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# SECTOR REPORT 2022

## IT/ITES





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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, the prodigy, has emerged as the world's most favored IT service outsourcing hub. Technology being the key element and a differentiator in today's age, saw greater adoption by end-users and firms worldwide. India's IT industry successfully navigated the challenges posed by the pandemic and achieved great milestones in FY22, which are as follows:

- Crossed \$200 Bn in revenues with 15% YoY growth (Highest since 2011)
- \$30 Bn added in the year itself
- 3rd largest startup hub ...
- 5 million direct workforce, 4.5 lakhs added in FY22

Macroeconomic risks, cyber security risks, geo-political tensions, soaring attrition rates, and supply chain disruption are the major challenges for the sector, resulting in reduced IT spending and global recession.

The proliferation of cloud computing & Cybersecurity and innovation in Artificial Intelligence/ Machine learning are keeping current demand trends high and provides hope that FY23 is going to be another growth year for the industry.



- **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.

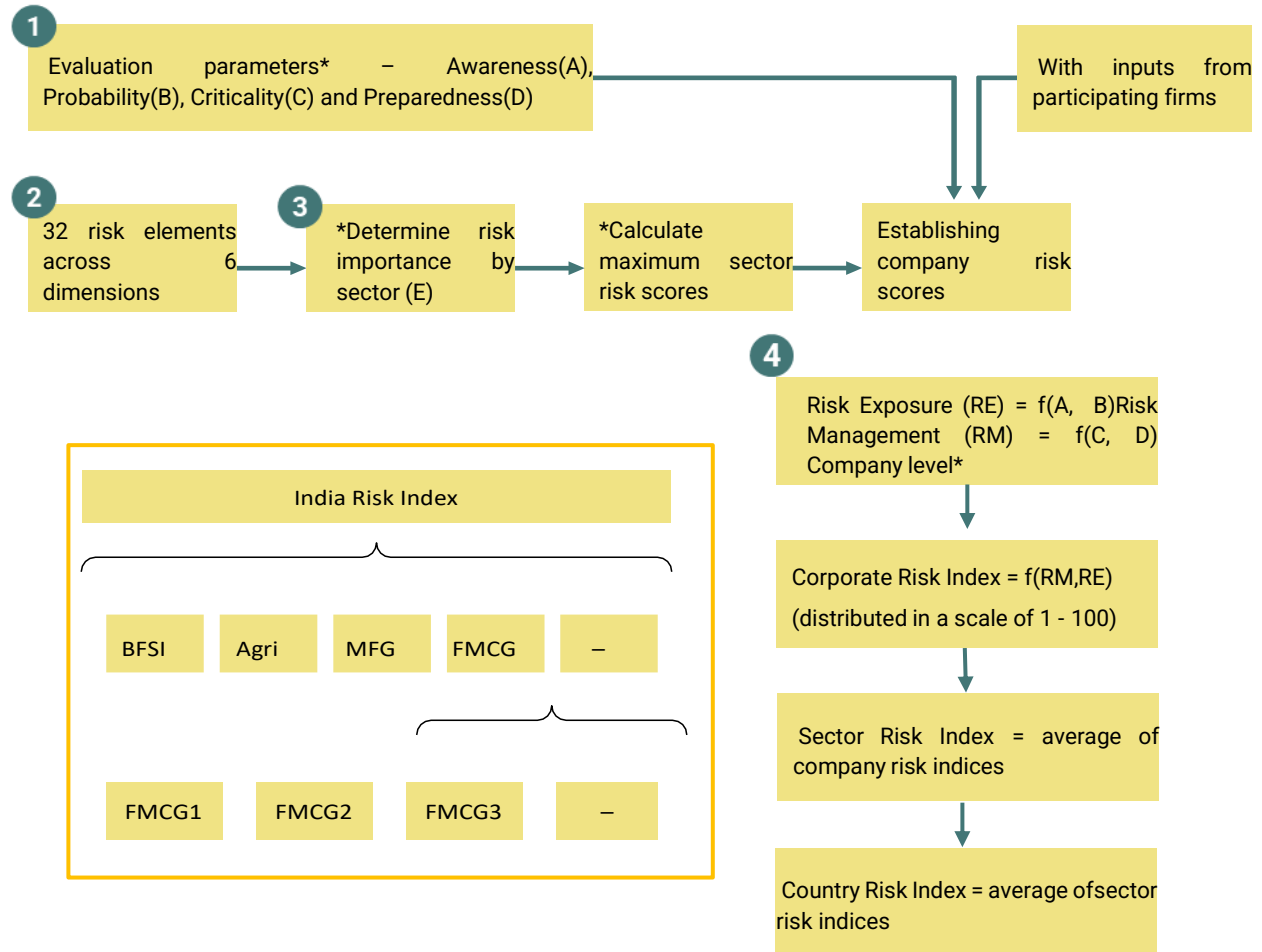
- **Pandemic and other global epidemic diseases:** Risk to business owing to disruptions caused by COVID-19 pandemic and similar another global epidemic.



## 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



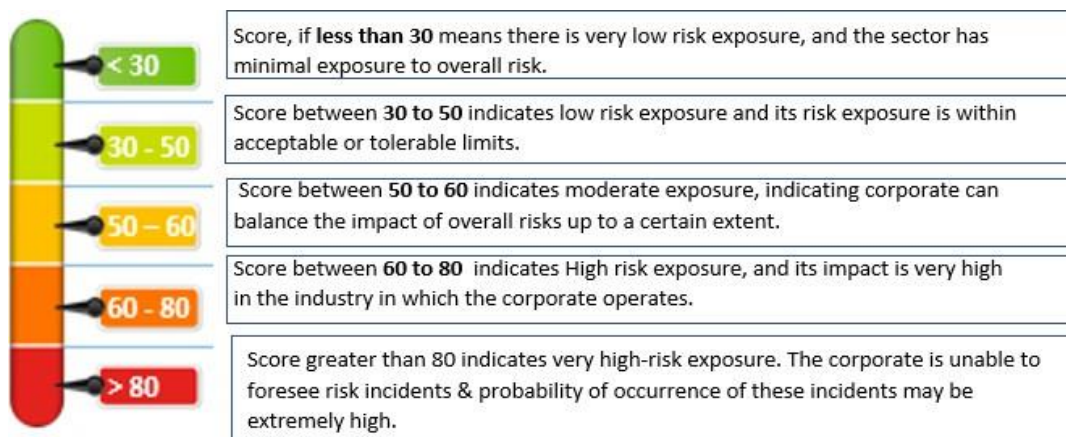
- 1. Evaluation Parameters\*:** The index maps the risks faced by any enterprise basis of Awareness, Probability, Criticality and Preparedness against the defined Risk elements. The evaluation Parameters are defined as: Awareness - Level of awareness of potential risk affecting the firm. - Likelihood 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.

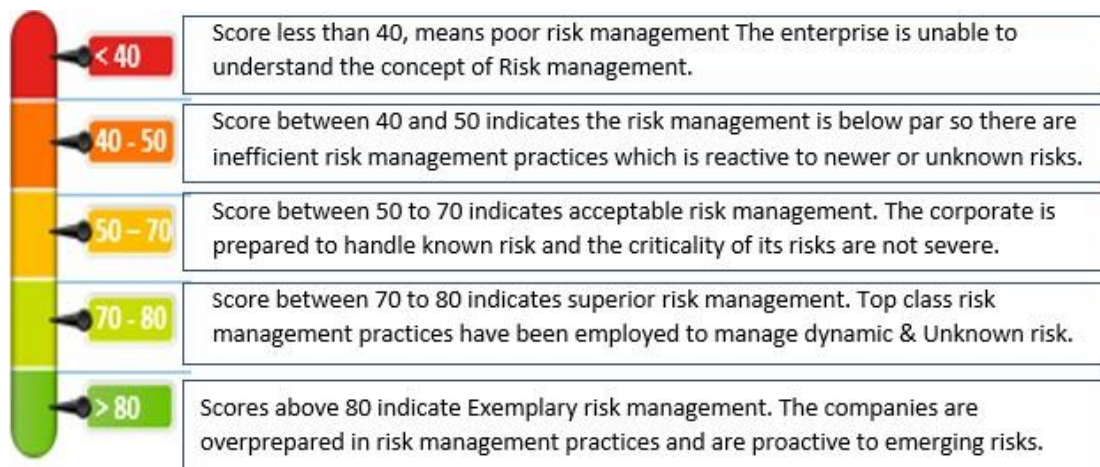
## A. ICICI Lombard Corporate Risk Exposure – Scale

**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

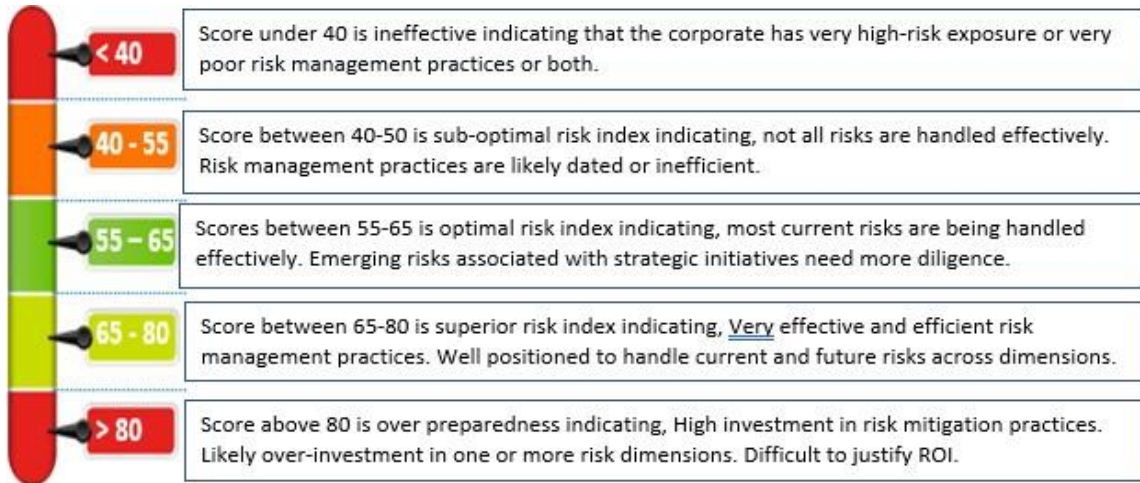
**Risk Management:** Identification, Evaluation and Prioritization of corporate risks followed by well-coordinated steps to minimize the occurrence of uncertainties in the foreseeable future is defined as the Corporate Risk Management. The risk management scale works in the opposite to that of the risk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

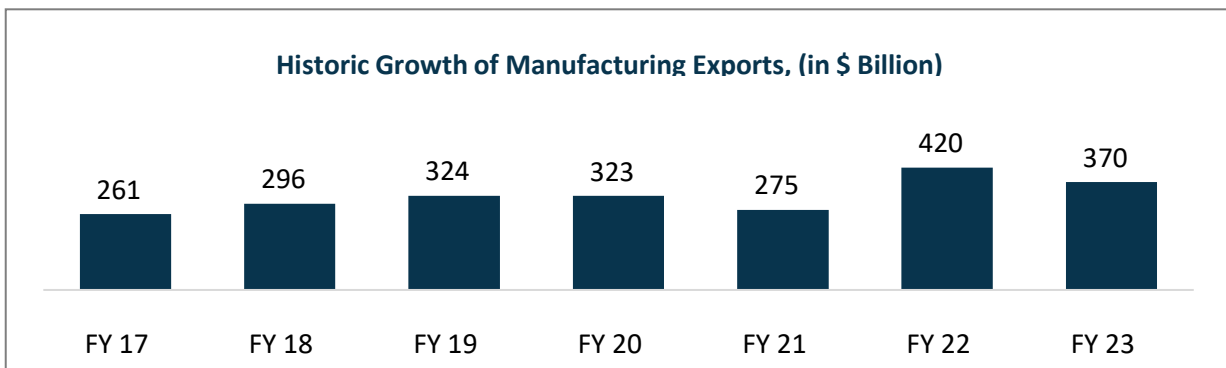
Let’s look at the risk Index scale.



# 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**

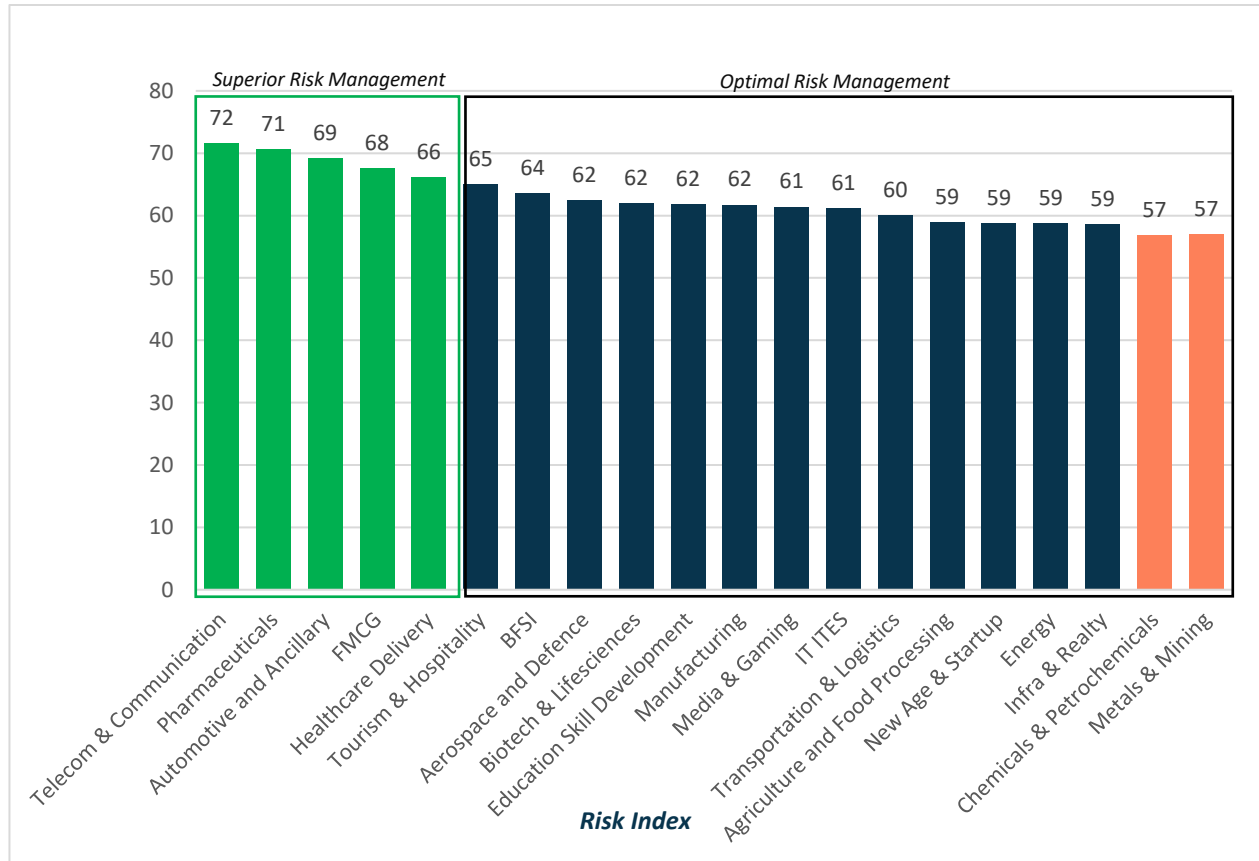
Corporate Risk Index Score of 63 implies that Indian enterprises are handling the risk in an optimal way but still there is scope of improvement to get into superior risk handling territory, Indian enterprises have a well-defined risk management practice in place for inherent risks, however risk management 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.

## IT/ITES Sector Insights 2022

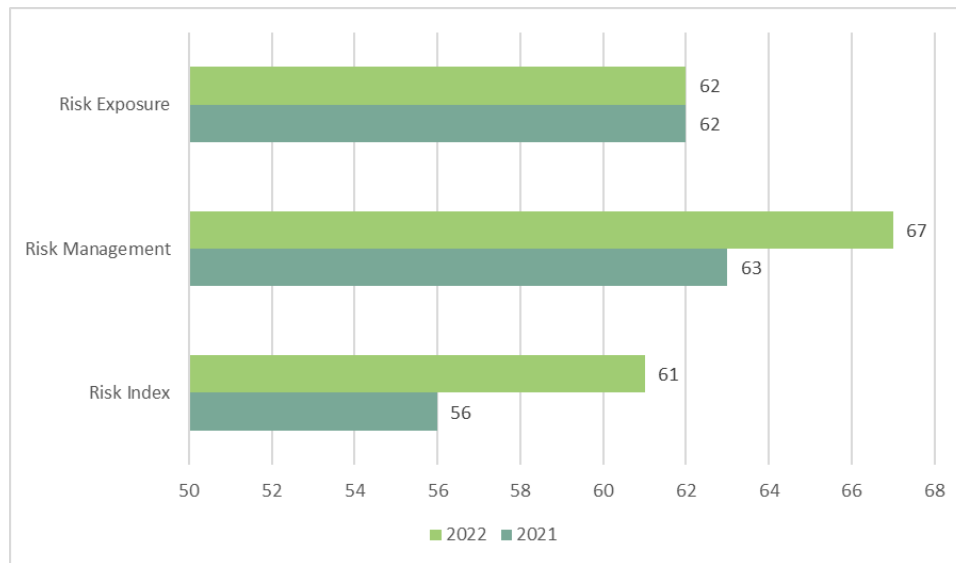
During the last decade, the world has witnessed a tremendous digital proliferation in every sector, from BFSI to manufacturing. India is successfully leveraging this opportunity with its capabilities, contributing to 7.7% of GDP and creating 5 million jobs while becoming a global IT services hub. The Indian IT-ITES (Information Technology-Information Technology Enabled Services) industry encompasses software development, IT consulting, Business Process Outsourcing (BPO), Knowledge Process Outsourcing (KPO), and other related services accounting for 26% of its exports, majorly to the US and the UK based firms. India IT firms are expected to generate a revenue of \$300-\$350 Billion as per NASSCOM and Mckinsey.

This growth is driven by factors such as faster adoption of IT services across the globe and industries, the proven capabilities of Indian IT firms, fostering of new-age digital applications, the growth of ESG-led business models, government policies, and the availability of a digitally versed workforce. Across India the market share for export revenue by sector is as follows, Manufacturing Sector (16.28%), Telecom and Hi-tech (17.65%), BFSI (41.15%) and others 24.93 %. The Banking sector has the majority share.

The government has promoted the IT industry by setting up technological parks, providing tax incentives, and export-oriented initiatives such as the STP scheme. The STPI scheme exported RS 5.02 lakh crore of units for the year 2020-21. Another scheme is the Next generation Incubation scheme (NGIS) has been approved with the aim of developing a vibrant software product ecosystem. Some other policies include the future PRIME skills and Champion Sector Services Scheme (CSSS). However, the industry faces challenges, and protecting margins is at the forefront of it. Key margin levers include increased capacity utilization, a higher share of offshore revenue, declining travel and facility costs, and operating leverage. The emergence of new competitors, especially from countries like China, Vietnam, and the Philippines, who offer lower-cost services, is a growing challenge for the Indian IT ITES industry. Another challenge is the continuous reskilling of the workforce to cater to the dynamic technological environment and dependence on developed countries for their revenues. The Indian IT ITES sector is highly dependent on technology, which makes it vulnerable to cybersecurity threats. Cyber-attacks could damage the reputation of the Indian IT ITES industry, leading to a loss of business and investor confidence. The start-up culture is proliferating in India with an estimated 26000 startups which moves up India to the 3rd spot in the world. The foreign inflows were around \$36 Billion in the last 3 years and 26 startups with over \$ 1 billion valuation. According to data, the growth of the startup ecosystem has largely concentrated in big (Tier 1) cities and states with strong economies, particularly in IT-enabled industries like e-commerce, transportation, and finance.

Indian companies are now re-focusing their outlook on developing niche capabilities in upcoming verticals such as AI/ML, cloud computing, and cyber security, which are expected to have higher demand and yield higher revenues.

# IT/ITES Sector Risk Index 2022 Vs 2021



**Figure 4: Detailed Comparative Analysis 2021 Vs. 2022**

## IT/ITES Sector Risk Index 2022 Vs 2021

The Improvement in the IT/ ITES risk index contributed significantly to the improvement of the country risk index, from 62 to 63. The sector risk index jumped from 56 in 2021 to 61 in 2022 showing excellent growth. This was possible due to the agility of the sector and the firms which was evident during the pandemic. We saw IT firm adapted to the pandemic by bringing in work from home culture and executed it smoothly with slight or no disruption in their operations. India is now a worldwide hub and the information technology capital of the world. The Indian IT sector has over 17,000 forms, with over 1,000 large firms having more than 50 delivery locations in India. Furthermore, the country's cost competitiveness in the provision of IT services—roughly three to four times that of the US—remains its major differentiator in the global sourcing market.

## IT/ITES sector Risk Management 2022 Vs 2021

The sector witnessed significant improvement in risk management score which stood at 67 in 2022 from 63 in 2021. Indian IT firms were well prepared for the threats like cyber security and disruptive technology. After the pandemic economic activity has been restored in major developed countries and this has benefited the Indian IT sector as major revenues come from the US and UK

The sector did face its biggest problem which is high attrition, but the firm mitigated this risk by bringing in policies like sufficient bench workforce, mass hiring and re-skilling of the existing workforce.

The external macroeconomic factors like geopolitical tensions, a global rise in inflation and reduced industrial activities still threaten the industry. Still, the firms are well aware and prepared for such challenges, and the increasing IT adoption in every sector is helping the industry flourish.

### **IT/ITES Sector Risk Exposure 2022 Vs 2021**

Sector Risk Exposure had no fluctuation due global slowdown in GDP growth resulting in reduced industrial activities, all-time low rupee valuation, and high CPI inflation. New-Age Startups Transportation showed the highest increase in risk exposure, the major increase is due to the slowed-industrial activities resulting in financial risks, rise in rates by US feds, with the current rate being 4.75% and geo-political tensions arising due to the Russia-Ukraine tensions.

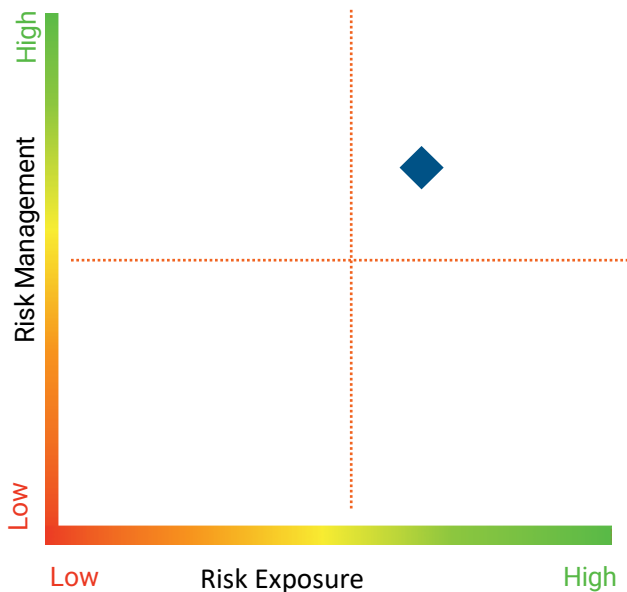
# Key Highlights



## Risk Dimension Analysis: Market and Economy

**Risk Exposure Score: 68**

**Risk Management Score: 68**



### Inflation

- Rise in inflation has a negative impact on the IT industry, especially when US fed rises the interest rate as IT exports are highest to the US.
- As per kotak securities owing to inflation the revenue of major IT firms will be down by 2% to 10% for FY23-FY25.
- A fear of recession will lead to a cut in IT spending by major global players, which would mean lower revenue for Indian IT firms.

### Taxation

- The ITES sector faces taxation risks related to compliance with various tax regulations, such as transfer pricing, indirect taxes, and permanent establishment regulations.
- Failure to comply with these regulations can result in tax liabilities, penalties, and reputational damage.
- The Indian ITES industry is governed by various tax regulations, including the Income Tax Act, 1961, the Transfer Pricing Regulations, 2012, and the Goods and Services Tax Act, 2017.
- A report by NASSCOM highlights the need for ITES companies to stay abreast of the latest tax regulations and interpret them correctly to avoid legal violations and penalties.

### Foreign Exchange Rates

- The ITES sector is exposed to foreign exchange risk due to the volatility of currency markets, fluctuations in interest rates, and the uncertainty of the global economic environment.

- The Indian ITES industry, in particular, is affected by fluctuations in the exchange rate of the Indian rupee against other currencies.
- To mitigate foreign exchange risk, the ITES sector must develop robust risk management strategies, such as hedging, diversification, and client risk-sharing arrangements.

### Geopolitical Risks

- Rising geopolitical tension leads to less investment for private players.
- Geo-political risk forces countries to change their trade policies. Thus firms with higher global exposure has to consider a broader strategic scenario.

### Competitive Risk

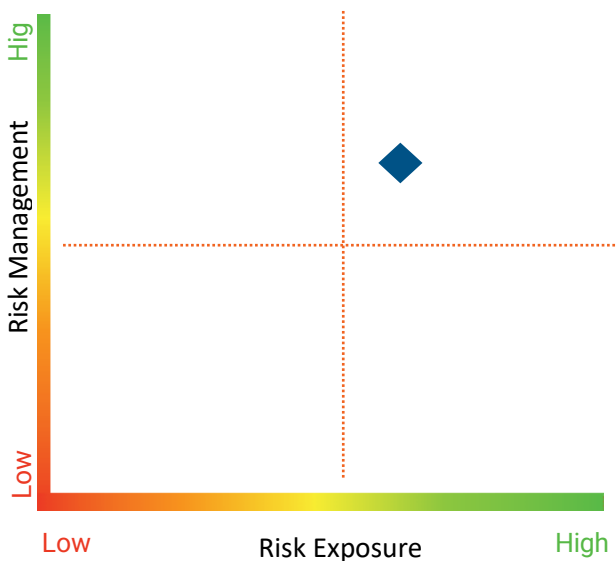
- India faces stiff competition from other low-cost destinations such as China, the Philippines, and Eastern Europe.
- These countries have been investing heavily in developing their IT infrastructure and talent pool, making them attractive destinations for companies looking for low-cost IT services.



## Risk Dimension Analysis: Technology

**Risk Exposure Score: 71**

**Risk Management Score: 72**



### Disruptive Technology

- The ITES sector faces disruptive technology risk due to the rapid pace of technological change, with the adoption of new technologies such as AI, RPA, and IoT transforming the industry.
- A report by NASSCOM notes that companies need to invest in re-skilling and up-skilling the workforce to adopt these technologies successfully.
- A Deloitte survey found that 51% of ITES companies in India consider the pace of technological change as their most significant challenge, with only 14% fully prepared to deal with disruptive technologies. Therefore, it is crucial for ITES companies to adopt new technologies and invest in workforce development to remain competitive.

### Data Compromise

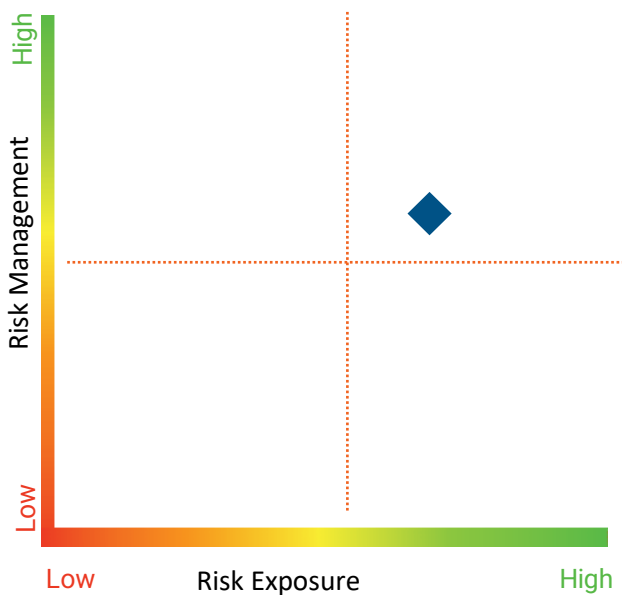
- Organizations using AI and automation had a 74-day shorter breach lifecycle and saved an average of USD 3 million more than those without.
- In 2022, detecting and containing a compromise took an average of 277 days-roughly 9 months. Shortening the time it takes to detect and contain a data intrusion to 200 days or less can result in cost savings.



## Risk Dimension Analysis: Operational and Physical

**Risk Exposure Score: 64**

**Risk Management Score: 68**



### Supply Chain Risk

- The IT industry relies heavily on global supply chains for components, materials, and finished products. Any disruptions or delays in the supply chain can have a ripple effect on IT companies, leading to product shortages, higher costs, and potential breaches in cybersecurity.
- One example of supply chain risk in the IT sector is the shortage of semiconductor chips affecting the industry since 2020.
- The COVID-19 pandemic and increased demand for electronic devices led to disruptions in the semiconductor supply chain, causing delays and price increases for IT companies that rely on these chips for their products. This has affected everything from personal computers to gaming consoles to automobiles, demonstrating the far-reaching effects of supply chain disruptions.

### Commodity Price Risk

- The production of computers, smartphones, and other electronic devices requires various metals and minerals such as copper, cobalt, lithium, and nickel. The prices of these commodities can fluctuate significantly, which can impact the costs of production for IT companies.
- If prices of energy commodities such as natural gas and oil increase, the IT companies may face higher costs for energy, which can impact their profitability.
- According to a report by the World Economic Forum, commodity price volatility is a significant risk for the technology industry, as it can impact production costs, disrupt supply chains, and affect demand for products and services.

## Portfolio Risk

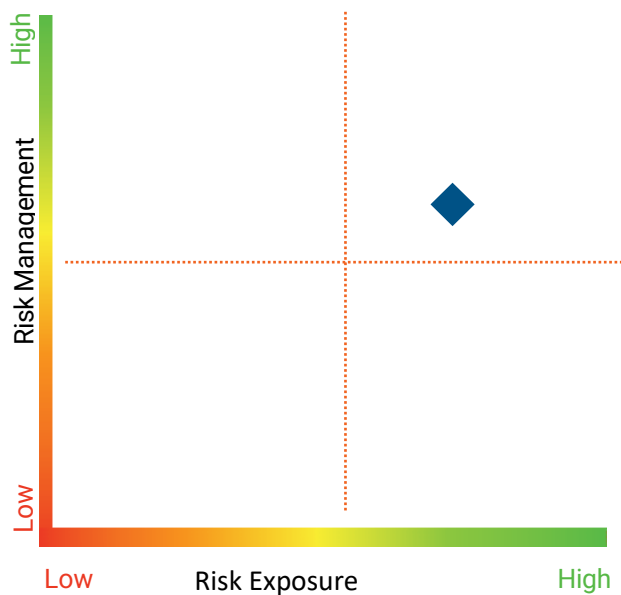
- The IT sector is known for its high volatility and the potential for significant swings in stock prices. This can be both an opportunity and a risk for investors.
- On the one hand, the IT sector has the potential to generate significant returns. However, on the other hand, it also has a higher risk profile than other sectors. This means that investors must know the potential risks and manage their portfolios accordingly.
- Furthermore, a study by the Journal of Financial and Strategic Decisions found that the IT sector is more sensitive to market risk than other sectors.



## Risk Dimension Analysis: Crime and Security

**Risk Exposure Score: 65**

**Risk Management Score: 66**



### Counterfeiting

- Counterfeiting is a significant risk in the ITES sector in India, with the ease of replicating software and other digital products making the industry particularly vulnerable.
- According to a report by FICCI, counterfeiting in the Indian IT industry has increased by 44% in the past three years, resulting in significant losses.
- To address this risk, ITES companies need to implement effective anti-counterfeiting measures and work with regulatory authorities and law enforcement agencies to combat counterfeit products.

### Cyber-crimes

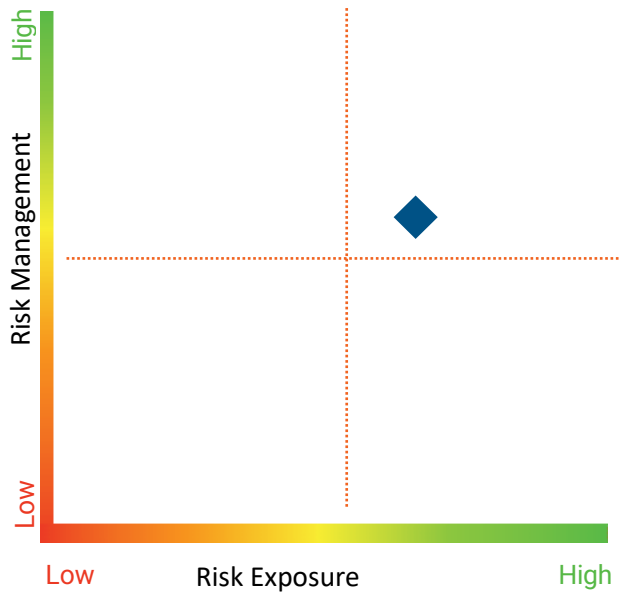
- In 2021 and 2022, 14,02,809 and 13,91,457 cybersecurity incidents were recorded, correspondingly. The CERT-In kept tracked these cases.
- 92 instances of central and state government website hacking have been reported in the last two years. In 2021 and 2022, 42 and 50 incidents of hacking of websites pertaining to the Central Government and State Governments, respectively, were reported.
- The Ransomware-as-a-Service (RaaS) landscape will remain dominated by a small number of organized cybercrime groups running a small number of highly active schemes. The 'detection window' between original entry to an environment and ransomware deployment will continue to close.



# Risk Dimension Analysis: Natural Hazard and Event

**Risk Exposure Score: 61**

**Risk Management Score: 65**



### Natural Hazards:

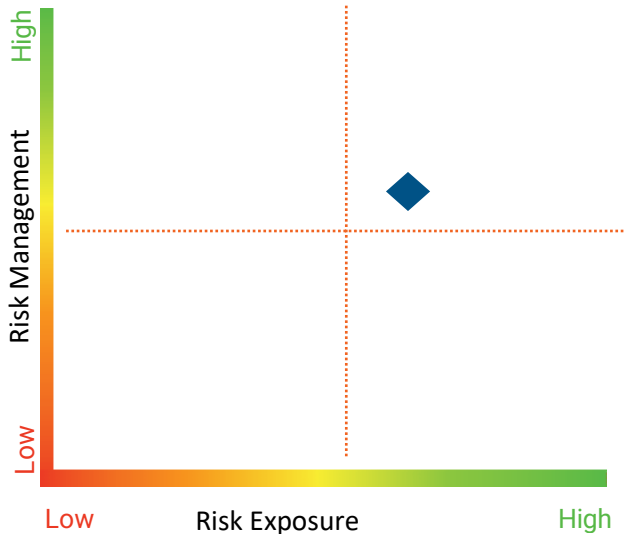
- Incidents such as earthquakes, hurricanes, and tornadoes damages communication infrastructure, including cellular towers, fiber-optic cables, and satellite systems. This can lead to disruptions in communication networks, making it difficult for IT companies to communicate with customers and suppliers.
- According to a report by the World Bank, natural hazards can cause economic losses of up to \$314 billion per year in the global IT sector.
- Hurricane Sandy caused widespread power outages in the northeastern United States, including in New York City. As a result, many data centers were forced to shut down, disrupting regional IT services.



## Risk Dimension Analysis: Strategic Risk

**Risk Exposure Score: 62**

**Risk Management Score: 62**



### Resource Scarcity / Misutilization / Overall Utilization:

- NASSCOM, India's primary IT industry organization, has stated that approximately 60% of the IT workforce in India will require continuous reskilling due to emerging industry trends.
- These trends include the growth of short-term jobs, the emergence of super jobs that require more supervision, and the entry of a younger generation into the workplace, which has caused a fundamental restructuring of organizations.

- According to NASSCOM, the IT sector needs to focus on developing "thrive skills" to accelerate growth.

### Public Sentiment

- Public sentiment risk is a growing concern in the ITES industry as companies face backlash for issues such as data privacy violations and ethical concerns.
- According to a survey by Edelman, only 47% of consumers trust the technology industry to do what is right, and 54% of consumers believe that technology companies have too much power and influence over their lives.
- To address this risk, ITES companies need to prioritize transparency, accountability, and ethical behavior in their operations and proactively engage with stakeholders.

# 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 held responsible 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 and record 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 breach or 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. Our Group 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 /facilitating 2nd 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 a qualified doctor
- v. **Diagnostics & pharmacy services** – Book a lab test or home delivery of medicines



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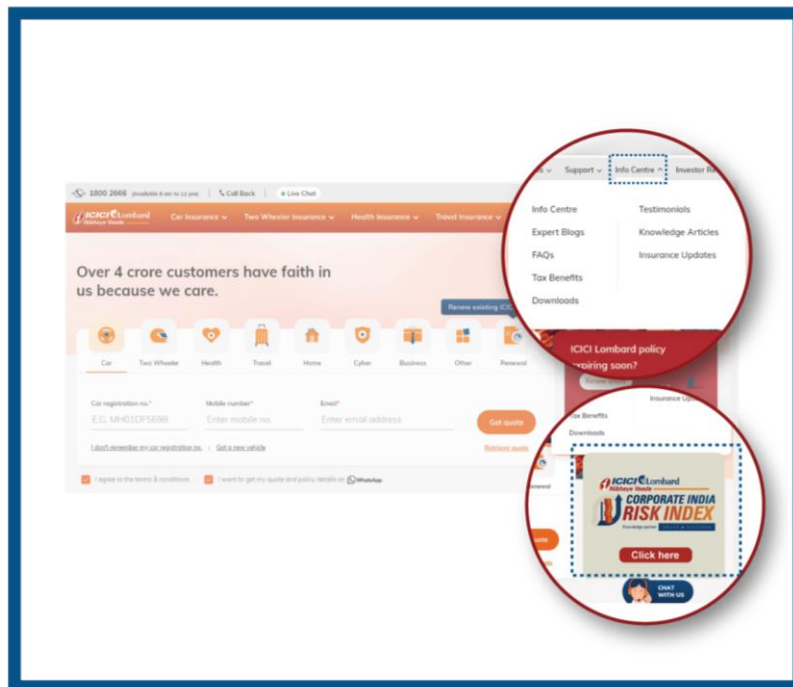






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**CORPORATE INDIA  
RISK INDEX**

Intelligence partner **FROST & SULLIVAN**

The graphic consists of a stylized bar chart with three orange bars of increasing height. A blue arrow curves around the bars, pointing upwards. A grey arrow curves around the bars, pointing downwards. The text "CORPORATE INDIA RISK INDEX" is written in a large, bold, sans-serif font, with "CORPORATE INDIA" in blue and "RISK INDEX" in orange. Below the text is the phrase "Intelligence partner" in a smaller font, followed by the Frost & Sullivan logo in a dark blue box.