



**Actuaries
Institute**

Actuaries: Disrupt Yourself or be Disrupted

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Disruption

Happens at an industry level,
individual Company level,
and Personal level

Disruption

01

There are **over-served** or **underserved** customers

02

Incumbents are willing to **concede segments** to new entrants

03

New entrants could deliver a **better service at a lower cost** than incumbents

04

Existing **sales channels** are expensive and have limited reach

Adapted from Clayton Christensen

The opportunity



**Emerging middle
class segments**

Developing Markets



**Millennially-
minded people**

Mature Markets

Industry pain

INCUMBENTS STRUGGLE TO ADDRESS THIS OPPORTUNITY



Product Challenges



Legacy Systems



Business Process
Challenges



Incomplete Client
Experience

Traditional Barriers to Entry are Failing

CAPITAL REQUIREMENTS



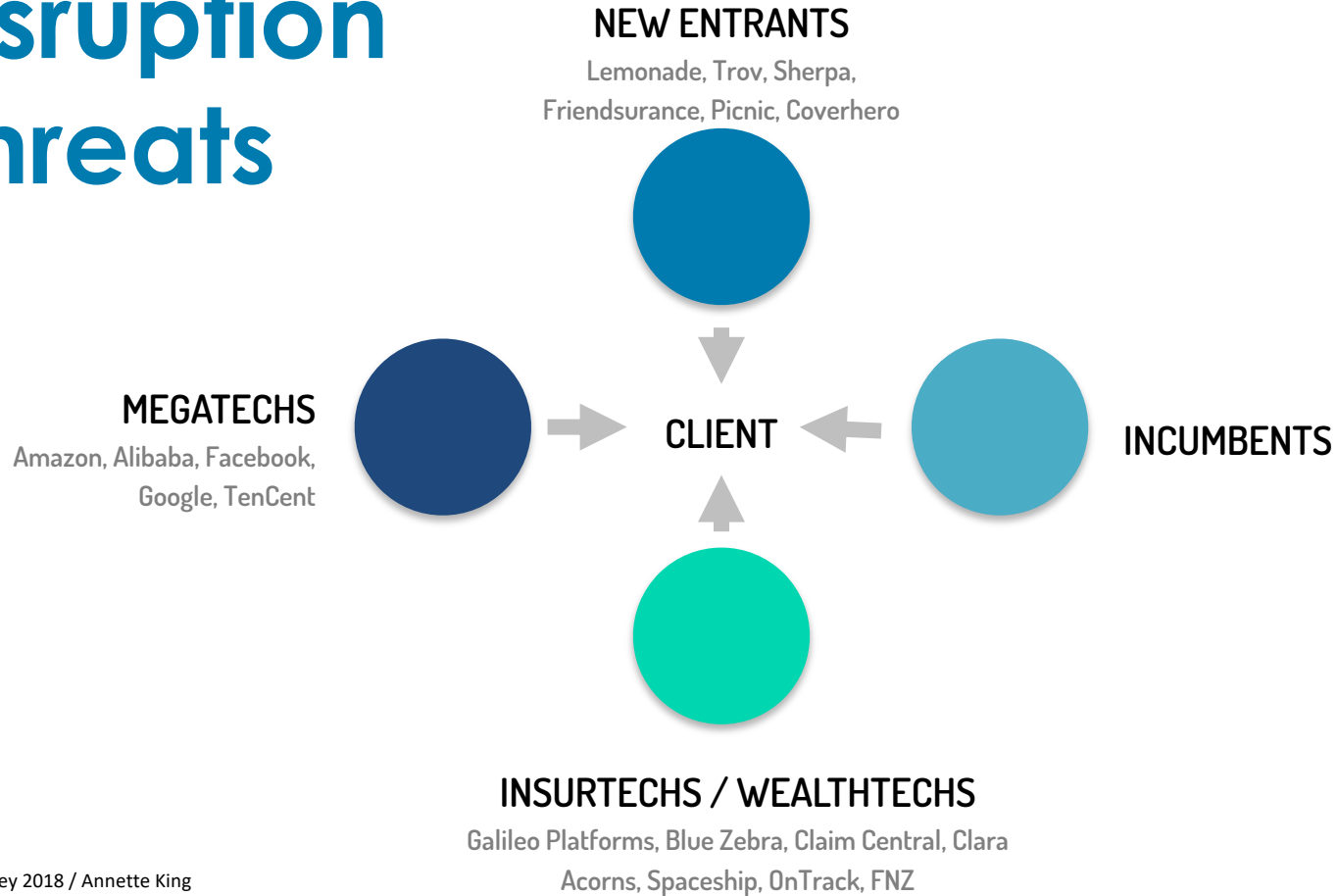
- VC appetite for insurtech and wealthtech investments
- Reinsurers' evolving role

COMPLEXITY AND EXPENSE OF REGULATORY COMPLIANCE



- Regulatory sandboxes
- Regtech
- Open API regulations

Disruption Threats



Innovation Sandboxes



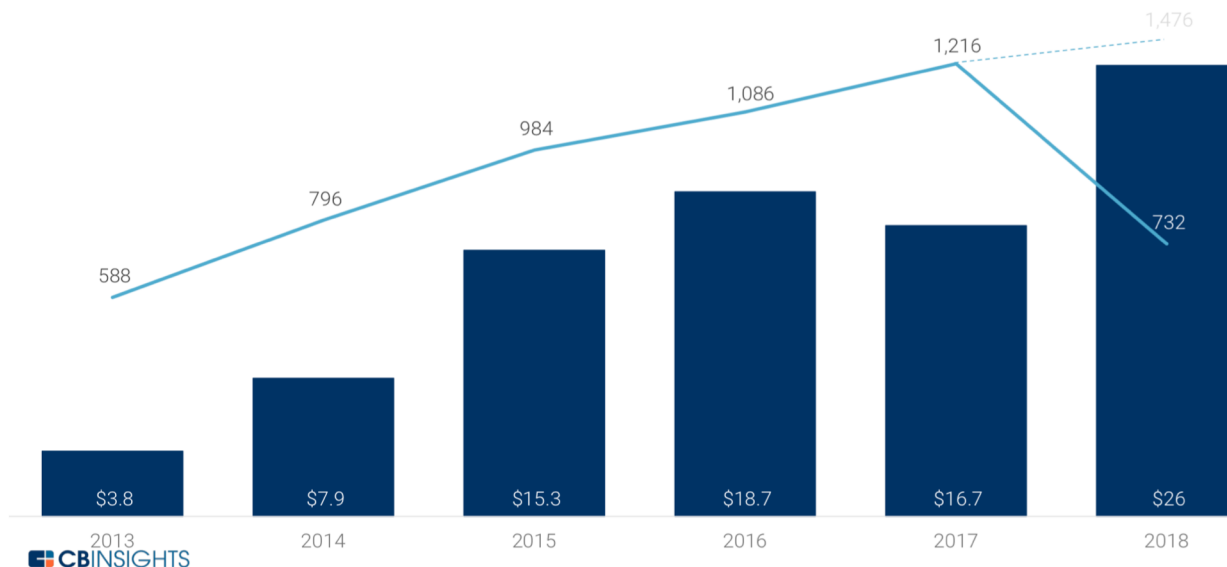
Source: Insurance Thought Leadership, Charlotte Mery, Sia Partners

Disruption is Happening:

Macro

Global Fintech deals: record levels

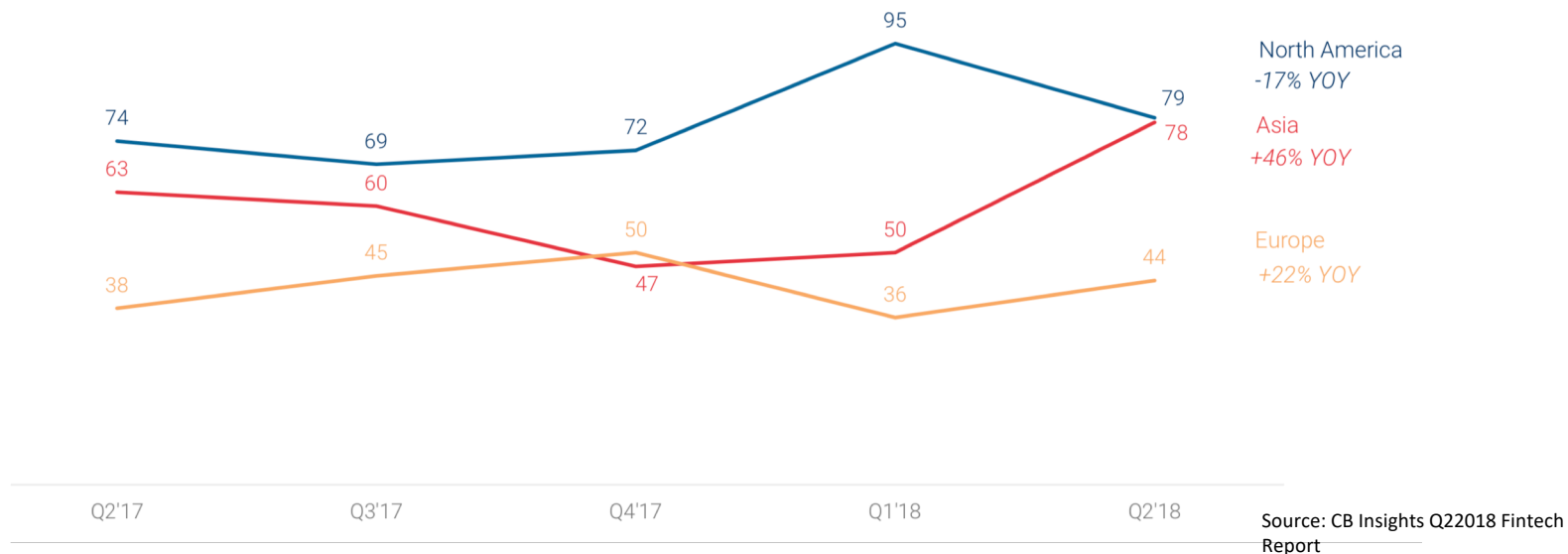
Annual VC-backed global fintech deals and financing, 2013 – 2018 YTD (Q2'18), (\$B)



Source: CB Insights Q22018
Quarterly Fintech Report

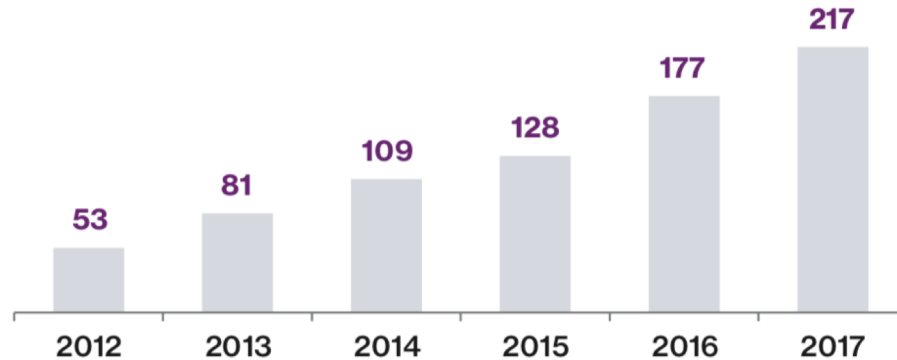
Asia Pacific nears US deals

Quarterly Seed and Series A deals to VC-backed fintech startups, Q2'17 – Q2'18



Number of VC Investors in Insurtech

More than 4x the number of investors today than in 2012 (+30% CAGR)

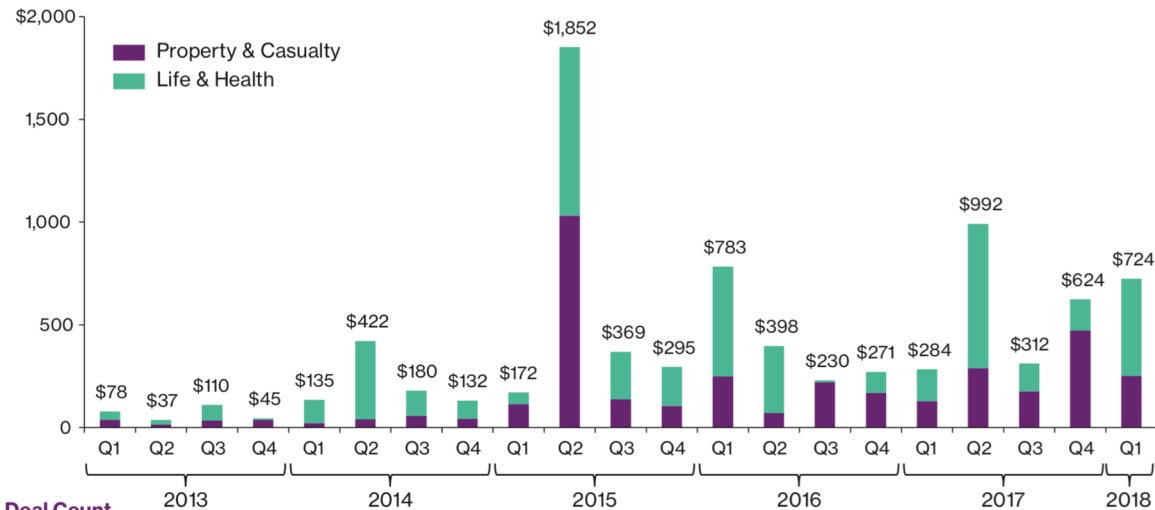


Source: Willis Towers Watson Q12018
Quarterly Insurtech Report

Funding Volume Increasing

Quarterly InsurTech Funding Volume – All Stages

(\$ in millions)



Deal Count

	2013				2014				2015				2016				2017				2018
P&C:	5	4	11	8	8	6	10	8	12	12	13	19	41	18	30	28	22	33	25	41	43
L&H:	15	8	10	4	11	16	20	15	13	19	15	21	18	16	8	15	16	32	23	10	23

Source: Willis Towers Watson Q12018 Quarterly Insurtech Report

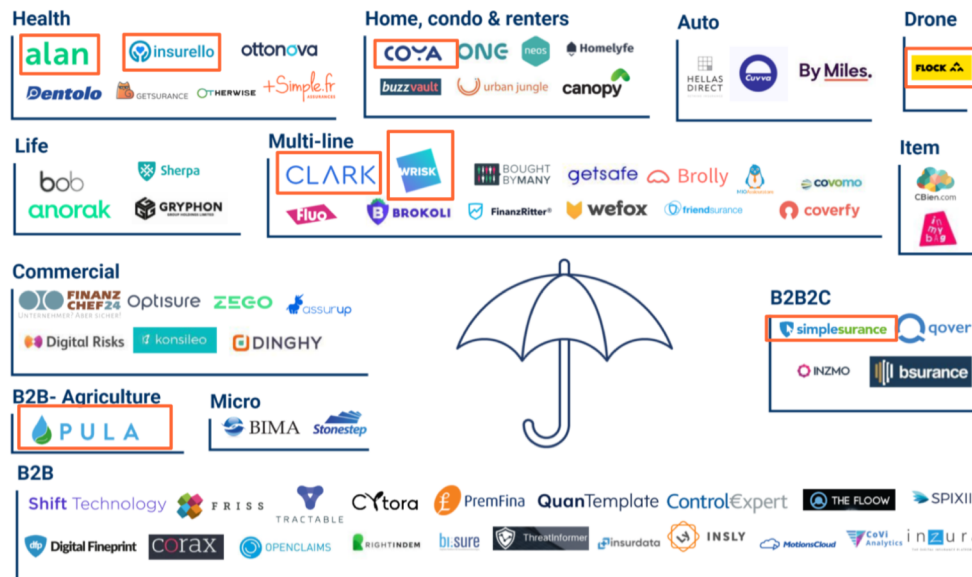
Incumbents get Involved

Top 14 European banks by assets, ranked by fintech portfolio companies
Equity financing 2012 - Q2'2018

	Rank	Blockchain	Data Analytics	Personal Finance	Wealth Management	Capital Markets Software	Lending	Payments & Settlement	Real Estate	Regulatory Technology
Santander	1	Digital Asset elliptic ripple r3	visible alpha	Curve	SICFIC	personetics TRADESHIFF	AutoFi payever PAYJOY creditos Kabbage	izettle PayKey Check	ROOSTIFY	SECURE Key: How can you protect your critical business data? Answer
CREDIT SUISSE	2	r3	Dataminr		canopy	SYMPHONY iCapital MULTILOGIC	WuLab PROPER			ACADIA:QFT Digital Banking
UBS	3	Digital Asset r3	visible alpha		SICFIC	SYMPHONY iCapital MULTILOGIC				ACADIA:QFT Digital Banking
BNP PARIBAS	4	TRINDEX r3			Protonix	SYMPHONY CURVEGLOBAL		Payler		ACADIA:QFT Digital Banking
BARCLAYS	4	r3				SYMPHONY OpenCharge CURVEGLOBAL		FORM3		Cloud Banking iCloud9
ING	8	TRINDEX r3					Bitstamp WuLab Kabbage	twisto FinCompare		
BBVA	6	r3		BankBank Alamo save101 DESTACAME.cl				sum up		
HSBC	6	r3	visible alpha quantexis			TRADESHIFF				ACADIA:QFT kyriba
Deutsche Bank	8	r3				TrustBills SYMPHONY ERIS MULTILOGIC		lyfone		ACADIA:QFT
SOCIETE GENERALE	8	r3				SYMPHONY		TagPay		ACADIA:QFT
ABN-AMRO	8	Digital Asset		BankBank tink			CLOUD LIFESPACE SOLUTIONS			Sealixio
CREDIT AGRICOLE	12	SETL		Lipson					LIBERKEYS	
RBS	13	r3								
UniCredit	13	r3								

Source: CB Insights
Q22018 Fintech Report

Activity in Different Segments



Disruption is Happening:

Grassroots

Life Insurance – buying made easier



Focus: Term life insurance

Coverage: Up to \$8M

(Re)insurance partners:
Hannover Re, Fidelity Security

H1'18 Funding: \$40M Series B



Focus: Term life insurance

Coverage: Up to \$10M

(Re)insurance partners:
Assurity, Munich Re, RGAX

H1'18 Funding: \$11.5M Series A



Focus: Accidental death and term life insurance

Coverage: Up to \$5M

(Re)insurance partners:
Vantis Life, RGAX

H1'18 Funding: \$10M Series A



Focus: Term life insurance

Coverage: Up to \$500K

(Re)insurance partners: North American Company for Life & Health, Munich Re

H1'18 Funding: \$15M Series A

Source: CB Insights
Q22018 Fintech Report

Home Insurance – voice activated

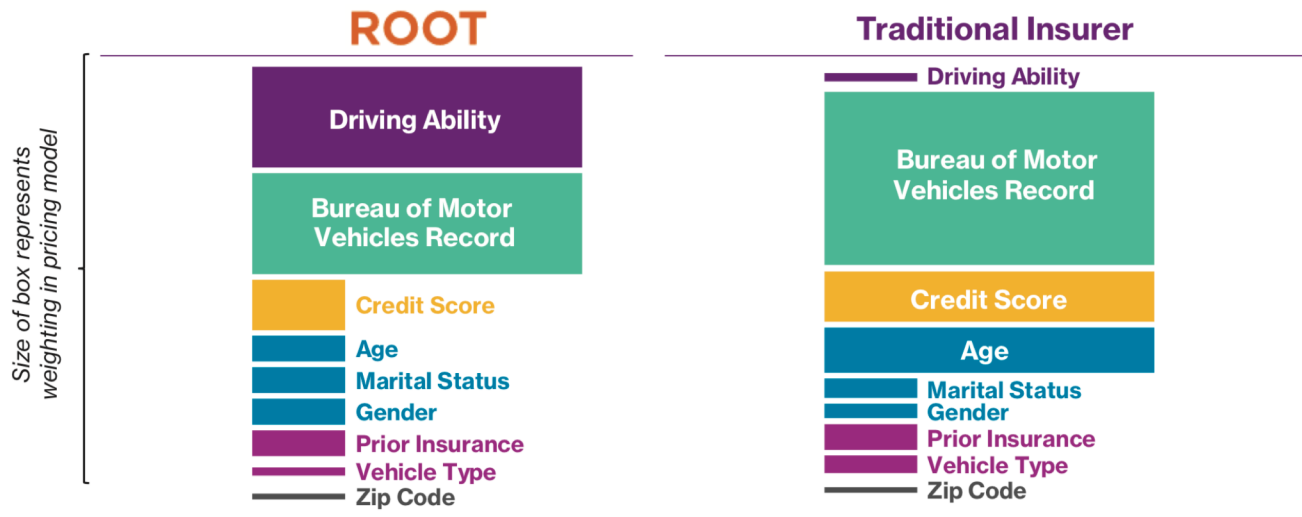
“Ok Google, talk to Amaguiz...”



Car Insurance

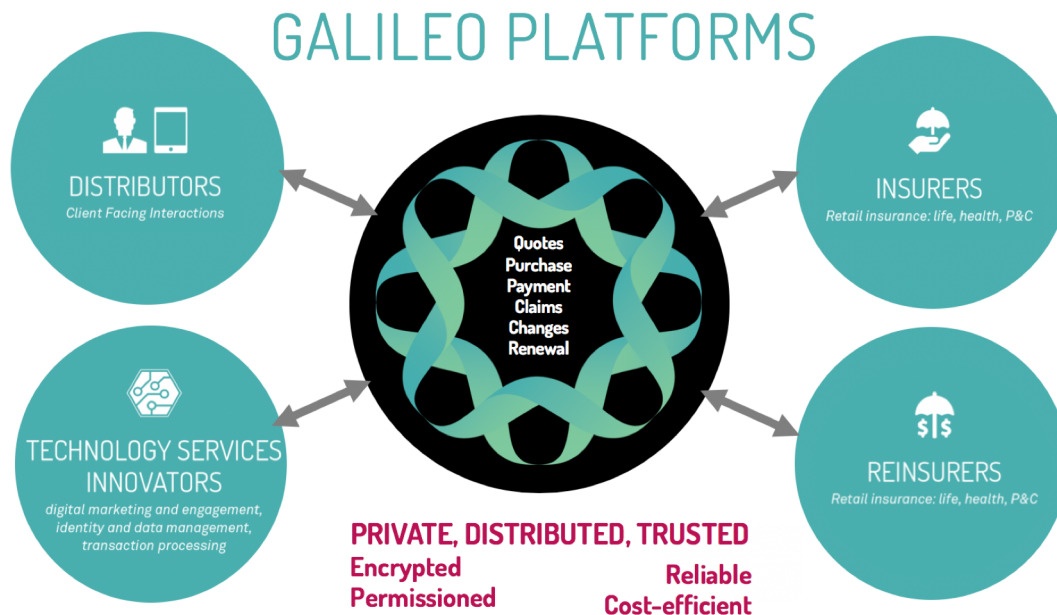
– underwriting & pricing

Root's Pricing Model vs. Traditional Pricing Model



Source: Company filings.

Purchase & Claims – real-time



New Insurance Risks

众安保险
ZhongAn Insurance

Slice



Wealth – competitive & transparent fees



Betterment

Management Fees

0.25%; first \$10,000 is managed free

0.25% to 0.40%, depending on plan

VS.

Morgan Stanley

J.P.Morgan

Management Fees

0.35%

0.25% to 0.50%



Trading Fees

\$0

\$0



Trading Fees

\$6.95

\$6.95

\$4.95

\$4.95

Source: CB Insights
Q22018 Fintech Report

Wealth Management – robo advice



The Disruption Enablers

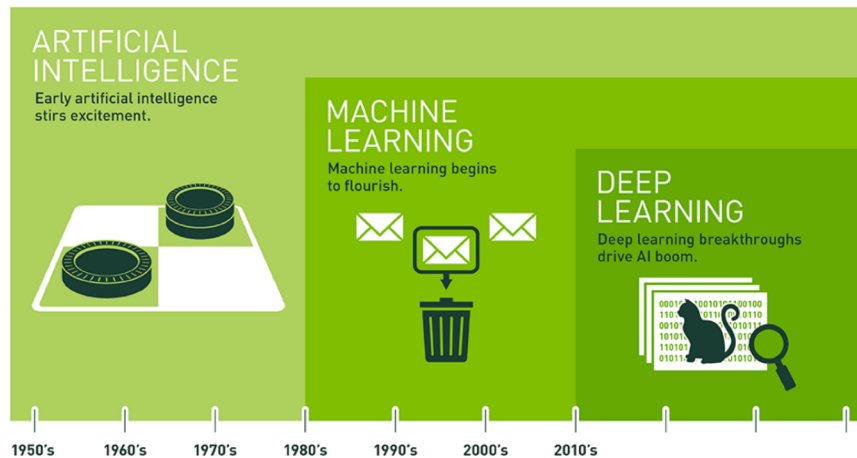
The ABC of Disruption

- A AI and Machine Learning
- B Blockchain
- C Connected Devices
- D Data Analytics
- E Ecosystem Platforms

The Big 5

AI & Machine Learning

- Intelligence demonstrated by machines
- Eg: reasoning, planning, learning
- Uses:
 - understanding human speech
 - statistical methods and mathematical optimization often used in marketing
 - autonomous cars
- Requires lots of data



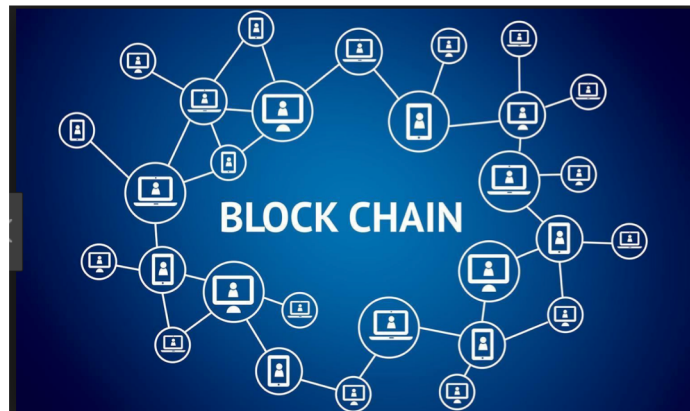
Since an early flush of optimism in the 1950s, smaller subsets of artificial intelligence – first machine learning, then deep learning, a subset of machine learning – have created ever larger disruptions.

Source: Nvidia Blog

Blockchain

- Distributed Ledger Technology
- Digitised, decentralized ledger, used to record and verify ownership and transactions
- Record cannot be altered retroactively
- The network forms a consensus about the validity of transactions
- High security, stability & scalability at low cost
- Real-time transactions
- No reconciliations between parties

- Uses:
 - Insurance, wealth, banking
 - Supply chain mgt
 - Identity mgt



Connected Devices (IoT)

- Devices connected to other devices or networks usually wirelessly (eg Bluetooth, NFC, Wifi, 4G) that can operate interactively and autonomously
- Uses:
 - Autonomous vehicles (GI)
 - Smart building detection (GI)
 - Health detectors (Life Ins)
 - NFC and nudge psychology (wealth)
- Produces lots of data



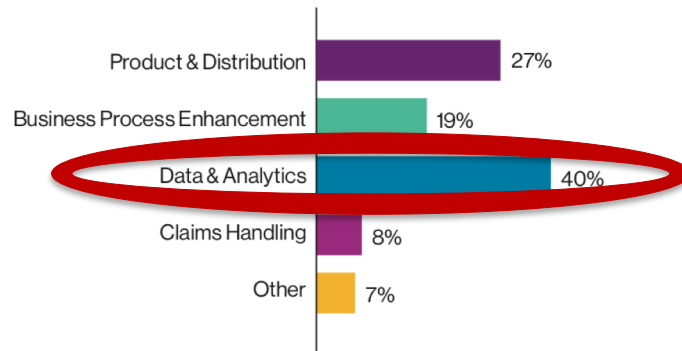
Data Analytics

Career option!

- Inspecting, cleansing, transforming and modelling data with the goal of discovering useful insights, informing conclusions and supporting decision-making
- Uses:
 - Marketing
 - Pricing
 - Claim management
 - Inv risk profiling
 - Behavioural psychology

Most Attractive Subsector for Investment

Participants view data & analytics as the most attractive subsector for InsurTech investing



Source: Willis Towers Watson Q12018
Quarterly Insurtech Report

Ecosystems & Platforms

- Latest technology enables completely new business models and collaboration
- Not bounded by traditional industry boundaries



Disrupt ... or be Disrupted!

What can you do today, in your job?

- Identify painpoints or areas of opportunity
- Build a business case
- Be a champion of change
- Garner support
- Disrupt from within or partner

How to collaborate with startups

- Identify painpoints or areas of opportunity
- Build a business case
- Be the Champion!
- Move fast
- Cashflow counts – simplify corporate procedures and speed up sales cycles
- Start small and build: do a Proof of Concept

No innovation theatre!

What can you do for yourself?

What can you do for yourself?

Be Brave!

Call to Action!

Call to Action!

Create the Future!

Reading Suggestions

- CB Insights
- Fintech Reports from big consulting firms
- Insurtech Reports from big consulting firms
- The Digital Insurer
- Insurance Thought Leadership
- Hubbis (wealth mgt)
- TED talks