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### Acknowledgments:

We would like to express our highest appreciation and deepest gratitude to all those who gave us the support to complete this report.

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# Foreword

The India Risk Survey (IRS) aims to measure and quantify the different risks that organisations face when conducting operations in India. The constantly evolving nature of Risks compels organisations to safeguard their operations and develop innovative strategies to predict threats. In this seventh edition, IRS 2018 aims to delve deeper into all facets of risks to identify the most prevalent Threat under each risk category.

Pinkerton utilizes a data-driven, comprehensive approach to Corporate Risk Management, aiming to use tools like Artificial Intelligence to anticipate risks, their probability and the potential business impacts they could have.

The Pinkerton Risk Wheel consists of four quadrants each related to different types of threats:

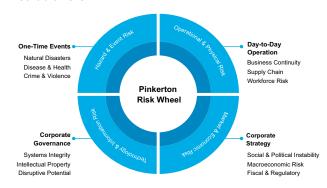
- Hazard & Event Risk
- Operational & Physical Risk
- Market & Economic Risk
- Technology and Information Risk.

The India Risk Survey report goes to capture twelve different threats, each of which fall into one of the aforementioned quadrants.

Through deliberations with policy makers and industry stakeholders across sectors, each year Emerging Risks are also identified. The IRS 2018 states Infrastructure Risks, Occupational Hazards at Workplace and Legal Regulatory Risk as the Emerging Risks of 2018.

Natural Hazards has emerged as the 2nd highest risk in the survey this year, with Floods being the most prevalent threat. While most destruction could be mitigated with proper maintenance of existing infrastructure, effective prediction analysis of future weather conditions is crucial to reduce the sheer volume of damage that is borne by the unprepared. Pinkerton's Applied Risk Science approach uses Data Science methods and technologies such as Artificial Intelligence in assisting to illustrate how risks and security threats are evolving and create interrelated situations with numerous implications, complications,

and consequences. Applied Risk Science offers organisations the advantage of insuring the non-insurable risks.



Information and Cyber Insecurity has emerged as the Number 1 Risk for two consecutive years. Threat Mapping measured Data Theft/Phishing/Hacktivism as the most prevalent Threat. Numerous Industries such as Financial Services, Govt/PSU, Infrastructure and Telecom have collectively ranked Information & Cyber Insecurity as the Number 1 risk, illustrating the urgency for upgrading existing resources, both Human Capital as well as Technology, to meet global compliance regulations. Political & Governance Instability rose to 5th Rank this year with Policy Changes as the most prevalent threat impacting business operations, indicative of rising uncertainty among the global investor community.

In today's time, policy makers and business leaders can truly fulfil their role by timely anticipating risks. On behalf of Pinkerton, I sincerely hope that the India Risk Survey 2018 report will assist the industry, as well as government decision makers, to assess the impact of these risks and develop preventive strategies to mitigate them.

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**Rohit Karnatak**Managing Director – India
APAC & EMEA - Global Screening
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# **Foreword**

Risks to business establishments is detrimental to the growth and development of any country. The nature of risks globally has changed enormously, and with their occurrences becoming more unexpected and their effects becoming more profound, risks need to be taken more seriously. Further, due to rapid digital transformation of businesses, underlying infrastructure is becoming more complex. In these changing times it is critical to understand emerging risks. Knowledge about impending risks can benefit businesses, especially MSMEs and start-ups, so that they could take well-informed decisions.

The seventh edition of the India Risk Survey is based on a comprehensive survey spanning across several sectors of the economy and geographical regions of India. This survey is an endeavour to examine and evaluate the 'potentially destructive' risks to business undertakings in India. The India Risk Survey consists of 12 risks that indicate the most significant threats to business operations in India. In this edition, new risks have been identified on the basis of this year's survey, which include: infrastructure risks, occupational hazards at workplace, and legal regulatory risks.

I am confident that this report will prove to be an important document for policymakers, senior executives and members of the civil society.

Dilip Chenoy

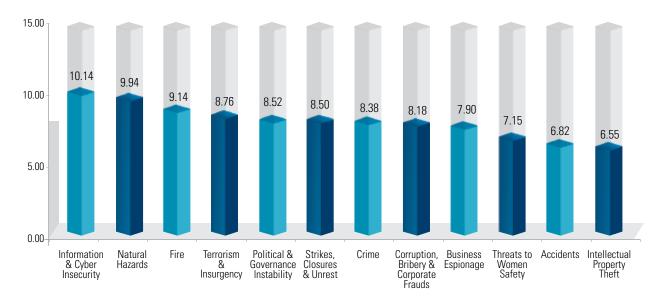
Secretary General, FICCI

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# Executive Summary

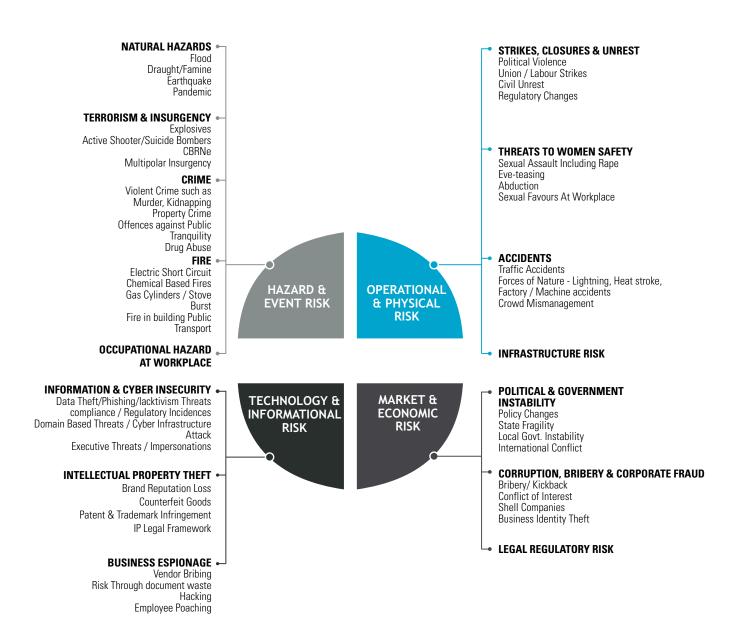
### **Overall Risk Trends - 2018**



The India Risk Survey consists of 12 risks that indicate the most significant threats to business operations and development in India. Each risk is assessed individually, which provides a deeper and more holistic understanding, based on the Pinkerton Risk Wheel. The Pinkerton Risk Wheel frames risk into four broad categories which can help understand not only the different threats that can impact business continuity, but the interconnectivity of risks as a whole. Threats categorized in one risk area ultimately can impact

the other risk areas. The risks wheel is divided into four quadrants: Hazard & Event Risk (natural hazards, terrorism & insurgency, crime, fire), Operational and Physical Risk (strikes and unrest, threats to women safety, accidents, infrastructure risk), Market and Economic Risk (political and Government instability, corruption, bribery, and fraud, and legal regulatory risk), and Technology and Information Risk (information and cyber insecurity, intellectual property theft, business espionage).





India Risk Survey 2018 also provides the most significant threat types within each risk for a comprehensive reading of each threat-vector as part of a larger reality. The threats are interconnected and overlap across domains, sectors, and geographies. In the 2018 edition, new risks have been identified on the basis of this year's survey, which include: infrastructure risk, occupational hazards at workplace, and legal regulatory risks.

Information and Cyber Insecurity remains at the top position in the India Risk Survey 2018. Considering the importance of cyber critical infrastructure, the vulnerabilities attached to it remain largely underlined in India Risk Survey 2018. Services in India are quickly

moving towards digitisation. While this could be perceived as a step towards rapid development in various sectors, it also presents risks in which malicious activity can be easily carried out, posing a significant threat to sensitive data. The India Risk Survey 2018 focuses on four major risks posed by Information and Cyber Insecurity. These are data theft, compliance and regulatory incidents, cyber infrastructure attacks, and impersonations. Amongst these, data theft, phishing, and hactivism emerged as the biggest threat. With India becoming a key destination for businesses and foreign investment, a more serious focus should be directed to create a robust security mechanism to address these challenges.



Natural Hazards ranks as the second biggest risk to business operations in the India Risk Survey 2018. As per the findings of India Risk Survey 2018, floods pose the biggest threat to business operations. Inadequate infrastructure and maintenance by concerned bodies remain a primary factor that would allow natural hazards to pose serious risks to business operations. Further, a lack of preparedness and early warning systems have contributed to making Natural Hazards a risk that should be considered with more seriousness.

Outbreak of fire poses risks to business continuity and operations, and ranks at third position in the India Risk Survey 2018. There have been numerous fire accidents in the current year, causing significant loss of life and property. Non-compliance with safety norms in factories and high-rises in addition to the under-equipped Fire Services in India has led to an alarming number of accidents year-on-year. While the Government and other regulatory bodies have prescribed norms and fire safety measures, implementation and vigilance continue to be a concern.

According to India Risk Survey 2018, risks that emanate from Terrorism and Insurgency show a significant drop to the fourth position. While there has been a marked decrease in fatalities, it has been found that there has also been a rise in the number of alleged terrorist attacks in the country. Left-Wing Extremism (LWE) remains a severe threat, posing security risks mainly to logistical operations. While the Islamic State (IS) has been relatively controlled on a global scale, the potential of IS sleeper cells remains a potential threat. The Government of India continues to push concentrated efforts to holistically counter the threats of terrorism and insurgency, internal, as well as external. India continues to strengthen its domestic capabilities in hostile regions, and at the borders. Simultaneously, the Government is also strengthening ties on bilateral and multilateral platforms to tackle the risks posed by terrorism to ensure that business operations and personnel are secure and safe.

Political & Governance Instability' ranks fifth position in India Risk Survey 2018. The India Risk Survey 2018 finds that certain policy changes are percieved as a threat under this risk category. It is assessed that the general elections to be held across the country in 2019, led to

a perception of increasing uncertainty, causing the risk to climb up one spot to number 5 position in 2018. Political & Government Instability is a risk that is closely observed by investors, foreign and domestic, and would impact business development and continuity plans for the economy as a whole.

'Strikes, Closures and Unrests' ranks in the sixth position in the India Risk Survey 2018. The survey finds that growing political instability has become a major cause for concern, which has resulted in violent clashes and unrests in several parts of the country. The implications posed by risks from Strikes, Closures, and Unrest have direct implications for financial losses incurred by businesses, and a slow-down in business development. Further, the country's reputation perceived as inhospitable for business to flourish also affects future prospects. Instability, threatening business operations, directly impacts the market by affecting investor confidence and an increase in the risk premium assigned to securities in the country. The Government continues to take steps to rectify situations by addressing worker disgruntlement through legal changes and reforms.

According to the India Risk Survey 2018, Crime ranks in the seventh position. India is ranked 136 out of 163 countries in the Global Peace Index, 2018, moving up just one position as compared to a jump of 6 positions in 2017. It is noted that the risk of crime in India has seen a steady decline over the last few years. The Government and police have made use of social media and digital platforms to reach more people and ensure more efficient policing. Various police departments have taken to using social media as a tool for crime prevention. The India Risk Survey 2018 finds that threats to security and safety posed by violent crimes, such as, kidnapping and murder, are the biggest risk to company personnel.

'Corruption, Bribery & Corporate Fraud' continues to be one of the biggest risks faced by businesses in India, and ranks eighth in the India Risk Survey 2018. The perception of the risk has fallen, with India incorporating economic reforms to ensure that global investors are appeased. According to the World Bank's Doing Business 2018 rankings, India has jumped from 130 in 2017 to 100 in 2018 out of 189



countries. 'Corruption, Bribery & Corporate Fraud' as a risk however, continues to hinder growth and cause disruptions in progress. It dissuades potential investors and diminishes the growth opportunities of existing players. Investors have called for better corporate governance and more stringent regulation of business corporations.

Business Espionage remains in the ninth position in the India Risk Survey 2018. As per the Transparent International's Corruption Perception Index 2017, India ranks 81 with a score of 40. This is in contrast to a ranking of 79 in in 2016, also with a score of 40. While the India Risk Survey 2018 places Business Espionage on the ninth spot, business developers and investors should remain focused on the risks associated with it, which should be mitigated at all costs. Due to the sensitive nature of critical infrastructures of businesses today, particularly the cyber-domain, business espionage is becoming increasingly more sophisticated and more covert. Hence, detecting and mitigating the risks involved becomes more difficult.

Threats to women safety ranks tenth in India Risk Survey 2018. Harassment of women in the workplace is assessed as a growing risk faced by businesses in India. The prevention of sexual harassment in the workplace is a responsibility that has to be largely borne by the employer. Corporates, in their own best interests, should streamline and strengthen their internal policies on sexual harassment.

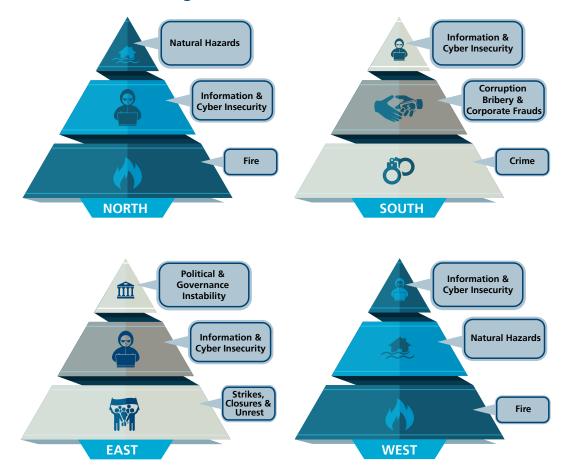
The India Risk Survey finds that 'Accidents' climbs one spot to be at 11th position from 12th last year. The survey finds that traffic accidents has been the most significant threat within the risk. According to media sources, a report published on 10 January 2018, nearly 400 hundred fatalities a day are caused by traffic accidents in India.¹ The source further reported that the Government of India is attempting to curb the rising trend on Indian roads. The growing trend of fatalities caused by occupational accidents implies increased liability for business, particularly for the insurance sector. Injuries caused by occupational accidents can also impact operations with probable reduced productivity, lower sales, and possible disrupted business continuity.

The India Risk Survey 2018 finds that risks associated with Intellectual Property (IP) Theft ranks twelfth. While there has been a slip in its ranking, IP theft is still a threat that could significantly affect a brand name and reputation. With India's IP policy coming closer to international norms, research and development have also seen an improvement.

<sup>&</sup>lt;sup>1</sup> The Economic Times, 400 Deaths a day are forcing India to take car safety seriously, January 10, 2018, https://economictimes.indiatimes.com/news/politics-and-nation/400-deaths-a-day-are-forcing-india-to-take-car-safety-seriously/articleshow/62439700.cms



## Top three risks in each region of India



### Top three risks across industry sectors

No. 1 Risk	No. 2 Risk	No. 3 Risk
Information & Cyber Insecurity	Political & Governance Instability	Natural Hazards
Corruption, Bribery & Corporate Frauds	Natural Hazards	Strikes, Closures & Unrest
Information & Cyber Insecurity	Terrorism & Insurgency	Corruption, Bribery & Corporate Frauds
Information & Cyber Insecurity	Natural Hazards	Terrorism & Insurgency
Corruption, Bribery & Corporate Fraud	Information & Cyber Insecurity	Natural Hazards
Information & Cyber Insecurity	Natural Hazards	Terrorism & Insurgency
Natural Hazards	Information & Cyber Insecurity	Fire
Information & Cyber Insecurity	Natural Hazards	Terrorism & Insurgency
Fire	Information & Cyber Insecurity	Natural Hazards
Business Espionage	Natural Hazards	Fire
Information & Cyber Insecurity	Natural Hazards	Terrorism & Insurgency
Natural Hazards	Terrorism & Insurgency	Fire
Political & Governance Instability	Natural Hazards	Fire
Strikes, Closures & Unrest	Natural Hazards	Information & Cyber Insecurity
Information & Cyber Insecurity	Natural Hazards	Fire
Information & Cyber Insecurity	Natural Hazards	Strikes, Closures & Unrest
	Information & Cyber Insecurity  Corruption, Bribery & Corporate Frauds Information & Cyber Insecurity  Information & Cyber Insecurity  Corruption, Bribery & Corporate Fraud Information & Cyber Insecurity  Natural Hazards Information & Cyber Insecurity  Fire  Business Espionage Information & Cyber Insecurity  Natural Hazards  Political & Governance Instability  Strikes, Closures & Unrest Information & Cyber Insecurity	Information & Cyber Insecurity  Corruption, Bribery & Corporate Frauds Information & Cyber Insecurity  Natural Hazards  Information & Cyber Insecurity  Natural Hazards  Information & Cyber Insecurity  Natural Hazards  Information & Governance Instability  Natural Hazards  Information & Cyber Insecurity  Natural Hazards



The India Risk Survey 2018 is a joint effort of FICCI and Pinkerton to highlight potential threats and severity of such risks and their impact. The results of the survey are based on a collation of a set of 12 risks that have been identified after a series of discussions & deliberations with stakeholders across sectors. The survey thus aims to focus on the major risks that have the potential to adversely impact businesses in India. The India Risk Survey also provides inputs that would be beneficial in cross-sector business leadership in devising risk-mitigation strategies to ensure a secure business environment. However, due to the multi-dimensional nature of risks, and their impact, the applicability of each risk to individual organisations may vary.

India continues to position itself as an attractive hub for investments from foreign players with an expanding economy and a steady Gross Domestic Product (GDP) growing annually at 7.1%. International forums have indicated that the ease of doing business in India has improved significantly. Pro-investor policies have been implanted by the Government to further bolster India's position in the international market. Through several flagship programmes, the Government is striving to promote manufacturing activity, locally. Foreign

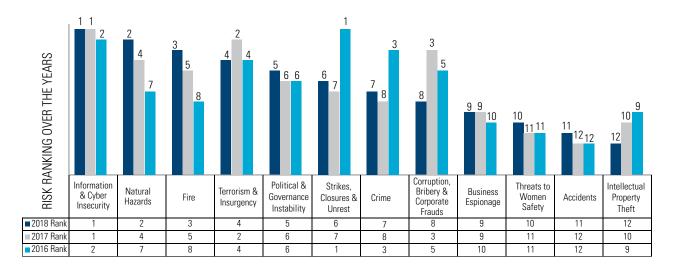
investment and IT-powered infrastructure continue to be developed to further enable support for logisticallyrobust and multi-nodal networks.

Emerging possibilities of growth implies risks across all sectors. Companies should expect an array of challenges in business operations in India. A lack of preparation against risk mitigation could result in financial and operational functions. The Government of India continues to make attempts at ensuring that bilateral and multilateral relations remain friendly for businesses to conduct operations.

As India prepares itself, as a nation, for another round of general elections in 2019, there has emerged a certain amount of uncertainty regarding business policies and existing schemes. With the upcoming elections in 2019, it is likely that policy change may affect business continuity. A holistic risk-management strategy would assist businesses to anticipate and prepare against emerging and existing risks, thereby, allowing a company to mitigate such risks.



### **Overall Risk Ranking- Yearly Trends**



While assessing and analysing the trends for the prime risks that impact corporate India, it emerged that 'Information & Cyber Insecurity' is rated as the top risk for another consecutive year, whereas 'Natural Hazards', 'Fire', 'Terrorism & Insurgency' and 'Political & Governance Instability' are amongst the top five risks. The risk of 'Natural Hazards' saw a surge on account of ever increasing incidences throughout the country.

Natural Hazards has evidently recorded a jump from the 4th position in 2017 to the 2nd this year. Fire climbed to the 3rd position this year from its previous ranking of 5. However, 'Terrorism & Insurgency' has slipped to No. 4 this year from its previous ranking of No. 2. 'Political & Governance Instability' has moved one scale upwards this year to fill the 5th position, as did 'Strikes Closures & Unrest' to the 6th and 'Crime' to the 7th.



'Corruption, Bribery & Corporate Frauds' has seen a major slide from its 3rd position last year to the 8th rank this year. 'Business Espionage' has maintained its position at the 9th rank this year as well. 'Threats to Women Safety' has ascended a scale upwards from the 11th position in 2017 to the 10th rank this year, as did

'Accidents' to the 11th. 'Intellectual Property Theft' has taken the last positon this year from its previous ranking of No. 10. It needs to be noted that each sector/industry has his own respective concerns and hence the nature of the work may indicate varying perception of risk.

### **FACTORS INFLUENCING THE RISK GAINERS**



### NATURAL HAZARDS

### **Trends**

According to media reports, a disaster risk index prepared by the Government of India, along with the United Nations Development Programme, assesses hazards and vulnerabilities across 640 districts indicating that Maharashtra is most vulnerable and prone to natural disasters, followed by West Bengal, Uttar Pradesh, and Madhya Pradesh. Among the Union Territories, Delhi positions itself to be the most vulnerable to such disasters.

### **Threat Mapping:**

The survey identifies flood as the most significant risk to businesses and communities in the country. In August 2018, the state of Kerala experienced, what has been considered as the worst flood in the region of the century, following incessant rain. According to media reports in August, property worth more than INR 20,000 Crores (USD 2755.01 million) has been lost; insurance companies have reportedly received claims worth over INR 1000 Crores, (USD 137.67 million). Nearly one million people have been displaced, and nearly 400 deaths have been reported.



This year, drought situations were also reported in India. According to reports, Shimla experienced severe droughts with water supply decreasing by an estimated 50% of the daily requirement.<sup>2</sup> The crisis has affected the tourism industry which the hill station is known for.

Fragile infrastructure, dilapidated buildings, weak conditions of logistic chains have a crucial impact and substantially increase the the risk of extreme natural events.

<sup>&</sup>lt;sup>2</sup> Shimla battles worst water crisis in decades,' Deccan Herald, May 29, 2018, https://www.deccanherald.com/national/shimla-battles-worst-water-crisis-decades-672312.html





### FIRE ....

### **Trends**

Non-compliance to safety norms in factories and high-rises, lack of institutionalized funding and under-equipped fire services in India, has led to an alarming number of accidents in the country. 'Electric Short Circuits' has been rated as the most significant threat under the risk category of Fire.

The National Crime Records Bureau (NCRB) data recorded a total of 1,13,961 deaths due to Fire Accidents between 2010 and 2014 at a startling average of 62 deaths per day.



### **Threat Mapping:**

Mumbai alone has witnessed 12 major fire tragedies and 22 deaths since the Kamala Mills fire that killed 14 people in December 2017.

The cause-wise analysis of fire accidents indicates that 29% were incidents at residential buildings while those at factories manufacturing combustible goods accounted for only 1 42%

### STRIKES, CLOSURES & UNREST .....

### **Trends**

India Risk Survey 2018 finds that growing political instability has become a major cause for concern, which has resulted in violent clashes and unrests in several parts of the country.

The implications posed by risks from Strikes, Closures and Unrest have direct implications for financial losses incurred by businesses, and a slow-down in business development.



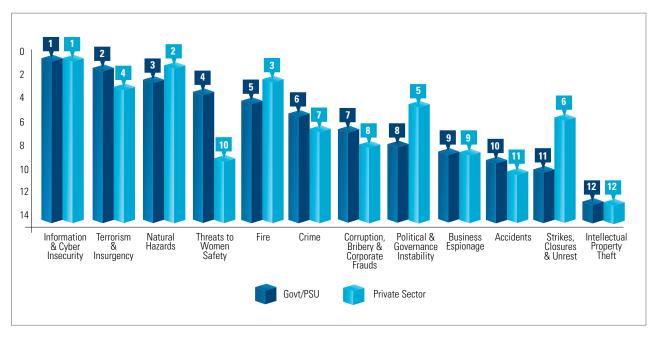
### **Threat Mapping:**

On January 2, 2018, it was reported that thousands of Dalits in Mumbai staged a protest, which disrupted local train services in the city. On May 23, 2018, it was reported that the Madras High Court's Madurai Bench stayed the construction of a leading manufacturer's new copper smelter plant in Tuticorin resulting in protests. It has been further reported that police opened fire against thousands of protestors. Thirteen casualties were reported and several others were injured.



### **Risk Ranking - Comparative Perspectives on Risk**

### Risk Ranking - Govt./PSU Vs Private Sector

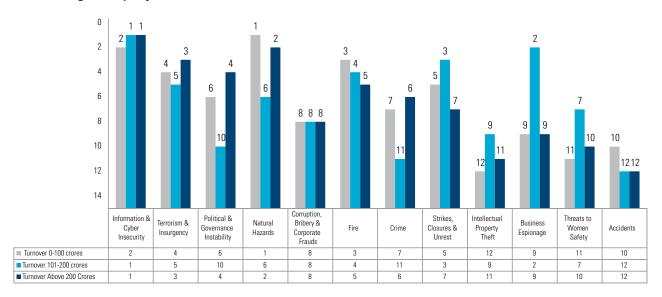


The survey results suggest that the perception of risk categories remains the same as last year between the Government/ PSU and the Private sector, with 'Information & Cyber Insecurity' remaining as the greatest risk to their operations. This perception can be attributed to a sustained increase in attempted cyber-attacks and potential espionage on cyber-security this year. As per the report, data theft, phishing & hacktivism pose the biggest threat under this risk category. The information and cyber-domain remains one of the most important critical infrastructure for the Government and the private sector, with the Government's extensive shift towards digitisation. This, coupled with the private sector's multi-modal engagement and investment in the sector has made it the most vulnerable to attacks. Protection of critical

infrastructure operations has emerged as a major challenge for the Government and Corporate sectors. The Government / PSU rates 'Terrorism & Insurgency' as the second highest risk to its operations, the same is ranked at No. 4 by the private sector. The Government / PSU rates 'Natural Hazards' as the third highest risk whereas private sector ranks 'Fire' at number 3. The Government/ PSU ranks 'Fire' at number 5 whereas Private sector places 'Political & Government Instability' at the same rank. Private sector ranks 'Crime' at number 7 whereas Government/ PSU places 'Corruption, Bribery & Corporate Fraud' at the same position. 'Business Espionage' is ranked at number 9 & 'Intellectual Property Theft' at number 12 by both segments.



### **Risk Ranking - Company Turnover**



The survey includes a study of the risk perception by companies on the basis of their turnover, giving an overview of the nature of challenges faced by small & medium level enterprises in comparison to large corporations. For the purpose of the survey, the companies were segregated according to the turnover, viz, Upto INR 100 crore (USD 13.9 million), Between INR 100 crore to 200 crore (USD 13.9 - 27.83 million), and companies with a turnover of more than INR 200 crore (USD 27.83 million). For medium-scale companies with a turnover between INR 100 crore to 200 crore (USD 13.9 - 27.83 million), as well as large corporations with an annual turnover exceeding INR 200 crore (USD 27.83 million), 'Information & Cyber Insecurity' was ranked as the primary risk. For small-scale companies with a turnover of Upto INR 100 crore (USD 13.9 million) 'Natural Hazards' was the primary risk.

For medium-scale companies, 'Business Espionage' was ranked as the second most risk. For small-scale companies with a turnover of Upto INR 100 crore (USD 13.9 million) 'Information & Cyber Insecurity' was the second most risk. Natural Hazards came at 2nd spot for large corporations.

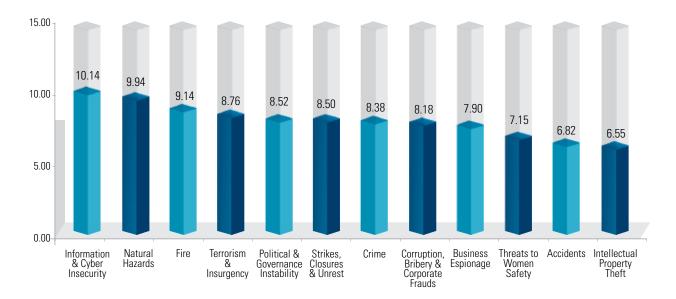
For companies exceeding an annual turnover of INR 200 crore (USD 27.83 million) rated 'Terrorism & Insurgency', 'Political & Government Instability' & 'Fire' as among the top five risks.

Similarly, small companies with an annual turnover of Upto INR 100 crore (USD 13.9 million) ranked 'Fire', 'Terrorism & Insurgency' and 'Strikes, Closures & Unrest' among the top five threats besides 'Natural Hazards' & 'Information & Cyber Insecurity' risk. For medium-scale companies with a turnover between INR 100 crore to 200 crore (USD 13.9 -27.83 million) 'Strikes, Closures & Unrest', 'Fire' and 'Terrorism & Insurgency' constitute among the top five risks.

'Corruption Bribery & Corporate Fraud' ranked at 8th position across the company segments, while 'Accidents' is the lowest perceived threat among medium scale companies & large corporations though it still remains a threat to business operations.



### **Overall Risk Trends - 2018**



The India Risk Survey presents the perception of various categories of risk by business leaders, professionals in public and private sectors spread across the country. As with any country facing challenging environments, India continues to tackle the dynamic and demanding environment with regard to the changing threat

perceptions. India Risk Survey 2018 thus tries to delve and encapsulate the movement of a particular risk in the spectrum comprising a set of 12 risks. This year the report has also captured the most prevalent threat under each risk as per the responses provided by surveyors.



### **Risk Trends Chart**

**Information & Cyber Insecurity** remains at the first position . With the current shift that the nation is undergoing towards digitisation of various assets, Information & Cyber Insecurity continues to pose a serious threat. As per India Risk Survey 2018 Data theft, Phishing, and Hacktivism have emerged as the biggest threat under this risk category.



**Natural Hazards** has evidently ascended to the second position from the previous year's report ranking, following the increasing uncertainies and incidences which has colossally affected the country. Further, a lack of preparedness and early warning systems have contributed to making Natural Hazards a risk that should be dealt with more seriousness.



**Fire** has moved up to the third rank from its previous ranking at No. 5. There has been a significant number of reported incidences causing losses to material and physical assets.



**Terrorism & Insurgency** has slipped to the fourth position as compared to its previous position at No.2. It continues to jeopardise internal security and significantly impedes the economic progress of the country.

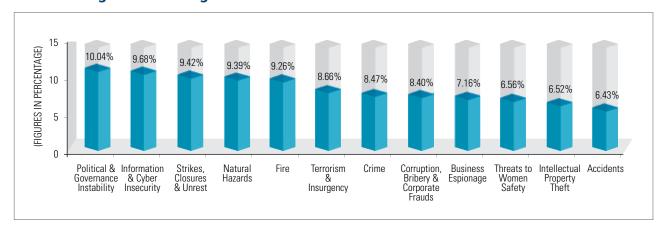


**Political & Governance Instability** has entered the top five risks due to the rising underlying uncertainty of the outcome of the electoral process across the country in 2019. The India Risk Survey 2018 finds that certain policy changes are percieved as a threat under this risk category.

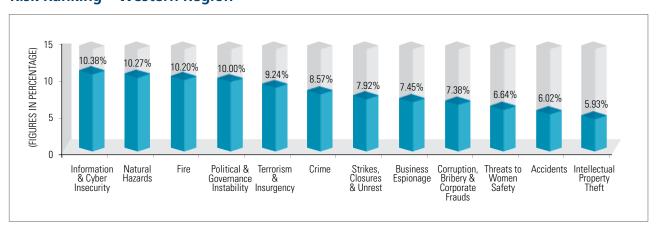




### **Risk Ranking – Eastern Region**

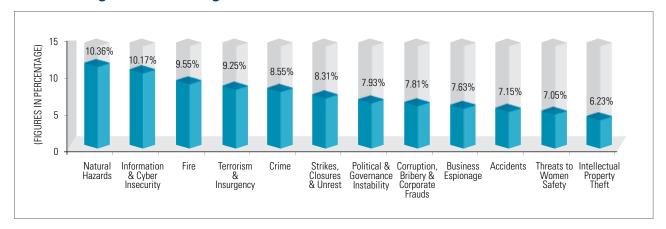


### **Risk Ranking – Western Region**

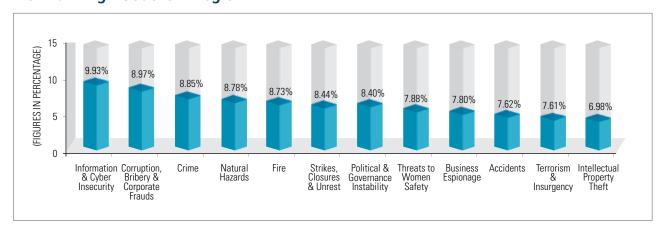




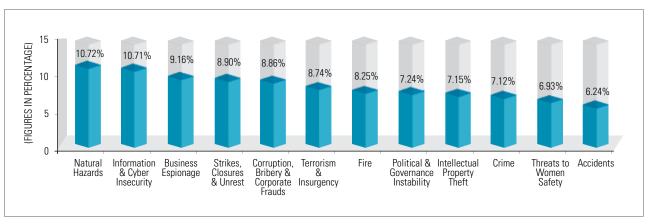
### Risk Ranking - Northern Region



### **Risk Ranking – Southern Region**

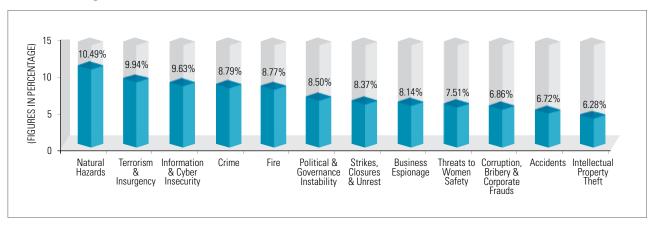


### Risk Ranking – PAN India





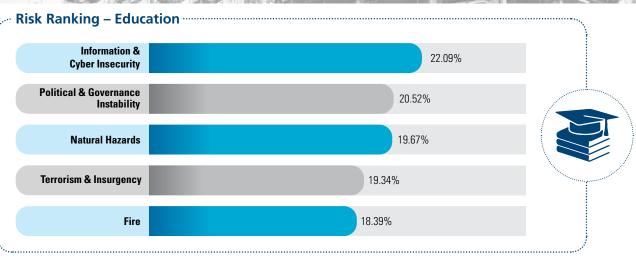
### Risk Ranking - Outside India

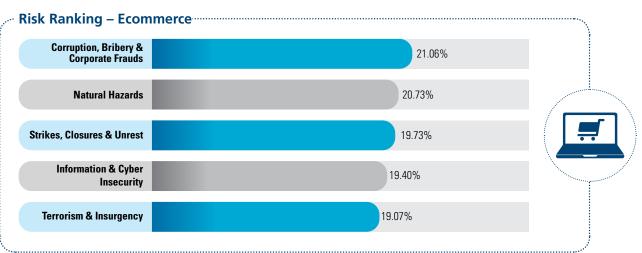


Two regions of India - South and West - view 'Information & Cyber Insecurity as the top most risk for businesses in the country. The East region perceives 'Political & Governance Instability' as the highest risk for business operations and investments. This rating is because of the increasing unrest in the region. The North region perceives 'Natural Hazards' as the top most risk for business operations. The eastern region ranks 'Information & Cyber Insecurity' and 'Strikes, Closures & Unrest' at No. 2 & No. 3 respectively. Based on key local challenges and concerns the western region rates 'Natural Hazards' and 'Fire' at the second and third position respectively.' Information & Cyber

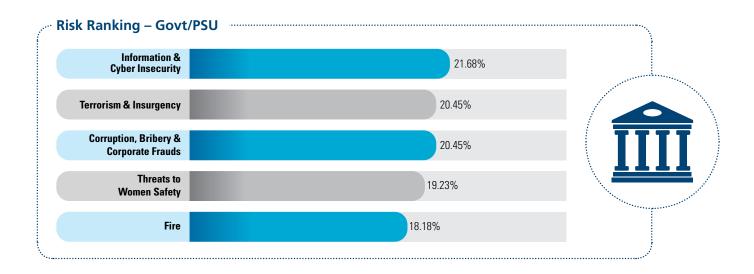
Insecurity' and 'Fire' constitute No. 2 and No. 3 in risk ranking perceptions for the northern region. The southern region of the country ranks 'Corruption, Bribery & Corporate Frauds' and 'Crime' at No. 2 and No. 3 respectively. For respondents from Outside of India, 'Natural Hazards' comprises the top most risk, followed by 'Terrorism & Insurgency' and 'Information & Cyber Insecurity' at No. 2 and No. 3 positions respectively.Pan India respondents also ranked 'Natural Hazards' as the highest risk, followed by 'Information & Cyber Insecurity' and 'Business Espionage' as the other two key risk to businesses.

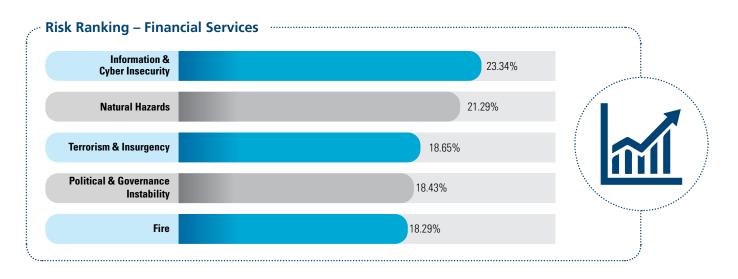


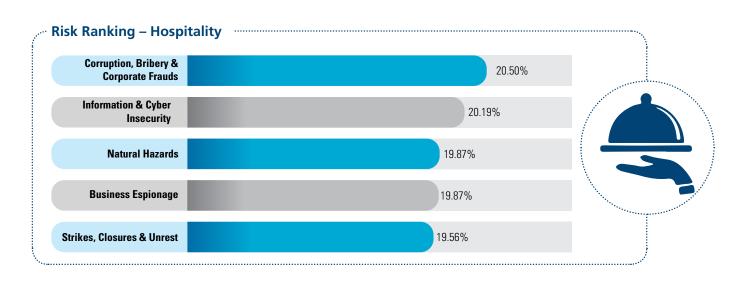




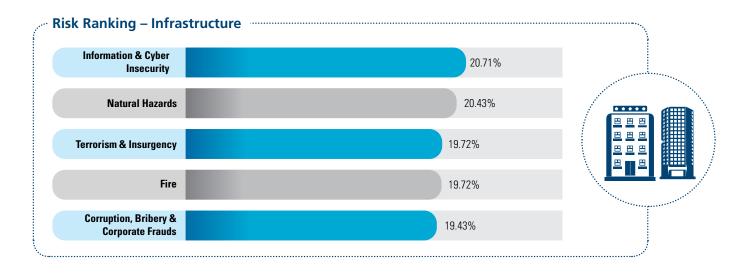


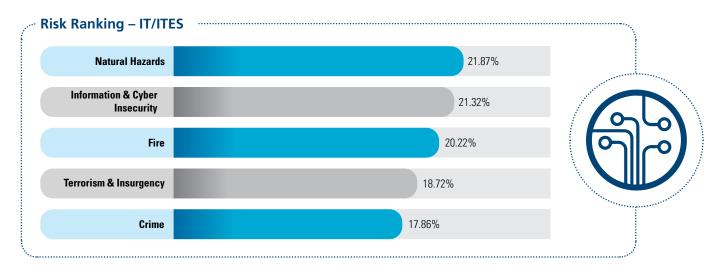


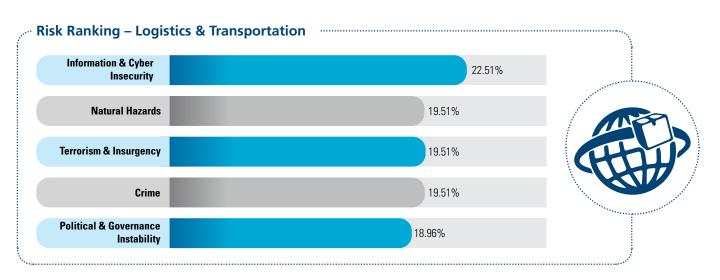




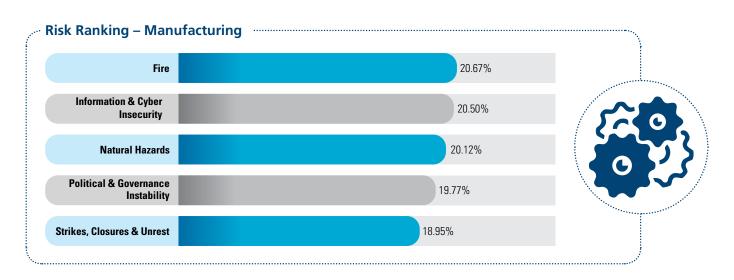


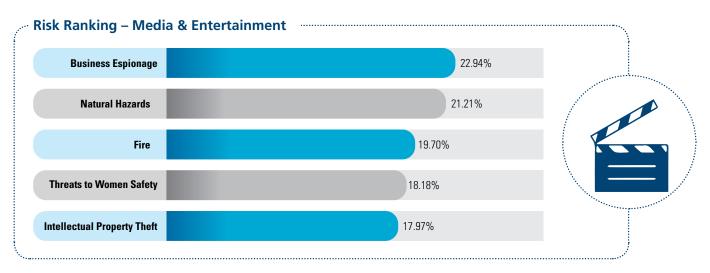


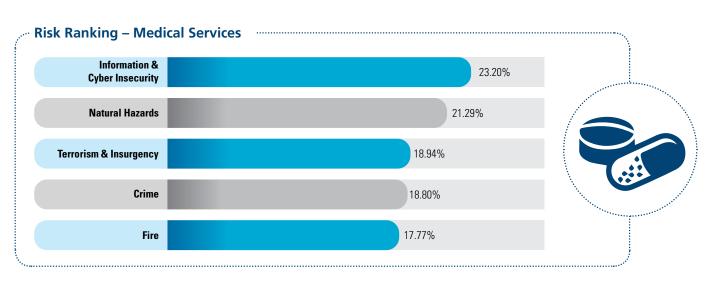




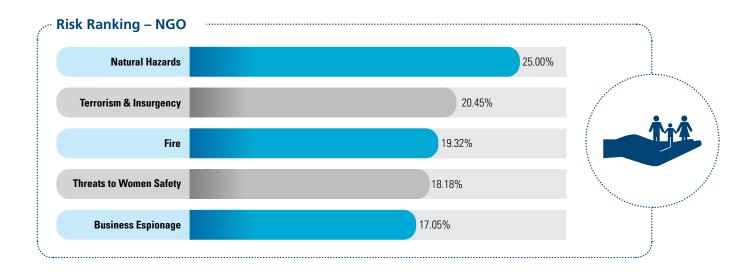


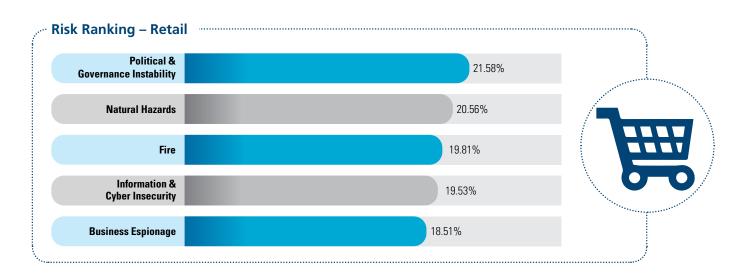


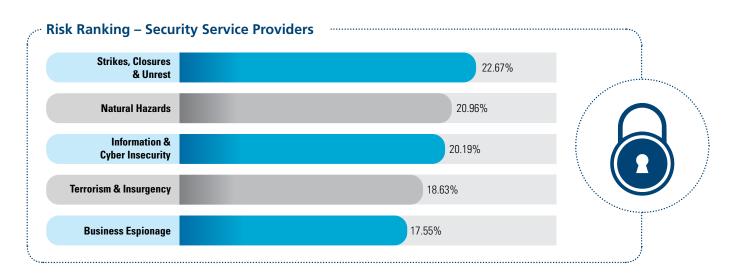




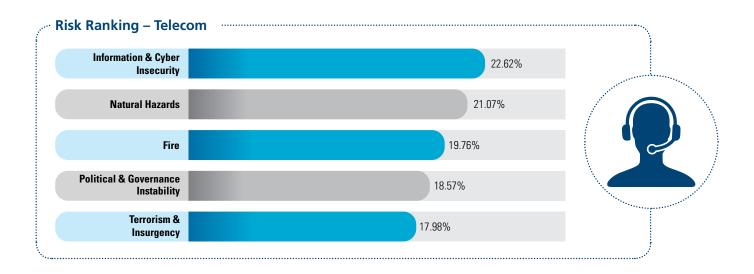


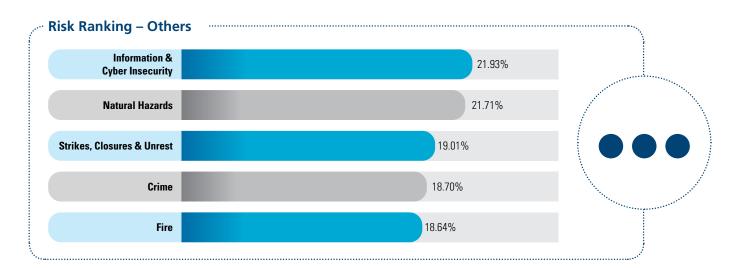












Industry-wise rankings of risk categories present a varied, comprehensive and sectoral perception. 'Information & Cyber Insecurity' is ranked the top risk by the Education, Govt. /PSU, Financial Services, Infrastructure, Logistics & Transportation, Medical Services, Telecom and Others. For the E- Commerce and Hospitality sectors, 'Corruption, Bribery & Corporate Frauds' holds the top most position. 'Natural Hazards' is the second leading risk for sectors including E-Commerce, Financial Services, Infrastructure, Logistics & Transportation, Media & Entertainment, Medical Services, Retail, Security Service Providers, Telecom and Others. For a majority of sectors 'Natural Hazards' has entered in the top three risk

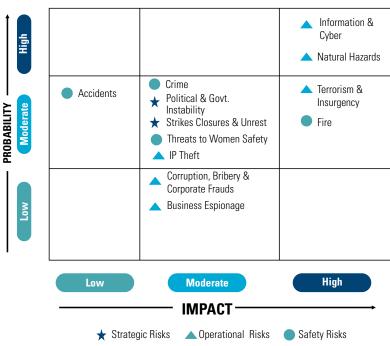
category and is considered to be one of the colossal key concerns for business operations in the country. For a majority of sectors, risks such as 'Terrorism & Insurgency', 'Fire', 'Political & Governance Instability' and 'Business Espionage' are the primary concerns and constitute among the top five perceived risks. 'Strikes, Closures & Unrest' is indicated among the top five risks observed in the E-Commerce, Manufacturing, Security Service Providers and Others. The Govt. /PSU, Media & Entertainment and the Non-governmental organization (NGO's) perceive 'Threats to Women Safety' as the fourth most important and concerning risk.



The IRS 2018 segregates risks in three categories, viz., Strategic, Operational and Safety risks. Strategic risks are those that impact directly the achievement of an organisation's business objectives. At the national level these are risks which have a grave impact on the national security and its survivability. Strategic risks are majorly determined by the top leadership of the organisation.

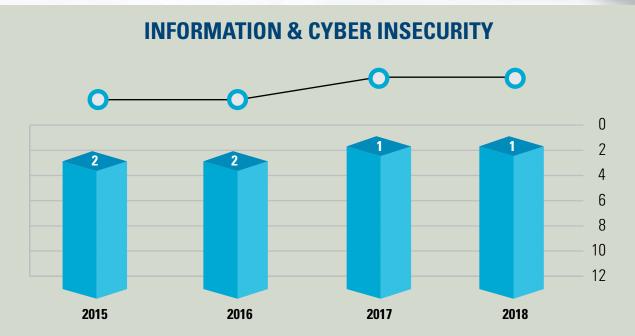
Operational Risks are defined as the probability of loss occurring from the internal inadequacies of an organisation or a breakdown in its controls, operations or procedures. Lastly, Safety risks are those risks which have the potential to jeopardise employee safety.

These could be either internal or external or both. Employees being the critical assets to an organisation, any potential hazard or threat to their safety could affect business continuity. The graph on 'categorisation of risk' represents a particular risk that falls within the



categories of either Strategic, Operational or Safety risks. The probability and impact of these risks illustrate their importance to the corporate sector. The categorisation is generic. Some of the risks considered 'Strategic' for some industries can be categorised as 'Operational' risk for another set of industries.





'Information & Cyber Insecurity' remains at 1st Rank in IRS 2018.

### Highlights

- Out of the four major risks posed by Information and Cyber Insecurity, data theft, phishing, and hactivism have emerged as the topmost & biggest threat.
- The city of Bengaluru emerged at the top regarding cases related to the IT Act. On March 7, 2018, it was reported that 22,207 Indian websites were allegedly hacked between April 2017 January 2018; this included 114 Government websites. According to a source, four cyber-attacks had already been reported in the first week of January 2018.



According to a report by the World Economic Forum, "Cybersecurity threats are outpacing the abilities of the
Governments and companies to overpower them unless all stakeholders cooperate." Hence, there is an urgent
need of growing understanding & corporation between the private sector and the Government to mitigate the
threats.

### **Year-on-Year Ranking**

Information and Cyber Insecurity remains at the top position in the India Risk Survey 2018. As per media reports, malicious cyber activity during 2017-2018 has increased in magnitude, as well as the level of sophistication in the attacks. Considering the importance of cyber critical infrastructure, the vulnerabilities attached to it remain largely underlined in India Risk Survey 2018. Services in India are guickly moving towards digitisation. While this could be perceived as a step towards rapid development in various sectors, it also presents risks in which malicious activity can be easily carried out, posing a significant threat to sensitive data. India Risk Survey 2018 focuses on four major threats posed by Information and Cyber Insecurity. These are data theft, compliance and regulatory incidents, cyberinfrastructure attacks, and impersonations. Amongst these, data theft, phishing, and hacktivism emerged as the biggest threat.

According to Crime in India 2016 report released by the National Crime Records Bureau (NCRB), a total of 12187 incidents of cybercriminal activity have been reported in 2016 in all the Indian states, compared to a total of 11331 incidents in 2015, and 9322 in 2014.<sup>2</sup> This marks a 6 per cent rise between 2015 and 2016. The city of Bengaluru emerged at the top regarding cases related to the IT Act. Further, Assam was the most affected with cases related to revenge or political motives as the intent of the crime.

With an evident rise in the number of reported malicious cyber activity, Information and Cyber Insecurity has become more pronounced, particularly with the current shift that the nation is undergoing

towards digitisation of various assets. Interestingly, the Indian Union Territories reported a total of 130 incidents, compared to 261 incidents in 2015, and 300 incidents in 2014. As per the NCRB data, Mumbai was the most targeted Indian city, while Uttar Pradesh was the most targeted state; Delhi suffered the highest number of reported incidents among the Indian Union Territories. The Mumbai police were quick to respond to the released data, according to a media source, citing that a five-day long training program had been initiated for personnel to better-handle cybercriminal activity.<sup>3</sup>

According to a report published by the World Economic Forum, called The Global Risks Report 2018 – 13th Edition, risks associated with cyber-security ranked third, and data fraud or theft ranked fourth.<sup>4</sup> Further, the report stated that "attacks are increasing, both in prevalence and disruptive potential. Cyber breaches recorded by business have almost doubled in five years, from 68 per business in 2012 to 130 per business in 2017."<sup>5</sup>

### **Incidence Mapping**

On March 7, 2018, it was reported that 22,207 Indian websites were allegedly hacked between April 2017 – January 2018; this included 114 Government websites<sup>6</sup>. According to a source, four cyber-attacks had already been reported in the first week of January 2018. The following are the reported attacks, as per the source<sup>7</sup>:

 Unrestricted access to Aadhaar details for INR 500 (USD 6.89) after paying via Paytm following an investigation by The Tribune.

 $<sup>^2\</sup> NCRB\ Report-2016, http://ncrb.gov.in/StatPublications/CII/CII2016/pdfs/NEWPDFs/Crime\%20in\%20India\%20-\%202016\%20Complete\%20PDF\%20291117.pdf$ 

<sup>&</sup>lt;sup>3</sup> 'NCRB Report Shows Trends In Cyber Crime In Cities, STATES and Union Territories And It May Contain Some Surprising Insights,' Firstpost, December 7, 2017, https://www.firstpost.com/tech/news-analysis/ncrb-report-shows-trends-in-cybercrime-in-cities-states-and-union-territories-and-contains-some-surprising-insights-4242851.html

<sup>&</sup>lt;sup>4</sup> The Global Risks Report 2018 – 13th Edition, World Economic Forum, http://www3.weforum.org/docs/WEF\_GRR18\_Report.pdf

<sup>5</sup> Ihid

<sup>&</sup>lt;sup>6</sup> 'Cyber attack of mammoth scale: Over 22,000 Indian websites hacked between April 2017-January 2018,' Financial Express, March 7, 2018, https://www.financialexpress.com/industry/technology/cyber-attack-of-mammoth-scale-over-22000-indian-websites-hacked-between-april-2017-january-2018/1090665/

<sup>&</sup>lt;sup>7</sup> 'A week into 2018, and four cyber-attacks have already happened,' NewsBytes, January 7, 2018, https://www.newsbytesapp.com/timeline/Science/14663/74632/2018-has-already-seen-major-cybersecurity-breaches



- An android banking trojan malware, called 'Android.banker.A2f8a', which allegedly imitated 232 banking and cryptocurrency application, including those offered by Indian banks. The malware, discovered by Quick Heal, reportedly tricked users into submitting login details.
- Google's Project Zero, along with other researchers discovered security flaws in modern microchips, putting almost all phones and computers at risk. The flaws, called Meltdown, and Spectre affects Intel, AMD, and ARM chips, which allows hackers to steal information from an application.
- Symantec workers discovered a fake Uber application for Android smartphones which shows a mock-up version of Uber services. The application allegedly attempts to steal information by asking for Uber login credentials.

On June 24, 2018, it was reported that six people were arrested for allegedly phishing ATM details in Coimbatore. According to the source, ICICI customers filed complaints regarding debited money without their knowledge; the involved customers had used the same ATM the same day. Investigations are underway as police suspect that a larger network is responsible for the activities.<sup>8</sup> On January 15, it was reported that multiple customers claimed incidents of fraudulent credit card transactions after attempting to purchase OnePlus products from the official website. As per the source, in what may be incidents involving a 'man in the middle attack.'9

Following reports of several ransomware attacks in India, security measures have been quickly taken.

However, cases of similar malicious activities have reportedly risen. On December 26, 2017, it was reported that the Mercantile Cooperative Bank in Thiruvananthapuram was attacked by a ransomware, in which one computer and the main server was affected. The files were then encrypted with a ransom in bitcoin. As per the source, bank transactions were not affected and the malicious activity is suspected to have had a source overseas.<sup>10</sup>

According to a source published on 14 August 2018, the rise of the GandCrab ransomware, which appears to replicate the WannaCry traits, was also increasing. The source reported that there have been reported incidents of GandCrab in the states of Gujarat, Telangana, Uttar Pradesh, and Kerala. As per a source published on 16 August 2018, experts claim that India is among the top three victims of KeyPass ransomware attacks, which uses a variant of KeyPass trojan after Brazil and Vietnam. August 2018, a media source reported that India ranked among the top-ten victims in SamSam ransomware attacks, with hackers reportedly having collected nearly USD 6.5 billion as ransom to release leaked information after taking them as hostage.

### **Impact and Combat**

On July 17, sources reported that IBM Security conducted a global study and found that apart from causing significant financial damages, data breaches are also "difficult and expensive to manage." <sup>14</sup> As per the findings of the same report, IBM projected that mega breaches, ranging from one million to 50 million records lost, can incur a cost of USD 40 million to USD 350 million on companies. <sup>15</sup> On July 11, a media source reported that the same IBM study found that a single

<sup>8 &#</sup>x27;6 men arrested for ATM phishing in Coimbatore,' India Today, June 24, 2018, https://www.indiatoday.in/india/story/6-men-arrested-for-atm-phishing-in-coimbatore-1268559-2018-06-24

<sup>9 &#</sup>x27;Multiple Oneplus Customers Claim Incidents Of Fraudulent Credit Card Transactions, After Purchasing Products From Official Website,' Firstpost, January 15, 2018, https://www.firstpost.com/tech/news-analysis/customers-claim-oneplus-payment-system-compromised-after-fraudulent-credit-card-charges-surface-4303001.html

<sup>&</sup>lt;sup>10</sup> 'Kerala Bank Hit By Ransomware Cyber Attack,' NDTV, December 26, 2017, https://www.ndtv.com/kerala-news/kerala-bank-hit-by-ransomware-cyber-attack-1792405

<sup>11 &#</sup>x27;The New Style Ransomware Attacks in India Is Quite Alarming: eScan,' Daze Info, August 14, 2018, https://dazeinfo.com/2018/08/14/ransomware-in-india-escan/

<sup>&</sup>lt;sup>12</sup> 'KeyPass ransomware attack on the rise,' Business Line, August 16, 2018, https://www.thehindubusinessline.com/info-tech/keypass-trojan-infection-spurts-in-august/article24701871.ece

<sup>&</sup>lt;sup>13</sup> 'India among top-10 victims in SamSam ransomware attack,' Business Line, August 1, 2018, https://www.thehindubusinessline.com/info-tech/india-among-top-10-victims-in-samsam-ransomware-attack/article24571334.ece

<sup>14 &#</sup>x27;IBM: The "hidden" costs of data breaches severely hurt business,' Insurance Business Magazine, July 2017, 2018, https://www.insurancebusinessmag.com/us/news/cyber/ibm-the-hidden-costs-of-data-breaches-severely-hurt-businesses-106136.aspx

<sup>15</sup> Ibid.



data breach could cost nearly INR 12 Crore (USD 1.656 Million) in India. <sup>16</sup> The report further mentions that the study found that, "an estimated per capita cost per lost or stolen records reported last year (2017) was INR 4,552 (USD 62.82) – a 7.8 per cent increase from a report published the previous year." <sup>17</sup> The findings in the report also indicated that data breaches incur the biggest costs in the U.S. and the Middle East, while India and Brazil suffer the least cost. In another study conducted by CISCO, it was found that Indian companies lost nearly USD 500,00 as financial damages due to alleged cyber-attacks within 12-18 months. <sup>18</sup>

The costs involved in setting up a robust security system against 'Information and Cyber Insecurity' will continue to grow. However, it is crucial that companies should consider financial damages, and to ensure the protection of sensitive data which belongs to the companies, and more importantly, clients. From an organisational approach, two weaknesses can be addressed internally. First, human error which can be mitigated via regular training and workshops; second, the growing understanding and cooperation between the private sector and the Government to mitigate similar threats.

With India becoming a key destination for businesses and foreign investment, a more serious focus should be directed to create a robust security mechanism and address these challenges. However, such malicious activities are becoming more sophisticated and growing larger in number. According to a report by the World Economic Forum, "cybersecurity threats are outpacing the abilities of the Governments and companies to overpower them unless all stakeholders cooperate." 19

Considering the vulnerabilities of the cyber critical infrastructure, particularly cloud services, potential targets will increase. Cyber-attacks can go beyond demanding ransoms; strategic critical infrastructure, including Government ministries, transportation systems, banks, telecommunication companies, energy sectors, manufacturers, and hospitals stand to be vulnerable. While more attacks targeting strategic infrastructure have not been successful, there have been instances when vital critical infrastructures have been manipulated. With the reported incidences of successful isolated hacking growing and the number of targets expanding, the risks are also increasing along with the financial costs to mitigate the threats. According to a World Economic Forum report, the cost of cyber-crime to businesses over the next five years is expected to be USD 8 trillion.

According to the report Economic Impact of Cybercrime – No Slowing Down published by The Center for Strategic and International Studies (CSIS), in partnership with McAfee, the report concludes that close to USD 600 billion, nearly one percent of global GDP, is lost to cybercrime each year.<sup>20</sup> 'Information and Cyber Insecurity' will likely be the biggest threat to companies in the near to medium term.

<sup>&</sup>lt;sup>16</sup> 'Single data breach costs nearly Rs 12 crore in India: IBM Study,' CNBC TV18, July 11, 2018, https://www.cnbctv18.com/technology/single-data-breach-costs-nearly-rs-12-crore-in-india-ibm-study-290621.htm

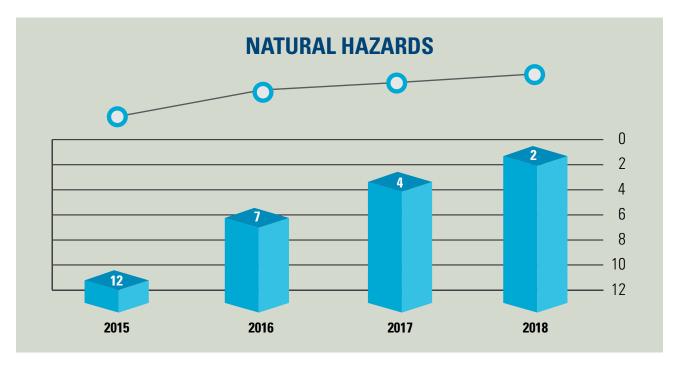
<sup>17</sup> Ibid

<sup>18 &#</sup>x27;Indian companies lost \$500,000 to cyber attacks in 1.5 years: CISCO,' The Economic Times, February 2018, https://economictimes.indiatimes.com/tech/internet/indian-companies-lost-500000-to-cyber-attacks-in-1-5-years-cisco/articleshow/63019927.cms

<sup>19</sup> Cyber threats outpacing abilities of governments, companies: World Economic Forum,' The Economic Times, January 14, 2018, https://economictimes.indiatimes.com/tech/internet/cyber-threats-outpacing-abilities-of-governments-companies-world-economic-forum/articleshow/62494975.cms

<sup>&</sup>lt;sup>20</sup> 'Economic Impact of Cybercrime – No Slowing Down', James Andrew Lewis - The Center for Strategic and International Studies (CSIS), February 21, 2018 https://www.csis.org/analysis/economic-impact-cybercrime





### 'Natural Hazards' jumps to 2nd Rank in IRS 2018

### Highlights

- According to the India Risk Survey 2018, floods pose the biggest threat to business operations under the Natural Hazards risk.
- Kerala floods: The state Government pegged an initial loss at around Rs 20,000 Crores (USD 2755.01 million). Insurance companies have reportedly received claims worth over INR 1000 Crores, (USD 137.67 million).
- Inadequate infrastructure and maintenance by the concerned bodies remain a primary factor that would allow natural hazards to pose serious risks to business operations.

### **Year-on-Year Ranking**

Natural Hazards ranks as the second biggest risk to business operations in the India Risk Survey 2018, compared to being ranked at number four in 2017. Major floods have been reported in different locations in India disrupting logistical and transportation routes, resulting in human and financial loss. As per the findings of India Risk Survey 2018, floods pose the biggest threat to business operations under the Natural Hazards risk. In 2018, one of the biggest floods to have struck India was reported in the state of Kerala. According to reports in August, property worth more than INR 20,000 Crores (USD 2755 million) has been lost; insurance companies have reportedly received

claims worth over INR 1000 Crores, (USD 139 million).<sup>21</sup> Stocks of companies linked to Kerala are also likely to be impacted in the near to medium term.<sup>22</sup> India's economic hub, Mumbai, faced flood-like situations yet again in 2018, which affected logistical operations and transportation. Other risks under this section include incidents of drought, dust storms, and pandemic outbreak.

According to media reports, the Government of India, along with the United Nations Development Programme, is currently preparing a draft to determine and assess a disaster risk index.<sup>23</sup> As per the media source, the index would factor in several parameters including exposure of population, agriculture and

<sup>&</sup>lt;sup>21</sup> 'Kerala Floods: Shares of these companies will be impacted,' The Economic Times, August 27, 2018, https://economictimes.indiatimes.com/wealth/invest/kerala-floods-shares-of-these-companies-will-be-impacted/articleshow/65539668.cms

<sup>22</sup> Ibid.

<sup>23 &#</sup>x27;Delhi most vulnerable UT in India's first disaster risk index, Maharashtra leads states,' The Times Of India, June 10, 2018, https://timesofindia.indiatimes.com/india/delhi-most-vulnerable-ut-in-indias-first-disaster-risk-index-maharashtra-leads-states/articleshow/64525085.cms



livestock, and environmental risks. The draft would also consider economic vulnerabilities and actions to mitigate the related risks. India continues to lack adequate infrastructure, coupled with weak institutional capacity, and financial resources when compared to other leading economies, such as Japan and China, to mitigate the adverse effects of natural disasters. Further, a lack of preparedness and early warning systems have contributed to making Natural Hazards a risk that should be considered with more seriousness.

### **Incident Mapping**

The looming threat that has affected several districts in India has been floods. In June 2018, the northeast region experienced major floods with the state of Assam reportedly bearing a majority of losses. According to sources, 25 deaths were reported due to flood-related incidents.<sup>24</sup> The city of Mumbai also experienced flood-like situations in July 2018. Transportation was affected the most with trains being cancelled, airports shut down, and roads being closed. Further, nearly 400 residents in low-lying saltpan lands in Manikpur were reportedly rescued on boats.<sup>25</sup> In August 2018, the state of Kerala experienced, what has been considered as the worst flood in the region of the century, following incessant rain. According to media reports, nearly one million people have been displaced, and nearly 400 deaths have been reported.<sup>26</sup> As per sources, coffee plantation and tyre companies are likely to experience great financial losses in the near to medium term.27, 28

This year, drought situations were also reported in India. According to reports, Shimla experienced

severe droughts with water supply decreasing by an estimated 50% of the daily requirement.<sup>29</sup> The crisis has affected the tourism industry, which, the hill station is known for. Further, minor protests were also reported. Despite the flood-like situation in the capital city of Maharashtra, the state Government declared drought in 8 talukas from 3 districts.<sup>30</sup> According to reports, the state Government also declared drought in nearly 14,000 villages following a reported shortage of crop production in the Kharif season of 2017.<sup>31</sup>

According to reports, 17 casualties have been reported due to an outbreak of the Nipah virus, a rare braindamaging entity.<sup>32</sup> The state of Kerala was put on high alert following reports of the pandemic. Further, as per sources, 2,379 people were quarantined in the state, raising alarms along the Malabar region of the state.<sup>33</sup>

Several flights were affected in the Delhi-NCR region due to reported dust storms with a wind speed of 109 kmph (67.72 miles per hour).<sup>34</sup> According to the source, dust storms have caused major devastation, with reported casualties, destroyed houses and crops.<sup>35</sup> Further, the dust storm also added to the region's already poor air quality index.

### **Impact and Combat**

Inadequate infrastructure and maintenance by the concerned bodies remain a primary factor that would allow natural hazards to pose serious risks to business operations and also makes mitigation difficult and delays rescue efforts in the event of a natural disaster. According to the aforementioned national disaster risk index by the Union Home Ministry, Maharashtra has

<sup>24 &</sup>quot;Barring Assam, the flood situation in northeast improving, death toll rises to 25," The Times Of India, June 18, 2018, http://timesofindia.indiatimes.com/articleshow/64639530.cms?utm\_source=contentofinterest&utm\_medium=text&utm\_campaign=cppst

<sup>&</sup>lt;sup>25</sup> 'Mumbai rains HIGHLIGHTS: Very heavy rains expected, train services hit,' Indian Express, July 12, 2018, https://indianexpress.com/article/cities/mumbai/mumbai-rains-weather-flood-death-toll-imd-alert-live-updates-5251753/

<sup>26 &#</sup>x27;In Kerala and Kodagu, ecologists warned of extreme floods years ago,' Quartz India, August 27, 2018, https://qz.com/india/1370367/in-kerala-and-kodagu-the-extreme-floods-were-foretold/

<sup>&</sup>lt;sup>27</sup> 'Floods have wiped out acres of Indian coffee plantations,' Quartz India, August 27, 2018, https://qz.com/india/1370201/coffee-farmers-in-kerala-and-coorg-fear-the-worst-post-floods/

<sup>&</sup>lt;sup>28</sup> Kerala floods may wash away tyre companies' profitability, The Economic Times, August 27, 2018, https://economictimes.indiatimes.com/markets/stocks/news/kerala-floods-may-wash-away-tyre-companies-profitability/articleshow/65561003.cms

<sup>&</sup>lt;sup>29</sup> 'Shimla battles worst water crisis in decades,' Deccan Herald, May 29, 2018, https://www.deccanherald.com/national/shimla-battles-worst-water-crisis-decades-672312.

<sup>30 &#</sup>x27;Maharashtra government declares drought in 8 talukas from three districts,' The Times of India, April 25, 2018, https://timesofindia.indiatimes.com/city/mumbai/maharashtra-government-declares-drought-in-8-talukas-from-three-districts/articleshow/63915144.cms

<sup>31</sup> Ibid

<sup>&</sup>lt;sup>32</sup> 'India's Kerala state on alert amid Nipah virus outbreak,' Al Jazeera, 5 June 2018. https://www.aljazeera.com/news/2018/06/india-Kerala-state-alert-Nipah-virus-outbreak-180605112720057.html

<sup>33</sup> Ibid.

<sup>34</sup> Dust storms worsen air in North India as part of deadly 'New Normal'

<sup>35</sup> Ibid.



been put at the top of the list that maps hazards and vulnerabilities, followed by West Bengal, Uttar Pradesh, and Madhya Pradesh. Delhi has been assessed as the most vulnerable among the Union Territories. However, considering that the scale of damages caused by the recent Kerala flood, the damage was mostly attributed to effects of "human incursions and unscientific developmental activities." <sup>36</sup> It is recommended that businesses assess the risks posed by natural hazards on a more elaborate scale, particularly before initiating planned operations.

Further, the National Disaster Management Authority of India (NDMA) has stated that "Disaster risks in India are further compounded by increasing vulnerabilities related to changing demographics and socio-economic conditions, unplanned urbanization, development

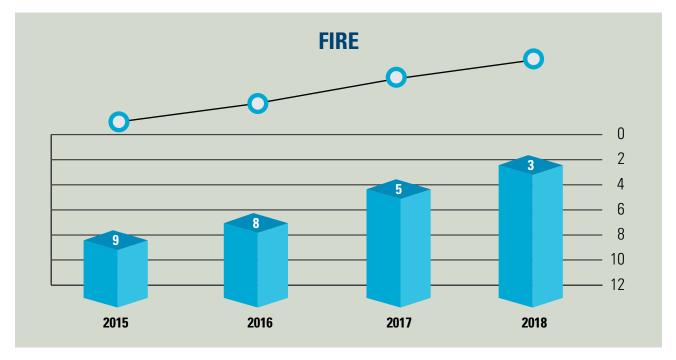
within high-risk zones, environmental degradation, climate change, geological hazards, epidemics and pandemics. Clearly, all these contribute to a situation where disasters seriously threaten India's economy, its population and sustainable development."37 However, poor maintenance of infrastructure would likely result in the same factors mentioned by the NDMA. For instance, media sources reported that the pending structural audit of 296 bridges in Mumbai by the Brihanmumbai Municipal Corporation (BMC) has revealed that 18 connectors, including 10 major bridges and 8 foot over-bridges, will have to be demolished and rebuilt; 61 bridges need major repairs, 107 need minor repairs, 110 are in good condition.<sup>38</sup> Comprehensive audits to ensure the safety conditions of important commutes would be beneficial to ensure the safety of company personnel during natural disasters.

<sup>&</sup>lt;sup>36</sup> 'For Kerala's flood disaster, we have ourselves to blame," Hindustan Times, August 17, 2018, https://www.hindustantimes.com/india-news/what-is-behind-the-kerala-monsoon-fury/story-2NxvHfTDAmS10k9hHofiiO.html

<sup>&</sup>lt;sup>37</sup> National Disaster Management Authority, Vulnerability Profile, https://ndma.gov.in/en/vulnerability-profile.html

<sup>38 &#</sup>x27;BMC audit: 18 bridges in Mumbai need reconstruction,' Hindustan Times, September 11, 2018, https://www.hindustantimes.com/mumbai-news/bmc-audit-18-bridges-in-mumbai-need-reconstruction/story-aXdSOGRY01rTliKoyY0gvJ.html





'Fire' jumps to 3rd Rank in IRS 2018

### Highlights

- In Fire, electric short circuit incidences pose as a major risk to business continuity and operations.
- Mumbai, Maharashtra has faced a 25-30% dip in footfalls and business due to fires that hit Kamala Mills. Mumbai witnessed 12 major fire incidences that killed 14 people in 2017.
- Citizen groups and corporate alliances are an imperative to create awareness and improve fire safety in India.

### **Year-on-Year Ranking**

An outbreak of fire poses risks to business continuity and operations, and ranks at the third position in the India Risk Survey 2018, compared to its ranking at the fifth position in India Risk Survey 2017. The National Crime Records Bureau (NCRB) data recorded a total of 1,13,961 deaths due to Fire Accidents between 2010 and 2014 at a startling average of 62 deaths per day. The cause-wise analysis of fire accidents indicates that 29% were incidents at residential buildings while those at factories manufacturing combustible goods accounted for only 1.42%.<sup>39</sup> The states of Maharashtra, Madhya Pradesh, Gujarat and Tamil

Nadu accounted for 54% of these fatalities. The most number of deaths occurred in Maharashtra (24,293), accounting for 21.3% of all deaths.<sup>40</sup> A CAG report indicates that Maharashtra continues to be at high risk of fire accidents owing to a shortfall of fire stations. Maharashtra has only 154 fire stations as against a requirement of 1,231, indicating a shortfall of 73% and a gross inability to effectively tackle fire disasters.<sup>41</sup> The India Risk Survey finds that electric short-circuit is the most likely cause of potential fire outbreaks at business locations.

<sup>&</sup>lt;sup>39</sup> The Times of India, 'Fire incidents kill 12 times more people than they injure', 9 January 2018, https://timesofindia.indiatimes.com/city/bengaluru/fire-incidents-kill-12-times-more-people-than-they-injure-ncrb/articleshow/62423748.cms

<sup>40</sup> NCRB, Accidental Deaths & suicides in India 2015, 29 July 2016, http://ncrb.gov.in/StatPublications/ADSI/ADSI2015/adsi-2015-full-report.pdf

<sup>&</sup>lt;sup>41</sup> The Times of India, 'Maharashtra fire stations are inadequate', 30 August 2016, https://timesofindia.indiatimes.com/city/mumbai/Maharashtra-fire-stations-are-inadequate-CAG-report/articleshow/53926477.cms



### **Incidence Mapping**

There have been numerous fire accidents in the current year, causing significant loss of life and property. Mumbai alone has witnessed 12 major fire tragedies and 22 deaths since the Kamala Mills fire that killed 14 people in December 2017. An accident in a Ludhiana plastic factory claimed 13 lives, including 3 firemen. Flouting of safety norms resulted in the collapse of the building, trapping dozens under the debris and further complicating the rescue operation. A cylinder leakage in Rohini Hospital, Telangana caused a fire that claimed two lives and injured several others. Two people were killed and 15 severely injured in Kota, Rajasthan due to an electrical short circuit and subsequent explosion of five gas cylinders. In Jharkhand, an illegal cracker unit caught fire and killed 6 people and injured four.<sup>42</sup>

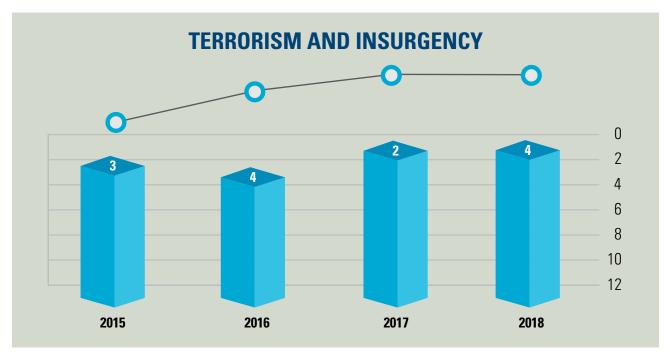
### **Impact and Combat**

Fire accidents in India have resulted in innumerable casualties and significant losses for businesses. Non-compliance with safety norms in factories and highrises, in addition to the under-equipped fire services in India, has led to an alarming number of accidents year-on-year. While the Government and other regulatory bodies have prescribed norms and fire safety measures, implementation and vigilance continue to be a concern. The increasing gravity of the situation has resulted in the formation of citizen groups and corporate alliances to create awareness and improve fire safety in India. Timely fire audits backed with coercive mechanisms in case of dereliction of obligations can prove effective.



<sup>&</sup>lt;sup>42</sup> Beyond Carlton, '8 Worst Fire Accidents of 2017', http://www.beyondcarlton.org/8-worst-fire-accidents-2017/





### 'Terrorism and Insurgency' drops to 4th Rank in IRS 2018

### Highlights

- As per the Global Terrorism Index (GTI) 2017, India remains in the eighth position with a measured score of 7.534 out of 10.
- The use of explosives are the most prevalent threat type under this risk.
- The MHA Report records the State wise extent of LWE in the year 2017. A total of 908 incidents and 263 deaths were recorded across 10 states. Majority of attacks occurred in the states of Chhattisgarh, Jharkhand, Odisha, Maharashtra, Bihar, Andhra Pradesh and Telangana.
- As per the Global Peace Index, India has been ranked 136 of 163 countries in 2018, which is a rank higher compared to the previous year.
- The Government of India continues to push concentrated efforts to holistically counter the threats of terrorism and insurgency, internal, as well as external.

### **Year-on-Year Ranking**

According to India Risk Survey 2018, risks that emanate from Terrorism and Insurgency show a significant drop to the fourth position. It ranked second in the survey conducted in 2017. As per the Global Terrorism Index (GTI) 2017, India remains in the eighth position with a measured score of 7.534 out of 10. It follows Somalia, which is in the seventh position, and Pakistan, which is in the fifth position.<sup>43</sup> Further, according to the reports, a total of 929 incidents of terrorist attacks were reported in India. Of these attacks, 340 deaths and 646 injured were reported.<sup>44</sup> While there has been

a marked decrease in fatalities, it has been found that there has also been a rise in the number of alleged terrorist attacks in the country. The GTI also cites that there were 16 per cent more attacks in 2016 compared to those reported in 2015.<sup>45</sup> According to the South Asian Terrorism Portal, a total of 2078 casualties were reported in 2017 till December 21, 2017, compared to 2835 casualties in 2016, and a total of 4477 casualties in 2015. India Risk Survey 2018 finds that acts of terrorism via explosives pose the biggest threat to businesses.

<sup>&</sup>lt;sup>43</sup> Institute of Economics and Peace, Global Terrorism Index 2017 – Measuring and understanding the impact of terrorism, Sydney, http://visionofhumanity.org/app/uploads/2017/11/Global-Terrorism-Index-2017.pdf

<sup>44</sup> Ibid

<sup>&</sup>lt;sup>45</sup> South Asia Fatalities 2010-2017, South Asia Terrorism Portal, http://www.satp.org/



### **Incidence Mapping**

According to the GTI, 20 of 56 terrorist groups have been responsible for fatalities; India has the lowest rate of deaths per attack among the ten countries that have been most affected by terrorism with an average of 0.4 deaths per attack.<sup>46</sup> The security environment in J&K remains volatile. On June 26, 2018, it was reported that two of 21 'wanted militants' were allegedly killed in three days in Kashmir following the release of a hit list as part of "Operation All Out" and anti-militancy operations in the state.<sup>47</sup> Further, the J&K police arrested an alleged suicide bomber a day after a high alert was sounded prior to the Republic Day celebrations.<sup>48</sup>

According to media sources on September 1, 2018, the National Investigation Agency (NIA) seized INR 48 Lakhs (USD 66033) during an investigation into Manipurbased proscribed terrorist organization Kangleipak Communist Party (KCP).<sup>49</sup> On August 6, it was reported that an alleged Lashkar-e-Toiba terrorist was arrested at the Delhi airport after having been deported from Saudi Arabia. As per the source, the accused was allegedly involved in 2007 incident of attempting to infiltrate terrorists into India.<sup>50</sup>

Left-Wing Extremism (LWE) remains a severe threat, posing security risks mainly to logistical operations. According to data provided by the Ministry of Home Affairs, 354 incidents have been reported, till May 15, 2018; 97 casualties have been reported. 263 deaths were reported in 2017, and 278 in 2016.<sup>51</sup> As per media sources, two paramilitary personnel were injured in an explosion allegedly triggered by left-wing rebels on June 1, 2018, in Aranpur, Chattisgarh.<sup>52</sup> In another incident reported by the South Asian Terrorism Portal (SATP), one police personnel was killed and three others were injured in an alleged Maoist-triggered blast in Chhattisgarh on September 1, 2018.<sup>53</sup>

While the Islamic State (IS) has been relatively controlled on a global scale, the potential of IS sleeper cells remains a potential threat. According to media sources, two people were arrested by the NIA from Hyderabad for allegedly having connections to the terrorist outfit.<sup>54</sup>

### **Impact and Combat**

It has been reported that South Asia is undergoing the "largest regional improvement in peacefulness." As per the Global Peace Index, India has been ranked 136 of 163 countries in 2018, which is a rank higher compared to the previous year. Security measures have direct implications for business operations and trade, as strong security regulations increase delivery time and costs. This highlights the persistent risk posed by Terrorism and Insurgency while conducting business operations in India.

The Government of India continues to push concentrated efforts to holistically counter the threats of terrorism and insurgency, internal, as well as external. It continues to strengthen its domestic capabilities in hostile regions, and at the borders. Simultaneously, the Government is also strengthening ties on bilateral and multilateral platforms to tackle the risks posed by terrorism to ensure that business operations and personnel are secure and safe. India has proposed for a UN Comprehensive Convention on International Terrorism (CCIT), which would give "legal teeth to prosecute terrorist acts", according to Indian officials. It is currently being discussed at the Sixth Ad Hoc Committee of the UN.55 According to its official website, the UK Government has reported that India and the UK are working together to counter extremism as well. The British Minister for Countering Extremism, Baroness Williams, during a speech at the Observer Research Foundation, mentioned, "We have a shared interest in each other's prosperity, generating jobs, developing skills, and enhancing the competitiveness of the UK's and India's economies."56

<sup>&</sup>lt;sup>46</sup> N. 1

<sup>&</sup>lt;sup>47</sup> 'Two out of 21 'wanted militants' killed in three days in Kashmir,' The New Indian Express, June 26, 2018, http://www.newindianexpress.com/nation/2018/jun/26/two-out-of-21-wanted-militants-killed-in-three-days-in-kashmir-1834087.html

<sup>&</sup>lt;sup>48</sup> 'Jammu and Kashmir Police arrested a woman 'suicide bomber' planning to disrupt Republic Day celebrations in Valley,' First Post, January 26, 2018, https://www.firstpost.com/india/jammu-and-kashmir-police-arrests-woman-suicide-bomber-planning-to-disrupt-republic-day-celebrations-in-valley-4320997.html

<sup>&</sup>lt;sup>49</sup> 'Manipur: NIA seizes Rs 48 lakh in terror funding case,' ANI, September 1, 2018, https://www.aninews.in/news/national/general-news/manipur-nia-seizes-rs-48-lakh-in-terror-funding-case201809010323220003/

<sup>&</sup>lt;sup>50</sup> 'LeT terrorist, deported from Saudi Arabia, arrested at Delhi airport, Hindustan Times, August 6, 2018, https://www.hindustantimes.com/india-news/lashkar-e-taiba-terrorist-handler-arrested-at-delhi-airport-after-being-deported-from-saudi-arabia/story-drVaf43jwCqv3vpAviDjdL.html

<sup>&</sup>lt;sup>51</sup> The State-wise extent of LWE violence during 2009 to 2018 (up to 15.05.2018), Ministry of Home Affairs, https://mha.gov.in/sites/default/files/LWEO300520180945.pdf

<sup>52 &#</sup>x27;2 troopers injured in the blast by left-wing rebels in central India,' Xinhua Net Asia & Pacific Edition, June 1, 2018, http://www.xinhuanet.com/english/2018-06/01/c\_137223414.htm

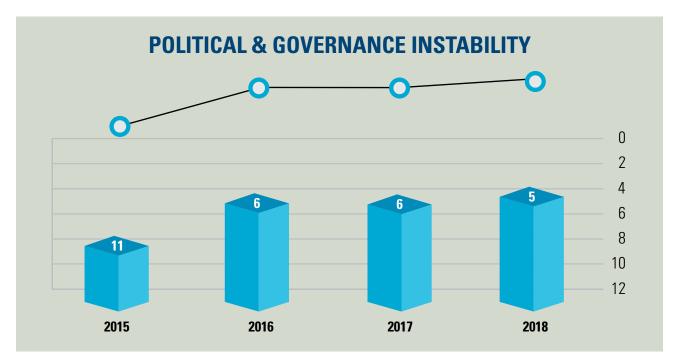
<sup>53 &#</sup>x27;Policeman killed and three others injured in a Maoist-triggered blast in Chhattisgarh,' SATP, September 2, 2018, http://www.satp.org/terrorism-update/policeman-killed-and-three-others-injured-in-maoist-triggered-blast-in-chhattisgarh

<sup>&</sup>lt;sup>54</sup> 'NIA arrests 2 Hyderabad men for having links with ISIS,' India Today, August 12, 2018, https://www.indiatoday.in/india/story/nia-arrests-2-hyderabad-men-for-having-links-with-isis-1312394-2018-08-12

<sup>55 &#</sup>x27;SCO endorses India's proposal for UN terror treaty,' The Economic Times, June 11, 2018, https://economictimes.indiatimes.com/news/defence/sco-endorses-indiasproposal-for-un-terror-treaty/articleshow/64548213.cms

<sup>56 &#</sup>x27;UK-India working together to counter extremism,' GOV.UK, June 12, 2018, https://www.gov.uk/government/speeches/uk-india-working-together-to-counter-extremism





'Political & Governance Instability' climbs one spot to 5th Rank in IRS 2018

- Certain Policy changes are percieved as a threat under this risk category.
- According to the World Bank, India now ranks at the 100th place in the 'ease of doing business' index, which is a significant jump from the 130th position in 2017.

### **Year-on-Year Ranking**

'Political & Governance Instability' claims the fifth position in India Risk Survey 2018. Political & Governance Instability' ranks fifth position in India Risk Survey 2018. The India Risk Survey 2018 finds that certain policy changes are percieved as a threat under this risk category. It is assessed that the general elections to be held across the country in 2019, led to a perception of increasing uncertainty, causing the risk to climb up one spot to number 5 position in 2018. Political & Government instability is a risk that is closely observed by investors, foreign and domestic, and would impact business development and continuity plans for the economy as a whole.

Further, the outcome of the state legislative elections in key business regions such as Karnataka, Madhya Pradesh, Telangana, Andhra Pradesh, and Rajasthan will determine the medium- to long-term policy framework for the implementation of plans to further boost business in their respective states. Other states that have concluded, will be conducting legislative assembly elections within the period of 2018-2019 are Meghalaya, Tripura, Chhattisgarh, Mizoram, Sikkim, Arunachal Pradesh, Odisha, Haryana, Maharashtra, and Jharkhand. This is projected to observe a positive state-wise shift of business development over the next one-two years as state Governments begin to engage with administrative and political consensus.



During the course of the year, several domestic issues have been flagged, particularly those of farmers' distress in several states, and the consistent increase of diesel and petrol, which a general public consensus has pointed to unnecessary taxes. The untoward feeling on both issues would affect the voting of rural as well as urban areas. Further, civil unrest and political compulsion in the state-centre relations continue to present credible risks to the Government's long-term economic and financial goals, thereby, delaying the Government's efforts to create a conducive and sustainable environment for businesses to engage in a competitive manner, therefore, impinging on investments from domestic and as well as foreign players.

### **Incidence Mapping**

Following the assessment in India Risk Survey 2017, it has been observed that in 2018 was marked by effects of several policies introduced in the previous year, that is, demonetisation and the introduction of the Goods and Service Tax (GST). Sources in the media suggest that businesses, and the general public, are still struggling with the reforms, which has been deemed as beneficial in the long term.

Per media sources, a state-wide ban of plastic, including carry-bags and thermocol (Polystyrene), announced on March 23, 2018, may result in a loss of up to INR 15,000 crores (USD 2118.15 million) and nearly 3 lakh jobs, as cited by the plastic industry.<sup>57</sup> This is in line with Prime Minister Modi's goal of initiating a plan to eliminate single-use plastic on an all-India scale by 2022. According to sources, global companies including Amazon, H&M, and Pepsi are attempting to soften the ban on single-use plastics due to its adverse implications for packaging logistics.

Considering the outcome of the Karnataka elections held in May, which, was followed by a degree of political uncertainty in the state, financial analysts assessed that despite the onset of the current coalition, the market would not be "perturbed." <sup>58</sup> Further, analysts commented that the poll would trigger a fresh bout of buying in the short term," <sup>59</sup> adding that the market would be more inclined towards international commodity prices.

In July 2018, the Union Minister of Road Transport and Highways elucidated to automobile manufacturers that the Government was serious about setting the ambitious target of having only electric cars by 2030. As per sources, the objective behind this idea is to move towards alternative fuel. After this announcement, the Government then announced that it has increased the official maximum load-carrying capacity of heavy vehicles, including trucks, by 20-25%. Some analysts are of the opinion that this step would adversely impact manufacturers of commercial vehicles by affecting the demand and increasing costs.<sup>60</sup> However, it has also been observed that the Government is attempting to implement the overloading norms with a view that infrastructure projects and moving construction material to project sites would be relatively cheaper. Further, the new norm would cut freight costs and increase the pace of movement of goods on highways.61

### **Impact and Combat**

According to the World Bank, India now ranks at the 100th place in the 'ease of doing business' index, which is a significant jump from the 130th position in 2017. The improvement has been credited to major improvements in several indicators such as resolving insolvency, protecting minority investors, getting credit, and paying taxes. The jump was also the highest by any country; the Hon'ble Finance Minister, Mr. Arun Jaitley commenting, "There is a significant improvement in many criteria such as protecting minority investors, availability of credit and getting an electricity connection."

As the current Government nears its five-year term the Centre has strongly focused on strengthening foreign and diplomatic relations with several major

<sup>&</sup>lt;sup>57</sup> "Plastic ban: India stares at a loss of Rs 15,000 crore & 3 lakh jobs," The Economic Times, June 24, 2018, https://economictimes.indiatimes.com/news/politics-and-nation/plastic-ban-india-stares-at-loss-of-rs-15000-crore-3-lakh-jobs/articleshow/64721810.cms

<sup>58 &</sup>quot;Modi wave in Karnataka prompts D-Street to speculate on new market high," The Economic Times, May 15, 2018, https://economictimes.indiatimes.com/markets/stocks/news/modi-wave-in-karnataka-prompts-d-street-to-speculates-on-new-market-high/articleshow/64170395.cms

<sup>59</sup> Ibid.

<sup>&</sup>lt;sup>60</sup> 'New load-carrying rules: Will this be a bulldozer roll over commercial vehicle industry? ' The Economic Times, July 18, 2018, https://economictimes.indiatimes.com/news/et-explains/new-load-carrying-rules-will-this-be-a-bulldozer-roll-over-commercial-vehicle-industry/articleshow/65037620.cms

<sup>61</sup> Ihid



players. This has been largely to create an inviting and sustainable environment for foreign companies to establish businesses in India, thereby, contributing to its economic growth.<sup>62</sup>

In what is likely an attempt to ensure that the present ruling party remains in power following the next general elections, the Centre is likely to focus on internal issues such as price-high of commodities, remedying the present condition of waiving farmer loans, and threats posed by internal security. In the foreign-investment

front, the Government would also likely introduce reforms that would allow new businesses to have start operations in India; this can be expected to improve due to its falling in the index of 'starting a new business' per the World Bank indicators (from 155 in 2017 to 156 in 2018). Herein, the existing risks and those foreseen in the near term, caused by political and governance instability would not disrupt the prospect of business operations and business developments, as India remains as a top investment hub in the world till 2019 as per a United Nations Conference on Trade and Development (UNCTAD).

<sup>&</sup>lt;sup>62</sup> "Political stability needed for economic growth: Pranab Mukherjee," The Times of India, February 28, 2018, https://timesofindia.indiatimes.com/india/political-stability-needed-for-economic-growth-pranab-mukherjee/articleshow/63115503.cms





'Strikes, Closures & Unrest' climbs one spot to 6th Rank in IRS 2018

- Under Strikes, Closures & Unrest, Political Violence has emerged as the most consequential threat to business operations.
- Strikes, Closures and Unrests' ranks in the sixth position in the India Risk Survey 2018, compared to a ranking at the seventh position in the previous year.
- Major incidents range from protests carried out by bank employees, public transport workers and farmers.
- Businesses with international operations could consider buying political risk insurance to manage politicallymotivated civil unrest.
- In the immediate future, business can expect several changes including the enhancement of the gratuity ceiling, consolidation of Labor Laws, National Employment Policy, the inclusion of LGBTQI rights, amendments to the Factories Act, 1948, changes to the Law on Contract Labor.

### **Year-on-Year Ranking**

'Strikes, Closures and Unrests' ranks in the sixth position in the India Risk Survey 2018, compared to a ranking at the seventh position in the previous year. India Risk Survey 2018 finds that growing political instability has become a major cause and concern, which has resulted in violent clashes and unrests in several parts of the country. With growing uncertainty leading to the 2019 general elections, it is not likely that there will be significant changes for existing businesses and their developments. However, perceived policy changes could emerge as a risk factor fearing losses.

There have been several changes in employment law reforms in 2017. These include increased maternity

benefits, a new law on rights of persons with disabilities, increased coverage for mandatory employee insurance, simplified employment law compliances, the Model Shops Act and Maharashtra's New Law for shops and commercial establishments, increased trade union activity in the information technology sector, and the introduction of a common platform for complaints of sexual harassment.

In the India Risk Survey 2017, it was noted that India had been ranked among the top five nations globally in terms of contingent workforce engagement by Manpower Group Solutions' Contingent Workforce Index (CWI) 2016. The study tracks the ease of sourcing, hiring, and retaining the contingent workforce in 75 countries. According to a 2017 study by Manpower



Group Solutions, India ranks in the 38th position of the Total Workforce Index Global Ranking; it ranks tenth in the Total Workforce Index Regional Ranking. However, reiterating the findings of Workforce, a study by Oxford Economics, states that industrial sectors in India are ill-prepared to manage the diverse, international and mobile work-force. The report implies that, by 2020, the working environment would encompass five different generations, each having different sets of skills, experiences, and work habits.

### **Incidence Mapping**

On January 2, 2018, it was reported that thousands of Dalits in Mumbai staged a protest which caused widespread disruption to traffic. Incidences of stone pelting were reported which claimed one casualty. This followed by reports of violent clashes in Pune between Dalits and right-wing groups. It was further reported that traffic services were disrupted in both cities. According to a source, local train services were affected on the Harbour Line between Chembur and Govandi.66 On May 23, 2018, it was reported that the Madras High Court's Madurai Bench stayed the construction of Sterlite's new copper smelter plant in Tuticorin resulting in protests. It has been further reported that police opened fire against thousands of protestors. According to sources, thirteen casualties were reported and several others were injured.67

On June 1, 2018, it was reported that bank employees observed a two-day strike affecting normal banking services, including ATMs.<sup>68</sup> On May 8, 2018, two casualties were reported following a series of political

clashes in Palloor, allegedly by workers of the BJP and those of the CPM.<sup>69</sup> On June 3, 2018, violence was reported in Shillong following an alleged clash between workers of the Shillong Public Transport Service (STPS) and the "non-tribal" residents of Them Lew Mawlong.<sup>70</sup> The clashes resulted in the state Government calling for daily evening curfews, which affected local business. On July 3, 2018, it was reported that a state-wide shutdown was called by opposition parties in Jharkhand; public transportation services were completely suspended in the state following the enactment of the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement (Jharkhand Amendment) Act, 2017. As per the source, 18973 protestors were also detained.<sup>71</sup>

Incidents of farmers' protest continue to be reported through the year in different parts of the country. In a recent incident, it was reported that thousands of farmers and labourers staged a protest in Delhi, targeting the central Government, affecting traffic in many parts of central Delhi.<sup>72</sup>

### **Impact and Combat**

The implications posed by risks from Strikes, Closures, and Unrest have direct implications for financial losses incurred by businesses, and a slow-down in business development. Further, the country's perceived reputation, as being inhospitable for business to flourish, also affects future prospects. Instability, threatening business operations, directly impacts the market by affecting investor confidence and an increase in the risk premium assigned to securities in the country.

<sup>63 &#</sup>x27;India – 2017 Total Workforce Index Country Profile Article,' Manpower Group Solutions, https://insights.manpowergroupsolutions.com/india-2017-twi-country-profile-article/

<sup>&</sup>lt;sup>54</sup> 'India Inc ill-prepared to manage the contingent workforce, says study,' Firstpost, September 25, 2014, https://www.firstpost.com/business/corporate-business/india-incill-prepared-to-manage-contingent-workforce-says-study-1992009.html

<sup>65</sup> Ihid

<sup>66</sup> Maharashtra On Boil: After Pune, Violent Protests Reach Mumbai, Local Train Services Hit,' Outlook, January 2, 2018, https://www.outlookindia.com/website/story/maharashtra-on-boil-after-pune-violent-protests-reach-mumbai-local-train-service/306305

<sup>&</sup>lt;sup>67</sup> 'Tuticorin firing: Madras High Court orders CBI investigation, wants the report in 4 months,' The Time of India, August 15, 2018, https://timesofindia.indiatimes.com/city/chennai/tuticorin-firing-madras-high-court-orders-cbi-investigation-wants-report-in-4-months/articleshow/65408322.cms

<sup>68 &#</sup>x27;Bank Strike: More participate on last day, services hit all over India,' Business Standard, June 1, 2018, https://www.business-standard.com/article/finance/bank-strike-more-participate-on-last-day-services-hit-all-over-india-118060100045\_1.html

<sup>69 &#</sup>x27;CPM, BJP workers killed in political violence in Kerala,' NDTV, May 8, 2018, https://www.ndtv.com/kerala-news/cpm-bjp-workers-killed-in-political-violence-in-kerala-1849254

<sup>7</sup>º (Shillong unrest: Fresh clashes reflect Meghalaya's past characterized by conflicts between tribals and 'outsiders',' Firstpost, June 3, 2018, https://www.firstpost.com/india/shillong-unrest-fresh-clashes-reflect-meghalayas-past-characterised-by-conflicts-between-tribals-and-outsiders-4493643.html

<sup>&</sup>lt;sup>71</sup> 'Jharkhand Bandh: 18973 protestors detained including Hemant, Babulal,' The New Indian Express, July 5, 2018, http://www.newindianexpress.com/nation/2018/jul/05/jharkhand-bandh-18973-protesters-detained-including-hemant-babulal-1838772.html

<sup>&</sup>lt;sup>72</sup> Farmers's protest disrupts Delhi as opposition targets PM Modi,' The Times of India, September 5, 2018, https://timesofindia.indiatimes.com/india/farmers-protest-disrupts-delhi-as-opposition-targets-pm-modi/articleshow/65686408.cms



Businesses with international operations could consider buying political risk insurance to manage politically-motivated civil unrest. Business should be aware that there exist indicators which provide an understanding of the different risk-maps of a country based on political interference. Businesses are also reminded that the Indian Penal Code (IPC) deals with communal incidences, caste agitations, and other forms of violent demonstration. Matters related to industrial relations are regulated by three main central enactments: The Trade Unions Act, 1926, the Industrial Employment (Standing Orders) Act, 1946, Industrial Disputes Act, 1947.

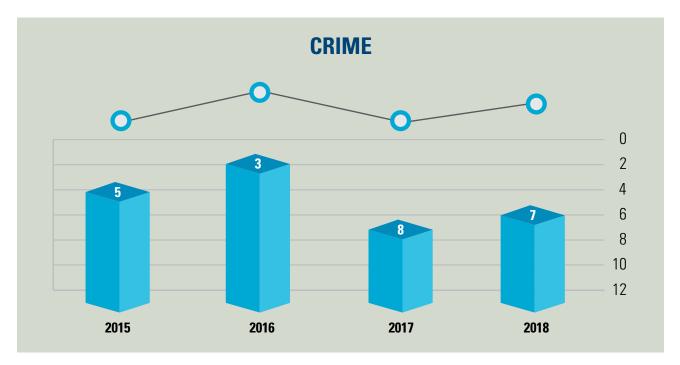
Further, the Government continues to take steps to rectify situations by addressing worker disgruntlement

through legal changes and reforms. Herein, a businesses can expect several changes in 2018 including the enhancement of the gratuity ceiling, consolidation of Labor Laws, National Employment Policy, the inclusion of LGBTQI rights, amendments to the Factories Act, 1948, changes to the Law on Contract Labor. Further, in the 2018 budget speech, the Finance Minister, Arun Jaitley, proposed that the Government will make provident fund contributions of 12 per cent of wages for new employees across sectors.<sup>73</sup> He further announced that there will be a reduction of the mandatory contribution limit from 12 per cent to 8 per cent for women employees for the first three years of employment, which would likely result in labour confidence among employees.<sup>74</sup>

<sup>&</sup>lt;sup>73</sup> 'Budget 2018: Govt proposes to contribute 12% of employees; contribution to EPF fund for new jobs,' The Economic Times, February 10, 2018, https://economictimes.indiatimes.com/wealth/personal-finance-news/budget-2018-govt-proposes-to-contribute-12-of-employees-contribution-to-epf-fund-for-new-jobs/articleshow/62743798.

<sup>74 &#</sup>x27;Budget 2018 proposal: New women workers take-home pay to up as EPF contribution capped at 8%,' The Economic Times, May 4, 2018, https://economictimes.indiatimes.com/wealth/personal-finance-news/budget-2018-proposal-new-women-workers-take-home-pay-to-go-up-as-epf-contribution-capped-at-8/articleshow/62737570.cms





'Crime' climbs one spot to 7th Rank in IRS 2018

- Violent Crimes such as Murder and Kidnapping have emerged as the topmost threat to the private and public sector
- Risks posed by criminal activity ranks seventh in the India Risk Survey 2018 as compared to India Risk Survey 2017 ranking at the eighth position.
- India is ranked 136 out of 163 countries in the Global Peace Index, 2018, moving up just one position as compared to a jump of 6 positions in 2017.
- It is imperative that Government and business organizations adopt pragmatic measures to proactively prevent and control crime.

### **Year-on-Year Ranking**

The risk of crime in India has seen a steady decline over the last few years. However, risks posed by criminal activity ranks seventh in India Risk Survey 2018, compared to India Risk Survey 2017 ranking at the eighth position. India is ranked 136 out of 163 countries in the Global Peace Index, 2018, moving up just one position as compared to the jump in 6 positions in 2017. However, India is still far behind neighbouring countries like China, Bangladesh, Nepal and Sri Lanka. Delhi, Kochi, Indore, Bhopal and Gwalior are among the cities with the highest crime rate in the country, with

Delhi having a crime rate of 182.1 compared to the national average of 77.2<sup>76</sup>

However, increasing awareness among citizens and the incorporation of people-friendly mechanisms for crime reporting, there has been a marked increase in the number of crimes being reported. The Government and police have made use of social media and digital platforms to reach more people and ensure more efficient policing. Various police departments have taken to using social media as a tool for crime

<sup>75</sup> NA

<sup>&</sup>lt;sup>76</sup> The Times of India, 'Delhi tops crime chart among 19 major cities', November 30, 2017, https://timesofindia.indiatimes.com/city/delhi/delhi-tops-crime-chart-among-19-major-cities/articleshow/61864264.cms



prevention. India Risk Survey 2018 finds that threats to security and safety posed by violent crimes, such as kidnapping and murder, are the biggest risk to personnel.

### **Incidence Mapping**

In 2016, IPC crimes have increased by 0.9% and Special & Local Laws (SLL) crimes have increased by 5.4% over 2015. A total of 48,31,515 cognizable crimes comprising 29,75,711 Indian Penal Code (IPC) crimes and 18,55,804 SLL crimes were reported in 2016, showing an increase of 2.6%over 2015 (47,10,676 cases).

State-wise, Uttar Pradesh accounted for 9.5% of the total crimes reported under IPC, followed by Madhya

Pradesh (8.9%), Maharashtra (8.8%) and Kerala (8.7%).<sup>77</sup> Delhi registered the highest crime rate with 974.9 per 1 lakh population, followed by Kerala with 727.6 and Madhya Pradesh with 337.9. Kerala reported the highest SLL crime rate of 1,252.7 in the country during 2016 followed by Gujarat (457.1) against the national average of 145.7.

### **Impact and Combat**

The risk of crime is a serious concern in India, affecting perceptions & hampering global investments & relations. Furthermore, white collar crime has impacted business profitability. Businesses should adopt their own risk mitigation strategies, with internal and /or external support, and treat this as an investment so as to prevent financial losses.

<sup>&</sup>lt;sup>77</sup> The Times of India, 'Uttar Pradesh tops country's crime list', November 30, 2017, https://timesofindia.indiatimes.com/india/uttar-pradesh-tops-countrys-crime-list-ncrb/articleshow/61863502 cms



# Crime Rate Reduction at Corporates: Current Scenario and Future Possibilities

### **Venkat Ramana**

Chief Operating Officer Valuepitch E Technologies Pvt Ltd

## **Crime Rate Reduction at Corporates: Current Scenario and Future Possibilities**

Around 70% of the crimes are committed by repeat offenders. If we are able to identify a previous offender and monitor closely, then the crime rate would drop significantly. It is not as simple at it sounds.

Identifying previous antecedents is one of the toughest problem in India. There are information gaps everywhere - in the record keeping, digitisation, access, accuracy, updation & availability. In India such steps have just begun being integrated with the processes in the last couple of decades. Databases like CCTNS, ICJS, Sex offenders, are some of the arsenal helping law enforcement agencies in tackling crime.

### **Workforce and Workplaces**

A workplace involves three sets of people - Employees, Contractors & Vendors. All pose security risks at varying degrees. In the current calendar year 2018, in the organized background verification industry, comprising of 22 top background verification agencies, have 3.2%(51820) criminal antecedent out of 1.6 million workforces applying for jobs including all white collar and blue collar. The violent crimes such as murder, kidnapping and grievous hurt contribute to 2.1%, 0.6% and 12.2% respectively.

While location wise contribution to national crime statistics provide one way to look at the occurrence of crime by area, corporates should be aware of the migration of workforce which would pose a significant difference in picture in terms of crime contribution. Job applications with involvement in serious crimes & the state-wise contribution to the above-mentioned three serious areas are as below.

### Contribution of States to Applicants Involved in Murder<sup>ii</sup>

State	Contribution		
Karnataka	16.0%		
Haryana	15.9%		
Maharashtra	15.9%		
Uttar Pradesh	13.2%		
Telangana	10.0%		
Tamil Nadu	4.8%		
Andhra Pradesh	4.7%		
Punjab	3.6%		
Assam	2.4%		
Gujarat	2.2%		
Rest of states	18%		

# Contribution of States to Applicants Involved in Kidnapping<sup>ii</sup>

State	Contribution
Maharashtra	40.2%
Uttar Pradesh	15.6%
Haryana	11.7%
Karnataka	10.1%
Punjab	6.0%
Telangana	2.7%
Rajasthan	2.5%
West Bengal	2.5%
Gujarat	2.2%
Andhra Pradesh	1.6%
Bihar	1.1%

### Contribution of States to Applicants Involved in Grievous Hurt<sup>ii</sup>

State	Contribution	
Maharashtra	29.3%	
Telangana	15.0%	
Karnataka	14.3%	
Haryana	10.8%	
Uttar Pradesh	8.7%	
Bihar	3.1%	
Assam	2.9%	
Punjab	2.1%	
West Bengal	2.0%	
Kerala	2.0%	
Gujarat	1.6%	



### The 3 Checks

The current status of criminal check at workplaces has three components.

ID check: Is the person introducing himself with his real identity? A lot of technological advancements in this area have come up with Aadhar and face matching technology.

Antecedent check on an ongoing basis: This is relatively new in India, though developed markets like the United States, have already implemented this. Uber cabs for instance, have implemented real-time drivers, criminal record check.<sup>iii</sup> Also, FBI offers a lifetime check of employees crime records for USD 18 (INR 1310)<sup>iv</sup>

Unusual Behavior Analysis: Currently HR division and managers are responsible for monitoring unusual behavior of their colleagues. This is a very subjective approach. For technology, this is the toughest, yet most promising aspect for the future, due to the recent advancements in technology. Proponents of this technology say that the crime needs to be identified in the action and alerts can be generated to stop the violence. The initial results seem promising with the evolution of Artificial Intelligence technologies and deep learning attached to the same.

In addition, a lot of technologies are being deployed by law enforcement around the world – including advanced thorough testing, privacy impact assessments, and public inputs. These are integrated using Biometric scanning<sup>v</sup>, facial recognition softwares<sup>vi</sup>, cell site simulators<sup>vii</sup>, social media monitoring tools<sup>viii</sup>, and, of course, "predictive policing<sup>ix</sup>". With the advent of Big data and AI, the time taken to narrow down on suspects is shrinking at dizzying rates.

### **How About the First-timers?**

While all criminal record checks are based on antecedents that are recorded and available, first time offenders to the extent of 30% are largely uncovered unnoticed. In corporates, a good working culture, effective monitoring of unusual behavior, continuous training and involvement could mitigate risks.

### The Future of Crime Reduction

Future of the crime rate reduction could be much dependent on identification of an ongoing crime and prevention in action. A fearful voice, a call for help, a violent scene could be identified with the help of nano devices embedded with sirens. These devices can function offline. If they get connected with the internet, they can contribute even more to the safeguarding of the places they are placed at.

In all, due to the lack of completeness, accuracy and availability of criminal records, a corporate needs to resort to more than one means to check the crime at workplaces under its umbrella. It's a never ending battle!

i Hindustan Times, 70% rape accused are repeat offenders: Study, 3 December 2010, https://en.wikipedia.org/wiki/Recidivism, https://www.hindustantimes.com/delhi-news/70-rape-accused-are-repeat-offenders-study/story-qWu0vYGGanidvxoPvdXXJK. html, https://www.theguardian.com/uk/2010/nov/04/jail-less-effective-community-service

ii This analysis is based on internal data. Valuepitch conducted a criminal record check over 1.6 million workforces in the period of January to September & found 3.2% criminals.

iii The Verge, Uber now monitors drivers in real-time for new criminal charges, 13 July 2018 https://www.theverge.com/2018/7/13/17568622/uber-background-checks-drivers-real-time-continual

iv https://www.fbi.gov/services/cjis/identity-history-summary-checks

v https://www.nbcnews.com/mach/mach/biometric-scanning-use-grows-so-do-security-risks-ncna593161,

vi https://www.popsci.com/technology/article/2009-10/fbi-facial-recognition-software-scan-highway-fugitive-motorists, https://www.forensicmag.com/article/2010/10/facial-recognition-valuable-tool-law-enforcement, https://www.techemergence.com/facial-recognition-in-law-enforcement/

 $vii \quad https://www.eff.org/pages/cell-site-simulatorsimsi-catchers, \\ http://www.chicagotribune.com/news/plus/ct-cellphone-tracking-devices-20160129-html \\ story.html$ 

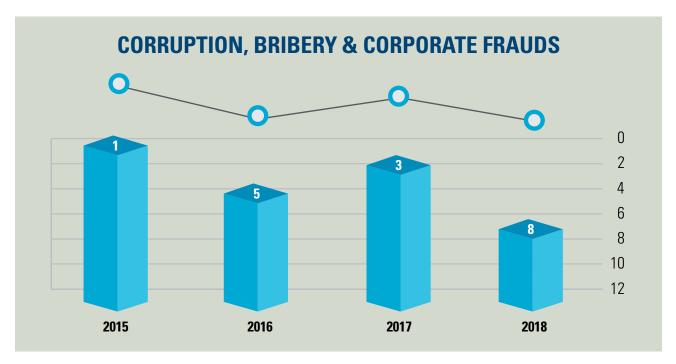
viii https://www.washingtonpost.com/news/the-switch/wp/2016/11/18/police-are-spending-millions-to-monitor-the-social-media-of-protesters-and-suspects/?utm\_term=. b6d8e64ecb73

https://www.citylab.com/equity/2016/12/how-police-are-watching-on-social-media/508991/https://www.wired.com/story/why-police-should-monitor-social-media-to-prevent-crime/

ix https://en.wikipedia.org/wiki/Predictive\_policing, https://link.springer.com/article/10.1007/s10610-017-9361-2 https://www.rand.org/content/dam/rand/pubs/research\_briefs/RB9700/RB9735/RAND\_RB9735.pdf https://www.ncjrs.gov/pdffiles1/nij/230414.pdf, https://cloudblogs.microsoft.com/industry-blog/industry/government/predictive-policing-is-empowering-law-enforcement/

x According to studies(refer note 1) crime rate of repeat offenders is 70%. let's assume remaining 30% are first time offenders.





'Corruption, Bribery & Corporate Frauds' drops 5 spots to 8th Rank in IRS 2018

- The Risk index identified Bribery / Kickbacks as the most significant threat to business organizations.
- The Transparency International Corruption Perceptions Index 2017 ranks India at 81 with a score of 40. Although there has been no change in the score, India's rank has slipped by two places from 79 in 2016.
- The recently amended Prevention of Corruption (Amendment) Act 2018 came into force on 26 July 2018 in an attempt to align the PC Act with the UN Convention Against Corruption, 2005.

### **Year-on-year Ranking**

'Corruption, Bribery & Corporate Fraud' continues to be one of the biggest risks faced by businesses in India, and ranks eighth in the India Risk Survey 2018. The Transparency International Corruption Perceptions Index 2017 ranks India at 81 with a score of 40. Although there has been no change in the score, India's rank has slipped by two places from 79 in 2016. However, since 2012, India has displayed a marginal improvement, from a score of 36 in 2012 and 2013 to 38 in 2014 and 2015 and finally to 40 in 2016 and 2017. This minor improvement continues to be a hindrance to business in India and impedes the ability to maintain leverage in a competitive environment.

While the perception ranking has fallen, India has incorporated economic reforms to ensure that global investors are appeased. According to the World Bank's Doing Business 2018 rankings, India has jumped from 130 in 2017 to 100 in 2018 out of 189 countries. The Distance to Frontier (DTF) score has also improved by 4.71%.<sup>79</sup> Through the promotion and implementation of policies that are anti-corruption, pro-business and pro-growth, India's global image as a potential destination for business has improved considerably.

<sup>78</sup> Transparency International, 'Corruption Perceptions Index 2017', February 21, 2018, https://www.transparency.org/news/feature/corruption\_perceptions\_index\_2017

<sup>79</sup> World Bank, 'Doing Business 2018, http://www.doingbusiness.org/data/exploreeconomies/india



### **Incidence Mapping**

In order to create a more conducive environment for business and attract more global investment, India has made every effort to combat corruption at every level. The recently amended Prevention of Corruption (Amendment) Act 2018 came into force on 26 July 2018 in an attempt to align the PC Act with the UN Convention Against Corruption, 2005. In addition to this, enforcement agencies have been aggressively investigating corruption cases, including those against bureaucrats and high-profile citizens.

According to reports, the CBI has registered as many as 314 corruption cases between January and June 2018. A total of 632 cases were registered in 2017, in comparison to 673 and 617 in 2016 and 2015 respectively. The Central Vigilance and Anti-Corruption Bureau records show a steady decline in the number of cases received. 3134 cases were received in 2017 as compared to 3980 in 2016, 4355 in 2015 and 5492 in 2014. In addition to this promising trend, advice was tendered to 41.07% of the cases within a period of 90 days. 1

### **Impact and Combat**

According to a report in 2016, the World Economic Forum cited that corruption remains a major barrier to

growth in India. As per the source, "Indian firms pay 50 per cent of the total project cost, on an average, as bribes to speed up clearances for real estate and infrastructure ventures."82

'Corruption, Bribery & Corporate Fraud' continues to hinder growth and cause disruptions in progress. It dissuades potential investors and diminishes the growth opportunities of existing players. Investors have called for better corporate governance and more stringent regulation of business corporations. The Government, in an effort to check corruption, has implemented certain measures such as:

- The Supreme Court expanded the definition of 'public servant' to include officials employed at private banks, making them liable for prosecution.
- Corruption by Public Servants will be considered a criminal misconduct.
- The maximum punishment for corruption was increased from five years to seven years.

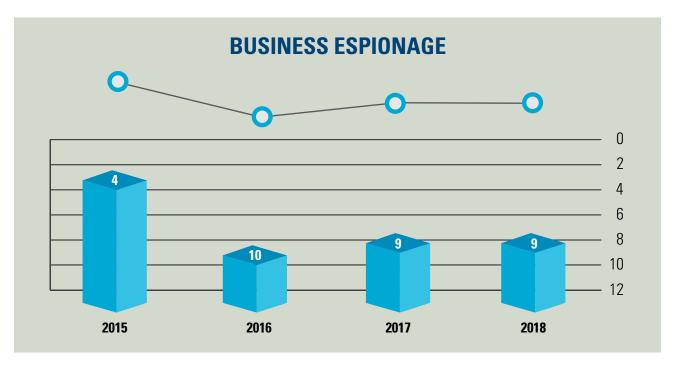
Overall, India has displayed a positive trend towards lowering corruption, bribery and corporate fraud. However, it persists as a major threat to the Indian economy and polity, pervading the public and private sectors alike.

<sup>80</sup> NDTV, 'CBI Registered 314 Corruption Cases In 2018', July 18 2018, https://www.ndtv.com/india-news/cbi-registered-300-corruption-cases-in-2018-says-government

<sup>81</sup> Central Vigilance Commission, 'Annual Report 2017, March 14, 2018, http://www.cvc.nic.in/sites/default/files/CVC

<sup>82 &</sup>quot;Firms pay 50% of costs as bribe," the Hindu, March 22, 2016, https://www.thehindu.com/business/Industry/firms-pay-50-of-cost-as-bribes/article8386124.ece





### 'Business Espionage' remains at 9th Rank in IRS 2018

### Highlights

- Vendor Bribing positions itself as the top threat in the functioning of business operations.
- Business Espionage remains at the ninth position in the India Risk Survey 2018.
- Due to the sensitive nature of the critical infrastructure of businesses today, particularly the cyber-domain, business espionage is becoming increasingly more sophisticated and more covert. Hence, detecting and mitigating the risks involved becomes more difficult.

### **Year-on-Year Ranking**

Business Espionage remains in the ninth position in the India Risk Survey 2018. Business espionage is generally understood as a covert, and at times, illegal practice to gain access to useful information from competitors to gain a business advantage. It could be conducted in several ways including cyber-attacks, which poses the biggest risk associated with business espionage, or by placing physical entities inside a competitor's organisation. A common practice conducted in business espionage is via a secretive/confidential buyoff of valuable assets (employees), or trade secrets, from competitors. This implies that there is a form of corruption being practised by the buyer and the asset, or the involved party that may be leaking trade secrets. It is therefore important to understand the level of

corruption that exists in businesses in India; in order to spurn the risk of business espionage.

As per the Transparent International's Corruption Perception Index 2017, India ranks 81 with a score of 40.83 This is in contrast to a ranking of 79 in 2016, also with a score of 40. However, while India score remains 40, it should be noted that it is an improvement compared to a score of 38 in 2015, and 36 in 2013 and 2012. Yet, when compared to other Asian countries, India has not fared well. For example, Singapore obtained a score of 84, Hong Kong scored 77, and Japan scored 73. The perception of corruption in businesses in India impedes on creating a more conducive environment for businesses to grow and to further attract foreign investments. With India's ranking

<sup>83</sup> Transparency International, 'Corruption Perception Index 2017,' February 21, 2018, https://www.transparency.org/news/feature/corruption\_perceptions\_index\_2017



improving remarkably in the World Bank's Doing Business, the level of corruption would have to be improved to further strengthen India as an investment hub.

### **Incidence Mapping**

While the India Risk Survey 2018 places Business Espionage on the ninth spot, business developers and investors should remain focus on the risks associated with it, which should be mitigated at all costs. On March 2, 2018, it was reported that a fertility clinic in Gurgaon has moved court against its former chief executive officer (CEO) following the allegation that he assisted a rival company to set up business in Delhi. As per sources, the accused later joined the firm and allegedly poached many of its employees.<sup>84</sup> On June 21, 2018, it was reported that Indian IT firms are allegedly seeking to hire employees from each other with a plan to add more experienced people locally in the US and other markets.85 On June 21, 2018, it was reported that a new leak, claimed to be a second set of Panama Papers, has revealed 12,000 documents linked to Indians. In November 2017, it was further reported that the first leak of the Panama Papers revealed linkages to 426 Indians or person of Indian origin.86

### **Impact and Combat**

Due to the sensitive nature of the critical infrastructure of businesses today, particularly the cyber-domain, business espionage is becoming increasingly more sophisticated and more covert. Hence, detecting and mitigating the risks involved becomes more difficult. A working environment in which corruption is present is likely to add to the probability for business espionage to be committed. Herein, businesses should be aware of specific provisions under the IT Act, which tackles data-theft. Further, The Prevention of Corruption Act, 2018, has been amended which dictates that a relevant trial should be completed on a day-to-day basis and should conclude within two years. The law also provides for a minimum imprisonment of three years, extendable to seven years, along with a fine.

With data becoming extremely valuable, businesses are advised to ensure that recommended firewalls are in place to safeguard from any hacking-activity. It is reiterated that organizational function and the flow of information should be protected at all cost, ensuring that valuable assets and sensitive data are secured. Further, frequently training employees would prepare them with best-practices in the event of possible hacking-activity. It is also advisable to conduct independent audits to check the business resilience of the organisation and secure business continuity.

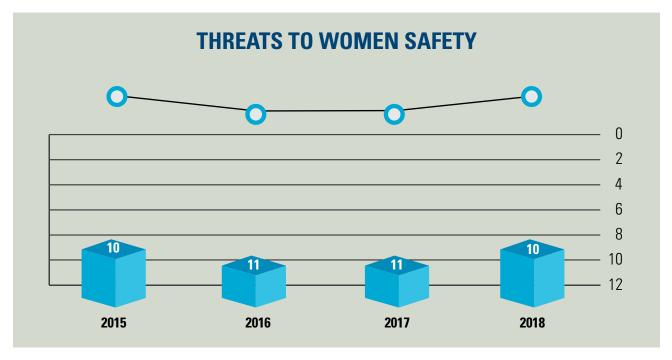
<sup>&</sup>lt;sup>84</sup> 'Fertility clinic takes ex-CEO to court, alleges data theft, staff poaching,' Times of India, March 2, 2018, https://timesofindia.indiatimes.com/city/gurgaon/fertility-clinic-takes-ex-ceo-to-court-alleges-data-theft-staff-poaching/articleshow/63131485.cms

<sup>85 &#</sup>x27;Indian It firms look for lateral staff overseas, poach from each other,' Business Standard, June 21, 2018, https://www.business-standard.com/article/companies/indian-it-firms-look-for-lateral-staff-overseas-poach-from-each-other-117062100399\_1.html- can't find this link

<sup>86 &#</sup>x27;Panama Papers2.0: New leak reveals fresh 12,000 documents linked to Indians,' Business Today, June 21, 2018, https://www.businesstoday.in/current/economy-politics/panama-papers-leak-kavin-bharti-mittal-airtel-mossack-fonseca/story/279384.html

<sup>87</sup> NA





'Threats to Women Safety' climbs one spot to 10th in IRS 2018

- Threats to women safety rank tenth in India Risk Survey 2018 where 'sexual assault including rape' has emerged as the biggest threat.
- It is vital for an organization to maintain a robust redressal facility for grievances. Firm policies and working rules for internal complaints must be incorporated.

### **Year-on-Year Ranking**

Threats to women safety ranks tenth in India Risk Survey 2018, compared to a ranking at the eleventh position in the previous edition of the survey. Harassment of women in the workplace is assessed as a growing risk faced by businesses in India. As per the National Crime Records Bureau (NCRB) 2016 data, there were 38,947 cases of rape reported in India, showing a startling rise from the 34,600 cases reported in 2015.88 42.1% of these cases pertained to the age group between 18 and 30. Out of a total of 38,947 reported cases, a total of 36,859 cases reported that the alleged offender was known to the victims, while in a total of 600 cases,

the offenders were co-workers or employers.<sup>89</sup> The National Commission for Women (NCW) reported that in 2017, it received 539 complaints at an average of 1.7 complaints per day.<sup>90</sup>

### **Incidence Mapping**

Reports of harassment, threats and violations of women's safety at work have become common in India. In May 2018, a woman was reported missing from her workplace in South Mumbai, where two of her colleagues were arrested for murder and disposing off the body.<sup>91</sup> An employee of a Finance Company in Nagpur was forced to resign on May 11, 2018, due

<sup>88</sup> National Crime Records Bureau, 'Crime in India, 2016', http://ncrb.gov.in/StatPublications/CII/CII2016/pdfs/NEWPDFs/Crime%20in%20India%20-%202016%20 Complete%20PDF%20291117.pdf

<sup>89</sup> Ibio

The Times Of India, NCW: 2 women harassed at workplace every day, December 17,2018, https://timesofindia.indiatimes.com/city/bengaluru/ncw-2-women-harassed-at-workplace-every-day/articleshow/62101990.cms

<sup>&</sup>lt;sup>91</sup> The Indian Express, 'After DNA match, colleagues held for South Mumbai Woman's Murder', May 6, 2018, https://indianexpress.com/article/cities/mumbai/after-dna-match-colleagues-held-for-south-mumbai-womans-murder-5164853/



to mental and physical harassment by her manager.<sup>92</sup> In August 2018, a software engineer in Noida filed a report alleging that she was molested by 43 of her co-workers.<sup>93</sup> Five women activists were abducted and gang-raped in Jharkhand.<sup>94</sup>

### **Impact and Combat**

The Vishaka Case in 1997 led to the mandate by the Supreme Court that all establishments with more than ten employees must set up anti-sexual harassment panels to deal with complaints and redressal. The Sexual Harassment of Women at the Workplace (Prevention and Redressal) Act, 2013, was revisited in May 2018 when the Supreme Court insisted that Chief Justices of all High Courts establish anti-sexual harassment committees in all courts across the country within two months. 95 In addition to this, and leading towards digitisation, the Government has introduced the SHe-Box (Sexual Harassment Electronic Box). This is an online platform that assists women in the process of filing

complaints of sexual harassment at the workplace. Law enforcement has become more vigilant with regard to the safety of working women. Companies have been issued guidelines to be followed in order to ensure the safety of female employees.

The prevention of sexual harassment in the workplace is a responsibility that has to be largely borne by the employer. Corporates, in their own best interests, should streamline and strengthen their internal policies on sexual harassment. Training programmes and workshops on sexual harassment for all employees can help create the necessary awareness and enforce the organisation's policies on sexual harassment. Sexual harassment on social media and social networking sites has risen sharply in recent times. Firm policies on monitoring of electronic communication & awareness drive on online abuse such as cyberbullying can help curb inappropriate communication. Every organization must have a proper redressal facility for complaints of such a nature.

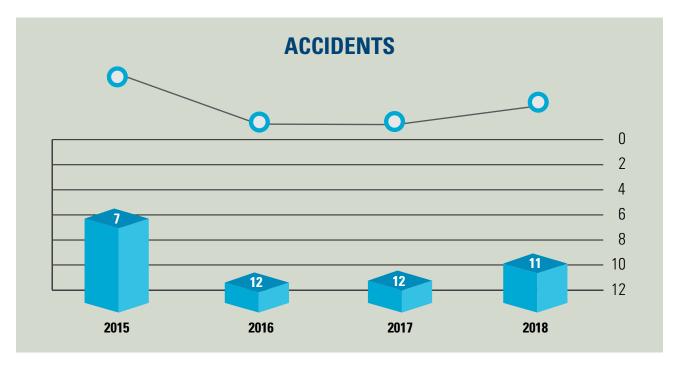
<sup>92</sup> The Times of India, 'Finance company manager arrested for molesting employee', August 23 2018, https://timesofindia.indiatimes.com/city/nagpur/finance-company-manager-arrested-for-molesting-employee/articleshow/65507463.cms?utm\_source=contentofinterest&utm\_medium=text&utm\_campaign=cppst

<sup>&</sup>lt;sup>93</sup> India Today, 'Woman alleges sexual harassment by 43 of her colleagues', August 14 2018, https://www.indiatoday.in/mail-today/story/woman-alleges-sexual-harassment-by-43-of-her-colleagues-1313801-2018-08-14

<sup>&</sup>lt;sup>94</sup> Hindustan Times, '5 women activists abducted, gang-raped in Jharkhand, attack reportedly filmed', June 22,2018, https://www.hindustantimes.com/india-news/five-anti-trafficking-activists-picked-up-during-play-raped-in-jharkhand-s-khunti/story-f5LTqkepu4d38t5lq1xp4O.html

<sup>&</sup>lt;sup>95</sup> The Economic Times, 'SC asks HCs to form anti-sexual harassment panels in all courts within 2 months', May 11 2018, https://economictimes.indiatimes.com/news/politics-and-nation/sc-asks-hcs-to-form-anti-sexual-harassment-panels-in-all-courts-within-2-months/articleshow/64122213.cms





### 'Accidents' climb one spot to 11th Rank in IRS 2018

### Highlights

- The Risk survey identifies Traffic Accidents as the topmost threat to business operations.
- According to a report published on January 10, 2018, nearly 400 fatalities a day are caused by traffic accidents in India. A media source sites that 90 per cent of deaths on roads is caused by rash driving.
- It is imperative to reinforce awareness of traffic rules and safety by companies through training workshops and discussions which could eventually be beneficial for employees, and business operations.

### **Year-on-Year Ranking**

The India Risk Survey 2018 finds 'Accidents' climbs one spot to be in the 11th position.

According to a World Bank study, funded by Bloomberg Philanthropies, published on January 9, 2018, "reducing road traffic deaths and injuries could result in substantial long-term income gains for low- and middle-income countries." <sup>96</sup> The study further found that "countries that do not invest in road safety could miss out on anywhere between 7% and 12% in potential capita GDP growth over a 24-year period. This requires policymakers to prioritize proven investment in road

safety." <sup>97</sup> As per the mentioned NCRB report, a total of 4,13,457 accidental deaths were reported in 2015. <sup>98</sup> This is a decrease of 8.5 per cent compared to figures in 2014. It further reports the following figures:

• There was a decline of 48.0 per cent from (20,201 deaths in 2014, to 10,510 deaths in 2015) in accidental deaths due to causes attributed to forces of nature and a decrease of 6.6 per cent (from 4,31,556 deaths in 2014 to 4,02,947 deaths in 2015) in deaths due to un-natural causes during 2015 as compared to 2014.

<sup>&</sup>lt;sup>96</sup> 'Road Deaths and Injuries hold Back Economic Growth in Developing Countries,' World Bank, January 9, 2018, https://www.worldbank.org/en/news/press-release/2018/01/09/road-deaths-and-injuries-hold-back-economic-growth-in-developing-countries

<sup>97</sup> Ibid

<sup>98</sup> Crime in India NCRB, 2015 Statistics, http://ncrb.gov.in/StatPublications/CII/CII2016/pdfs/NEWPDFs/Crime%20in%20India%20-%202016%20Complete%20 PDF%20291117.pdf



A total of 4,81,805 traffic accidents occurred in 2015, which include road, railway and trespassing accidents. Traffic accidents accounted for a majority of the casualties with 1,77,423 deaths. The highest number of deaths due to traffic accidents in 2015 occurred in Uttar Pradesh (23,219 deaths), followed by Maharashtra (18, 404 deaths), and Tamil Nadu (17,376 deaths). Further, the maximum fatalities caused by traffic accidents were reported in Delhi City (2,216 deaths) followed by Kanpur (1,031 deaths) and Jaipur (939 deaths).

### **Incidence Mapping**

According to a report published on January 10, 2018, nearly 400 fatalities a day are caused by traffic accidents in India.<sup>99</sup> The source further reported that the Government of India is attempting to curb the rising trend on Indian roads. In light of this, a bill was introduced in August 2016, which proposed harsher penalties for traffic offences; the bill also demands that automakers should add safety features.<sup>100</sup> The bill is expected to be passed by the upper house in 2018. According to another media source, 90 per cent of deaths on roads are caused by rash driving.<sup>101</sup> According to sources, a Government Railway Police (GRP) stated that 17 commuters died on the Mumbai suburban train network on September 6, 2018; over 3,000 deaths were reported on the network in 2017 alone.<sup>102</sup>

Another trend in accidental deaths has been those that are related to industrial accidents. For instance, according to a report published on January 20, 2018, an earlier explosion at a National Thermal Power Corporation (NTPC) plant in Rae Bareli in November 2017 took a confirmed toll of 45 deaths. <sup>103</sup> The source further stated that an investigation carried out by the

Uttar Pradesh labour department found that "sheer negligence" was the reason behind the explosion. 104 Further, a report citing a study conducted by the International Labour Organisation, it is estimated that nearly 48000 people die, on an average, per annum due to work-related hazards. On a daily basis, 38 fatalities in the construction sector are reported.

### **Impact and Combat**

A growing trend of fatalities caused by occupational accidents implies increased liability for businesses, particularly for the insurance sector. Injuries caused by occupational accidents can also impact operations with probably reduced productivity, lower sales, and possible disrupted business continuity. Preventing accidents at a place of business, therefore, becomes a significant practice in which several details should be considered, such as slips and falls, electrical wirings, manual handling and lifting.

The former Lead of the FICCI Sub-Committee on Road Safety, Mr. Amit Saha, and former Chief Sustainability Officer, Hindustan Coca-Cola Beverages Ltd, remarked at the annual road safety conference organized by FICCI, "Other than the sheer density of people on roads in vehicles of all forms and sizes, it is the gross disregard towards traffic rules and lack of safety as a value that has put India in dubious distinction of being the highest road fatality country." 105 Herein, reinforced awareness of traffic rules and traffic safety by companies through training workshops and discussions could be beneficial for employees, and business operation. While assessing mitigation procedures associated with traffic accidents, corporates can also sensitize stakeholders through awareness and education on the use of genuine parts to prevent road accidents. 106

<sup>99 &#</sup>x27;400 deaths a day are forcing India to take car safety seriously,' the Economic Times, January 10, 2018, https://economictimes.indiatimes.com/news/politics-and-nation/400-deaths-a-day-are-forcing-india-to-take-car-safety-seriously/articleshow/62439700.cms

<sup>101 &#</sup>x27;90% deaths on roads due to rash driving: NCRB,' The Time of India, December 3, 2017, https://timesofindia.indiatimes.com/india/90-deaths-on-roads-due-to-rash-driving-ncrb/articleshow/61898677.cms

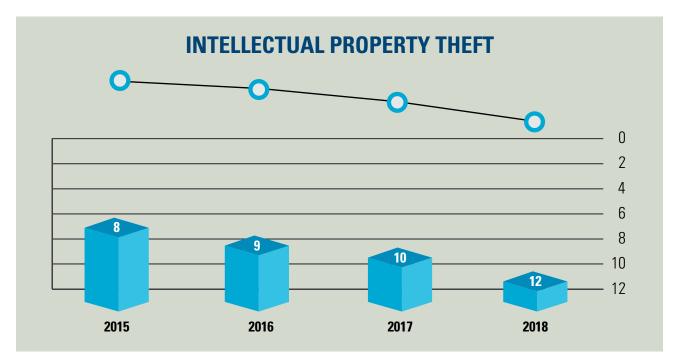
<sup>&</sup>lt;sup>102</sup> 'Deadly commute: 17 passengers die on a single day on the Mumbai suburban train network,' Times Now News, September 8, 2018, https://www.timesnownews.com/mirror-now/civic-issues/article/earlier-this-week-17-commuters-died-on-mumbai-locals-suburban-train-network-in-a-single-day/281986

<sup>103 &#</sup>x27;Toll in explosion at NTPC unit in Rae Bareli is 45, not 32, shows RTI reply to The Indian Express,' Scroll.in, January 20, 2018, https://scroll.in/latest/865769/toll-in-explosion-at-ntpc-unit-in-rae-bareli-is-45-not-32-shows-rti-reply-to-the-indian-express

<sup>104</sup> Ibic

<sup>105 &#</sup>x27;Corporates and Road Safety in India – Blazing the Trail,' Business World - BW Smart Cities, August 14, 2018, http://bwsmartcities.businessworld.in/article/Corporates-and-Road-Safety-in-India-Blazing-the-Trail/14-08-2018-157844/





'Intellectual Property Theft' drops to 12th Rank in IRS 2018

- Under the domain of IP Theft, Brand Reputation Loss has been ranked as the most significant threat in the Risk Survey.
- It has been noted that there has been minimal IPR awareness among persons in their respective fields.
- According to FICCI CASCADE nearly 20 per cent of accidents on Indian roads are caused by counterfeit automobile parts; nearly 30 per cent of Fast-moving consumer goods (FMCG) items that are sold are fake.
- The Government and Private sector continue to foster diplomatic ties on bilateral and multilateral platforms to resolve IPR issues. It is also important to note that a thorough employee background check aids in avoiding industrial/business espionage relating to IP theft.

### **Year-on-Year Ranking**

According to India Risk Survey 2018, risks associated with Intellectual Property (IP) Theft ranks twelfth, compared to a ranking at the tenth position in 2017. While there has been a slip in its ranking, IP theft is still a threat that could significantly affect a brand name and reputation. According to a study by Einfolge, an international patent and analytics and market research company, over 35% of respondents were not aware of Intellectual Property Rights (IPR).<sup>107</sup> As per the source, respondents had "minimal awareness about monetary

benefits acquiring an IP right, commercialization of acquired IP rights, or the legal troubles that one might land in for using pirated products."108

The Government of India continues to push for the Make in India campaign with several foreign companies expressing interest to start, and also expand, business operations in India. The campaign's policy includes creating IPR awareness while promoting research and development through tax benefits.

<sup>&</sup>lt;sup>107</sup> "Study shows low IPR awareness in India," Livemint, September 8, 2018, https://www.livemint.com/Politics/Rap1LeEuftJTFehNt00gTJ/Study-shows-low-IPR-awareness-in-India.html

<sup>108</sup> Ibid.



### **Incidence Mapping**

On January 31, 2018, media sources reported that a leading Natural Healthcare company filed a case against its competitor at the Delhi High Court for allegedly violating trademark and copyright laws. As per the source the latter compared hair oil products and denigrated a Dabur product in a print advertisement. 109 On July 8, 2018, it was reported that Metro Shoes filed a case in the Bombay High Court following accusations that Flipkart allegedly sold a private brand named Metronaut, a name that is "deceptively similar to Metro's eponymous brand." 110 Further, Metro Shoes has also accused the e-commerce giant of selling shoes among other products under the brand name.

On June 28, 2018, it was reported that the Maharashtra Cyber Digital Crime Unit shut down 29 websites allegedly involved in providing pirated copies of television content.<sup>111</sup> As per the source, an estimated number of 88.56 million users were found to have been using the websites. 112 According to a FICCI CASCADE (Committee Against Smuggling and Counterfeiting Activities Destroying the Economy), nearly 20 per cent of accidents on Indian roads are caused by counterfeit automobile parts; nearly 30 per cent of Fast-moving consumer goods (FMCG) items that are sold are fake. 113 According to the study by the committee, 80 per cent of consumers believe that the products are genuine. 114 The large scale of fake goods spreading in the market continues to adversely impact industries in India, which have a direct implication for the safety and health of consumers.

### **Impact and Combat**

With the amendment to India's Patent Act in 2005, India took a step to comply with the Trade-Related Aspects of Intellectual Property Rights (TRIPS agreement). With India's patent policy coming closer to international norms, research and development have also seen an improvement. The next step forward would be to increase exports and to make technological improvements, along with changes in tariff rates and economic policies. While the same has been mentioned in the India Risk Survey 2017, it is important to emphasize the announcement made by the Federation of Indian Export Organizations, that is, "the Indian export-import community will be immensely benefitted with stakeholder consultation mandated before effecting any change (in policies). There will be considerable lead time available, before implementing a change, which will by and large address the problems of shipments which are in the pipeline and presently getting stuck due to policy procedural changes." 115 While the policy comes closer to international norms, which is a positive indication, however, procedural changes to policies are causing a delay.

While the Government of India continues to strengthen diplomatic ties on bilateral and multilateral platforms to resolve IPR issues, businesses are advised to comply with the same tenor as that of the Government to ensure continuity of existing inflow and outflow of trade and investments. Further, a thorough check on employees would be beneficial to avoid industrial/business espionage relating to IP theft.

<sup>109 &#</sup>x27;Dabur takes Marico to court for 'trademark infringement',' The Economic Times, January 31, 2018, https://economictimes.indiatimes.com/industry/cons-products/fmcg/dabur-takes-marico-to-court-for-trademark-infringement/articleshow/62716200.cms

<sup>&</sup>lt;sup>110</sup> 'Metro Shoes takes Flipkart to Bombay HC over band name,' The Economic Times, June 0, 2018, https://economictimes.indiatimes.com/industry/services/retail/metro-shoes-takes-flipkart-to-bombay-hc-over-brand-name/articleshow/64503448.cms

<sup>111 &#</sup>x27;Maharashtra Cyber Digital Crime Unit shut down 29 websites involved in online piracy,' India Today, June 28, 2018, https://www.indiatoday.in/india/story/mahrashtra-cyber-digital-crime-unit-shuts-down-29-websites-involved-in-online-piracy-1271704-2018-06-28

<sup>112</sup> Ibid

<sup>113 &#</sup>x27;30% FMCG items are fake, counterfeit auto parts cause of 20% accidents: FICCI,' Business Standard, June 12, 2018, https://www.business-standard.com/article/current-affairs/30-fmcg-items-fake-counterfeit-auto-parts-cause-of-20-accidents-ficci-118061200673\_1.html

<sup>115 &#</sup>x27;India submits the proposal on service trade facilitation at WTO,' The Hindu Business Line, February 23, 2017, https://www.thehindubusinessline.com/economy/india-submits-proposal-on-services-trade-facilitation-at-wto/article9557710.ece



### **Other Risks**



Based on deliberations from industry experts and survey findings, this year, Infrastructure Risks, Occupational Hazards at Work Place, and Legal Regulatory risks have emerged as new risks, in addition to the 12 risks assessed in IRS 2018. If these risks had to be plotted on a scale of 1-12, 'Infrastructure Risk' would rank the highest followed by 'Occupational Hazards at Workplace' in the second position and 'Legal Regulatory Risk' in the third position.

### Infrastructure Risk

As several sectors in India are still adjusting to an unanticipated demonetisation, as well as the impact of Goods and Service Tax reform, there is a far-reaching uncertainty associated with growth earnings. The CRISIL Infrastructure Yearbook which was launched in 2017 along with the 'Infrastructure Investability Index', states that industries in India, as per estimates, will spend

nearly 50 lakh crore (USD 689 billion) on infrastructure in key sectors including power, highways, railways, urban infrastructure, ports and airports between 2018 and 2022. This would have a significant impact across the infrastructure and building sector —Steel, Cement, Construction, Financials; by extension, it would also impact the job market. However, water scarcity and shortage, or non-availability of transport, lack of building maintenance, and poor infrastructure to conduct business, have emerged as current risks posing as future macro threats to the Indian economy. The 'Composite Water Management Index' (CWMI) reported the deteriorating ground situation in various parts of India and presents a bleak picture of the country's hydrological scenario. 116 According to the report, the other sector affected is the horticultural industry. Unplanned urbanisation, climate change, and water pollution seem to be the underlying causes of the current crisis. 117

<sup>116</sup> Indian Express, 'Niti Aayog report: India suffering worst water crisis', June 15, 2018, https://indianexpress.com/article/india/niti-aayog-report-india-suffering-worst-water-crisis-5218119/

<sup>117</sup> The Times Of India, 'Losses mount to Rs 2,000 crore in Maharashtra on Day 3 of stir: Transporters', The July 23, 2018, https://timesofindia.indiatimes.com/city/mumbai/losses-mount-to-rs-2000-crore-in-state-on-day-3-of-stir-transporters/articleshow/65095993.cms



### **Occupational Hazards at Workplace**

Occupational Hazards are commonly understood as a consequence(s) of a particular occupation which can be categorised under biological, chemical, ergonomic, physical, psychological, and safety. Occupational stress has shown to have a direct impact on productivity. Surveys conducted by Optum and 1to1 help.net, two of the leading providers of employee assistance programmes to Indian organisations, have shown a significant increase in the number of workers who are severely depressed, or who are vulnerable to taking their lives due to rising stress levels.<sup>118</sup>

According to a report by Optum, nearly half the employees in India suffer from some kind of stress. The survey was conducted among 800,000 employees in 70 large companies, each with a minimum workforce of 4,500.<sup>119</sup> Another survey, conducted by 1to1help.net, showed that the proportion of workers at high risk of suicide due to unmanaged stress has grown to 8%, of all counselling cases, in 2018 from 2-4% two years ago. The manufacturing sector, which includes the welding industry, poses a major threat to physical and safety risks of its workers. A study conducted by researchers at Osmania University and BM Medical Research Centre confirmed that welders were at higher risk of DNA damage, impaired pulmonary functions, lung cancer, eye burns, and long-term injuries to the skin. It also

found that lack of awareness among the workers and the general population contributes further to the problem. 120

### **Legal Regulatory Risk**

Legal Regulatory Risk can become difficult to manage given the backdrop of the sweeping reforms announced by the Government that affected all industries in India, such as the GST, and demonetisation. The impact of new regulations results in significant changes to the operational environment of businesses.

Unanticipated changes to laws and regulations greatly affect organisations as a whole. Compliance risk, legal risk, and investment risk comprise the major risks under regulatory risks. It involves the restructuring of supplychains and systems. The active implementation of GST in July 2017 has had a neutral impact on most industrial sectors. Various sectors like the healthcare & pharmacies faced initial challenges but have eventually recovered in the past one year. However, the telecom industry is said to have been impacted the most, followed by the food and services sector, media, and financial products and services. 121 In an uncertain environment, organisations should be prompt and must attend the needs of the industry. The Government has adopted a stricter approach to statutory compliance with the objective of improving the business environment in India.

<sup>118</sup> The Economic Times ,India Inc looks to deal with rising stress in employees, , June 26, 2018,

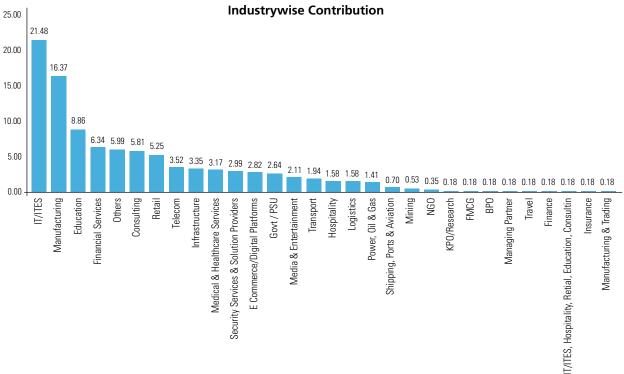
https://economictimes.indiatimes.com/jobs/india-inc-looks-to-deal-with-rising-stress-in-employees/articleshow/64741313.cms

<sup>119</sup> Ibid

<sup>120</sup> http://www.newindianexpress.com/thesundaystandard/2018/aug/12/welders-at-greater-risk-of-dna-damage-than-smokers-says-new-study-1856563.html

<sup>121</sup> International Journal of Innovative Research and Advanced Studies (IJIRAS) Volume 5 Issue 3, 'Impact Of GST On Different Sectors Of Indian Economy', March, 2018.www.iiiras.com/2018/Vol 5-Issue 3/paper 44.pdf

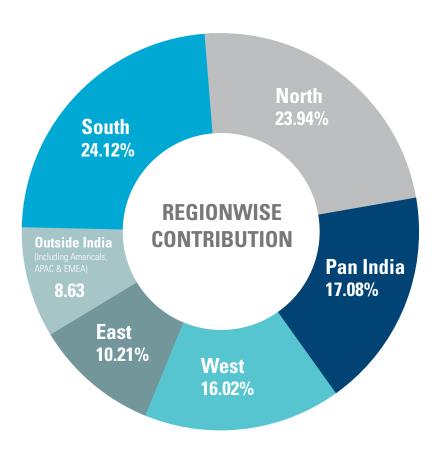
# Methodolgy & Respondents



The aim of the IRS 2018 is to identify prominent risks that are critical in nature and rank them based on their pertinence to businesses and regions of India. The methodology consisted of a risk survey that was administered across India and abroad. The respondents varied from employees from lower, middle to upper

management professionals. All results received have been presented graphically along with trend observations for each risk. The highest risk is ranked at number 1, with the lowest at number 12. Respondents were also required to identify which was the most prevalent threat under each risk category.







### **About Pinkerton**

Pinkerton traces its roots to 1850 when Allan Pinkerton founded the Pinkerton National Detective Agency. Today, Pinkerton utilizes an Applied Risk Science approach using technology such as Artificial Intelligence to provide companies with a holistic perspective for risk management and forecasting. Our global team of advanced security professionals offers a full range of comprehensive services including data-driven risk management planning, investigations, executive protection, employment screening and protective intelligence. With employees and offices worldwide, Pinkerton maintains an unmatched reputation for protecting clients and their assets.

**Our Values** – Our Values create the foundation for our corporate culture. They help shape our behavior and create measurable expectations for clients, employees and stakeholders. Our key values can be summarized in three words: Integrity, Vigilance and Excellence.

**Integrity** - The overriding principles of our firm are honesty and ethical conduct. To uphold our reputation for reliability and accuracy, Pinkerton places utmost importance on integrity. It has allowed us to sustain our commitment throughout our 160 year history.

**Vigilance**- Unparalleled protection requires the tenacity to continually see, hear, evaluate and analyse over and over. The vigilance instilled in the Pinkerton culture means that our agents, analysts and consultants offer clients a level of attentiveness and alertness that – we believe – cannot be equalled by anyone.

**Excellence** - It's crucial to get the job done and get it done right. This is how we earn the privilege of retaining our long-term client relationships.

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### **About FICCI**

Established in 1927, FICCI is the largest and oldest apex business organisation in India. Its history is closely interwoven with India's struggle for independence, its industrialisation, and its emergence as one of the most rapidly growing global economies.

A non-government, not-for-profit organisation, FICCI is the voice of India's business and industry. From influencing policy to encouraging debate, engaging with policy makers and civil society, FICCI articulates the views and concerns of industry. It serves its members from the Indian private and public corporate sectors and multinational companies, drawing its strength from diverse regional chambers of commerce and industry across states, reaching out to over 2,50,000 companies.

FICCI provides a platform for networking and consensus building within and across sectors and is the first port of call for Indian industry, policy makers and the international business community.

# NOTES



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