

## Risk Management Discussion: Information Security Risks

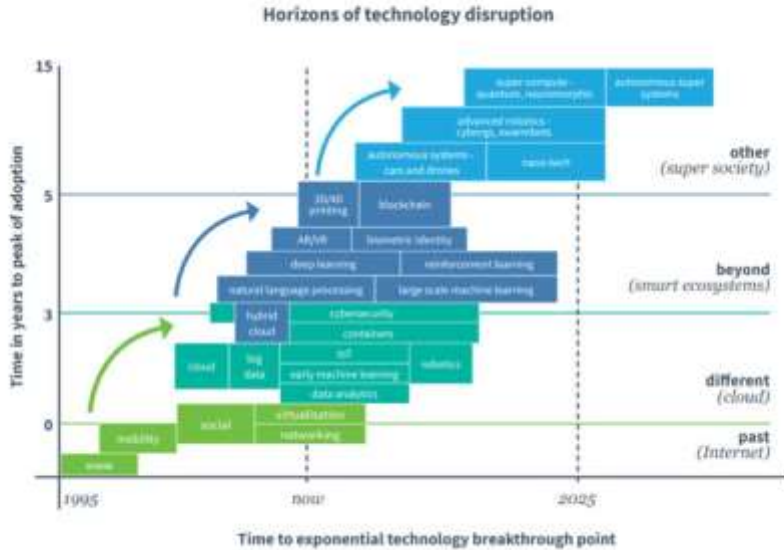
1<sup>st</sup> Chief Risk Officer (CRO) Forum 2018  
ASOSIASI ASURANSI JIWA INDONESIA (AAJI)  
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## Agenda

- Horizons of Technology Disruption
- Insurance – Technology Disruption
- Information Security Risks
- Cyber Risk trends
- Cyber Risk resilience
- Way Forwards

# Horizons of Technology Disruption



# The 5 Stages of Technology Disruption

**D/ISRUPTION** disruptionhub.com

## THE FIVE STAGES OF DISRUPTION

**1 THE KODAK MOMENT**

Disruptive technology is inevitable. The market leaders, established players in their industries, often see the signs and symptoms of it, but underestimate its disruptive power. When the disruption comes, they are often too slow to react, and their competitive advantage is eroded.

**2 INTERNET INFRASTRUCTURE**

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**3 DISRUPTIVE BUSINESS MODELS**

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**4 IoT AND ARTIFICIAL INTELLIGENCE**

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**5 THE ADOPTION CURVE**

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There is a point where the disruption can be seen. It is the point where the market leaders, established players in their industries, often see the signs and symptoms of it, but underestimate its disruptive power. When the disruption comes, they are often too slow to react, and their competitive advantage is eroded.

**THE DISRUPTION OF DISRUPTION ISN'T OVER YET.**

disruptionhub.com

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# The Seven Technologies

Disrupting The Insurance Industry

- Infrastructure
- Online sales technologies
- Advanced analytics (AA)
- Machine Learning
- The Internet of Things
- Distributed Ledger technology
- Virtual Reality (VR)

**Customers / Consumers**

**Markets / Industries**

**Organizations / Process**

## Technology Disruption ?

**Technology by itself is not the disruptor, but not being customer-centric is the biggest threat to any business**

- **NETFLIX** did not kill blockbuster. Ridiculous late fees did.
- **UBER** did not kill the taxi business. Limited access and fare control did.
- **APPLE** did not kill the music industry. Being forced to buy full-length albums did.
- **AMAZON** did not kill other retailers. Poor customer service and experience did.
- **AIRBNB** isn't killing the hotel industry. Limited availability and pricing options are.

# Digital disruption is adding to insurance industry challenges

Forces of change battering the industry



# Insurance - Technology Disruption

**InsurTech & Insurance Disruption**

Incumbents are worried about being "Ubered" - or simply want to innovate to remain relevant in the marketplace.

9 ways insurers and brokers can respond in 2017

Follow Partners

What is your objective?

	Set up an internal innovation team	Build a scalable technology stack	Build your own digital propositions	Create a "digital lab"	Build a "technology buffet"	Accelerator / Incubator	Invest in startups
	Build your own	Sponsor	Direct	Via third party			
Effect cultural change	⊖	⊖	⊖	⊖	⊖	⊖	⊖
Change existing processes	⊖	⊖	⊖	⊖	⊖	⊖	⊖
Access better technology	⊖	⊖	⊖	⊖	⊖	⊖	⊖
Direct financial returns	⊖	⊖	⊖	⊖	⊖	⊖	⊖

Cost

www.partners.co.uk

## Information Security Risk



## Information Security Risk Management

- A major subset of **Enterprise Risk Management** process
- Which includes both the **assessment** of information security risk to the institutions,
- As well as the determination of appropriate **management actions and established priorities** for managing and implementing controls ...
- ... mostly about **data protection ... GDPR**

## The Rising Trends of The Internet of Things (IoT)



## Adopting The Internet of Things (IoT)



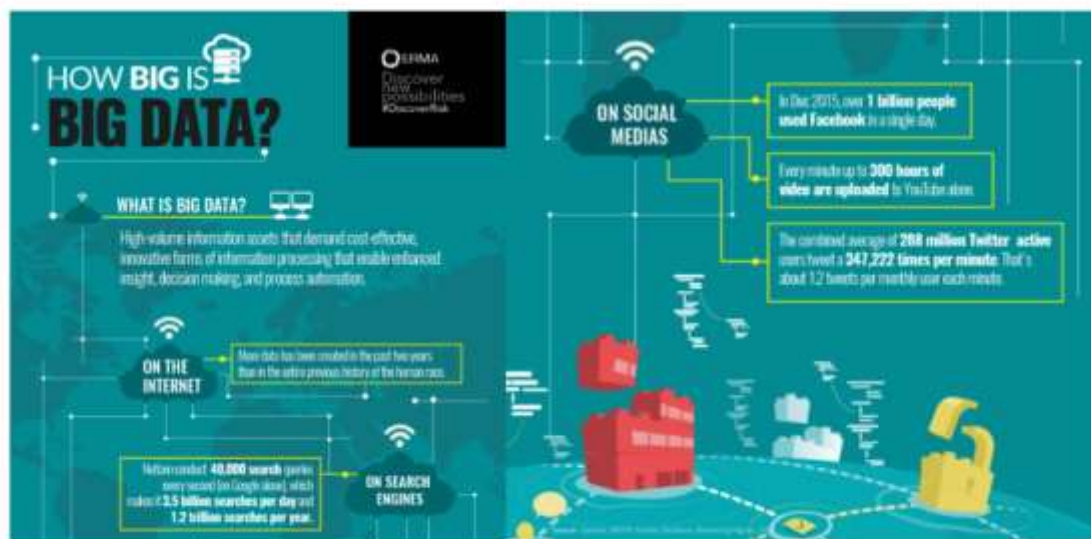
## Alteration by The Internet of Things (IoT)



## Alteration by The Internet of Things (IoT)



# The game is on Data



# General Data Protection Regulation



**5 Misconceptions about General Data Protection Regulation (GDPR)**

The General Data Protection Regulation (GDPR) comes with strict guidelines and requirements, however, a lot of companies do not fully understand it, are misinterpreting the demands of the law, hence are using outdated privacy systems.

**Misconception #1**

The GDPR affects only companies within the EU.

**Misconception #2**

The GDPR rules are only for private and sensitive personal data.

**Misconception #3**

It's easy to meet GDPR notification requirements if a breach occurs.

**Misconception #4**

Individuals whose data are breached should be informed.

**Misconception #5**

There are no legal consequences than fines.

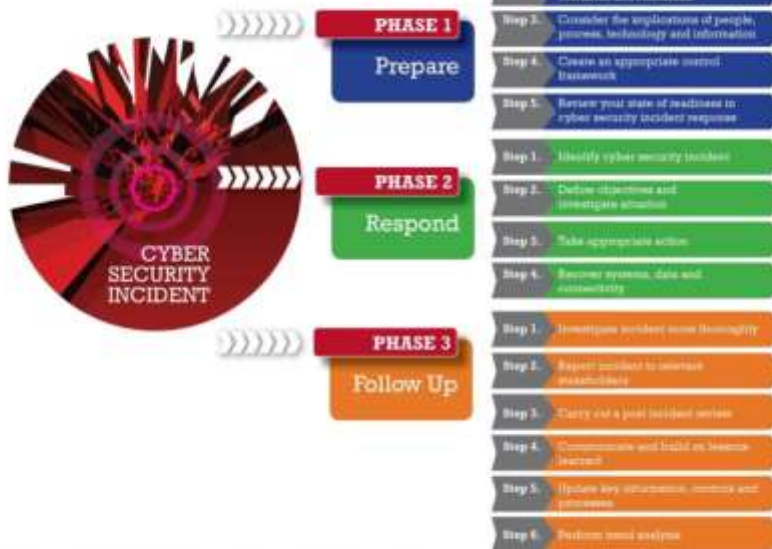


## 5 Top Trends in Cyber Risk



Source: Allianz Global Corporate & Speciality, 2015.

## Cyber Security Incident



Source: <http://www.credit-approved.com/wp-content/uploads/15-step-response-process.jpg>

# Cyber Security and Protection



Cyber security and protection

## Cyber security and protection...

### ⑤ top cyber risk mitigation tips

- Identify key assets at risk and weaknesses such as the "human factor" or over-reliance on third parties
- Create a culture of cyber security and a "think-tank" approach to tackling risk - different stakeholders from the business need to share knowledge
- Implement a crisis response or breach response plan. Test it
- Consider how merger and acquisition activity and changes in corporate structures will impact third party data
- Make decisions around which risks to avoid, accept, control or transfer

Source: Allianz Global Corporate & Speciality, 2015.

# 5 Top Trends in Cyber Insurance



Cyber insurance

## Cyber insurance continues to evolve...

### ⑤ top trends in cyber insurance

- Exclusions in traditional policies will become more commonplace. Standalone cyber product to be the main source of liability cover
- Cyber concept and wordings will be tested, potentially resulting in litigation
- Cyber insurance market needs volume and diversification. More segmentation in future with insurers specializing in certain sectors
- Lack of education is an obstacle to growth - both in terms of businesses' understanding of exposures and underwriting knowledge
- In the event of a cyber security incident a speedy response and use of third party experts can mitigate losses

Source: Allianz Global Corporate & Speciality, 2015.

# Cyber Security and Protection

Figure 1. Obstacles to meeting demand for cyber coverage



Source: Deloitte Center for Financial Services.

Deloitte University Press | [dupress.deloitte.com](http://dupress.deloitte.com)

# Cyber Resilience



## HOW TO ACHIEVE CYBER RESILIENCE IN 7 STEPS



# Cyber Resilience - Way Forwards



## 10 steps to cyber security



- STEP 1** Implement an effective governance structure, maintain board engagement and produce appropriate information security policies which should include:
- STEP 2** User education and awareness training
- STEP 3** Monitoring policies and procedures for all networks and systems
- STEP 4** Incident management procedures, including response and disaster recovery
- STEP 5** Network security policies and procedures
- STEP 6** Management and control of user privileges
- STEP 7** Secure configuration guidance
- STEP 8** Malware protection procedures
- STEP 9** Control of removable media usage
- STEP 10** Monitoring of mobile and home working procedures

Source: Allianz Global Corporate & Speciality, 2015.

# Way Forwards - Future Cyber Risk Trends



Cyber risk 2025

## Cyber risk 2025 - the next 10 years...

### ⑤ Future cyber risk trends

- Cyber insurance market could be worth \$20bn+ by 2025
- Liability and data protection risks dominate market today but demand for, and take-up of, business interruption cover will grow over next decade
- Businesses will be increasingly exposed to – and focused on – supply chain cyber risk
- Financial institutions, energy, utility, transport and telecommunications sectors to lead widening demand for cover
- A catastrophic cyber loss is increasingly likely. Governments, businesses and insurers will need to collaborate to protect critical infrastructure

Source: Allianz Global Corporate & Speciality, 2015.

# Looking forward to next

## Risk Beyond 2018 | Bali 6-7<sup>th</sup> Dec 2018

**RISK  
BEYOND  
2018**
ERM INTERNATIONAL  
CONFERENCE ON ERM 2018  
**INTEGRATED GRC**

**INTEGRATED GRC**
**IN A NEW DIGITAL WORLD**

- Artificial Intelligence and Block chain
- Fin Tech and its trends
- Cyber securities
- The disruption is not over yet
- ISO 31000:2018 and its integration with ISO 27001 and GDPR
- About GDPR – Concept to Practice Sharing
- Governance, Risk Management and Compliance

# Thank You

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