing metro components and trains, which has helped to reduce costs. For example, the Bombardier Innovia Metro 300 trains that are used on the Delhi Metro are manufactured in India.

Data on Costs and Benefits

Cost/Benefit	Estimated Value
Initial investment per kilometer	₹ 150-200 crore
Cost per passenger-kilometer	₹ 2-3
Reduction in travel time	30-50%
Reduction in fuel consumption	20-30%
Reduction in carbon dioxide emissions	10-20%
Increase in property values	10-20%
Job creation	100,000 direct and indirect jobs by 2025

The benefits of metro rail projects far outweigh the costs. Metro rail is a cost-effective and sustainable mode of urban transportation that can help to improve the quality of life for millions of people.

Case Studies

Here are a few case studies that illustrate the cost-effectiveness of Indian metro railways:

- Delhi Metro: The Delhi Metro is the largest metro system in India, and it is also one of the most cost-effective. The cost per passenger-kilometer on the Delhi Metro is ₹2.2, which is significantly lower than the cost of other modes of transportation in Delhi, such as buses and auto-rickshaws.
- Bangalore Metro: The Bangalore Metro is a relatively new metro system, but it is already proving to be cost-effective. The cost per passenger-kilometer on the Bangalore Metro is ₹2.3, which is also lower than the cost of other modes of transportation in Bangalore.
- Noida Metro: The Noida Metro is a small metro system, but it is also very cost-effective. The cost per passenger-kilometer on the Noida Metro is ₹ 2.1, which is the lowest cost per passenger-kilometer of any metro system in India.

The cost-effectiveness of Indian metro railways is a result of a combination of factors, including standardization, economies of scale, PPPs, and localization of manufacturing. The benefits of metro rail projects far outweigh the costs, and metro rail is a sustainable mode of urban transportation that can help to improve the quality of life for millions of people.

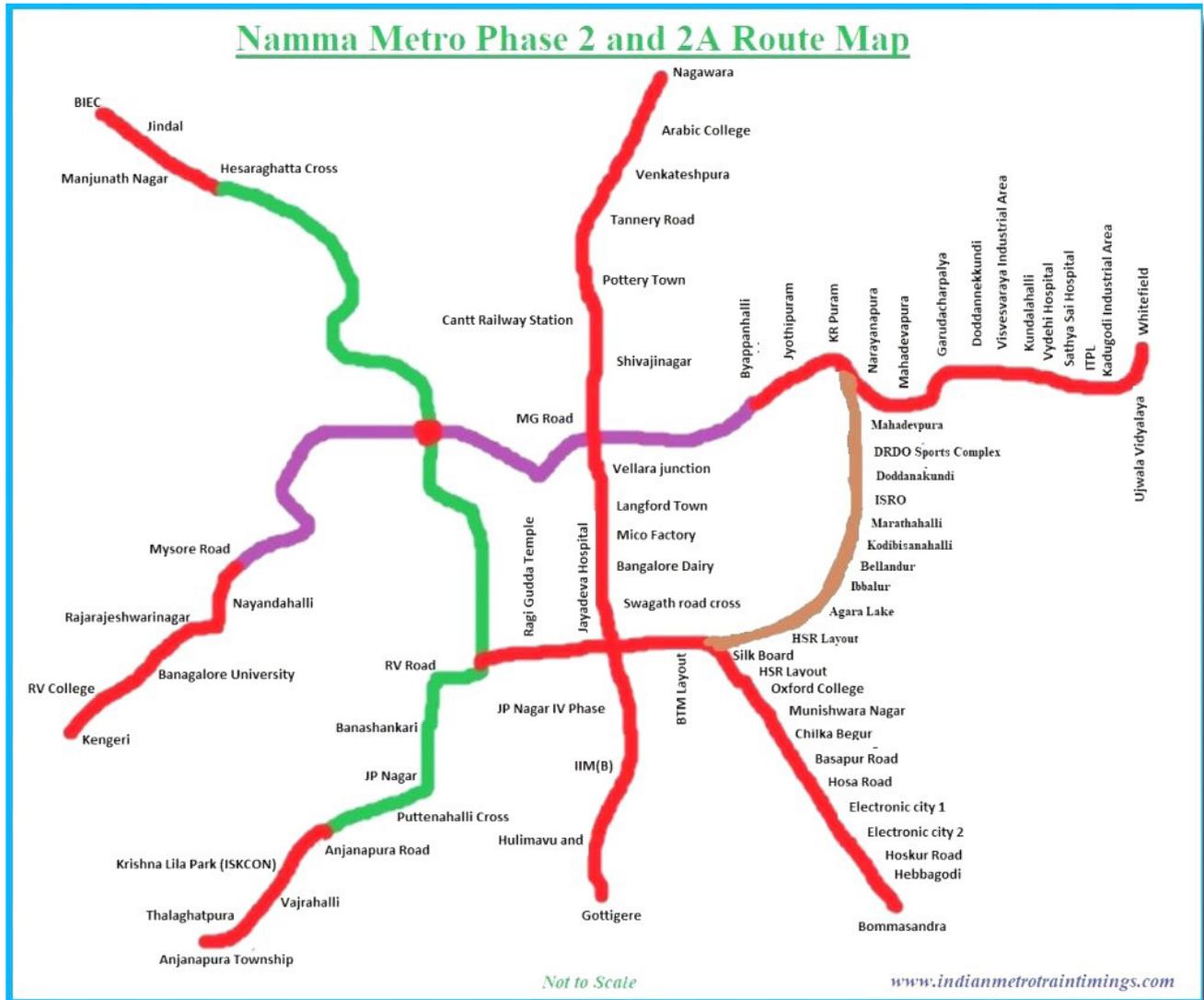
Future Plans for Indian Metro Rail

- Estimated investment in metro rail projects by 2025: ₹ 1.5 lakh crore
- Total metro network length by 2025: Over 1,000 kilometers
- Total metro stations by 2025: Over 1,000

Upcoming Metro Projects

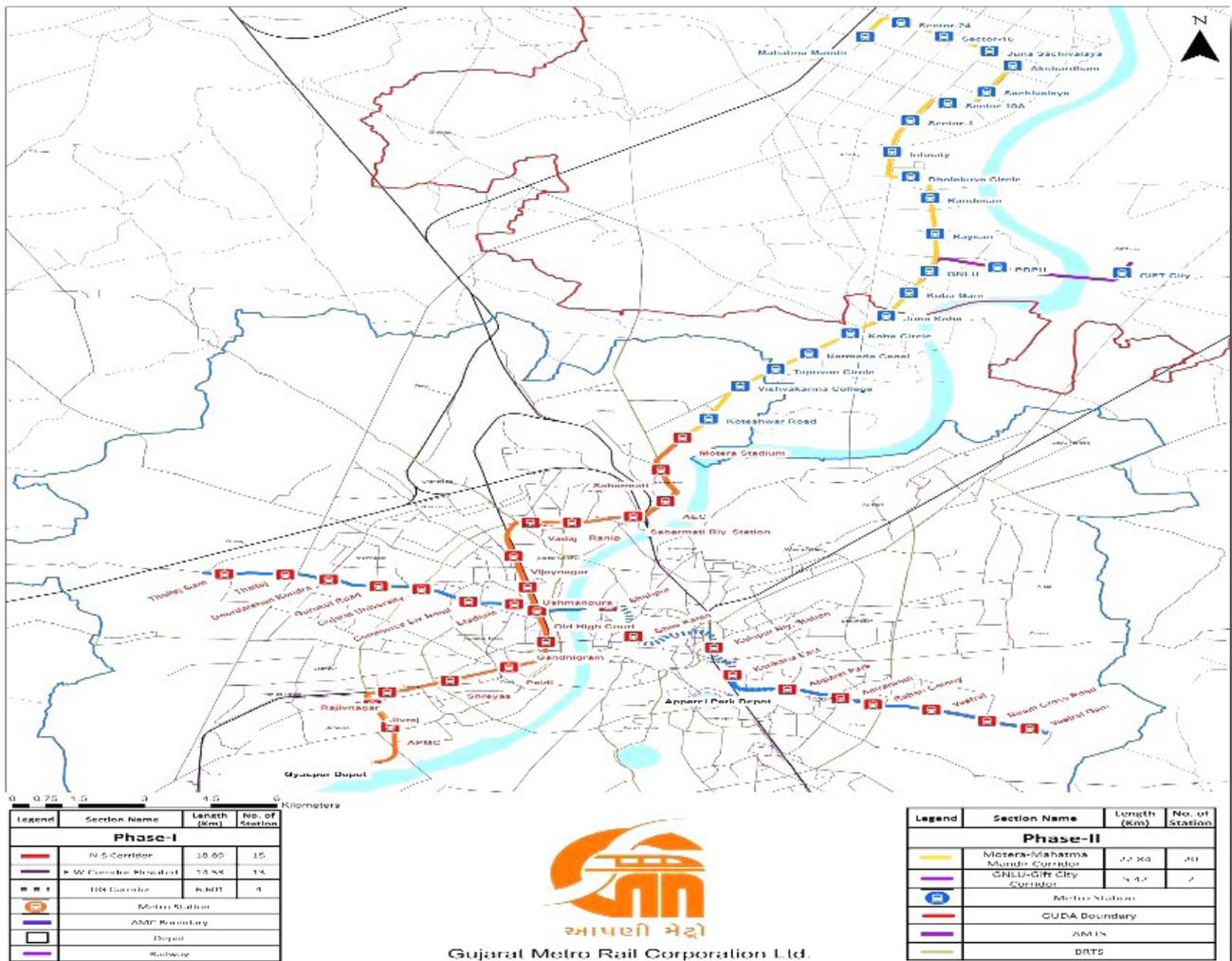
Several metro projects are currently under construction in various cities, and more are in the planning stages. Here are some of the key upcoming metro projects:

1. Bangalore Metro: Phase 2 of the Bangalore Metro is currently under construction, and it will add 56 kilometers and 61 stations to the existing network.



Source: <https://www.metrotrainnews.in/bengaluru-metro-phase-2-stations-will-be-smaller-than-phase-1/>

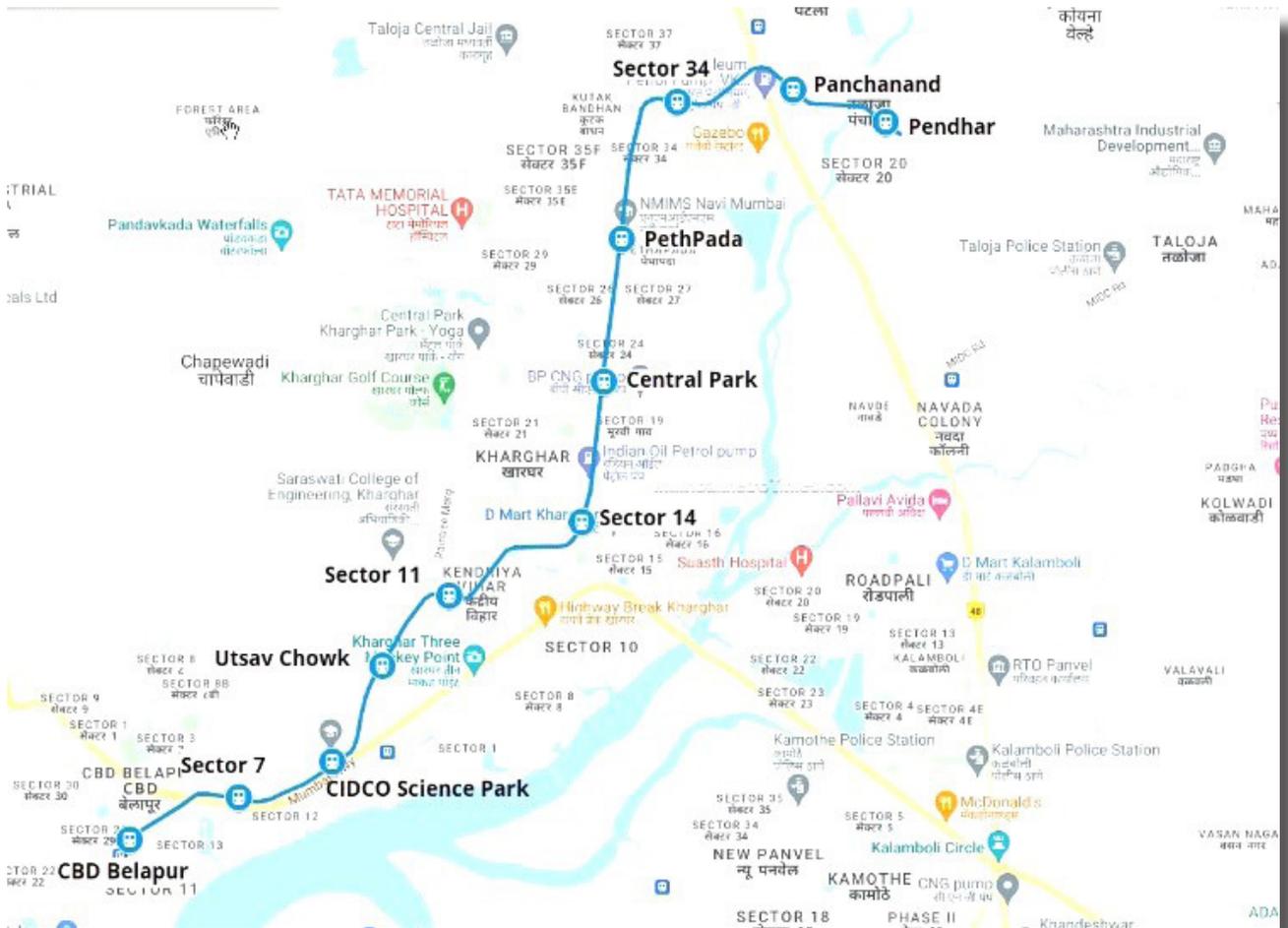
2. Ahmedabad Metro: Phase 2 of the Ahmedabad Metro is currently under construction, and it will add 28 kilometers and 23 stations to the existing network.



Source: <https://www.metro railnews.in/the-ahmedabad-metro-phase-2/>

3. Lucknow Metro: Phase 2A of the Lucknow Metro is currently under construction, and it will add 6.1 kilometers and 3 stations to the existing network.

4. Navi Mumbai Metro: Line 1 of the Navi Mumbai Metro is currently under construction, and it will add 11.1 kilometers and 11 stations.



Source: <https://www.mumbaimetrotimes.com/navi-mumbai-metro-receives-final-clearances-for-line-1-to-be-soon-operational/>

5. Kanpur Metro: Phase 2 of the Kanpur Metro is currently under construction, and it will add 4.5 kilometers and 3 stations to the existing network.



Source: <https://housing.com/news/kanpur-metro/>

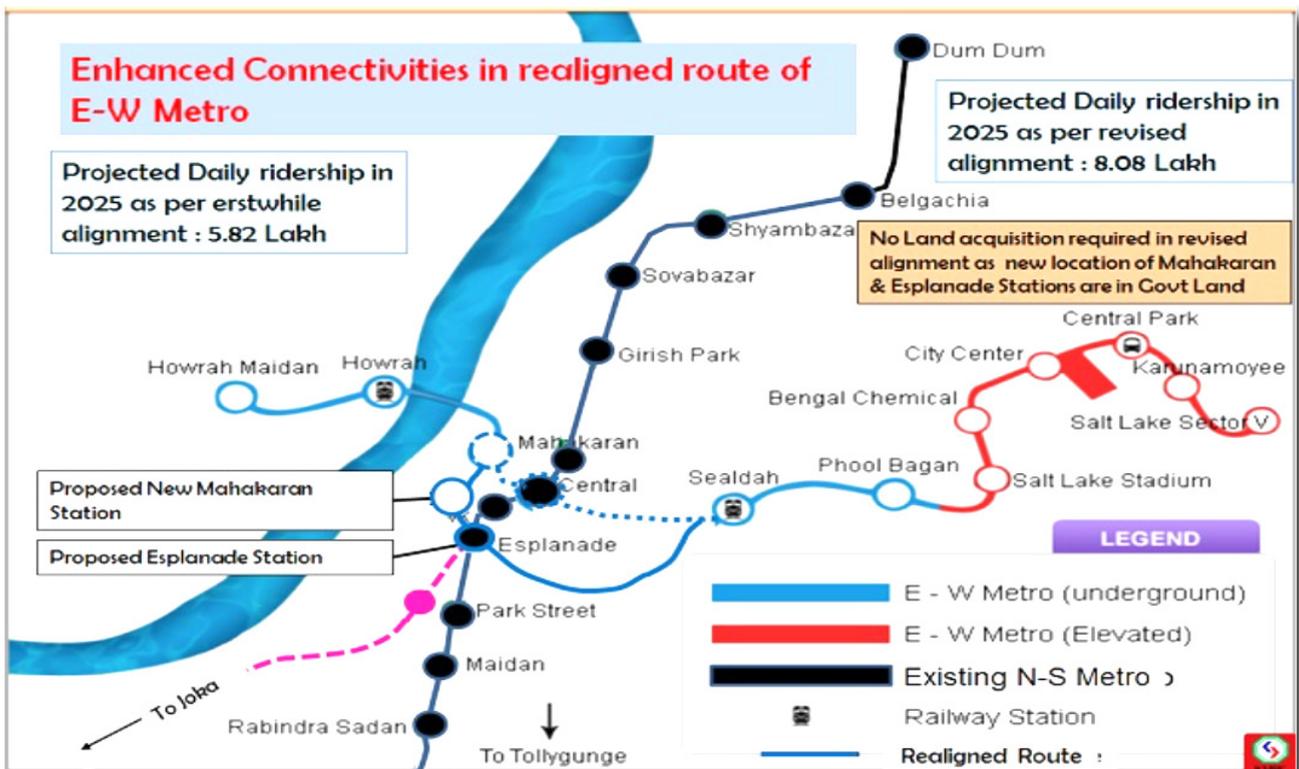
6. Madhya Pradesh Metro: The Bhopal Metro is currently under construction, and it will add 27 kilometers and 28 stations. The Indore Metro is also in the planning stages.

7. Chennai Metro: Phase 2 of the Chennai Metro is currently under construction, and it will add 118.9 kilometers and 133 stations to the existing network. The Chennai Metro Rail Limited (CMRL) on 21st September, 2023 submitted the Detailed Feasibility Reports (DFR) for the extension of Phase II project from Koyambedu to Avadi (via Thirumangalam, Mogappair) and Siruseri to Kilambakkam bus terminus (via Kelambakkam). Chennai Metro Rail Ltd on October 13, 2023 signed a contract agreement with TATA Projects for five underground stations. It was a JICA funded tender.



Source: <https://themetrorailguy.com/2021/02/19/bids-invited-for-chennai-metro-phase-2-line-4s-final-section/>

8. Delhi Metro: Phase 4 of the Delhi Metro is currently under construction, and it will add 65 kilometers and 61 stations to the existing network.
9. Gurgaon Metro: The Gurgaon Metro is in the planning stages, and it will connect Gurgaon with Delhi and other parts of the National Capital Region.
10. Gujarat Metro: The Surat Metro is in the planning stages, and it will connect Surat with other parts of Gujarat.
11. Hyderabad Metro: Phase 2 of the Hyderabad Metro is in the planning stages, and it will add 44 kilometers and 34 stations to the existing network.
12. Jaipur Metro: Phase 2 of the Jaipur Metro is in the planning stages, and it will add 23 kilometers and 24 stations to the existing network.
13. Kochi Metro: Phase 2 of the Kochi Metro is in the planning stages, and it will add 11 kilometers and 10 stations to the existing network.
14. Mumbai Metro: Metro Line 4 of the Mumbai Metro is in the planning stages, and it will connect Thane with Wadala.
15. Nagpur Metro: Phase 2 of the Nagpur Metro is in the planning stages, and it will add 17 kilometers and 16 stations to the existing network.
16. Noida Metro: Phase 3 of the Noida Metro is in the planning stages, and it will add 6.9 kilometers and 7 stations to the existing network.
17. Kolkata Metro: 87.83 kms. new Metro projects have been sanctioned, out of which 20.67 kms. are being constructed by Metro Railway and balance 67.16 kms. by RVNL. Approximately 2.54 route Kms. have been completed by Metro Railway between Dum Dum – Noapara and commissioned on 10.07.13 including Noapara Station.





Source: <https://www.timesnownews.com/business-economy/industry/article/kolkata-metro-east-west-section-stations-with-elegant-interiors-offer-world-class-amenities/669682>



Centralised Air Conditioner of Kolkata Metro Railway

Source: https://mtp.indianrailways.gov.in/view_section.jsp?fontColor=black&backgroundColor=LIGHTTEELBLUE&lang=0&id=0,1,547,553

CMA^s IN THE LEADERSHIP



CMA (Dr.) Prasanna Kumar Acharya
Director - Finance
Chennai Metro Rail Ltd (CMRL)

1. Future of Metro Rail & Chennai Metro Rail in particular

Q. How do you consider METRO RAIL as a key for Mass Transit System?

A: The first metro rail was started in Kolkata way back in 1984 and Indian metropolitan people have waited for 18 years to see the 2nd one in 2002 in the form of Delhi Metro Rail (DMRC). In India less than 1000 KM metro rail network is in operation and similar length either is in construction or study phase. India is aiming to have about 5000 KM Metro Rail network by 2030. The estimated investment required for developing another 4000 KM of metro Rail network is about 16 lakh crore.

About 90 lakh riders are travelling in Metro Rail on daily basis. Delhi is the highest of about 70 lakh riders per day followed by Hyderabad, Bangalore and Chennai. In the growing cities, mass transport system is very essential as we may not afford to have more road network inside the city and more buses and cars. Metro rail is the other alternative to ensure, safe, reliable, economic environment friendly and fast transport alternative.

Q. How do you perceive CMRL as a good transport medium in Chennai city and what is its future plan?

A: CMRL is presently operating two lines from Wimconagar to St Thomas Mount and Airport to Chennai Central. The total length of both the lines is about 55 KM. The same was constructed with a total capital outlay of about 22k crores. About 3.5 lakh riders are using metro rail every day. CMRL is also constructing about 118 KM in Phase-II with an estimated CAPEX of 63k crore. With completion of phase-II the daily ridership estimated to surge drastically and is expected to emerge as the 2nd largest metro network in the country followed by DMRC. Further, CMRL is probably the one who is implementing the highest length of metro network (118 KM) at one go in the world. If we analyse metro rail network across the globe, only Hongkong Metro is an example of profitable metro. All other metro rail companies are not able to generate profit even though



some of them are operational positive. The success of Hongkong Metro is the real estate business associated along with metro network. About half of its revenue is from the non-core business. CMRL is presently able to earn 25% of its revenue from the non-fare box and targeting

for 35% to 40% in next 2-3 year's time.

2. Financial Strategy:

Q. What overarching financial strategy have you employed in your previous roles that you believe would be beneficial for the Chennai Metro Rail?

A: My experience in both Public and Private Sector particularly related to digitisation, systems and processes related to strengthening internal control has helped me a lot to roll out various initiatives like Risk Management, Compliance Management, Rolling tender, Forward/Reverse Auction, ERP Etc in the organisation.

Q. How do you align financial strategies with the long-term goals and vision of an organization?

A: Metro Rail is a growing sector and requires huge CAPEX. Arranging low cost and long tenure funding is the key for sustainable operation. Further efforts to increase ridership and monetisation of assets are the key strategies required for long-term vision of the company.

3. Budgeting and Forecasting:

Q. Can you describe your approach to budgeting and forecasting, especially in a dynamic environment like the public transportation sector?

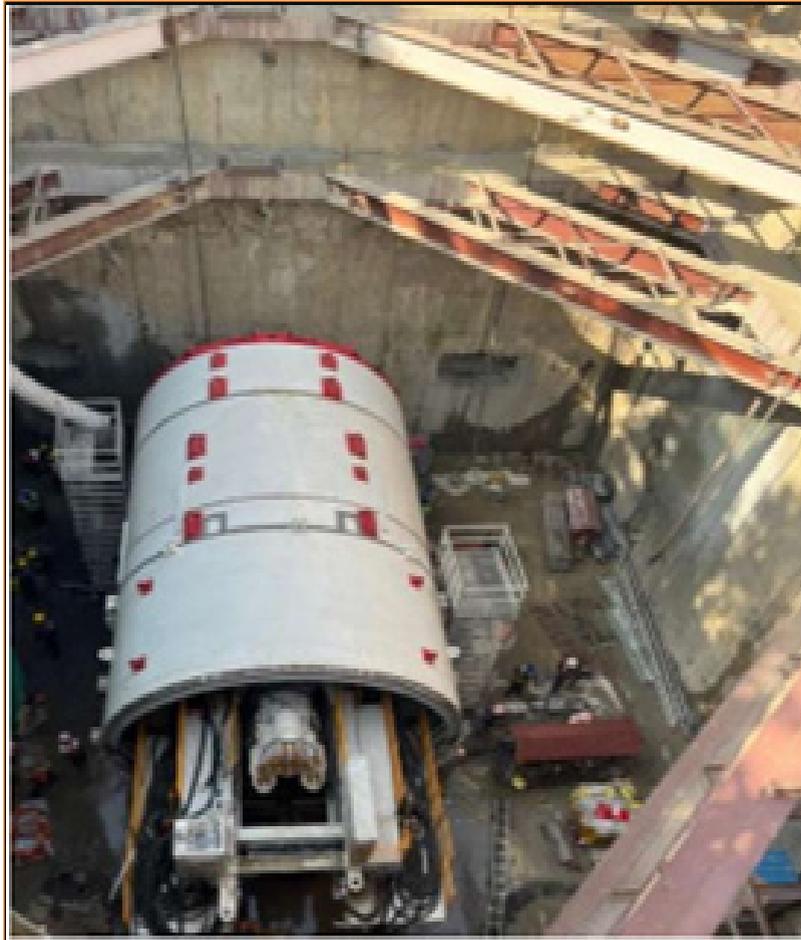
A: As I mention earlier Metro Rail is an evolving sector and is in the stabilisation process. The historical data required for budgeting are not matured enough to ensure effective budgetary control. However, learning of the past and estimating the future with available input have helped to start with a conventional budget estimate and budgetary control. Once system is more matured, we can shift to Zero Based Budgetary Control approach. With

my experience with Metro Rail, I understand that, Metro Rail Companies are more relying on the OEM for the supply of spare parts and maintenance activity. Usually in a given scenario, OEM cost some times more than double of its possible alternate option. Hence, efforts need to be made to develop vendors for supply of maintenance spares and to slowly

move away from the OEM concept. This will help substantial saving in O&M cost of Metro Rail Operation. Joint and collaborative effort can be made among all metro rail companies to address this issue.

Q. How do you ensure accuracy in financial projections, considering potential uncertainties?

A: As we all know, the uncertainties like COVID pandemic was a really a challenge for all the transport sector. Metro Rail was not an exception. It is really a tough issue which is difficult to estimate in advance. However, all-out efforts were made to bounce back to normalcy at minimum time lag. Financial Projections particularly with respect to revenue and expenses are prepared with normal business scenario with some flexibility to take care of minor deviations.



Launching Shaft of Tunnel Boaring Machine

As you know the pricing of fare is more sensitive in metro sector and to be decided through a high level committee as per Metro Rail Policy, care need to be taken for simplified pricing approach affordable by the commuters. The pandemic like situation needs to be handled with a different approach.

4. Cost Management:

Q. What methodologies have you used to effectively manage costs without compromising operational efficiency?

A: The fundamental principle behind cost management is to understand cost with each of its elements. Half of the problem is addressed once we understand each and every element of cost associated to a particular expenses or packages or contract as the case may be. During the project phase our estimate need to be closure to the market response level. In most of the time substantial variation from the estimate requires re-tendering which is always a time-consuming approach. So, our expert team always keep a watch on various market trends, technology and economics to ensure proper estimation before floating of tender.

Q. How do you prioritize cost-cutting initiatives while maintaining the quality of services?

A: I personally believe, cost cutting is not a solution to the requirement and it is always a temporary approach to postpone the challenge. I believe, cost optimisation through detailed study, technology intervention ensures increases productivity. However, close watch needs to be there for expenses incurred which can be avoided/ postponed without impact in the business operation.



Viaduct Construction

5. Financial Reporting:

Q. How do you ensure timely and accurate financial reporting? Can you provide an example of a situation where your reporting played a crucial role in decision-making?

A: Metro Rail Companies are not listed entity and as per requirement under companies act the accounts need to be adopted in AGM by 30th Sept every year. If we see, in real terms half of the next year is consumed for preparing previous years account, which is not a correct approach. There is little time to plan and think for the current year. After my joining, I have taken various steps which was hindering closing of the accounts and with frequent inter departmental meetings and a tight timeline we could able to complete the previous years financials including auditing one moth

earlier compared to previous year. With similar approach and with intervention of technology the same can be further reduced by one more month which we are targeting this year. The internal audit points and audit points of last 2-3 years are also helping us to plan in such a way that, the said points does not appear again during the current year audit. I can also mention that, there were audit qualifications since last few year on one accounting treatment and, we as a team has sorted the same and FY 23 financials has been approved without any qualification/adverse comment from Statutory Auditors and C&AG.



Q. How do you communicate financial information to non-financial stakeholders?

A: Financial information available in public domain are shared and explained to the stakeholders based on demand. Non-sensitive financial information which are not in public domain is also clarified for the understanding of stakeholders based on requirements. As we all know, being a non-listed entity financials are published once in a year and some of the stakeholders require basic financial information for taking various decisions. Being a public utility service, we maintain confidentiality of the sensitive financial information to the desired extent.

6. Risk Management:

Q. In your experience, how do you identify and mitigate risks? Can you share an example of a successful risk management strategy you implemented?

A: With respect to my understanding, Risk mitigation arises only when we understand the risk perception, its vulnerability and its likely occurrence and possible mitigation measures available. Risk appetite of the organisation is also crucial while designing risk management plan. In CMRL we have developed a system based risk register wherein we capture possible risks associated either in construction or operation and based on the risk perception cost of mitigation etc we decide the mitigation measures and monitor the same at periodic interval. As we are dealing with public in our day to day operation we are very much sensitive to the safety and security of our riders. Any risk identified pertaining / associated with passengers are mitigated on priority. Similarly high priority is given to the construction related risk wherein again public safety is involved.

7. Compliance and Governance:

Q. How do you ensure compliance with relevant financial regulations and governance standards in the transportation industry?

A: If we look to the various compliance requirements under Companies Act, 2013, Income Tax, GST and other associated Act and Rules the list itself is mind boggling. To address this issue, CMRL has developed its own Compliance Management System wherein all compliance requirements are mapped and the compliance officer is monitoring and reporting the same to Directors and MD for their review. The new requirements are also fed into the system as and when it arises. It's a full proof system to take care of any non-compliances wherein the penal provisions are very high.

8. Technology Integration:

Q. How do you leverage technology in financial management, and what role do you see technology playing in the future of financial operations for metro rail systems?

A: We have implemented ERP system in phase-1 which covers Finance and Stores and phase-2 is under implementation which will take care of balance activities. Considering the volume and size of the organisation we have pulled open-source ERP provider Odoo for implementing the same with much more economic way compared to other ERP solution providers in the market. Considering the size of our project, we have also developed a comprehensive project management system (PMIS) which takes care the entire project management. We are also in the process of extending the ERP to the vendor front wherein vendor invoice management system is to be integrated in our system, through which vendor can directly upload their invoice in our platform and can monitor its movement till it receives its payment. No manual intervention is required at any stage from procurement to payment.

9. Funding and Capital Structure:

Q. What strategies have you used to optimize the capital structure of an organization, especially in securing funding for large-scale infrastructure projects?

A: Metro Rail is not a commercial requirement and it largely built to address social issues/challenges and now it is for a sustainable environment requirement. It is mean to address the issues related to safety, punctuality, economic, reliability and convenience. In the present structure as per Metro Rail Policy 2017, Govt is infusing equity between 30% to 40% excluding cost towards land and balance amount is funded through long term loan. The life of these projects are about a century except for the rolling stock which is between 20-25 years and require replacement. Metro projects are approved considering the economic rate of return instead of internal rate of return. The loans are supported with sovereign guarantee where repayment initially met by the Govt to the funding agencies. Once repayment of the loans are over, the Metro Rail will be economically viable and self- sustainable entity.

Q. How do you balance debt and equity considerations in financial decision-making?

10. Performance Metrics:

Q. What key performance indicators (KPIs) do you consider most critical for assessing the financial health and performance of a metro rail system?

A: Key performance indicator of any metro rail system is the utilisation of its assets which is its ridership (Peak Hour Peak Direction Traffic- PHPDT), Frequency, down time for maintenance, availability of trains, frequency of operation from physical point of view. In terms of financial the KPI can be Operational cost to revenue, power cost, employee cost and maintenance cost as a percentage of revenue, non-fare box revenue as a percentage of total revenue and fare box revenue, EBIDTA margin etc. As Metro Rail operation in India and across the world is not a profitable venture except Hong-Kong Metro, the KPI can be restricted upto EBIDTA level.

Q. How do you align financial metrics with the broader organizational objectives?

A: Financial objectives of any commercial organisation is to improve top and bottom line. Improvement in top line will automatically improve the bottom line (PAT) unless the cost of improvement of the top line is more than the revenue earned. All-out effort need to be focussed towards optimum utilisation of asset both in fare and non-fare box areas. Its true for any industry cost recovery happens when assets are fully / optimally utilised and same is the situation for metro rail. Optimum utilisation of metro rail assets is nothing but maximisation of ridership using the same assets. When frequency of trains in any metro system achieves 3 minutes with the designed riders in the train throughout the operational hours, automatically both the top and bottom line will improve, and it can be a financially sustainable transport system.

11. Economic and Industry Trends:

Q. How do you stay informed about economic and industry trends that may impact the financial stability of a metro rail system?

A: Metro Rail system being a capital intensive infrastructure project largely depend upon financial support from Central and State Govt. The funding of most of the metro rail projects are from Multi-Lateral Funding agencies. The rate change by international funding agencies and currency volatility is a major concern for the metro rail companies. Presently, as the loan is in the books of Govt. of India, hedging option has not been explored by Metro Rail Companies. Going forward as per my view Metro Rail Companies may look forward to change the loan currency suitable to them and also explore possibility of hedging to take care of the currency fluctuation.

Q. Can you provide an instance where your awareness of industry trends influenced financial decision-making?

A: In recent past after the change of (Secured Overnight Financing Rate -SOFR) rate for USD based loan we have moved to YEN based loan



in consultation with administrative ministry. This will help to reduce interest burden as well as currency volatility to a great extent.

12. Stakeholder Relationship Management:

Q. How do you manage relationships with key stakeholders, including government agencies, investors and external auditors?

A: Being a Public Sector Company we always look forward for the welfare of the public at large, at the same time we also derive liberty in our decision making for the overall interest of the organisation. We took feedback from stakeholders and ensure suitable action wherever necessary. Further, with respect to auditors, we are always thrust upon transparency and professionalism in our approach and collaborate the right approach as per the statutory requirement and industry practice.

Q. Can you share an experience where effective stakeholder management had a positive impact on financial outcomes?

A: If you see the financials of FY22 and prior, auditors have qualified our financials. We have taken up the dispute to the Expert Committee of ICAI as well as to the administrative ministry and based on the expert opinion we have aligned our accounting policies, restated the financials to meet the requirement and received a clean audit report from the auditors.

13. Professional Development:

Q. In the dynamic field of finance, how do you stay updated on the latest developments, tools and methodologies?

A: Training is an important tool in the present dynamic environment. We strongly believe on this approach and continuously focussing on various training mechanisms be it functional or behavioural. Our employees have training targets and they tend to comply these targets.

Q. Can you provide an example of how your continuous learning contributed to improving financial processes?

A: In the recent past we have introduced various reform process to bring discipline in the financials of the company. Some of them are introduction of reverse auction in the revenue tenders, rolling tendering system for all revenue, loan and insurance tenders. We have also in the process of implementing Board room Automation in our company. We also have focussed for purchasing power through open access and gained substantially to reduce stress on our operational cost. We have also signed MoU with various event partners of the city to collaborate with metro system for seamless travel during such event. Some examples are IPL and WC Cricket match in recent past.

14. Ethical Considerations:

Q. How do you ensure that financial practices within your purview adhere to the highest ethical standards?

A: Ethical practice is the basic fundamental for success and sustainable operation of any business organisation. CMRL is committed to uphold the highest ethical standards and ensures there is no such un ethical practice among its employees, vendors and contractors. A separate vigilance cell under the direct control of MD is operating to ensure proper compliance of all standards including ethical standards. A separate concurrent independent Audit Team is also working for that purpose apart from internal auditors. From General Consultants also separate team is working to ensure no compromise in quality and other ethical practices.

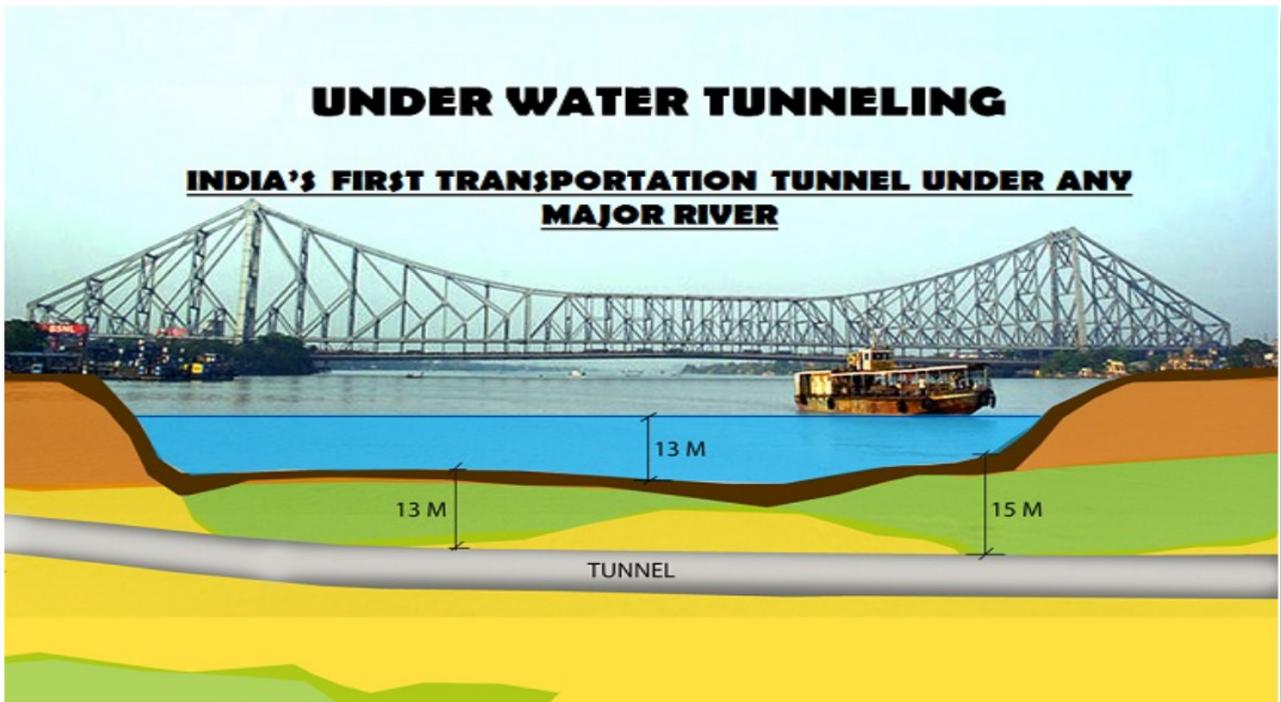
Q. Can you share an experience where you had to navigate an ethical dilemma in financial decision-making?

A: Financial decision making keeping the overall organisational interest is the requirement. Many time we come across the situation where employees to take precautionary approach to save their skin even though organisational interest is hampered. I strongly believe that, on every decision making overall organisational interest must be attended to.

INDUSTRY TITBITS

CMA Industry Insights – November 2023 Issue

Kolkata Metro



Kolkata Metro Railway: A Symphony of Timeless Tracks and Cultural Resonance

- Recent Triumphs: Kolkata has achieved a significant milestone with the construction of its underwater metro, known as the East West Metro Tunnel. This underwater river tunnel is a part of the Kolkata Metro system and is constructed beneath the Hooghly River. It is considered the largest underwater river tunnel in India and is specifically designed for metro rail service. The tunnel has a length of 10.8 km (6.7 mi) and a width of 5.5 meters (18 ft 1 in). A 520-meter (1,706 ft 0 in) section of the tracks goes through the tunnel under the Hooghly River, with the roof of the tunnel being approximately 30 meters (98 ft 5 in) from the ground level. The

project was completed in 2021 by the Kolkata Metro Rail Corporation (KMRC) as the operator and owner of the metro line. The underwater metro is expected to serve the Kolkata Metropolitan Region and provide a significant transportation infrastructure improvement for the city. Further, the recent inauguration of the Joka to Taratala stretch in December 2022 was a triumph—a triumph that resonated with the Purple Line. It was a brushstroke on the canvas of Kolkata's metro narrative, connecting more lives, more dreams, and more stories.

- New Project of Kolkata Metro Railway:** 87.83 kms. new Metro projects have been sanctioned, out of



which 20.67 kms. are being constructed by Metro Rly. and balance 67.16 kms. by RVNL. 2.54 route Kms. have been completed by Metro Rly. between Dum Dum – Noapara and commissioned on 10.07.13 including Noapara Station. Moreover, 16.55 route Kms East-West Metro Corridor has been sanctioned which is being constructed by KMRCL

- **Architectural Elegance and Engineering Marvels:** Kolkata Metro is not just a means of transportation; it's an architectural masterpiece that seamlessly blends functionality with aesthetic brilliance. The stations, each telling a unique story, boast a blend of modern design and traditional motifs. From the imposing structures of Esplanade to the artistic grace of Rabindra Sarobar, every station is a showcase of architectural elegance.
- **Cutting-Edge Technology for Seamless Travel:** Step aboard, and you'll witness the marriage of tradition and technology. The metro coaches, equipped with state-of-the-art amenities, promise a comfortable journey through the heart of the city. The introduction of air-conditioned coaches, Wi-Fi connectivity, and real-time information systems has transformed the travel experience, making every journey not just efficient but delightful.
- **Connectivity that Bridges Communities:** Kolkata Metro Railway isn't just a mode of transport; it's a lifeline that weaves together the diverse fabric of Kolkata. Connecting North to South and East to West, the metro transcends geographical boundaries, fostering unity among the communities it serves. It's a conduit that brings people together, turning the city into a cohesive whole. Till 31st October of this financial year (2023-24), total 11.18 crore passengers have travelled in the North-South (Blue Line), East-West (Green Line) and Joka-Taratata stretch of Purple Line. Out of these, North-South Metro has carried maximum number of passengers i.e., 10.48 crores till October of this year. East-West Metro has carried 69.39 lakh passengers and in the Purple Line 78,131 passengers have travelled in that period. It is to be noted that in 2022-23 Metro had carried 9.94 crore passengers during the same

period (i.e., April, 2022 to October, 2022). This is an increase of 12.47 %.

- **Empowering Commuters with Accessibility:** Beyond its architectural grandeur, Kolkata Metro Railway takes a stride towards inclusivity. Stations are equipped with ramps and elevators, ensuring that the marvel of metro travel is accessible to all. This commitment to accessibility not only reflects progress but also echoes the spirit of a city that cares for every soul.
- **Green Initiatives for a Sustainable Tomorrow:** In the era of environmental consciousness, Kolkata Metro takes a pioneering step towards sustainability. The commitment to environmental sustainability, an integral part of the metro's ethos, is also a cost-effective serenade. Rainwater harvesting, solar power integration, and green initiatives not only paint the stations with ecological hues but also sing a financial duet—a duet where eco-friendliness is not a costly affair but a wise investment in the city's future. Metro Railway has been constantly thriving hard to reduce carbon footprint by generating power from alternative sources. Metro has 2.1895 Mwp capacity of its own Solar Power Plants. These plants have generated Solar Energy of 1777.936 Mwh units during the year 2022-23. Due to this usage of Solar Power, 1457.91 tonnes of Carbon Dioxide emission could be prevented. Till October,'23 of this fiscal, Metro Railway has generated 1413.219 Mwh units of Solar Energy which has helped to save 1158.84 tonnes of Carbon Dioxide emission. As Kolkata Metro has been emphasising on using more Solar Power which in turn has helped to stop emission of 5814.01 tonnes of Carbon Dioxide since 2014-15. This solar power generation system of Metro Railway is being monitored through cloud-based monitoring system. External computers and smart devices analyse plants' performances with the help of built-in meters and data loggers.

(Source: https://mtp.indianrailways.gov.in/view_section.jsp?fontColor=black&backgroundColor=LIGHTSTEELBLUE &lang=0&id=0,1,547,553)

Cost-Effectiveness Strategy of Indian Metro Railways

Entrepreneurship and Startup

The startup environment and funding activity in India

- Tier 2 and Tier 3 cities in India, including Kerala, have become game changers in evolving the startups to flourish in India due to improvements in infrastructure and supportive policies from the government, according to a Kerala Startup Mission (KSUM) release, such that the startup ecosystem will play a crucial role in helping India become the third largest economy in the world.
- India and the United States signed a Memorandum of Understanding (MoU) on November 14 in San Francisco to enhance innovation by addressing regulatory hurdles, increasing cooperation among startups, and sharing best practices on fundraising for startups with entrepreneurs.
- The recent resurgence in mid-sized and large funding rounds came as a boost for Indian startups recently, which came after a prolonged period of funding crunch and muted investments in the Indian startup ecosystem.
- Electric Vehicle startup Ola Electric Mobility Private Limited has changed its name to Ola Electric Mobility Limited and converted them into a Public Entity, which is the first step to listing themselves as an Initial Public Offering (IPO) for the public.
- Digital payments platform PhonePe has achieved a new milestone as the fintech platform crossed more than 5.33 billion transactions via the unified payments interface (UPI) for the first time in October. According to data issued by the National Payments Corporation of India (NPCI), total UPI transactions crossed over 11 billion transactions worth ₹ 17.16 trillion, and PhonePe contributed around 47% of the total transaction volume in October.
- Software as a Service (SaaS) Startup “Genesis Ray” leverages tools like Climate Modeling, Geographic Information Systems (GIS) and Machine Learning to help wind and solar energy sectors find conducive sites for renewable energy projects.
- 25 Indian startups raised around \$201 million in funding between November 6 to November 11 which witnessed a drop of over 12% as compared to the previous week, where the 25 deals comprised four growth stage deals in raising funds around \$131.75 million, and the 19 early stage deals contributed around \$68.9 million.
- Manipal Education and Medical Group chairman Ranjan Pai has invested approximately ₹1,400 crore in Byju’s Aakash to help Byju’s Aakash get out of the debt raised by US-based investor Davidson Kempner in May 2023, which was a struggling situation for Byju’s to pay off its debt for quite a while.
- Zomato and Swiggy, two giants in the food delivery sector, are now grappling with GST demand notices amounting to a staggering ₹ 750 crore, as revealed by a report from the Directorate General of Goods and Services Tax Intelligence (DGGI). The crux of the matter revolves around the nature of food delivery services and their GST implications, raising questions about the taxation dynamics in this rapidly evolving industry. This development could reshape the financial landscape of these industry leaders and influence their valuation performance.

Maternity insurance for women delivery partners introduced by Zomato

- Zomato, the food ordering and delivery platform announced the launch of a comprehensive



maternity insurance plan for its female delivery partners. The insurance plan will cover expenses related to pregnancy, consisting of birth and any maternity complication.

- The maternity insurance cover is powered by ACKO. It extends to the female delivery partners who have completed 1,000 deliveries on the Zomato platform and have been active since the last 60 days on the date of intimation for the maternity insurance plan.
- The comprehensive coverage includes normal and caesarean deliveries for up to two children, along with maternity complications such as miscarriage and abortion. This insurance plan provides upto ₹ 25,000 for normal delivery, upto ₹ 40,000 for cesarean sections, and upto ₹ 40,000 in case of maternity complications such as miscarriage and abortion.

[Ola Electric raises ₹ 3,200 crores from Temasek, SBI to scale up cell manufacturing at gigafactory](#)

- Ola Electric announced the closure of ₹ 3,200 crore of funding as a part of its equity and debt round raised from Temasek-led investors and project debt from State Bank of India, respectively. The funds raised would be utilised towards expansion of Ola's EV business and setting up India's first lithium-ion cell manufacturing facility in Krishnagiri, Tamil Nadu.
- Ola Electric was also selected by the government under its cell PLI scheme, receiving a maximum capacity of 20 GWh. The ACC PLI scheme will be instrumental in making India self-reliant and localizing the most critical aspects of the EV value chain.

Banking Sector

Reserve Bank of India has raised concerns over numerous activities of NBFSc and Banks

- The Reserve Bank of India (RBI) is notified to bring all entities facilitating cross border payments for the import and export of goods and services under its direct regulation, and with this circular, the RBI brings accountability to payment aggregator firms, which were essentially domestic banks since the money was deposited with and settled by them.
- The Reserve Bank of India recently imposed monetary penalties on four cooperative banks and a Non-Banking Financial Company (NBFC) Sappers Finance and Consultancy Private Ltd., for deficiencies in regulatory compliance. The cooperative bank Nasik Merchant's Co-operative Bank Ltd received a penalty of ₹ 48.30 lakh, Mehsana Urban Co-operative Bank Ltd of ₹ 15 lakh, Sangli Sahakari Bank Ltd of ₹ 2 lakh, and Pudukkottai Co-operative Town Bank Ltd got a

penalty of ₹ 25,000 from the RBI.

- The Reserve Bank of India has raised concerns over unsecured loans and, thereby, risk weights on credit cards, unsecured personal loans, and lending to NBFCs by 25 percentage points. The recent measure will strengthen norms for unsecured retail loans, which will help tighten underwriting norms through higher risk weighted assets because lenders will need to allocate higher capital for retail loans, improving the loss absorbing buffers.
- The Reserve Bank of India (RBI) has prevented Bajaj Finance from lending under Insta EMI and eCOM services over violations of certain provisions of the digital lending guidelines, such as the non-issuance of Key Fact Statements (KFS) to borrowers issued for other digital loans sanctioned by Bajaj Finance.
- The Reserve Bank of India imposed a penalty of ₹ 90.92 lakh on Axis Bank for non-compliance

with certain directions, like the KYC (Know Your Customer), code of conduct for opening and operating current accounts, code of conduct for outsourcing financial services, and statutory restrictions regarding loans and advances. The bank failed to maintain customer identification records and also did not obtain declarations from customers at the time of opening current accounts

and thereby the penalty was imposed at large.

- The liquidity deficit of the Indian Banking System reached its highest level in nearly five years on monthly goods and services tax payments. The liquidity deficit, which stands at ₹ 1.74 lakh crore (\$20.90 billion), is the highest since 26th December 2018, when it was ₹ 1.86 lakh crore.

Infrastructure Related News

- India-Bangladesh Jointly Inaugurated Major Development Projects: India has become Bangladesh's biggest development partner during the Modi administration, with a portfolio of about \$10 billion in grants and concessional loans. During this month, India and Bangladesh jointly inaugurated three major power and connectivity projects, including a railway line that would establish the first direct link between the northeastern states of their respective countries. These projects were constructed with Indian assistance. The projects are the Khulna-Mongla port rail connection, the Akhaura-Agartala cross-border rail link, and Maitree super thermal power plant unit II. In a virtual ceremony, Prime Minister Narendra Modi and his Bangladeshi counterpart Sheikh Hasina jointly unveiled all of these projects. Through train connections, the project will improve cross-border connectivity and promote trade and interpersonal relationships. Additionally, this will significantly help both countries satisfy their energy needs and maintain long-term energy security.
- India's national highway construction rate for the first seven months of the current fiscal year was 20.78 km per day: The largest highway development project in India, Bharatmala Pariyojana, intends to build 34,800 km of national highway corridors at a cost of ₹ 5.35 lakh crore. The program's first phase entails building a network of approximately 24,800 km of highways, including motorways, inter-corridor and feeder roads, national corridors with increased efficiency, border and international connectivity, coastal and port connectivity, and 10,000 km of roads under the rest of the National Highway Development Project (NHDP). The Ministry of Road Transport and roadways (MoRTH) has plans in place to build 12,500 km of new roadways in 2023–2024 while maintaining the current rate of highway construction. The nation's national highway construction rate for the first seven months of the current fiscal year was 20.78 km per day. "During this period, the (project) award figure is 2,595 km, compared to 5,007 km in the same period last year. Compared to 4,060 km built up to October in 2022–2023; the ministry has built 4,474 km of national highways up to October in 2023–2024. However, 10,237 km of NH were built by the ministry in the 2019–20 fiscal year, 13,327 km in 2020–21, and 10,457 km in 2021–22.
- Four infra projects of ₹23,500 crs. proposed for approval in NPG: Under the PM Gati Shakti programme, four road and railway infrastructure projects totaling ₹23,500 crore have been proposed for sanction. The 58th Network Planning Group (NPG) conference evaluated these projects. Sumita Dawra, the Special Secretary for Logistics at the Department for Promotion of Industry and Internal Trade (DPIIT), chaired over the meeting.



The goal of the effort was to lower logistical costs by creating an integrated infrastructure. The NPG is the conduit for all logistics and connectivity infrastructure projects, which need investments over ₹ 500 crore. Every two weeks, the interministerial NPG convenes to review infrastructure projects in order to guarantee multimodality, coordination of efforts, and all-encompassing development within and surrounding the project site.



(Source: <https://infra.economicstimes.indiatimes.com/>)

Economic News

Fall of India's FOREX Reserves

- India's Foreign Exchange Reserves dipped by \$462 million to \$590.32 billion for the week ending on November 10 as per the latest data by the RBI showed on 17th November 2023. Previously, forex reserves witnessed a surge of \$4.67 billion to \$590.78 billion for the week ending on November 3.
- According to the Weekly Statistical Supplement released by the RBI, Foreign currency assets (FCAs) increased by \$108 million to \$522 billion. Expressed in dollar terms, the FCAs include the

effect of appreciation or depreciation of non-US units like the euro, pound and yen held in the foreign exchange reserves.

- Gold Reserves was decreased by \$608 million to \$45.52 billion while SDRs were up by \$36 million to \$18.01 billion.

Steps towards Digital Economy

- The 9th edition of Google for India, held on October 19, 2023, is anticipated to be a catalyst for advancements in the global digital economy. This edition is poised to unveil significant progress within the Indian digital ecosystem, particularly in response to technological changes. Notably, Google

has underscored its commitment to enhancing three key areas through artificial intelligence (AI): supporting 1,000 languages, providing support to artists and creators, and addressing challenges related to health and climate change. The event is expected to showcase Google's dedication to fostering positive developments across these critical domains.

- In October 2023, Unified Payments Interface (UPI) transactions achieved a record-high value of ₹17.16 trillion, reflecting a 9 percent increase

from September's ₹ 15.8 trillion. In terms of volume, transactions also reached a new peak at 11.41 billion, demonstrating an 8 percent rise compared to September's 10.56 billion. Data from the National Payments Corporation of India (NPCI) reveals a significant uptick, with transaction volumes being 56 percent higher than October 2022's 7.30 billion and a 42 percent increase in value compared to ₹ 12.12 trillion in the same period last year. In August, UPI transactions recorded 10.58 billion in volume and ₹ 15.76 trillion in value.

ESG related News

Initiatives of Private Players to Ensuring Sustainability

- Southwest Airlines on 17th November, 2023 announced an updated sustainability strategy, Nonstop to Net Zero, which outlines the carrier's path toward its goal of achieving net zero carbon emissions by 2050, and including a series of new goals, ranging from electrification and fuel savings to plastic reduction. and supporting a more sustainable future for air travel.
- In addition to the new goals, Southwest announced initiatives targeting sustainability in its supply chain, including utilizing business sustainability ratings provider EcoVadis to assess the ESG performance of suppliers, and ensuring alignment with the company's Supplier Code of Conduct.
- Amazon announced on 14th November, 2023 that it has invested in 78 new solar and wind energy projects so far this year, including its first brownfield project built on a brownfield, built on a site abandoned due to industrial pollution.
- Mitsubishi Electric Corporation (Tokyo: 6503) announced on 10th November, 2023 that it will issue Green Bonds for the first time to raise funds for the construction of a silicon carbide power semiconductor plant and the enhancement of related production facilities that handle products capable of contributing to decarbonization.
- Investment giant BlackRock announced today that it has raised nearly \$1 billion in client commitments at the initial close of its energy transition and energy security-focused Evergreen Infrastructure fund. It was launched in June 2022. The fund is a core, open-ended infrastructure equity fund that focuses on investing in infrastructure businesses in Europe and North America aligned with the themes of energy transition and energy security, in addition to a focus on thematic sectors including transportation, digital infrastructure and the circular economy.
- Consumers globally are willing to pay more for products with a lower environmental impact (12% premium for sustainable products), as they express increasing concern over climate change and environmental sustainability, yet many still find sustainable consumption too expensive, and focus on different aspects of product sustainability than the companies producing the products, according to a new study released by global management consultancy Bain & Company. For the study, Bain



surveyed more than 23,000 consumers globally about a broad set of sustainability issues, including their concerns and buying behaviours, and also conducted conjoint analysis and ethnographic research, speaking directly to hundreds of consumers.

- Geothermal heat and power company Geothermal Engineering announced on 14th November, 2023 that it is raising £600 million (USD \$745 million), with proceeds used to expand its production of zero carbon lithium, a byproduct of its geothermal projects, for use in the rapidly growing electric vehicle market.

Insurance Sector News

IRDAI sets up panel to increase banks' participation in selling insurance products

- Regulator IRDAI has set up a high-level panel to suggest steps to increase the participation of banks for easy availability of insurance products across the country. Despite the large network of banks through their branches across the length and breadth of the country, the contribution of the lenders as corporate agents was 5.93 per cent of non-life premiums and 17.44 per cent of new business premiums for life insurance in 2022-23.
- IRDAI said banks are engaged in the distribution of insurance products as corporate agents and as master policyholders subject to the applicable regulatory framework. According to IRDAI "one of the ways of reaching the last mile and making available insurance products to the nook and corner of the country is leveraging the vast bank branch network."

Insurance Scheme for MSMEs launched by Government

of Kerala

- The Kerala government has announced insurance schemes dedicated to the MSMEs in the state against business risks and instil confidence in their operations. The Department of Industries and Commerce has formalised agreements with four public sector insurance companies to provide tailored products for the MSMEs of Kerala.
- Under the insurance scheme, a wide range of risks would be covered including natural disasters, fire accidents, theft, accidents and market fluctuations, curbing the risk of devastating financial losses for businesses. All the enterprises with Udyam registration in Kerala and enrolled in the "Bharat Sookshma/ Laghu Udyog scheme" from any of the four insurance companies before April 1, 2023, are eligible under the scheme. Enterprises would be eligible for 50 per cent of the reimbursement of the annual insurance premium, with a ceiling of ₹ 2,500.

MSME related News

- In just three years and four months since its launch, the government's online registration platform for Micro, Small, and Medium Enterprises (MSMEs), known as the Udyam platform, has achieved a significant milestone by surpassing the 3 crore registration mark. The latest data, as of October

27, 2023, reveals that the Udyam platform has successfully registered 3 crore enterprises. Notably, this includes 96.72 lakh non-GST small businesses that have enrolled through the Udyam Assist platform. It's also important to highlight that Udyam is the exclusive platform authorized by the

MSME Ministry for the registration of micro, small, and medium enterprises having turnovers of up to ₹ 250 crore. Among the registered enterprises, the majority, accounting for 2.93 crores, are micro-enterprises. In addition, there are 5.78 lakh small enterprises and 53,935 medium enterprises on the platform. Collectively, these enterprises provide employment to over 14.87 crore individuals, including 3.37 crore women employees.

- Recognizing the significance of Informal Micro Enterprises (IMEs) not covered under the Goods and Services Tax (GST) regime or exempted from the CGST Act, 2017, the Reserve Bank of India (RBI) has directed all financial institutions, including banks and NBFCs, to consider those with the Udyam Assist Certificate (UAC) as micro-enterprises. This classification ensures that such enterprises are eligible for Priority Sector Lending (PSL) norms.
- On October 1, 2023, as part of the Swachhata Hi Seva (SHS) Campaign, the Ministry of Micro, Small, and Medium Enterprises (MSME) is set to actively engage in the “Ek Tareekh Ek Ghanta Ek Saath” initiative. A Joint Secretary-level nodal officer has been appointed by the Ministry to supervise the

comprehensive planning of the entire campaign and its activities scheduled across India on the specified date. The overarching theme for SHS 2023 is “Garbage Free India.”

- The Ministry has strategically outlined more than 200 events to be conducted through its subordinate organizations as part of the “Ek Tareekh, Ek Ghanta, Ek Saath” activity. Participation in this campaign extends to key entities such as the National Small Industries Corporation (NSIC), Khadi and Village Industries (KVI), COIR Board, MGRI-Wardha, NIMSME-Hyderabad, and Micro, Small, and Medium Enterprises-Development Facilitation Offices (MSME-DFOs) via its extensive nationwide network of offices and training centers.
- According to the Women in India’s Startup Ecosystem Report (WISER) 2023, there has been a noteworthy surge in women-led startups, marking a substantial 18% growth in India over the last five years. The thriving startup ecosystem in India is witnessing a notable rise in the presence of female founders who are transforming their entrepreneurial initiatives into prosperous and successful businesses.

News related to Indian Space Research

What next for ISRO after Chandrayaan 3 and Aditya-L1?

- The Indian Space Research Organisation’s (ISRO) historic lunar mission, Chandrayaan-3, has entered an indefinite dormancy stage on the Moon. Following its lunar descent on August 23 and the successful execution of various experiments, including the deployment of a rover, the mission has transitioned into a perpetual sleep mode. While Chandrayaan-3 has accomplished its primary objectives, it is now destined to remain on the lunar surface, foregoing any plans for a return journey to Earth. As the spacecraft enters this dormant phase, it encounters new challenges, particularly arising

from the lunar environment itself. One notable threat arises from the continuous bombardment of micrometeoroids that relentlessly impact the Moon’s surface.

- The Indian Space Research Organization (ISRO) revealed that the cryogenic upper stage of the LVM3 M4 launch vehicle, vital for placing the Chandrayaan-3 spacecraft into its designated orbit on July 14, 2023, has undergone an uncontrolled re-entry into Earth’s atmosphere. This incident took place around 14:42 pm on Wednesday, November 15, 2023, with the debris ultimately landing in the North Pacific Ocean.



- The Aditya L1 solar probe mission by the Indian Space Research Organisation (ISRO) has reached a noteworthy milestone, capturing its inaugural high-energy solar flare in X-ray. The HELIOS instrument, a component of the Aditya L1 mission, was responsible for capturing this image. Operating as the High Energy L1 Orbiting X-ray Spectrometer, HELIOS specializes in the wide X-ray energy range from 10 to 150 keV, facilitating the study of solar flare activities on the Sun. ISRO has achieved a significant breakthrough in solar research with the Aditya-L1 mission on its way to Lagrange Point 1 (L1). HELIOS, one of seven payloads aboard the Aditya-L1 spacecraft, recently accomplished a major feat by successfully recording the impulsive phase of solar flares during its inaugural observation period on October 29, 2023.
- ISRO is gearing up for its inaugural manned mission, with the much-anticipated Gaganyaan project originally slated for a 2022 launch. However, the mission faced delays attributed to the COVID-19 pandemic. The revised schedule now sets the launch for 2024. The estimated cost for this manned mission is approximately ₹ 9,023 crore.
- The launch of the NASA-ISRO Synthetic Aperture Radar (NISAR) is slated for the first quarter of 2024. The ISRO Geosynchronous Satellite Launch Vehicle Mark-II will carry NISAR into space from the Satish Dhawan Space Centre in Sriharikota. This collaborative project between ISRO and NASA involves the construction of a Low Earth Orbit (LEO) observatory, as stated by ISRO.

Market Report: A Recap of the Key Developments for the month of October 2023

Introduction

The Indian stock market has witnessed a roller-coaster ride throughout the month of October 2023. As the global economic landscape remains uncertain due to various factors, the Indian stock market has responded to both domestic and international developments, leaving investors and analysts on the edge of their seats. From government policies and corporate earnings to international events, the market has been influenced by a multitude of factors. In this article, we delve into the key developments that have shaped the Indian capital market in October.

Global Headwinds and their Impact

The month of October commenced under the cloud of global uncertainty. The ongoing global supply chain disruptions, inflationary pressures, and the rising interest rates in the United States have contributed to a cautious atmosphere among investors.

The recent spike in geopolitical tensions in oil-producing regions, posed a significant challenge to India, which

is highly dependent on oil imports. Higher oil prices have the potential to increase production costs and fuel inflation, impacting India's economy and, consequently, its stock market.

Government Policies and Reforms

The Indian government announced several policy measures and reforms aimed at reviving economic growth and market confidence.

One of the most notable developments was the government's push to privatize a range of public sector enterprises. This initiative, which included the privatization of PSU banks and several other state-owned entities, was met with mixed reactions. Supporters argue that it will streamline the public sector, improve efficiency, and generate revenue for the government. Critics, on the other hand, expressed concerns about potential job losses and the erosion of public assets.

The government also expecting a steady state of inflow of foreign investments under National Infrastructure Pipeline (NIP), with a focus on boosting investments in

the infrastructure sector. The NIP is expected to provide a significant stimulus to the economy and create jobs. Investors and analysts reacted positively to these efforts, viewing them as steps in the right direction to stimulate economic growth.

However, the market remained cautious as it awaited further details and the successful implementation of these policies, which would play a crucial role in determining the long-term impact.

MPC meeting of RBI

The Monetary Policy Committee (MPC) of the Reserve Bank of India maintained the repo rate at 6.50% in a unanimous vote on MPC meeting. Nevertheless, Governor Shaktikanta Das indicated that they will maintain a restrictive liquidity stance by employing bond sales to align inflation with its 4% target. RBI Governor Das, while announcing the bi-monthly monetary policy review, stated that the domestic economy demonstrates resilience due to robust demand.

Corporate Earnings Season

The corporate earnings season, which began in October, provided insights into how Indian companies had weathered recent challenges and how well they were positioned to navigate the ongoing economic turbulence.

Several companies across different sectors reported their quarterly results, with mixed outcomes. The IT sector, often considered a bellwether for the Indian economy, continued to perform well due to the global demand for technology and digital solutions. Companies like TCS and Infosys reported robust earnings, reflecting strong growth in their core services.

Conversely, companies in sectors more directly affected by supply chain disruptions and rising costs, such as the automobile and manufacturing industries, faced challenges. Many reported lower-than-expected earnings, with some citing production delays and material shortages as contributing factors.

According to moneycontrol.com, till date, the top performing sector for Q2FY2024 is the real estate sector. Whereas, the media and entertainment remained an underperforming sector. The logistics and trading

sector also underperformed during Q2 FY2024.

Investors monitored these earnings closely, looking for signs of resilience and adaptability among Indian businesses.

Stock Market Performance

The Indian stock market, represented by benchmark indices such as the Nifty 50 and Sensex, showed notable fluctuations throughout October.

At the start of the month, there was a sense of optimism, and the indices exhibited a positive trend. However, as global headwinds and uncertainty persisted, the market saw periods of sharp declines, only to rebound on the back of positive news, such as the government's infrastructure push and strong corporate earnings.

At the start of the month, the NIFTY 50 displayed a positive trend, reflecting a sense of optimism driven by corporate earnings reports and government policy announcements. Strong performances in the automobiles, Power, Banking, Information Technology (IT) sector, infrastructure, and pharmaceuticals contributed to this early positive sentiment.

However, as the month unfolded, global headwinds began to impact the index. Ongoing global supply chain disruptions, rising crude oil prices, and concerns about inflation and interest rates in the United States led to periods of sharp declines in the NIFTY 50.

Foreign institutional investors (FIIs) continued to play a significant role in the market's dynamics. Their actions, driven by global factors and risk sentiment, led to substantial capital flows in and out of the Indian market, causing fluctuations in stock prices.

The real estate sector experienced significant volatility, driven in part by the government's decision to allow foreign direct investment (FDI) in the sector. This policy change aimed to attract more investments and boost the housing market, but it also led to speculation and shifts in real estate stocks.

Overall, the month of October saw the market grapple with various factors, resulting in a mix of gains and losses for investors. The unpredictability of the global economic landscape added to the market's volatility, keeping investors on alert.



Market Summary > NIFTY 50

19,230.60

✓ Following

-422.90 (-2.15%) ↓ past month

3 Nov, 3:32 pm IST • Disclaimer

1D | 5D | 1M | 6M | YTD | 1Y | 5Y | Max



Open	19,241.00	Low	19,210.90	52-wk high	20,222.45
High	19,276.25	Prev close	19,133.25	52-wk low	16,828.35

Fig 1: NIFTY 50 during the month of October 2023

64,363.78

+ Follow

-1,631.85 (-2.47%) ↓ past month

3 Nov, 3:30 pm IST • Disclaimer

1D | 5D | 1M | 6M | YTD | 1Y | 5Y | Max



Open	64,444.90	Low	64,275.39	52-wk high	67,927.23
High	64,535.19	Prev close	64,080.90	52-wk low	57,084.91

Fig 2: Sensex during the month of October 2023

643.75

+56.25 (9.57%) ↑ past month

3 Nov, 3:32 pm IST • Disclaimer

INDEXNSE: NIFTY_REALTY

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1D | 5D | 1M | 6M | YTD | 1Y | 5Y | Max



Open	629.35	High	644.40	52-wk high	644.40
Prev close	627.80	Low	628.30	52-wk low	370.65

Fig 3: NIFTY Real Estate Index during the month of October 2023

Sectors to Watch

Several sectors showed promise and were closely monitored by investors:

1. **Information Technology:** The IT sector remained a bright spot, with strong earnings, robust demand for digital services, and continued growth in the technology space.
2. **Infrastructure and Construction:** With the government's emphasis on infrastructure development, companies in this sector were expected to benefit from increased investment opportunities.
3. **Renewable Energy:** Renewable energy and clean technology companies continued to attract attention as the world shifted toward more sustainable practices.
4. **Pharmaceuticals:** Amid global health concerns, pharmaceutical companies were expected to play a vital role in addressing medical needs and advancing healthcare solutions.

Key Takeaways

The Indian stock market in October 2023 has been marked by a dynamic interplay of factors. Global economic uncertainty, government policies, corporate earnings, and foreign investor behaviour have all contributed to the market's ups and downs.

Investors and analysts are eagerly awaiting further details on the government's privatization efforts, infrastructure initiatives, and their successful implementation. These policies are seen as potential game-changers for India's economic growth.

While some sectors have thrived, others have faced challenges, reflecting the diversity of the Indian economy and its resilience in the face of adversity.

As the year progresses, the Indian stock market will continue to respond to these and other developments, making it essential for investors to stay informed and adaptable in navigating this ever-changing landscape.



NOTES

A series of horizontal dotted lines provided for writing notes.

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