



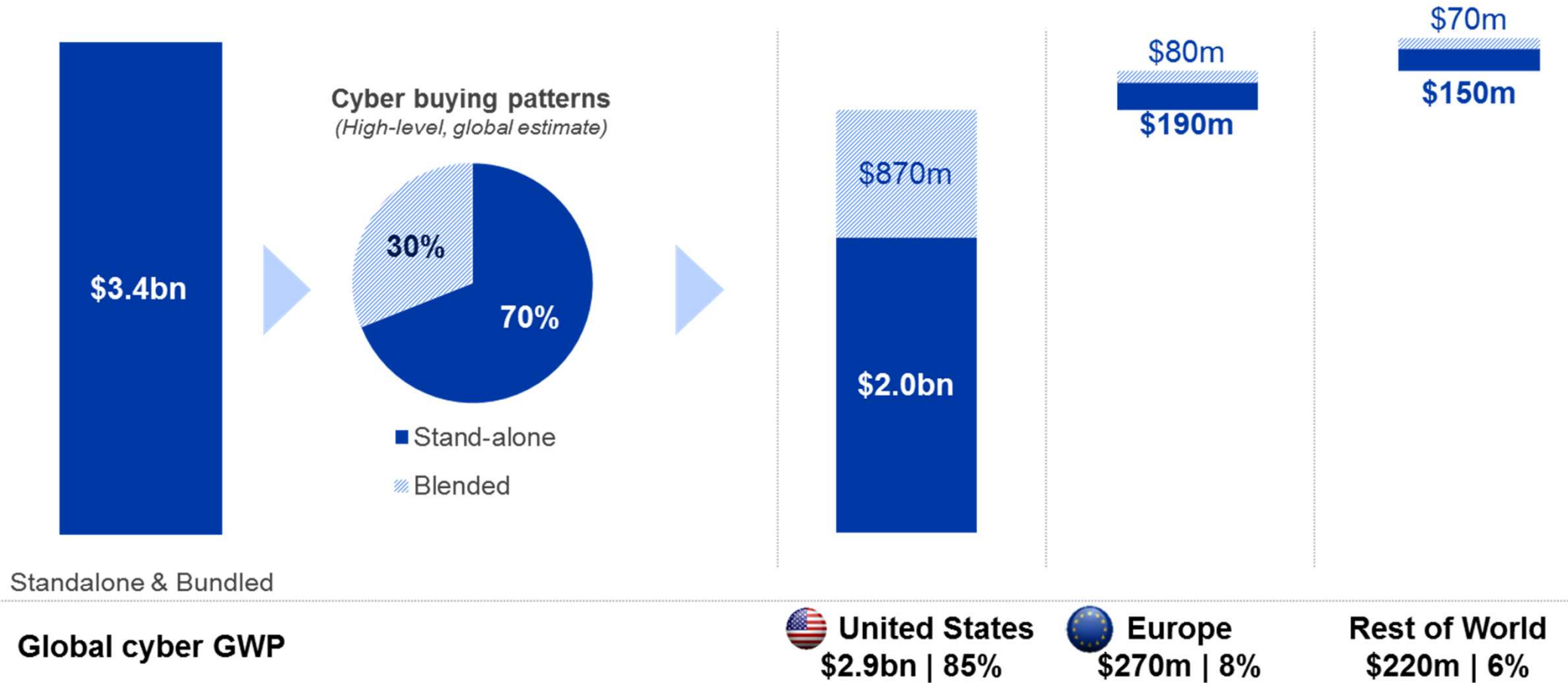
Global Cyber Market Overview

ENISA Cyber Insurance Workshop

Brussels – October 6th, 2017

The global cyber market is estimated to be worth c.\$3.4bn in premium

- 70% - c. \$2.3bn relates to standalone cyber products
- 85% of the business originates from the US



Source: Aon Inpoint analysis, Swiss Re Sigma, Aon GRIP data, Aon cyber whitepaper, Aon practitioner insights, PWC, Allianz, Advisen

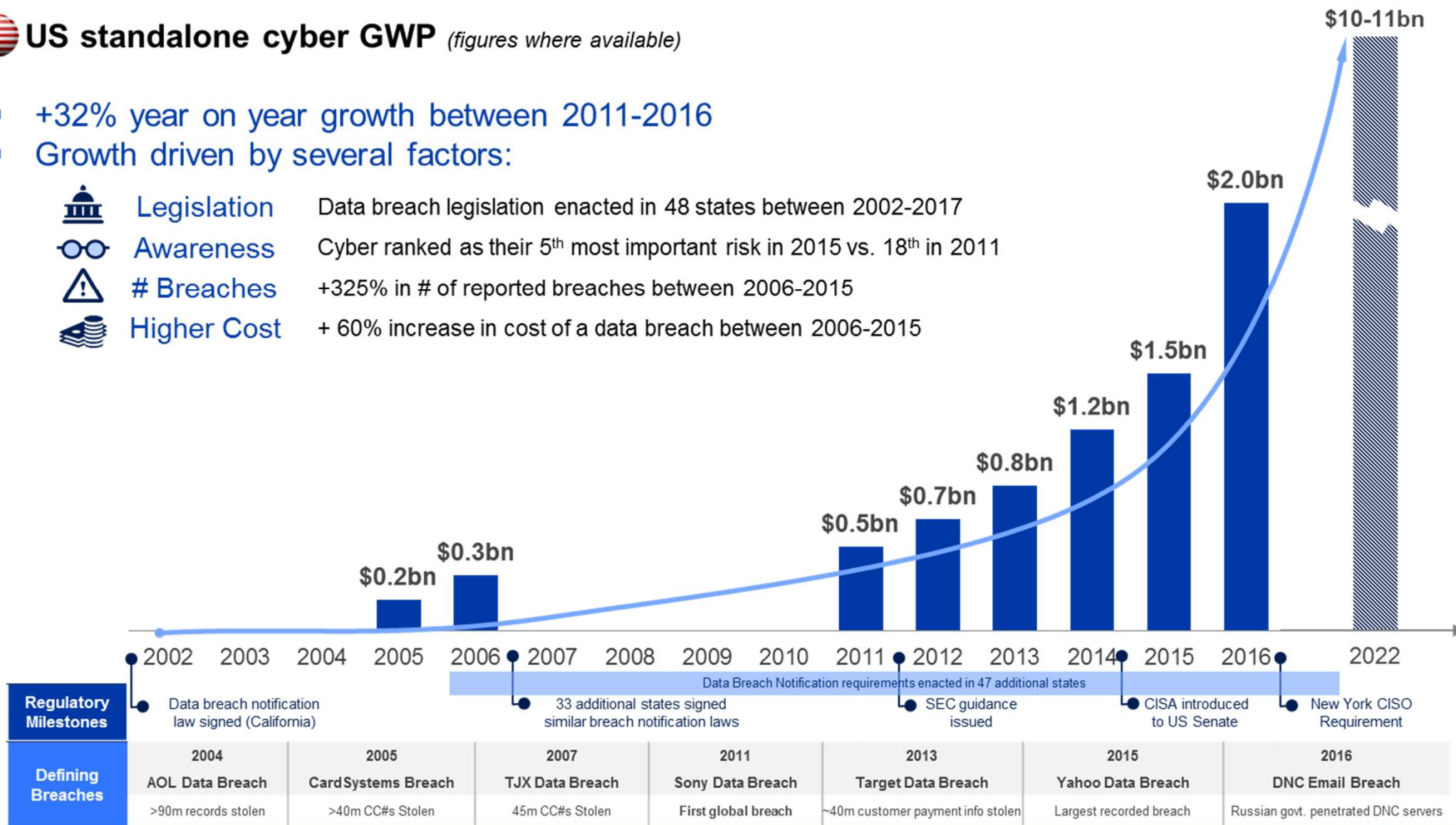


Over the last decade, the US market has shown high growth levels

US standalone cyber GWP (figures where available)

- +32% year on year growth between 2011-2016
- Growth driven by several factors:

- Legislation** Data breach legislation enacted in 48 states between 2002-2017
- Awareness** Cyber ranked as their 5th most important risk in 2015 vs. 18th in 2011
- # Breaches** +325% in # of reported breaches between 2006-2015
- Higher Cost** + 60% increase in cost of a data breach between 2006-2015



Source: Betterley Report, Advisen, PropertyCasualty360, Business Insider, Marsh, Aon, datalossdb.org, Identity Theft Resource Center, NCSL, Ponemon Institute, Aon Global Risk Survey, Aon Inpoint analysis





- Notes:
- Aon Global Risk Survey
 - Identity Theft Resource Centre/ Breach Level Index
 - The Ponemon Institute

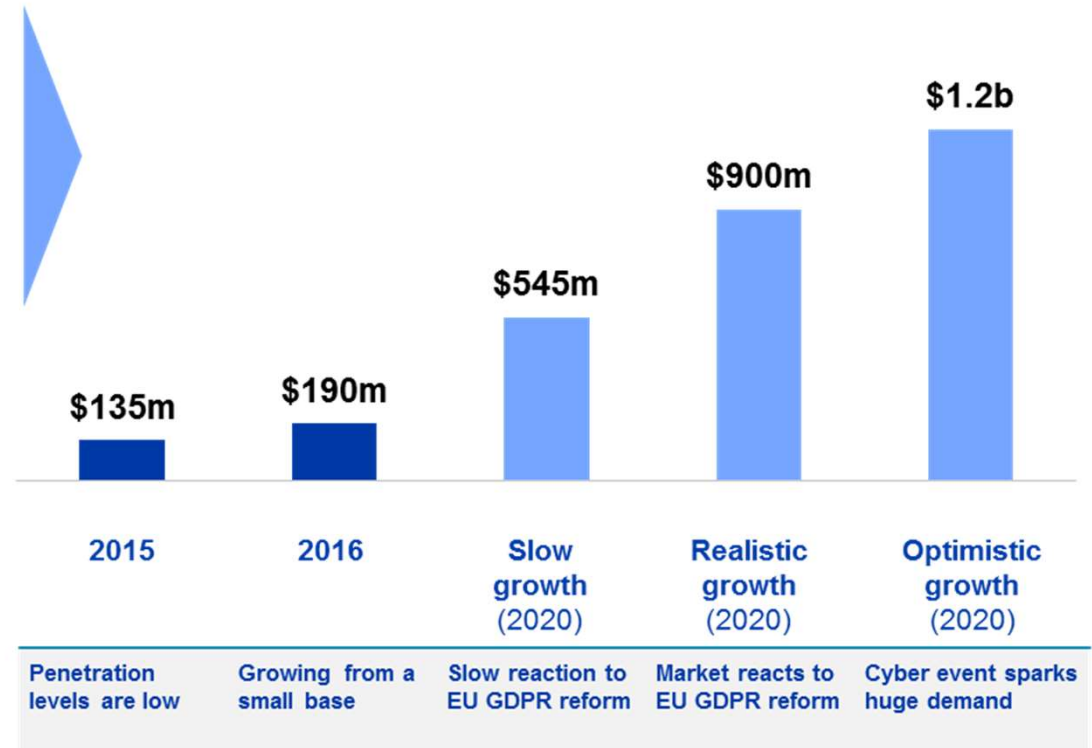


The EU standalone cyber market is estimated to be worth c.\$190m and could grow to c.\$900m by 2020 as a result of GDPR's impact on buyer awareness and demand

EU standalone cyber GWP

- +40% GWP growth between 2015-2016
- Expected to see accelerated growth due to stricter regulations and increased awareness

 Legislation	<ul style="list-style-type: none"> Increased data regulations (GDPR) Duty to notify data breaches Fine of up to 2% or 4% of global turnover¹ EU wide enforcement of GDPR
 Awareness	<ul style="list-style-type: none"> Increased awareness driven by GDPR Cyber ranking as 14th largest risks by companies² Expected to move to 8th position by 2018
 Breach Numbers	<ul style="list-style-type: none"> # of breaches increasing at 36% since 2011³ Mandatory notification to drive numbers higher
 Costs	<ul style="list-style-type: none"> Cost of data breach in Europe 35% lower vs. US⁴ Costs likely to increase as a result of GDPR As seen in US after enforcement of data legislation



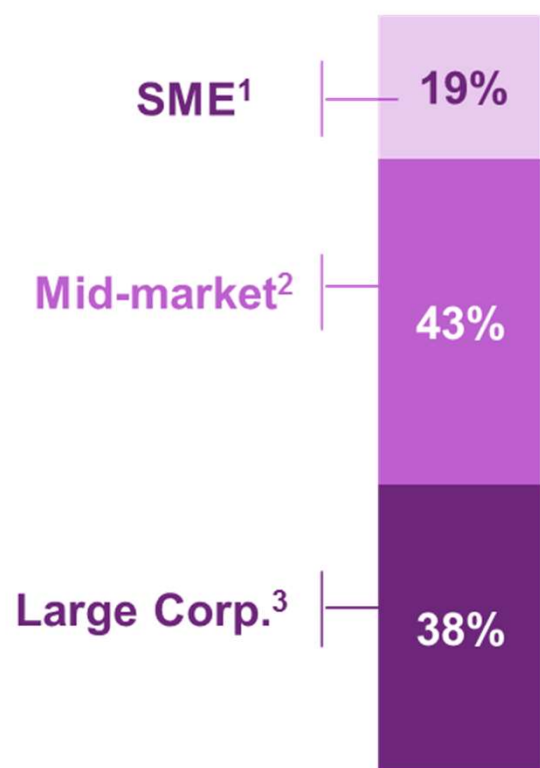
Source: The European Union, Breach Level Index, IBM, Ponemon Institute, Aon Global Risk Survey, Aon Inpoint analysis

Notes: 1. Depending on activity | 2. Aon Global Risk Survey | 3. The Breach Level Index | 4. IBM



In the US, large financial institutions, retailers and healthcare companies have been the main buyers of standalone cyber products

 **2015 Estimated breakdown of standalone US cyber market**

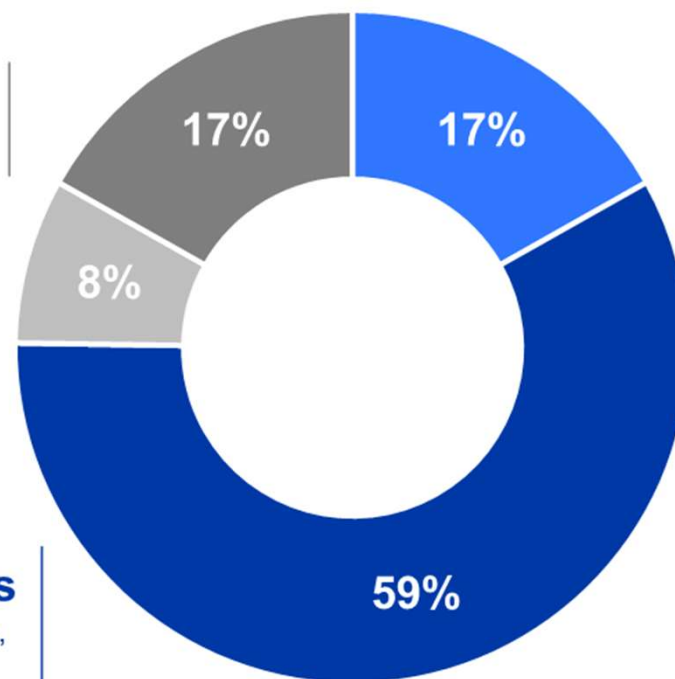


Personal data & ops risks
Healthcare, transportation, logistics

Operational risks
Manufacturing, energy, utilities

Financial transactions
Fin. institutions, retail, wholesale, hospitalities, business services

Personal data & tech risks
Technology, telecom/media, professional services, education



¹Small and Medium-sized Enterprises (SME) are defined as companies generating less than \$100m; ²Mid-Market: \$100m to \$1bn; ³Large Corporate: >\$1bn

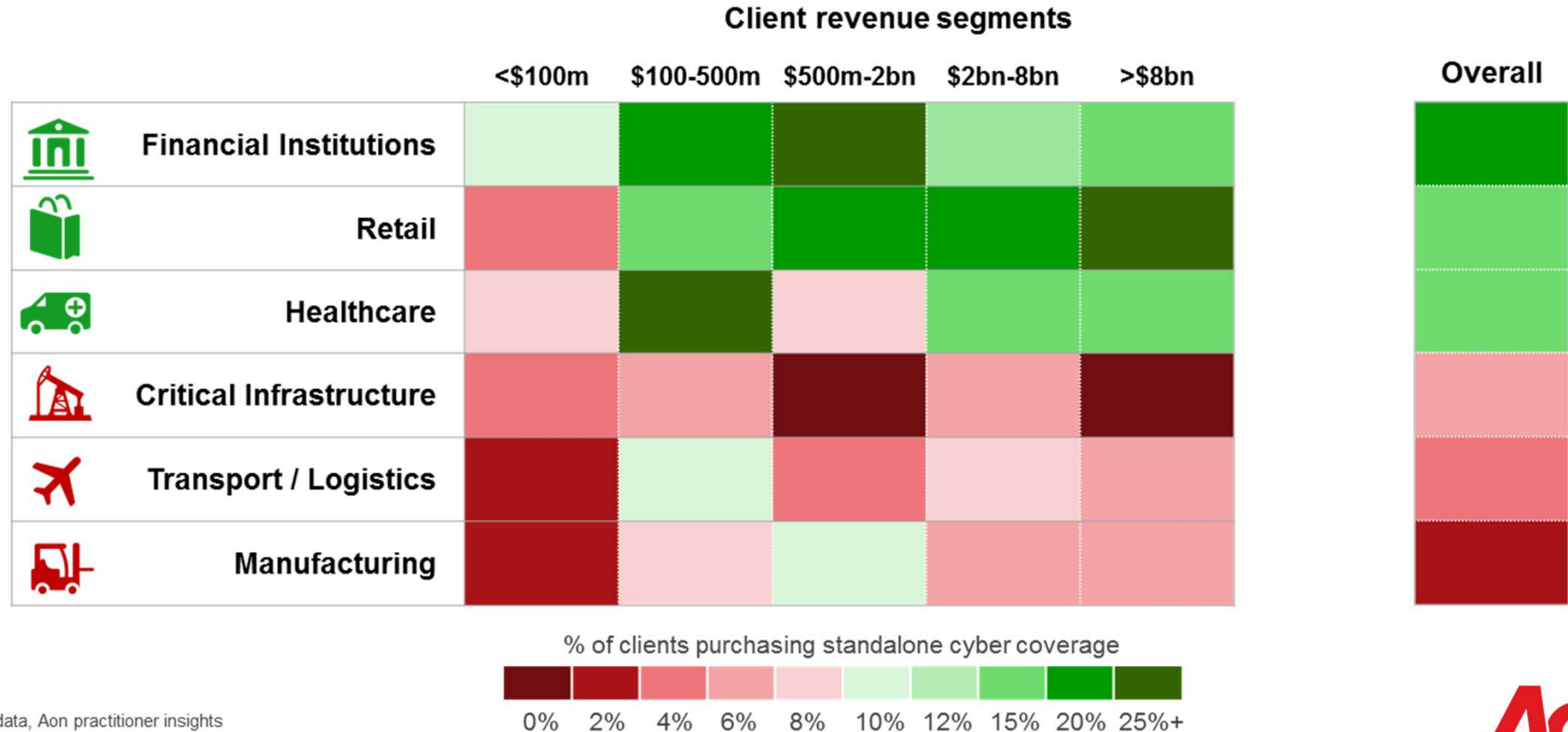
Source: Aon broker insights, Aon GRIP data, Aon Inpoint analysis



Higher penetration of cyber insurance is observed in these 'traditional' buying segments

Higher take-up rates of standalone product is evidence of :

- Increased awareness of potential impact of a cyber event on their business
- Insurers' ability to offer relevant products
- Higher maturity of the market in these segments



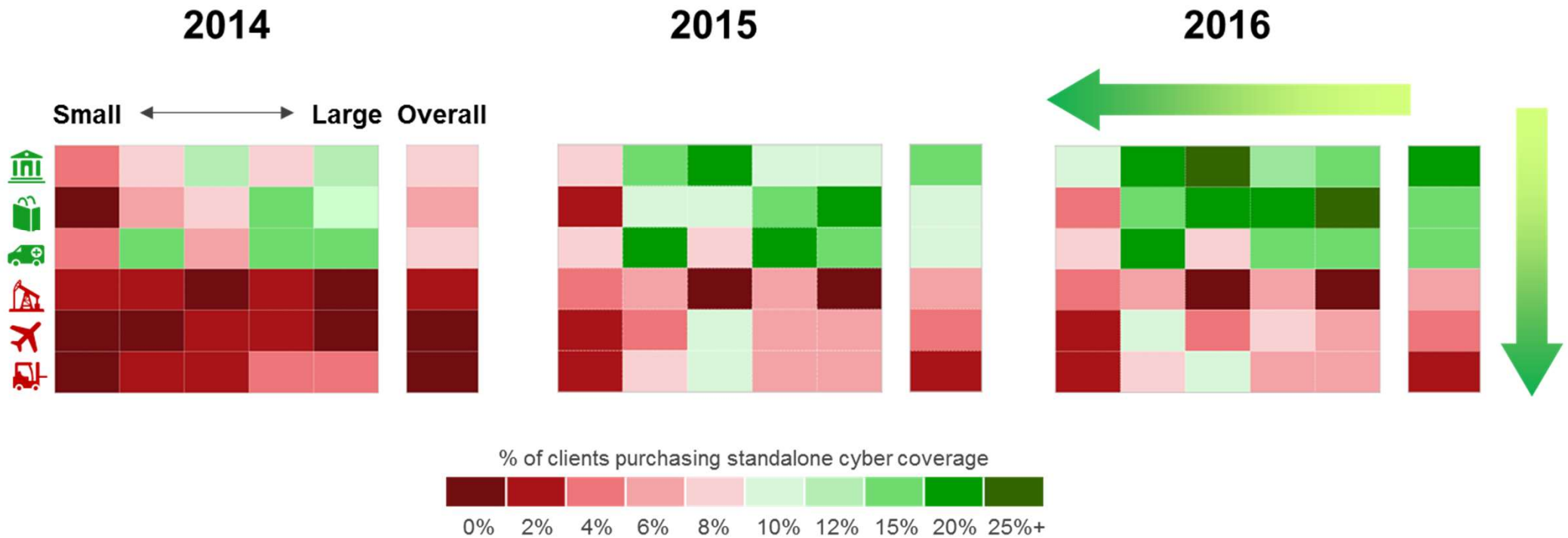
Source: Aon GRIP data, Aon practitioner insights



Penetration levels of standalone cyber insurance products have increased rapidly

Reflecting the increase in demand from those 'traditional' cyber segments
Demand is also spreading to new segments:

- Moving from large global 'traditional buyers' to smaller companies
- Reaching new industry segments less exposed to data breach but still exposed to cyber events



Source: Aon GRIP data, Aon practitioner insights



While emerging segments have specific needs, the market has not yet fully addressed the needs of the 'traditional' buyers

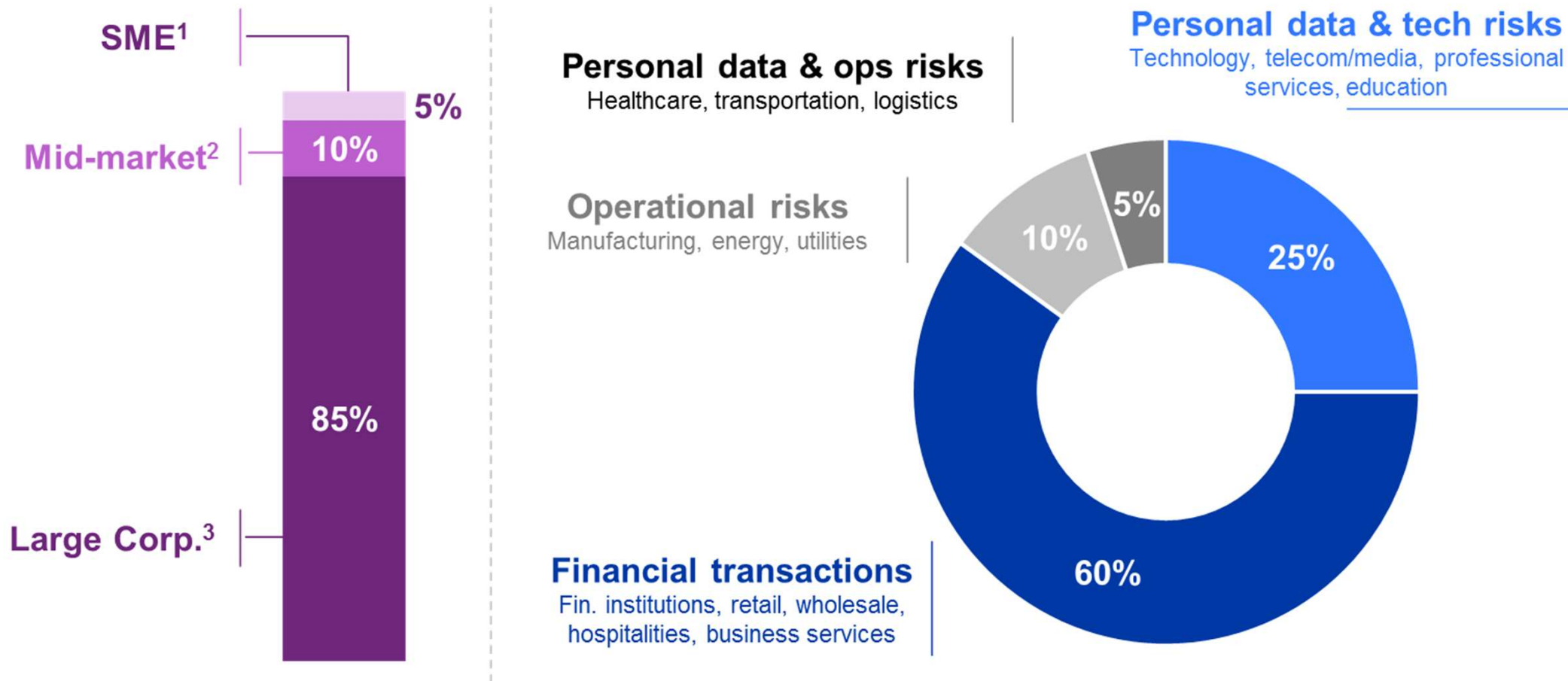
	Financial Institutions	Retail	Healthcare	Critical Infrastructures	Transport Logistics	Manufacturing
	<ul style="list-style-type: none"> Banks Financial Svcs 	<ul style="list-style-type: none"> Consu. Goods Online Retailers 	<ul style="list-style-type: none"> Hospitals Health Services 	<ul style="list-style-type: none"> Energy Utilities Telecom 	<ul style="list-style-type: none"> Aviation Aerospace Logistics 	<ul style="list-style-type: none"> Chemicals Pharma Food and Others
3rd Party Liab.	16	14	17	8	11	12
Breach Costs (1st)	9	12	16	10	8	8
Business Interr.	25	14	14	14	25	17
Data / Syst. Restor.	22	8	13	8	20	13
Contingent BI	19	16	16	9	9	10
Bod. Inj./PD (1st/3rd)	5	2	5	7	14	5
Loss of IP	19	8	7	9	9	15
Reputational Risk	25	23	16	12	6	13

Source: Aon Cyber Survey 2016



In the less mature European market, the demand for cyber standalone product is coming from large financial institutions, retail and tech risks

2015 breakdown of standalone Cyber GWP using Aon's book

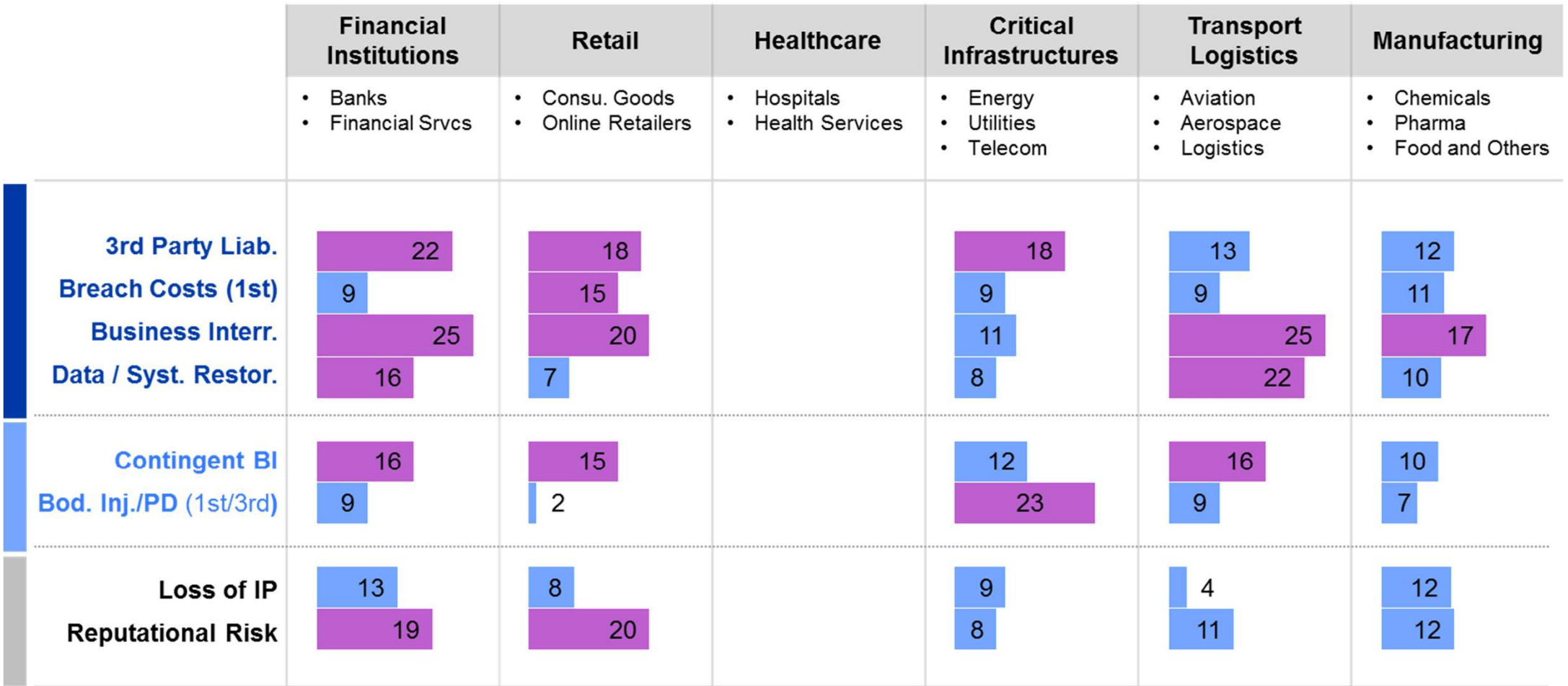


¹Small and Medium-sized Enterprises (SME) are defined as companies generating less than \$50m; ²Mid-Market: \$50m to \$1bn; ³Large Corporate: >\$1bn

Source: Aon broker insights, Aon GRIP data, Aon Inpoint analysis



However, European companies are also concerned by the same risks that drove demand in the US



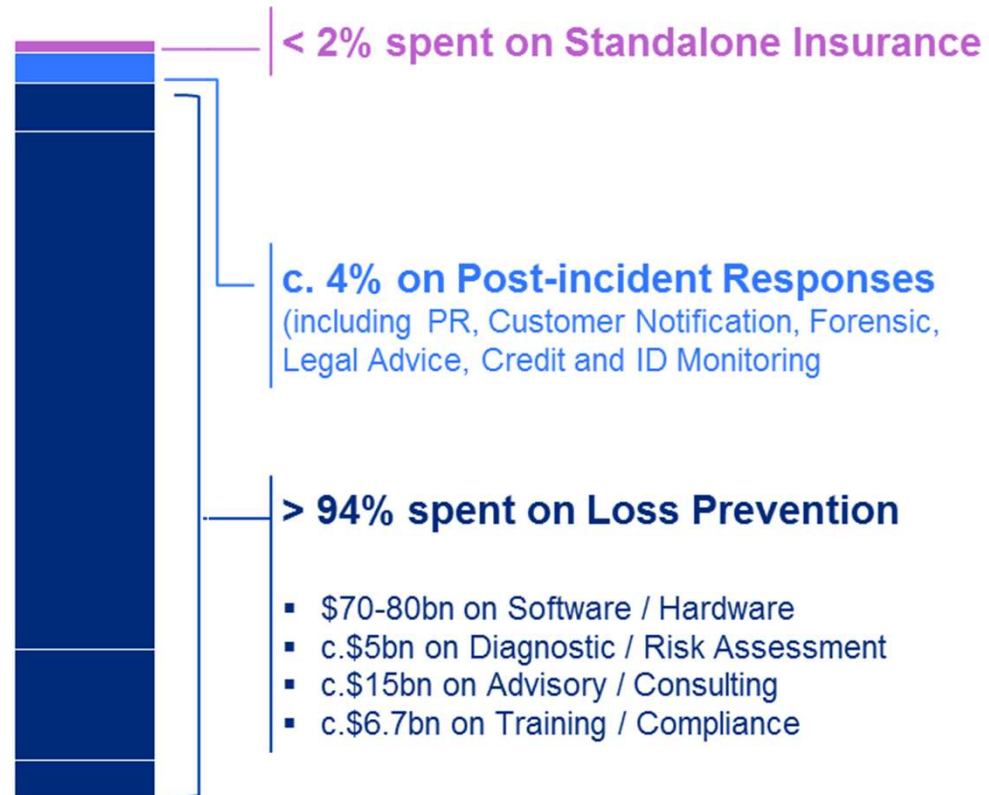
.... and we can expect the demand for cyber insurance product to quickly extend to other segments

Insurance only represents a small fraction of companies' spend on cyber security

We estimated the total 2015 cyber security market to be worth **c.\$100bn**

- The majority of cyber spend is on loss prevention solutions
- Despite strong growth over the last few years, Insurance only accounts for c.2%

**2015
Global cyber security
spend**

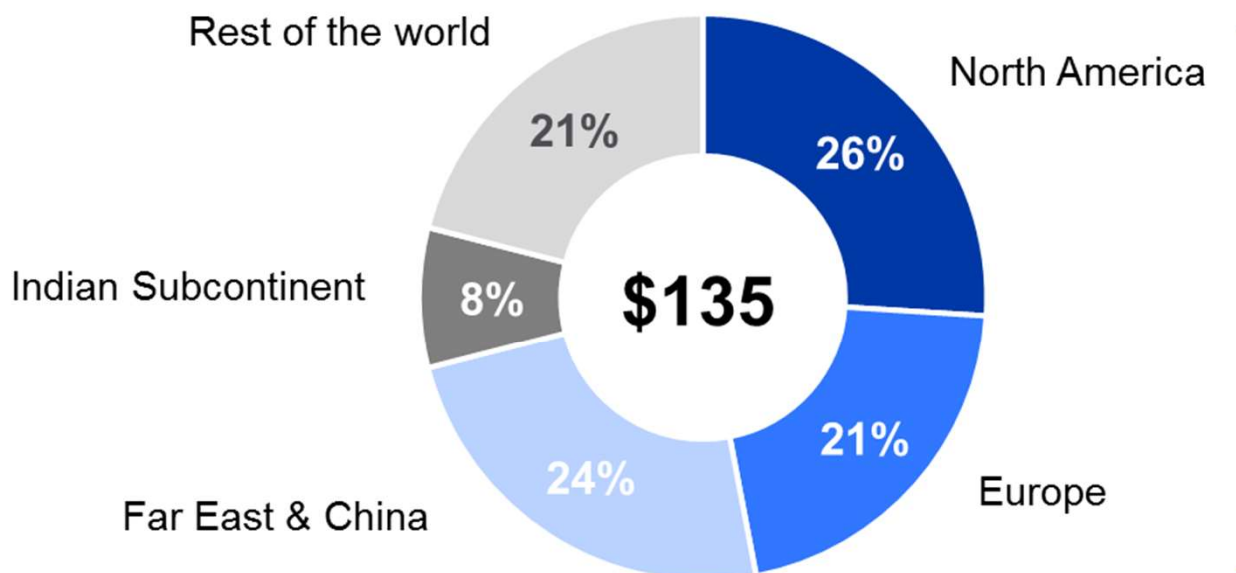


In a world where it is not a question IF a network is going to be breached but WHEN it will happen, loss prevention solutions are not enough to fully protect companies

A report from Juniper Research estimates the spend on software/hardware and network security solution to reach **\$135bn by 2022**

Cyber security market forecast – 2022

(approximated figures)



North America and Europe currently represent > 90% of cyber insurance premium but are expected to account for c. 45% of cyber security spend by 2022

In the future, cyber insurance will play an important role in supporting companies in the digital era, in North America, Europe and other parts of the world

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