



CYBER RISK

INSURANCE AND ITS RELEVANCE IN INDIAN MARKET

"There are only two types of companies: Those that have been hacked and those that will be hacked"

Robert Mueller- FBI director, 2012

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BROKERS PVT. LTD.

AGENDA



WHAT is Cyber security

- Current scenario of cyber attacks around the globe
- Indian Cyber Security Landscape



HOW can Insurance be the solution

- Cyber exposures faced by companies
- Cyber Risk Protector- a complete solution



WHY Tata AIG

- Value Added Services (VAS)
- Our USP's

CYBERSECURITY



NO ONE CAN AFFORD A CYBER ATTACK

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DID YOU KNOW?

44 EVERY SECOND



Ransomware

Ransomware attacks worldwide rose by 350% in 2018

2645 PER MINUTE



Malware

Rise of Malware from 12.4 Million in 2009 to 812.67 million 2018

158,727 PER HOUR



Phishing

Phishing is reported by businesses to be used in 91% of successful data breaches



Denial of Service

DDoS Attacks are forecasted to double by 2022

Source: PurpleSec

CYBERCRIME COULD COST THE WORLD OVER \$6 TRILLION ANNUALLY BY 2021

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TARGETED MARKETS



Data Records Lost Or Stolen Since 2013: **9,727,967,988**

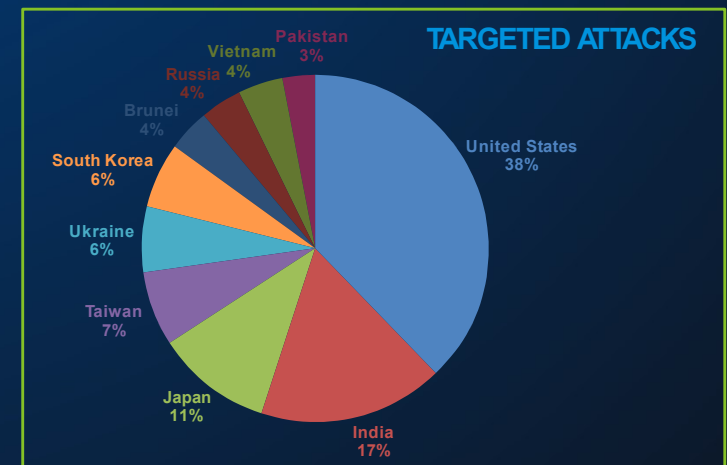


Source: Varonis

RANSOMWARE ATTACK

- India-9.6%
- Kazakhstan-5.75%
- Germany-4.26%
- Algeria-3.9%
- Ukraine-3.72%
- Russian Federation-6.41%
- Italy-5.25%
- Vietnam-3.96%
- Brazil-3.72%
- United States-1.41%

Source: Cyber security Insider



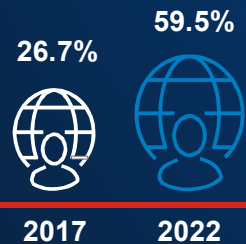
Source: Norton

OVER 9.7 BILLION DATA RECORDS HAVE BEEN LOST OR STOLEN GLOBALLY

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WHY INDIA IS BECOMING THE HOTSPOT?

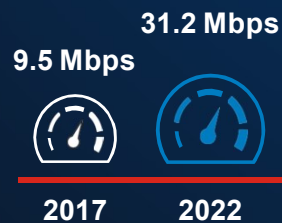
Internet Users: % of Population



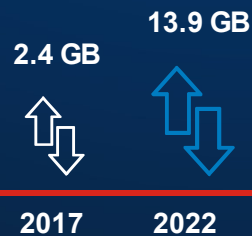
Devices and Connections per Capita



Average Speeds



Average Traffic per Capita per Month



Source: CISCO

INDIAN COMPANIES ARE MORE PRONE TO CYBER ATTACKS:

79% Corporates indicated that cyber security was amongst the top 5 business risk

Companies focus more on technology, 74% stated that detailed cyber risk assessment not carried, not included in focus areas

81% of organisation have cyber budget less than 10% of total planned budgets

Two-thirds of the law enforcement agencies feel that there are not adequate laws to address matters related to cybercrime prevention, detection, and investigation

Source: KPMG

DIGITAL TECHNOLOGIES TO GENERATE \$1 TRILLION IN INDIA BY 2025

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INDIAN MARKET



Cyber security market in India is expected to grow from USD 1.97 billion in 2019 to USD 3.05 billion by 2022 at a CAGR of 15.6%



Cyber security products are growing at 16.9% CAGR and services at 14.2% CAGR

Source: DSCI

AVERAGE DATA BREACH COST:
USD 2 MN



**COST FOR SINGLE LOST
OR STOLEN RECORD: USD 75.6**

Source: IBM

**AVERAGE TIME TO IDENTIFY A
DATA BREACH: 230 DAYS**



**AVERAGE TIME TO CONTAIN
A DATA BREACH: 83 DAYS**

HACKERS ATTACK EVERY 39 SECONDS, ON AVERAGE 2,224 TIMES A DAY

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SECURITY THREATS



95% CYBERSECURITY BREACHES TRACE BACK TO HUMAN ERROR

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**FIRST PARTY
LOSS**



**THIRD PARTY
LOSS**

TRIGGER POINTS:

Breach of Data Security

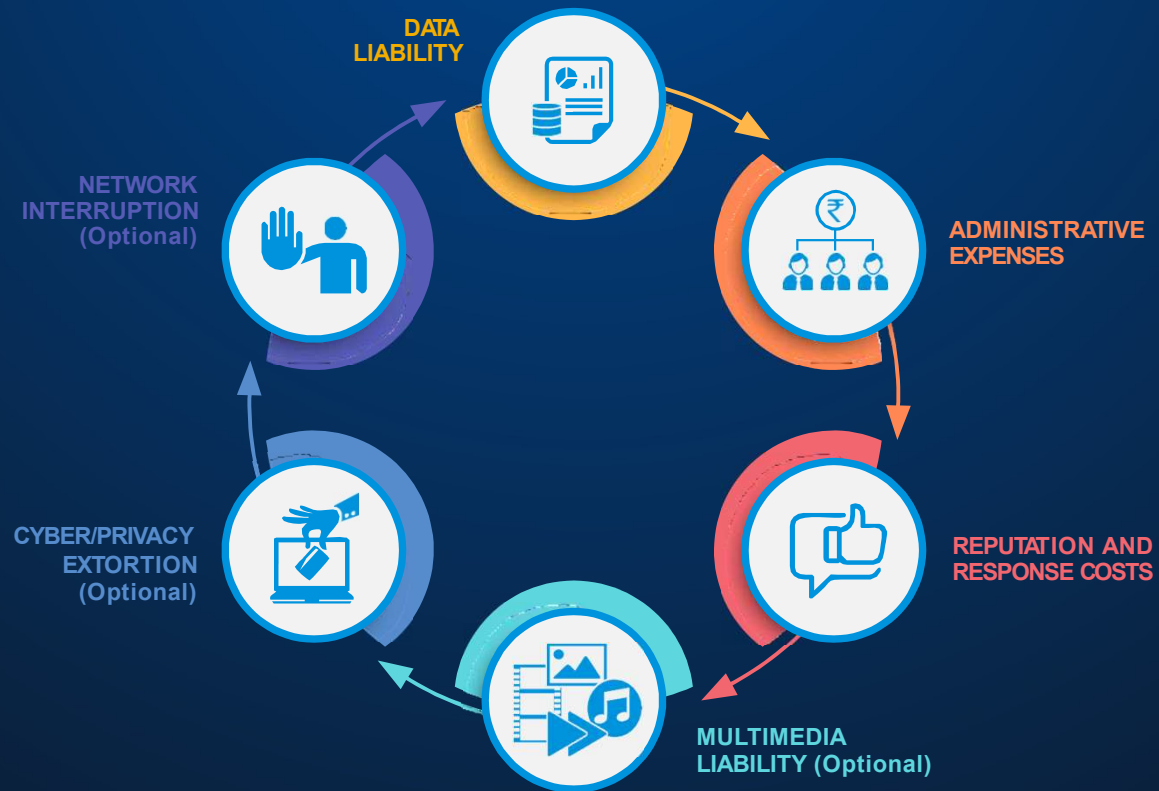
Breach of Data Protection Law

Newsworthy Events

Extortion Threats

Material Interruptions

WHAT IS COVERED?



A. DATA LIABILITY



A.1 LOSS OF PERSONAL INFORMATION



A.3 OUTSOURCING



A.2 LOSS OF CORPORATE INFORMATION



A.4 NETWORK SECURITY



B. ADMINISTRATIVE OBLIGATIONS

B.1 Data Administrative Investigation

Professional Fees for legal advice and representation in connection with any Regulatory Investigation

B.2 Data Administrative Fines

Data Administrative Fines to the extent insurable by law, resulting from Regulatory Investigation

C. REPUTATION AND RESPONSE COSTS



C.1 Pro-active Forensic Services



C.2 Repair of the Company's Reputation



C.3 Repair of the Individual Reputation



C.4 Notification to Data Subjects



C.5 Monitoring

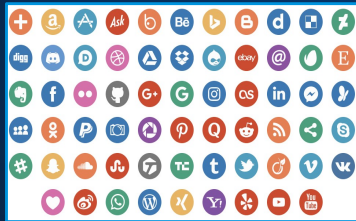


C.6 Electronic Data

OPTIONAL EXTENSIONS

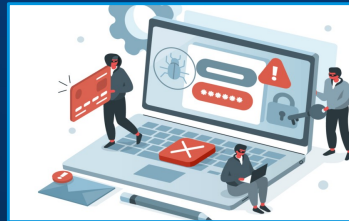


MULTI-MEDIA LIABILITY



All **Damages** and **Defence Costs** which arise out of a **Claim** by a **Third Party** against the **Company** solely in the performance of or failure to perform **Multi- Media Activities**

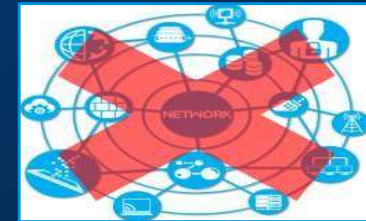
CYBER/ PRIVACY EXTORTION



All **Extortion Loss** that an **Insured** incurs solely as a result of an **Extortion Threat**.

Cost shall include all professional fees and extortion monies.

NETWORK INTERRUPTION



Any **Network Loss** in respect of a **Material Interruption** that an **Insured** incurs after the **Waiting Hours Period** has expired and solely as a result of a **Security Failure**

MAJOR EXCLUSIONS



ANTI TRUST



BODILY INJURY AND PROPERTY DAMAGE



CONTRACTUAL LIABILITY



CRIMINAL ACT



TRADING LOSSES



UNAUTHORISED DATA COLLECTION



TERRORISM & WAR



SECURITIES CLAIMS



REGULATORY LANDSCAPE



IMPLICATIONS

What impact do various regulations have on cyber insurance?

GDPR (General Data Protection Regulation)

PDPB (Personal Data Protection Bill)

Reason for investing in cybersecurity:

68% the GDPR requirements
55% holding increasing amounts of customer data



26% of businesses don't believe their business is fully compliant one year on from GDPR

62% I AGREE I DONT 38%

GDPR compliance has resulted in more investment in cybersecurity



51% I AGREE I DONT 49%

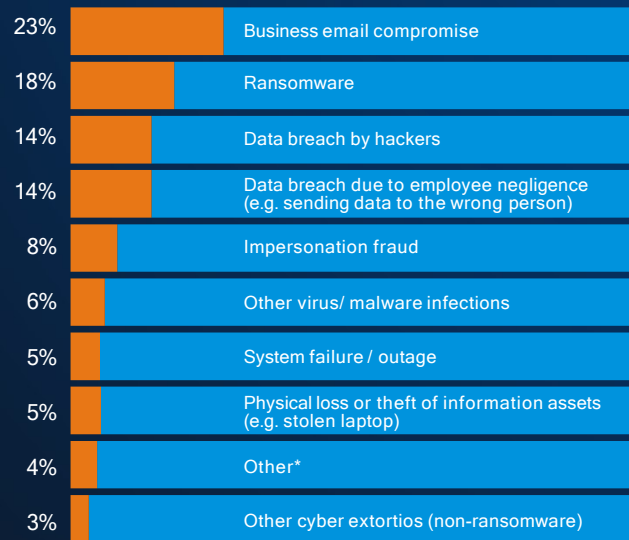
GDPR compliance has made our business safer from cybercrime

Source: RSM

CLAIMS ANALYSIS



Cyber Claims received by AIG EMEA (2018) - By reported incident



*Denial of Service Attacks, Legal/ Regulatory Proceedings based on violations of data privacy regulations.

Figure:2

Cyber Claims Received by AIG EMEA (2013-2018) - Volume

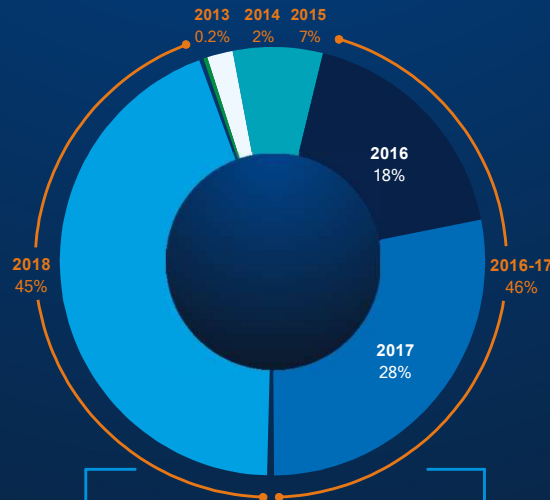
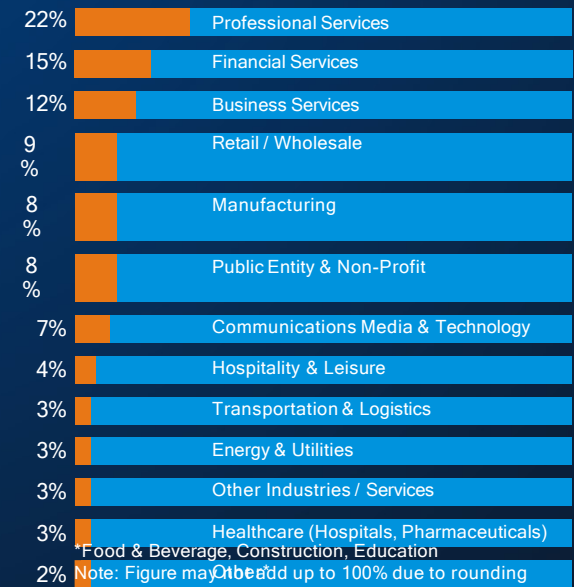


Figure:1

Cyber Claims received by AIG EMEA (2018) - By industry



Note: Figure may not add up to 100% due to rounding

Figure:3

Source: AIG

REALLIFEINSTANCES:CYBERATTACKS



IT MAJOR ATTACKED

- A phishing attack on a major IT company took place
- Attack affected both employee & customer accounts
- Company's systems were used as jumping-off points for phishing expeditions, thereby targeting a dozen of the company's systems

BANK MONEY SIPHONED

- Malware Cyber attack launched by fraudsters, which involved siphoning of USD 12.8 Mn (INR 9.4 Cr) from bank within two days
- Hackers siphoned off the money & transferred it to a Hong Kong bank
- Hackers hacked into the ATM server of the bank and stole details of many debit card owners
- The switching system which ~~was an interacting module between~~ ^{between} the gateways and the bank's centralized banking solution was attacked

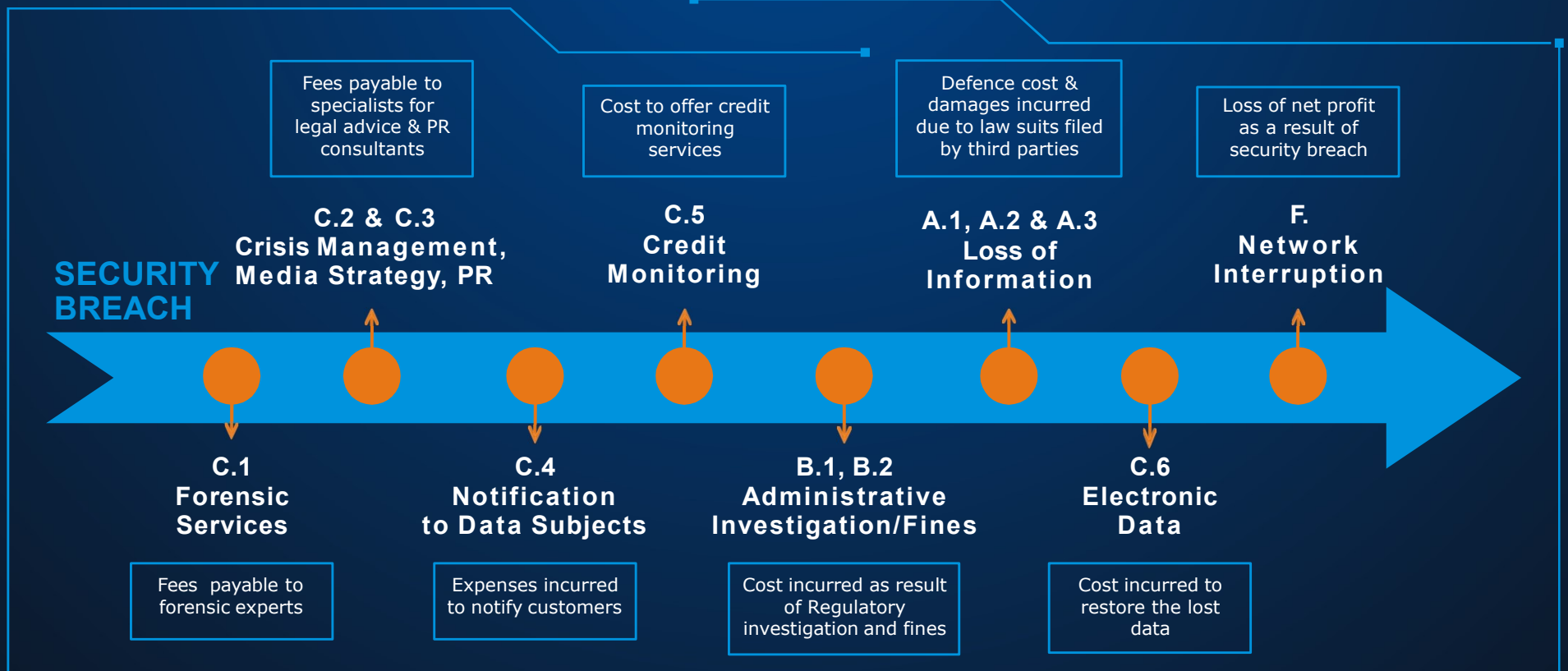
DATA BREACH IN FIVE STAR HOTEL

- The hotel chain's reservation systems was compromised, with hundreds of millions of customer records, including credit card and passport numbers, being exfiltrated by the attackers
- In the investigation it was found that data was encrypted by hackers and they also attempted to remove the data from the hotel chains systems

CYBER ASSAULT ON PETROCHEMICAL COMPANY

- In 2015, a malware attack took place in which virus spread on the network of the company and it wiped out the hard drives of the computers
- The virus infected almost thirty thousand workstations during mid of August
- Later, investigators found that the attack was not designed to simply destroy data or shut down the plant, it was meant to sabotage the firm's operations and trigger an explosion

CLAIMSTIMELINE



MORE THAN JUST INSURING



VALUE ADDED SERVICES (VAS)



**Security
Scorecard**



**Cyber Maturity
Assessment Call**



**Bitsight Security
Risk Rating**

A PROGRAM OF END-TO-END CYBERSECURITY RISK MANAGEMENT

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WHY TATA AIG?



- A pioneer in coverage for cyber exposures, we continue to set the standard today with:
 - Innovative coverage tailored to an insured's specific needs
 - Experienced claims handlers with extensive knowledge and expertise
 - Financial capacity to deliver unparalleled peace of mind and enduring stability
- Tata AIG clients get an advantage of our global network and deep resources dedicated to reducing the risks of companies of all types and sizes
- TATA AIG Underwrites Cyber Insurance policies for:
 - Top NASSCOM companies
 - Insurer and reinsurer of Top private sector banks
 - Companies from other industries such as Pharmaceutical, Consumer Durables, Manufacturing, Information Technology and others
- Launched the Cyber Insurance product in the Indian Market and is a leader in the Cyber Insurance space



T H A N K Y O U

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