ICICI Lombard
Nibhaye Vaade

CORPORATE INDIA RISK INDEX

2022

Intelligence partner FROST & SULLIVAN

SECTOR REPORT 2022

EDUCATION & SKILL DEVELOPMENT


RISK

Table of Contents

Table of Figures

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

The education sector in India faces several market and economic risks, including high inflation rates averaging 10% from 2012-2021, policy framework instability, foreign exchange risks, and homogeneity in product offerings. Operational and physical risks include resource allocation and management for critical infrastructure incorporation, while technology risks involve susceptibility to data compromises and limited accessibility and affordability in certain regions.

Security risks require safeguarding proprietary content and strengthening privacy frameworks. Natural hazard and event risks include the impact of the COVID-19 pandemic, natural calamities such as earthquakes and floods, and opportunities for IT-enabled sustainable and scalable teaching solutions. Strategic decisions are necessary for targeted marketing efforts and to prevent negative stakeholder sentiment. Quality assurance is also important to avoid parity in educational outcomes.

The industry is seeing a trend towards market capitalization over value creation, and there is a high demand for innovation to create unique value for learners. Educational institutions are adopting an integrated approach of Human Intelligence and Artificial Intelligence for infrastructure management, and there is an upsurge in the need for IT-enabled operations. Overall, the education sector in India faces a range of challenges and opportunities as it navigates the changing landscape of the industry.

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 Defense, 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. Around 7.4% of the attacks in the Asian region were targeted at India in 2022.

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. From Surat Gas leak to landslides in the north and cyclones in Bay of Bengal, the year 2022 was no exception. Such 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 COVID-19 pandemic and similar another global epidemic.

Strategic risk

- Strategic risk is the risk that failed business decisions may pose to 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.

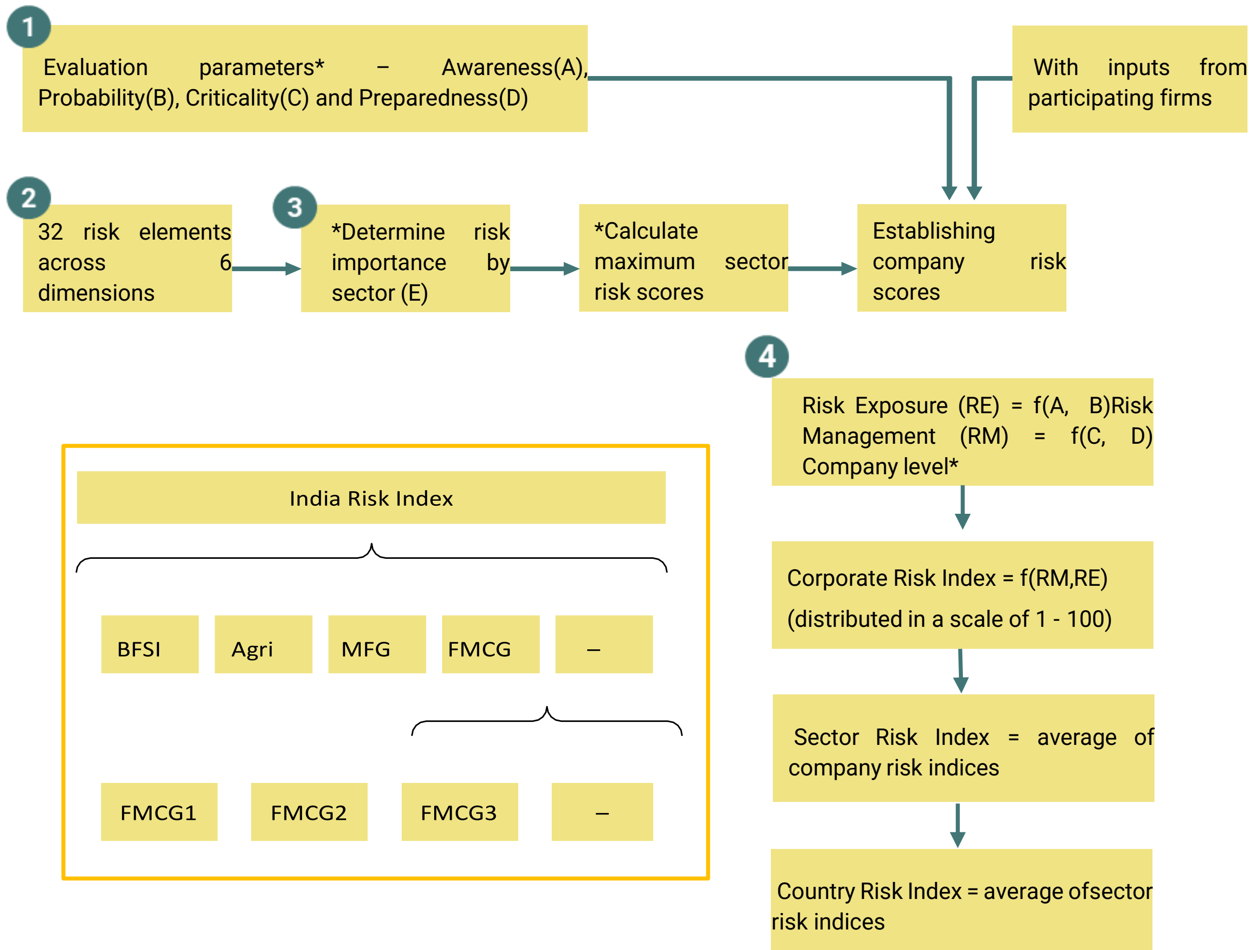
- **Public Sentiment:** Current events playing out in the public scene can change the public sentiment.

- **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



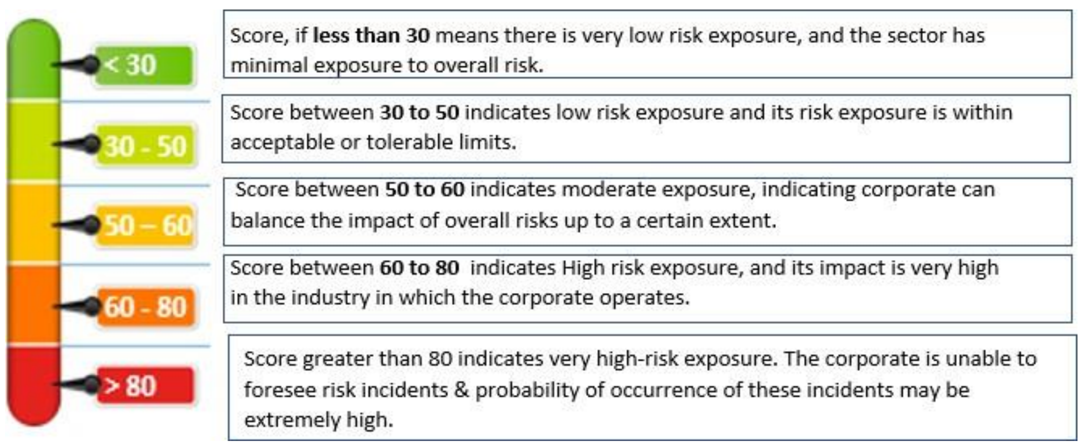
1. **Evaluation Parameters*:** The index maps the risks faced by any enterprise basis of Awareness, Probability, Criticality and Preparedness against the defined Risk elements. The evaluation Parameters are defined as: Awareness - Level of awareness of potential risk affecting the firm. - Likelihood of risk to affect the business goals of the firm adversely. Criticality - Level of impact of the identified risk on the success of business goals. Preparedness - Risk handling practices/ mechanisms already in place to handle the risk.
2. **Determining Risk Importance*:** Importance/Impact of individual risk element is established against individual sector based on the published corporate risk reports, in depth sector understanding by F&S team and SMEs.
3. **Calculating Maximum Sector Risk Score**: Weighted Sum of all risk elements based on their importance to the respective sector.
4. **Company Level*:** All the Risk Index scores for companies in a sector are averaged to represent the sector; and sectors average to India. Risk Exposure is defined as the function of corporate's Risk Awareness and Probability of risk occurrence. Risk Management is defined as the function of an enterprise risk preparedness and criticality risk impact assessment.

Defining the Risk Scale

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

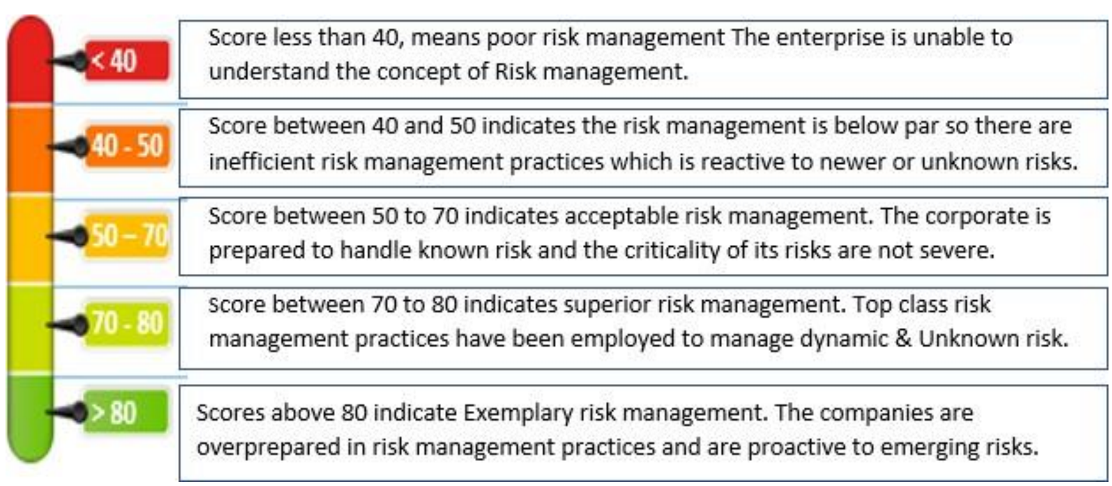
A. ICICI Lombard Corporate Risk Exposure – Scale

Risk Exposure: The impact of any internal, external or strategic occurrence on the financial performance of an organization is defined as the corporate risk exposure. Risk has traditionally been seen as something to be avoided – with the belief that if behavior is risky, it's not something a business should pursue. But the very nature of business is to take risks to attain growth. Risk can be a creator of value and can play a unique role in driving business performance. Let's look at the risk exposure scale.



B. ICICI Lombard Corporate Risk Management – Scale

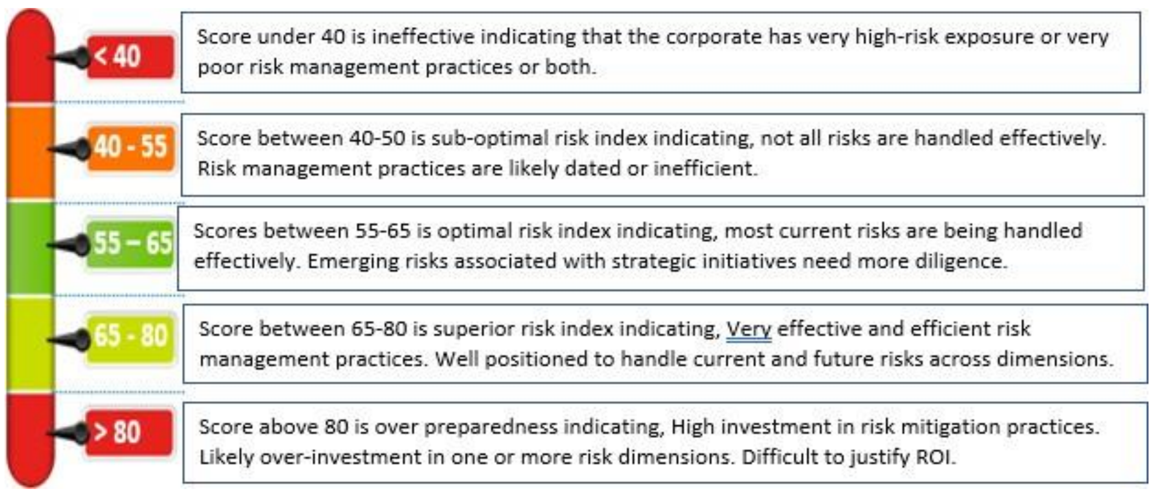
Risk Management: Identification, Evaluation and Prioritization of corporate risks followed by well-coordinated steps to minimize the occurrence of uncertainties in the foreseeable future is defined as the Corporate Risk Management. The risk management scale works in the opposite to that of the risk exposure scale. Let's look at the risk management scale.



C. ICICI Lombard Corporate Risk Index – Scale

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

Let's look at the risk Index scale.



India - Emerging Superpower with Optimized Corporate Risk Handling

Manufacturing sector contribution to India's GDP in 2022 stands at 17% and is expected to grow to 25% by 2025, the expected growth is attributed to various favorable schemes initiated by Government of India like 'Make in India', 'Digital India', Improved Road Infrastructure, implementation of modern technologies of manufacturing resulting in optimized and effective production, Also the pandemic has made business realize that they cannot just rely on a single manufacturing hub; hence notion of "China+1" is making the world realize the significance of India. China is in a trade war with the USA, which is positively shaping the role India will play in the global arena.

The below chart showcases the gradual increase in India's manufacturing exports.

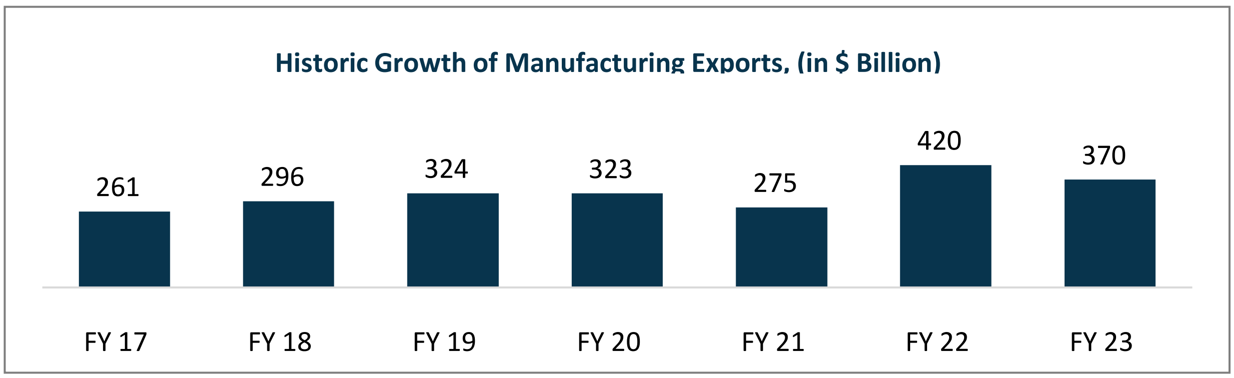


Figure 1: India's Growth of manufacturing exports. (Source: Redseer)

Indian manufacturing sector is also focusing on electronics manufacturing like mobile phones, industrial electronics consumer electronics, etc. due to government initiatives the production has doubled since 2015.

Aerospace and defense sector in India have evolved significantly, Govt. of India have identified A&D as area of focus due to the belligerent neighborhood, steps like Make in India(Atmanirbhar Bharat) is helping the overall defense sector, however India still remains the largest importer of arms and ammunition, favorable policies and ease in regulations is helping the drone industry in India and many new start-ups and big players are entering in this space.

Urbanization is another phenomenon evolving in India and it is estimated that by 2030 more than 400 million people will be living in cities, due to this megatrend huge push towards realty and infra sector is observed which is also the growth of ancillary industries like metals, cement, water availability, sanitation, mobility etc., the government along with the private sector is working on multiple initiatives to manage the huge inflow.

India has observed a steady adoption towards EVs in recent years, though India adoption still remains very low in comparison to Europe, Canada, China, however all big auto players are coming with new lines of EVs, and significant strategic investment have been made. The adoption is primarily due to lower running costs, lower maintenance, zero tailpipe emissions, tax and financial benefits by the government, convenience of charging.

BFSI sector in India is showcasing a significant robustness in the time of global crisis, there is a growing demand for financial services as there is a gradual rise in income across income brackets, with a rapid increase in mobile penetration and internet availability more than 2100 fintech companies have emerged in India, the traditional banks are also adopting the digital technologies at a required pace, investment on making the systems secured from cyber threats is utmost priority. Policy support by the government in the union budget 2021-22 is taking up shape and is helping the BFSI sector in 2022 and coming years, like government approval of 100% FDI for insurance intermediaries have increased the FDI limit to 74% from 49%.

Healthcare sector is also continuously growing healthcare has become the one of the India's largest employers, employing around 4.7 million people, though in 2021-22 India only spends 2.1% of its GDP in healthcare, in the union budget 2022-23, US$ 11.28 billion was allocated to the Ministry of Health and Family Welfare (MoHFW). there is still huge room for improvement in the overall healthcare system in India. Efforts towards having well trained medical professionals in India is top priority. There were exemplary development in the vaccine manufacturing by India, Bharat Biotech Covaxin and Oxford AstraZeneca's Covishield manufactured by SII, helped India get a protection shield against Covid. There is a plan by the government of India to infuse US $ 6 billion to boost the healthcare infrastructure in India.

The IT/ITes sector is a key engine for fueling India's economic growth and contributing to 7.5% of India's GDP in 2021-22, the Big four IT firms in India have recruited over 1 million employees, As the world is moving towards era of digital economy Indian IT-sector will be contributing significantly towards this journey, the rollout of 5G communication technologies and adoption of new age technologies across industries; like AI, Robotics, Internet of Things will further increase the size of Indian IT sector.

Indian enterprises are also concerned about the risks emerging out of the growing economy and the globalization India is heading towards, its observed that Indian enterprises are taking significant steps towards risk management and keeping budget allocated to implement best in class risk mitigation practices.

India Showcasing an Optimized Risk Handling

Figure 2: Corporate India Risk Index 2022

Corporate Risk Index Score of 63 implies that Indian enterprises are handling the risk in an optimal way but still there is scope of improvement to get into superior risk handling territory, Indian enterprises have a well-defined risk management practice in place for inherent risks, however risk management can be improved further as a potential buffer against potential risk events arising from market & economy, operational and technology related Risk events, openness towards adoption of technology and having a well-defined risk management team was observed across enterprises in India.

Sectorial categorization across above stated five categories, it was found that risk management is getting a paramount importance in the growth strategy of every organization and all the organization fell either into 'Superior Risk Management' or 'Optimal Risk Management' category.

From a risk exposure front the intensity of impact due to market and economy related risks increased due to the heightened inflation, global recession, and geopolitical tensions though from a regulation point the sector specific policies by the government helped the industries. Some of the inherent risks exposure due to the operational aspect did not see a significant change as compared to previous year, however companies are adopting diversification, technologically enabling the supply chain, and creating better hedging against financial related risks, whose results will be seen in coming years.

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

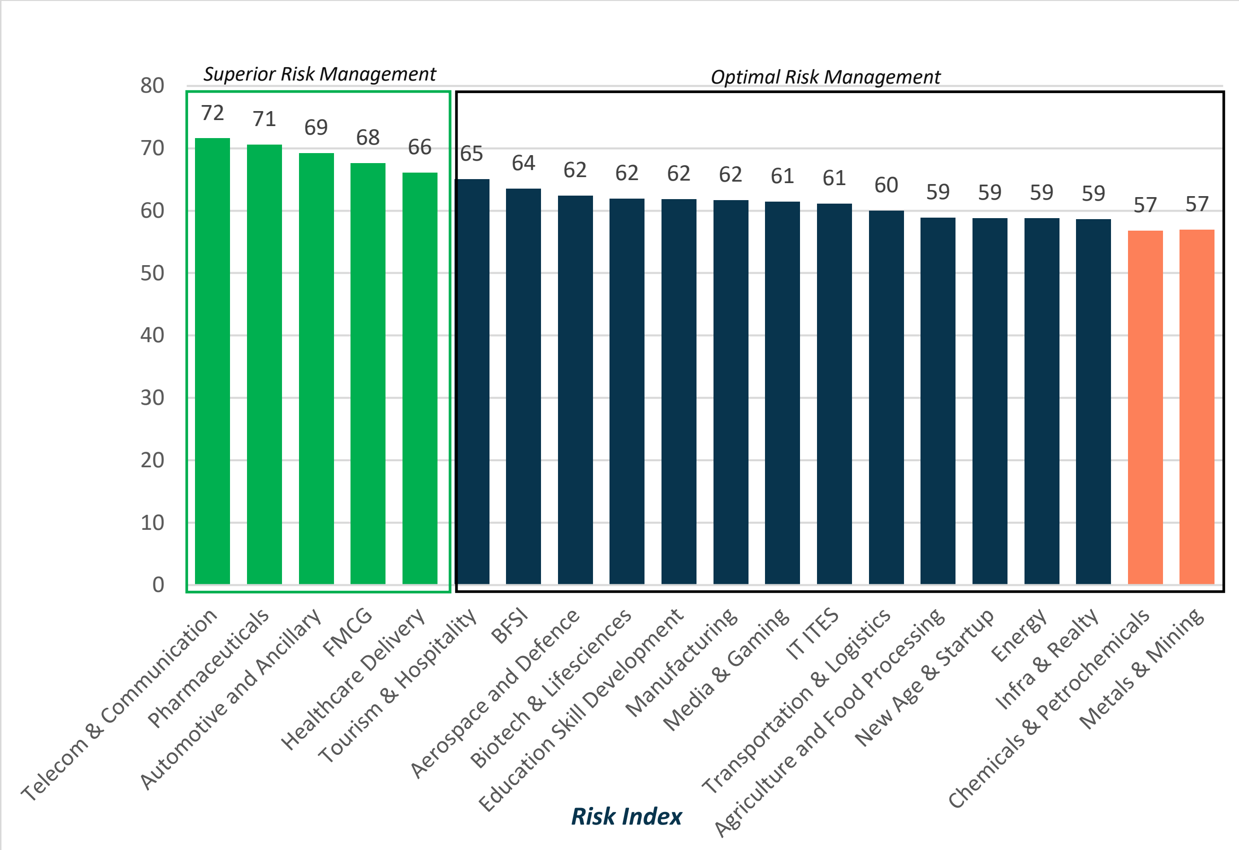


Figure 3: Corporate India Risk Index 2022 Sector Score

Superior Risk Index

Superior risk handling was found in five industrial sectors: Telecom & Communication, Pharmaceuticals, Automotive & Ancillary, FMCG, Healthcare Delivery.

Optimal Risk Index

Optimal risk handling was found in 15 industrial sectors: Tourism & Hospitality, BFSI, Aerospace & Defence, Biotech & Lifesciences, Education Skill Development, Manufacturing, Media and Gaming, IT & ITES, Transportation & Logistics, Agriculture and Food Processing, New Age & Startup, Energy, Infrastructure & Realty, Chemicals & Petrochemicals, Metals & Mining.

Education & Skill Development Insights 2022

Education in India has always been a subject of intense scrutiny, particularly in terms of the interaction between private and public entities in delivering results and augmenting human resource development. While an enhanced interaction of market forces can be beneficial, it also triggers questions around financial feasibility, sustainable models, and legal compliances. In light of this, it is essential that educational entities base their business decisions on creating marginal social benefit for end-users.

In Maslow's hierarchy of needs theory, education belongs to a physiological need category. As a result, even natural disasters like the COVID-19 pandemic have failed to disrupt the market opportunity in this segment. However, the pandemic has caused significant transactional shocks to the education and skill development sector in India. Over two-thirds of the country's 1.5 million schools were shut down during the lockdown, leading to significant learning loss. According to a survey conducted in 2021, more than 82% of children in grades two to six had forgotten foundational mathematics skills, and over 92% had forgotten language skills. The gender gap in learning widened, with over 10 million girls likely to drop out of school due to the pandemic. The socio-emotional well-being of students was also impacted, with 33% of children aged 5-13 and 14-18 reporting poor mental health. Additionally, 250 million students suffered from a lack of nutrition due to the closure of schools and the mid-day meal scheme.

Despite these challenges, the National Education Policy (NEP) was introduced, taking a holistic approach to education and skill development in India. The NEP included a range of initiatives, such as the National Initiative for School Heads' and Teachers' Holistic Advancement (NISHTHA), the National Initiative for Proficiency in Reading with Understanding and Numeracy (NIPUN) Bharat Mission, and the National Digital Educational Architecture (NDEAR). The NEP also envisages setting up a new regulatory body for higher education to replace the University Grants Commission (UGC) and the All India Council for Technical Education (AICTE).

The pandemic also accelerated the growth of EdTech companies in India, with hybrid and online teaching becoming the norm. Educational institutions in tier II and III cities embraced digital technologies for content generation and instruction. The trend of personalisation of learning through "Personalised Adaptive Learning (PAL)" technologies was also observed in both government and private schools. With a 500 million population in the age group of 5-24 years, there exists a market potential that demands embracing the Education 4.0 Revolution, therefore marking the onset of technology integration in education to innovate the customer value proposition. However, the integration of technology in education also creates intellectual property risks and data compromises. Often, test prep platforms engage in database exchanges and plagiarising software, which can compromise data security. Therefore, it is crucial to balance the benefits of technology with its associated risks.

In higher education, 31% of respondents to a 2021 survey reported feeling stuck due to the pandemic, with 65% enrolling in upskilling programs in the past year. The most popular courses were Data & AI, Project Management and Scrum, Cloud Computing/DevOps, and Digital Marketing. However, last year's Union Budget saw a 6% reduction in funding for the education sector, which may hinder the implementation of some initiatives. Inflation rates, recessionary tendencies, and ever-developing foreign non-cooperation also bear a negative impact on cash flows across privately-owned avenues and stakeholder involvement in public avenues.

Furthermore, the assumption of upward homogeneity among educational service providers widens the scope for operational, financial, and technical risks. It is, therefore, essential to undertake comprehensive risk mapping and define the externalities flowing from them through primary and secondary data collection.

Education & Skill Development Sector Risk Index 2022 Vs 2021

Figure 4: Detailed Comparative Analysis 2021 Vs. 2022

Education & Skill Development Sector Risk Index 2022 Vs 2021

Education sector experienced a stagnant risk index from 2021-22, indicating stability in managing innovation, transforming processes and in-place mitigation plans for contingencies. The policy frameworks have been implemented in a phased manner to ensure rectifications, political and economic landscape have borne minimal to zero implication on educational infrastructure. The student welfare infrastructure is strengthened through integration of direct cash transfers in the existing in kind upliftment. Education is considered to be a relatively stable industry, with a lower susceptibility to market risks compared to other industries, owing to three-fold reasons. Firstly, education is a basic necessity and is essential for personal and social development, creating a constant demand for education regardless of economic conditions. According to UNESCO, the global demand for higher education is projected to continue growing, with enrollment rates expected to increase from 220 million in 2015 to 414 million in 2030. Secondly, education is a long-term investment that pays off over many years, making it less susceptible to short-term fluctuations in the market. A report by the OECD shows that investing in education yields positive returns, with an average net present value of $92,000 for a tertiary education degree in developed countries. Additionally, education is a social and public good, with governments and other stakeholders often investing in education for the greater good of society. According to the World Bank, public expenditure on education as a percentage of GDP ranges from 2% to 6% in low-income countries, and from 4% to 7% in high-income countries. Lastly, education is heavily regulated and relatively low-cost, which limits the impact of market forces.

Education & Skill Development Sector Risk Management 2022 Vs 202

There were no significant changes in the India Risk Management across Education & Skill Development, however it slightly declined to 65 in 2022 from 66 in 2021. Post Covid 19 disruptions, Education sector steadily integrated virtual reality for an uninterrupted teaching learning process and optimization of learning outcomes. However, data for technology dependence across Indian population indicated skewed allocation of resources, therefore the decline in management of risks. Similarly, there exists a dire need to regulate and systematize AI tools in learning to ensure data security and privacy of entities. Lack of clarity in policy structure in place and rapid springing up of various market suppliers must be catered to, in order to upscale risk management plans.

Education & Skill Development Sector Risk Exposure 2022 Vs 2021

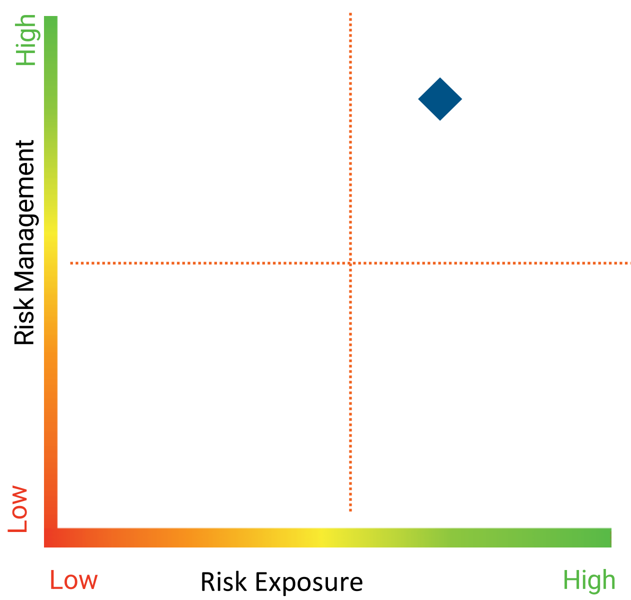
The education and skill development industry in India has been able to maintain a stable risk exposure, despite the challenges posed by the pandemic. This is due to a proportional increase in market opportunity and an improvement in risk preparedness among industry players. The pandemic has heightened market consciousness, leading to a more strategic and proactive approach towards managing risks. This includes the adoption of new technologies, such as online learning platforms, as well as a focus on diversifying revenue streams. According to a report by KPMG, the Indian education sector is expected to reach USD 101.1 billion by 2025, with the e-learning market alone projected to grow at a compound annual growth rate of 20.3%. This growth potential, coupled with a more prepared and resilient industry, indicates that the education and skill development sector in India is poised for continued success in the coming years.

Key Highlights

Risk Dimension Analysis: Market and Economy

Risk Exposure Score: 70

Risk Management Score: 68



Inflation

- The education sector in India has witnessed a steady rise in inflation rates, averaging at 10% from 2012 to 2021.
- This high inflation rate has had an upward bearing on expenses such as tuition fees, books, and uniforms, making education increasingly unaffordable for many.
- The education sector is one of the primary pillars of the Indian economy, and such high inflation rates can have a significant impact on the overall economy.

Regulatory Framework

- The policy framework of the education sector in India is also reflecting instability due to the alpha and beta phase of the New Education Policy.
- This policy is focused on admission criteria, credit systems, research endeavors, and the evolution of the linguistic landscape.
- Such constant policy changes can create confusion and uncertainty among stakeholders, including students, teachers, and institutions.

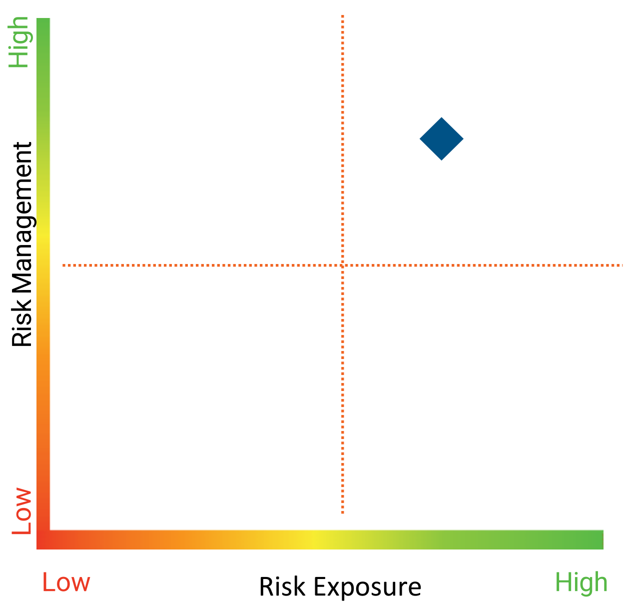
Foreign Exchange Rates

- India's forex hit an all-time high in February 2023, despite the 2022 downward trend. India's strong trade and production facilities have enabled the rupee to be stable.
- However, the limited options to absorb talent create reliance on foreign exchange, leading to a foreign exchange risk that affects educational equipment.
- This risk can affect the quality of education, which can impact the overall growth of the education sector in the long run.

Risk Dimension Analysis: Technology

Risk Exposure Score: 58

Risk Management Score: 62



Data Compromise

- However, with the onset of EdTech 2.0, there is an increased susceptibility to data compromises and a gradual retardation of technology tools. This is because the use of AI and other advanced technologies requires a significant amount of data, which can be vulnerable to cyber threats.
- To ensure the safety and security of data, it is important to implement robust data protection measures and ensure that technology tools are regularly updated and maintained.

Innovation Risk

- The Union Budget 2023 in India marked a significant shift towards digital education services. The government has recognized the importance of human capital formation and has made significant investments in artificial intelligence (AI) orientation.
- This digital revolution is expected to transform the education sector by making it more accessible, efficient, and effective

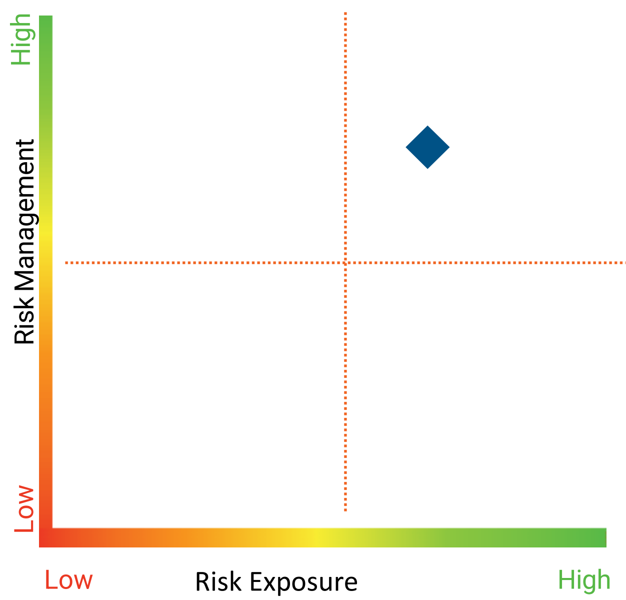
Disruptive Technology Risk

- Tailored communication and customization of course material have become a requirement for learners. They expect their learning experience to be personalized to their needs and preferences.
- However, accessibility and affordability of technology are not favorable in most tier 2 and tier 3 cities. This digital divide can limit access to quality education, particularly for students from disadvantaged backgrounds.

Risk Dimension Analysis: Operational and Physical

Risk Exposure Score: 70

Risk Management Score: 69



Critical Infrastructure Management

- As the economy opened up after the lockdown restrictions were lifted, educational institutions faced the challenge of managing their infrastructure while ensuring the health and safety of their students.
- In response, many institutions adopted an integrated approach that combines human intelligence with artificial intelligence for infrastructure management.
- The use of artificial intelligence can help to optimize and automate infrastructure management, making it more efficient and cost-effective.
- For example, AI-powered sensors can be used to monitor the temperature, air quality, and other environmental factors in classrooms and other spaces, allowing for real-time adjustments to ensure the well-being of students and staff.

Business Continuity Risk

- There are challenges associated with the adoption of AI in infrastructure management.
- Resource allocation and management can be a significant barrier, as many institutions may not have the necessary funds or expertise to implement and maintain AI-powered infrastructure management systems.

- Additionally, the integration of AI with existing systems and processes can be complex and time-consuming.

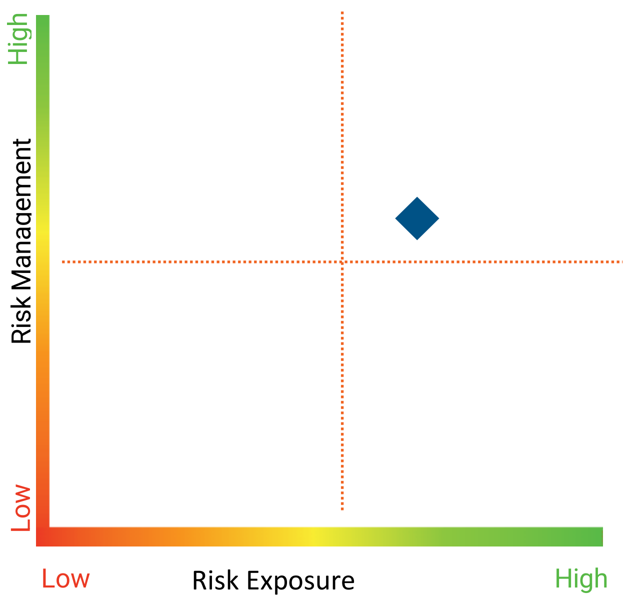
Others

- The increase in concerns regarding the hygiene and wellness of students has made critical infrastructure incorporation a priority in the short run.
- Institutions are investing in upgrades to their ventilation systems, sanitation facilities, and other infrastructure to ensure that students and staff remain healthy and safe.

Risk Dimension Analysis: Crime and Security

Risk Exposure Score: 52

Risk Management Score: 58



Counterfeiting

- The edtech market space is rapidly growing and is currently valued at USD 3.42 billion, with an industry CAGR of 30%.
- With such growth, there is an upsurge in the need to safeguard proprietary content by various market players. This is essential to protect intellectual property and maintain a competitive edge in the market.
- This can include implementing robust data protection measures, such as encryption and firewalls, as well as regularly monitoring and updating systems and processes to ensure they remain secure.
- Additionally, it is essential to build awareness among employees and users about the importance of data privacy and the potential risks associated with sharing sensitive information online.

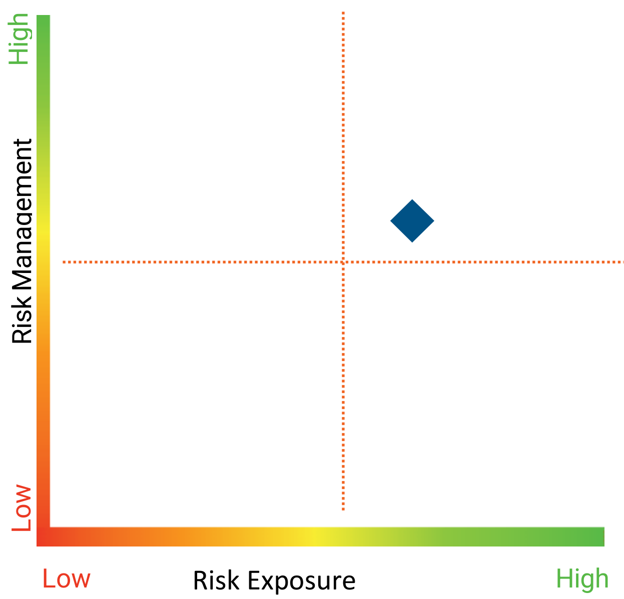
Cyber Crimes

- The prevalence of online predators and the need for data security and privacy is becoming increasingly critical. Business owners in the edtech industry need to strengthen and evolve their privacy frameworks to protect themselves and their users from data breaches and cyber-attacks.

Risk Dimension Analysis: Natural Hazard and Event

Risk Exposure Score: 62

Risk Management Score: 64



Natural Hazards:

- By adopting such solutions, educational institutions can provide continuity of education, even in the face of natural calamities or other disruptions that can impact classroom learning.
- This can also lead to greater access to education, particularly for those living in remote or underprivileged areas, who may not have had access to traditional classroom learning before.

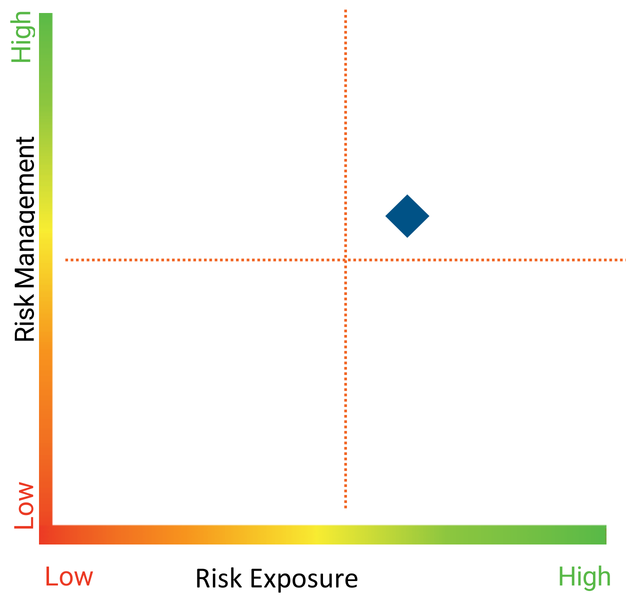
Pandemic and other global epidemic diseases:

- The COVID-19 pandemic has forced educational institutions to develop virtual ecosystems for teaching and learning, leading to an increase in the adoption of online learning platforms.
- While the pandemic was the primary driver of this shift towards online learning, natural calamities such as earthquakes, floods, and other disruptions can also impact classroom learning, highlighting the need for IT-enabled solutions that are both sustainable and scalable.
- The shift towards online learning has presented itself as a market opportunity for IT-enabled operations that offer sustainable and scalable teaching solutions.
- Educational institutions are increasingly investing in online learning platforms that provide a comprehensive and engaging learning experience for students, regardless of their location.

Risk Dimension Analysis: Strategic Risk

Risk Exposure Score: 59

Risk Management Score: 60



Public Sentiment

- In the highly competitive Indian education ecosystem, homogeneity in product offerings demands innovation to create unique value for learners.
- With 1.5 million K-12 schools in India and various edtech players, the competition is intense. Therefore, it is crucial to continuously innovate to differentiate oneself from others and provide value to learners.

Market Synergy

- With over 30 mergers and acquisitions across Edtech sector in the post-pandemic set up, market capitalization seems to have gained greater importance for industry players instead of value creation.
- Strategic decisions have to be taken for targeted marketing efforts, to prevent negative sentiments among stakeholders.
- Due quality assurance has to be undertaken to avoid parity in expected and actual outcomes in educational attainment of students.

ICICI LOMBARD: Key Solution Offerings

Property

a. Businesses are always prone to risks and fire eruption and fire insurance provides a comprehensive protection against damages caused due to fire explosion and other risks. Besides fire related perils, it also protect damages caused due to any natural calamity, bursting of water tanks, theft etc. The built in covers include alterations or extensions, stocks on floater basis, temporary removal of stock, cover for specific contents, start-up expenses, professional fees, costs for removal of debris etc

b. Solutions

i. Property Loss Prevention exercise - We have developed the methodology of Property Value Added Services for corporate customers which focuses on technical engagement with detail risk visit, followed by benchmarking of the risk (Industry Risk Profiling).

ii. Fire Hydrant IoT - Fire hydrant online monitoring devices use IoT to monitor fire hydrants and assure their availability in emergencies. We've helped multiple corporate customers maintain and monitor this important fire safety component in real time.

Marine

a. We offer specially curated plans for covering the risk of theft, malicious damage, shortage, and non-delivery of goods, damages during loading and unloading, and mishandling of goods/cargo

b. Marine Cargo insurance primarily covers loss during transit caused due to fire, explosion, hijacks, accidents, collisions, and overturning

c. Solutions

i. GPS Device Tracking: With the help of our advance GPS devices we can have bird eye view on the consignment and vehicle from anywhere in the world. OurSAAS allows us to track and get the visibility of the vehicle on the basis of our requirements which is fully customizable

Liability

a. Comprehensive general liability:

i. This policy is important for every small and medium sized businesses to protect the insured entity against claims arising out of legal liability where they are heldresponsible for third party bodily injury or property damage due to insured's business, premises or products. It should be taken by every new business as it covers all risk a business may face.

b. Cyber - With cyber risk steadily increasing, security/ data breaches affect millions of records a year. Cyber Risk insurance coverage is designed to help an organization mitigate its risk exposure by offsetting costs involved with recovery after a cyber-related security breach or similar event.

c. Solutions

i. **Simulated phishing tests** - Simulated real looking phishing tests andrecord employee behavior to phishing attacks along with training collateral in form of co-brandable posters, infographics and videos

ii. **Cyber maturity assessments** - Assess the security posture of your organization and identify the potential risks with our assessment based on ISO 27001 Control measures for Information security

iii. **D&O** - The need of Directors & Officers Insurance is more than ever before. Any breachor non-performance in the duties can result in claims against directors, officers and employees by reason of wrongful act and need to incur various expenses like defense costs, damages or compensation and other incidental costs. This can affect company's growth and performance.

Group Health

a. Employees are the backbone of an organization and the most valued asset. OurGroup health insurance product is designed to offer health coverage to suit employees of all business types ranging from small & medium enterprises to large organizations.

b. Solutions:

i. **IL Take Care -** AI enabled mobile app for employees

ii. **Health assistance services -** Health Assistance is a dedicated medical care service that assists you in all your health related queries for identifying specialist/hospital/fixing an appointment with doctors/nutritionist /facilitating2nd opinion

iii. **Tele Consultation** – Hello Doctor

iv. The insured is eligible to avail unlimited General Physician consultations for routine health issues over the phone by aqualified doctor

v. **Diagnostics & pharmacy services** – Book a lab test or home delivery of medicines

Bibliography

https://www.investindia.gov.in/sector/education

https://www.adb.org/sites/default/files/institutional-document/31318/guidance-note-education-sector-risk-assessment.pdf

file:///C:/Users/gpw/Downloads/us-top-risks-higher%20education-up-digital.pdf

https://kpmg.com/in/en/blogs/home/posts/2022/01/education-skill-nep-digital-mantra.html

https://www.ibef.org/industry/education-sector-india

https://www.indiatoday.in/education-today/featurephilia/story/key-higher-education-industry-trends-2023-2312634-2022-12-26

https://edufund.in/blog/impact-of-education-inflation-on-hidden-costs-of-education#:~:text=The%20education%20inflation%20rate%20in,the%20corresponding%20month%20of%202022.

https://www.moneycontrol.com/news/business/personal-finance/how-education-inflation-can-hurt-your-childs-future-8682261.html

https://www.financialexpress.com/education-2/education-india-2022-national-education-policy-nep-fyup-cuet-ugc-aicte-ews-du-delhi-university-what-has-happened-in-education-indian-education-system-new-education-policy-educational-development-in-in/2919838/

https://bloncampus.thehindubusinessline.com/b-learn/study-abroad/how-the-falling-rupee-prices-are-impacting-students-abroad/article65487903.ece

https://doi.org/10.1002/emt.30943

https://uis.unesco.org/en/blog/mitigate-impact-covid-19-schools-need-adequate-facilities

https://www.outlookindia.com/business/budget-2023-edtech-sector-welcomes-digital-initiatives-focus-on-ai-in-education-news-258696

https://www.globaldata.com/store/report/india-edtech-market-analysis/#:~:text=The%20India%20edtech%20market%20size,30%25%20during%202021%2D2026.

https://www.usgs.gov/educational-resources/natural-hazards-education

https://www.thehindubusinessline.com/news/education/edtech-sector-sees-spate-of-ma-deals/article66072444.ece

Disclaimer:

Notes:

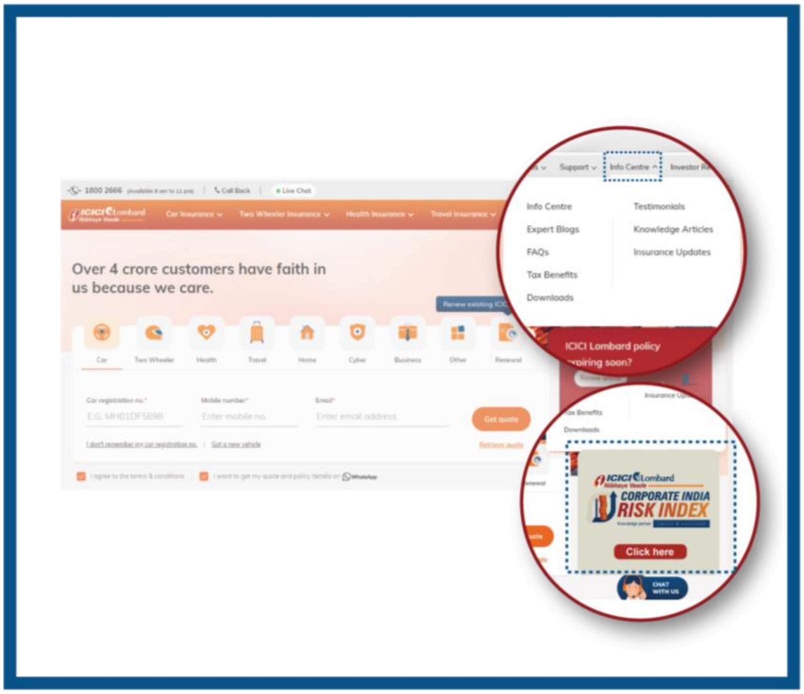
ICICI Lombard
Nibhaye Vaade

CORPORATE INDIA RISK INDEX

Intelligence partner FROST & SULLIVAN

Now accessible at

www.icicilombard.com/corporate-india-risk-index



Please send a mail to ciri@icicilombard.com to get your customized ICICI Lombard Corporate India Risk Index Report

ICICI Lombard

Nibhaye Vaade

CORPORATE INDIA RISK INDEX

Intelligence partner FROST & SULLIVAN