



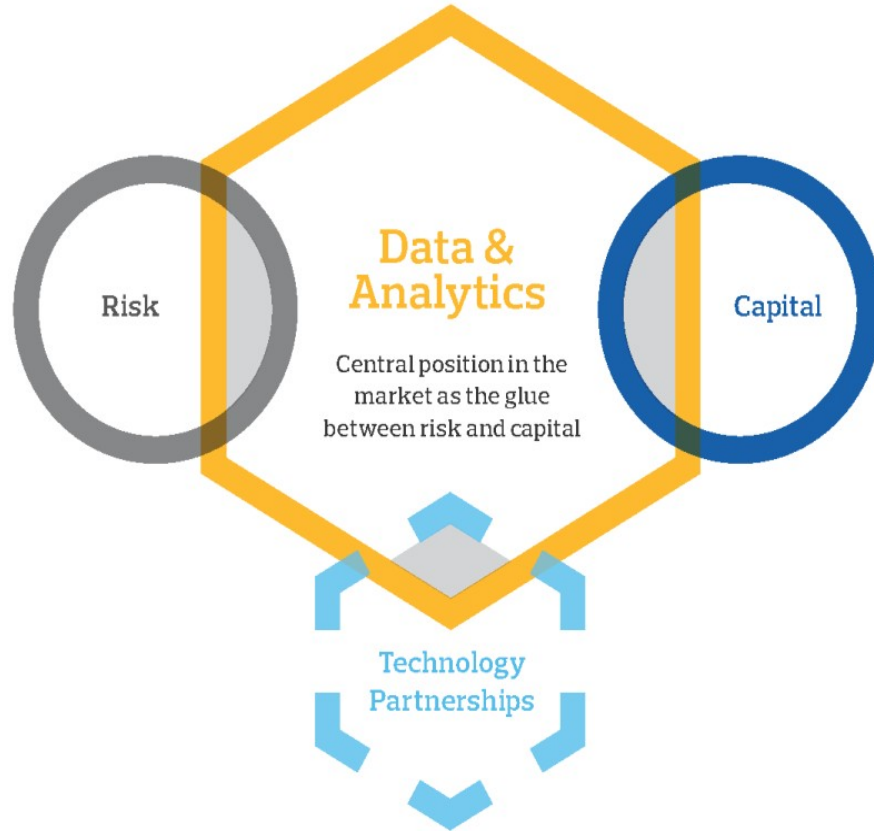
Innovation, Agility, Resilience

**PII International Insurance Conference – “InsurTech & Microinsurance”
14th–16th April 2019 | Karachi**

Prepared by Aon Reinsurance Solutions
Proprietary & Confidential

AON
Empower Results®

Innovation in Insurance

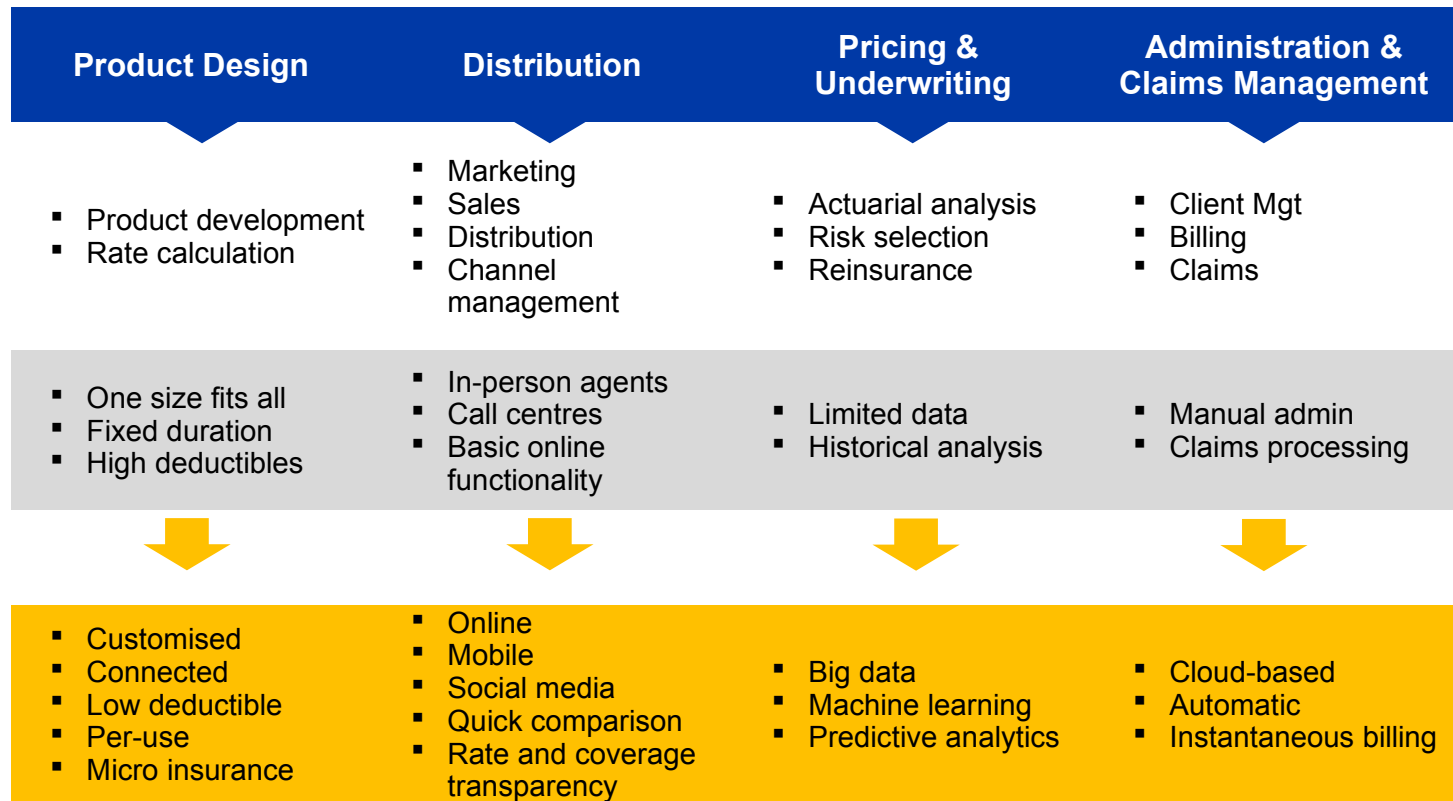




Innovation

- Turning an idea into a solution that adds value from a customer's perspective
- The implementation of creative ideas in order to generate value, usually through increased revenues, decreased costs or both
- **Executing an idea which addresses a specific challenge and achieves value for both the company and the customer**

Targeting the Insurance Value Chain



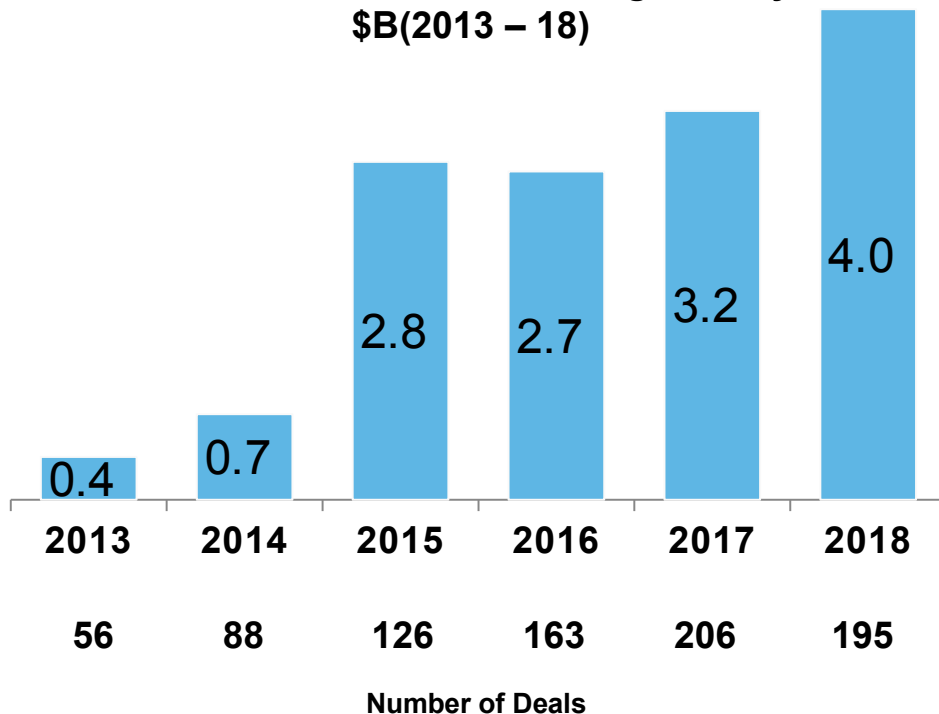
Themes of Innovation & Disruption in the Insurance Industry

Themes	How is technology helping?	Examples of innovators
Digital Experience <ul style="list-style-type: none"> Digital marketing B2B brokers or B2C marketplace Online interaction models (e.g. P2P) Cyber security 	<ul style="list-style-type: none"> Improved customer experience Increased penetration of existing market Access to new markets Opportunities for new products 	
Analytics / Data <ul style="list-style-type: none"> Process automation (e.g. RPA, NLP, Chatbots) AI / Machine learning Cloud computing Big data / Data collection and mining 	<ul style="list-style-type: none"> Improved operational processes (e.g. fraud detection, loss adjustment) Smart underwriting and decision tools Multi-channel connected data New sources of data to assess risk 	
IoT / Sensors / Devices <ul style="list-style-type: none"> Remote sensing (e.g. drones, spatial imagery) Connected devices, sensor tech Internet of things (IoT) 3D Printing 	<ul style="list-style-type: none"> Enhanced data for risk assessment and improved operational efficiencies Value added UBI analytics Better risk mitigation Emerging demand to insure new risks 	
Blockchain <ul style="list-style-type: none"> Distributed ledger assets Smart contracts Cryptocurrencies 	<ul style="list-style-type: none"> Chained key-value database Enhanced integrity and validation New risk products based on blockchain technology 	
Societal Trends <ul style="list-style-type: none"> Sharing economy Gig economy Urbanisation Longevity 	<ul style="list-style-type: none"> Emergence of new insurable risks and exposures as a result of innovation New implications for existing business Enhanced linkages between health and wealth 	

Source: Aon team analysis

InsurTech in Numbers

Annual InsurTech Financing Activity
\$B(2013 – 18)



Source: FT Partners

\$14bn
investment

834
innovators

Fuelling the InsurTech Engine

Category	Examples
Angel / Seed Investors	   
Generalist / Tech VCs	   
InsurTech specific VCs	   
Insurance companies	      

Growth – the Three Forces

Data

Time

Community

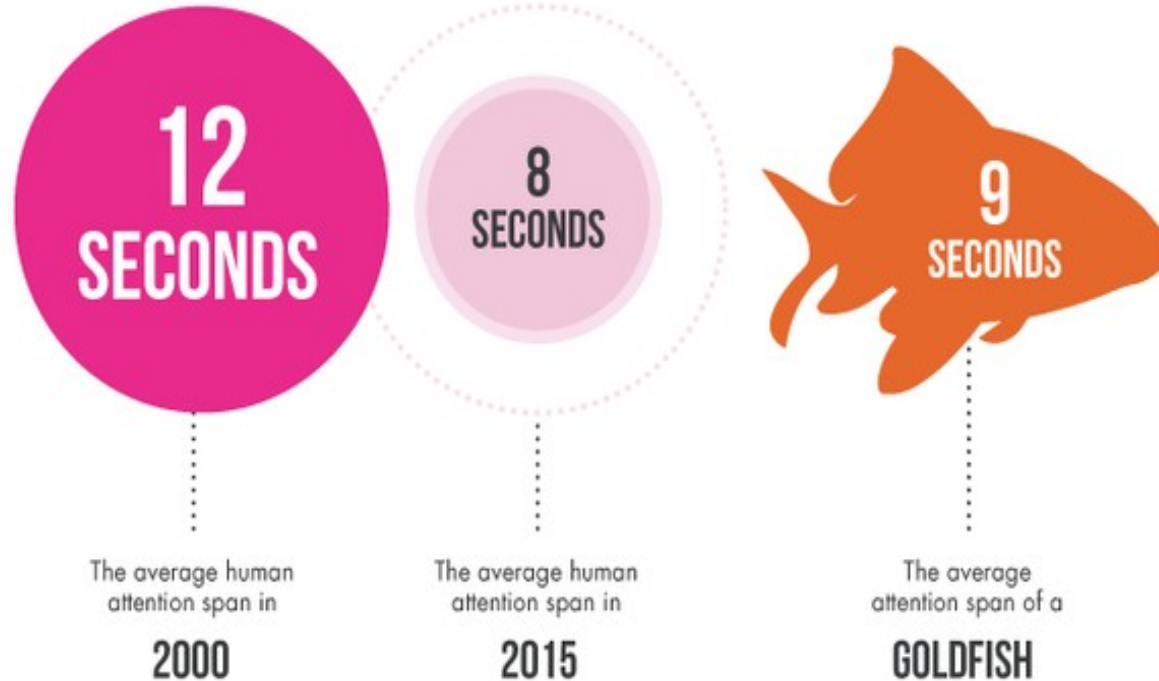
The Three Forces – Data

Collect vs Buy vs Create



The Three Forces – Time

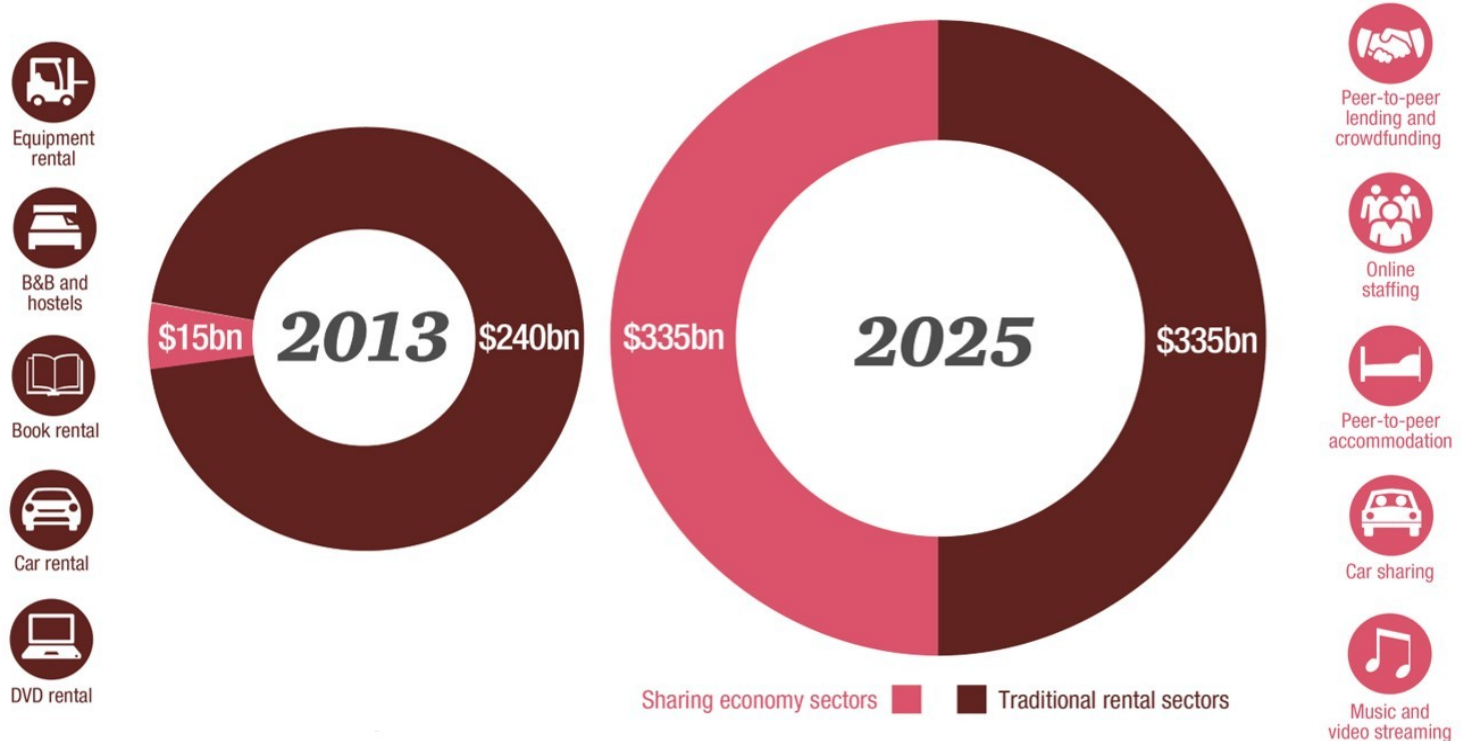
Living in an On-Demand Economy



SOURCE: STATISTIC BRAIN

The Three Forces – Time

Time-Based Competition



Source: PwC research conducted in 2014

The Three Forces – Community

From Corporations to Platforms to Digital Communities



2.00 Billion



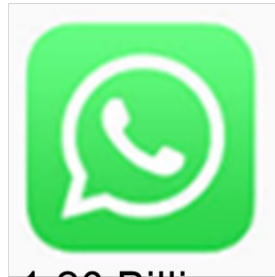
1.37 Billion



0.70 Billion



0.50 Billion



1.20 Billion



0.33 Billion



0.33 Billion



0.26 Billion

Source: Company websites, Press releases



Agility

- Responding rapidly to changes in the internal and external environment without losing momentum or vision
- Where organisations seek to approach their operations and resources in a flexible, responsive manner
- **Adaptability, flexibility and balance to remain relevant**

InsurTech is Hitting the Industry From Many Directions

Non-traditional sectors are exploring opportunities



- Internet & Tech is a powerful medium for customer acquisition
- Vertical integration in health insurance as large retailers try to save costs
- Influx of alternative capital is creating opportunities for new products
- IoT devices are changing the role of OEM

Blockchain has potential to disrupt our industry



- Blockchain technology is creating opportunities for disintermediation with new applications:
 - Marine smart contracts
 - Equipment repair / warranty
 - Account reconciliation
- Maersk is launching a marine blockchain platform in 2018 for insurance contracts
- A distributed ledger will greatly reduce admin costs, capital requirements and expense ratios for marine insurers

The rise of InsurTech MGAs



- Commercial client demands are changing too quickly for traditional insurers.
- Capital light structure and partnerships with incumbents is increasing capacity for new vehicles

Examples



InsurTechs are changing the leaderboards



ZhongAn

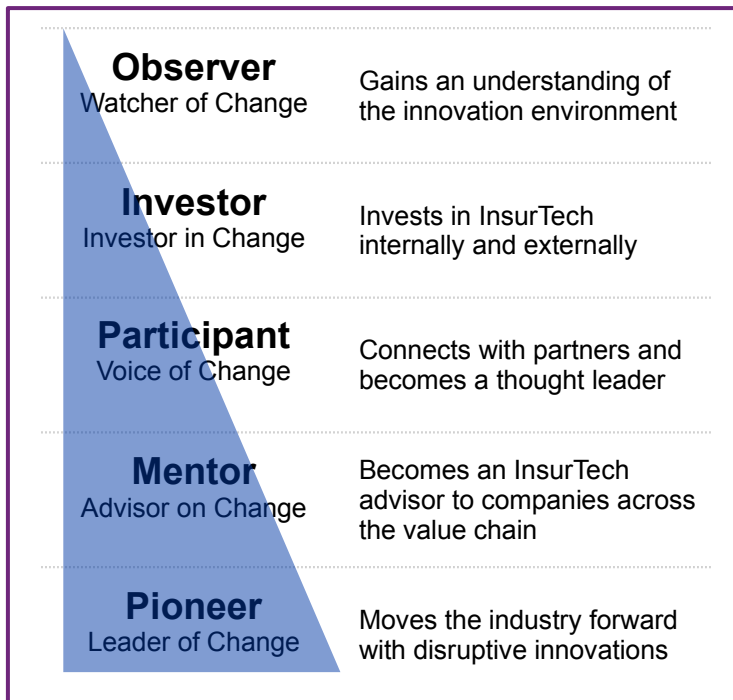
China's first online insurer has sold more than 8.2bn policies since 2013 and distributes policies through the messaging service WeChat



Sources: AIG, Insurance Insider, Business Insider, Business Wire, Allianz, CNBC, EY, Reuters, Financial Times, Reinsurance News, Insurance Journal & Growth Street

How can Insurers Respond to InsurTech Innovation

5 categories



Multiple ways to participate



The Asia Pacific “Lab” Landscape



Aon's Expanding Innovation Network

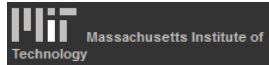
Our existing partnerships...

ANDREESSEN
HOROWITZ

Private US Venture Capital firm

Founded: 2009; **Location:** Menlo Park, CA

Portfolio: 450+ Investments in ~300 companies



MIT Risk Group

**Cutting edge risk related research /
technology related to cyber, other relevant
areas**

PLUGANDPLAY

**Startup accelerator, venture fund, innovation
platform**

Founded: 2006; **Location:** California, Singapore

Portfolio: ~400 Investments in 300+ companies



**Co-working, collaboration for early stage
startups**

Founded: 2011; **Location:** Melbourne, Australia

And expanding...

- **University partnerships across North America, Europe, and APAC**
- **Additional Venture Capital or accelerator companies**

Aon's Data & Analytics Partnerships

Current and Potential

Product Design	Distribution	Pricing & Underwriting	Administration & Claims Management
Hardware product that blocks communication to any potentially hostile IP addresses	Digital platform for extended warranty	Software analysis of loss data from PDFs and other document types	Analyses damaged vehicle images to predict repair cost estimates
Sensors providing predictive data to allow insurance providers to better quantify and manage risk	Digital platform for catastrophe insurance	AI-driven pricing for commercial lines underwriting	Platform connecting property damage assessment, supply chain management, claim management and policyholder service
Real time supplier risk intelligence	Digital insurance distribution services incorporating behavioural assessment	Geospatial analytics leveraging satellite imagery, advanced image processing and data science to identify trends	Machine Learning platform to build and deploy predictive models with application to other aspects of insurer operations

Example Aon Partnerships



Claims Excellence

Utilises predictive analytics to improve WC outcome

- The Aon Inpoint claims team is working together on the co-delivery of client engagements focused on improving the way that carriers handle Workers Compensation claims
- Aon Inpoint's claims expertise coupled with Clara's cutting edge predictive analytics provide actionable recommendations optimizing the management of Workers Compensation claims



Underwriting

AI enabled analytics platform that processes unstructured data from multiple sources (satellite, aerial, LiDAR) at scale to extract building characteristics

- Aon is working with Zesty.ai to co-develop their product starting at an early stage to shape capabilities around real world needs
- Aon Reinsurance identifies insurers and reinsurers who may benefit from the use of Zesty.ai data to supplement model based data and application data



Data & Analytics

Integrates automated data mining & learning technology to eliminate data entry and delivers uniform insights

- Aon is unlocking the insights of legacy data that has historically been stored on disparate sources across all of Aon, including PDF and paper files
- This data will be used to better understand our existing clients and develop new propositions to bring to the market place with carrier partners

Regulation – Blessing or Burden

Oversight

Disclosure

Sandbox



Resilience

- The capacity to recover quickly from difficulties
- Ability of an organisation to anticipate, prepare for, and respond and adapt to incremental change and sudden disruptions in order to survive and prosper
- **Ability of an organisation to quickly adapt to disruptions while maintaining continuous business operations and safeguarding people, assets and overall brand equity**

Innovation is generating New Risks

The Evolving Protection Gap



Tight supply chains



Sharing economy



New payment schemes



Crowdsource software



Platform businesses

Aon 2017 Global Risk Management Survey Risk Ranking

1	Damage to reputation/brand	2	Economic slowdown/slow recovery	3	Increasing competition	4	Regulatory/legislative changes	5	Cyber crime/hacking/viruses/malicious codes	6	Failure to innovate/meet customer needs	7	Failure to attract or retain top talent	8	Business interruption
9	Political risk/uncertainties	10	Third party liability	11	Commodity price risk	12	Cash flow/liquidity risk	13	Property damage	14	Directors & Officers personal liability	15	Major project failure	16	Exchange rate fluctuation
17	Corporate social responsibility/sustainability	18	Technology failure/system failure	19	Distribution or supply chain failure	20	Disruptive technologies/innovation	21	Capital availability/credit risk	22	Counter party credit risk	23	Growing burden and consequences of corporate governance/compliance	24	Weather/natural disasters
25	Failure to implement or communicate strategy	26	Merger/acquisition/restructuring	27	Injury to workers	28	Failure of disaster recovery plan/business continuity plan	29	Loss of intellectual property/data	30	Workforce shortage	31	Environmental risk	32	Crime/theft/fraud/employee dishonesty
33	Lack of technology infrastructure to support business needs	34	Inadequate succession planning	35	Product recall	36	Concentration Risk (product, people, geography)	37	Aging workforce and related health issues	38	Accelerated rates of change in market factors and geopolitical risk environment	39	Interest rate fluctuation	40	Globalization/emerging markets
41	Unethical behavior	42	Outsourcing	43	Resource allocation	44	Terrorism/sabotage	45	Climate change	46	Asset value volatility	47	Natural resource scarcity/availability of raw materials	48	Absenteeism
49	Social media	50	Sovereign debt	51	Pandemic risk/health crises	52	Share price volatility	53	Pension scheme funding	54	Harassment/discrimination	55	Kidnap and ransom/extortion		

Insurable

Partially Insurable

Uninsurable

www.aon.com/2017GlobalRisk

Building Resilience – Disaster Protection Gap

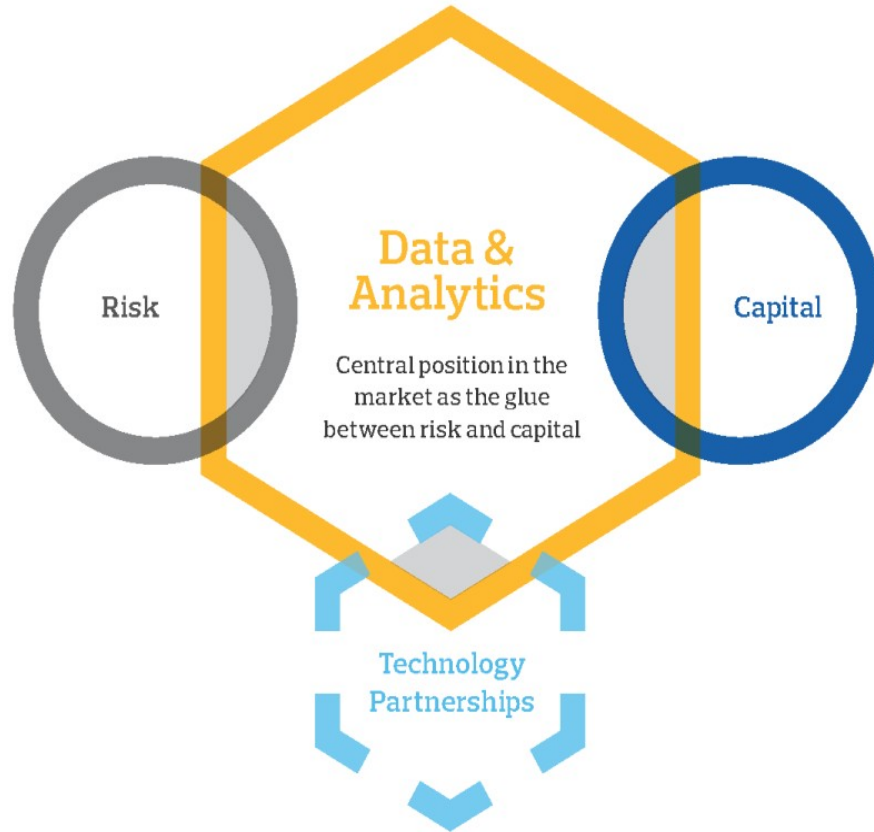
NatCatDAX

IDF

Lloyd's
DRF

ASEAN
DRFI

Innovation in Insurance





Thank You!