



Digital Technology – Transforming Industries

***Martin O’Sullivan,
Technology analyst, Shore
Capital***

Quick straw poll...

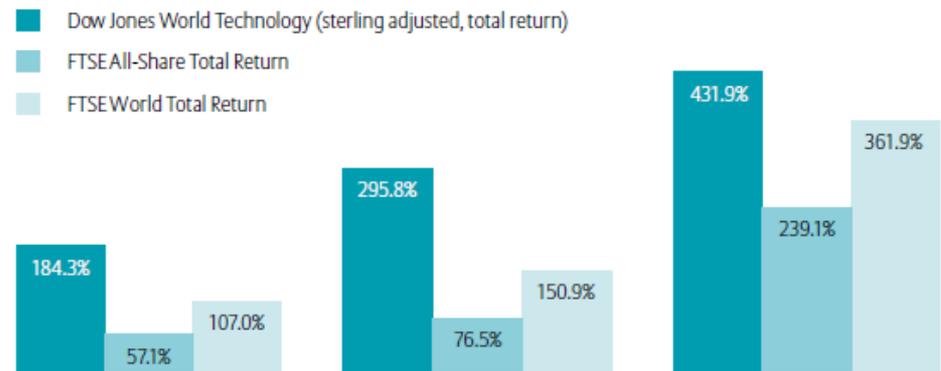
- 90% of adults in the UK have a smartphone
- 60% of adults look at their smartphone within 5 minutes of waking
- 70% of adults watch at least one video on their smartphone each week
- 20% of adults watch videos at least once a day
- 20% of adults use their smartphone often for business purposes outside of working hours



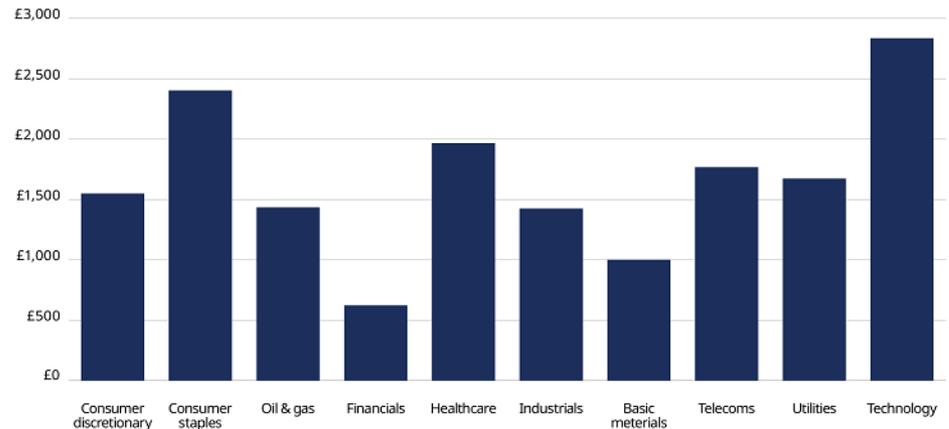
Why Tech?

- Tech is the **biggest** sector of the US stock market (c25% of market cap)
- One of the **biggest** drivers of global GDP
- Every industry is being impacted by applications of technology
- Tech sector has **outperformed** over the medium and long term
- UK Tech has **outperformed** in the last 5, 10 and 20 year periods

Total return – how technology has performed against UK and global equities



How a notional £1,000 investment 10 years ago may have grown



Source: Schroders, Datastream, MSCI UK Total Return data as at 30 March 2017. For information purposes only. The material is not intended to provide advice of any kind. Information herein is believed to be reliable but Schroders does not warrant its completeness or accuracy. Past performance is not a guide to future performance and may not be repeated. There can be no guarantee as to the magnitude of any future market movements.

In case you missed it...

we are well past the levels of the dot.com bubble

- NASDAQ



Global tech continues to deliver GROWTH

US / International

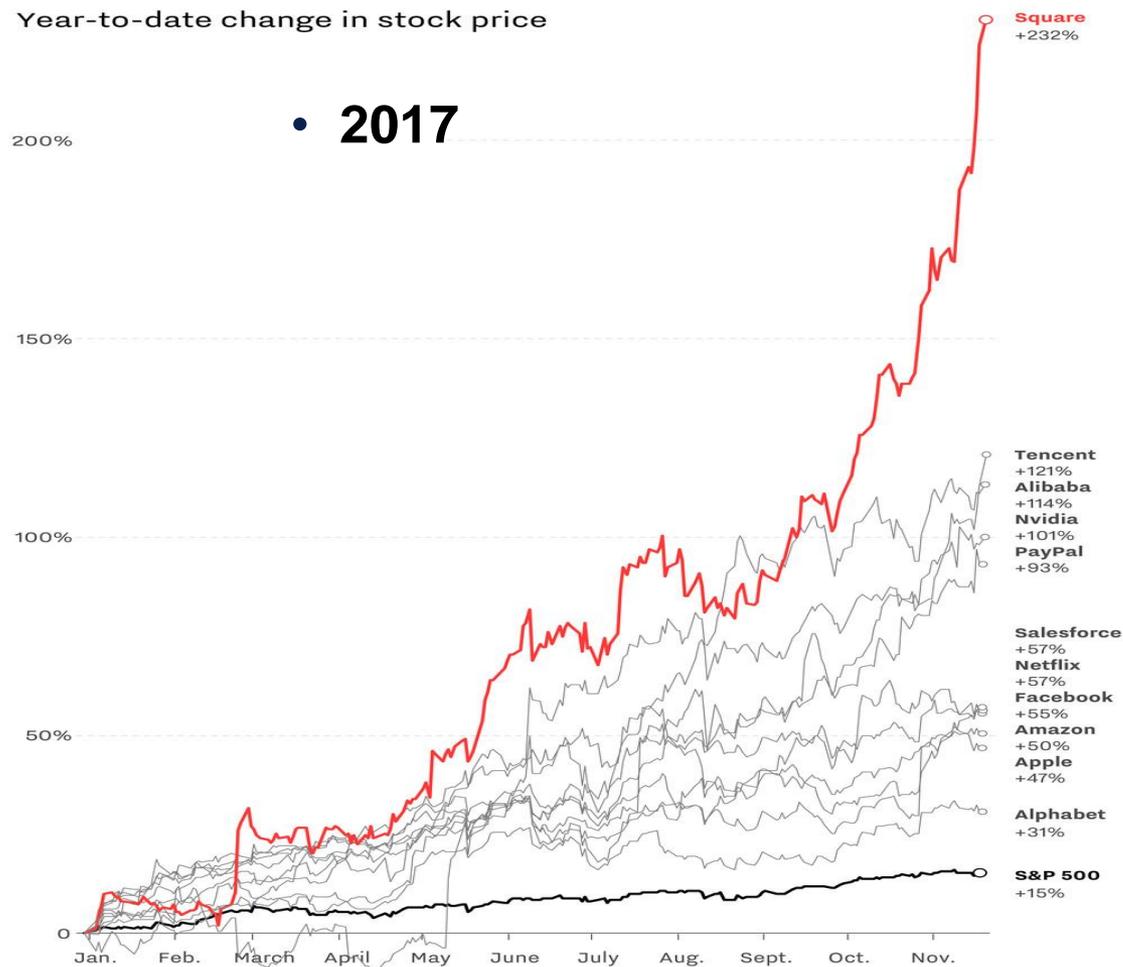
- Alphabet, Apple, Square, Tencent, Alibaba, Nvidia, PayPal, Salesforce, Netflix, Amazon ...

UK

- Sage, Sophos, First Derivatives, Blue Prism, IQE ... ARM Holdings, Halma (both here today!)
- Private: XMOS, Graphcore, Oxford Nanopore, Global Switch, Transferwise

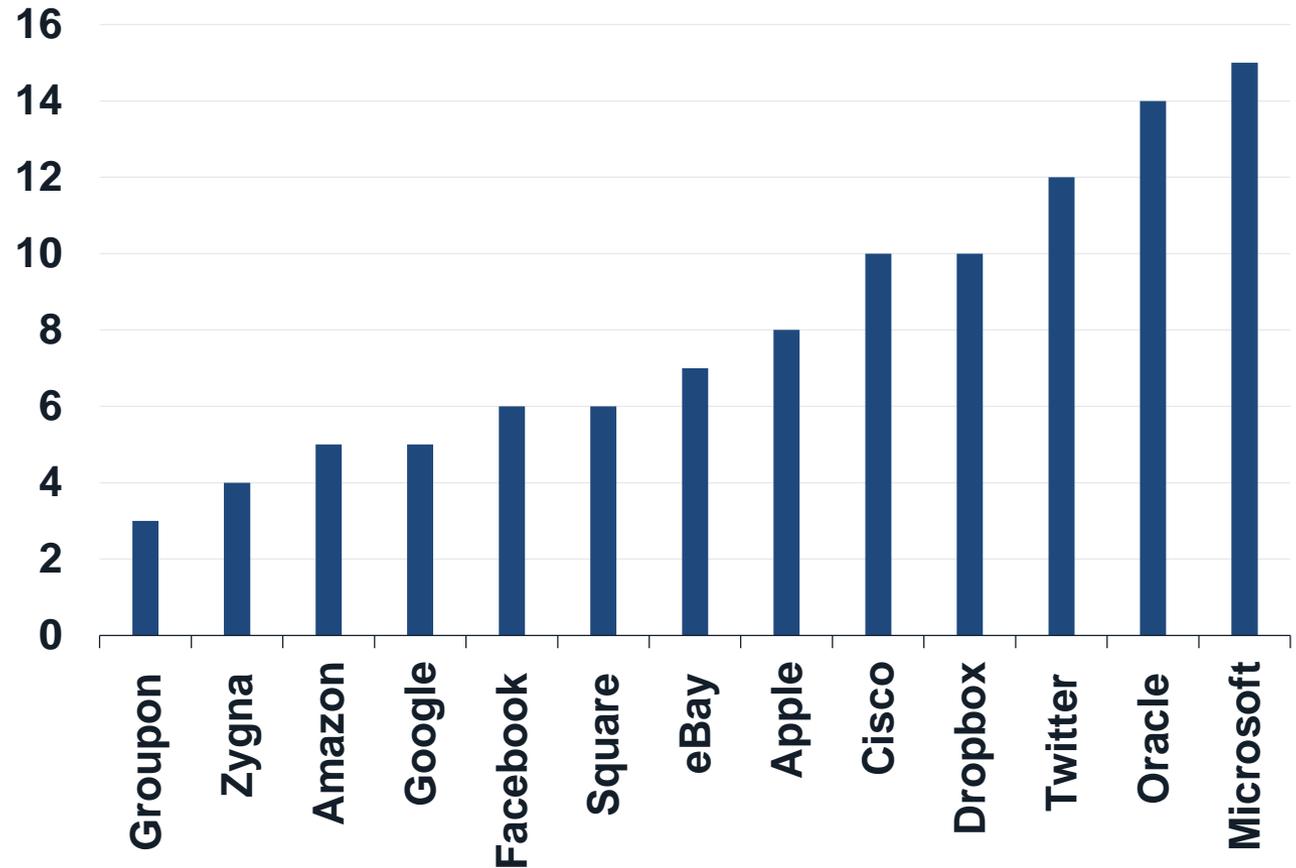
Performance of FAANG and other tech stocks

Year-to-date change in stock price



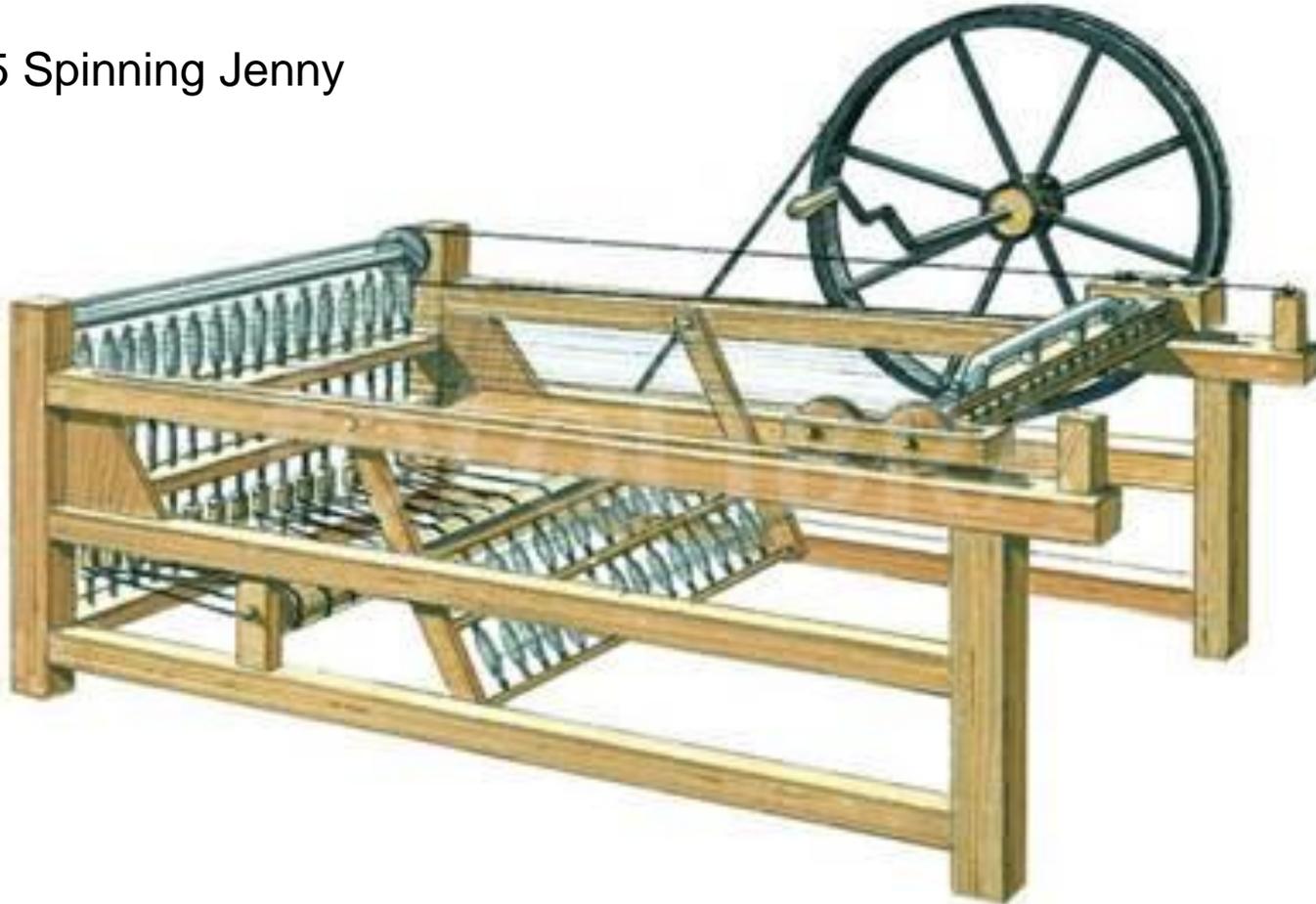
High growth in a low growth world

- Time taken (in years) to reach \$1 billion in revenues has compressed
- Internet and cloud have removed geographical barriers
- Groupon, Zynga, Amazon and Google all reached \$1bn within 5 years



We are at the start of the 4th Industrial revolution

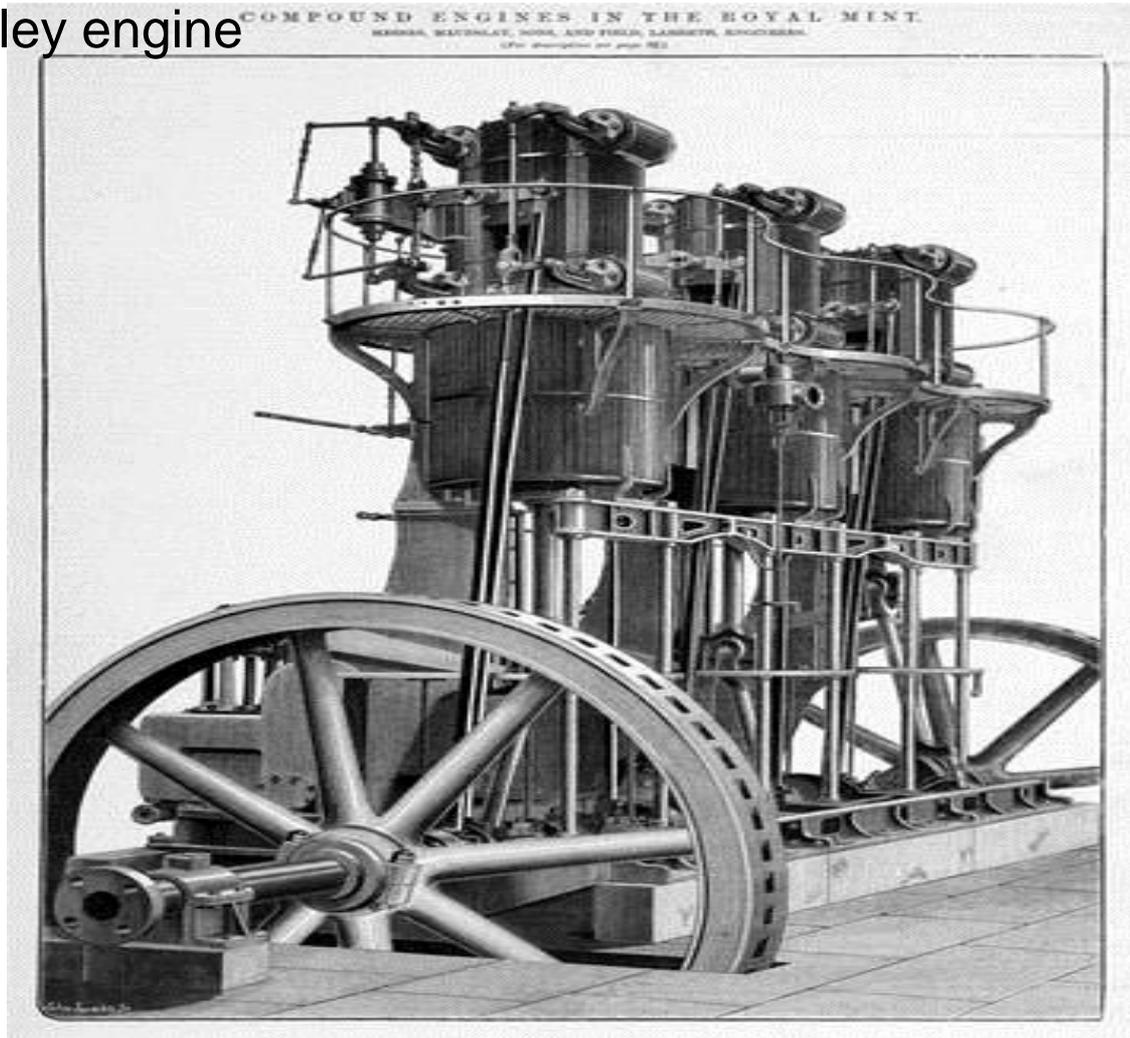
- 1st Industrial Revolution:
 - 1765 Spinning Jenny



We are at the start of the

4th Industrial revolution

- 1838 Maudsley engine



We are at the start of the

4th Industrial revolution

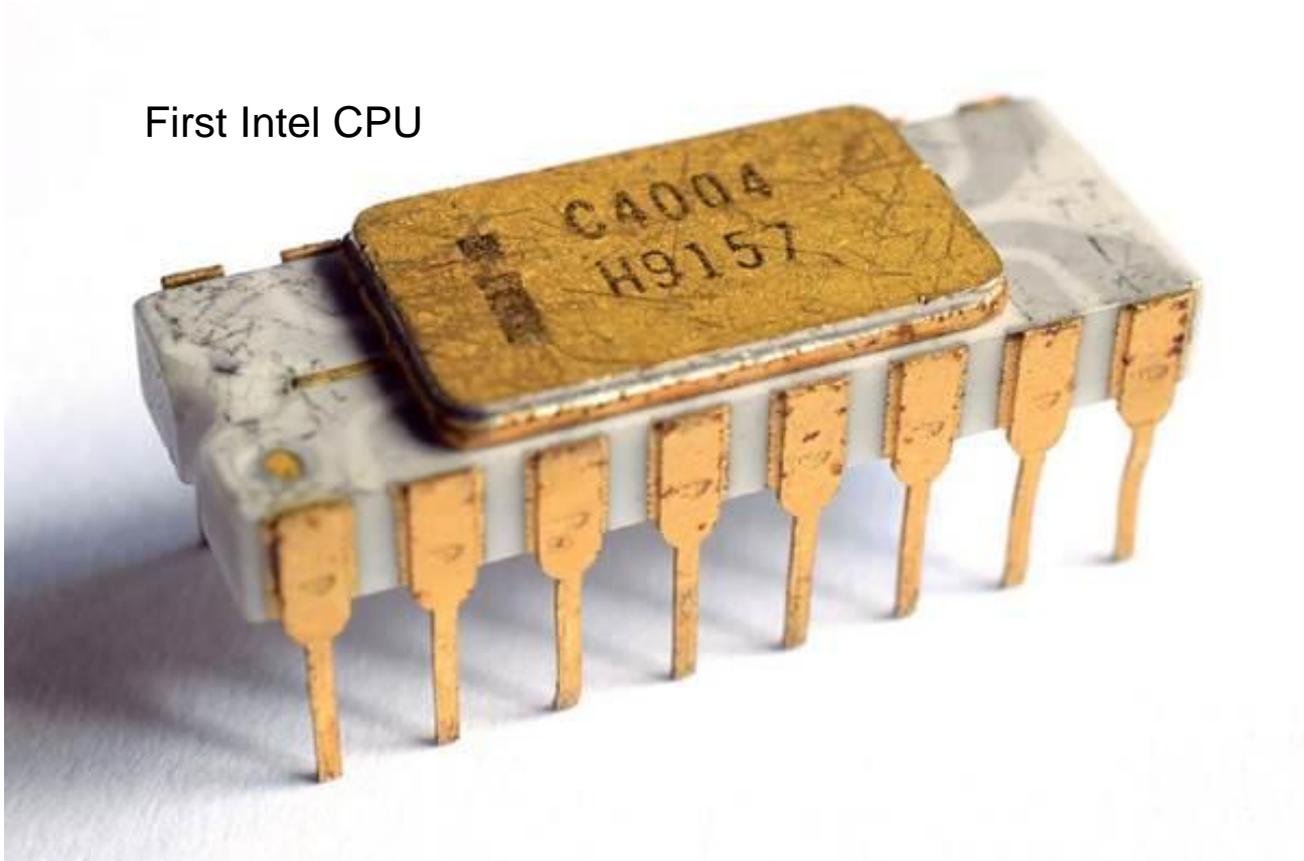
- 2nd Industrial Revolution: Mechanisation



We are at the start of the 4th Industrial revolution

- 3rd Industrial Revolution: Microprocessor, early 1970s

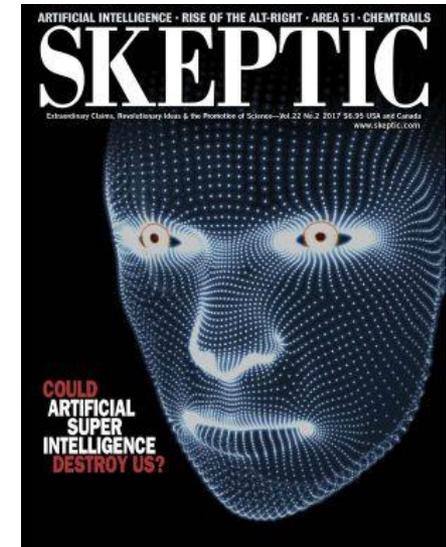
First Intel CPU



We are at the start of the

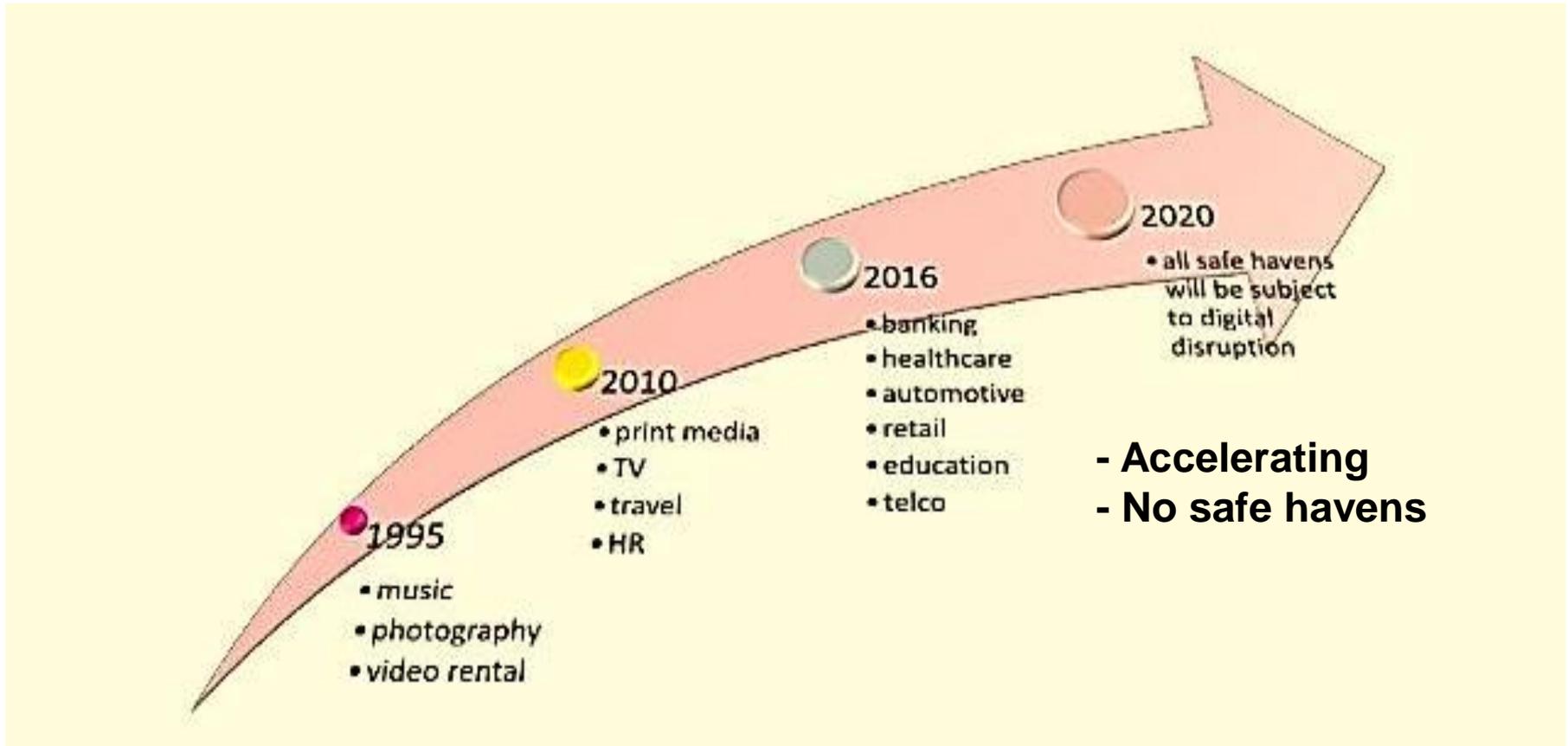
4th Industrial revolution

- 4th Industrial Revolution: Fundamentally different... Artificial Intelligence and automation



Wave after wave of disruption ...

no safe havens left



Wave after wave of disruption ...

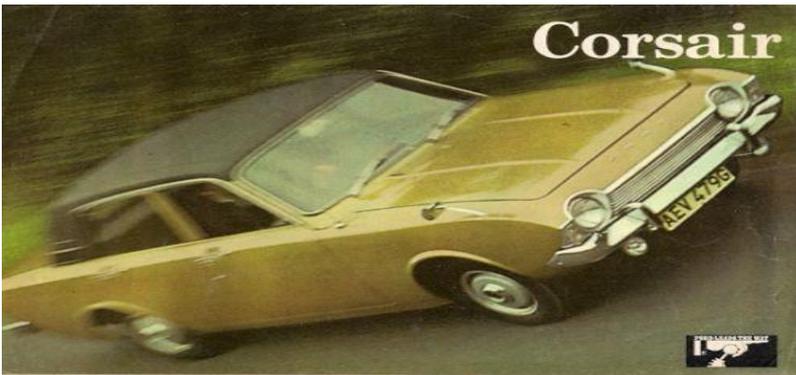
no safe havens left

- Hilton Hotels: 90 years to get to 1 million rooms
- Airbnb: <10 years to 3 million rooms



Wave after wave of disruption ...

no safe havens left



Microsoft



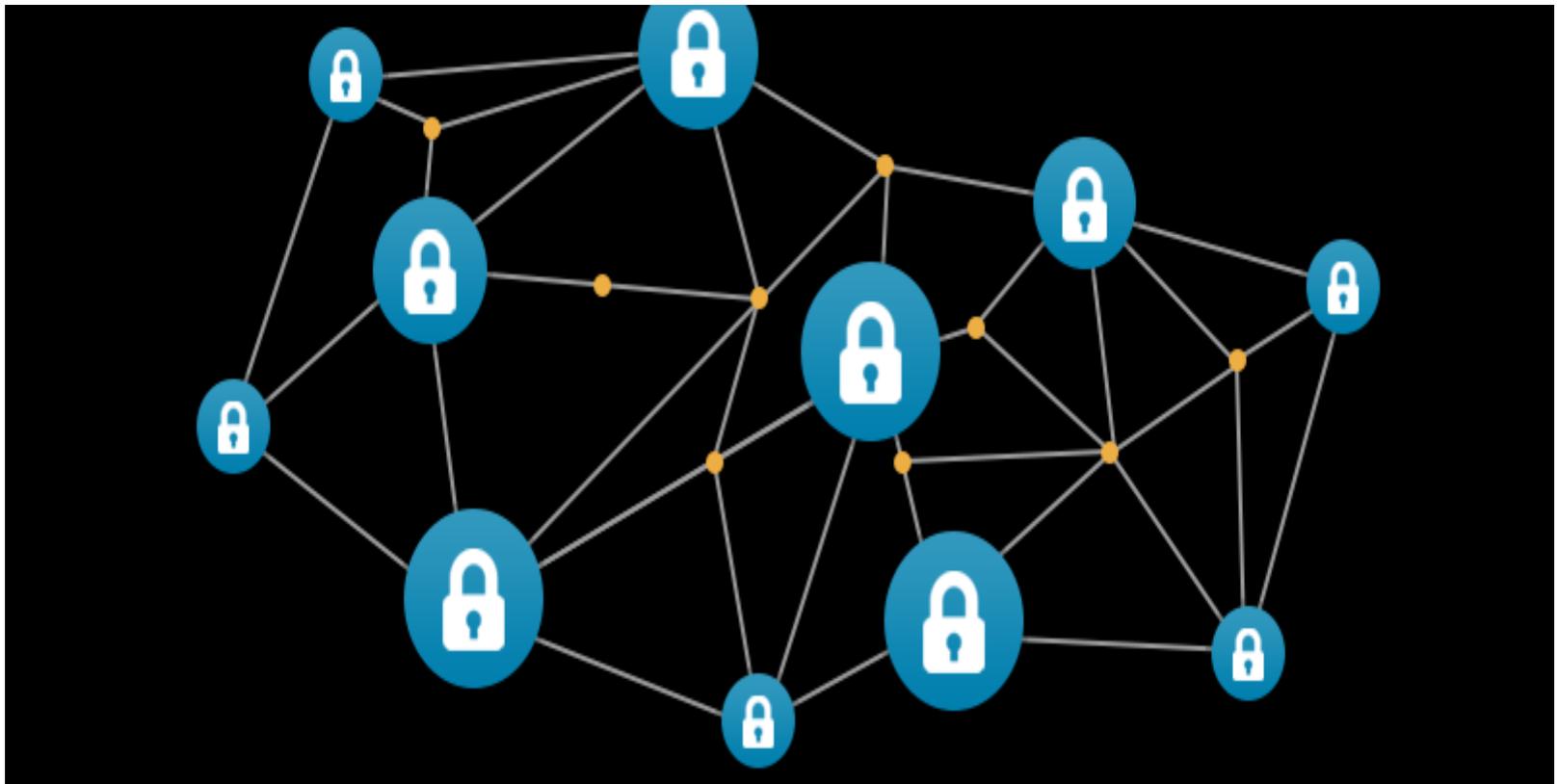
Those stuck in old patterns are being left behind

- **“Bankers fear they will get Amazon-ed in tech disruption” - FT, Jan 2018**



Those stuck in old patterns are being left behind

“Distributed ledger technology could reduce banks’ infrastructure costs [...] by between \$15-20 billion per annum by 2022” – Santander



Those stuck in old patterns are being left behind

THE WAREHOUSE TECH MARKET MAP

WAREHOUSE & INVENTORY MANAGEMENT SOFTWARE



OUTSOURCED WAREHOUSING & FULFILLMENT



ASSET TRACKING



WAREHOUSE ROBOTICS



WORKER WEARABLES



PACKING



ON-DEMAND WAREHOUSE SPACE



Those stuck in old patterns are being left behind



Apple Music

Spotify®

amazon alexa

amazon prime video

Thank you!