

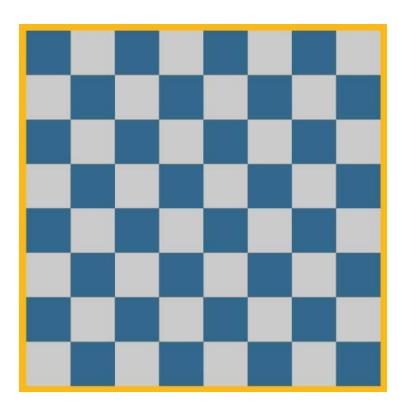
S. Eric Boyum

Managing Director

National Technology and Communications Industry Practice

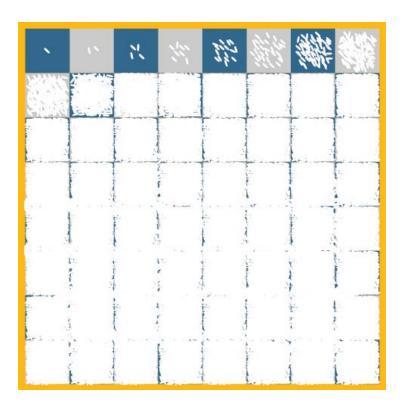


How Technology's Evolution Enabled Disruption





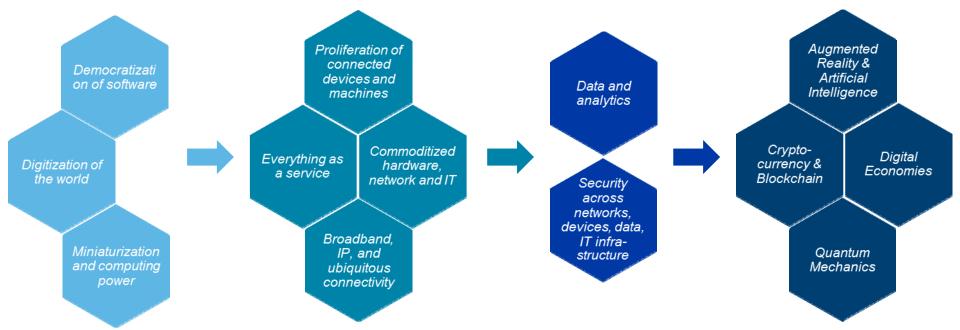
How Technology's Evolution Enabled Disruption





How Technology's Evolution Impacts Itself and the Economy

- The companies in the industry that participated in the development of these trends are evolving to products and services built upon the higher level technologies.
- The way the technology industry is now executing toward this change has accelerated and become more aggressive.
- Every cluster makes the previous clusters more powerful and therefore changes their potential & risks again.
- Inevitably, the advancements enable & challenge existing business models and/or render them less relevant or useful



"Computers aren't very useful. They can only give you answers."
- Pablo Picasso

Source: Deloitte Press University and Aon

Aon Risk Solutions | Technology and Communications Industry Practice

May 16, 2018

Proprietary & Confidential



When is a Company a Technology Company and Should We be One?



The company which provides the most taxi rides in the world

Does not own any taxis



The company which rents more rooms than any other company in the world

Does not own any rooms

facebook

The company with the largest distribution of media content company

Does not generate any content

Many companies <u>identify as technology companies</u>, <u>yet operate in other</u> <u>traditional industries</u>, and this needs to be appreciated when considering how solutions need to work to address these unique business models.



When is a Company a Technology Company and Should We be One?

Technology Industry digital ecosystem:

- Hardware, content, software applications, and / or ...
- Provides a digital platform for the creation, distribution, and consumption of content, applications, and services

Impact on the economic environment:

- All Industries' identities will be impacted by innovations in technology
- Challenges in pivoting brand identity
- Challenges in attracting and retaining talent
- The business of today needs to remain robust and profitable enough to fund the transformation technology will bring



Technology Evolution and Risk – A Dichotomy

Impact on Addressing Risk

- How does technology impact the way in which you serve your clients?
- What disruption will come from within your industry, and what disruption will come from outside your industry?

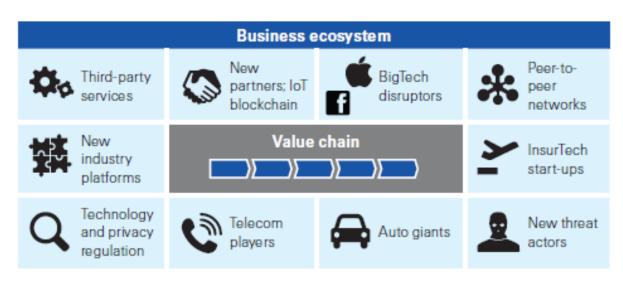
Impact on Risk

- How is technology evolution affecting what your clients do and how they do it?
- Our idea of what an industry is evolves with digital transformation it's not about industry, it's about what our client's do, how they do it, for whom they do it, and how they achieve their business model evolution.
- Digitizing platforms creates a greater interconnection of risk within each client and across business partners (growing digital ecosystem)
- Existing insurance solutions become less relevant to these digital organizations, and eventually to the economy as a whole



Impact on the Ecosystem

- Non-insurer participants like auto manufacturers and telecoms companies too are gaining access to customer data, and digital analytics capabilities can enhance their client offering.
- Industry boundaries are becoming blurred as firms in several sectors build digital platforms that can connect to different market places, supply chain hubs and financial networks
- In the case of insurance, these platforms allow individuals within a social network to pool premiums and underwrite each other's risks.



Source: Swiss Re Institute.



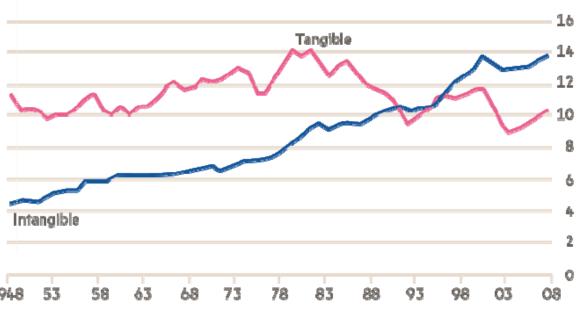
The Global Value Rotation to Intangible Assets

Key Observations

- Innovation drives our global economy
- Markets reward protected innovation
- Intellectual property has emerged as a major asset class
- Management of the intellectual property risk/return profile is key
- The 2017 Aon Global Risk Management Survey identified Intellectual Property as a top Tech Industry risk

Intangible assets have soared in the U.S....

Investment as a share of sector gross value add- U.S.



Source: 'Capital sm Without Capital - the rise of the Intangible Economy' Haskel & Westleke (Princeton University Press, 2017)



Intangible Assets: Market Opportunity

S&P 500 Total Market Capitalization*

Tangible Assets \$3.77 Trillion

Intangible Assets \$19.79 Trillion

*As of March 29, 2018

World's Largest Companies by Market Cap

Apple

Alphabet

Microsoft

Amazon

Tencent

Berkshire Hathaway

Alibaba Group

\$851.32 billion

\$717.4 billion

\$702.76 billion

\$700.67 billion

\$507.99 billion

\$492.02 billion

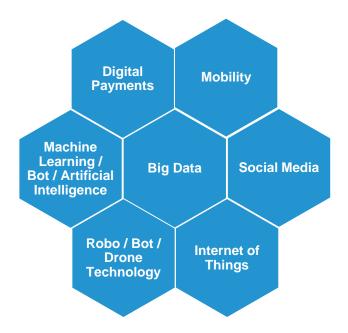
\$470.93 billion

Source Financial Times Global 500 Rankings, March, 2018



Industry Digitalization

It is as much about technology convergence – Clustering technologies to enable new business models....



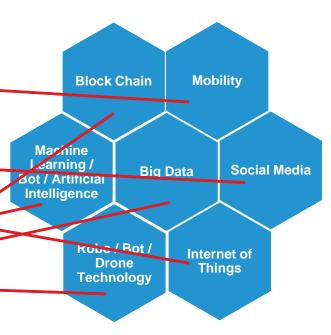
The insurance industry underpinnings of data and capital - The capital needs the data to effectively underwrite the risk. But does the data need the capital to effectively manage risk?



How Imagination, New Paradigms and and Technology Cluster into Disruption – When Life Gives you Lemons....Lemonade "Insurance"

- Brandon's coat was stolen on a sub-zero Saturday night.
- Brandon did something no one has ever done: he took out his iPhone 7 and set a world record.
- It was December 23rd at 5:43pm when he entered the details of his Canada Goose Langford Parka in his <u>Lemonade</u> app: it had cost \$979.
- He then spoke into the camera and described what happened (that took 61 seconds) and at 5:49 and 7 seconds he hit 'Submit.'
- Between 5:49:07 and 5:49:10, A.L. Jim,
 Lemonade's <u>claims bot</u>, reviewed Brandon's claim,
 cross-referenced it against his policy ran 18 anti-fraud
 algorithms on it, approved it:
 - sent wiring instructions to the bank for the transfer of \$729 (Brandon has a \$250 deductible), and
 - informed Brandon of the good news.

3 seconds: it took you longer to read the previous sentence.



- Peer-to-Peer (P2P)
- Behavioral Economist
- Pick Your Charity B4 Policy

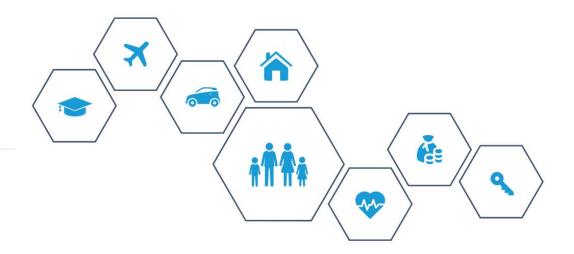


When is a Company a Technology Company and Should We be One?



DECENTRALIZED INSURANCE

TGE registration is now open



SOCIAL INSURANCE

We demonstrate a social security model implemented in a decentralized application on the Ethereum blockchain. This is a lightweight and highly efficient approach to social insurance which is affordable and accessible for anyone. The model is designed to provide basic coverage for rare, disastrous life events such as death or heavy illness. You can think of it as a first, immediate emergency payment which helps to get through critical times.



CypherPunks Go Mainstream

Crypto-currency and Blockchain

- Decentralized Autonomous Organization (DAO) and responsibility for risk
- Regulatory environment
- Blockchain risk realization vs. traditional system risk realization

The Ether Thief – Exploting Code Line 666

- Should the following traditional coverages be separate for these exposures?
- Fidelity, E&O / Cyber, D&O, Fiduciary

Initial coin offerings (ICOs) / Token Generation Events (TGEs)

- On chain vs. off chain solutions
- Product and solution development and approaches
- Parametric opportunities and solutions
- Impact of alternative capital



Ecosystems vs. Industries

- Center of the Universe or Third Rock from the Sun
- The industry's role in the economy, and now the digital economy
 - The Apple AppStore: 25 / 193
- The shifts in economic prominence from corporations with people and assets to digital platforms with connections to people and assets
- Integration of benefits (distribution) into the traditional industries / economy vs. integration of benefits (and distribution) into digital platforms
- Picking the winning platforms vs. developing a winning platform. Are you the business or are you enabling the business?



Contact Information

Eric Boyum

Managing Director, National Practice Leader
Aon Risk Solutions Technology and Communications Industry
Practice

t + 303.639.4120 | m + 303.887.1498

eric.boyum@aon.com

