ICICI Lombard

CORPORATE INDIA RISK INDEX

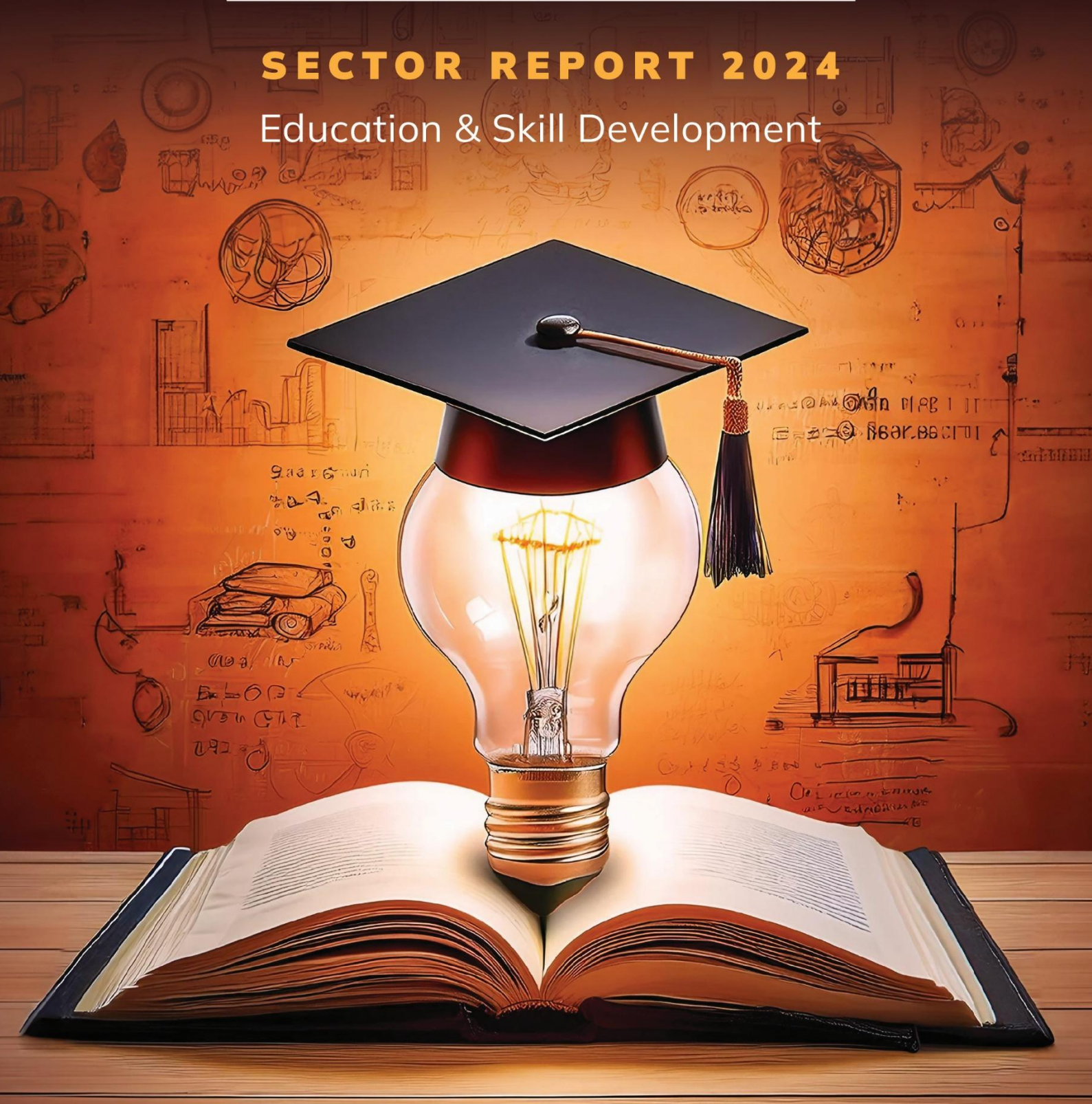
2024

Intelligence partner FROST & SULLIVAN

Navigating Risks, Powering India's Growth

SECTOR REPORT 2024

Education & Skill Development



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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 also 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.

Executive Summary

India's Education and Skill Development sector is undergoing a transformative shift, fueled by the nation's growing young population and an evolving economic landscape. As the country aims to build a future-ready workforce, the sector faces challenges such as ensuring equitable access to quality education, improving skill development programs, and aligning curriculum with industry needs. Disparities in education, particularly based on socio-economic background, gender, and geography, remain a significant hurdle. To address these, targeted interventions, infrastructure development, and inclusive pedagogies are needed to promote holistic and equitable growth.

Another key challenge lies in enhancing the quality of education across levels, from early childhood care to higher education and vocational training. Continuous curriculum reforms, adoption of innovative teaching methods, and investments in teacher training are critical to keep pace with industry demands and global standards. Additionally, integrating technology into education presents an opportunity to expand access and improve learning outcomes, though this requires careful planning and infrastructure development. The skill development ecosystem must focus on future-oriented skills, such as digital literacy and AI, to bridge the gap between the skills possessed by the workforce and those required by an increasingly tech-driven job market.

To realize the full potential of India's Education and Skill Development sector, streamlining regulations, fostering collaboration between government and educational institutions, and ensuring financial sustainability are crucial. By prioritizing quality, inclusivity, and innovation, the sector can unlock significant socio-economic progress and equip India's citizens with the knowledge and skills necessary for success in the 21st century. With continued efforts in these areas, India can harness its demographic advantage and play a leading role in the global knowledge economy.

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 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 know-how.
- **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

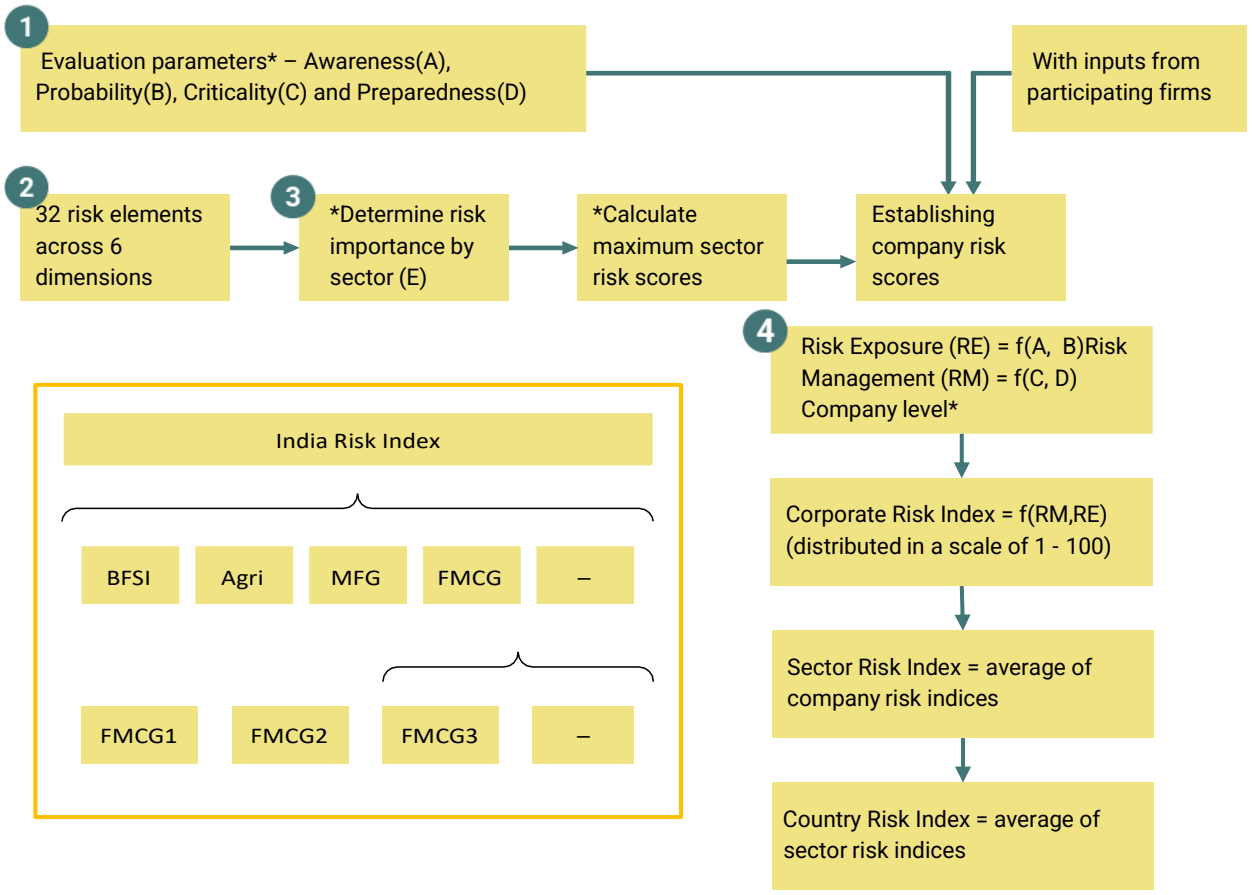


Figure 1: Risk Assessment Approach

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

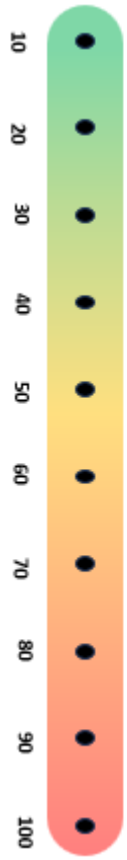
We have selected 20 sectors to understand the current stand of our country today in terms of risk. Risk for various sectors is measured on the risk exposure scale and risk management scale.

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.



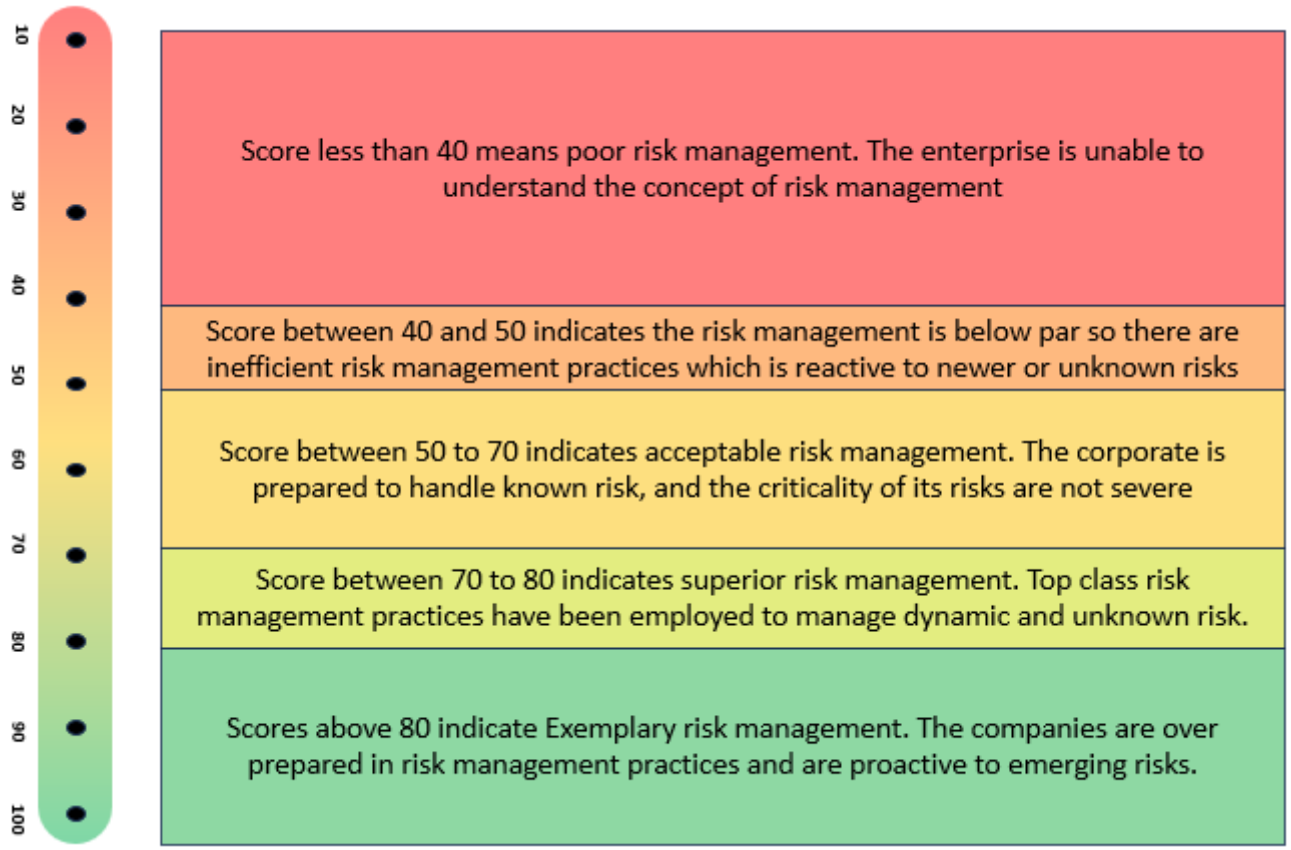
Score: If less than 30 means there is very low risk exposure, and the sector has minimal exposure to overall risk
Score between 30 to 50 indicates low risk exposure and its risk exposure is within acceptable or tolerable limits
Score between 50 to 60 indicates moderate exposure indicating corporate can balance the impact of overall risks up to a certain extent
Score between 60 to 80 indicates high risk exposure and its impact is very high in the industry in which the corporate operates
Score greater than 80 indicates very high-risk exposure. The corporate is unable to foresee risk incidents and probability of occurrence of these incidents may be extremely high

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.

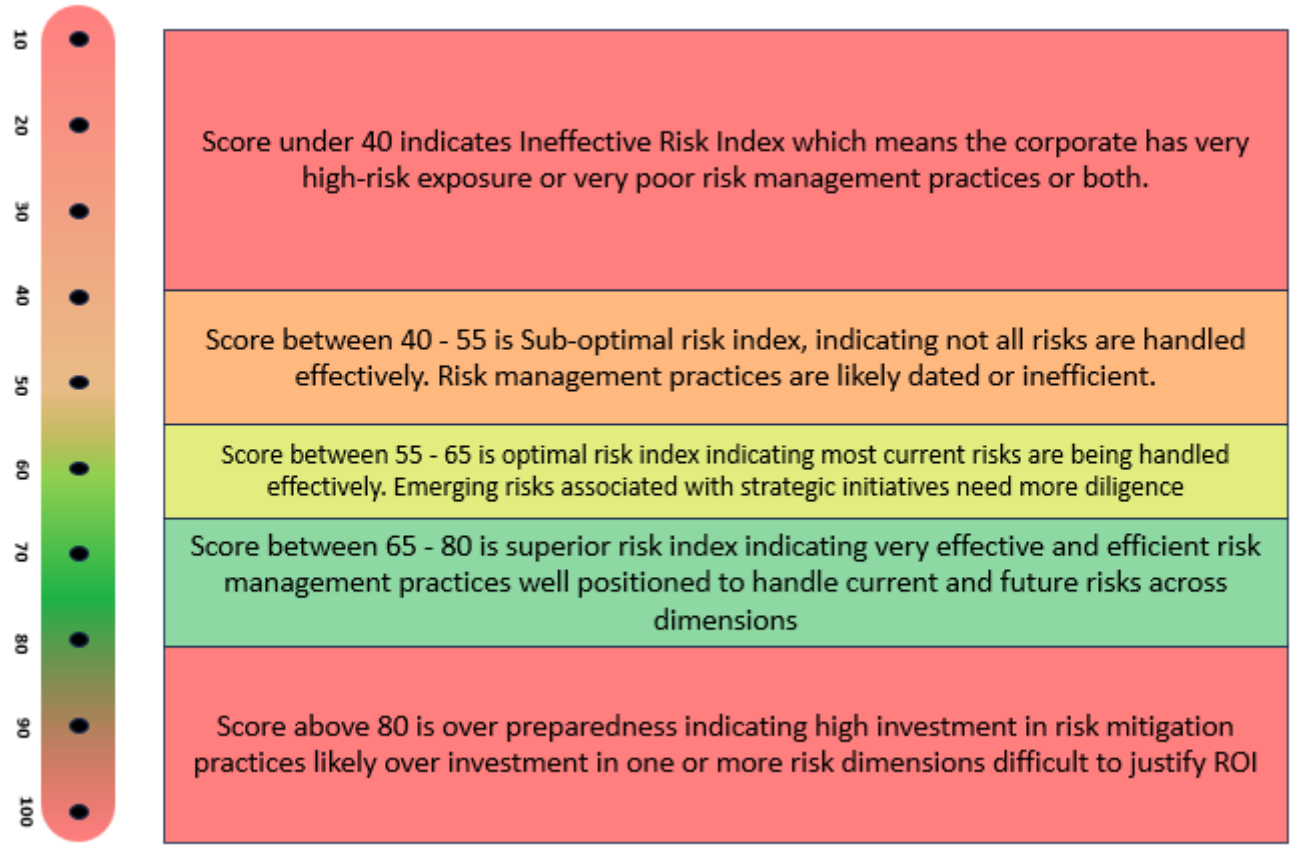
Let's look at the risk management scale.



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.



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 e-commerce 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.

Education & Skill Development Sector Insights 2024

India's education and skill development sector in 2024 is marked by a continued emphasis on innovation, digital transformation, and strategic policy implementation. The sector is witnessing a concerted effort to align educational outcomes with the evolving demands of the global workforce, particularly in emerging fields like artificial intelligence, data science, and advanced manufacturing. The focus remains on bridging the gap between theoretical knowledge and practical skills, ensuring India's youth are equipped to thrive in a rapidly changing economic landscape. The National Education Policy (NEP) 2020 continues to serve as a guiding framework, fostering a multidisciplinary approach and promoting holistic development.

The year 2024 is witnessing a significant push towards integrating advanced technologies into education and skill development. The implementation of AI-driven learning platforms, virtual and augmented reality (VR/AR) in educational content delivery, and the expansion of online learning infrastructure are key priorities. The government's initiatives to establish centres of excellence for AI and other Industry 4.0 technologies are gaining traction, with increased collaboration between academic institutions and industry partners. This is crucial for developing a skilled workforce capable of driving innovation and technological advancement. Additionally, the focus on vocational training and skill development programs is intensifying, with initiatives like the Skill India Mission expanding their reach and impact.

However, the sector continues to grapple with challenges such as ensuring equitable access to quality education, addressing the digital divide, and mitigating the impact of inflation on educational expenses. The need for robust cybersecurity measures to safeguard student data and institutional integrity remains paramount. Regulatory complexities and the need for streamlined processes are also areas of focus. The continuous evolution of technology requires constant updating of curriculum and teaching methodologies, posing a challenge for educational institutions. Furthermore, the need for increased funding towards research and development in educational technology is vital for sustained growth. The Economic Survey of India highlights the government's efforts to address these challenges through targeted investments and policy reforms.

Looking ahead, the projections for India's education and skill development sector are optimistic. The sector is expected to witness continued growth, driven by increasing government investments, rising demand for skilled professionals, and the adoption of innovative technologies. The emphasis on lifelong learning, upskilling, and reskilling initiatives is poised to play a crucial role in enhancing employability and driving economic growth. The integration of industry-relevant skills into educational curricula, coupled with the expansion of vocational training programs, will be

instrumental in preparing India's workforce for the future.

While navigating the complexities of technological advancements and socio-economic challenges, India's education and skill development sector is demonstrating resilience and a strong commitment to progress. The strategic policy initiatives, coupled with increased investments and a focus on innovation, are laying the foundation for a robust and future-ready education.

Education & Skill Development Sector Risk Index 2024 Vs 2023

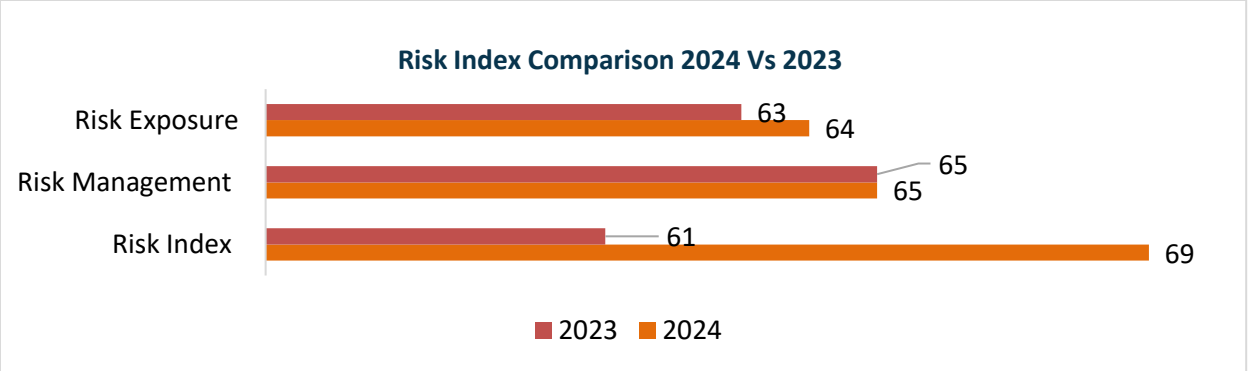


Figure 4: Detailed Comparative Analysis 2024 Vs. 2023

Education & Skill Development Sector Risk Index 2024 Vs 2023

The overall Risk Index for the sector increased from 61 to 69 in 2024 owing to an increase in the risk exposure in the sector.

Education & Skill Development Sector Risk Exposure 2024 Vs 2023

In the education sector, the increase in risk exposure by 1 can be attributed to several evolving challenges. First, the growing demand for quality education, especially in the context of India's expanding young population, has put a strain on infrastructure and resources, particularly in underserved areas. The increasing focus on technology integration, such as online learning platforms and digital tools, has also introduced new risks related to cybersecurity, data privacy, and the digital divide between urban and rural regions. Furthermore, the unpredictable nature of policy changes, such as those related to curriculum reforms and regulatory scrutiny, added an element of uncertainty. Geopolitical risks and the global impact of the pandemic further compounded these issues, creating disruptions in international partnerships and student mobility.

Education & Skill Development Sector Risk Management 2024 Vs 2023

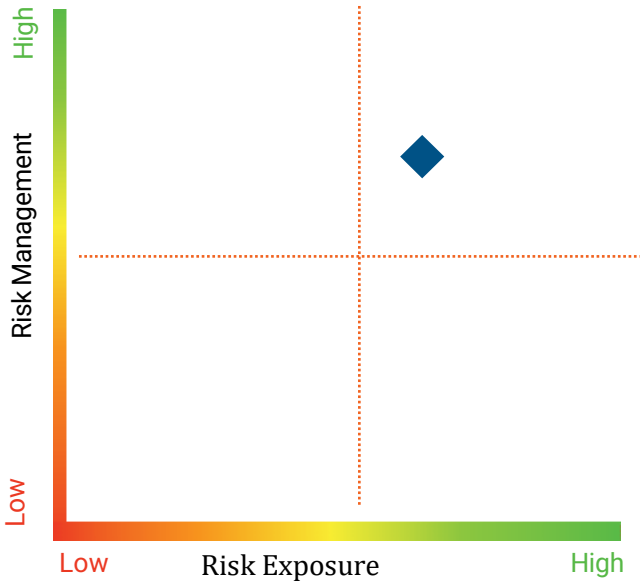
Despite these heightened exposures, risk management in the education sector remained the same due to the continued reliance on existing strategies. Educational institutions and organizations continued to focus on adapting to digital learning, managing the integration of technology into curricula, and complying with regulatory changes using established frameworks. While the risks have evolved, the sector's approach to risk management, which includes infrastructure development, professional training for educators, and investments in technology, did not undergo significant shifts in 2024.

Key Highlights

Risk Dimension Analysis: Market and Economy

Risk Exposure Score: 68

Risk Management Score: 67



Inflation

- In 2024, Education and skill development sector in India continues to grapple with significant inflationary pressures. This disparity highlights rapid escalation of educational expenses, with the potential for costs to double every six to seven years, placing substantial burden on families.
- The rising cost of tuition fees across educational institutions remains a central concern, making higher education increasingly inaccessible for middle-class families.
- Additionally, the escalating prices of essential educational materials, including textooks, transportation, and uniforms, contribute to the overall financial strain. These pressures are particularly acute for economically disadvantaged students, who face heightened barriers to accessing higher education and skill development opportunities.
- Furthermore, the need for updated digital infrastructure, software, and hardware, combined with the increasing demand for skilled educators capable of delivering technology-enhanced learning, adds to the financial burden on educational institutions.
- In the skill development sector, the cost of specialized training equipment, industry-relevant software, and qualified instructors remains a significant factor, potentially limiting the accessibility and scalability of crucial skill-building programs.

Taxation and Regulatory Risk:

- In 2024, the taxation and regulatory landscape for India's education and skill development sector is undergoing notable shifts, presenting both opportunities and challenges.
- One key aspect is the GST. Educational services, particularly those provided by government, are

generally exempt from GST. Ancillary services, such as coaching classes, vocational training provided by private institutions, and online learning platforms, are subject to GST. The current rates on these services can impact affordability and accessibility. Changes to GST rates in future can create fiscal uncertainty for educational institutions.

- The implementation of the National Education Policy (NEP) 2020 has derived reforms related to accreditation, curriculum development, and the establishment of multidisciplinary institutions. Compliance with these regulations requires significant investment in infrastructure, faculty training, and administrative processes, adding to operational costs of educational providers.
- Moreover, the regulatory environment for online education and ed-tech platforms is becoming increasingly complex. Data privacy, cybersecurity, and consumer protection are key concerns, leading to the introduction of new regulations and guidelines. Compliance with these standards is essential for maintaining trust and ensuring the sustainable growth of the digital education sector.

Foreign Exchange Risk:

- In 2024, the education and skill development sector, particularly concerning international education, faces significant risks. The Indian Rupee's fluctuations against major global currencies, notably US Dollar, continue to be a primary concern. With the rupee experiencing moderate depreciation, financial burden on Indian students pursuing education abroad has intensified.
- The cost of studying abroad is further compounded by rising tuition fees and additional charges imposed by foreign universities. These factors, combined with the volatility of foreign exchange rates, make international education increasingly expensive.
- The rising cost of air travel, influenced by factors such as aviation fuel prices and exchange rate fluctuations, adds another layer of financial pressure. This directly impacts the overall cost of pursuing education overseas, creating budgetary challenges for families.
- Furthermore, the increasing reliance on online learning platforms and ed-tech solutions, often involving international collaborations and software subscriptions, exposes the education sector to foreign exchange risks.
- Therefore, managing foreign exchange risks is crucial for ensuring affordability and accessibility. Financial planning, hedging strategies, and exploring alternative funding options are essential for mitigating these risks.

Competitive Risk:

- The education and skill development sector faces escalating risks driven by rapid proliferation of online learning platforms, emergence of AI-powered educational tools, and increasing demand for personalized learning experiences.
- The rise of edtech companies and digital learning platforms has intensified competition. These

platforms leverage AI, and data analytics to offer personalized learning paths, and skill assessments, challenging traditional classroom-based models. Educational institutions must invest in digital infrastructure, integrate technology, and develop online learning capabilities to remain competitive.

- The growing demand for integrated learning solutions means that educational institutions must provide comprehensive range of services beyond traditional academic programs. Further, the increased accessibility of free, or low cost, educational resources from reputable sources has increased competition.
- To mitigate these risks, educational institutions and skill development providers should invest in digital transformation, offer personalized learning experiences and flexible learning options, enhance career services, and Monitor competitor activities.

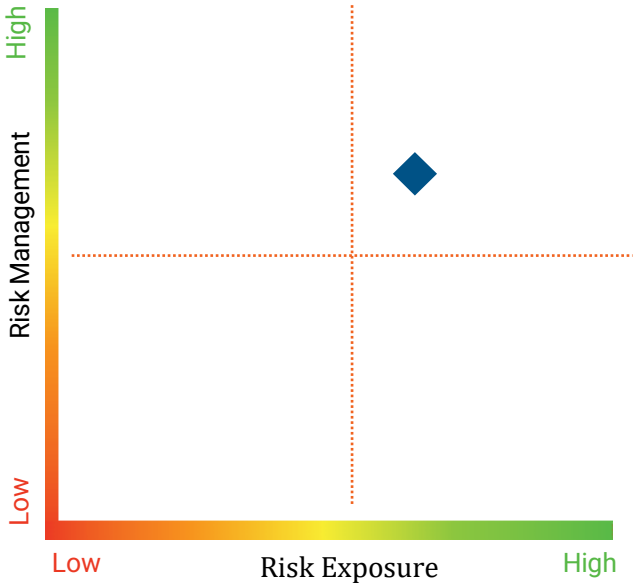
Geo-Political Tension:

- Global conflicts and shifting diplomatic relations can disrupt international student mobility, research partnerships, and the exchange of knowledge, hindering the sector's ability to foster innovation and cross-cultural understanding.
- Geopolitical tensions create uncertainty that can deter foreign investment in education and skill development initiatives. This directly impacts the ability of institutions to provide quality education and develop skills relevant to the global market. Any instability in relations with major countries can deter students from pursuing education or training in affected regions, leading to a decline in international student mobility.
- Restrictions on foreign capital flows, sanctions compliance measures, and changes in visa regulations can cause volatility in funding and student enrolments. Institutions heavily involved in international collaborations and student exchanges must ensure their risk models account for geopolitical instability to avoid losses from sudden policy changes.
- The education and skill development sector should diversify International Partnerships, develop Contingency Plans, invest in Digital Learning Infrastructure, advocate for policies that support international collaboration and focus on skills related to global challenges to mitigate these risks.

Risk Dimension Analysis: Technology

Risk Exposure Score: 65

Risk Management Score: 64



Innovation Risk / Obsolete Technology

- The rapid pace of technological advancements presents both opportunities and risks. Educational institutions are under pressure to adopt and integrate emerging technologies to meet evolving needs. However, this process is fraught with challenges, including compatibility issues, resistance to change from faculty and staff, and the need for continuous professional development to ensure effective technology utilization.
- Investment in R&D is crucial for fostering innovation, but institutions face challenges in allocating resources and evaluating new educational technologies effectively. The evaluation of educational technologies requires rigorous testing, including assessment of impact on learning outcomes.
- Moreover, the increasing focus on next-generation technologies like AI-powered personalized learning, immersive VR/AR experiences, and blockchain-based credentialing presents both opportunities and risks. Adapting to these technological frontiers requires substantial investment in advanced research capabilities, testing infrastructure, and faculty training

Intellectual Property Risk

- In 2024, IP risks are increasingly prominent in the education and skill development sector, driven by the growing emphasis on innovation and technology transfer. As educational institutions engage in research, development, and commercialization of new technologies, the protection of IP becomes a critical consideration.
- While the focus on fostering innovation and knowledge creation is essential, it also necessitates robust mechanisms for safeguarding IP rights. Higher education institutions are now increasingly involved in technology transfer, licensing, and commercialization. This shift highlights the need for clear IP policies that balance the dissemination of knowledge with the protection of commercial interests.
- Furthermore, the increasing collaboration between educational institutions and private investors in R&D raises complex ownership issues. Contractual and licensing arrangements must clearly define the rights and responsibilities of all parties involved to avoid potential

conflicts and litigation.

- Educational institutions must adopt sophisticated IP management strategies, including clear IP policies, secure data management systems, and compliance with relevant regulations. The rise of online learning and digital content creation also introduces new IP challenges, such as copyright infringement and unauthorized use of educational materials. Educational institutions must educate faculty, staff, and students about IP rights and responsibilities.

Disruptive Technology

- AI-driven energy management systems began transforming power grid operations, but traditional utilities struggled to integrate these advanced systems due to lack of digital infrastructure.
- Next-generation nuclear power technologies gained momentum globally, but India's progress in advanced reactors remained slow, creating a risk of falling behind in clean energy innovation.
- Direct air capture (DAC) carbon removal technology started gaining commercial traction, but Indian power companies hesitated to invest due to high costs and uncertain regulatory incentives.
- Decentralized peer-to-peer (P2P) energy trading platforms gained traction, allowing small renewable producers to sell power directly, but traditional utilities viewed this as a competitive threat.

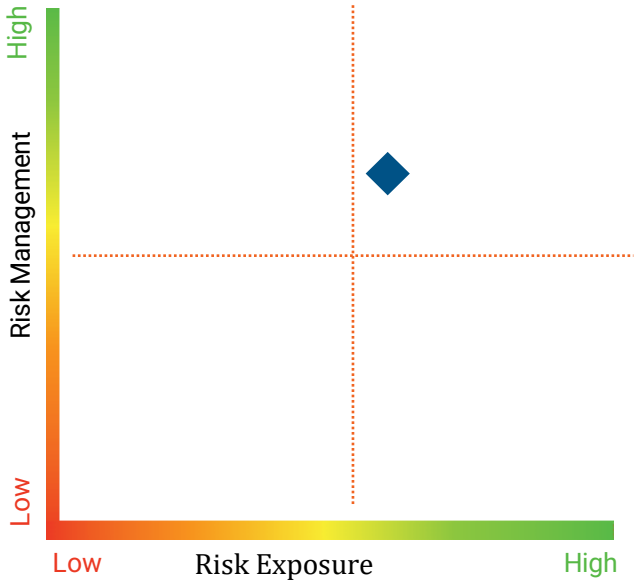
Data Compromise

- Power sector cyberattacks increased in 2024, with multiple DISCOMs reporting hacking attempts targeting billing databases, leading to concerns over data integrity and consumer privacy.
- Energy trading platforms faced security breaches, with hackers attempting to manipulate power prices through unauthorized access to real-time trading algorithms.
- Smart meter deployments exposed vulnerabilities, as cybersecurity firms detected loopholes that could allow remote manipulation of meter readings, raising risks of financial fraud.
- Confidential project bidding data faced risks of leaks, with unauthorized disclosures of tariff bids for renewable energy auctions affecting market competitiveness.

Risk Dimension Analysis: Operational and Physical

Risk Exposure Score: 64

Risk Management Score: 67



Critical Infrastructure Failure / Machine Breakdown

- The reliance on sophisticated technology including online learning platforms, digital labs, and advanced simulation tools, makes the sector vulnerable to equipment malfunctions and system failures. Technical issues, inadequate maintenance, and unforeseen events can disrupt educational activities, delay training programs, and increase operational costs.
- For vocational training and skill development centres, machine breakdowns can directly impact practical training and certification processes. Equipment malfunctions in labs, workshops, and simulation environments can lead to delays in training, reduced productivity, and potential safety hazards.
- Furthermore, the development of certain technologies and training programs is heavily dependent on government actions, such as infrastructure investment, internet connectivity, and the availability of essential resources.
- In the context of online learning, critical infrastructure failures can include server outages, network disruptions, and data centre malfunctions. These failures can disrupt online classes, assessments, and communication, impacting the learning experience and potentially leading to data loss.
- Preventive maintenance, redundant systems, and backup plans are essential for mitigating these risks. The complexity of modern educational technology and the rapid pace of technological advancements make it challenging to anticipate and prevent all potential failures.

Business Continuity:

- In 2024, the sector faces a dynamic landscape characterized by rapid technological advancements, evolving regulatory frameworks, and unforeseen disruptions, making robust business continuity plans essential.
- Institutions must conduct thorough risk assessments, establish contingency measures, and

invest in technology solutions like cloud computing, remote learning platforms, and cybersecurity infrastructure. While AI can enhance efficiency and automate certain processes, it also introduces new vulnerabilities that must be addressed in business continuity plans.

- Educational institutions must regularly revisit and update their business continuity plans so that they remain resilient to new and emerging threats. Partnering with experts is a smart choice for institutions that want to improve their preparedness. Organizations that specialize in business continuity planning can provide robust strategies that are tailored to meet unique institutional needs.

Supply Chain Risk:

- Disruptions in the supply chain can impact the availability of essential resources, equipment, and technology, affecting educational delivery and skill training programs including supplier failures, raw material shortages, geopolitical instability, and logistical challenges.
- The increasing reliance on digital platforms and online learning solutions also introduces supply chain risks related to software and hardware dependencies. Delays in software updates, hardware replacements, or network infrastructure maintenance can disrupt online classes and assessments.
- To mitigate these risks, educational institutions and skill development centres should diversify their supplier base to reduce reliance on single sources, build strong relationships with key partners and suppliers, invest in robust logistics and transportation systems for timely delivery of educational resources and conduct regular risk assessments and develop contingency plans to address potential disruptions.
- The curriculum in educational institutions, particularly in business and management programs, needs to evolve to include a greater emphasis on supply chain management. This includes integrating supply chain concepts into core curricula and offering executive education programs to enhance understanding and appreciation of supply chain management principles. These skills are crucial for navigating the complexities of modern supply chains.

Commodity Price Risk - Volatility in prices of raw materials:

- Volatility in prices of raw materials, particularly those used in educational infrastructure and technology, can affect budget planning and project execution. Fluctuations in the price of metals used in computer hardware or building materials for school construction can lead to unexpected expenses.
- Rising energy costs impact the operational expenses of educational institutions, particularly those with large campuses or energy-intensive facilities. The price of paper and other school supplies can also fluctuate.
- Commodity price volatility can impact the demand for specific skills and training programs. To mitigate these risks, institutions should implement Budgeting Flexibility, Monitor Market Trends, diversify suppliers, and utilize long term contracts.

Portfolio Risk:

- A highly concentrated funding portfolio, relying heavily on a single source such as government grants or tuition fees, exposes institutions to heightened financial risks. If a significant portion of revenue is tied to a particular funding stream, any downturn or policy change can lead to financial instability.
- Losing key institutional clients, such as corporate training contracts or research collaborations, can significantly impact revenue streams. Over-dependence on specific technology providers or content developers can disrupt operations and hinder innovation.
- Business model risks arise from shifting regulatory frameworks, evolving learner preferences, and technological disruptions. Traditional institutions must continuously innovate to stay relevant and competitive. Institutions should diversify funding sources, expand program offerings, build strong partnerships and regularly review partners to mitigate these risks.

Environmental Hazard Risk:

- Climate change and extreme weather events pose risks to educational infrastructure, such as school buildings and data centres, through increased damage from floods, storms, and heatwaves. Regulatory pressure for sustainable practices requires institutions to integrate environmental risk assessments into their operations and infrastructure development.
- Deforestation, water scarcity, and pollution can impact the health and well-being of students and staff, affecting attendance and academic performance. Institutions must implement sustainable practices, such as energy efficiency, waste reduction, and water conservation, to mitigate environmental risks. Failure to address sustainability concerns can lead to reputational damage and potential funding losses.

Workplace Accident:

- Workplace accidents in the education and skill development sector can disrupt operations, lead to legal liabilities, and damage reputations. Fire hazards, slips and falls, and equipment malfunctions can occur in classrooms, laboratories, and administrative offices.
- Workplace injuries can lead to compensation claims and increased insurance costs. Employee health and safety regulations are becoming stricter, requiring institutions to enhance workplace security measures. Containment incidents, such as chemical spills in laboratories or manufacturing units associated with vocational training, can impact financial exposure.
- Labor strikes and protests at educational institutions can disrupt academic activities and student services. To mitigate these risks, institutions should implement Robust Safety Protocols, provide Regular Safety Training, invest in Safety Equipment, develop Emergency Response Plans and maintain Records.

Human Resource:

- Attracting, retaining, and developing skilled educators and administrative personnel is

essential for sector's success and its ability to deliver quality education. The sector faces a shortage of skilled labour in various areas, particularly in STEM education, vocational training, and digital learning. Competitive compensation and benefits packages, comprehensive training programs, and clear career development opportunities are crucial to attract and retain top talent.

- While India has made significant progress in expanding access to education, particularly at the primary level, the quality of education and skill development remains a challenge. The skills gap is particularly evident in industries such as manufacturing, healthcare, and engineering, where the demand for skilled workers is high.
- Continuous learning and upskilling are essential for enhancing employability in today's fast-changing job market. The rapid pace of technological change means that the skills required by employers are constantly evolving, and employees need to keep up with these changes. Upskilling programs provide an opportunity for employees to learn new skills and remain relevant in the job market.

Financial Risk:

- Financial risks in the education and skill development sector are multifaceted, driven by fluctuating funding models, evolving market demands, and increasing reliance on technology. Institutions must strengthen their internal audit and financial reporting systems to ensure compliance with relevant accounting standards and regulatory requirements.
- Further, fluctuating enrolment numbers and changes in government funding policies can significantly impact revenue streams, requiring institutions to adopt flexible financial planning and budgeting strategies. Investments in digital infrastructure, online learning platforms, and AI-powered tools require substantial upfront costs and ongoing maintenance.
- Institutions must carefully assess the return on investment for technology initiatives and develop strategies for managing technology obsolescence. Moreover, economic downturns and changes in labour market demands can affect the demand for specific skills and training programs, impacting revenue and profitability. Institutions must closely monitor economic trends and adapt their program offerings to align with evolving market needs.

Breaches of law (local/ international)

- Failure to comply with local and international laws can lead to lawsuits, regulatory fines, and reputational damage. Institutions must ensure compliance with data privacy regulations, intellectual property laws, and accessibility standards.
- The rapid evolution of technology and the emergence of new educational models, such as online learning and micro-credentials, require institutions to continuously update their compliance mechanisms to align with evolving regulations.
- Institutions must ensure strict legal due diligence when expanding into foreign markets or offering online programs to international students to prevent exposure to complex

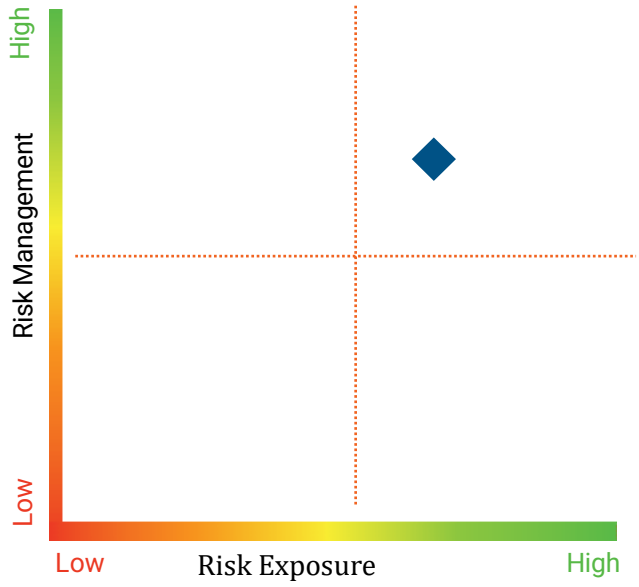
international legal frameworks.

- Consumer protection laws are becoming more stringent, requiring institutions to ensure transparency in program disclosures and student rights. Institutions must regularly update their student service policies to align with consumer rights regulations and provide clear and accurate information about program outcomes and costs.

Risk Dimension Analysis: Crime and Security

Risk Exposure Score: 59

Risk Management Score: 60



Cyber-crimes

- The increasing reliance on digital platforms, online learning, and the storage of sensitive student data has made educational institutions prime targets for cyberattacks.
- Educational institutions are responding by developing flexible learning options, such as online and hybrid programs, to accommodate working professionals. These programs often incorporate real-world scenarios, virtual labs, and industry certifications to ensure graduates are prepared for immediate challenges.
- Advanced technology like AI is being integrated into training programs, helping students understand modern threat detection and response mechanisms. This technological integration ensures graduates are familiar with cutting-edge tools and methodologies used in professional environments.
- To mitigate these risks, educational institutions should conduct regular security audits and vulnerability assessments, provide cybersecurity training for staff and students, develop and enforce strong data protection policies, partner with experts and industry leaders and back up data frequently.

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Counterfeiting

- Counterfeiting of educational materials, including textbooks, software, and online learning resources, compromises product quality, safety, and reliability. This can have a detrimental effect on student learning and skill development, as counterfeit materials often lack the accuracy and quality of authentic products.
- Collaboration between regulatory agencies, law enforcement authorities, and educational institutions is essential for conducting investigations and prosecuting counterfeiters. This helps safeguard students and institutions from the negative impacts of counterfeit materials.
- Institutions should launch initiatives to inform students, parents, and educators about the signs of counterfeit products and promote ethical consumption practices. This includes educating them about the potential consequences of using counterfeit materials, such as compromised academic integrity and diminished learning outcomes.
- To mitigate the risks of counterfeiting, implement robust supply chain management practices, conducting awareness campaigns to educate stakeholders about the risks of counterfeit

materials, investing in technological solutions to detect and prevent counterfeiting, educate Students about the dangers of using counterfeit materials is essential.

Threat to Women Security:

- Instances of digital harassment, cyberstalking, and online fraud disproportionately affect female students, educators, and staff. As online learning platforms and digital communication tools become more prevalent, the risk of cyber-related harassment and exploitation increases.
- Institutions must implement robust cybersecurity measures and provide training on digital safety to mitigate these risks. Physical security risks on campuses and in training centres, particularly in remote or underserved areas, require enhanced safety measures.
- Institutions must partner with NGOs and community organizations to educate women on safety protocols and provide support services. Workplace security concerns for female employees, including harassment and discrimination, necessitate strengthened internal grievance redressal mechanisms and workplace security policies. Promoting a culture of respect and inclusivity is crucial for creating a safe and supportive environment for women.

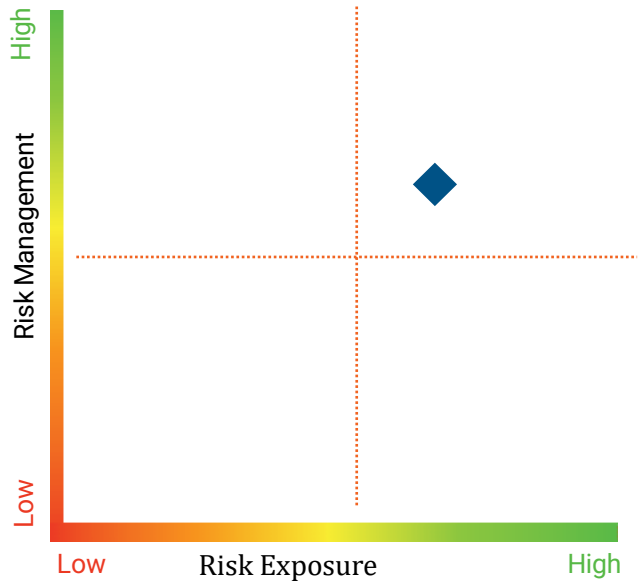
Terrorism

- Terrorist financing and money laundering risks require stringent compliance with regulations aimed at preventing illicit financial flows. Institutions that receive international funding or engage in cross-border collaborations must implement robust due diligence procedures to ensure compliance with anti-money laundering (AML) and counter-terrorism financing (CTF) regulations.
- Terror-related cyberattacks targeting educational infrastructure, such as online learning platforms and research databases, can disrupt services and compromise sensitive data. Institutions must enhance their cybersecurity defences to mitigate these risks.
- Institutions must implement security protocols to safeguard physical assets and ensure safety of students and staff. Sanctions on entities linked to terrorism require constant monitoring of funding sources and partnerships. Institutions must ensure real-time screening of financial transactions and collaborations to detect suspicious activity.

Risk Dimension Analysis: Natural Hazard and Event

Risk Exposure Score: 71

Risk Management Score: 75



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

- Natural disasters have a profound impact on the lives of people, potentially destroying structures and disrupting social life. Education is one of the areas severely affected, with educational institutions often damaged or destroyed, hindering educational process and limiting students' access to educational activities.
- Aging infrastructure and insufficient funding exacerbate the vulnerability of educational institutions to natural hazards. Retrofitting buildings, establishing evacuation plans, and conducting regular drills are crucial for disaster preparedness. Government initiatives, including the National Education Policy 2020, aim to enhance disaster resilience by increasing public investment in education and allowing foreign universities to operate.
- To mitigate this risk, measures such as conduct regular risk assessments, establishing plans and conducting regular drills, fostering partnerships with disaster management agencies, ensuring access to mental health support for students and educators affected by disasters is essential.
- Landslides in hydroelectric project zones, especially in the Himalayas, raised concerns over dam safety, with increased sedimentation impacting turbine efficiency and reservoir capacity.
- Flooding of coal mines in monsoon season affected fuel availability, forcing thermal power plants to rely on expensive imported coal, increasing generation costs.
- Lightning strikes damaged critical grid substations, leading to localized blackouts and higher maintenance costs for transmission operators.

Pandemic and other Global Epidemic Diseases

- The COVID-19 pandemic served as a stark reminder of the vulnerability of traditional educational systems and the need for resilient, adaptable strategies.
- The pandemic's impact on education was profound. Transition to online education brought about both adverse educational changes and adverse health consequences for children and

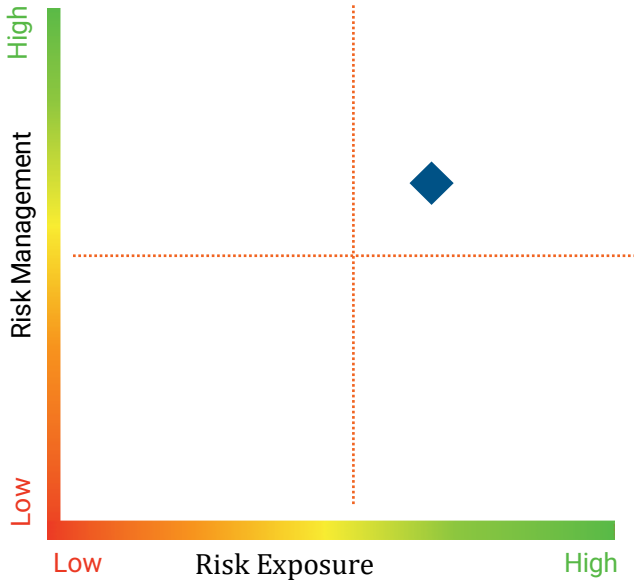
young adult learners.

- However, this transition also introduced new challenges, including digital divide issues, access to reliable internet, and the need for effective online teaching methodologies. Education institutions prioritized health protocols and student well-being, integrating mental health services and stress management programs.
- Educational institutions must continue to develop and maintain robust digital infrastructure to support online and hybrid learning models, implement comprehensive health and safety protocols, provide mental health support, focus on the quality of online education and develop effective online teaching methodologies, collaborate with health authorities to stay informed about emerging health threats and develop flexible training programs that can adapt to disruptions.

Risk Dimension Analysis: Strategic Risk

Risk Exposure Score: 62

Risk Management Score: 62



Public Sentiment:

- Public sentiment highlights widespread concerns over rising costs of education, particularly tuition fees, and the resulting impact on affordability and accessibility. These concerns influence public discourse on government policies and necessitate reforms to enhance affordability and equitable access to quality education.
- The challenges in affordability and the limitations on for-profit organizations financing education, amplify concerns among families. This underscores the need for regulatory reforms that address financial burdens and promote sustainable educational development.
- Maintaining a positive public image is crucial for educational institutions and skill development providers. Negative public sentiment can lead to decreased enrolment, increased regulatory scrutiny, and challenges in attracting and retaining talent.
- Transparent communication, community engagement, and commitment to ethical and sustainable practices are essential for building trust and maintaining positive public image

Resource scarcity / Misutilisation / Overall Utilisation:

- Educational institutions require access to range of resources, including digital infrastructure, skilled educators, training materials, and financial resources. Scarcity or misutilization of any of these resources can impact educational outcomes and increase operational costs.
- Misutilization of digital infrastructure can hinder effectiveness of digital learning initiatives. On the other hand, Financial misutilization can limit the availability of essential resources and hinder the implementation of innovative educational programs.
- Inefficient utilization of training facilities and equipment can lead to delays in training programs and reduced productivity. This is compounded by the fact that many vocational training centres often have outdated equipment.
- To address these challenges, the education and skill development sector should implement robust resource management systems, invest in upgrading digital infrastructure, develop efficient financial management and increase use of data analytics to monitor resource

utilization.

Delay in Execution of Projects:

- Infrastructure development projects, such as building new classrooms, upgrading technology labs, or implementing learning management systems (LMS), often face delays due to regulatory approvals, funding constraints, and logistical challenges.
- Delays in launching new educational products or services, such as online courses or skill-based certifications, can result in a loss of competitive advantage and missed market opportunities. Slow decision-making processes within institutions, particularly in large or bureaucratic organizations, can hinder timely execution of critical projects.
- Internal complexities related to approvals, resource allocation, and cross-functional collaboration can lead to prolonged project timelines. External dependencies, such as reliance on third-party technology providers or government agencies, can further delay project timelines.
- To mitigate delays, institutions should engage with regulatory bodies, implement agile methodologies to enhance project flexibility, develop contingency plans and optimize internal decision-making processes.

Increased Number of Recalls and Quality Audits:

- The education and skill development sector is facing increasing scrutiny from regulatory bodies and agencies, leading to rise in quality audits and program recalls. Regulatory bodies frequently conduct audits to ensure institutions meet established standards for curriculum delivery, student support, and learning outcomes.
- Any discrepancies identified during these audits can result in program recalls or loss of accreditation. Increased scrutiny, such as assessment methods, faculty qualifications, and student feedback mechanisms, has led to stricter quality audits. Institutions are adopting AI-driven compliance tracking tools and investing in robust quality assurance frameworks to minimize audit-related risks. Poorly structured educational programs or learning materials, such as online courses with outdated content or ineffective pedagogical approaches, may require recalls if they do not meet learner expectations or regulatory standards.
- Poorly structured educational programs or learning materials, such as online courses with outdated content or ineffective pedagogical approaches, may require recalls if they do not meet learner expectations or regulatory standards.
- Institutions must ensure that their programs and services are accessible to all learners and that they comply with all relevant regulations. Implementing robust product testing frameworks, enhancing transparency in program disclosures, and reinforcing student rights policies are crucial for mitigating these risks.

Failed / Hostile Mergers & Acquisitions:

- Mergers and acquisitions (M&As) are increasingly common in the education and skill development sector, driven by factors such as consolidation, expansion, and diversification. Unsuccessful M&As can result in financial losses, cultural conflicts, and operational inefficiencies.
- Incompatibility between merging entities in terms of technology platforms, curriculum approaches, or organizational cultures can lead to failed integrations. Hostile takeovers can lead to management disputes, employee dissatisfaction, and strategic misalignment.
- Institutions must focus on stakeholder alignment strategies to prevent hostile acquisition attempts. Overvaluation or mis-judgments of synergies between merging firms can result in financial strain and investor dissatisfaction.
- To mitigate M&A risks, institutions should conduct thorough due diligence, focus on cultural and stakeholder alignment, conduct thorough financial evaluations, create contingency plans, and engage in transparent communication.

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 house-keeping, 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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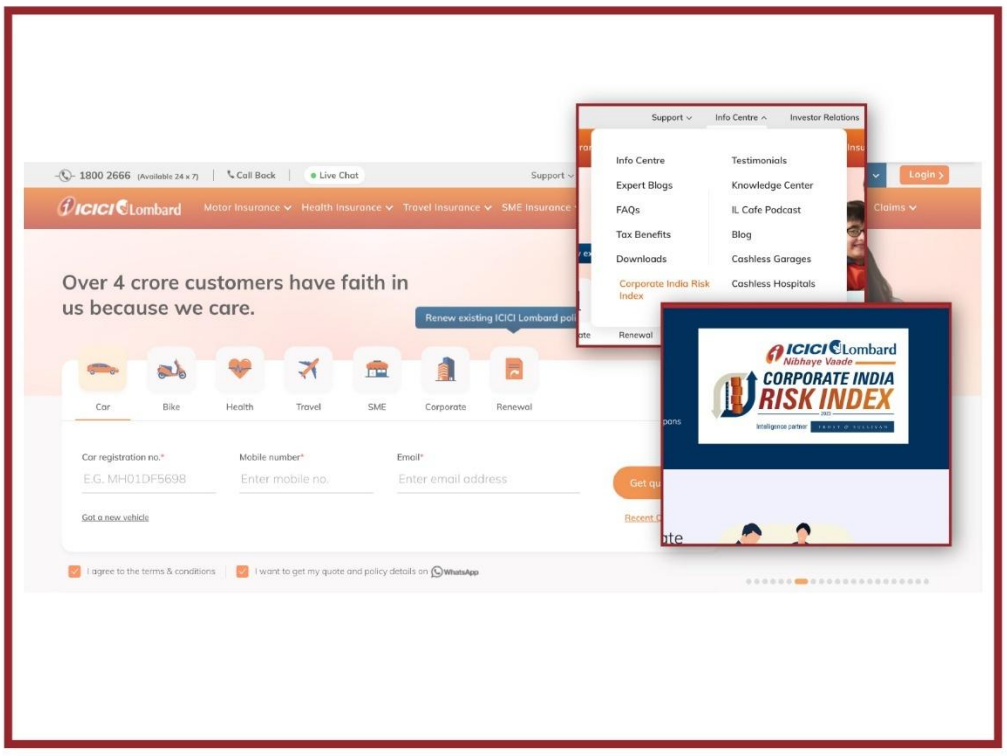

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