



**Thai  
Institute of  
Directors**

**15  
September  
2016**

# **Managing Cyber Exposure at the Board Level**

**Prepared by Aon Risk Solutions**

Proprietary & Confidential

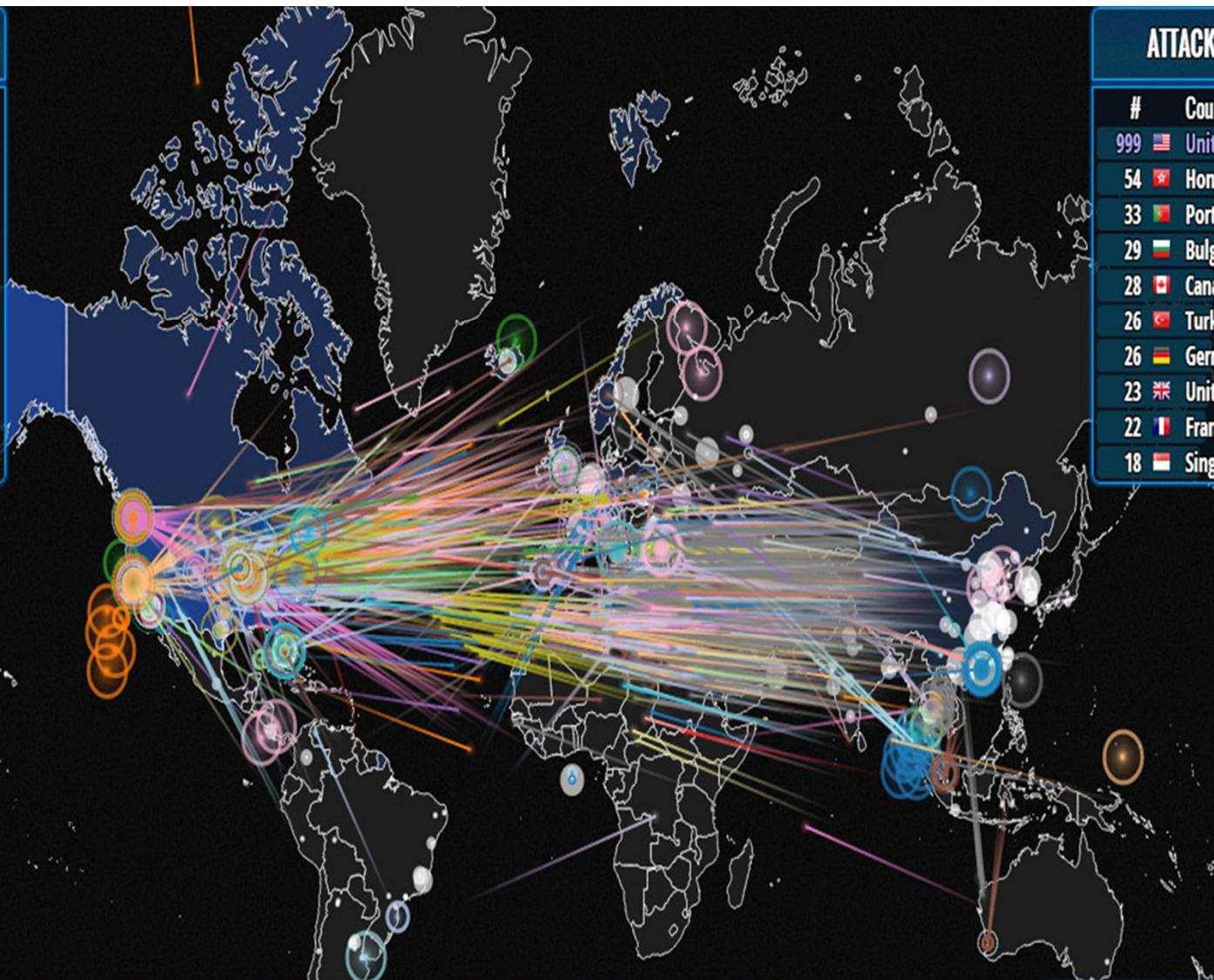
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Empower Results®

## ATTACK ORIGINS

#	Country
340	China
298	United States
97	Netherlands
57	Canada
56	South Korea
50	Russia
48	Hong Kong
45	France
40	Sweden
32	India

## ATTACK TARGETS

#	Country
999	United States
54	Hong Kong
33	Portugal
29	Bulgaria
28	Canada
26	Turkey
26	Germany
23	United Kingdom
22	France
18	Singapore



## ATTACKS

Timestamp	Attacker			Target		
	Organization	Location	IP	Location	Service	Port
2014-06-25 11:47:03.66	Hurricane Electric	Stanford, United States	184.105.139.114	Seattle, United States	NetController, ntp	123
2014-06-25 11:47:03.97	TOT Public Company	Thanyaburi, Thailand	101.108.250.0	Saint Louis, United States	unknown	52421
2014-06-25 11:47:04.53	Webhosting.Net	Miami, United States	67.215.180.162	Miami, United States	discard	9
2014-06-25 11:47:04.53	Webhosting.Net	Miami, United States	67.215.180.162	Miami, United States	discard	9

## ATTACK TYPES

#	Service	Port
115	ssh	22
93	ms-term-services	3389
84	isakmp	500
70	microsoft-ds	445
50	http	80

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- Market Trends

- **Director and Officer Exposure to Cyber Liability**

- The high profile lawsuits – and wins – for boards
- Protecting yourself and the entity pre-breach and post-breach and through insurance

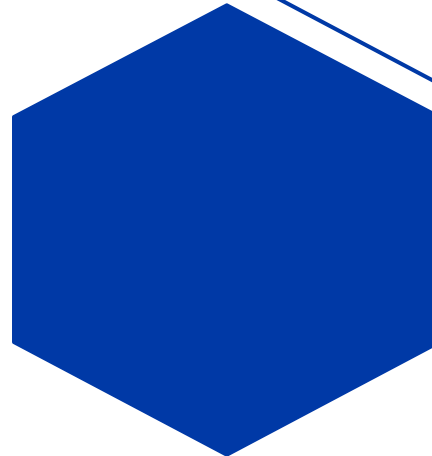
- **Cyber Risk Transfer**

- **Service Provider Exposure**

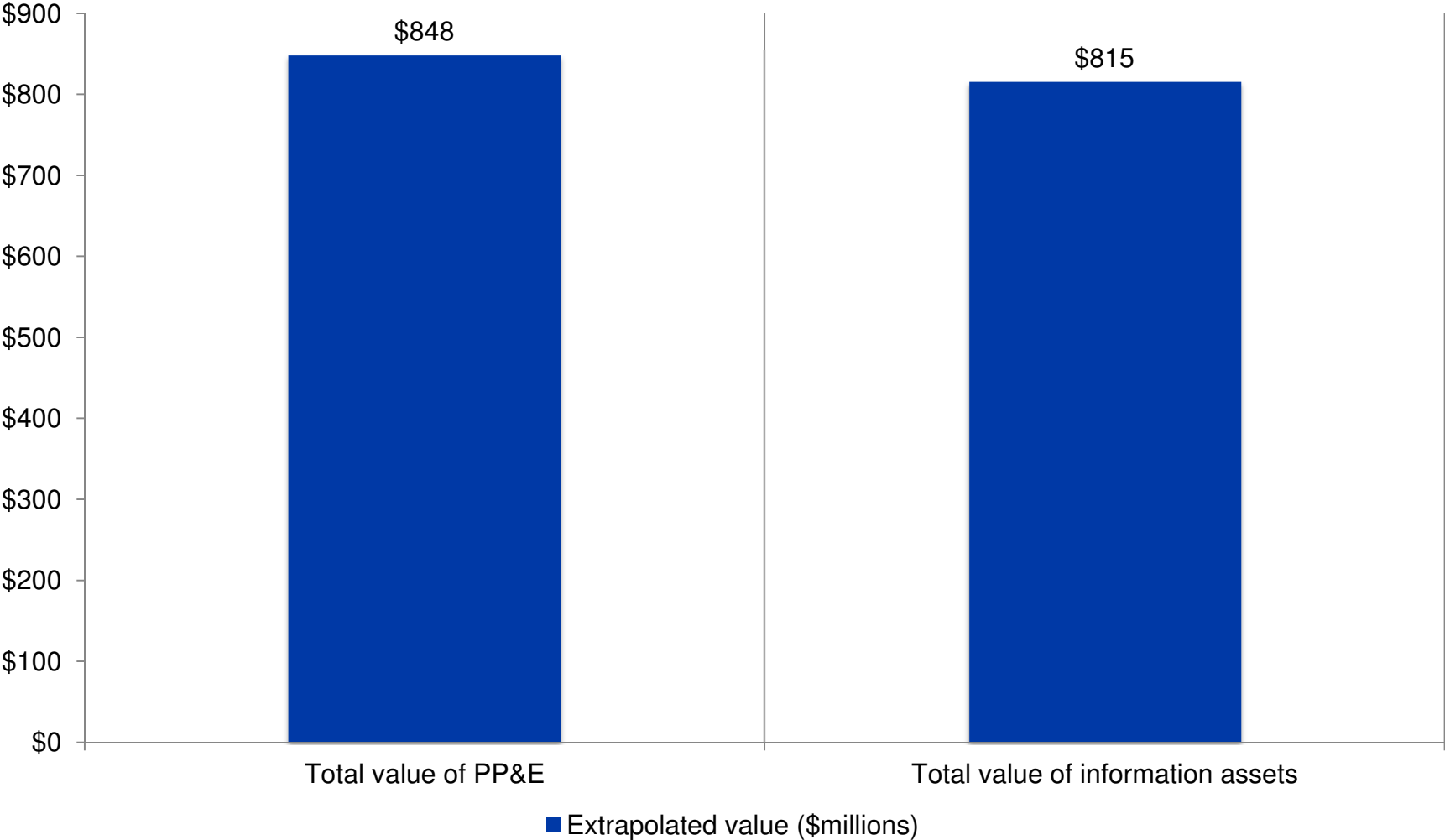
- Protecting the entity at vendor engagement
- Managing service provider dependency through risk transfer



# Cyber Risk in Asia



# Valuing Tangible and Intangible Assets



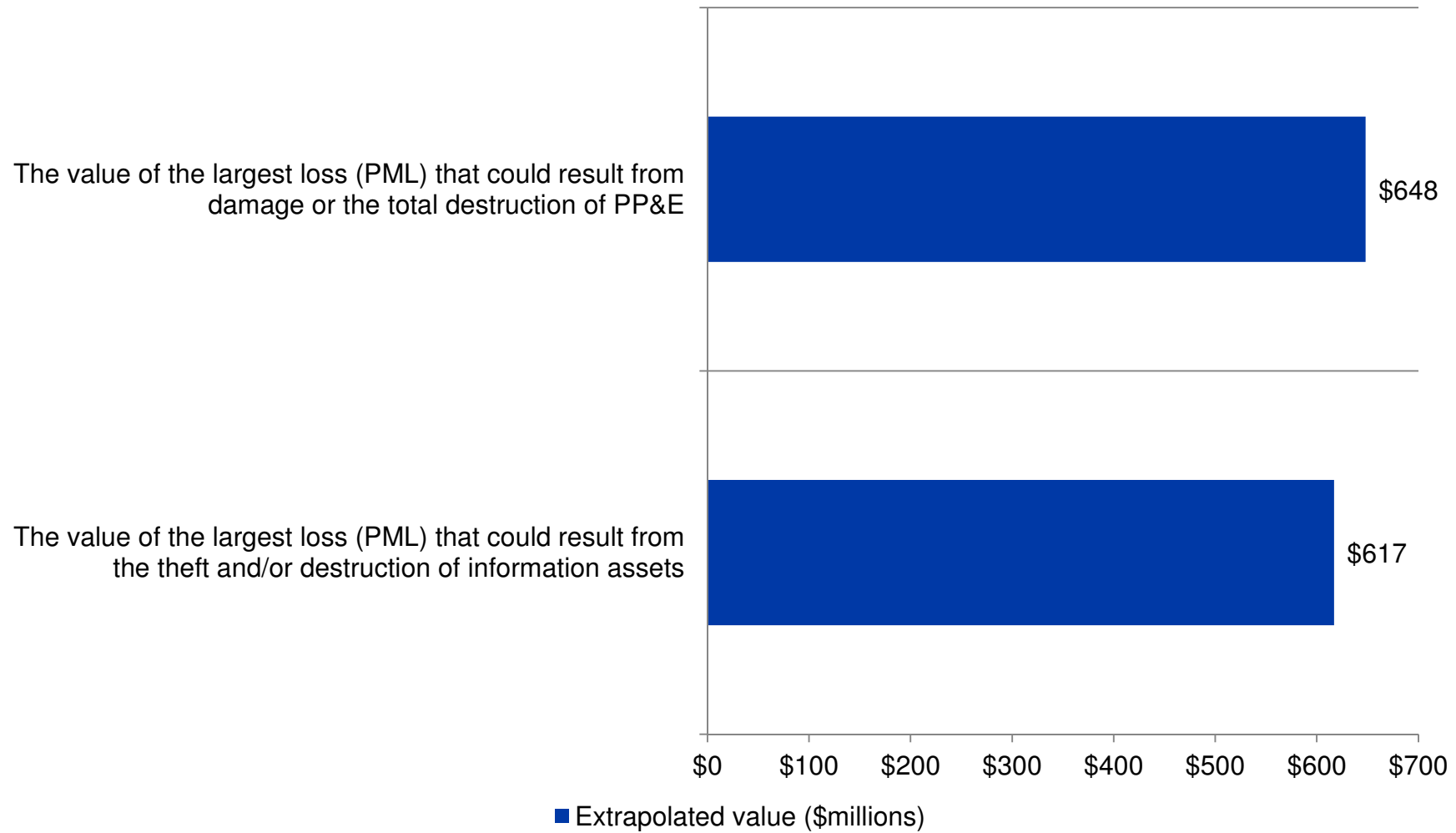
Source: Ponemon 2015 Global Cyber Impact Study

Risk. Reinsurance. Human Resources



# Estimating Loss to Tangible and Intangible Assets

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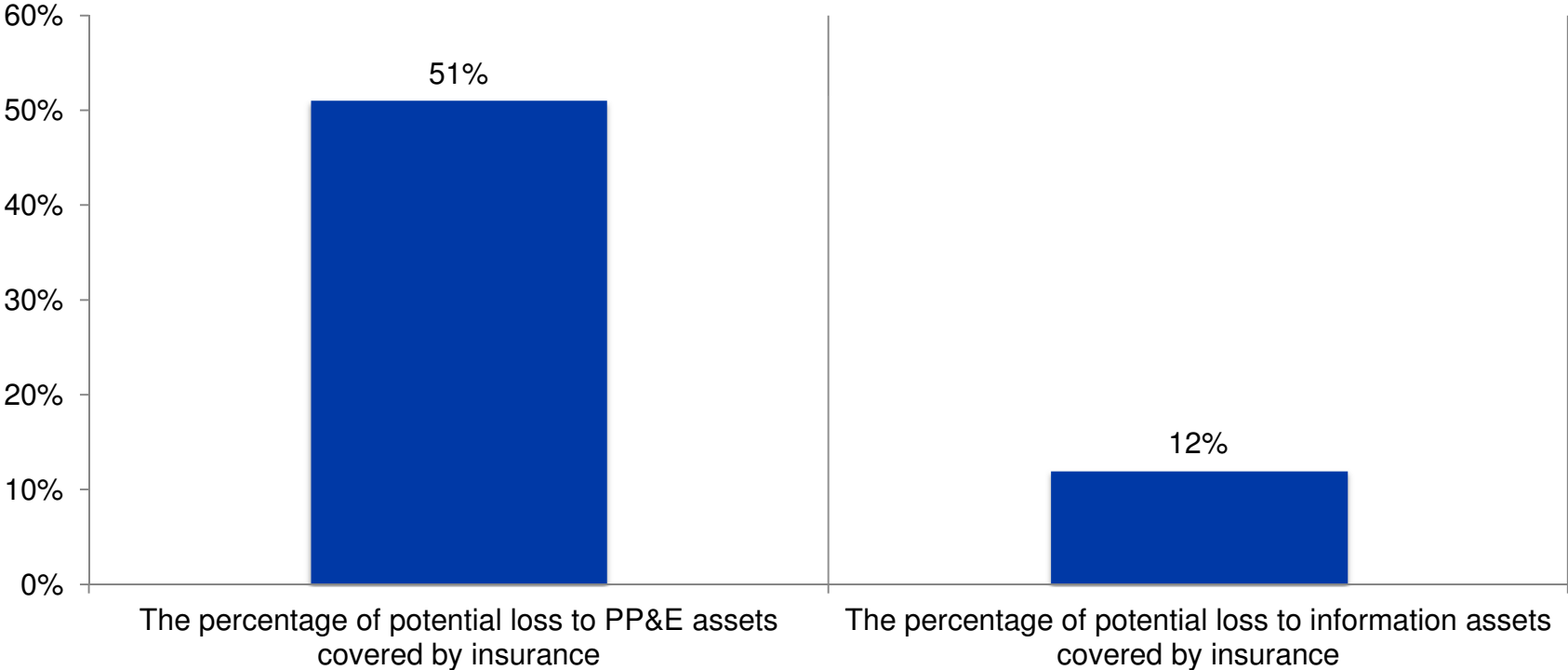


Source: Ponemon 2015 Global Cyber Impact Study

Risk. Reinsurance. Human Resources



# Insuring Tangible and Intangible Assets

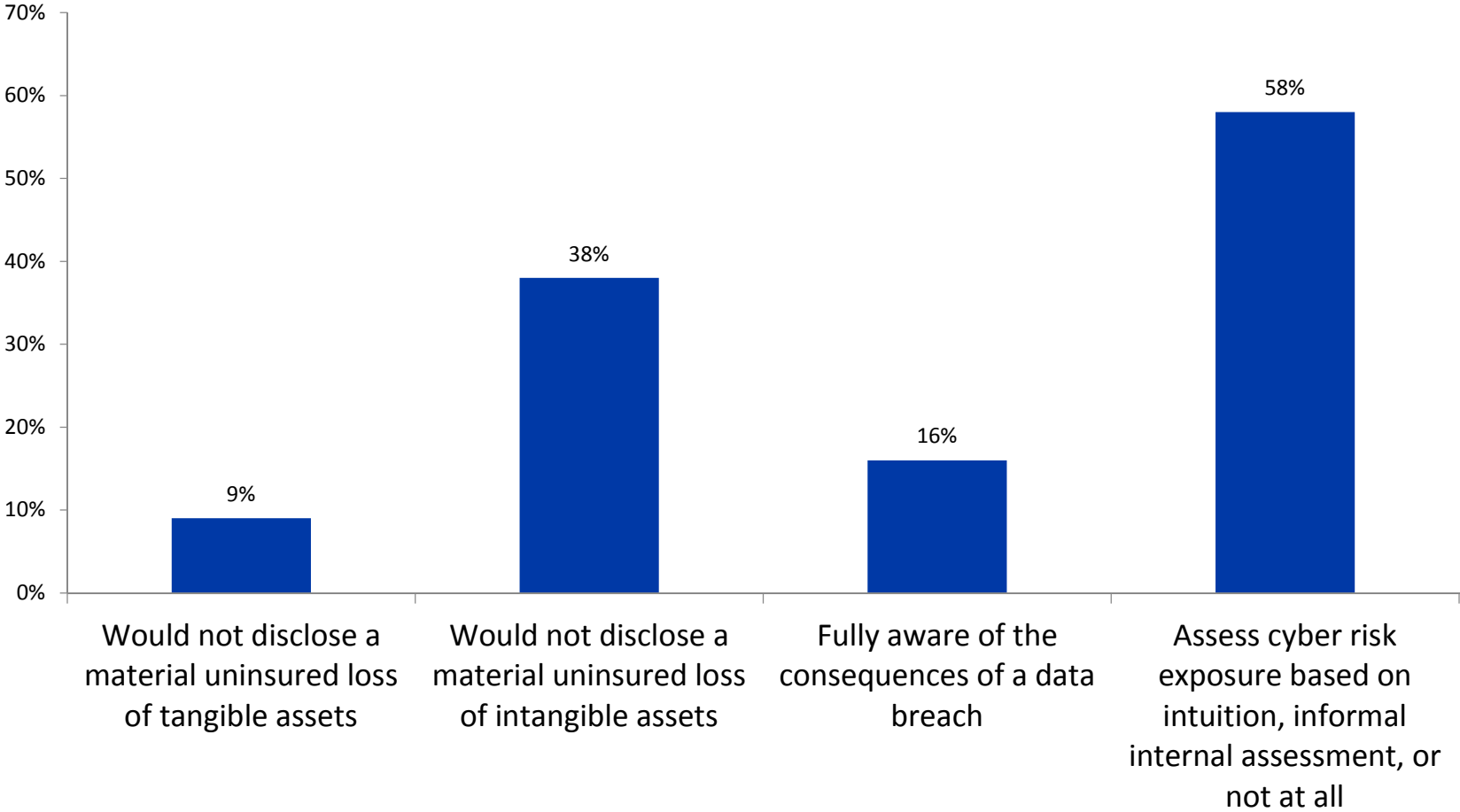


Source: Ponemon 2015 Global Cyber Impact Study

Risk. Reinsurance. Human Resources



# Cyber risk awareness among APAC businesses

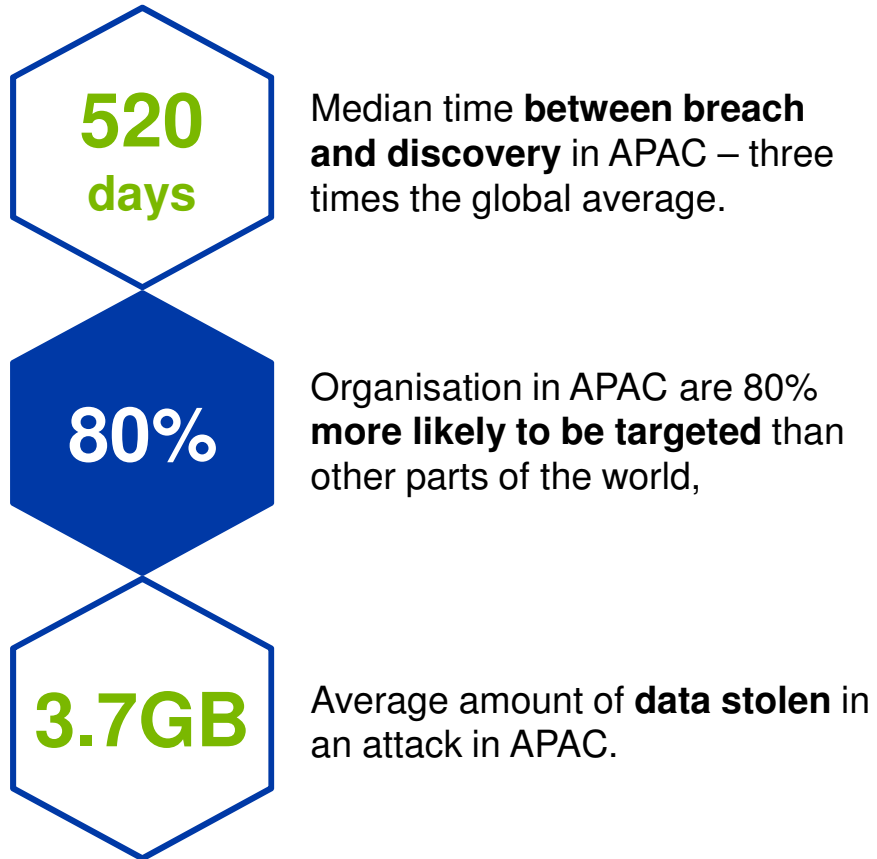


Source: Aon 2015 Asia Pacific (APAC) Cyber Impact Report

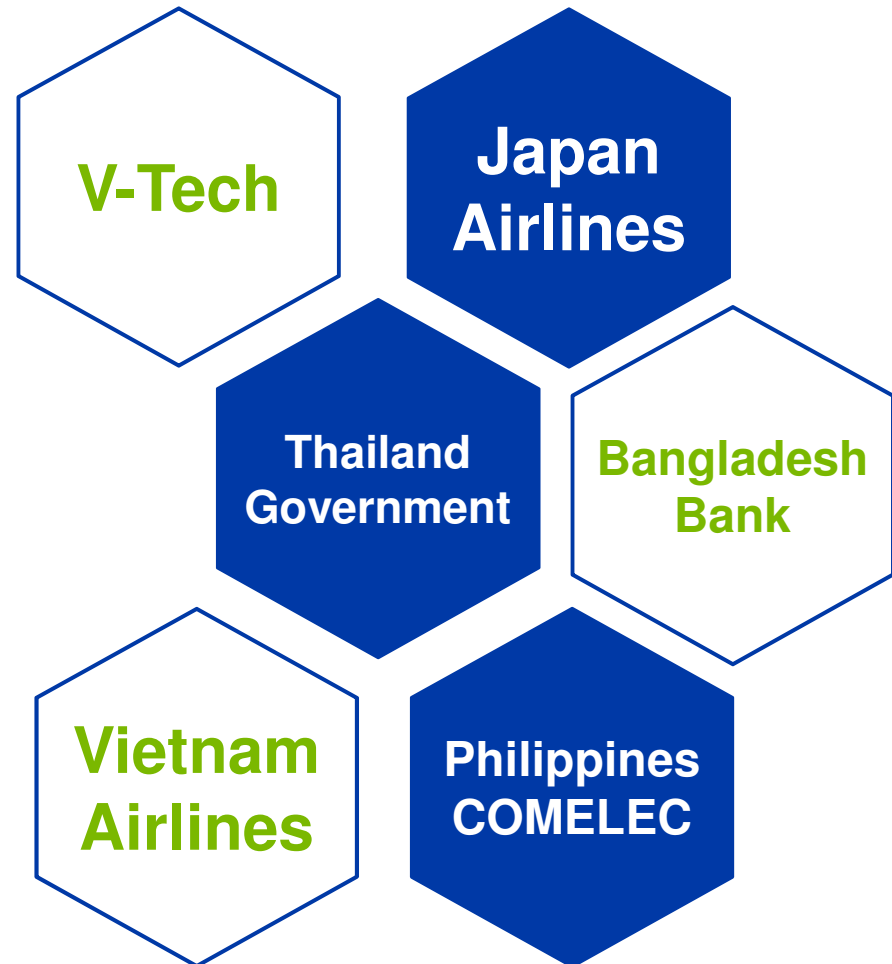




## Cyber Risk in Asia



Source: Mandiant M-Trends Asia Pacific



## Market Trends – Attack Trends

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2015 (and early 2016) has seen, largely, a **continuation of trends** in relation to cyber-attacks.

The majority of perpetrators are still **external actors**, the primary motive remains **financial gain** and phishing and particularly **spear phishing** attacks remain dominant.

Spear phishing **attacks targeting employees** have increased by 55 percent in 2015.

**Social engineering** has increased in frequency and public recognition.

There has also been an **increase in ransomware** attacks – up 35 percent in 2015.

**DD4BC** (Distributed Denial of Service for Bitcoin) attacks have been common, with **smaller scale attacks** launched initially along with a modest demand for payment, with the threat of increased attacks if the demand is not met.

Source: Symantec's Internet Security Threat Report 2016

hire a hacker for every job you can imagine, from DDOS to completely ruining people or destroy reputation of a company or individual -

[Bookmarks](#) [Tools](#) [Help](#)

✓ Silk Road (mark... ✕ [The Hidden Wiki](#) ✕ [The Matrix - Th...](#) ✕ [TorSearch](#) ✕ [TORCH: Tor Se...](#) ✕ [IsraelService](#)

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[Core.onion](#)

# Rent-A-Hacker

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## Rent-A-Hacker

Experienced hacker offering his services!

(Illegal) Hacking and social engineering is my bussiness since i was 16 years old, never had a real job so i had the time to get really good at hacking and i made a good amount of money last +-20 years.

I have worked for other people before, now im also offering my services for everyone with enough cash here.

### Prices:

Im not doing this to make a few bucks here and there, im not from some crappy eastern europe country and happy to scam people for 50 euro.

Im a professional computer expert who could earn 50-100 euro an hour with a legal job.

So stop reading if you dont have a serious problem worth spending some cash at.

Prices depend alot on the problem you want me to solve, but minimum amount for smaller jobs is 200 euro.

You can pay me anonymously using Bitcoin.

### Technical skills:

- Web (HTML, PHP, SQL, APACHE)
- C/C++, Assembler, Delphi
- 0day Exploits, Highly personalized trojans, Bots, DDOS
- Spear Phishing Attacks to get accounts from selected targets
- Basically anything a hacker needs to be successfull, if i dont know it, ill learn it very fast
- Anonymity: noone will ever find out who i am.

### Social Engineering skills:

- Very good written and spoken (phone calls) english and german.
- If i cant hack something technically ill make phone calls or write emails to the target to get the needed information, i have had



Wed 6/8/2016 1:08 PM

EmiratesNBD <banknet@emiratesNBD.com>

Your payment copy advice from Emirates NBD Bank/subsidiary

To

 We removed extra line breaks from this message.

 Message  EmiratesNBD\_ADVICE.7z

Attention,

Please see attached payment swift document based on the instruction from our customer.

Should you have any inquiry or require assistance, please contact your payer (our customer) at the contact number stated in the attached advice. Please note that you will need Adobe Acrobat Reader Version 5.0 or above to view your advice. If you do not have the required software, you can download it from the Adobe website at [www.adobe.com](http://www.adobe.com)

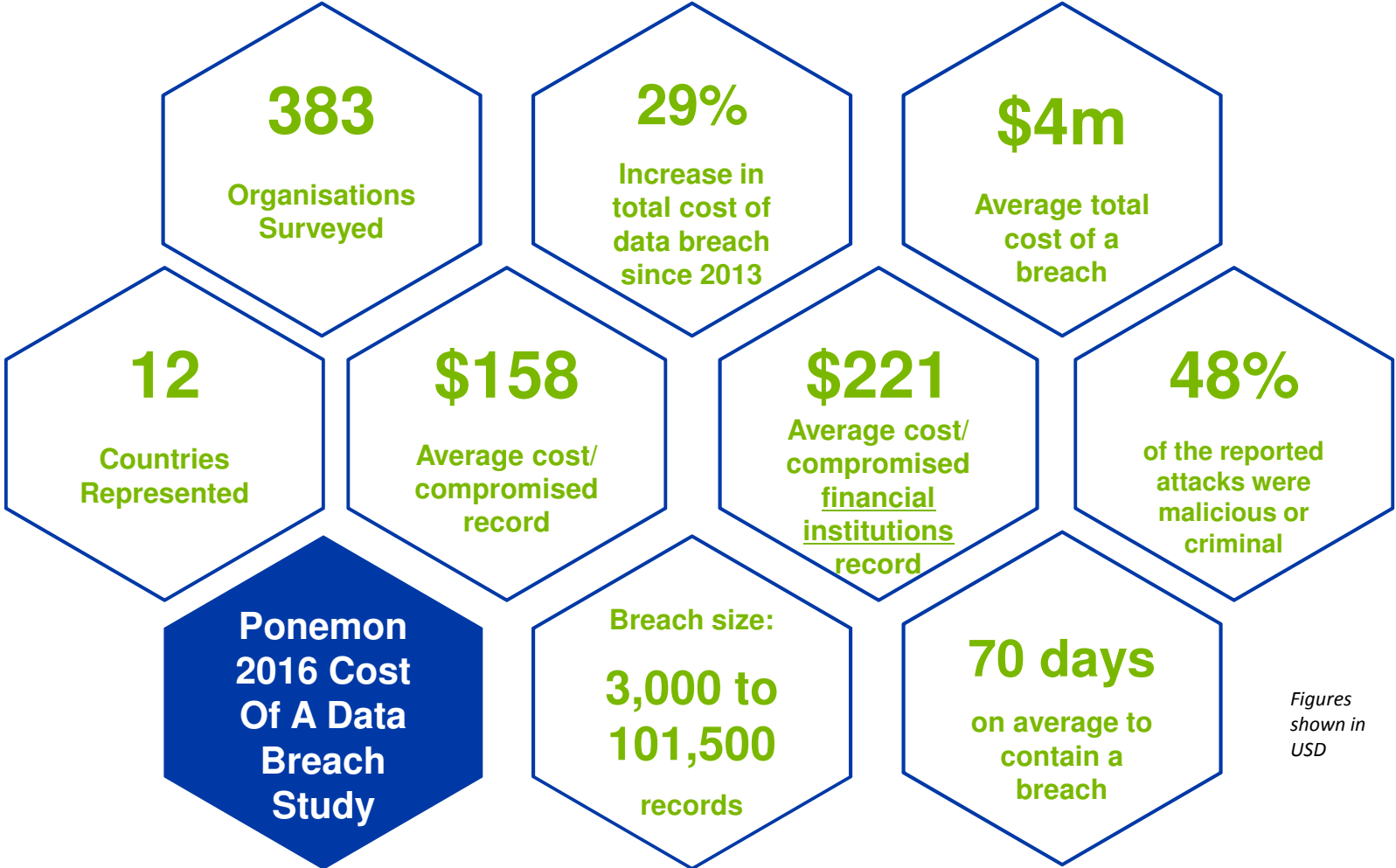
Best Regards,

Emirates NBD Bank  
P.O. Box 777 Deira,  
Dubai United Arab Emirates  
Phone: +971 600 540040  
Fax: +971 4 327 2996

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Disclaimer

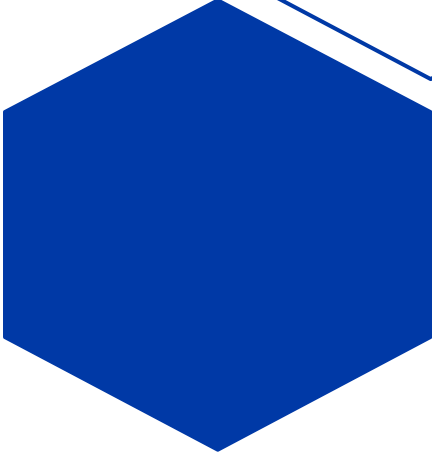
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# Market Trends – Cost of a Data Breach





**Director &  
Officer  
Exposure**

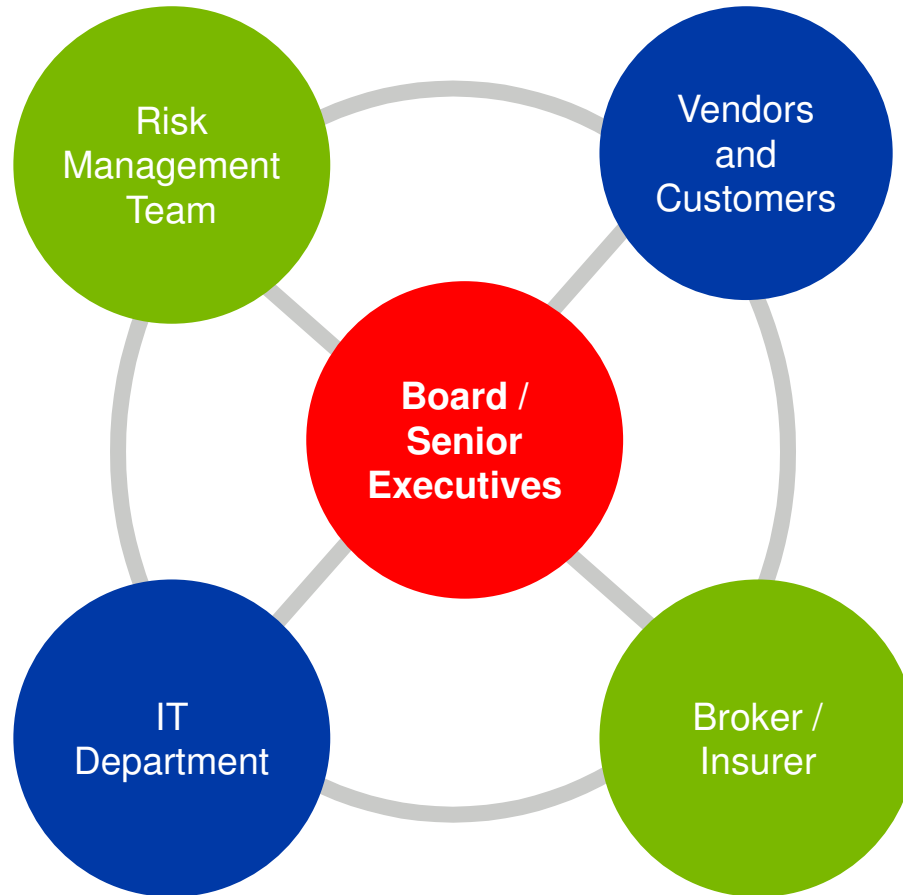


# Board Level Mitigation

Ensure that there are up to date policies and plans in place for data protection, incident response and business continuity

Manage the dialogue between your IT and Risk teams.

Know and meet regularly with your Information Security / IT Team. Understand incidents or “near misses”.



Understand your contracts with your customers and vendors. What risks are you assuming? Who is required to maintain insurance?

Know your external experts and reporting obligations when a cyber event occurs

Review your risks with your insurance broker and insurer continually. Insurance coverage is negotiable.

# Cyber Risk Transfer

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## D & O Policy

- Personal cover for directors, officers and senior executives
- Legal costs of defending claims and investigations covered
- Claims against directors arising from cyber events often take a similar form to other actions
- Ensure there is no exclusion for cyber related claims – not typically excluded.

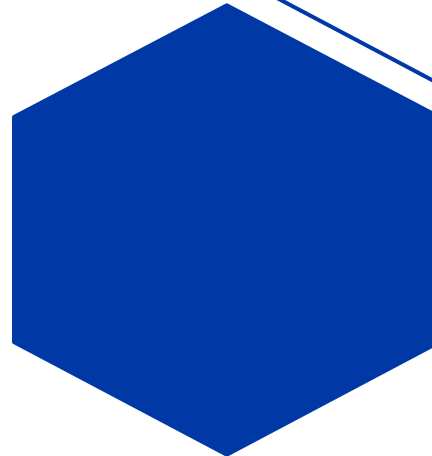
## Cyber Policy

- Cover for the entity for first and third party losses.
- Grants access to experienced network of crisis managers, IT/forensic experts, public relations consultants and lawyers and covers these costs
- Provides cover for business interruption and claims against the entity
- Demonstrates board level awareness of and response to cyber risk





**Cyber Risk  
Transfer**



## Coverage & Gaps Under Traditional Policies

### Property Insurance:

Malware and Denial-of-Service attacks do not constitute '**physical perils**' and do not damage '**tangible property**'

### Professional Indemnity:

- Requires **negligence** in provision of defined business activities.
- Definition of professional services may not capture ancillary functions like data collection and management

### Common Hurdles:

- No coverage for **crisis expenses** required by law or to protect **reputation**.
- No cover for data protection **regulatory actions**, including **penalties**

### General Liability Insurance

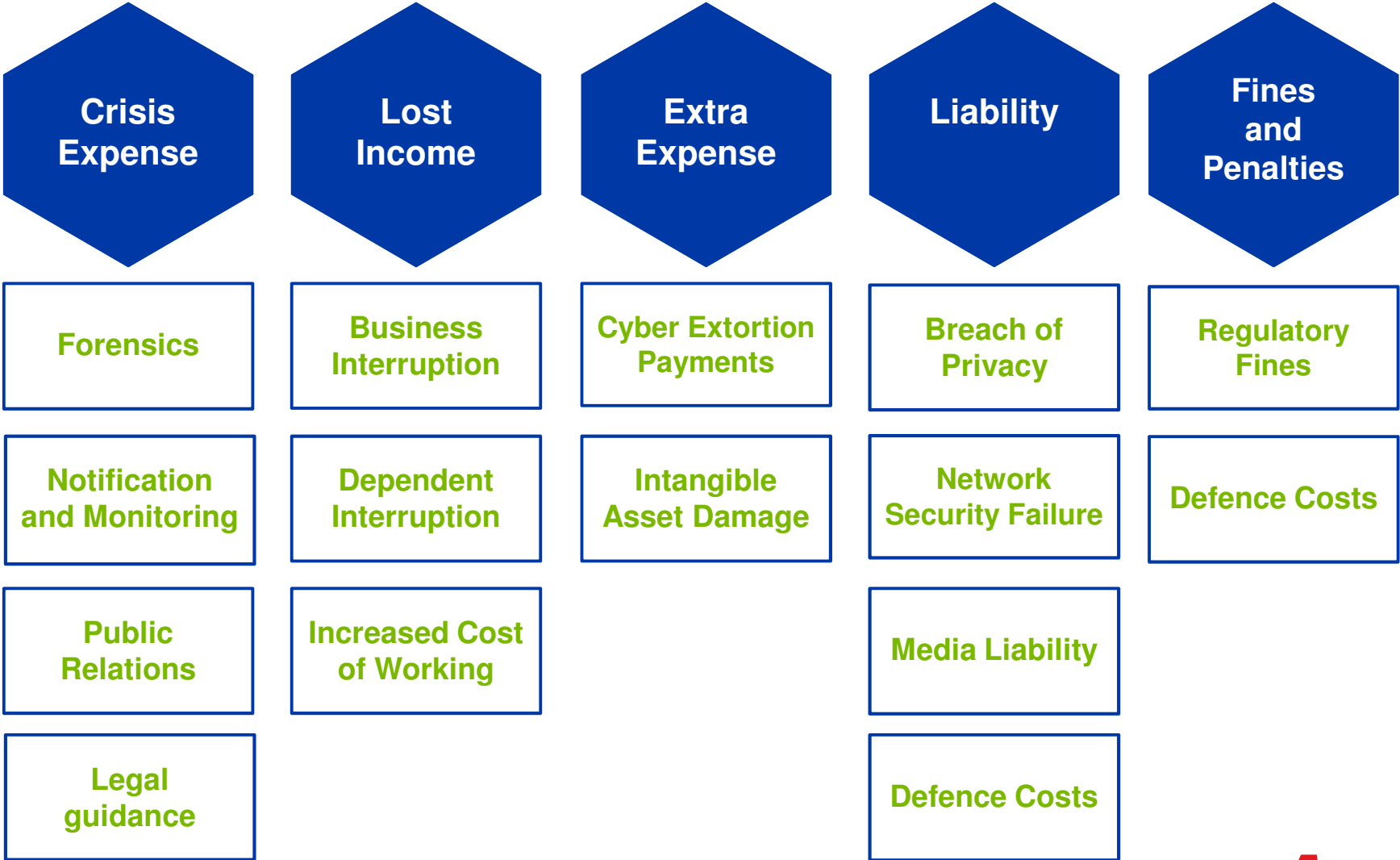
CGL Privacy coverage limited to '**publication or utterance**' resulting in one of traditional privacy torts.

"Publication" resulting from hacking is **not an act of the insured**

### Crime Coverage

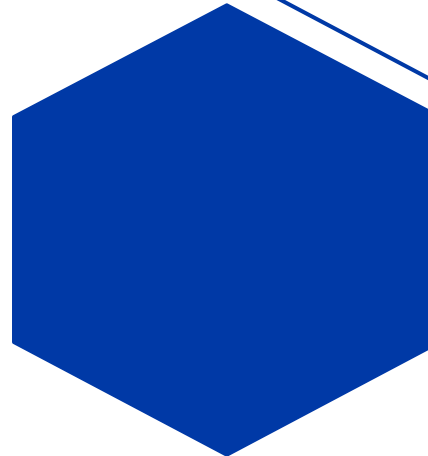
- **Covered loss is theft** of money, securities, or tangible property.
- First port of call for 'Bangladesh Bank' type loss
- social engineering needs express cover
- Confidential information exclusion

# Cyber Risk Transfer – Attack Costs





## Managing Vendors



## Managing Vendors

	Pre-Breach	Post-Breach
Vendor Engagement	<ul style="list-style-type: none"> <li>Identify those vendors on which your company relies to conduct business and those who collect and store personal data for which you are liable</li> <li>Ensure that business units engaging vendors perform the requisite due diligence and that service provider expertise is fit for purpose</li> <li>Note: Target breach facilitated by initial breach of HVAC vendor</li> </ul>	<ul style="list-style-type: none"> <li>Engage crisis managers, IT/forensic experts, public relations consultants and lawyers as appropriate</li> <li>Access to network of experts made available through cyber insurance policy</li> </ul>
Vendor Risk Transfer	<ul style="list-style-type: none"> <li>Maintain robust service agreements and be aware of how indemnities and limits of liabilities protect or expose your company</li> <li>Consider requiring that critical vendors maintain a satisfactory level of cyber insurance</li> </ul>	<ul style="list-style-type: none"> <li>Seek cover for dependent business interruption loss, i.e. lost income because a service provider you rely upon succumbs to a cyber attack</li> <li>Ensure your cyber cover is broad enough to cover claims against you arising from the conduct of your vendors, particularly those who handle sensitive data</li> </ul>

## Aon Specialty Contact Team

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