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Navigating Risks, Powering India's Growth



COUNTRY REPORT 2024



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Preface

Corporate India Risk Index is primarily an academic exercise to understand the level of risk that companies are facing and assist in developing a successful risk aversion plan, CIRI is a first-of-its-kind risk measurement tool to gauge the level of a company's risk exposure and preparedness.

This Corporate risk comprises of various aspects of the business–spanning customer, competition, regulatory environment, business operations, technology finances, environmental factors etc. The impact of unprecedented events is significantly higher now.

This Index is a comprehensive framework that draws upon global risk management best practices and comprises of 32 risk elements across 6 broad dimensions. The Risk Index is based on the principles of Lean and Six Sigma that qualify business processes by measuring effectiveness and efficiency.

ICICI Lombard's Corporate India Risk Index provides a crucial tool for assessing and addressing risks, fostering resilience and adaptability in the ever-evolving global landscape. In the current climate of increasing macroeconomic uncertainties, it is essential for corporates to prioritize robust risk management. We believe that a proactive approach to risk management not only fortifies individual businesses but also contributes significantly to India's overall economic growth and stability.



Foreword

The corporate landscape has evolved significantly over the past year, in addition to adapting to global uncertainties and economic pressures; it has also withstood significant technological disruption. While we live in an era that is being defined by complexity and rapid transformation, risk management is now a cornerstone of resilience and growth. The 5th edition of the CIRI report reflects a landscape that's evolving beyond stability, highlighting deeper shifts in 2024. It signifies a maturing approach to risk, one where businesses are no longer just reacting to challenges but actively fortifying themselves. This year's report offers a compelling look at how industries across India are navigating, what is becoming an increasingly intricate risk environment.



Mr. Sanjeev Mantri MD & CEO, ICICI Lombard

This year's report highlights a notable shift, while risk exposure remains unchanged businesses have made meaningful strides in the way that they manage these challenges. A stronger focus on risk management this year highlights a proactive mindset, with resilience firmly at the core. Across industries, organizations are no longer waiting for disruption but proactively embedding risk readiness into their everyday operations, while also creating a foundation that is designed to hold up through economic slowdowns, global uncertainty and inflationary trends.

The most defining theme of 2024 has undoubtedly been the increasing integration of AI across industries. While enhancing productivity, improving decision-making and streamlining operations are all invaluable; the rapid adoption of AI has also introduced a number of new risks and challenges- data privacy, cybersecurity threats, workforce displacements including ethical concerns. While India is taking proactive steps to manage these challenges, implementing stricter data protection regulations and fostering discussions around AI ethics is the need of the hour. The balance that we strike now between innovation and caution; is likely to shape how businesses will handle emerging technologies and disruption in the years to come.

Aside, AI led challenges, 2024's risk landscape comprised global conflicts, rising geopolitical tension, unpredictable oil prices and national elections- despite all of which industries across India have continued to push forward.



More recently, emerging discussions around global tariffs and shifts in trade policy have added yet another layer of complexity to the external risk environment. While these developments may not be reflected in this edition's underlying data, they are very much on the radar for businesses today. As the world rethinks trade relationships and supply chain dependencies, Indian industry must remain alert, agile, and ready to respond with clarity and purpose.

While these events could easily have derailed multiple industries, what we have seen instead is a business environment that is adapting through better tech, faster digital adoption and a stronger focus on sustainability. Slowly but surely, India is moving from simply coping with volatility to building systems that can actually thrive in it.

Furthermore, Corporate India's commitment to sustainability has brought to the fore, risks like supply chain vulnerabilities and complex regulatory landscapes. As industries continue to embrace green technologies, building resilient frameworks to navigate these complexities is going to be critical for success in the longterm.

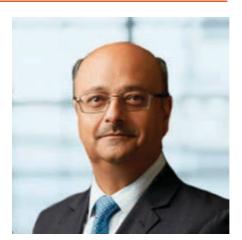
As India moves further along its path toward global leadership, we believe the risks will continue to evolve, but so will the opportunities. The insights from this year's CIRI report reinforce a powerful truth: resilience is no longer reactive; it is strategic, intentional and is built into the fabric of every forward-thinking organization.

We thank you for joining us on this journey, and we look forward to continuing the dialogue in the years ahead, monitoring risk, embracing change and shaping the future of corporate India together.



Foreword

The CIRI Country Report 2024 offers an insightful look into India's dynamic and evolving risk landscape, spotlighting the key sectors that continue to drive the nation's growth despite global challenges. This report covers critical industries, including pharmaceuticals, healthcare, automotive & ancillary, manufacturing, banking & finance, infrastructure, and technology. Each of these sectors showcases India's resilience, innovation, and strategic adaptation as they navigate risks while driving forward national economic growth.



Mr. Aroop Zutshi Global President and Managing Partner, Frost & Sullivan

As we reflect on 2024, we find that the identification of which risks to manage, and managing them effectively, is the true differentiator. Businesses across India face a complex web of

challenges: geopolitical shifts, economic volatility, supply chain disruptions, and fast-paced technological advancements. The Corporate India Risk Index (CIRI), developed in partnership by ICICI Lombard and Frost & Sullivan, underscores how India's businesses are evolving their risk management frameworks to stay ahead in this rapidly changing environment. This year's report reveals a significant shift—while risk exposure has remained relatively constant across many sectors, risk management strategies have been enhanced.

India's ability to adapt and recover is evident in sectors like Pharmaceuticals, Healthcare Delivery, Automotive & Ancillary, and Manufacturing, which stand out as the leaders in risk management. These industries have excelled not only by addressing immediate risks but also by proactively embedding long-term resilience into their operations. For instance, Pharmaceuticals continue to build on their global supply chain robustness and regulatory compliance frameworks, while the Automotive & Ancillary sectors are accelerating innovation, positioning India as a key player in the global electric vehicle and advanced manufacturing space.

The broader risk landscape is being shaped by emerging technological disruptions, regulatory pressures, and a shifting global economy. Industries like Banking and Finance and Healthcare have invested heavily in digital transformation, cybersecurity, and data privacy to protect against evolving threats. At the same time, sectors such as Infrastructure & Realty and Technology have prioritized sustainability and innovation, adapting to new demands for greener solutions, smarter cities, and digital economies. This strategic shift towards digital and sustainable practices is a hallmark of India's evolving corporate resilience.



The transformative impact of Artificial Intelligence (AI) has been another defining feature of 2024, reshaping industries and risk management strategies alike. AI-driven solutions have empowered businesses to predict risks more accurately, streamline operations, and enhance customer experience. AI's role in enhancing data analysis, automating risk mitigation strategies, and optimizing decision-making processes is becoming increasingly critical. As businesses continue to embrace AI, they are not only enhancing their competitiveness but also fortifying their risk management capabilities in an increasingly complex world. The adoption of AI across sectors has the potential to unlock new efficiencies, reduce operational risks, and help organizations stay ahead in a rapidly evolving market landscape.

This year's report emphasizes the growing importance of predictive risk management and the critical need for businesses to stay agile. As sectors continue to embrace digital technologies like AI, automation, and blockchain, understanding and mitigating risk will remain key to unlocking future opportunities. The role of data-driven insights in shaping risk management strategies cannot be overstated, and this report aims to empower stakeholders with the tools and knowledge to navigate the future with confidence.



Executive Summary

CIRI is a first-of-its-kind risk measurement tool to gauge the level of a company's risk exposure and preparedness. A higher score reflects a company's ability to manage risks effectively, allowing them to adopt tailored risk management strategies that align with their specific risk landscape.

The 5th edition of ICICI Lombard's Corporate India Risk Index (CIRI) reveals a slight improvement in risk management practices, despite facing global challenges such as inflation, geopolitical tensions, and global economic slowdowns. However, India's economic activity continued to show resilience, resulting in a Corporate India Risk Index 2024 score of 65, indicating "optimized risk handling" with potential for further refinement. The company has released the study in continued collaboration with Frost and Sullivan, a leading global management consulting firm.

Key Stats

India Risk Index Score increased from 2023 due to improvement in risk management which was combating the increase in the risk exposure compared to 2023.

| Key Factors Comparison | 2024 | 2023 |
|---------------------------------|------|------|
| Corporate India Risk Index | 65 | 64 |
| Corporate India Risk Management | 68 | 67 |
| Corporate India Risk Exposure | 65 | 64 |

The findings of the 2024 edition of the Risk Index show that nine sectors secured 'Superior Risk Index' amongst all 20 sectors, indicating superior risk handling and management. These sectors include Pharmaceuticals, Healthcare Delivery, Automotive & Ancillary, Manufacturing, Metals & Mining, Telecom & Communication, BFSI, Tourism & Hospitality and Transportation & Logistics

In 2024, sectors like Pharmaceuticals, Healthcare Delivery, Automotive & Ancillary, and Manufacturing stood out with the best risk management practices, demonstrating resilience amidst global economic uncertainties and regulatory challenges. These industries faced risks such as supply chain disruptions, rising raw material costs, and geopolitical tensions, but their proactive risk management strategies, including digital transformation and strategic policy reforms, enabled them to mitigate these challenges effectively.



The Chemicals and Metal & Mining sectors saw the maximum improvement in risk management compared to last year. The Chemicals sector benefited from adapting to regulatory changes and focusing on sustainability practices, supported by government initiatives like Atmanirbhar Bharat and the PLI scheme, which helped reduce import dependency.

However, the Telecom and New Age sectors saw the most significant downgrade in their risk profiles in 2024. The Telecom sector faced challenges like rising spectrum costs, regulatory scrutiny, and the pressure of 5G infrastructure upgrades, while the New Age sector struggled with reduced venture capital funding, regulatory uncertainties, and a shift towards profitability over growth.



Introduction

ICICI Lombard Corporate India Risk Index is a one of its kind, unified, credible, standardized corporate Risk Index that spans over the country level, the industry level, and the company level. The index has a comprehensive sector coverage. Aerospace and Defence, Agriculture and Food Processing, Automotive and Ancillary, BFSI, Biotech & Life sciences, Chemicals and Petrochemicals, Education Skill Development, Energy, FMCG, Healthcare Delivery, Infra and Realty, IT/ITES, Manufacturing, Media and



Gaming, Metals and Mining, New Age & Startup, Pharmaceuticals, Telecom and Communication Technology, Tourism and Hospitality, Transportation and Logistics.

The impact is identified across key business risk (internal and external) under the following 'Strategic Risk Areas', The ICICI Lombard Corporate India Risk Index Framework comprises of 32 risk elements across 6 broad dimensions.

Market and Economic Risk

Corporate Risks arising due to market and economy related factors, such as internal or external political uncertainty, global slowdown, taxation-regulatory changes etc. Market and economy related risks are also identified as 'Systematic Risks', we have further classified the risks into below mentioned categories.

- **Inflation**: Inflation is the general increase in prices within the economy. The rising prices for businesses could result in bigger production spending and a fall in profitability. The companies should be attentive, acute, and responsive to changes in inflation to efficiently manage the prices of final products.
- **Taxation**: In a large democracy like India, complexity of multiple taxes (multiple taxes like GST, custom duties, central excise duty, etc.) is a major concern. The changing legislations, increased scrutiny by tax authorities and increasing public attention are together resulting in tax risks for organizations. There is, thus an increasing urgency for firms to manage their tax affairs efficiently to minimize tax risks.



- **Regulatory Risks**: Regulatory risk is the risk of changes in regulations and laws that might affect an industry or businesses. The regulatory changes can pertain to tariffs and trade policies, business laws pertaining to employment, minimum wage laws, financial regulation, Foreign Direct Investment etc.
- Foreign Exchange Risk: The exchange rate plays an important role for firms who export goods and import raw materials. The fluctuations in foreign exchange will have great impacts on the prices of traded goods. For example, if the currency depreciates (devaluation), the exporting firms will benefit. However, the firms importing raw materials will face higher costs on imports. The firms need to hedge their exposure to foreign exchange risks to insulate themselves from the impact from forex changes.
- **Geo-political Tension**: Geopolitical risk means the political and economic risks that are a potential threat to the financial and operational stability of companies.
- Competitive risk: Competitive risk is the risk associated with the fact that there are multiple companies competing in the market, each seeking to obtain the highest position and consumer ratings, to gain maximum benefits for themselves. The companies devise different strategies to garner a higher market share and acquire customers from competitors. Any failure in managing the competitive stand could lead to losses in business, thereby making marketing and competition a major risk in the market.

Technology Risk

Technology risks are also identified as information technology-related risks which may arise due to failure of any installed hardware or software system, spam, viruses or any malicious attack. Also delay/over/under adoption of trending disruptive technologies can lead to technology related risks. We have classified the risks in below mentioned categories.

- Innovation Risk / Obsolete Technology: Innovation is the key to success in all the industries. Risk of redundancy and losing out to competition on account of poor R&D is a major concern.
- **Intellectual Property risk:** Dependence on trade secrets and unpatented proprietary knowhow.
- **Disruptive Technologies:** These will fundamentally alter the financial prospects of the industry.
- **Data Compromise:** Hardware failure refers to malfunctions within the electronic circuits or electromechanical components (disks, tapes) of a computer system; Software failure refers to an operating system crash. Such failures lead to stoppage of entire computer or operating systems creating substantial losses to business.



Operational and Physical Risk

Risk of losses caused due to faulty or failed processes, systems or human resource related inefficiencies are classified as operational and physical risks. We have classified Operational & Physical risks in below mentioned categories.

- Critical Infrastructure Failure / Machine Breakdown: Industries with a heavy dependence on machinery consider any rise in machinery breakdowns a hindrance to their businesses operations. An untimely equipment breakdown can bring businesses to a standstill or be the root cause for fires and explosions. Mostly, human errors and deferred maintenances are the major reasons for such breakdowns. The companies should actively invest in timely maintenance of all machineries.
- Business Continuity / Sustainability: Non adoption of Business Continuity/ Sustainability Plans and Lack of Internal Control tools would result in: Failure of businesses, Brand Equity / Loss of reputation, Financial Loss, Business model Failure, Ineffective engagement/communication with stakeholders, Losses in productivity, Lack of opportunity monitoring.
- **Supply chain risk:** Raw Material unavailability and Heavy Dependence on Global Supply Chains / Supplier concentration risk. Unavailability of raw materials owing to disruption in the supply chain or heavy dependency on one source (company/country) which is unable to supply owing to some geo-political tensions, fires, or any other incidents. Transportation is one of the key activities for companies making it an important risk to mitigate. The loss of goods in transit and spillage is one of the major concerns as it accounts for a sizeable loss of revenue to companies.
- Commodity Price Risk Volatility in prices of raw materials: The fluctuations in raw material prices creating a margin pressure / top-line pressure in the scenario of rising input costs.
- **Portfolio Risk:** Loss of key customers, Customer concentration Key customers accounting for a larger share of revenue, Over-dependence on suppliers, Business Model Risk: Transformative changes in business model, Tail Risks: Ability to overcome or manage extreme worst-case scenarios.
- **Environmental Hazard Risk:** Any environmental hazard having the potential to affect the surrounding environment.
- Workplace Accident: Fire and Explosion Hazards, Containment Incidents, Workplace Injuries
- **Human Resource:** Key person risk: This risk occurs when a business or business unit becomes heavily reliant on a key individual. Talent acquisition and retention The companies require a highly skilled labor force for R&D as well as continuous production. Accessing skilled resources and expertise on an on-going basis is one of the major challenges; moreover, retention of trained staff is imperative. Labor shortages, Union Strikes & Industrial Actions, Employee



health, safety, and security (SHE/Sustainability risk).

- Financial Risk: Financial Reporting Risk: Material misstatement of Financial Statements, whether due to fraud or error. Interest rates and equity prices: Interest rate risk arising out of working capital borrowings at variable rates. Equity price fluctuations affect the Company's income or the value of its holdings of financial instruments. Liquidity Risk (Credit Risk / Receivables).
- **Breaches of law (local/ international):** Voluntary/ involuntary breaches of law can lead to costly lawsuits.

Crime & Security Risk

Cybersecurity risks relate to the loss of confidentiality, integrity, or availability of information, data, or information (or control) systems and reflect the potential adverse impacts to organizational operations. These attacks can cause major financial losses, reputational harm, and a loss of client trust. Regarding cybersecurity, the BFSI industry in India has several difficulties, including difficult-to-secure legacy systems, a shortage of qualified cybersecurity personnel, and the requirement for ongoing system and network monitoring. There is a significant investment in cybersecurity tools like network monitoring, endpoint security, access control, and threat intelligence. Many organizations are also implementing cutting-edge technology like artificial intelligence and machine learning to strengthen their security posture.

We have classified Crime & Security risks in below mentioned categories.

- **Cyber Crimes:** Data Theft, Spam, scams and phishing, Hacking, Malwares and Viruses, Piracy, Fraud, Corruption, Malicious attacks
- **Counterfeiting:** Counterfeiting of goods/services leads to loss of revenues, profits and ultimately affects the brand equity
- Threat to Women Security
- **Terrorism:** Un-lawful use of violence and intimidation, especially against civilians, in the pursuit of political aims.

Natural Hazard Risk

A natural hazard is the threat of an event that will likely have a negative impact. A natural disaster is the negative impact following an actual occurrence of natural hazard if it significantly harms a community. Due to India's geographical structure, it is one of the most disaster-prone countries in the world. Natural hazards like floods, earthquakes, landslides, and cyclones are common risks faced by India. The situation has worsened due to rise in GHG emissions, loss of biodiversity, deforestation, and degradation of environment. Natural disasters hamper the day-to-day



operations of corporates, and it is important for them to understand that such risks cannot go unheeded. Over the years, Indian corporates have learnt to mitigate such risks by diversifying their supply chains, having multiple logistics partners, diversified geographical presence and multiple vendors.

■ **Pandemic and other global epidemic diseases:** Risk to business owing to disruptions caused by global pandemic scale events like the COVID-19 pandemic

Strategic Risk

Strategic risk is the risk of undesirable outcomes of business decisions which may impact a company. Strategic risk is often a major factor in determining a company's worth, particularly observable if the company experiences a sharp decline in a short period of time. Several factors, such as unethical or unlawful activities, poor customer service, product recalls, data breaches, or unfavorable media coverage, can lead to strategic risk. An organization's reputation can be severely harmed by a single negative incident, such as a high- profile data breach or fraud scandal, resulting in a loss of clients, income, and market share.

- **Resource scarcity / Misutilization / Overall Utilization:** Difficulties in acquisition of land, water, fuel, or other resources for operations of business.
- **Public Sentiment:** Current events playing out in the public scene can change the public sentiment.
- **Delay in execution of projects:** Delays in execution of projects can surge in the capex.
- Increased number of recalls and quality audits: Impacts both the brand equity and increased operational expenses.
- **Failed / Hostile Mergers & Acquisitions:** High dependence on inorganic growth.



Bottom-Up Risk Assessment Approach

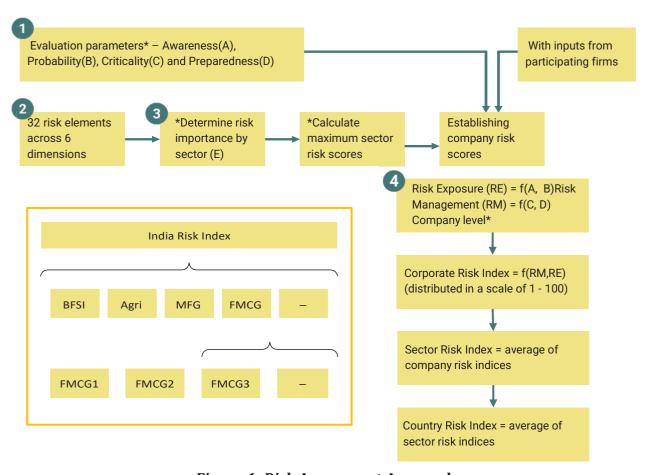


Figure 1: Risk Assessment Approach

- 1. **Evaluation Parameters*:** The index maps the risks faced by any enterprise basis of Awareness, Probability, Criticality and Preparedness against the defined Risk elements. The evaluation Parameters are defined as:
- Awareness Level of awareness of potential risk affecting the firm.
- Probability Likelihood of risk to affect the business goals of the firm adversely.
- Criticality Level of impact of the identified risk on the success of business goals.
- Preparedness Risk handling practices/ mechanisms already in place to handle the risk.
- **2. Determining Risk Importance*:** Importance/Impact of individual risk element is established against individual sector based on the published corporate risk reports, in depth sector



understanding by F&S team and SMEs.

- **3. Calculating Maximum Sector Risk Score**: Weighted Sum of all risk elements based on their importance to the respective sector.
- 4. **Company Level*:** All the Risk Index scores for companies in a sector are averaged to represent the sector; and sectors average to India. Risk Exposure is defined as the function of corporate's Risk Awareness and Probability of risk occurrence. Risk Management is defined as the function of an enterprise risk preparedness and criticality risk impact assessment.



Defining the Risk Scale

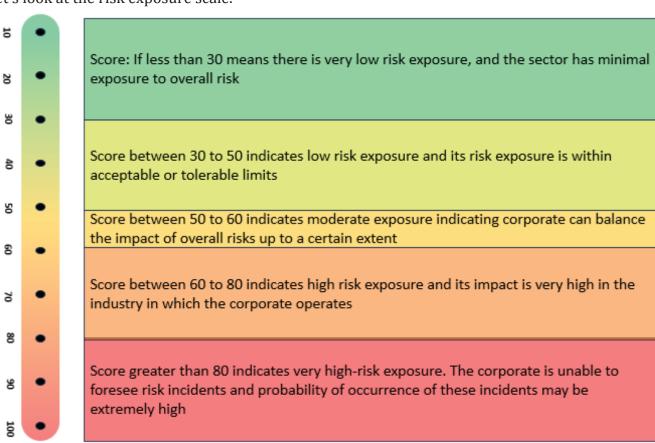
We have selected 20 sectors to understand the current stand of our country today in terms of risk. Risk for various sectors is measured on the risk exposure scale and risk management scale.

A. ICICI Lombard Corporate Risk Exposure - Scale

Risk Exposure: The impact of any internal, external or strategic occurrence on the financial performance of an organization is defined as the corporate risk exposure.

Risk has traditionally been seen as something to be avoided – with the belief that if behavior is risky, it's not something a business should pursue. But the very nature of business is to take risks to attain growth. Risk can be a creator of value and can play a unique role in driving business performance.

Let's look at the risk exposure scale.



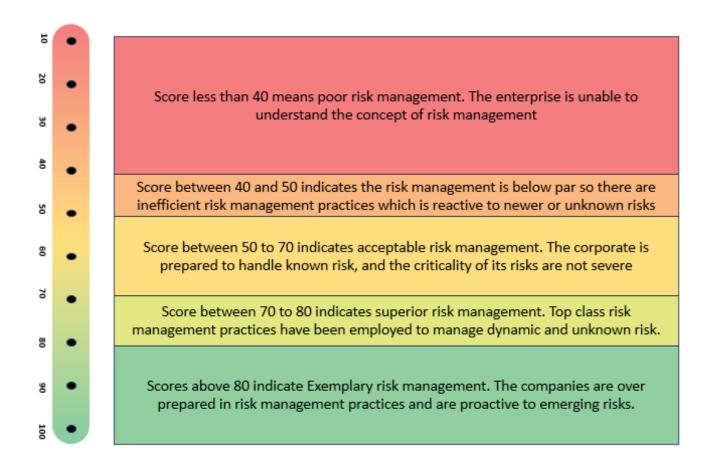


B. ICICI Lombard Corporate Risk Management - Scale

Risk Management: Identification, Evaluation and Prioritization of corporate risks followed by well- coordinated steps to minimize the occurrence of uncertainties in the foreseeable future is defined as the Corporate Risk Management.

The risk management scale works in the opposite to that of the risk exposure scale.

Let's look at the risk management scale.

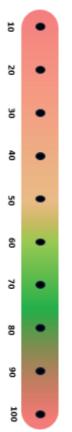




c. ICICI Lombard Corporate Risk Index - Scale

Risk Index: Risk Index is a measurement tool to gauge the level of Risk Exposure against Risk Preparedness. The score intends to give companies/Sector/Country access to an extensive and quantifiable metrics of risk management.

Let's look at the risk Index scale.



Score under 40 indicates Ineffective Risk Index which means the corporate has very high-risk exposure or very poor risk management practices or both.

Score between 40 - 55 is Sub-optimal risk index, indicating not all risks are handled effectively. Risk management practices are likely dated or inefficient.

Score between 55 - 65 is optimal risk index indicating most current risks are being handled effectively. Emerging risks associated with strategic initiatives need more diligence

Score between 65 - 80 is superior risk index indicating very effective and efficient risk management practices well positioned to handle current and future risks across dimensions

Score above 80 is over preparedness indicating high investment in risk mitigation practices likely over investment in one or more risk dimensions difficult to justify ROI



India - Resilient Growth and Superior Risk Management

In 2024, India's diverse sectors demonstrated significant growth and resilience, leveraging technological advancements, strategic reforms, and proactive risk management to navigate an evolving economic landscape. Despite global challenges, industries embraced innovation, digital transformation, and sustainable practices, positioning themselves for long-term success.

In this year, the integration of Artificial Intelligence (AI) across various sectors presented both significant opportunities and risks. While AI-driven innovations enhanced productivity, decision-making, and customer engagement, the adoption also raised concerns around data privacy, cybersecurity, and workforce displacement. India navigated these risks by implementing robust data protection regulations and promoting AI ethics in the development and deployment of technology. Additionally, the government and private sector invested in reskilling programs, ensuring the workforce was equipped to adapt to the evolving digital landscape. AI's strategic implementation across sectors like BFSI, healthcare, and manufacturing helped India enhance operational efficiency while balancing the challenges posed by rapid technological transformation. The Aerospace & Defence sector saw substantial advancements as India attracted global aerospace companies seeking to strengthen supply chains. Local firms expanded their capabilities, particularly in the growing private space sector, driving both revenue growth and global competitiveness. The Agri & Food Processing sector turned to precision farming and AI-driven analytics to enhance productivity, while renewable energy solutions like solar-powered cold storage reduced post-harvest losses, improving sustainability and efficiency.

In the Automotive sector, the shift toward electric vehicles (EVs) gained momentum, supported by government schemes aimed at promoting EV adoption. Major manufacturers expanded their EV portfolios, addressing both sustainability goals and evolving consumer demands. The BFSI sector continued its digital transformation, with AI integration enhancing fraud detection and compliance, further improving security and efficiency.

The Biotech & Lifesciences sector experienced accelerated growth, particularly in genomics and vaccine development, with India solidifying its role as a global leader in pharmaceutical manufacturing. The sector's innovation, supported by public and private investments, enhanced healthcare technology and medical devices. In Chemicals & Petrochemicals, India attracted significant investments to meet rising demand, driven by growing consumption from its expanding middle class, while the Education sector embraced AI and digital learning platforms, expanding access to quality education and equipping the workforce for future demands in emerging technologies.

The Energy sector made substantial progress towards sustainability, with a focus on renewable



energy, including ultra-mega solar parks and offshore wind projects. These initiatives were supported by favorable government policies and decreasing costs of clean energy technologies. The FMCG sector adapted to inflationary pressures by shifting focus towards premium products and ecommerce platforms, which were increasingly driving sales, particularly in rural markets.

In Healthcare, there was significant growth fueled by digital innovations such as telemedicine and AI-driven diagnostics, which helped improve access and efficiency in healthcare delivery. India also continued to strengthen its position as a global hub for medical tourism, offering competitive treatment options. The Real Estate sector benefitted from increased demand in affordable housing and infrastructure development, with commercial real estate seeing steady growth and an emphasis on sustainable building practices.

The IT sector continued to thrive despite global challenges, driven by demand for cloud services, cybersecurity solutions, and AI technologies. Tier 2 and 3 cities emerged as new tech hubs, with government support enhancing regional tech expansion. The Pharmaceutical sector saw an uptick in exports and domestic manufacturing, with reduced dependence on imports and new product launches in global markets bolstering its growth. In Manufacturing, India focused on boosting production through initiatives like the Production-Linked Incentive schemes, especially in electronics and EV manufacturing, which also contributed to job creation and supply chain resilience. The "China + 1" strategy adopted by global firms has played a pivotal role in shaping India's manufacturing sector. While it has increased risk exposure, it has also driven companies to invest in more sophisticated, globally relevant risk management practices, strengthening the sector's resilience and positioning India as a key player in global supply chains.

Media & Entertainment saw continued growth, with OTT platforms gaining popularity, especially in regional content. The Gaming industry also flourished, becoming a key revenue generator as mobile gaming gained dominance. In Steel and Mining, investments in decarbonization and digitalization allowed the sectors to reduce environmental impact and enhance operational efficiency. Startups saw substantial funding despite global slowdowns, with SaaS, fintech, and D2C brands leading the charge in innovation and market expansion.

The Telecom sector expanded 5G coverage and rural internet penetration, narrowing the digital divide and improving connectivity across the country. The Tourism & Hospitality sector rebounded strongly, attracting both domestic and international visitors, with eco-conscious travelers opting for sustainable tourism options and luxury experiences. Finally, the Logistics sector benefited from advancements in automation and multimodal connectivity, reducing costs and improving efficiency, while the government's National Logistics Policy streamlined operations, cutting transit times and enhancing cross-sector integration.

In summary, 2024 saw India's sectors display resilience and adaptability, addressing emerging risks through innovation, digital adoption, and sustainability initiatives. The country's ongoing focus on risk management, technological advancement, and strategic reforms has positioned its economy for continued growth and transformation, paving the way for India to solidify its place as a global economic leader.



India Showcasing an Optimized Risk Handling



Figure 2: Corporate India Risk Index 2024

A score of 65 on the Corporate Risk Index indicates optimal handling of risk by the Indian companies. In 2024, India faced significant market, economy, and operational risks across various sectors, highlighting areas for improvement in the coming years. The year was further complicated by global events such as the ongoing Israel-Palestine conflict, which led to geopolitical instability and fluctuations in global oil prices. The rise of recession fears in major economies like the United States and Europe disrupted supply chains and created demand uncertainties, impacting Indian exports and manufacturing. Investor sentiment in India remains flat in 2024, reflecting the cautious behavior of Angel and VC investors globally. This persistent challenge, which has carried over from 2023, highlights ongoing risks in the market and underscores the uncertainty that continues to affect investment decisions in the country.

Additionally, India's national elections increased risk exposure, with political uncertainty and policy shifts potentially affecting business operations, investor confidence, and sectoral reforms. These global and domestic challenges underscored the need for stronger risk management



frameworks and adaptive strategies across India's industries to navigate future uncertainties effectively.

In response to the heightened risks in 2024, companies across India have increasingly focused on strengthening their risk management frameworks. With the backdrop of global uncertainties, such as geopolitical conflicts and economic slowdowns, alongside domestic challenges like the national elections, businesses have prioritized proactive risk identification, mitigation strategies, and resilience-building measures. This shift reflects a broader trend of embedding risk management into corporate strategy, with an emphasis on agility, digital transformation, and sustainability. As a result, sectoral risk indices have remained within the superior and optimal risk index range, demonstrating that most industries in India have effectively managed the challenges they faced. Through a combination of technological innovations, regulatory compliance, and strategic planning, sectors have been able to maintain stability and navigate both internal and external risks. This disciplined approach to risk management has ensured that, despite various pressures, India's

sectors remained well-positioned for sustainable growth and continued progress in 2024.

Below is a broader categorization of sectors in terms of risk index:

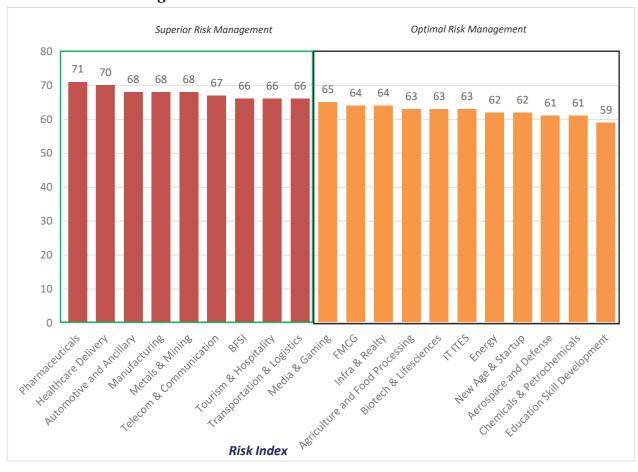


Figure 3: Corporate India Risk Index 2024 Sector Score



Superior Risk Index

Superior risk handling was found in nine industrial sectors: Pharmaceuticals, Healthcare Delivery, Automotive & Ancillary, Manufacturing, Metals & Mining, Telecom & Communication, BFSI, Tourism & Hospitality, and Transportation & Logistics.

Optimal Risk Index

Optimal risk handling was found in 11 industrial sectors: Media & Gaming, FMCG, Infra & Realty, Agriculture & Food processing, Biotech & Lifesciences, IT ITES, Energy, New Age & Startup, Aerospace & Defence, Chemicals & Petrochemicals and Education & Skill Development.







Aerospace & Defence

India's Aerospace and Defence sector in 2024 continued to demonstrate impressive growth, consolidating its position as a key player in both regional and global markets. The sector's expansion is largely driven by India's commitment to modernizing its defence capabilities and increasing self-reliance through strategic initiatives like "Make in India" and the Defence Acquisition Procedure (DAP). With a renewed focus on domestic manufacturing, the government's increased defence spending highlighted the nation's strategic priority of strengthening both military and aerospace capabilities.

In 2024, the sector faced a series of challenges that tested its resilience. Global supply chain disruptions heightened geopolitical tensions, and rapidly evolving technological demands were at the forefront of the industry's risks. The global semiconductor shortage, a lingering issue from the previous year, continued to affect production timelines, especially for advanced defence systems and aerospace technology. To address these risks, companies within the sector focused on diversifying their supply chains, establishing more localized sources for critical components, and forming strategic partnerships with both national and international suppliers. These efforts helped mitigate the adverse effects of global disruptions.

Cybersecurity also emerged as a significant concern, as the sector increasingly relied on advanced digital technologies such as artificial intelligence (AI), blockchain, and the Internet of Things (IoT). These technologies, while enhancing operational efficiency and decision-making, also opened the door to potential cyber threats. To address these risks, aerospace and defence companies ramped up their investments in cybersecurity measures, adopting state-of-the-art security frameworks, conducting regular vulnerability assessments, and implementing comprehensive data protection protocols. These efforts were designed to safeguard sensitive military and aerospace data and ensure that critical systems remained resilient against external threats.

On the technological front, India's push for self-reliance in defence production resulted in several notable milestones in 2024. Key projects such as the Tejas Mark 2 fighter jet and the Advanced Medium Combat Aircraft (AMCA) gained momentum, reinforcing the nation's strategic goal of reducing dependency on foreign imports. Additionally, India made significant strides in enhancing its missile systems and incorporating next-generation technologies into its defence arsenal. The development and induction of advanced systems like the Light Combat Helicopter (LCH) marked a significant step toward strengthening the country's military capabilities.

Despite facing these complex challenges, the Aerospace and Defence sector in India has showcased remarkable resilience. The sector's ability to adapt to evolving global dynamics, while prioritizing domestic innovation and self-reliance, positions it for continued growth and global competitiveness. As the industry continues to embrace emerging technologies and navigate



geopolitical uncertainties, it remains a crucial pillar of India's economic and strategic growth.

| Aerospace & Defence sector | Risk Index | Risk Exposure | Risk Management |
|----------------------------|---------------|------------------|-----------------|
| 2023 | 61 | 62 | 64 |
| 2024 | 61 | 63 | 64 |

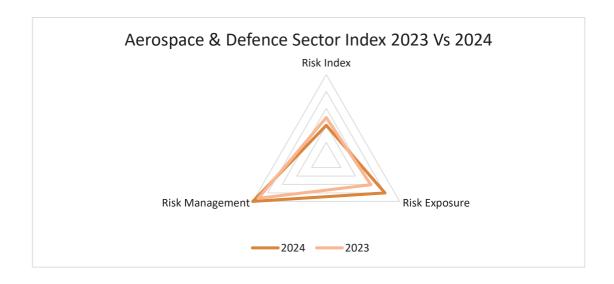


Figure 4: Aerospace & Defence Sector Comparative Analysis 2024 Vs 2023

The Aerospace & Defence sector in India saw a slight shift in its risk profile from 2023 to 2024. The sector's risk index remained the same at 61, indicating stable overall risk levels. Despite global uncertainties and industry-specific challenges, the sector's risk exposure and management strategies balanced out, ensuring that the risk index did not fluctuate significantly.

Risk exposure increased marginally from 62 in 2023 to 63 in 2024. This indicates that the sector faced a slightly higher degree of risk, primarily driven by external factors such as geopolitical tensions, supply chain vulnerabilities (especially due to the ongoing semiconductor shortages), and the increasing complexity of technological integration. The growing dependence on advanced technologies, such as AI and cybersecurity systems, also contributed to this uptick in risk exposure.

The risk management score remained constant at 64. This reflects the sector's continued focus on improving risk mitigation strategies, including investing in advanced cybersecurity frameworks, diversifying supply chains, and ramping up self-reliance in defence production through initiatives like "Make in India." These proactive measures helped stabilize the sector's risk management, ensuring it was well-equipped to handle emerging challenges despite the rise in risk exposure.



Agriculture & Food Processing



Agriculture & Food Processing

In 2024, India's agriculture and food processing sectors continued to be critical drivers of the economy. The agriculture sector remained a backbone for rural employment and food security, while the food processing sector saw significant growth due to rising consumer demand and government initiatives. Despite these positive developments, both sectors faced significant risks that required adaptive strategies and timely interventions.

Climate change was one of the most prominent risks. Unpredictable weather patterns, including delayed monsoons, severe droughts, and flooding, severely impacted crop yields, especially for key staples like rice and wheat. The agriculture sector, highly dependent on monsoon rains, found itself vulnerable to these changing weather patterns. In response, farmers embraced climate-resilient crops and adopted more efficient irrigation systems, such as drip and sprinkler irrigation, to mitigate water scarcity.

Water scarcity, exacerbated by over-reliance on traditional irrigation systems, posed another major challenge. Agriculture is the largest consumer of water in India, and insufficient rainfall in key agricultural regions further strained water resources. To address this, the government and farmers focused on better water management practices, including water conservation techniques and the promotion of rainwater harvesting.

Supply chain disruptions, which were particularly highlighted during the COVID-19 pandemic, continued to pose risks to both sectors in 2024. These disruptions led to delays, increased operational costs, and limited access to markets. In the food processing sector, the unorganized market structure and fragmented supply chains led to inefficiencies and difficulties in quality control. The sector tackled these issues by enhancing infrastructure and improving logistics networks. Government schemes like the Production Linked Incentive Scheme (PLIS) and Pradhan Mantri Kisan Sampada Yojana (PMKSY) played a significant role in modernizing supply chain infrastructure and boosting processing capacities.

Another challenge was the high percentage of unorganized players in the food processing sector, which affected the ability to maintain consistent quality standards. To address this, the government promoted initiatives for the formalization of the sector, streamlining market access and encouraging investments in quality control technologies.

Despite these risks, both sectors displayed resilience through a combination of government policies, technological innovation, and adaptive farming and business practices. With continued investment in infrastructure, technology, and sustainable practices, India's agriculture and food processing sectors are positioning themselves for long-term growth, despite the ongoing challenges. The introduction of drones in India's agriculture sector has started to show promising results, enabling more efficient processes and helping farmers achieve better yields. This innovation is enhancing productivity and contributing to growth in the sector.



| Agriculture & Food Processing sector | Risk Index | Risk Exposure | Risk Management |
|---|---------------|------------------|-----------------|
| 2023 | 63 | 64 | 66 |
| 2024 | 63 | 64 | 66 |

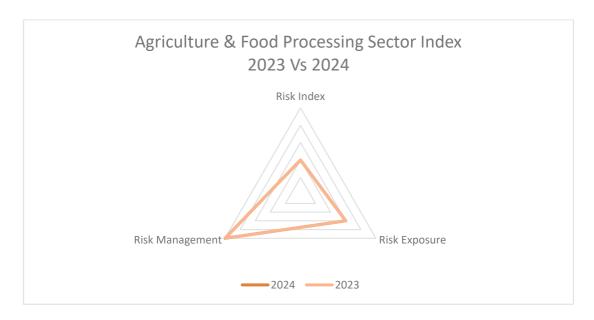


Figure 5: Agriculture & Food Processing Sector Comparative Analysis 2023 Vs 2024

The Agriculture & Food Processing sector's risk profile remained stable from 2023 to 2024, with no significant changes in its Risk Index, Risk Exposure, or Risk Management scores. The overall Risk Index stayed at 63, indicating that the sector's risk handling practices remained consistent, neither improving nor worsening in response to external factors.

The Risk Exposure score, which remained at 64, suggests that the sector continues to face similar challenges as it did in the previous year. These challenges primarily stem from climate change, unpredictable weather patterns, water scarcity, and ongoing supply chain disruptions. While these risks persisted, they did not escalate in 2024, pointing to the sector's ongoing vulnerability to external factors but without substantial deterioration.

The Risk Management score remained at 66, indicating that the sector's efforts to mitigate risks have been relatively effective but have reached a plateau. The consistent score reflects that while risk management strategies like technological advancements, government support schemes, and improvements in irrigation and water management practices are in place, there hasn't been a marked improvement or significant changes in their implementation. The stability of these scores suggests that while the sector is managing its risks well, there are still areas that could be strengthened to further reduce exposure and improve resilience.



Automotive & Ancillary



Automotive & Ancillary

The automotive sector in India has witnessed a dynamic year in 2024, with notable growth despite global economic uncertainties and ongoing supply chain challenges. The industry has continued to evolve, driven by a surge in demand for electric vehicles (EVs), advancements in technology, and government support aimed at boosting domestic manufacturing.

In 2024, India's automotive market reached new heights, with the passenger vehicle segment growth at a fast rate. The EV market, in particular, saw a significant upswing, driven by favorable policies such as the Faster Adoption and Manufacturing of Hybrid and Electric Vehicles (FAME) scheme and incentives for electric two-wheelers. Major automakers have ramped up their EV offerings, and several new models were launched, catering to an increasingly eco-conscious consumer base.

On the manufacturing front, India continues to establish itself as a global manufacturing hub, with the automotive sector benefiting from government initiatives like the Production-Linked Incentive (PLI) scheme, aimed at enhancing production capabilities and attracting investment. The sector also saw investments in expanding facilities for EV production and battery manufacturing, including a growing focus on creating domestic battery manufacturing capacity, which is crucial for supporting the EV ecosystem.

However, the automotive sector in India faced several challenges in 2024. One of the key risks was the continued impact of supply chain disruptions, particularly in the availability of semiconductors, which slowed production in both the passenger vehicle and two-wheeler segments. Additionally, rising raw material costs, particularly for steel and aluminum, posed significant cost pressures on manufacturers, which were partly passed on to consumers in the form of price hikes.

Another risk faced by the industry was the increasing competition from global EV manufacturers, especially as foreign automakers ramped up production and marketing efforts in India. This competition has heightened the pressure on domestic manufacturers to innovate and scale up their EV production capabilities.

Despite these challenges, the Indian automotive sector demonstrated resilience. Companies focused on improving supply chain efficiency, increasing local sourcing, and investing in technology to mitigate semiconductor shortages.

Furthermore, there was a significant push towards the development of more sustainable manufacturing processes and a stronger emphasis on digitalization, with the adoption of AI, machine learning, and IoT technologies for enhanced production and vehicle diagnostics.

Overall, while the automotive sector faced challenges in 2024, its growth trajectory remains strong, especially as India continues to transition towards more sustainable and technologically advanced



transportation solutions. The rise in EV adoption and the sector's increasing alignment with global trends position it for continued growth in the years ahead.

| Automotive and Ancillary Processing sector | Risk Index | Risk Exposure | Risk Management |
|---|---------------|------------------|-----------------|
| 2023 | 68 | 67 | 71 |
| 2024 | 68 | 62 | 65 |



Figure 6: Automotive and Ancillary sector Comparative Analysis 2024 vs 2023

In 2024, India's Automotive and Ancillary Processing sector saw a steady risk index of 68, indicating resilience amidst ongoing challenges. Risk exposure decreased from 67 in 2023 to 62, reflecting improvements in supply chain resilience and better local sourcing of components. However, risk management declined from 71 to 65, primarily due to rising raw material costs and the complexities of transitioning to electric vehicle (EV) production. While the sector managed external risks better, cost pressures and competition in the EV space highlighted the need for continued focus on operational efficiency and innovation.





BFSI

In 2024, India's Banking, Financial Services, and Insurance (BFSI) sector demonstrated resilience and adaptability amidst a challenging global economic environment. The sector has made significant strides in embracing technological advancements, particularly in digital banking, artificial intelligence (AI), and blockchain, to enhance customer experiences and operational efficiency. Digital payment systems continued to expand rapidly, driven by strong government support and the growing demand for contactless transactions, which further entrenched India's push towards a cashless economy. The widespread adoption of AI in fraud detection, customer support, and personalized banking services allowed institutions to improve service delivery while reducing operational costs.

Despite this progress, the BFSI sector had to contend with several risks throughout the year. The global economic instability, triggered by inflationary pressures and geopolitical tensions, posed considerable challenges to financial markets. Volatility in global stock markets and fluctuating interest rates created uncertainty for banks and insurance companies, compelling them to reevaluate their risk exposure and diversify their portfolios to minimize financial losses. Domestic challenges included rising non-performing assets (NPAs), particularly in the public sector banks, which required greater attention towards credit risk management.

Regulatory scrutiny in areas such as data privacy, cybersecurity, and anti-money laundering intensified in 2024, with institutions investing heavily in cybersecurity infrastructure to combat growing threats of cyber-attacks. As the banking sector digitized, it faced an increasing need for robust security measures to protect sensitive customer data and maintain trust. Regulatory developments, such as the introduction of tighter Know Your Customer (KYC) norms and enhanced oversight on digital lending platforms, further impacted the operational landscape of BFSI companies, necessitating significant adjustments to compliance frameworks.

Furthermore, the competition from non-banking financial companies (NBFCs) and fintech startups intensified, offering innovative solutions that catered to niche markets and underserved segments, challenging traditional financial institutions to innovate continuously. As a result, the BFSI sector accelerated its focus on financial inclusion, pushing for greater penetration in rural and semi-urban areas through digital banking services and low-cost insurance products.

The sector also witnessed steady growth in the insurance segment, with increasing awareness around health, life, and general insurance, driven by rising disposable incomes and changing consumer mindsets towards risk mitigation. Despite the challenges, the BFSI sector's proactive risk management strategies, such as strengthening liquidity buffers, diversifying investment portfolios, and enhancing digital infrastructure, enabled it to weather the storm.



| BFSI sector | Risk Index | Risk Exposure | Risk Management |
|-------------|---------------|------------------|-----------------|
| 2023 | 64 | 64 | 67 |
| 2024 | 66 | 63 | 66 |



Figure 7: BFSI sector Comparative Analysis 2024 vs 2023

The BFSI sector in India saw a slight increase in its overall risk index from 64 in 2023 to 66 in 2024. This change reflects a moderate rise in the sector's overall risk exposure and risk management practices.

While the sector's risk exposure decreased slightly from 64 in 2023 to 63 in 2024, this indicates that despite the challenges faced in global and domestic markets, the BFSI sector was able to effectively mitigate some of the risks associated with economic volatility, regulatory changes, and financial market fluctuations. The reduction in risk exposure suggests that institutions within the BFSI sector may have become more resilient, diversifying their portfolios and enhancing risk monitoring to protect against broader financial uncertainties.

On the other hand, risk management efforts remained steady, with a slight decrease in the score from 67 in 2023 to 66 in 2024. This suggests that while the sector continued to implement strong risk mitigation strategies, such as digitalization of services, robust cybersecurity measures, and improved compliance frameworks, the increased global risks—particularly in the form of inflationary pressures, interest rate volatility, and geopolitical tensions—have made it more challenging to sustain optimal levels of risk management.



Biotech & Lifesciences



Biotech & Lifesciences

The Biotech and Life Sciences sector in India has shown resilience and growth in 2024, driven by strong performance in pharmaceuticals, biotechnology, and healthcare services. India remains the world's largest exporter of generic medicines, contributing significantly to global healthcare, particularly in the fields of cancer treatment, antibiotics, and vaccines. The sector also benefited from the increasing adoption of digital health technologies, including telemedicine, AI-driven diagnostics, and personalized medicine. The expansion of the domestic healthcare infrastructure and the government's continued focus on health schemes, such as the Ayushman Bharat initiative, further bolstered the sector's growth prospects.

However, 2024 has also presented several risks for the sector. Supply chain disruptions, especially in sourcing raw materials and active pharmaceutical ingredients (APIs), continued to impact production and distribution timelines. Rising global inflation and geopolitical tensions led to fluctuations in the availability and cost of key components, affecting manufacturing efficiency. Additionally, there was increased regulatory scrutiny surrounding product approvals, particularly for novel therapies and biopharmaceuticals, as authorities ensured adherence to international standards.

In response to these challenges, companies have intensified their focus on innovation and digital transformation. Investments in research and development (R&D) surged, particularly in the fields of biotechnology, vaccine development, and diagnostics. India also witnessed a rise in biotech startups, many of which are focused on developing cutting-edge therapies using gene editing and regenerative medicine technologies. AI and machine learning were increasingly adopted to streamline drug discovery, clinical trials, and patient care management, enabling more efficient processes and improved patient outcomes.

Furthermore, India's pharmaceutical sector played a critical role in the global fight against COVID-19 and its variants, contributing significantly to vaccine production and distribution worldwide. With several new vaccine candidates and treatments under development, India solidified its position as a key player in the global life sciences landscape.

In summary, despite facing challenges such as supply chain disruptions and regulatory pressures, India's Biotech and Life Sciences sector in 2024 displayed remarkable growth and adaptability. The sector's continued focus on innovation, coupled with strategic investments in R&D and digital healthcare solutions, ensures its sustained resilience and global competitiveness.

| Biotech & Lifesciences sector | Risk Index | Risk Exposure | Risk Management |
|----------------------------------|---------------|------------------|-----------------|
| 2023 | 60 | 63 | 64 |
| 2024 | 63 | 59 | 61 |



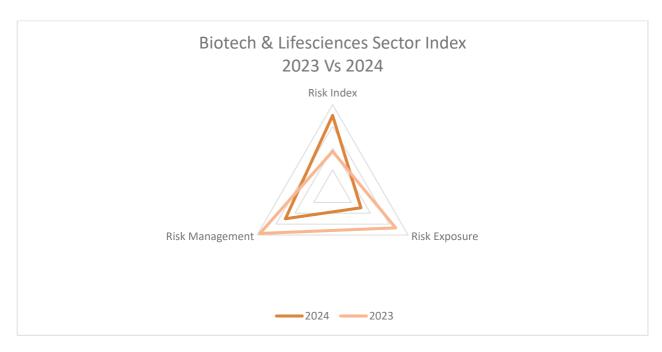


Figure 8: Biotech & Lifesciences Sector Comparative Analysis 2024 vs 2023

The Biotech and Life Sciences sector saw a slight increase in its Risk Index in 2024, moving from 60 in 2023 to 63. This increase reflects the sector's improved risk handling, despite facing several ongoing challenges. While the risk exposure dropped from 63 to 59, showing a decrease in the vulnerability to external risks, risk management practices also saw a slight decline, from 64 to 61.

The drop in risk exposure indicates that the sector has managed to mitigate some of the external pressures, such as supply chain disruptions, regulatory scrutiny, and geopolitical uncertainties, by implementing more robust strategies and securing alternative sources for key inputs. However, despite this reduction in exposure, the slight dip in risk management suggests that the sector may still be adjusting to the evolving regulatory environment and increasing competition in the global biopharma and life sciences space. Additionally, while the sector made strides in managing risks, it may not have fully optimized its strategies to cope with some new emerging risks, particularly related to intellectual property concerns and cybersecurity in the growing digital health landscape.

Overall, the increase in the Risk Index, albeit modest, reflects a sector that is managing its risks with improved awareness but also facing some difficulties in streamlining risk management practices amidst a rapidly changing environment.



Chemicals & Petrochemicals



Chemicals & Petrochemicals

The chemical and petrochemical industry is a crucial driver of India's economic growth, contributing significantly to GDP, employment, and industrial development. As a backbone for multiple sectors—including agriculture, pharmaceuticals, automotive, construction, and consumer goods—the industry plays an essential role in India's manufacturing ecosystem. In 2024, the sector experienced significant growth, driven by rising domestic demand, government incentives, foreign investments, and sustainability initiatives. With increasing urbanization and industrialization, the industry is poised to become a global manufacturing hub.

The government's focus on fostering self-reliance through initiatives like "Atmanirbhar Bharat" has encouraged growth in the sector, with policies aimed at boosting local manufacturing, enhancing infrastructure, and attracting foreign investment. Moreover, the chemical sector has increasingly been integrating sustainable and green technologies, with companies adopting innovations in areas such as bio-based chemicals, waste management, and energy-efficient processes.

To strengthen the industry, the Government of India has introduced several policies and investment-friendly initiatives. One of the most significant is the Petroleum, Chemicals, and Petrochemicals Investment Regions (PCPIRs) Policy 2020-35, which aims to attract \$142 billion in investments by 2035. Four major PCPIRs have been designated in Gujarat, Andhra Pradesh, Odisha, and Tamil Nadu, where large-scale integrated petrochemical hubs are being developed to enhance industrial infrastructure and attract global investors.

Additionally, the Production-Linked Incentive (PLI) Scheme has been expanded to encourage domestic production of specialty chemicals, which are crucial for industries such as pharmaceuticals, textiles, and electronics. The mandatory BIS certification for imported and domestically produced chemicals is another regulatory measure aimed at ensuring quality standards, environmental safety, and fair trade practices.

Despite these positive trends, the sector faced several risks in 2024, including raw material price volatility, supply chain disruptions, and regulatory changes related to environmental standards. In response, companies have placed greater emphasis on risk management strategies, such as diversifying suppliers, investing in technology, and improving operational efficiency. The focus on sustainability and regulatory compliance is pushing businesses to adapt, even as they seek to balance growth and environmental responsibility.

The increasing shift toward digitalization, including the adoption of Industry 4.0 technologies like artificial intelligence, robotics, and automation, has helped enhance operational efficiency. Additionally, there has been a rise in investments for research and development (R&D), particularly in sustainable chemicals, which will likely position the sector for continued long-term growth and innovation. As a result, the chemical sector remains poised to capitalize on both



domestic demand and global opportunities while managing the inherent risks of the industry.

| Chemicals & Petrochemicals sector | Risk Index | Risk Exposure | Risk Management |
|-----------------------------------|---------------|------------------|-----------------|
| 2023 | 56 | 61 | 61 |
| 2024 | 61 | 62 | 63 |



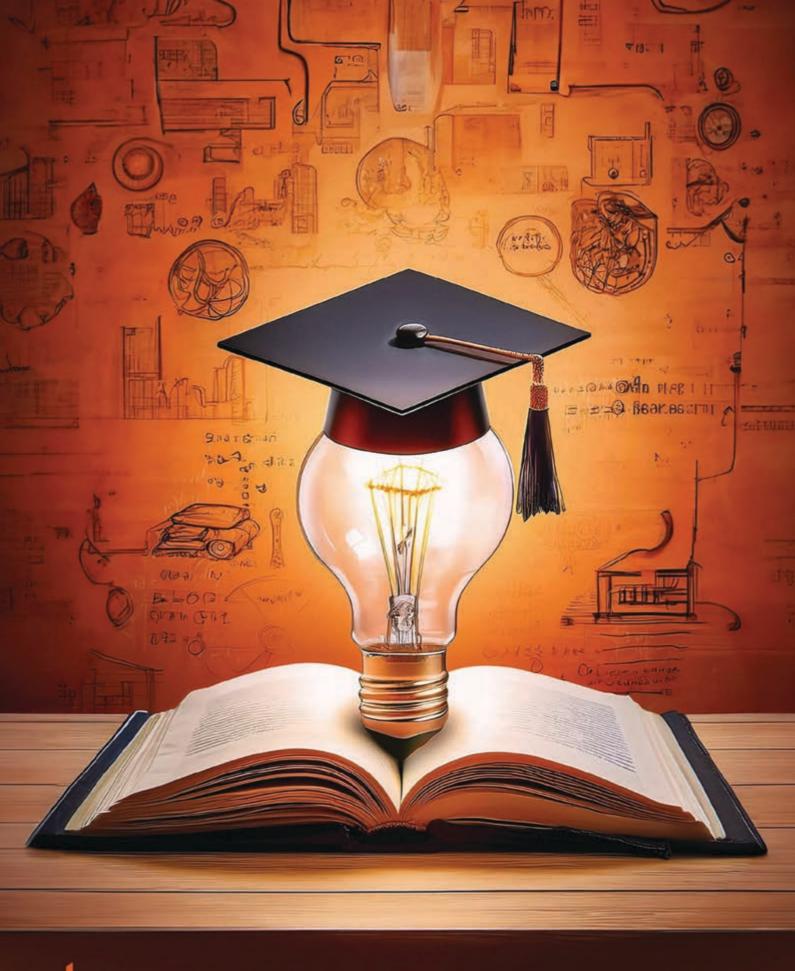
Figure 9: Chemical & Petrochemical sector Comparative Analysis 2024 vs 2023

In 2024, the Chemicals & Petrochemicals sector saw an increase in its overall Risk Index, rising from 56 in 2023 to 61, reflecting higher perceived risks. This was driven by a slight rise in both risk exposure and risk management scores, signaling evolving challenges and proactive strategies within the sector.

Risk exposure increased from 61 in 2023 to 62 in 2024, due to global supply chain disruptions, volatile raw material prices, and increasing regulatory pressures, especially around sustainability and emissions standards. The petrochemical sub-sector remains vulnerable to fluctuations in crude oil and natural gas prices, impacting production costs.

However, risk management improved from 61 in 2023 to 63 in 2024, indicating that companies are actively mitigating risks through strategies like supply chain diversification, investment in digital technologies, and greener practices. Advances in AI, automation, and sustainable chemical R&D have helped companies optimize operations and comply with stricter environmental regulations.

In summary, the rise in the Risk Index highlights the sector's growing challenges, while the improvement in risk management shows its efforts to address them and maintain resilience in a rapidly changing global landscape.



Education & Skill Development



Education & Skill Development

India's education and skill development sector in 2024 is navigating a complex terrain, marked by the rapid influx of digital technologies and the imperative to create an inclusive and future-ready workforce. The foundation laid by the National Education Policy (NEP) 2020 is instrumental in this transformation, pushing for innovative learning paradigms and addressing the diverse needs of the nation's youth. The sector's projected growth, with a significant valuation surge by 2030, highlights its pivotal role in India's economic advancement and global competitiveness.

However, the persistent rise in educational costs remains a significant hurdle. Inflationary pressures, particularly impacting tuition fees and resource materials, are disproportionately affecting marginalized communities, limiting their access to quality education. Addressing this challenge requires a multi-faceted approach, including exploring alternative funding models, strengthening scholarship programs, and promoting the adoption of affordable digital learning solutions. Ensuring equitable access to education is crucial for building a more inclusive and prosperous society.

The integration of technology into education has opened up new learning opportunities, but it has also widened the digital divide. Students from disadvantaged backgrounds often lack access to digital infrastructure and devices, hindering their participation in online learning. Bridging this gap requires a concerted effort to expand broadband connectivity, provide affordable devices, and develop digital literacy programs. The government's initiatives to connect government schools and provide digital resources in regional languages are positive steps towards achieving digital inclusion.

Infrastructure deficiencies, particularly in rural areas, continue to pose a significant challenge. Dilapidated buildings, inadequate sanitation facilities, and a shortage of qualified teachers create barriers to effective learning. Addressing these issues requires substantial investments in infrastructure development, teacher training, and equitable resource distribution. The establishment of Atal Tinkering Labs is a valuable initiative that will foster innovation and creativity among young minds.

As educational institutions increasingly rely on digital platforms, cybersecurity threats have become a major concern. Protecting sensitive student data from cyberattacks requires robust cybersecurity measures, including data encryption, regular security audits, and employee training. The implementation of CCTV monitoring and mental health information systems is also crucial for ensuring student safety and well-being.



| Education & Skill Development sector | Risk Index | Risk Exposure | Risk Management |
|---|---------------|------------------|-----------------|
| 2023 | 61 | 63 | 65 |
| 2024 | 59 | 64 | 65 |



Figure 10: Education & Skill Development sector Comparative Analysis 2024 vs 2023

In 2024, the Education & Skill Development sector saw a slight decline in its overall Risk Index, dropping from 61 in 2023 to 59. This change was driven by a slight increase in risk exposure and stable risk management practices.

Risk exposure rose marginally from 63 in 2023 to 64 in 2024. This uptick reflects ongoing challenges such as the increasing need for digital transformation, fluctuating demand for skill development in emerging industries, and the pressure to maintain quality education amidst resource constraints. Additionally, the sector faced risks related to policy shifts, technological advancements, and the uncertain impact of global economic trends on education budgets.

Despite the rise in risk exposure, risk management remained steady at 65, indicating that the sector has maintained its focus on risk mitigation. Educational institutions and skill development organizations continue to implement effective strategies, such as embracing technology for online learning, upskilling the workforce to match industry demands, and adopting hybrid models to cater to diverse student needs.





Energy

India's energy sector in 2024 stands at a critical juncture, characterized by rapid growth, evolving challenges, and strategic priorities. As one of the fastest-growing economies globally, India continues to play a pivotal role in shaping the global energy landscape. The year 2024 has been marked by substantial progress in renewable energy adoption, surging electricity demand, and efforts to address the complexities of transitioning to sustainable energy systems.

As of March 31, 2024, India's total installed power capacity reached 442 GW, with renewable energy sources, including large hydroelectric plants, accounting for 43% of this total. This reflects India's strong commitment to decarbonization and meeting its Nationally Determined Contributions (NDCs) under the Paris Agreement. Solar power remains a dominant contributor, with an installed capacity of 92.12 GW by October 2024, followed by wind power at 48.16 GW. In addition, the growing focus on green hydrogen is positioning India as a key player in the global clean energy transition, with ongoing investments and projects aimed at developing green hydrogen as a sustainable energy source. This progress is crucial for meeting India's 2030 target of achieving 50% non-fossil fuel capacity, further strengthening the energy sector's shift toward sustainability. However, coal continues to dominate electricity generation, accounting for approximately 76% of the total electricity produced in FY 2023-24.

Electricity demand surged significantly in 2024 due to economic recovery, industrial expansion, and extreme weather conditions exacerbated by climate change. On May 30, 2024, India recorded an all-time peak electricity demand of 250 GW. The government has responded with ambitious initiatives to modernize the grid and improve infrastructure resilience. Programs like the Revamped Distribution Sector Scheme (RDSS) aim to reduce Aggregate Technical and Commercial (AT&C) losses through smart metering and advanced grid technologies. These measures are critical for addressing inefficiencies and ensuring reliable power supply.

Despite these advancements, India's energy sector faces significant risks and challenges. Geopolitical tensions have disrupted global fuel supply chains, necessitating increased domestic coal production. In fact, coal production surpassed one billion metric tons in 2024 to meet rising electricity demand during record summer heat waves. While this reduces reliance on imports, it raises concerns about aligning with global climate goals. Regulatory uncertainties and delays in policy implementation have also hindered private sector participation in renewable projects.

The financial health of distribution companies (DISCOMs) remains a critical concern. Despite ongoing reforms aimed at improving financial discipline—such as ensuring timely payments to power generators—many DISCOMs continue to face liquidity crises due to high AT&C losses and inefficiencies in revenue collection. Addressing these structural issues is vital for ensuring the long-term sustainability of India's power sector.



| Energy sector | Risk Index | Risk Exposure | Risk Management |
|---------------|---------------|------------------|-----------------|
| 2023 | 63 | 67 | 69 |
| 2024 | 62 | 69 | 71 |

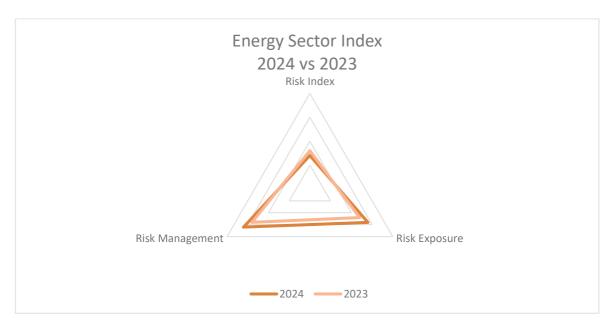


Figure 11: Energy sector Comparative Analysis 2024 vs 2023

In 2024, the Energy sector saw a slight decline in its overall Risk Index, dropping from 63 in 2023 to 62. This was due to an increase in risk exposure and a slight improvement in risk management practices.

Risk exposure rose from 67 in 2023 to 69 in 2024, reflecting growing concerns around geopolitical tensions, fluctuating energy prices, and the transition towards renewable energy sources. The sector faced heightened risks related to supply chain disruptions, regulatory changes, and environmental challenges, such as the need to balance traditional energy sources with sustainability goals. Additionally, the ongoing global energy crisis and its impact on India's energy security further contributed to the rise in exposure.

On the other hand, risk management improved slightly from 69 in 2023 to 71 in 2024. This indicates that the sector has made advancements in managing these risks, particularly through strategic investments in technology, infrastructure, and diversification into renewable energy. Efforts to strengthen cybersecurity, reduce operational inefficiencies, and implement advanced risk assessment tools have also contributed to improved risk management in the sector.





FMCG

In 2024, the FMCG sector in India also benefited from the strong push for digitalization, particularly through e-commerce platforms and mobile apps. The growth of online shopping, especially in rural areas, further expanded market reach, allowing companies to tap into new customer segments. E-commerce accounted for a significant portion of FMCG sales, particularly in categories such as personal care, home care, and packaged foods. As more consumers embraced online shopping, companies enhanced their digital capabilities, ensuring smoother delivery systems and offering personalized experiences.

Conversely, urban consumption faced headwinds due to persistent food inflation, leading to a tightening of household budgets. This inflationary pressure compelled consumers to curtail spending on non-essential items, adversely affecting the earnings of consumer goods firms and raising concerns about long-term economic stability. The middle-class segment, in particular, experienced a squeeze, with approximately 75% of average retail spending directed towards food and grocery, leaving limited room for discretionary purchases. Icite Iturn Onews 18 It This shift in spending patterns underscored the sensitivity of urban consumption to price fluctuations and its broader implications for the FMCG sector.

On the regulatory front, the Indian government continued to introduce policies aimed at boosting consumption and employment, particularly through initiatives like the National Retail Policy, which seeks to promote the growth of retail in both urban and rural areas. This policy aims to formalize the retail sector, reduce taxation burdens, and encourage the adoption of technology. However, challenges such as rising inflation, high unemployment rates, and supply chain disruptions from global uncertainties posed ongoing risks. These issues required companies to adopt a more flexible approach to pricing, production, and distribution to maintain profit margins.

Supply chain disruptions, aggravated by global events and logistical challenges, further compounded the risks faced by the FMCG sector. Many companies were forced to rethink their supply chain strategies, with some moving towards more localized production to reduce dependency on international suppliers. To address these disruptions, brands invested in digital supply chain solutions, including blockchain for better traceability and AI-driven tools for demand forecasting. Additionally, companies diversified sourcing strategies to mitigate risks from single-supplier dependence.

The heightened consumer demand for health and wellness products also influenced product innovation within the FMCG sector. As consumers shifted towards healthier lifestyles, there was a noticeable increase in demand for plant-based foods, natural ingredients, and low-sugar or low-fat options. FMCG companies responded by reformulating products, introducing new lines, and investing in research and development to meet these needs. The pandemic, which heightened consumers' health awareness, accelerated this trend, with brands developing immunity-boosting



products, functional beverages, and organic skincare items. This focus on wellness, along with growing health-consciousness, has led to increased competition among FMCG companies as they vie for a share of the rapidly expanding health and wellness market.

| FMCG sector | Risk Index | Risk Exposure | Risk Management |
|-------------|---------------|------------------|-----------------|
| 2023 | 66 | 71 | 75 |
| 2024 | 64 | 72 | 74 |

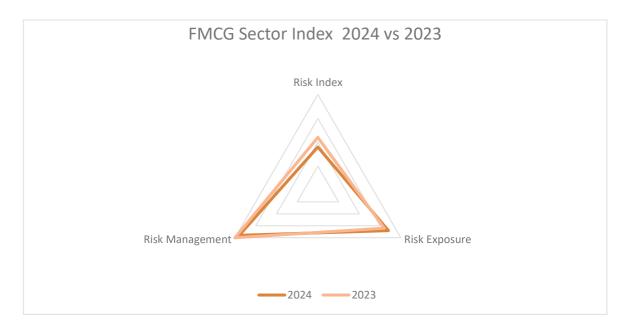


Figure 12: FMCG sector Comparative Analysis 2024 vs 2023

The FMCG sector's risk scores for 2024 reflect a slight improvement in overall risk management, though the sector continues to face significant challenges. The Risk Index decreased from 66 in 2023 to 64 in 2024, showing a minor improvement in managing risks.

Risk Exposure slightly increased from 71 in 2023 to 72 in 2024, indicating continued exposure to risks like inflation, supply chain issues, and shifting consumer behavior. However, the sector's ability to adapt, including digital adoption and tapping into rural markets, helped mitigate some of these risks.

Risk Management dropped marginally from 75 in 2023 to 74 in 2024. While FMCG companies continue to implement strong risk management strategies, challenges such as inflation and global uncertainties slightly reduced their effectiveness. Ongoing changes in consumer preferences and demand for sustainable products require constant adaptation.



Healthcare Delivery



Healthcare Delivery

In 2024, India's healthcare sector experienced a period of notable growth and transformation, supported by both government initiatives and private sector innovations. With the rising focus on universal health coverage, the sector has witnessed significant investments aimed at improving healthcare access, infrastructure, and quality, especially in rural and underserved regions. The government's Ayushman Bharat scheme, which aims to provide health insurance to economically vulnerable populations, continues to expand its reach, making healthcare more affordable for millions. Additionally, the National Health Mission has been instrumental in improving health outcomes in rural areas by strengthening healthcare facilities, training healthcare workers, and increasing outreach. The private healthcare sector in India has also grown rapidly, with the expansion of private hospitals, diagnostic centers, and specialty clinics offering advanced treatments. Digital health solutions have become integral to this transformation. In India's healthcare sector, the adoption of robotics has significantly improved precision and efficiency in treatments, while reducing risks associated with human error, leading to better patient outcomes and lower operational risks. The adoption of telemedicine, driven by the need for accessible healthcare during the pandemic, has remained a key component in overcoming geographic barriers. In 2024, the use of teleconsultations, mobile health applications, and digital platforms for managing patient records and monitoring chronic conditions has increased, improving patient care and convenience. Innovations in artificial intelligence (AI) and machine learning (ML) have further improved diagnostic accuracy, predictive healthcare, and personalized medicine, helping both private and public sector providers streamline operations and enhance healthcare delivery.

However, the sector still faces significant challenges. The increasing prevalence of non-communicable diseases (NCDs) such as diabetes, hypertension, and cancer, alongside an aging population, has strained both public health systems and healthcare costs. India's healthcare expenditure, though growing, remains lower than the global average, and the burden of disease continues to outpace the expansion of healthcare infrastructure. The shortage of healthcare professionals, especially in rural areas, also remains a persistent issue, leading to overcrowded hospitals and long waiting times.

Supply chain disruptions, particularly for pharmaceuticals and medical equipment, have been exacerbated by global events such as the pandemic and geopolitical tensions. These disruptions affect the availability of essential medicines, vaccines, and medical devices, raising concerns about India's preparedness to handle future health crises. Moreover, rising healthcare costs, driven by both the increasing demand for high-end medical treatments and the rising price of raw materials, have made healthcare unaffordable for many people, especially in the lower-income groups.

Despite these challenges, India's healthcare sector has shown resilience and the ability to adapt. The rise of digital health platforms and AI-powered diagnostic tools offers promising solutions to



these challenges. Moreover, healthcare startups and tech companies continue to innovate, focusing on areas like telemedicine, health insurance, and wellness services.

| Healthcare Delivery sector | Risk Index | Risk Exposure | Risk Management |
|----------------------------|---------------|------------------|-----------------|
| 2023 | 66 | 66 | 69 |
| 2024 | 70 | 66 | 70 |

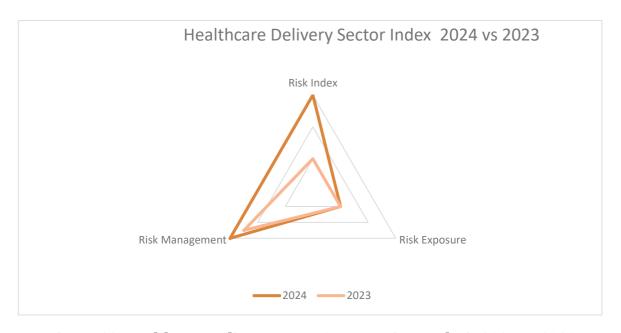


Figure 13: Healthcare Delivery sector Comparative Analysis 2024 vs 2023

In 2024, the Healthcare Delivery sector in India saw a slight increase in its risk index, rising from 66 to 70. This reflects a higher perceived risk due to ongoing challenges like capacity constraints, workforce shortages, and rising healthcare costs. Despite the consistent risk exposure score of 66, the sector is still grappling with these issues, especially in rural areas. The risk management score improved slightly from 69 to 70, indicating progress in addressing these challenges. Efforts such as digital health adoption, telemedicine, and government initiatives like Ayushman Bharat have enhanced resilience and efficiency in managing risks. While there have been improvements in managing risks, the sector remains vulnerable due to persistent infrastructure and human resource constraints.

In conclusion, the healthcare sector in India in 2024 has been marked by a balance of innovation and challenges. While advancements in technology, digital health, and biotechnology are contributing to the sector's growth, there are still critical areas that need attention, including infrastructure, affordability, and the rising burden of diseases. The continued focus on government initiatives, coupled with investments from the private sector, will be crucial to sustaining and expanding India's healthcare capabilities in the coming years.



Infrastructure & Realty



Infrastructure & Realty

In 2024, India's infrastructure and real estate sectors experienced significant transformations, driven by strategic investments, policy initiatives, and technological advancements. These developments have played a pivotal role in shaping the nation's economic landscape and enhancing its global standing.

India's infrastructure and real estate sectors in 2024 witnessed unprecedented growth, fueled by a combination of government-led investments, foreign direct investment (FDI), technological advancements, and a rising demand for modern urban developments. The National Infrastructure Pipeline (NIP) continued to be a major driving force, with projects worth over ₹110 lakh crore (\$1.4 trillion) under implementation, spanning roads, highways, railways, ports, and energy infrastructure. The Delhi-Mumbai Expressway, Chennai-Bengaluru Industrial Corridor, and Eastern and Western Dedicated Freight Corridors saw significant progress, reducing logistics costs and improving supply chain efficiencies.

The PM Gati Shakti National Master Plan played a crucial role in integrating multiple infrastructure projects to optimize development efforts and remove bottlenecks in transportation and logistics. India's highway construction reached an all-time high, with daily road-building rates exceeding 40 km per day, enabling smoother connectivity between urban and rural areas. The expansion of metro rail networks across cities like Mumbai, Bengaluru, Hyderabad, and Ahmedabad reduced traffic congestion and enhanced public transport efficiency, while the Parvatmala scheme introduced several new ropeway projects in hilly regions to boost tourism.

In 2024, India's infrastructure and realty sectors experienced substantial growth, driven by robust domestic demand, progressive policy reforms, and significant investment inflows. The infrastructure sector saw transformative changes, driven by a clear policy direction from the government, which prioritized large-scale connectivity projects and sustainable initiatives. Government initiatives, such as increased budget allocations, the National Infrastructure Pipeline (NIP), and public-private partnerships, collectively fostered investor confidence and accelerated sector growth.

Investor sentiment remained robust, driven by substantial inflows into infrastructure development, notably in renewable energy, urban transit, and digital connectivity. India's ambitious green transition goals, reflected in aggressive adoption of renewable energy targets and sustainable infrastructure practices, positively influenced investment decisions. The increasing adoption of ESG (Environmental, Social, and Governance) criteria by global investors further incentivized Indian developers to prioritize sustainability in their operations, resulting in reduced carbon footprints and higher standards of green infrastructure.

The realty sector in 2024 experienced significant shifts driven by urbanization, changing



demographic patterns, and rising disposable incomes, particularly in metropolitan and tier-II cities. Residential housing demand surged, especially in affordable and premium segments, underpinned by stable interest rates and enhanced consumer confidence. The commercial real estate market also showed resilience, driven by increased leasing activities from sectors like IT, pharmaceuticals, and financial services, further boosting the attractiveness of Indian commercial spaces.

| Infra & Realty sector | Risk Index | Risk Exposure | Risk Management |
|-----------------------|---------------|------------------|-----------------|
| 2023 | 60 | 67 | 68 |
| 2024 | 64 | 67 | 69 |



Figure 14: Infra & Realty sector Comparative Analysis 2024 vs 2023

In 2024, the Infra & Realty sector experienced an increase in its risk index, rising from 60 in 2023 to 64. This reflects a growing concern regarding the sector's vulnerability to external factors like regulatory changes, financing challenges, and land acquisition issues. The risk exposure remained stable at 67, highlighting persistent challenges related to project delays, supply chain disruptions, and fluctuating demand.

On the positive side, the risk management score improved marginally from 68 to 69, indicating that companies within the sector have made strides in managing and mitigating risks. This improvement can be attributed to enhanced project management, increased adoption of technology, and more robust financial strategies. However, despite these advancements, the sector still faces structural challenges that keep its overall risk index relatively high. These include the complexity of regulatory frameworks and the ongoing impact of macroeconomic factors like interest rates and inflation.



IT / ITES



IT/ITES

In 2024, India's IT/ITES sector continued to thrive, with its services playing a pivotal role in the digital transformation journeys of companies worldwide. The sector benefited from strong demand for services like cloud computing, cybersecurity, artificial intelligence (AI), and automation, which are integral to business operations across industries. The IT sector remains one of India's largest export sectors, contributing significantly to GDP and employment. The increasing adoption of AI, machine learning, and data analytics has led to the creation of innovative solutions, positioning Indian IT companies as leaders in the global IT services market.

The sector also capitalized on the rise of new technologies such as 5G, Internet of Things (IoT), and blockchain, catering to industries such as finance, healthcare, and retail. This technological adaptability has furthered India's competitive advantage in the IT and outsourcing industries. Indian firms are increasingly engaging in higher-value work like business process outsourcing (BPO) with advanced capabilities and offering customized solutions in niche areas.

Despite strong growth prospects, the sector faced several risks in 2024. One of the key risks was the increasing wage inflation in India, which has led to higher operational costs for IT companies. Additionally, global competition from lower-cost outsourcing destinations and the rise of nearshoring trends posed a challenge to India's dominance in the outsourcing space. Regulatory pressures also intensified in key markets, particularly concerning data privacy and security, as governments around the world enacted stricter compliance requirements. For example, the EU's General Data Protection Regulation (GDPR) and other global data protection laws forced companies to rethink their data-handling processes.

Furthermore, the pace of technological change presented both an opportunity and a challenge. IT companies in India had to continuously innovate and upskill their workforce to meet the evolving demands of clients. Cybersecurity threats have also surged, with an increasing number of cyberattacks globally. This required IT firms to invest significantly in strengthening their cybersecurity capabilities to safeguard their clients' data and infrastructure.

To mitigate these risks, Indian IT companies have increasingly focused on diversification of their offerings, geographic expansion, and investments in technology like AI and automation to improve efficiency. Additionally, they have ramped up efforts in upskilling their workforce and adopting hybrid work models to retain talent in a competitive environment. By focusing on innovation, enhancing cybersecurity measures, and expanding their service portfolio, India's IT/ITES sector is well-positioned to maintain its leadership in the global IT services market while navigating these evolving challenges.



| IT/ITES sector | Risk Index | Risk Exposure | Risk Management |
|----------------|---------------|------------------|-----------------|
| 2023 | 61 | 62 | 64 |
| 2024 | 63 | 63 | 65 |



Figure 15: IT/ITES sector Comparative Analysis 2024 vs 2023

In 2024, the IT/ITES sector saw an increase in its Risk Index, moving from 61 in 2023 to 63, signaling a slight rise in the overall risk levels. This indicates that while the sector continues to experience growth, it is becoming more exposed to various external challenges, particularly related to global competition and regulatory pressures.

The sector's Risk Exposure increased from 62 to 63, meaning that the level of exposure to external risks, such as geopolitical instability, wage inflation, and the volatility of global markets, did not increase significantly. However, the sector's Risk Management improved slightly, from 64 in 2023 to 65 in 2024, showing that companies have made efforts to enhance their strategies in mitigating these risks, such as investing in advanced technologies, upskilling their workforce, and enhancing cybersecurity practices.

This shift in the Risk Index reflects an evolving environment in the IT/ITES industry, where firms are increasingly adopting digital technologies, but they are also facing more competition and tighter regulations. The sector's ability to manage these risks and adapt to a rapidly changing landscape is evident in its slight improvement in risk management strategies, although challenges such as rising operational costs and the need for continuous innovation remain significant.





Manufacturing

In 2024, India's manufacturing sector demonstrated impressive growth and resilience, remaining a key pillar of the nation's economic strength. The sector benefited greatly from government initiatives like "Make in India," which continues to boost local production, and the "Atmanirbhar Bharat" (self-reliant India) campaign, aimed at reducing dependency on imports. These efforts have provided a solid foundation for the growth of industries like automotive, chemicals, textiles, electronics, and industrial machinery. Technology adoption, including automation, AI, and digital tools, helped manufacturers streamline operations, improve productivity, and enhance product quality. As a result, the manufacturing sector not only showed promise in meeting domestic demand but also enhanced its competitiveness in global markets.

In addition to these advancements, the government's focus on infrastructure development, including the National Infrastructure Pipeline (NIP), further supported the sector. Infrastructure improvements, such as better roads, railways, and ports, allowed manufacturers to operate more efficiently and at scale, contributing to India's overall economic development. The "China + 1" strategy adopted by global firms has encouraged Indian manufacturing to adapt to global standards of risk management. This shift has prompted Indian companies to enhance their operational resilience and adopt more sophisticated risk mitigation practices, aligning with international benchmarks to remain competitive in the global supply chain.

However, the manufacturing sector faced several significant challenges in 2024. Global uncertainties, including geopolitical tensions, trade disruptions, and economic slowdowns in key international markets, created demand volatility. Rising raw material costs, driven in part by supply chain disruptions and inflationary pressures, put further strain on margins. Additionally, the fluctuating energy prices and challenges related to the energy transition complicated production costs for energy-intensive industries. These factors, coupled with climate-related risks such as extreme weather events, posed potential threats to both production and logistics infrastructure, disrupting the smooth functioning of manufacturing operations.

In response to these challenges, companies in the manufacturing sector have adopted a variety of strategies to build resilience. For example, businesses have diversified their supply chains to reduce dependence on a single source or region, improving their ability to withstand global disruptions. Investments in sustainability have also been a major focus, with manufacturers increasingly turning to eco-friendly processes, energy-efficient technologies, and greener supply chains to mitigate both environmental risks and rising costs associated with climate change. These steps align with growing consumer demand for sustainability and corporate social responsibility.

Automation and AI integration played a key role in improving operational efficiency and reducing costs. With the advent of smart factories, manufacturers were able to implement predictive maintenance, optimize production schedules, and reduce downtime. Lean manufacturing practices,



too, have been increasingly employed to cut waste, improve workflow efficiency, and minimize resource consumption.

While the sector faces challenges, it also has significant opportunities for growth. The Indian manufacturing industry is poised to benefit from domestic market demand, rising exports, and the ongoing trend toward reshoring as companies seek to reduce reliance on distant international suppliers. In the long term, India's large, young workforce, cost-competitive advantages, and evolving infrastructure provide a favorable environment for sustained growth in the sector.

| Manufacturing sector | Risk Index | Risk Exposure | Risk Management |
|----------------------|---------------|------------------|-----------------|
| 2023 | 67 | 72 | 75 |
| 2024 | 68 | 72 | 76 |

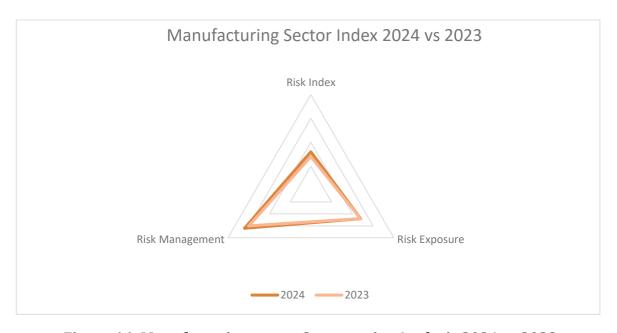


Figure 16: Manufacturing sector Comparative Analysis 2024 vs 2023

The Manufacturing sector's risk scores from 2023 to 2024 show a slight increase in the overall risk environment. The Risk Index moved from 67 to 68, indicating a small rise in the sector's overall risk due to ongoing global economic volatility, supply chain disruptions, and rising raw material costs. These factors have made the sector more vulnerable to external shocks.

Risk Exposure remained steady at 72, suggesting that while the sector faces consistent challenges like supply chain issues and inflation, the exposure has not worsened significantly. This stability reflects the sector's adaptability to these ongoing risks.

The Risk Management score improved slightly from 75 to 76, indicating that manufacturers are becoming more effective in managing risks. Investments in technology, automation, and sustainability have likely played a role in improving operational efficiency and reducing vulnerabilities.



Media & Gaming



Media & Gaming

The Media and Gaming sector in India has continued to evolve rapidly in 2024, driven by the increasing adoption of digital content, mobile gaming, and OTT platforms. As one of the fastest-growing industries, it benefits from India's expanding internet infrastructure, with internet penetration reaching unprecedented levels across both urban and rural areas. This has led to a surge in digital content consumption, with OTT platforms and mobile games gaining substantial traction among users. The growth of mobile gaming, in particular, has been fueled by the increasing smartphone penetration and the accessibility of affordable data plans, making gaming a ubiquitous form of entertainment for millions of Indians.

The sector's performance in 2024 has been further boosted by the rise of e-sports, which has transitioned from a niche activity to a mainstream phenomenon in India. The increasing popularity of competitive gaming and live-streaming events has not only attracted millions of viewers but also prompted a rise in gaming-related investments, sponsorships, and partnerships. Additionally, there is an increasing focus on developing indigenous content, with both gaming companies and media creators emphasizing content that appeals to India's diverse audience base, including regional language content and culturally relevant themes.

However, the sector faces its fair share of challenges. One of the major risks is the intense competition from both global and local players. International OTT platforms, gaming giants, and tech companies have poured substantial investments into the Indian market, raising the competitive stakes. At the same time, local players face challenges around scalability and sustaining profitability, particularly when it comes to content creation costs

Moreover, regulatory uncertainty remains a pressing concern, especially regarding content censorship, gambling laws, and data privacy issues. The rapid growth of the sector has drawn the attention of regulatory bodies, and as governments look to impose stricter guidelines to ensure responsible content distribution and online safety, companies must adapt quickly to comply with the evolving regulations.

Cybersecurity remains another area of concern, particularly with the rise of piracy and intellectual property theft. The digital nature of the sector makes it particularly vulnerable to content piracy, which undermines revenue generation and reduces consumer confidence.

To mitigate these risks, companies are increasingly adopting new technologies like artificial intelligence (AI) and augmented reality (AR) to enhance user experience and provide immersive content. AI is being used for personalized content recommendations, while AR and virtual reality (VR) are being incorporated into gaming and entertainment offerings, creating engaging experiences for users. Additionally, gaming companies are experimenting with subscription models, in-game purchases, and e-sports tournaments to diversify revenue streams and reduce



dependency on a single source of income.

Despite these challenges, the Indian media and gaming sector shows no signs of slowing down. With the expansion of digital infrastructure, a growing gaming culture, and continued demand for diverse and innovative content, the industry is set for sustained growth.

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| Media & Gaming sector | Risk Index | Risk Exposure | Risk Management |
|-----------------------|---------------|------------------|-----------------|
| 2023 | 66 | 60 | 63 |
| 2024 | 65 | 62 | 64 |

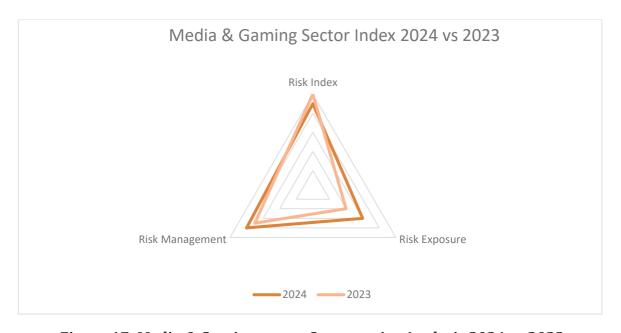


Figure 17: Media & Gaming sector Comparative Analysis 2024 vs 2023

The risk scores for the Media & Gaming sector show a stable yet evolving landscape in 2024. The slight decrease in the Risk Index from 66 to 65 suggests a small improvement in overall risk perception, though challenges remain.

Risk Exposure rose from 60 to 62, indicating increased exposure due to factors like growing competition, regulatory changes, and content piracy. Meanwhile, Risk Management improved slightly from 63 to 64, reflecting stronger efforts in areas like cybersecurity, intellectual property protection, and compliance.

Overall, the sector's risk exposure has grown, but its risk management strategies are becoming more effective, addressing key issues like security, competition, and regulation.





Metal & Mining

In 2024, India's Metal & Mining sector demonstrated resilience, backed by both domestic and global factors. The country's steel production saw a boost, largely driven by the ongoing infrastructure boom and the government's push towards large-scale projects like Smart Cities, transportation networks, and housing development. The government's efforts to reduce import dependence on critical minerals, such as lithium and cobalt, played a significant role in supporting the growth of the sector. With domestic consumption of steel, aluminum, and other metals rising, the sector showed promise for continued expansion. The adoption of the National Mineral Policy, aimed at improving the transparency and efficiency of mining operations, also had a positive impact.

Additionally, global recovery after the pandemic, coupled with increased demand for metals driven by construction and electric vehicle (EV) production, added momentum to the sector's performance. As India increasingly positions itself as a key player in the global supply chain, the demand for metals and minerals necessary for renewable energy technologies and electric vehicles has grown substantially. India's efforts to become self-reliant in mineral extraction and processing, as well as its push towards reducing reliance on imports, especially for critical minerals, have bolstered this trend.

However, challenges persist in the sector, primarily due to price volatility in global commodity markets. Fluctuations in the prices of metals like steel and copper can have a substantial impact on margins for metal producers, making it a sensitive industry to global economic shifts. Furthermore, geopolitical tensions and the ongoing supply chain disruptions have highlighted the vulnerability of the sector to external shocks. For instance, the war in Ukraine and trade restrictions have resulted in delays in raw material supply and price increases, adding pressure on manufacturers.

To mitigate these risks, many companies in the sector are embracing new technologies such as automation, AI, and IoT to improve operational efficiency and reduce costs. The shift towards green steel production, where companies aim to reduce carbon emissions and incorporate sustainable practices, is a key trend that is also gaining momentum in response to increasing environmental concerns. As countries and industries push for lower-carbon footprints, Indian manufacturers are exploring renewable energy sources and energy-efficient technologies to remain competitive globally.

Moreover, regulatory pressures to reduce environmental impact have spurred investment in research and development for cleaner technologies, as well as better resource management. With the increasing focus on sustainability, mining companies are adopting circular economy principles, seeking to reduce waste and recycle materials, which is essential for the long-term health of the industry. Looking ahead, the Metal & Mining sector in India is poised to face both challenges and opportunities. While the sector is likely to continue benefiting from infrastructure development, domestic demand, and global recovery, external risks such as commodity price fluctuations and



geopolitical instability remain key factors. Companies that can successfully balance growth with sustainable practices, adapt to new technologies, and navigate regulatory frameworks will be well-positioned for success in the coming years. The pace at which the industry can transition to cleaner technologies and manage its environmental impact will play a crucial role in shaping its long-term trajectory.

| Metal & Mining sector | Risk Index | Risk Exposure | Risk Management |
|-----------------------|---------------|------------------|-----------------|
| 2023 | 63 | 59 | 61 |
| 2024 | 68 | 59 | 63 |

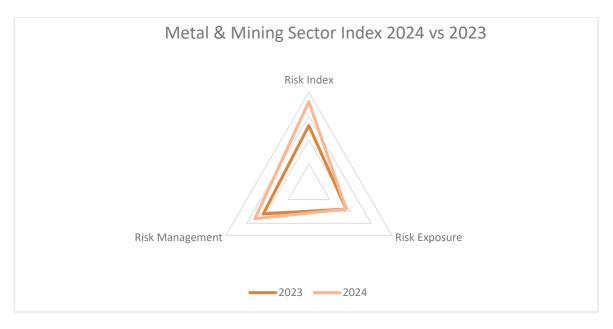


Figure 18: Metal & Mining Sector Comparative Analysis 2024 vs 2023

The analysis of the Metal & Mining sector's risk scores shows that while risk exposure remained unchanged from 2023 to 2024, there was an increase in both the overall risk index and risk management scores. The rise in the risk index from 63 to 68 indicates that the sector has become more vulnerable to various risks. This could be attributed to factors such as global economic uncertainties, supply chain disruptions, and fluctuating commodity prices, which often impact the metal and mining industries.

However, despite the higher risk index, the risk management score saw a slight improvement, from 61 in 2023 to 63 in 2024. This suggests that companies in the sector have implemented more robust strategies to mitigate risks, possibly through better operational efficiency, technological integration, and sustainability initiatives. The stable risk exposure score indicates that the overall level of inherent risks has not changed, but the sector has become more adept at managing these challenges, improving its resilience against external shocks.





New Age & Startup

In 2024, India's new-age sectors, encompassing technology-driven industries such as e-commerce, digital services, artificial intelligence (AI), fintech, and more, continued to evolve and shape the economic landscape. The growth of these sectors has been fueled by several factors, including the accelerated adoption of digital platforms, rising consumer demand for online services, and robust government support for innovation and technological advancements. India's commitment to becoming a global tech leader, coupled with its growing middle class, has played a pivotal role in bolstering the progress of these industries.

The fintech sector, in particular, saw remarkable strides in 2024. With India's digital payment systems already among the world's largest, fintech firms continued to innovate in areas such as mobile payments, peer-to-peer lending, and blockchain applications. Initiatives like the Digital India program and regulatory frameworks like the Reserve Bank of India's (RBI) focus on creating a digital infrastructure for financial services provided a strong foundation for fintech growth. The increasing penetration of smartphones and internet connectivity further accelerated the sector's expansion, especially in rural areas where mobile financial services have become integral to the lives of millions.

The e-commerce sector also witnessed tremendous growth in 2024. As more consumers shifted to online shopping, both large players and small businesses embraced digital platforms to reach wider audiences. With improved logistics, enhanced digital payment systems, and increasing trust in online transactions, e-commerce companies continued to expand their product offerings and customer base. Initiatives to promote digital literacy and online payments in rural areas further drove growth in the sector.

However, the new-age sectors faced various risks in 2024. One of the primary concerns was the regulatory environment. As these sectors continue to expand rapidly, there is a growing need for updated policies and regulations to ensure the safe and efficient functioning of these industries. Data privacy, cybersecurity, and the risk of regulatory uncertainty were among the most pressing concerns, particularly for fintech and e-commerce companies that rely heavily on consumer data and digital transactions.

In 2024, the new age and startup sector in India has faced a decline in investor-backed fund flows, reflecting a global slowdown in venture capital and angel investments. This reduction in funding presents a challenge for many startups, hindering their growth and innovation potential.

Supply chain disruptions also posed a challenge, particularly for sectors that depend on global supply chains for critical components, such as the technology and e-commerce sectors. The ongoing global chip shortage and rising material costs created bottlenecks, which slowed production and delayed delivery timelines.



Despite these challenges, India's new-age sectors continued to show resilience and innovation in 2024. Technological advancements, coupled with supportive government policies and increasing consumer adoption, have set these industries on a path of long-term growth. With the focus on sustainability, digital transformation, and smart technologies, these sectors are expected to remain key contributors to India's economic development in the coming years. However, addressing regulatory, supply chain, and cybersecurity risks will be crucial for maintaining momentum in the evolving landscape.

| New Age & Startup sector | Risk Index | Risk Exposure | Risk Management |
|--------------------------|---------------|------------------|-----------------|
| 2023 | 66 | 63 | 66 |
| 2024 | 62 | 67 | 69 |



Figure 19: New Age & Startup Sector Comparative Analysis 2024 vs 2023

The New Age & Startup sector saw a decrease in its Risk Index from 66 in 2023 to 62 in 2024, suggesting an improvement in risk management. However, the sector's Risk Exposure increased from 63 to 67, indicating greater exposure to external challenges like macroeconomic fluctuations, regulatory changes, and competitive pressures.

Despite higher exposure, the sector improved its Risk Management from 66 to 69. This improvement reflects startups' growing ability to adopt technology and data-driven solutions to mitigate risks, such as supply chain disruptions and regulatory compliance issues. Additionally, better financial management and diversifying funding sources have helped startups navigate funding and market uncertainties.

In summary, while the New Age & Startup sector faces more external risks in 2024, it has become more effective at managing them, focusing on innovation, sustainability, and digitalization for continued growth and stability.



Pharmaceuticals



Pharmaceutical

The pharmaceutical sector in India in 2024 continued its prominent role in global healthcare, exhibiting both resilience and adaptability amidst a rapidly evolving landscape. India is known as the "pharmacy of the world," supplying over 50% of global demand for vaccines and nearly 40% of generic drugs. The sector remains an essential part of the Indian economy, contributing significantly to employment and exports. However, 2024 has been a year of mixed performance, shaped by both growth drivers and key challenges that the sector has had to navigate.

One of the major drivers for the pharmaceutical sector's growth in 2024 is the increasing demand for generics and active pharmaceutical ingredients (APIs), especially in emerging markets. India's pharmaceutical exports continue to grow, fueled by the rising global healthcare needs. The sector is benefitting from ongoing research and development (R&D) advancements, particularly in areas like biologics, biosimilars, and mRNA technology. Companies are increasingly focusing on strengthening their product portfolios with innovative treatments in therapeutic areas such as oncology, cardiovascular diseases, and diabetes. The government's continued emphasis on improving healthcare access and initiatives such as the Pradhan Mantri Bhartiya Janaushadhi Pariyojana have also supported the growth of affordable medicine.

Despite these advancements, the pharmaceutical industry in India is facing a series of risks in 2024. One of the primary concerns remains regulatory challenges, both domestically and internationally. Tightening regulations and the scrutiny of product safety standards, especially in global markets like the United States and the European Union, have posed compliance challenges for Indian drug manufacturers. Moreover, increasing global competition from low-cost producers in other parts of Asia and the threat of price controls in key markets continue to put pressure on margins.

Supply chain disruptions remain a significant risk, particularly in the wake of the pandemic's aftermath and geopolitical tensions that have affected raw material supplies. India's heavy reliance on China for raw materials for generic drugs has highlighted vulnerabilities in the sector, and efforts are underway to reduce dependence by sourcing domestically or diversifying supply chains. Furthermore, fluctuating input costs and rising freight expenses have strained the profitability of many companies in the sector.

The growing importance of technology and digital transformation in the pharma sector cannot be understated. Artificial intelligence (AI), machine learning, and blockchain technologies are becoming key enablers for improving R&D productivity, optimizing manufacturing processes, and ensuring transparency in the supply chain. However, the sector still faces challenges in fully leveraging these technologies, primarily due to high costs and the lack of skilled talent.

In conclusion, India's pharmaceutical sector remains a significant contributor to both the national economy and global healthcare. While the sector is benefiting from a solid growth trajectory and



advancements in R&D, it faces considerable risks such as regulatory hurdles, supply chain vulnerabilities, and increased global competition. To ensure sustainable growth, Indian pharmaceutical companies must continue to innovate, streamline operations, and adopt advanced technologies while addressing the challenges of regulatory compliance and cost control.

| Pharmaceutical sector | Risk Index | Risk Exposure | Risk Management |
|-----------------------|---------------|------------------|-----------------|
| 2023 | 71 | 65 | 70 |
| 2024 | 71 | 64 | 69 |



Figure 20: Pharmaceutical Sector Comparative Analysis 2024 vs 2023

In 2024, India's pharmaceutical sector maintained a steady risk profile, with the Risk Index unchanged at 71 compared to 2023. This suggests the sector has managed to navigate risks effectively, despite facing ongoing challenges. The slight decrease in Risk Exposure from 65 to 64 indicates a minor reduction in external risks, such as supply chain disruptions and regulatory pressures, though challenges like securing raw materials, particularly APIs, remain significant.

The Risk Management score slightly declined from 70 to 69, reflecting that while improvements in supply chain resilience and compliance measures are being made, external pressures like global market fluctuations and regulatory scrutiny continue to limit the effectiveness of risk management strategies.





Telecom & Communication

In 2024, India's telecom sector has faced a mix of challenges and opportunities, as it continues to evolve with technological advancements and growing consumer demand. India remains one of the largest and fastest-growing telecom markets in the world, driven by rapid mobile internet adoption, digital services, and the expansion of 5G networks. The government's push towards digitization, supported by schemes like Digital India, has helped accelerate the sector's growth, making it a crucial part of India's economic development.

One of the most significant developments in the telecom sector in 2024 is the ongoing rollout of 5G services. The spectrum auctions in late 2023 and early 2024 allowed telecom operators to gain the necessary bandwidth to enhance their network capabilities. As a result, 5G has started reaching urban centers and is expected to expand further, improving connectivity and enabling a range of new services, including autonomous vehicles, IoT (Internet of Things) applications, and enhanced broadband for businesses and individuals alike.

However, the sector faces several challenges in 2024. One of the primary risks continues to be intense competition among telecom operators, which has led to lower tariffs and pressure on profitability. While consolidation in the sector has reduced the number of players, the fierce competition has forced operators to continue investing heavily in infrastructure and digital services to differentiate themselves. The entry of new technologies, like 5G, has further intensified this competition, as companies look to secure a larger share of the growing digital ecosystem.

Financial pressures have also been a challenge for the telecom industry, particularly after the Supreme Court's ruling in 2020 on adjusted gross revenue (AGR), which resulted in significant liabilities for telecom operators. While the government has taken steps to ease this burden, including offering moratoriums and relief packages, the long-term financial sustainability of telecom companies is still a concern, especially for smaller players in the market.

Another major challenge facing the telecom industry in 2024 is cybersecurity. As more services are digitized, the risk of cyberattacks and data breaches has increased. Telecom operators are under pressure to protect their networks and consumer data while complying with new regulatory frameworks aimed at ensuring data privacy and security. With cyber threats becoming more sophisticated, telecom companies must invest heavily in securing their networks to maintain customer trust and avoid regulatory penalties.

Additionally, there are concerns regarding infrastructure development in rural areas. While urban centers are quickly adopting 5G technology, rural areas still face challenges related to poor network coverage and high operational costs. The government and private sector are making concerted efforts to address this issue, but it remains a key hurdle in ensuring that the benefits of digital connectivity reach all corners of the country.



In conclusion, while India's telecom sector in 2024 is progressing with major technological advancements like 5G, it still faces several risks, including regulatory pressures, financial sustainability concerns, intense competition, cybersecurity threats, and infrastructure challenges in rural regions. Despite these risks, the sector remains a key driver of India's digital transformation, and efforts to strengthen its foundations will continue to be crucial for future growth.

| Telecom & Communication sector | Risk Index | Risk Exposure | Risk Management |
|--------------------------------|---------------|------------------|-----------------|
| 2023 | 72 | 64 | 69 |
| 2024 | 67 | 71 | 76 |

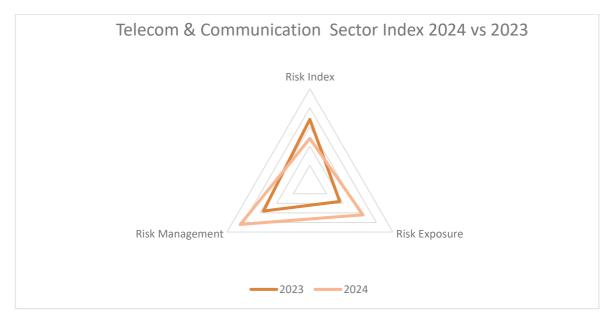


Figure 21: Telecom & Communication Sector Comparative Analysis 2024 vs 2023

In 2024, the telecom sector in India saw a decrease in its Risk Index from 72 in 2023 to 67, signaling reduced overall risk. This improvement is largely due to advancements in 5G infrastructure and the ongoing digital transformation. However, the sector still faces high risk exposure, with the score rising from 64 to 71. The increase in exposure reflects ongoing financial challenges, regulatory hurdles, and the significant costs associated with 5G rollout and digital services expansion.

On a positive note, the sector's Risk Management score improved from 69 to 76. Telecom operators have focused on bolstering cybersecurity measures and compliance with regulations, as well as diversifying their service offerings to reduce reliance on traditional revenue streams. Despite these efforts, the telecom industry remains vulnerable to competition, debt pressures, and the complexities of maintaining sustainable growth.



Tourism & Hospitality



Tourism & Hospitality

In 2024, India's tourism and hospitality sector has made a remarkable recovery, bouncing back from the challenges posed by the pandemic in previous years. The sector has seen significant growth, driven by domestic and international tourism, government initiatives, and a resurgence in business travel. The country's rich cultural heritage, vibrant cities, and natural beauty continue to attract millions of visitors annually, further boosting the sector's contribution to the economy.

Key to the sector's revival has been the government's focus on policies that promote tourism. The introduction of the "Dekho Apna Desh" initiative has encouraged domestic tourism, allowing Indian citizens to explore the diverse regions within the country. Additionally, India's hospitality industry has seen an influx of investments, with new hotels and resorts opening across popular destinations. The expansion of infrastructure, such as airports, transportation, and digital booking platforms, has also played a significant role in supporting this growth.

The tourism and hospitality sector has faced several challenges in 2024. One of the key risks includes geopolitical tensions, which could affect international travel, especially in regions that rely on inbound tourists from countries facing political instability. While tourism has seen a bounce back, there are concerns regarding the fluctuating prices of travel services, accommodation, and fuel, which could deter travelers, especially those from price-sensitive markets.

Another significant risk is the ongoing labor shortage faced by the hospitality industry. Despite growth in tourist arrivals, the sector continues to struggle with staffing challenges, particularly in skilled positions like chefs, service staff, and housekeeping. The COVID-19 pandemic disrupted labor markets, and the sector has yet to fully recover in terms of human resource availability. The increased demand for skilled workers in both domestic and international markets has further exacerbated this issue.

Sustainability has also emerged as a critical focus area. The tourism sector has increasingly been urged to adopt eco-friendly practices, such as waste reduction, energy efficiency, and responsible tourism, to preserve natural resources. In response, many hospitality businesses have committed to green initiatives, like reducing plastic usage, promoting sustainable tourism packages, and supporting eco-friendly accommodations.

Despite these challenges, the tourism and hospitality sector remains resilient, adapting quickly to changes in consumer preferences. The growing trend toward experiential travel, wellness tourism, and adventure tourism continues to shape demand, with travelers seeking unique and immersive experiences. As the sector looks forward to continued recovery, it will need to manage the risks associated with rising operational costs, labor shortages, and sustainability concerns while ensuring a seamless and enjoyable experience for both domestic and international tourists.



| Tourism & Hospitality sector | Risk Index | Risk Exposure | Risk Management |
|---------------------------------|---------------|------------------|-----------------|
| 2023 | 65 | 63 | 66 |
| 2024 | 66 | 68 | 72 |

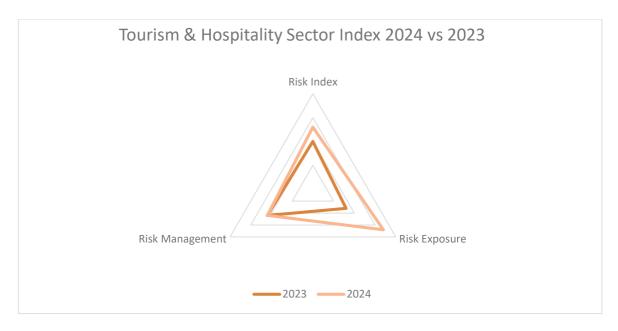


Figure 23: Tourism & Hospitality Sector Comparative Analysis 2024 vs 2023

In 2024, the Tourism & Hospitality sector's risk index increased from 65 in 2023 to 66, While its risk exposure increased, rising from 63 to 68, indicating heightened vulnerabilities due to factors such as geopolitical uncertainties, fluctuating fuel prices, and global economic instability, all of which can impact both international and domestic travel. This increase in risk exposure points to the ongoing challenges the sector faces despite progress in recovery.

The risk management score remained constant at 72, signaling that the sector has improved in strengthening its strategies to mitigate risks. The increased focus on technological advancements, sustainable practices, and enhancing customer experience has been key to this improvement. The implementation of digital solutions, contactless check-ins, improved hygiene protocols, and more flexible booking policies have bolstered the sector's resilience in adapting to the evolving global landscape.



Transportation & Logistics



Transportation & Logistics

In 2024, India's Transportation & Logistics sector witnessed continued growth, driven by strong demand across e-commerce, manufacturing, and infrastructure development. With the government's push for infrastructure upgrades, such as road expansion projects, new airports, and port development, the sector benefited from an improved physical infrastructure that facilitated smoother supply chains. Additionally, India's growing manufacturing sector and the rise of digital commerce fueled a sharp rise in demand for efficient logistics services, further boosting the sector's overall performance.

The logistics market saw continued digitization in 2024, with the adoption of technologies such as AI, machine learning, and blockchain in supply chain management. These technologies enabled better route optimization, inventory tracking, and predictive analytics, improving operational efficiency. With initiatives like the PM Gati Shakti National Master Plan for Multi-modal Connectivity, the sector was able to streamline cross-sector connectivity, reducing bottlenecks and improving last-mile delivery.

The sector also experienced strong growth in the rail and air freight segments, with railways benefitting from increased cargo capacity and air freight bolstered by improved logistics infrastructure. Furthermore, India's push towards green mobility and sustainability saw a growing emphasis on electric vehicles (EVs) and alternative fuel systems, contributing to a reduction in carbon emissions in the logistics sector.

Despite these advances, the sector faced several challenges in 2024. Fuel price fluctuations remained a persistent risk, impacting both transportation costs and profitability for logistics companies. Additionally, global supply chain disruptions, though less severe than the previous years, still posed a threat to smooth operations. The increased demand for raw materials, parts, and finished goods continued to strain supply chains, leading to delays and heightened logistical costs.

Moreover, labor shortages in key sectors such as trucking and warehousing added further strain on logistics companies. The rapid shift to online shopping and home deliveries during the post-pandemic period has created capacity issues in last-mile delivery, which continues to challenge the industry.

The government's continued investment in infrastructure and reforms, such as the implementation of the Goods and Services Tax (GST), helped streamline operations, promoting a more unified and efficient logistics network across states. Furthermore, the rise of technology-driven startups offering innovative logistics solutions has brought in new opportunities and has played a pivotal role in transforming traditional business models in the sector.



In summary, India's Transportation & Logistics sector demonstrated solid growth in 2024, driven by infrastructure developments and technological advancements. While challenges like fuel price volatility and supply chain disruptions remain, ongoing reforms and investments position the sector for sustained growth in the years to come.

| Transportation & Logistics sector | Risk Index | Risk Exposure | Risk Management |
|-----------------------------------|---------------|------------------|-----------------|
| 2023 | 63 | 59 | 61 |
| 2024 | 66 | 60 | 64 |



Figure 24: Transportation & Logistics Sector Comparative Analysis 2024 vs 2023

In 2024, the Transportation & Logistics sector saw an increase in its Risk Index, rising from 63 in 2023 to 66. This suggests the sector faced more challenges, primarily due to fluctuating fuel prices, ongoing supply chain disruptions, and labor shortages.

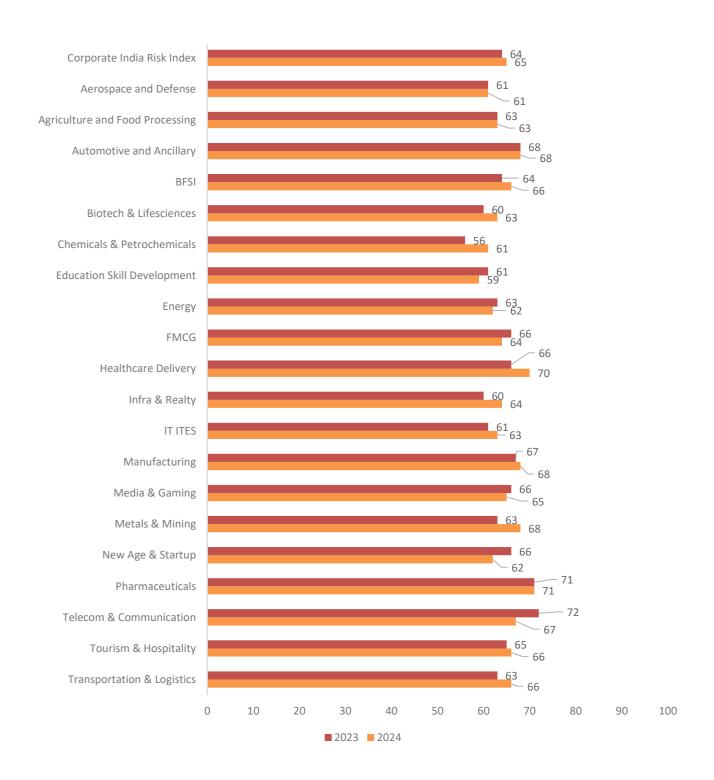
Risk Exposure remained stable, moving slightly from 59 in 2023 to 60 in 2024. Though external factors such as fuel price fluctuations and global supply chain challenges had an impact, the sector's exposure to risks did not significantly change. The increased demand for logistics services compounded by these external disruptions created pressures on operational processes, but exposure levels were still moderate.

Risk Management saw slight improvement, increasing from 61 in 2023 to 64 in 2024. This indicates that the sector implemented proactive strategies to mitigate risks. Investments in technology, digital supply chain solutions, and infrastructure upgrades helped improve risk management. Companies also focused on fleet diversification and last-mile delivery optimization, aligned with initiatives like the PM Gati Shakti National Master Plan, further enhancing their ability to manage risks effectively.



How India's Risk Handling is Evolving

Risk Index Comparison 2024 vs 2023





Corporate India Risk Index 2024 Vs 2023

The India Risk Index in 2024 stood at 65, slightly up from 64 in 2023, indicating a modest improvement in risk handling. This increase is primarily attributed to a rise in the country's risk management score, which reflects better preparedness and stronger frameworks for addressing emerging risks. While the overall risk exposure remained consistent with the previous year, India's improved ability to manage risks demonstrates progress in resilience, whether through policy measures, business practices, or sectoral adjustments, especially in areas like manufacturing and energy.

There was an improvement in the risk index of sectors like Chemicals, Transportation & logistics, healthcare and Infrastructure. In Chemicals, improved safety standards and regulatory compliance have played a key role. Transportation & Logistics have adapted effectively to global supply chain shifts, particularly with the "China + 1" strategy. Healthcare has benefited from technological advancements and better operational frameworks, while Infrastructure has seen consistent growth due to increased investments and government initiatives.

Whereas the risk index marginally dropped in sectors like Telecommunication, New Age & Startup and FMCG. Telecommunications faced increased regulatory pressures and rapid technological changes. The New Age & Startup sector was impacted by a decline in investor-backed funding, while FMCG experienced heightened competition, changing consumer preferences, and supply chain disruptions, leading to a slight increase in risk exposure.

Corporate India Risk Management 2024 Vs 2023

The Risk Management Score for India improved slightly from 67 in 2023 to 68 in 2024, indicating progress in strengthening the country's overall risk management frameworks. This improvement reflects enhanced preparedness across various sectors, driven by more robust policies, better implementation of risk mitigation strategies, and increased focus on resilience in the face of both domestic and global challenges. The rise in the score highlights India's ongoing efforts to manage risks more effectively, contributing to greater stability and confidence in the market.

Corporate India Risk Exposure 2024 Vs 2023

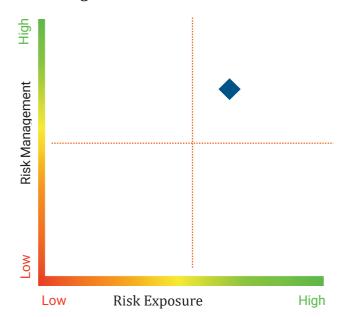
The India Risk Exposure increased slightly from 64 in 2023 to 65 in 2024. This rise indicates a marginal increase in the country's exposure to risks, possibly due to evolving global economic conditions, geopolitical uncertainties, and sector-specific challenges. While improvements have been made in risk management, the slight increase in exposure highlights the ongoing vulnerabilities and the need for continuous adaptation to both domestic and global risk factors.



Key Highlights

Risk Dimension Analysis: Market and Economy

Risk Exposure Score: 71 Risk Management Score: 70



Inflation

- The Consumer Price Index (CPI)-based inflation rate moderated to 4.83% in April 2024, down from 5.69% in December 2023.
- The Reserve Bank of India (RBI) maintained the repo rate at 6.5% throughout 2024, focusing on sustaining economic growth while keeping inflation within the target range.
- In March 2024, the RBI announced a significant liquidity infusion of ₹1.5 trillion to support economic growth and ease lending conditions.

Taxation

- The basic exemption limit was raised, with the non-taxable income threshold increasing from ₹700,000 to ₹1.28 million under the new tax regime introduced in 2020.
- This impacts the purchasing power of consumers and would have an impact on sectors like FMCG, healthcare, new age, etc.

Regulatory Risks

- Despite ongoing digitization efforts, India's regulatory environment remained intricate. Businesses, particularly foreign investors, faced challenges due to overlapping regulations and involvement from multiple government levels. This complexity often led to increased compliance costs and operational uncertainties.
- The regulatory landscape experienced frequent amendments and updates, requiring businesses to continually monitor and adapt to remain compliant. This volatility created a moving target for compliance, necessitating agile strategies from companies to navigate the



evolving requirements.

- The government prioritized reforms to streamline business operations, introducing initiatives such as online approvals, single-window clearances, and faster dispute resolution mechanisms. These measures aimed to simplify the business environment and reduce bureaucratic hurdles.
- The Reserve Bank of India issued an operational framework for reclassifying equity investments by foreign portfolio investors into foreign direct investment, enhancing opportunities and confidence for foreign investors. This move aimed to create a more investor-friendly environment by simplifying investment classifications.
- Positive regulatory changes were observed across various sectors. For instance, the introduction of the Uniform Code of Pharmaceutical Marketing Practices 2024 aimed to ensure transparency and ethical practices in pharmaceutical marketing. Additionally, the proposed Broadcasting Services (Regulation) Bill, 2023 sought to overhaul the regulatory framework for broadcasting services, encompassing a wider range of platforms and technologies.

Foreign Exchange Rates

- The rupee began the year trading at approximately 82.75 per US dollar on January 1, 2024, and depreciated to around 85.79 by December 30, 2024, marking a decline of about 3.7% over the year.
- The average exchange rate for 2024 was 83.68 INR per USD, with the rupee reaching its weakest point at 85.79 on December 30, 2024, and its strongest at 82.75 on January 1, 2024.
- The rupee's depreciation was influenced by global economic uncertainties, including trade tensions and concerns over domestic economic growth. These factors led to increased demand for the US dollar as a safe-haven currency, exerting downward pressure on the rupee.
- To mitigate sharp depreciation, the Reserve Bank of India (RBI) intervened in the foreign exchange market, aiming to stabilize the rupee amidst global volatility.

Geopolitical Risks

- The deceleration in global trade, coupled with tighter monetary policies worldwide, posed contingent risks to the Indian economy. These factors led to reduced demand for Indian exports and heightened volatility in financial markets, necessitating vigilant economic management.
- Tensions in the Red Sea region disrupted critical supply chains, notably impacting India's pharmaceutical sector due to interruptions in the supply of essential ingredients and chemicals. Additionally, this geopolitical strife led to increased shipping costs for exporters, affecting the competitiveness of Indian goods in international markets.
- Ongoing conflicts in the Middle East, alongside strained India-US ties, disrupted India's export channels, particularly to the Middle East, the US, and Europe. This disruption adversely affected agricultural output and contributed to fluctuations in food prices domestically.
- The escalating conflict between Israel and Palestine hindered efforts toward regional stability,



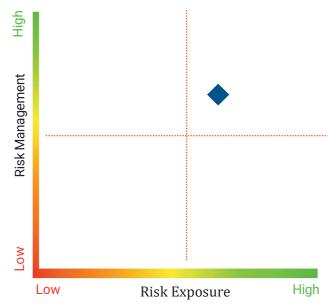
influencing India's diplomatic stance and potentially affecting trade relations within the Middle East.

- The protracted Russia-Ukraine conflict continued to pose challenges for global stability, with potential implications for India's trade relations and economic outlook, especially concerning geopolitical alignments and the enforcement of economic sanctions.
- The longstanding Teesta River water-sharing dispute between India and Bangladesh resurfaced in 2024, following political changes in Bangladesh. The interim government, led by Nobel laureate Muhammad Yunus, prioritized resuming talks with India to reach a fair agreement, underscoring the geopolitical significance of transboundary water resources in South Asia.
- The US imposed import tariffs on steel and aluminium, reshaping global steel trade and potentially directing excess supply into India. This shift could lead to a price correction in Indian steel prices and impact the profitability of local steelmakers.
- The US administration's efforts to reduce dependence on Chinese imports and reroute products through third countries could influence global supply chains. Countries like India might benefit through increasing trade and investment relationships with the US, although fully excluding China remains challenging due to its manufacturing prowess.
- India maintained its economic and diplomatic ties with Russia during the ongoing Ukraine conflict, including purchasing discounted Russian oil and fertilizer, and supplying dual-use technology. This stance led to criticism from Ukraine and complicated India's relations with Western nations imposing sanctions on Russia.



Risk Dimension Analysis: Technology

Risk Exposure Score: 64 Risk Management Score: 66



Innovation Risk / Obsolete Technology

- In the Global Innovation Index 2024, India improved its position, ranking 39th out of 133 economies, reflecting progress in its innovation ecosystem. To enhance R&D success rates, organizations are increasingly adopting advanced technologies:
- Digital Twins and 3D Printing: These tools offer new dimensions of innovation and efficiency, allowing for more accurate simulations and rapid prototyping, which can reduce development time and costs.

Disruptive Technology

- The proliferation of artificial intelligence (AI), blockchain, and quantum computing necessitated that organizations remain vigilant in identifying and adapting to these advancements to harness their full potential.
- While these technologies offered substantial growth prospects, they also introduced new risks, including ethical concerns related to AI and data privacy issues, requiring careful consideration and management
- Integrating disruptive technologies with existing legacy systems posed significant challenges, demanding meticulous planning and execution to ensure compatibility and security.

Intellectual property

- India's ranking on the International Intellectual Property Index declined from 20th in 2014 to 42nd in 2023. This drop highlights challenges in the IP regime, including enforcement, legal reforms, and protection mechanisms.
- Verifying product authenticity, safeguarding IP, and ensuring supply chain integrity are significant challenges. Implementing secure authentication measures, enforcing IP protection mechanisms, and conducting regular supply chain audits are essential to mitigate these risks.
- India's patent law allows for compulsory licensing under specific conditions, such as when a patented invention is not available to the public at a reasonably affordable price. This provision aims to balance patent holders' rights with public interest, especially in critical



sectors like pharmaceuticals.

■ The Indian Patent Office has implemented modernization programs to improve efficiency and reduce backlogs. Efforts include e-filing systems and increased disposal targets for patent applications, aiming to enhance the overall IP infrastructure.

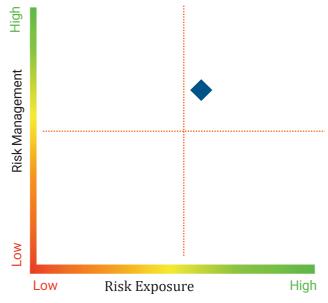
Data compromise

- The Indian Cyber Force (ICF) remained active in 2024, engaging in various cyber activities, including retaliatory attacks against foreign entities. Notably, in January 2024, amid diplomatic tensions, the ICF targeted several Maldivian institutions with cyberattacks, defacing official websites and compromising security systems.
- CERT-In Initiatives: The Indian Computer Emergency Response Team (CERT-In) continued to play a pivotal role in enhancing cybersecurity measures. In July 2024, CERT-In addressed a critical computer outage related to CrowdStrike tools in Microsoft systems, categorizing the incident as "critical" and collaborating with Microsoft to resolve the issue promptly.



Risk Dimension Analysis: Operational and Physical





Critical Infrastructure Failure / Machine Breakdown

- India's infrastructure continued to face challenges in 2024, posing operational risks to businesses across sectors.
- Frequent power outages, road congestion, and poor quality of transportation infrastructure continued to disrupt supply chains and manufacturing processes.
- Additionally, India's water and sanitation infrastructure faced ongoing issues, particularly in rural areas and rapidly expanding urban centers, which impacted the reliability of

utilities needed for business operations.

- The power grid also experienced stress, particularly during peak seasons, which led to interruptions in production and increased energy costs. This infrastructure fragility is exacerbated by the rapid urbanization and the increasing strain on existing infrastructure networks, including roads, railways, and airports.
- The breakdowns in infrastructure, especially in critical areas such as transportation and power, can cause delays, elevate operational costs, and diminish overall business productivity.
- Companies had to invest heavily in backup systems, alternate supply chain routes, and disaster recovery strategies to mitigate these risks, particularly in the face of potential disruptions caused by infrastructure failures.

Business Continuity/Sustainability

- India's businesses faced heightened risks to continuity due to natural disasters, power outages, and external disruptions such as geopolitical events and global economic instability.
- The impact of these events required companies to enhance their resilience by investing in digital infrastructure, cybersecurity, and backup systems.
- Moreover, the rise in remote working and evolving safety regulations increased the complexity of business continuity planning, especially with regard to data security and employee wellbeing.



Supply Chain Risk

- Global geopolitical tensions, particularly the ongoing Russia-Ukraine war, continued to affect India's supply chains.
- Disruptions in the transportation of raw materials, particularly in sectors like automotive, pharmaceuticals, and manufacturing, posed a challenge.
- Additionally, the volatile international trade environment increased uncertainty regarding the availability and cost of crucial imports.

Commodity Price Risk - Volatility in prices of raw materials

- In 2024, the volatility in raw material prices continued to be a major operational risk for Indian businesses.
- Prices for critical materials such as steel, oil, and agricultural products fluctuated significantly due to global supply constraints, trade tensions, and market instability.
- These price variations added unpredictability to production costs and led to increased operational expenses for manufacturers, as well as the need for strategic sourcing and inventory management.

Environmental Hazards and Sustainability

- India in 2024 continued to grapple with significant environmental risks that directly impacted both businesses and the broader economy. These risks were primarily linked to climate change, extreme weather conditions, and environmental degradation.
- The country faced severe heatwaves, floods, and unpredictable monsoons, which disrupted agricultural production, transportation, and daily operations in various industries. Environmental pollution, particularly in urban areas, also posed long-term health and environmental challenges, with air and water quality deteriorating in many regions. Businesses operating in industries like manufacturing, agriculture, and tourism were directly affected, facing the threat of lower productivity, increased costs due to remediation efforts, and reduced consumer demand due to environmental concerns.
- Moreover, companies were increasingly under pressure to comply with stringent environmental regulations, adopt sustainable practices, and contribute to mitigating climate change, leading to rising operational costs for meeting environmental standards.

Workplace Accident

- Despite ongoing efforts to improve workplace safety, India continued to experience a significant number of workplace accidents, particularly in high-risk industries such as construction, mining, and manufacturing.
- There were numerous fatalities and injuries, which not only impacted employee well-being but also increased costs related to insurance claims, legal liabilities, and production delays.
- Companies were urged to improve safety protocols and invest in worker training and safety



equipment to mitigate such risks.

Human Resource

- In 2024, HR risks remained prevalent across Indian businesses, particularly with regards to talent retention and labor relations.
- The demand for skilled labor, especially in the technology and healthcare sectors, made recruitment and employee retention more challenging.
- At the same time, labor unrest in some industries highlighted the need for companies to improve employee engagement, welfare programs, and conflict resolution strategies.
- Additionally, changes in labor laws and regulations required businesses to stay updated to avoid legal complications and ensure that their HR practices were compliant.

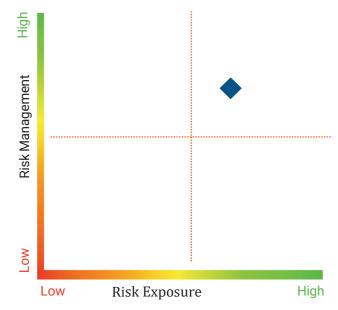
Breaches of law (local/international)

- In 2024, businesses in India continued to face risks related to breaches of law, ranging from violations of environmental regulations to corporate governance issues.
- The government's focus on stricter enforcement of environmental norms, consumer protection laws, and intellectual property rights made it increasingly important for companies to adhere to the legal framework.
- Failure to comply with these laws could result in heavy fines, legal action, and damage to a company's reputation. In addition, the complex regulatory environment posed challenges for businesses, particularly foreign investors, in understanding and navigating legal requirements, which further increased the risk of unintentional violations.



Risk Dimension Analysis: Crime and Security

Risk Exposure Score: 60 Risk Management Score: 64



Cyber-crimes

- In 2024, cybercrime remained one of the top security threats in India, with the country experiencing an increase in ransomware attacks, data breaches, and online frauds.
- With India's increasing reliance on digital platforms and the growth of e-commerce, cybercriminals targeted businesses of all sizes, seeking access to sensitive data and financial assets.
- The scale of cyber threats grew, with both large corporations and small businesses facing challenges in maintaining cybersecurity.
- Data breaches, in particular, jeopardized the privacy of individuals and led to significant financial and reputational damage for companies.
- Businesses had to invest heavily in cybersecurity measures, employee training, and risk mitigation strategies to protect against such threats.
- The rise in cybercrimes also resulted in stricter regulatory frameworks around data protection, forcing companies to comply with emerging data privacy laws and industry standards.

Counterfeiting

- Counterfeiting continued to be a major concern in India in 2024, affecting various sectors including pharmaceuticals, automotive, FMCG, and electronics.
- The counterfeiting of pharmaceuticals posed a particular risk, as it endangered public health, leading to loss of consumer trust and legal challenges for companies in the healthcare sector. Additionally, counterfeit goods in sectors like electronics and apparel posed threats to both businesses and consumers, as they reduced the demand for genuine products and resulted in losses.

Threat to Women Security

- In 2024, the threat to women's safety in India remained a significant concern, with rising reports of gender-based violence, harassment, and threats in both urban and rural areas.
- Reports highlighted an increase in workplace harassment, which continued to be a risk for companies, as they faced reputational damage and legal repercussions for failing to adequately



address such issues.

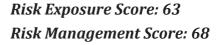
- Furthermore, the threat to women's safety has driven a demand for businesses to adopt stronger security policies and ensure that their workplaces remain safe and inclusive.
- Companies were encouraged to implement comprehensive security measures, create awareness programs, and establish strong reporting mechanisms for instances of harassment.

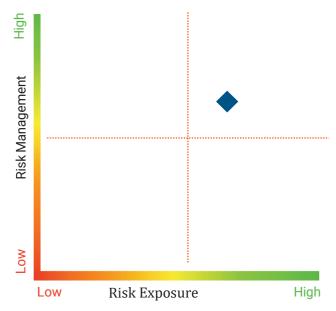
Terrorism

- Terrorism remained an ongoing concern in India in 2024, with continued threats from both domestic and international groups. The risk of attacks, especially in high-profile urban centres, infrastructure hubs, and critical industries, continued to impact businesses and the general population.
- These risks have resulted in significant investments in security infrastructure and policies to ensure both employee safety and the continuity of operations.



Risk Dimension Analysis: Natural Hazard and Event





Natural Hazards like flood, drought, famine, earthquake, landslide etc.

- India in 2024 continued to be highly vulnerable to a variety of natural hazards, including floods, droughts, heatwaves, and cyclones.
- In particular, the annual monsoon season brought heavy rains, triggering widespread flooding and landslides in certain regions, including parts of Assam, Kerala, and Himachal Pradesh.
- The destruction of infrastructure, displacement of people, and disruption to supply

chains were common outcomes of these events.

■ Companies were increasingly focusing on integrating climate resilience strategies into their operations to mitigate potential losses.

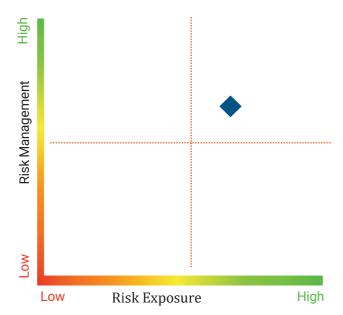
Pandemic and other global epidemic diseases

- Although India has made significant progress in managing the COVID-19 pandemic, there remains an ongoing risk of future pandemic outbreaks, which could disrupt business operations and public health.
- In 2024, while the threat of COVID-19 had reduced, the potential for new viral outbreaks—such as new variants of existing viruses or entirely new pathogens—remained a significant concern for public health authorities and businesses.
- Companies were urged to keep contingency plans for pandemic-related disruptions, including remote working policies, health and safety protocols, and stockpiling essential supplies.



Risk Dimension Analysis: Strategic Risk

Risk Exposure Score: 60 Risk Management Score: 65



Resource scarcity / Misutilisation / Overall Utilisation

- Resource scarcity remained a significant concern in India, particularly in critical areas such as water, raw materials, and energy.
- This growing resource scarcity challenges companies that rely heavily on these resources, pushing them to adopt more sustainable practices, such as recycling, efficient resource use, and alternative sourcing strategies.
- Companies that fail to adapt may face higher operational costs and potential disruptions.

Increased number of recalls and quality audits

- In 2024, India saw a significant rise in product recalls due to quality concerns. These recalls affected multiple sectors, from automobiles to consumer goods, and impacted both domestic and international markets.
- The increase in product recalls not only damaged consumer trust but also tarnished brand reputations and strained financial resources. Companies were compelled to tighten their quality control processes and invest in predictive analytics and real-time monitoring systems to avoid such recalls.
- This surge in recalls also led to heightened scrutiny and quality audits from regulators and consumers, emphasizing the need for organizations to maintain rigorous quality standards across their product lines.

Delay in execution of projects

- The delay in executing infrastructure projects remained a critical strategic risk in 2024. India has seen a persistent backlog of projects, with hundreds of infrastructure initiatives, particularly in sectors like transportation, energy, and urban development, facing significant delays.
- The factors contributing to these delays included bureaucratic hurdles, lack of timely approvals, and poor project management.
- Delayed projects affect economic growth, investor confidence, and public welfare, as they lead



- to lost opportunities and hinder long-term development.
- Companies involved in infrastructure and realty sectors needed to streamline approval processes, improve coordination between stakeholders, and enhance monitoring mechanisms to mitigate the risks associated with delayed execution.

Public Sentiment

- Public sentiment continued to play a key role in shaping the strategic risk landscape for businesses in India. Companies, particularly those in consumer-facing industries, faced increasing pressure to align with the expectations of the public regarding social responsibility, sustainability, and ethical business practices.
- Public reactions to issues like environmental degradation, labor conditions, and corporate governance increasingly influenced consumer behavior and, in turn, impacted the reputation and market value of companies.

Failed / Hostile Mergers & Acquisitions

- Mergers and acquisitions (M&A) activity in India continued to carry a significant amount of strategic risk in 2024. While M&A deals can offer growth opportunities, they also bring risks of failure.
- In several cases, companies faced challenges in integrating operations, cultures, and systems after mergers, leading to the failure of expected synergies. Additionally, regulatory hurdles and opposition from stakeholders also resulted in some M&A deals being abandoned or delayed.
- The failure of M&A transactions can result in financial losses, a damaged reputation, and missed growth opportunities.
- To mitigate these risks, companies needed to conduct thorough due diligence, ensure effective post-merger integration strategies, and foster clear communication with all stakeholders involved.



ICICI LOMBARD: Key Solution Offerings

Property

Evaluation of various risks to understand areas for improvement, such as fire preparedness, electrical safety, safety & emergency preparedness, maintenance and housekeeping, etc. By evaluating risks, we can identify potential hazards and advise on mitigating risks.

- **Property Loss Prevention:** We believe users should carry out detail risk visit followed by benchmarking of the industry good practices (Industry Risk Profiling). For instance, industries such as chemicals & petrochemicals impose a major challenge in manufacturing due to inherent risk. We recommend solutions for "Low Focus High Loss Areas. This can help in minimizing severity losses. All the risk recommendations are grouped into four different segments based on cost-impact matrix and the priority is decided accordingly. Key decision makers at user's end can ensure to get recommendations implemented.
- Comprehensive Risk Assessment (CRA): A Comprehensive Risk Assessment is a systematic approach to electrical safety specially designed for industries to evaluate potential hazards and recommend improvements, coupled with savings. It is an important tool for identifying risks, severity of hazards and avoid incidents arising out of electrical faults.
- Electrical Risk Assessment (ERA): An Electrical Risk Assessment is a basic solutions focused towards electrical safety designed to evaluate potential hazards and recommend improvements. Majority of fires in India are caused due to electrical installations. Ensuring safety of electrical installations of industrial unit or organization is critical to reduce risk and ensure safety compliance with Safety Standards and Regulation. ERA is an important tool which have 6 inbuilt solutions such as Electrical Audit & Thermography, etc.
- **Fire Hydrant IoT:** Fire Hydrant IoT: Fire hydrant IOT (ILGIC Patented Solution) is an automated device for monitoring key parameters such as Hydrant and Sprinkler line pressure, Main and Jockey pump on-off status, Firewater tank level. These can be interpreted to provide intelligence on unauthorized usage of water and leakage, effectively saving water. This information pertaining to breach of above-mentioned parameters is notified through dashboard & email alerts. Monitoring of such system is essential as these fire fighting systems are lifeline during any emergency.
- **Temperature & Humidity IoT:** Provides end-to-end plug & play ambient temperature and humidity monitoring Solution to manage temperature and humidity-controlled environment more efficiently. It generates Automated reports (historical trends for different locations etc.). Intelligent Alerts SMS & emails is sent to the concerned (one or multiple) stakeholders in case



any anomaly.

- **Electrical IoT:** Electrical IoT is a patented solution (ILGIC Patented Solution) to avoid any instances of short circuiting due to abnormal voltage & current conditions. These are mainly built for application in warehouses. This solution has been created as these locations are having huge stocks with lesser manpower during emergencies mainly during non-business hours. The device automatically cuts off power in case of abnormality & restarts back when situation is normal.
- Ultrasound technology for Gas Leak Detection: Use of ultrasound technology for leak detection in process lines. The methodology recommends a non-destructive way of avoiding losses with no downtime. The main objective is to identify the leakages in all pressurized systems including pipelines by using ultrasound technology and tag them for rectification. It also includes listing leaks with individual CFM losses and cost savings possible.
- **Fire Mitigation Solutions:** Solutions have been designed based on their specific needs, keeping in mind the level of awareness and complexity of the location. These best-in-class solutions which are installed at correct locations.
- Renewable Solutions: In line with our philosophy of recommending business solutions, we recommend efficiency measurements for wind and solar power generating assets. Drones are used to provide high accuracy and quick reach which is not possible through any traditional methodology. User get to know about the low performing module and ways to improve the same within the entire solar plant with latlong identification. We recommend advanced drone-based technology for inspection of wind turbines and solar PV modules.

Marine

In the dynamic realm of marine insurance, cargo faces a myriad of risks, from unpredictable weather conditions to unforeseen accidents, safeguarding against potential challenges at sea and in surface transportation / INLAND movement is paramount.

- MLCE (Marine loss control engineering): Frequent occurring losses due to Peril such as accident, wet damage, theft, non-delivery, pilferage, hijack of consignments, mishandling shall be examined with ground inspections, to determine root cause analysis with MIS, claim assessment reports collectively in the form of logistics audit.
- MWS (Marine warranty surveys): Our inhouse practices of condition survey prior risk inception & post risk inceptions helps our customers to have an independent risk management of the high value / ODC (over dimensional cargo) movements conducted by the Insured so that reliance over logistics service provider is supervised with Insured's nominated risk assessment team having a worldwide presence with a supervised network. Not only marine cargo, but HULL insurance risk exposures are surveyed for risk assessment and risk management.
- **Technical engagements:** Uncertainty of the risk associated with the transit can be concluded



with marine experts. Assessing vessel's condition for SEA transit as a full chartered load on behalf of the Insured, Risk assessment of cargo from packing, handling, lifting, securing, transit and final delivery methodology shall be discussed with the logistics team. Vessel selection, stowage and securing methods can be jointly discussed with the User's logistics team for a safe transit, dispatch and delivery coverage after assessing the risk on desktop with a virtual or F2F engagement and / or a ground visit.

■ Transit Telematics: With the government's constant agenda of upgrading to digitalized operations by introducing ULIP and NITI Aayog mode of operations, not having a visibility of transit will hamper your logistics operations. IOT and SAAS (software as a service) based products incorporating the design of a cost efficiency and loss mitigation system can help enhance delivery with safe operation. Additionally, a 24*7 risk control is recommended to effectively monitor and mitigate theft / pilferage prone dispatches to ensure a safe transit delivery. Be it a temperature-controlled cargo, expensive cargo in transit or liquid bulk cargo in lorry tankers, it is essential to mitigate the risk and losses that might occur due to accidents caused by fatigue, unexplained conditions, or theft. We have case studies of successful recovery of stolen goods with our telematics services.

Liability

The growing adoption of technology in organizations has not only led to crucial data being stored and processed on digital platforms but also facilitated the automation of operations, thereby enhancing business efficiency. However, this shift also amplifies cyber risk, exposing sensitive information to potential threats and rendering organizations vulnerable to financial losses, reputational damage, and legal liabilities. As organizations delve deeper into the digital realm, fortifying cybersecurity measures becomes imperative to safeguard operational integrity and protect critical data from unauthorized access or breaches.

- **Phishing Simulation:** Experience cutting-edge phishing simulation tests to fortify your organization's defenses against cyber threats. You can enable phishing attack simulations to educate your employees on identifying and handling potential risks. Through engaging and interactive scenarios, you can raise awareness and equip your team with the necessary skills to detect and thwart phishing attempts.
- Awareness Campaigns: With Cyber Awareness Campaigns, you can go beyond just educating organizations about cybersecurity. The campaigns are meticulously designed to empower your team with essential best practices, insights into global incident trends and a comprehensive understanding of potential risks. Interactive designs help you captivate and engage your employees, fostering a cyber-aware culture within your organization. Customized campaigns can perfectly align with your unique needs and requirements and stay informed and vigilant.
- **Incident Response and Readiness:** A bespoke service that fortifies organizations with robust processes and clear communication channels for proficient cyber-incident management. This



recommendation not only trims down the incident response time but also facilitates prompt, accurate action within the crucial initial hours. By meticulously assessing your organization's incident response policies and sculpting response systems in alignment with global industry benchmarks, this ensures you are thoroughly prepared to tackle the evolving digital threat landscape.

- CXO's Session: CXO's Session service provides immersive training sessions, personalized coaching & interactive discussions to empower your CXOs with cybersecurity knowledge that aligns with your business objectives. The subject matter experts recommend strategic guidance and in-depth insights into the ever-evolving threat landscape, translating technical jargon into practical language. Regular cybersecurity forums facilitate peer-to-peer learning and benchmarking against industry standards. CXO- focused approach ensures a cyber-aware leadership team that drives your organization's success securely into the future.
- Weekly Threat Intelligence Bulletin: Stay ahead of cyber threats with the Weekly Threat Intelligence Bulletin. We meticulously curate this comprehensive bulletin, providing timely insights on emerging threats, vulnerabilities, and attack trends. Delivered directly to your inbox, it recommends proactive advantage by promptly identifying potential risks. With continuous updates and ongoing support, you can confidently adapt your Defence strategies to combat the most sophisticated threats. It enables you to make informed decisions and protect your organization from emerging threats with Weekly Threat Intelligence Bulletin.
- **Email Security:** Safeguard your organization's communication channels with the Email Security solutions. We recommend robust measures to protect against phishing, malware & other email-borne threats. The advanced email filtering and authentication technologies prevent malicious emails from reaching your users inbox. Implementing encryption protocols to ensure the confidentiality of sensitive data in transit is a good idea. With real-time monitoring and threat intelligence, email security measures provide proactive Defence, detecting and blocking suspicious activities promptly. You can protect your organization's reputation and sensitive information with comprehensive Email Security measures, ensuring a secure and reliable email environment.
- **Agent-less Patching:** Agent-less patching platform for companies and MSMEs who want a rapid solution to distribute critical security updates and vulnerability fixes without causing system downtime. The patching platform not only assists with patch deployment, but it also enables your system administrator in understanding the patches, Adjustments & impact of the patches on the system. Before applying the patch, the software generates a warning if the system requires downtime or a reboot. You can experience a hassle-free patching process with the platform recommending enhanced security for your organization.
- EDR/MDR Services: Elevate your organization's cybersecurity capabilities with the Endpoint Detection and Response (EDR) and Managed Detection and Response (MDR) services. These advanced solutions provide continuous monitoring, rapid threat detection & effective incident response, safeguarding your digital assets in real-time. With EDR, proactively detect and



- respond to threats at the endpoint level, while MDR service offers 24/7 monitoring and expert support. You can strengthen defenses against the most sophisticated cyber-attacks with EDR/MDR services, ensuring a resilient and secure digital environment.
- All-in-one Operating System: All-in-One Operating System is a true game-changing platform that provides a fortified desktop environment to foster secure collaboration and centrally managed cybersecurity resilience. Inbuilt endpoint security serves as a vigilant guard, blocking potential dangers. Effortless IT management provides with a user-friendly interface, leading to significant cost savings in IT infrastructure. It provides in-built end-point security, automated updates and patches along with extensive device reports. Organizations can unlock a secure and prosperous future by embracing the All-in-One Operating System in their IT infrastructure.
- Cyber Risk Management & Compliance Dashboard: Gain a clear understanding of your organization's cyber risk exposure with Cyber Risk Management & Compliance Dashboard. This powerful tool assesses your risk posture, quantifies potential financial Impact & evaluates compliance with industry standards and regulations. Armed with this information you can make informed decisions to prioritize cybersecurity investments and ensure compliance with relevant laws and regulations. The intuitive dashboard provides a comprehensive view of your cybersecurity performance enabling data-driven decision-making. This solution enables organizations to stay ahead of threats and ensure a resilient cybersecurity posture.
- Security Score Card: Track your organization's cybersecurity performance with a dynamic Security Score Card solution. This comprehensive rating provides a clear overview of your security posture, highlighting areas that require attention and improvement. It empowers data-driven decisions, allowing you to focus on strengthening key areas. Identify potential risks and compliance gaps with industry standards and regulations. With actionable insights, you can prioritize cybersecurity investments effectively, ensuring a robust and resilient Defence against cyber threats. This Security Score Card solution can be your strategic tool to proactively elevate your cybersecurity posture.
- VAPT: Enhance your organization's cybersecurity defenses with the Vulnerability Assessment and Penetration Testing (VAPT) service. Skilled professionals conduct rigorous assessments, simulating real-world attacks to identify potential vulnerabilities in your digital infrastructure. With detailed insights, you can fortify your defenses and proactively address weak points before malicious actors exploit them. This service goes beyond identifying vulnerabilities, you also get actionable recommendations to mitigate risks effectively. Organizations can be one step ahead of cyber threats, ensuring the security and resilience of your critical assets with the comprehensive VAPT service.

Engineering

In engineering risk management, it's vital to adopt a holistic approach that extends beyond immediate concerns to proactively tackle potential risks and uncertainties. Drawing upon



considerable expertise in claims handling and risk evaluation, a robust and customized protection strategy can be ensured.

Construction endeavors face a myriad of risks such as floods, cyclones, impact damage, fires, theft, and collapse. However, the adverse effects of these risks can be mitigated through the implementation of extensive loss prevention measures specifically tailored for engineering projects.

- Engineering Loss Prevention Exercise (ELP): To effectively manage losses in Engineering Risk, fostering a culture of loss prevention is crucial. It's widely acknowledged that each construction project is distinct, presenting specific challenges related to geography, geology, occupancy, and construction methodology, which in turn result in unique associated risks. To cater this challenge a specific risk management framework which deals about the unique requirement of each project could be created for the loss prevention with reference to some parameters of distinctive research and industries best practices.
- **Drone Solutions for Linear Projects:** In recent years, the construction industry has undergone significant changes due to the introduction of drone-based construction solutions. These cutting-edge technologies are transforming the planning, design, and execution of construction projects. A major benefit of drone technology in construction is its capacity to conduct aerial surveys, providing extensive coverage and detail. Drones, equipped with advanced cameras and sensors, can rapidly capture precise images and data, offering project managers valuable insights into site conditions. This data can facilitate project planning, cost estimation and design optimization by providing a comprehensive understanding of the project's parameters.
- **CPM Fleet & Fuel Management:** An advanced GPS-equipped sensor is available to precisely measure direct fuel consumption, evaluate engine efficiency, and detect potential tampering of diesel engines in both mobile vehicles and stationary machinery. This solution enables real-time alerts for service reminders and critical health issues, facilitating prompt resolutions and enhanced utilization. Additionally, it offers valuable insights into machinery and equipment performance through comprehensive analyses, resulting in optimized inventory usage and increased efficiency.

Health

We highly recommend exploring proactive and preventive healthcare solutions, which can make a significant difference in maintaining good health. Recognizing that majority of in-patient department (IPD) admissions could be prevented with timely interventions and regular healthcare, it is important to focus on health, not just during illness.

Pioneering Digital Platform: We recommend exploring digital health innovations offered by industry leaders, which provide cutting edge health solutions through the IL TakeCare (ILTC) app. Our platform has transformed the way health services are delivered by introducing a fully digital and cashless Outpatient Department (OPD) and Wellness Program.



- **Health Advisory Services:** We recommend a suite of health advisory services on the IL TakeCare app. Users can access health risk assessments, diet and exercise trackers, health parameter tracking and trends and sleep, meditation & hydration reminders. In addition, the platform recommends a feature to upload health records up to 1GB, and provides informative health blogs.
- IL TakeCare App: IL TakeCare app is a One-Stop-Solution for users with insurance needs. This robust user engagement is a testament to the high-value features that the app provides. Unique to the app is the innovative self-health assessment feature, which includes Face scan technology that can measure blood pressure, heart rate, cardiac variance, and SpO2 levels. The platform provides seamless teleconsultations with medical practitioners and specialists, and even recommends access to mental wellness experts to the insured. The facility for cashless OPD services and the efficient claim settlement process further enhance user experience. By encapsulating a wide range of state-of-the-art health services and solutions, the IL TakeCare platform revolutionizes corporate health management and serves as a comprehensive digital health solution.





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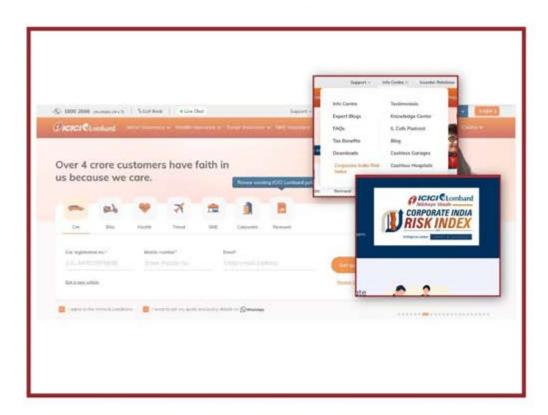
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