

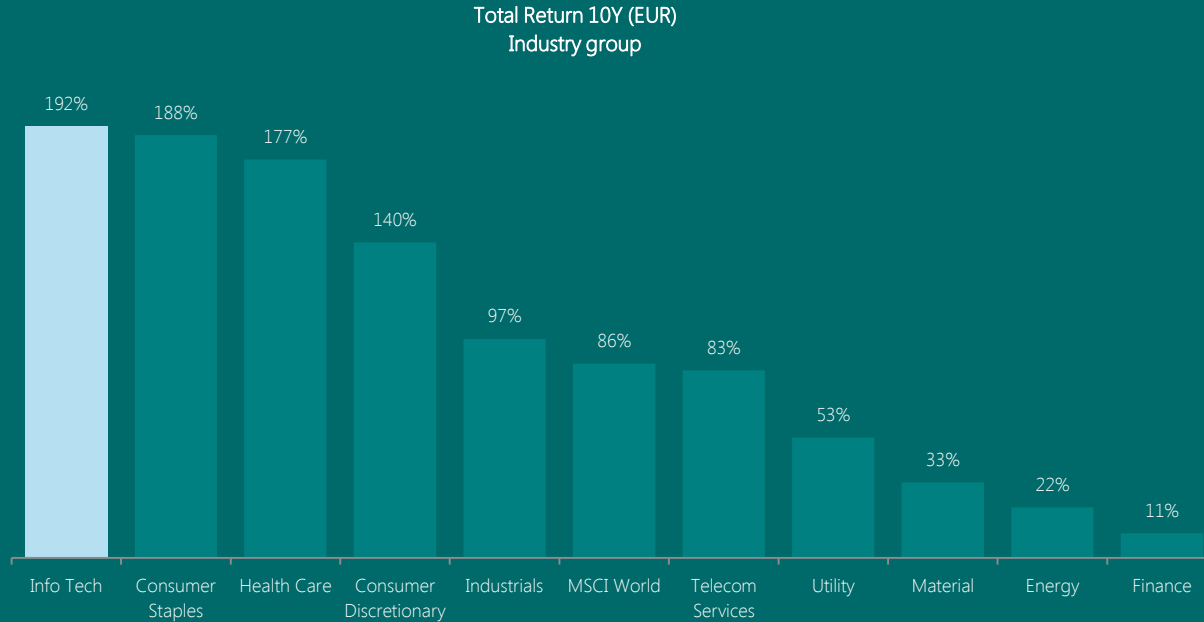
A close-up, shallow depth-of-field photograph of a microscope's objective lens and stage. The image is overlaid with a semi-transparent teal color on the left side. The text is positioned on the teal area.

Digital Disrupsjon

DNB Teknologi
Erling Haugan Kise
Portføljeforvalter

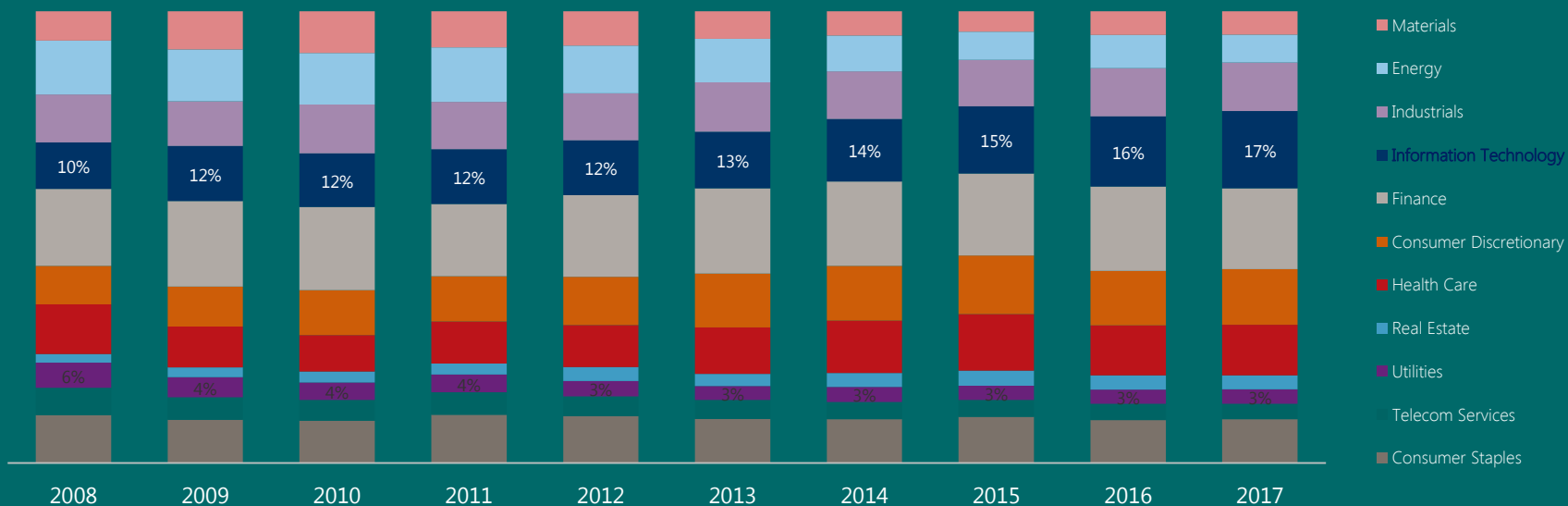
DNB

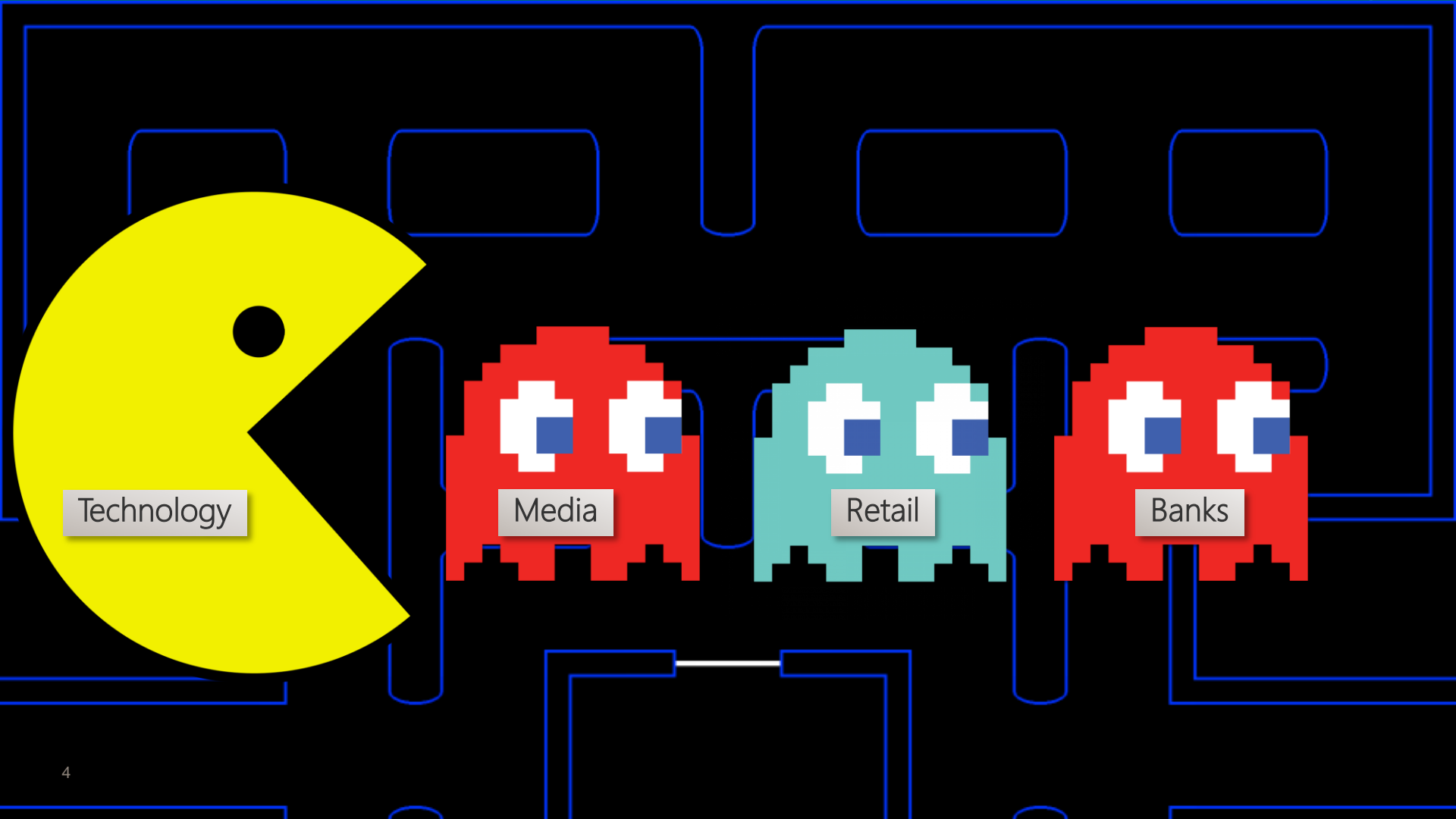
Tech has been the best sector the last 10 years



Technology is 17% of Global Market Cap

Share of Global Market Cap





Technology

Media

Retail

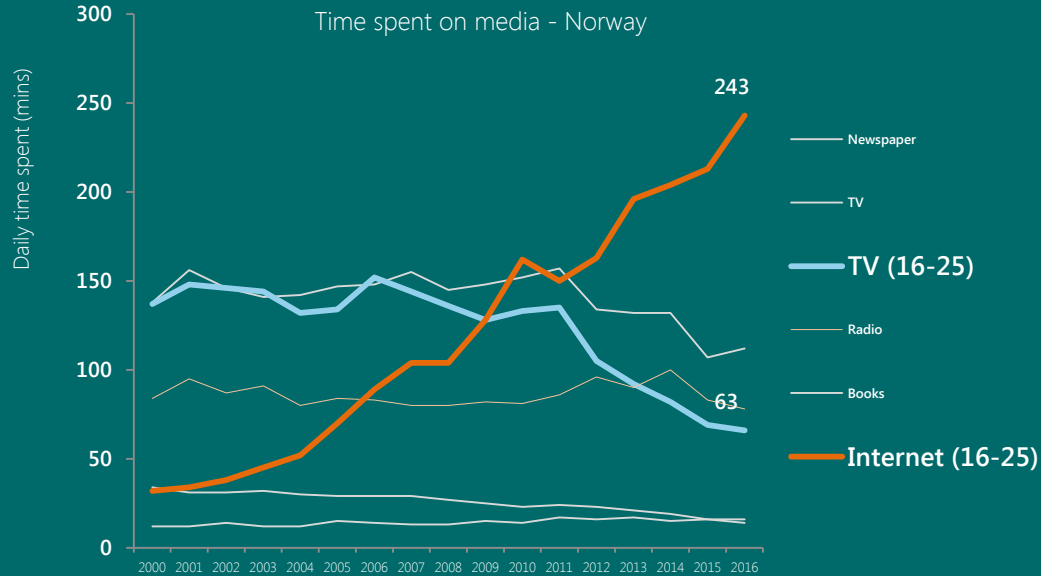
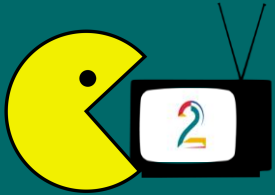
Banks

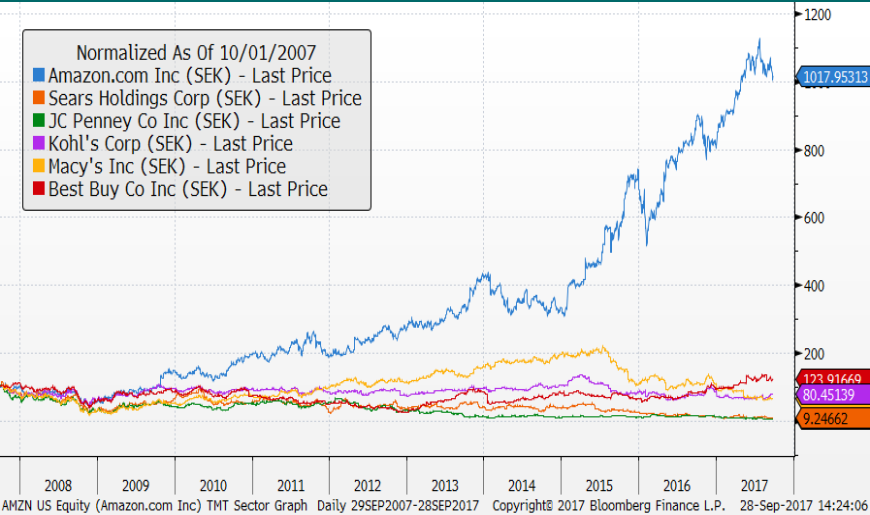


+ USD 28 Bn

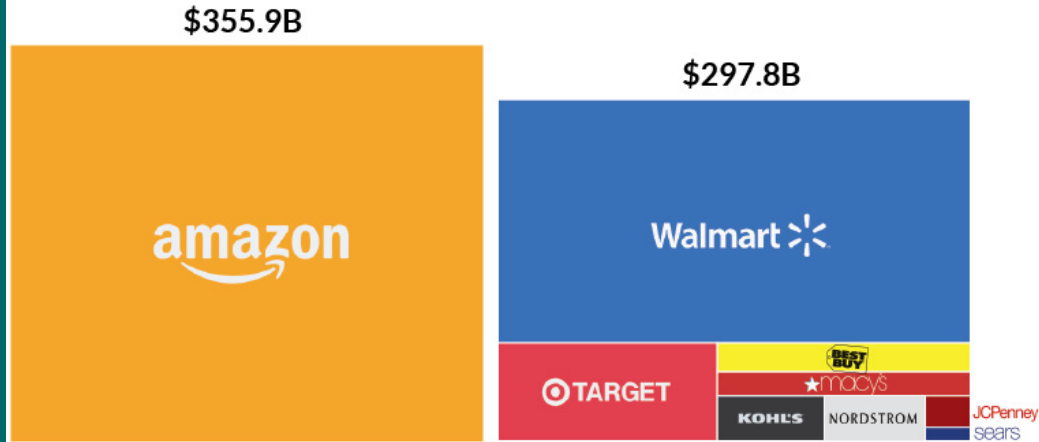
÷ USD 30 Bn







Market value as of December 30, 2016



Three Things Come Together

Access to Data



Computing Power

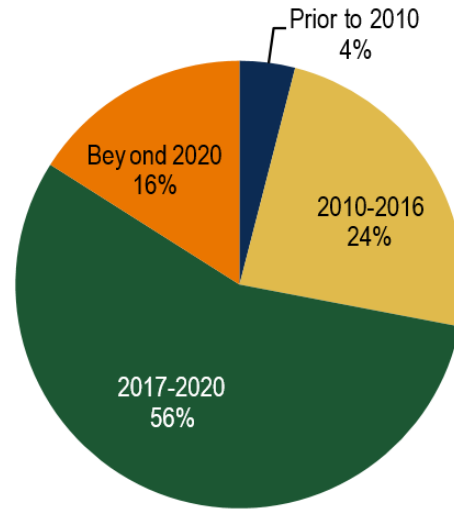


Broadband speed



«50% of business models obsolete by 2020»*

Percentage (%) indicating their industry has already reached its point of disruption or will within the next 3 years



Source: Harvard Business Review 2016

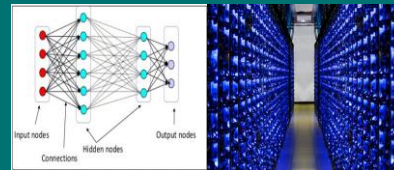
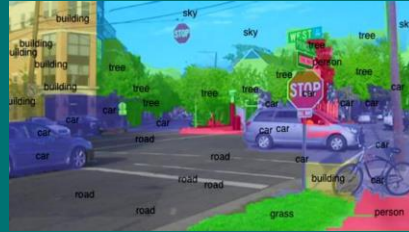
Computer Vision

Seeing



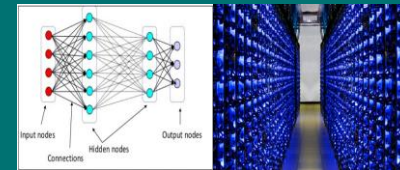
- Cameras
- Microscopes
- Nightvision
- Radars
- Satellites
- 3D sensing
- 360 vision

Recognition



Machine learning

Understanding



Machine learning

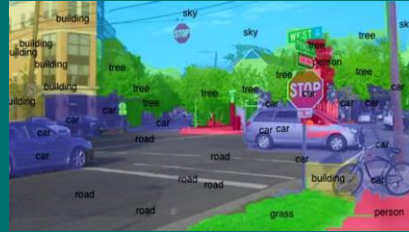
Computer Vision

Seeing



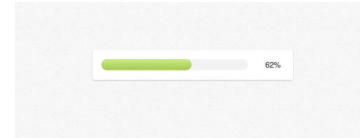
WAY BETTER
THAN HUMANS

Recognition



BETTER THAN
HUMANS FOR
SOME TASKS

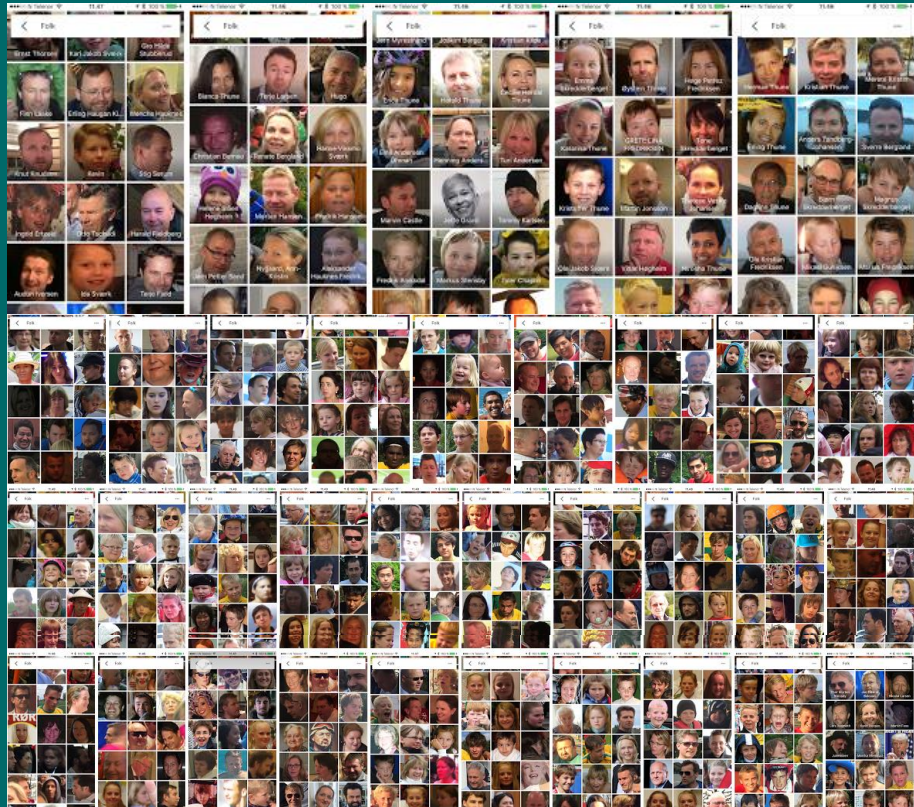
Understanding



IN PROGRESS...

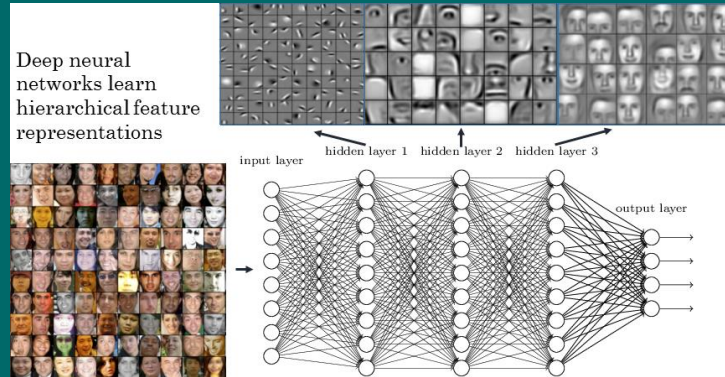
Computer Vision – Face Recognition

Who am I?



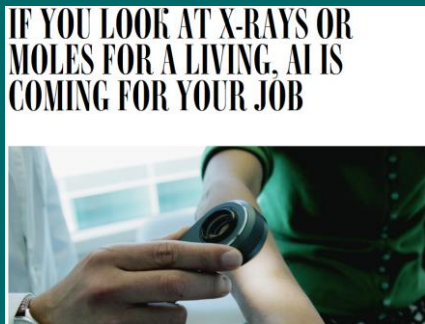
Computer Vision – Face Recognition

Who am I?



AI and Computer Vision Will Transform many Industries

Medicine

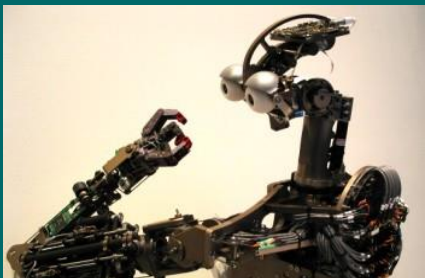


Automotive



Robots

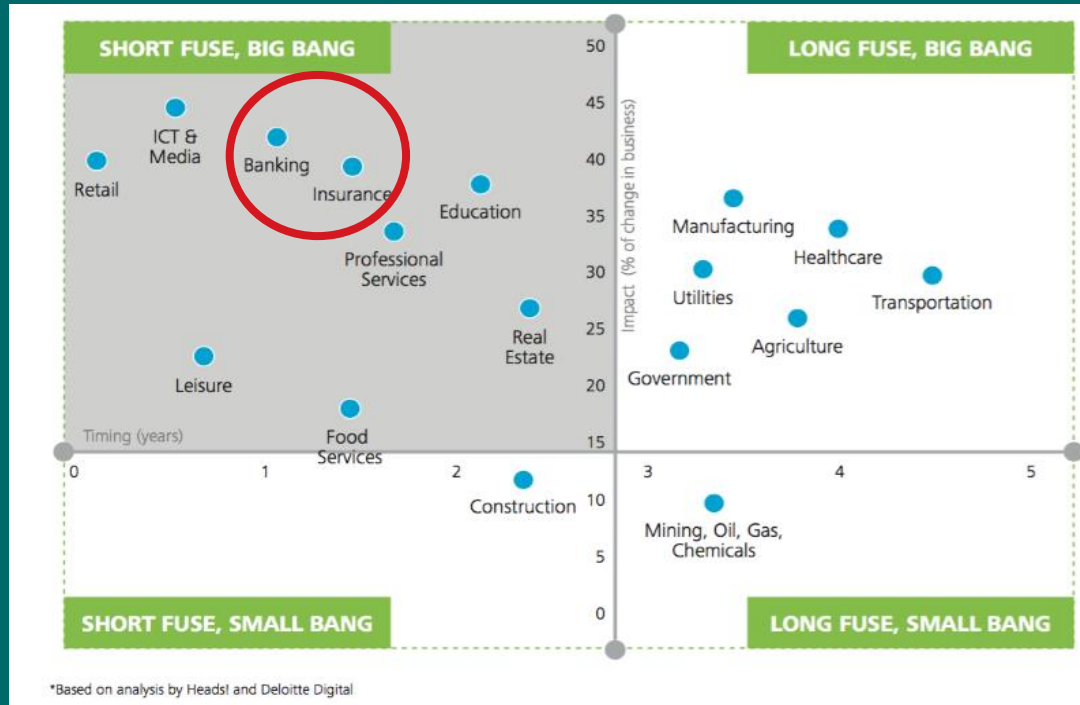
(they used to be blind...)

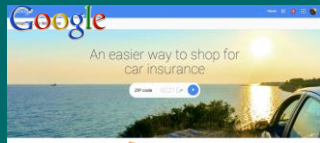


Security



Short Fuse – Big Bang

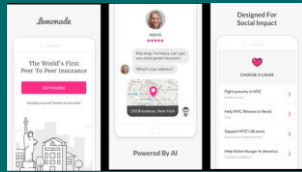




Navigation menu: Dagligbank og lån, Pensjon og forsikring, Sparing og investering, Innstillinger

Totaloversikt Min Totaloversikt Konto Min kontooversikt Åpne ny konto Siste transaksjoner Kontoutskrift Ansøppgave Disponenter Egne kontoinnstillinger Kontobetingelser	Betale og overføre Betale til en Betale til flere Betale eFaktura Betalingsoversikt Utførte betalinger Overføre egne kontoer Faste oppdrag Avtalegiro og eFaktura Betale til utlandet Mottakerliste Betalingsinnstillinger	Kort Mine kort Bestille kort Erstatte kort Vise PIN - kode Mitt regnskap Forenklet regnskap Lage eget regnskap Min oversikt Transaksjoner Faste utgifter Regnskapskontoer Bankkontoer	Lån og kredittkort Mine lån og kredittkort Søk om lån og kredittkort Boliglånskalkulator SMS og mobil SMS - tjenester Varslinger Mobilbank og app'er Meldinger Postkasse Arkiv Mine oppgaver	Kjøp og bestill Boliglån Kredittkort Design eget kort Billån Debetkort Hjelp og kundeservice Kontakt oss Reklamasjon Kalkulatorer og verktøy Lånekalkulator Valutakalkulator Iban-kalkulator Nettbank demo
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Bottom navigation: Totaloversikt, Betale, Siste transaksjoner, Lån og kredittkort



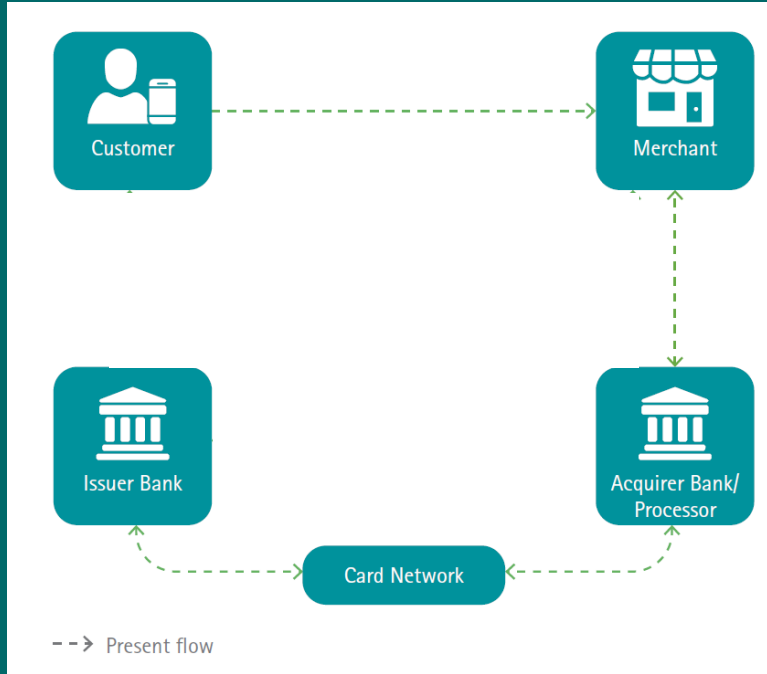
Wally

Goodbudget

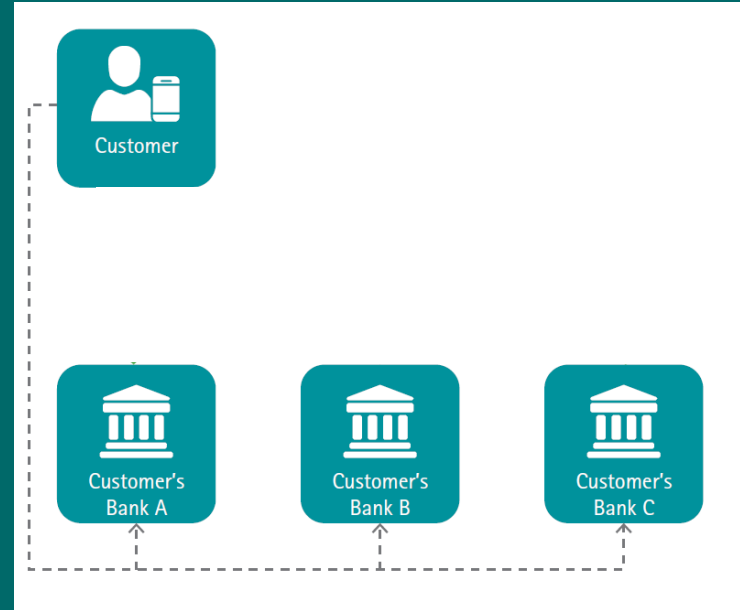
ASSET MANAGEMENT

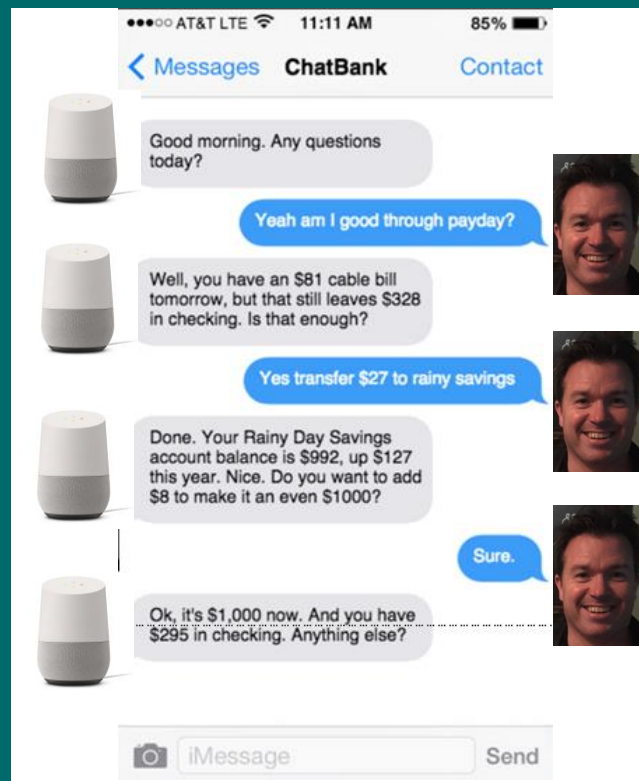
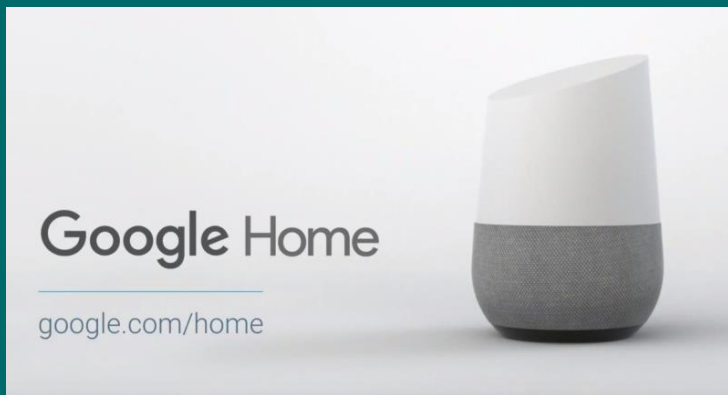
«PSD2» Opens Up for Tech Disruption

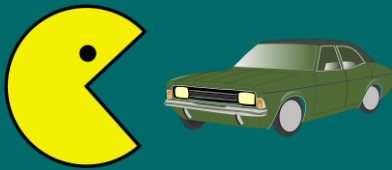
Payments



Bank information

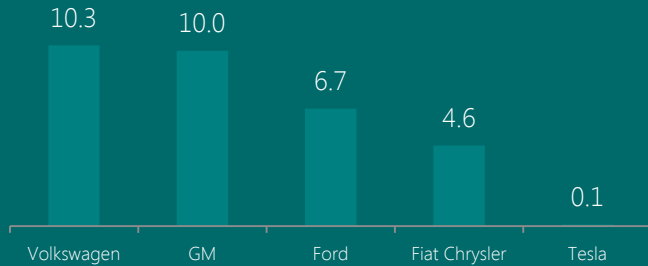






Share price Last 5 years

Number of Cars sold in 2016 (mill)

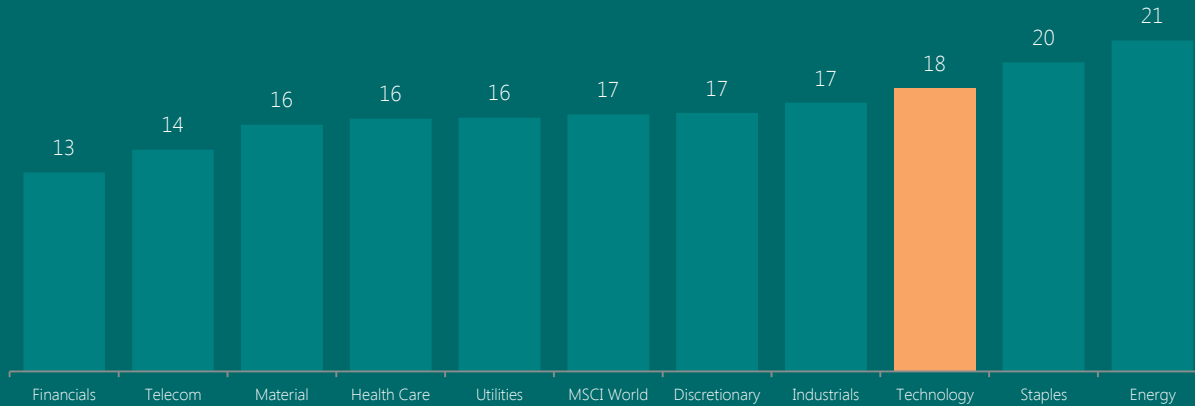


Peer Valuation:

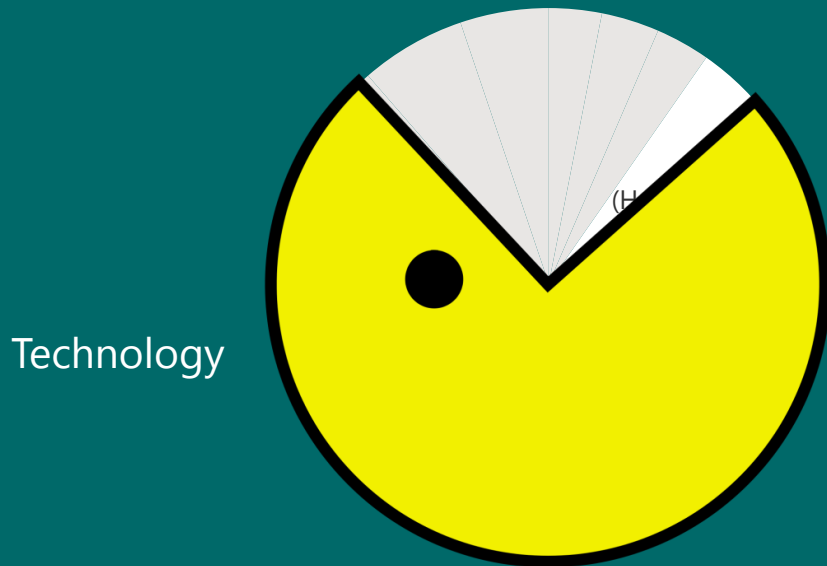
Name	Mkt Cap (USD)	BF EV/EBITDA	BF P/E	BF EV/EBIT	BF EV/Rev	LF P/BV
Tesla Inc	55.82B	43.1x	365.3x	552.5x	4.1x	11.2x
Fiat Chrysler Automobiles NV	16.97B	1.6x	4.5x	3.2x	0.2x	1.0x
Ford Motor Co	45.20B	2.7x	7.1x	5.4x	0.2x	1.5x
General Motors Co	51.99B	2.5x	5.7x	4.0x	0.3x	1.1x
Volkswagen AG	79.39B	1.5x	5.9x	3.1x	0.2x	0.7x

Technology is not a bubble

12 mth forward
Industry group



Technology Will Continue to Eat into other Industries



Thanks for your attention