



CYBER INSURANCE

Erik van der Heijden
Risk Management International Team

UTRECHT 18 JANUARY 2018



Relax, we'll help you.

ERIK VAN DER HEIJDEN

Senior risk engineer

Since 1988 in the insurance industry

- Risk assessments and consulting
 - Civil engineering
 - Environmental engineering
 - Health & Safety engineering
 - Fire safety & protection systems
 - Security science & Management
 - Cyber...



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IF P&C INSURANCE

Introduction

Clients in Nordics & Baltic States

- Stockholm, Sweden
- Sampo plc (NASDAQ OMX Helsinki)
- Largest insurance company in the Nordics
- 3 million private customers, 320,000 (large) corporate clients
- We receive 1.4 million damages claims every year and handle more than half of them within 24 hours. 9 out of 10 clients who have had a claim award us top marks for our claims administration.



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IF P&C INSURANCE

Nordic clients

Risk Management

- We underwrite what we understand
- We hire subject matter experts
- We learn from losses

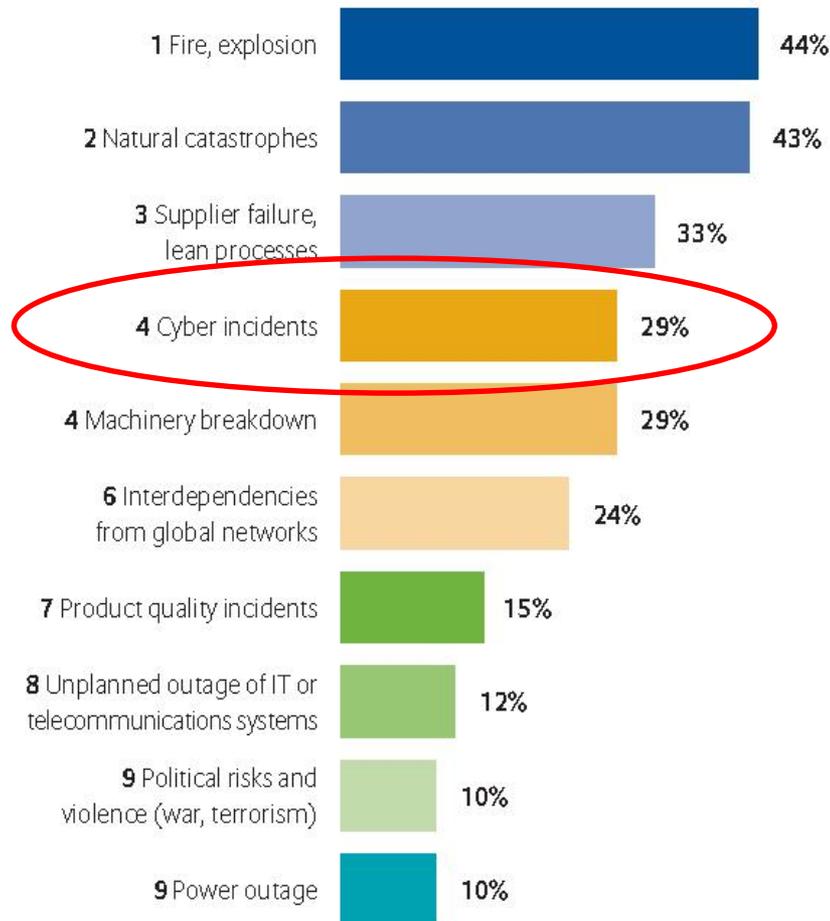


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TRENDS

Allianz Risk Barometer 2017

Which causes of Business Interruption (BI) are feared most?



BUSINESS THREATS AND UNCERTAINTIES 2017

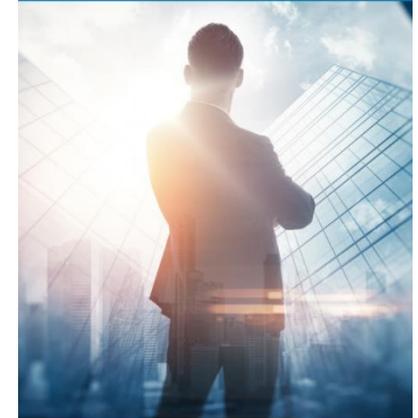
Horizon

Information collected from 726 organisations originating from 79 countries

Near-term threats, based on business continuity practitioners worldwide in-house analysis.

Percentage of respondents reporting they are 'extremely concerned' about a particular threat.

Business Continuity Institute
HORIZON SCAN REPORT 2017



bci Business Continuity Institute

bsi.

Threat	2012	2013	2014	2015	2016	2017
Cyber Attack	24%	25%	31%	43%	48%	54%
Data Breach (loss/theft confidential info.)	28%	26%	29%	32%	41%	47%
Unplanned IT & Telecoms Outage	30%	28%	34%	34%	35%	38%
Security incident (theft, fraud, protest)	N/A	12%	14%	12%	17%	18%
Adverse weather	18%	13%	18%	12%	14%	16%
Interruption to Utility Supply	18%	15%	18%	18%	16%	16%
Act of terrorism	13%	10%	11%	11%	19%	16%
Supply Chain Disruption	14%	10%	9%	13%	16%	14%

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CYBER

Challenges

- Young technology originally aimed at fulfilment only
- Legacy software
- Client demand for integration & connectivity
- Lack of (cyber) risk management
- End-of-pipe solutions
- Lingo



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APPLES & ORANGES

Large variety in client base population.

HOSPITALITY

RETAIL

HEALTHCARE

FOOD

**CRITICAL
INFRA**

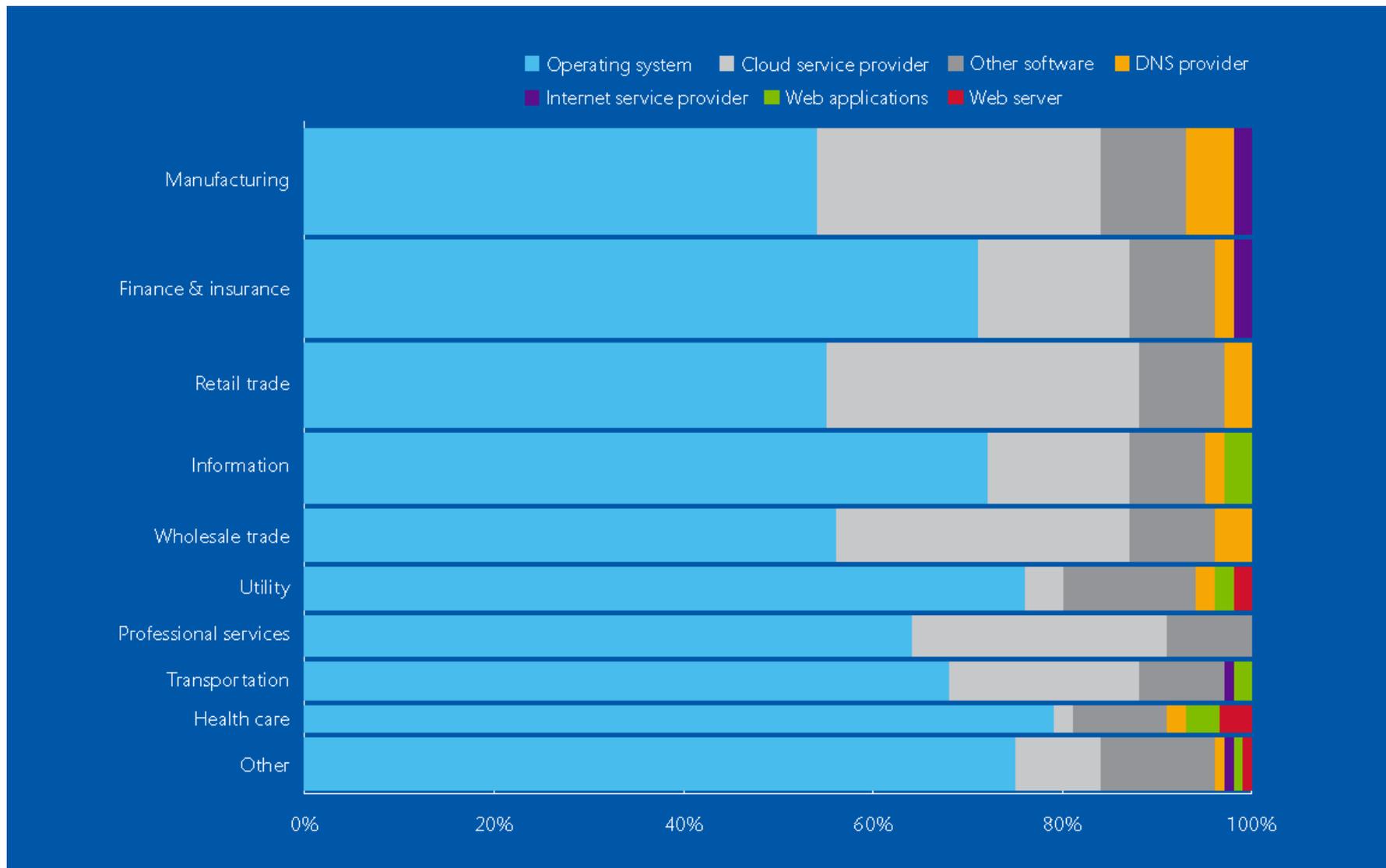
**SUPPLY
CHAIN**



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FORTUNE 500 CYBER RISK AGGREGATION

Aon Benfield



INSURANCE

Principles

Insurance business

- Many sharing the burden of a few.
- Sudden and unforeseen events
- Agreed price & conditions
- Agreed limits / sublimits
- Agreed controls
- Accumulation in portfolio is anticipated
- Loss Ratio (Premiums Paid / Losses Paid)
- Reserves
- Profit



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MODULAR WORDING - COVERAGE

Stand-alone product

Basic Coverage

- Restoration (1st Party)
- Confidentiality and Privacy Liability (3rd Party)
- Incident and Breach Response (1st Party)
- Business Interruption (1st Party)
- Cyber Extortion (1st Party)
- Reputation (1st Party)
- Network Security Liability (3rd Party)

Additional Coverage

- Media Liability (3rd Party)
- Cyber Crime (1st Party)
- PCI DSS (1st Party)

Main Insured Perils

- Computer Malicious Act
- Computer Malware
- Human Error
- Theft of Data
- Denial of Service Attack

Policy Trigger

- First Party sections – Discovery (incl. reporting)
- Third Party sections – Claims made
- ERP = 1 year as standard



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MODULAR WORDING – COVERAGE

Stand-alone product

Key Exclusions => Not covered

- Outage of the internet and utility providers
- Terrorism
- War, riot, civil war & Government action
- Punitive damages
- Property damages & Bodily Injury
- Contractual Liability
- Infringement of Intellectual Property rights
- Financial market risk or trading losses
- IT outsourced by the insureds IT outsourcer



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MODULAR WORDING – STRUCTURE

Stand-alone product

Limits / Sublimits

- Flexible limits/sublimits for all sections
- Inclusion of outsourcing partner possible (named/unnamed)

Back-ups and protection (obligations)

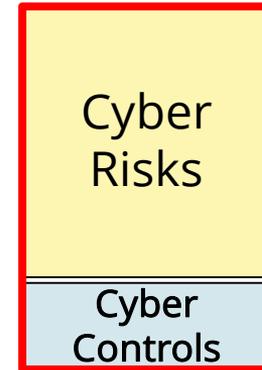
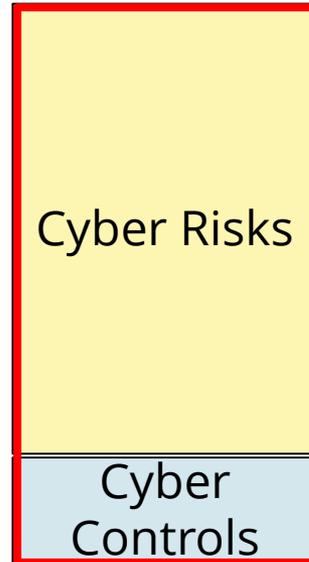
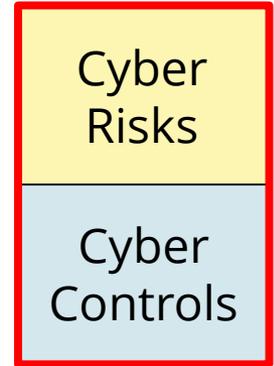
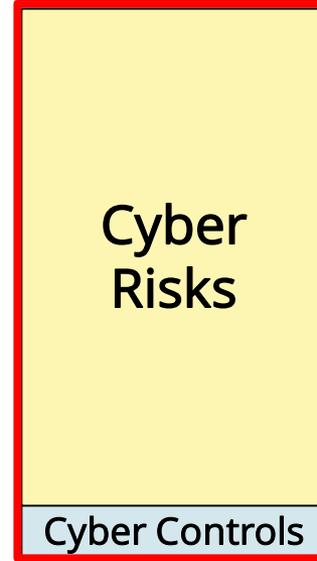
- Frequent back-up of data (daily/weekly)
- Anti-malware software
- Protection of computer systems/network (e.g. passwords, firewalls, segregation, etc.)



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INSURED ARE DIFFERENT

Impact and Likelihood



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CONTROLS

ISO 31001

Options

- Take
- Treat
- Transfer
- Terminate
- Accept Risk
- Put controls in place
- **Buy insurance**
- Stop activity



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NECESSARY CONTROLS

Business Impact Analysis

Business Continuity Plan



CONTROLS = BIA – BCP ?



CONTROLS

What are insurers looking for?

Confirmation on the controls in place...

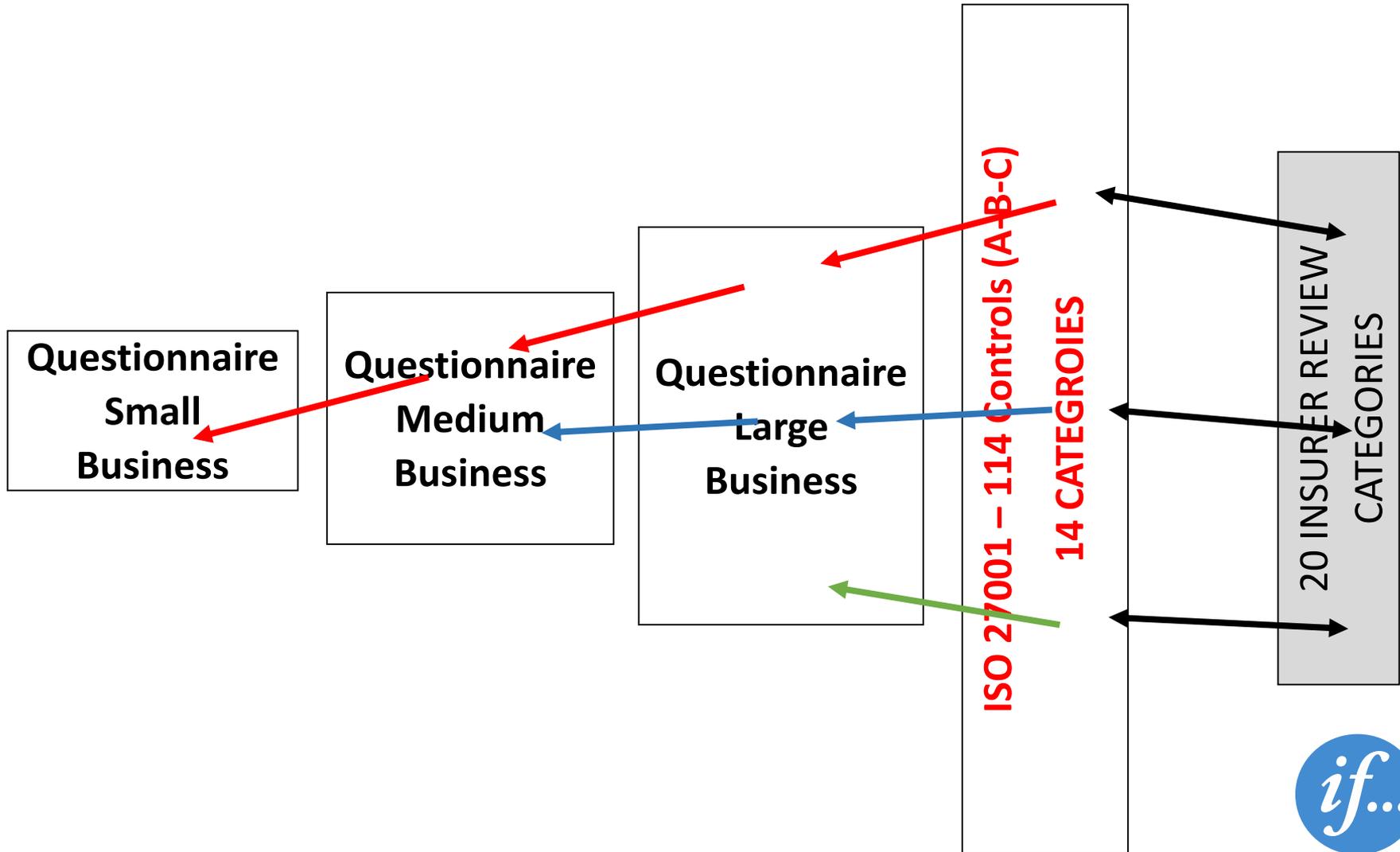
ISO 31000	Standard for risk management
ISO 27001	Standard for information security
NIST	Cyber security framework
COBIT	Framework for the governance and management of enterprise IT
IEC 62264	International standard for enterprise-control system integration. This standard is based upon ANSI/ISA-95.
20 CIS Controls	Baseline...



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QUESTIONS, QUESTIONS, AND MORE QUESTIONS

Focusing on relevant vulnerabilities, risks and controls



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FROM QUESTIONNAIRE TO SCORECARDS

Sharing knowledge

At present we have many questions and we provide little information.

We want you to know what we are looking for.....We need your help!

Network changes			
Score 0	Score 1	Score 2	Score 3
No overview of the network infrastructure is kept.	All network connections and changes are administrated via a defined process.	All network connections and changes are administrated via a defined (documented) process. Changes in the network infrastructure are reported, and evaluated periodically.	All network connections and changes are administrated via a defined process. Changes in the network infrastructure are reported and changes are only permitted explicitly. Unauthorized network changes are identified and reported into incident response process.



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INSURER TOP 3 OF INTEREST

Wishlist

- Business Continuity Plan
- Patch Management Process
- Awareness Training

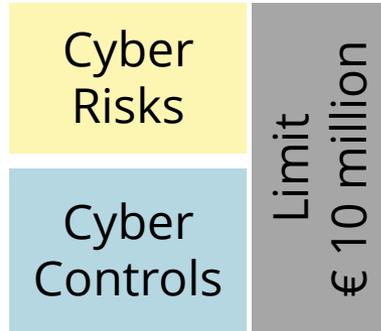


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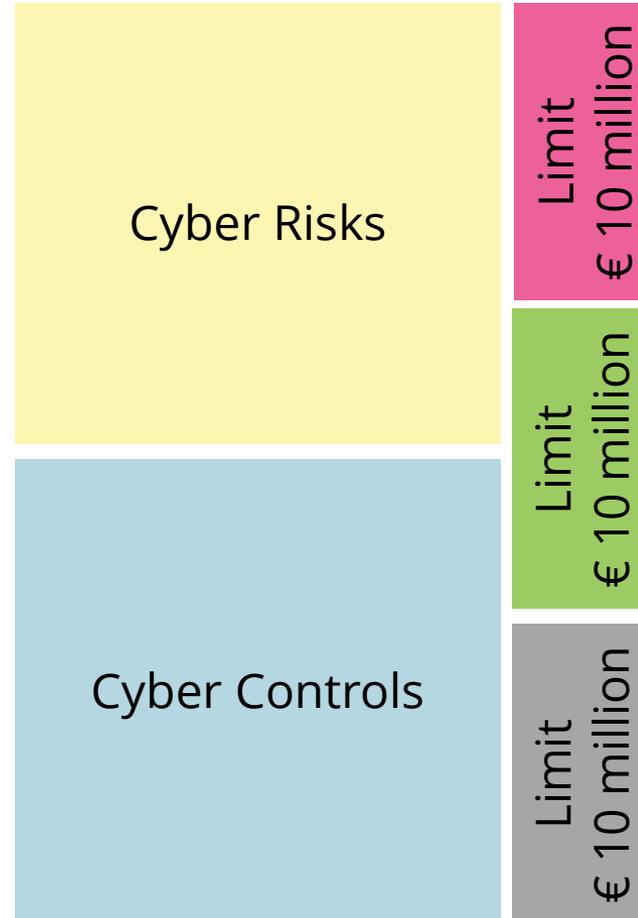
INSURERS VS BROKERS

Bespoke solutions all around

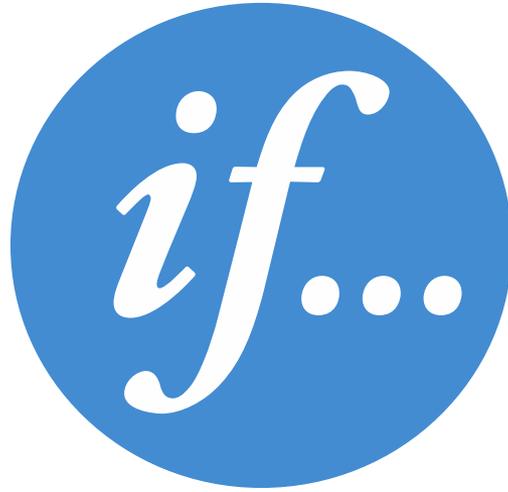
Insurer



Broker



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