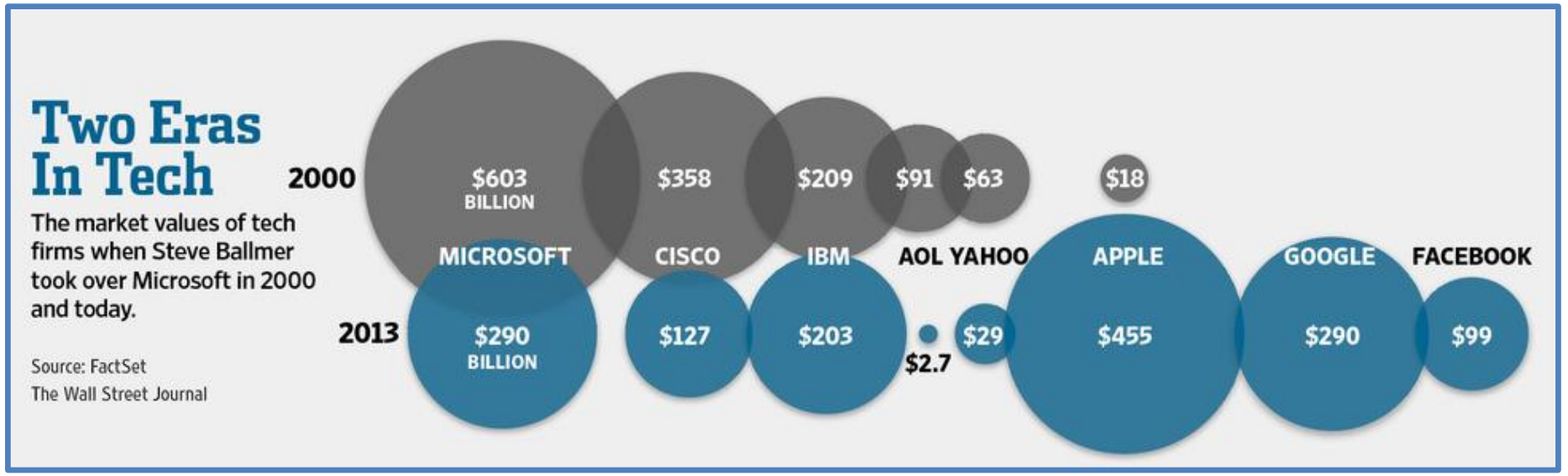
Digital disruption calls for new strategies.

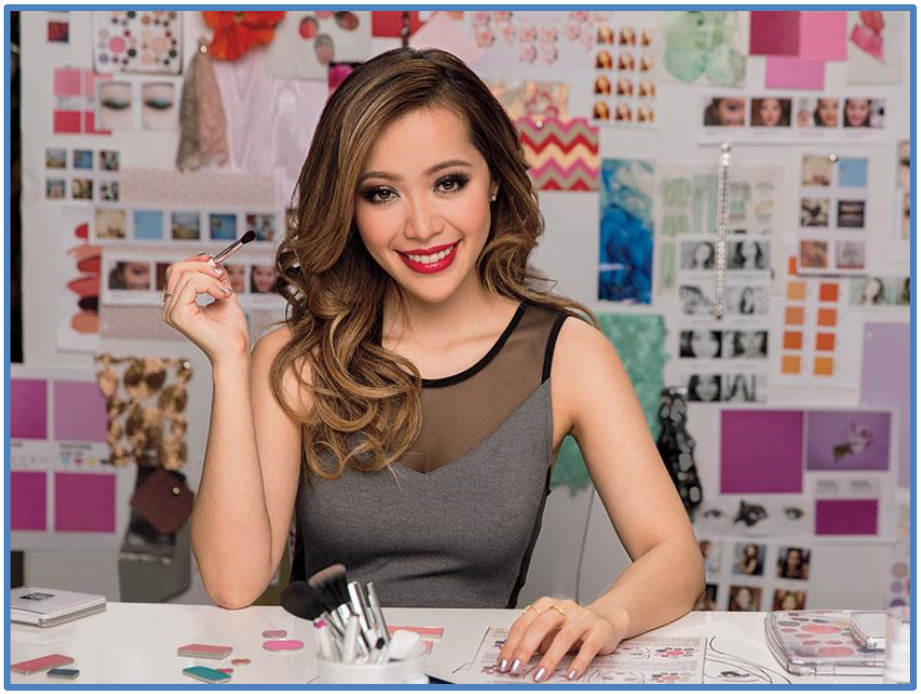
Niels Bjørn-Andersen
Professor Copenhagen Business School

Bogazici University
Department of Management Information Systems 10th May 2017

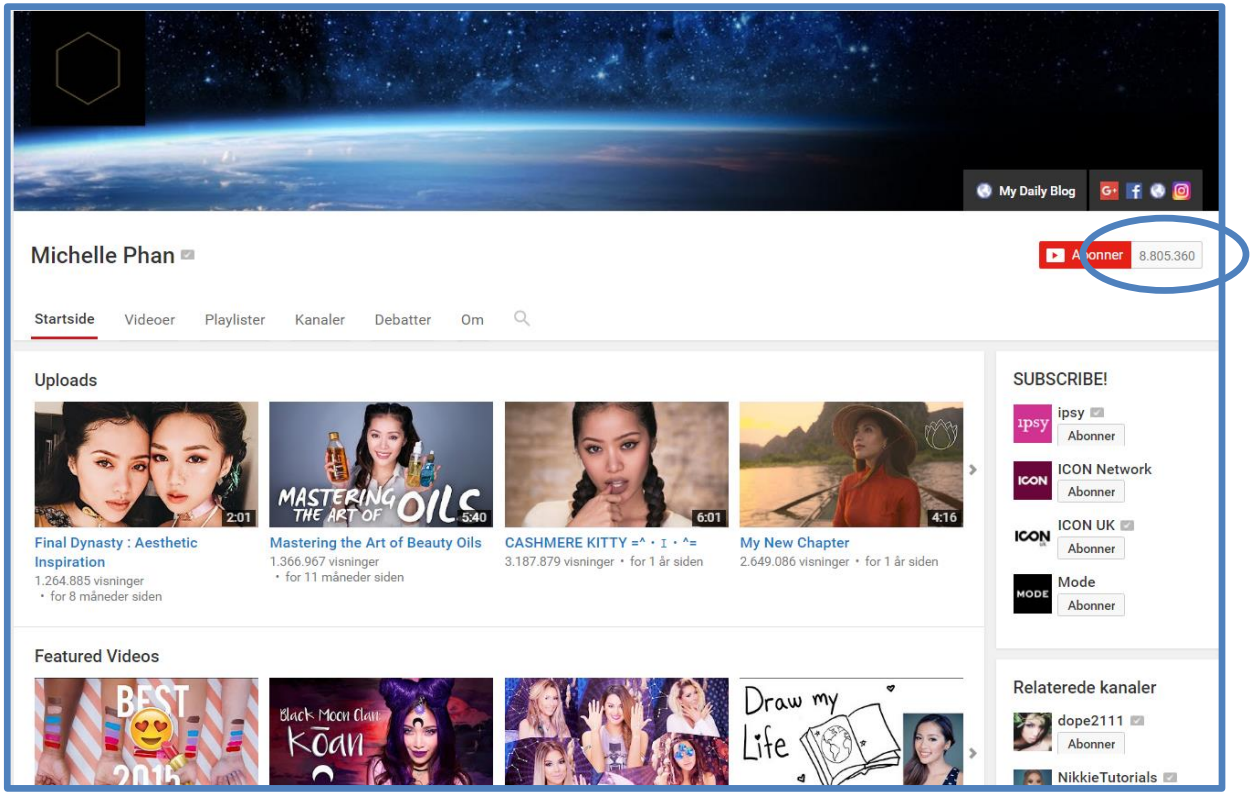
60% of *Fortune* 500 companies in 2000 did not make it on the list in 2015.



Michelle Phan



Michelle Phan



Michelle Phan

Technological Megatrends

Cybercrime has become an industry – increased need for IT security.

The mobile unit is the main channel and is rapidly developing.

Social media is exploding.

There's a radical shift toward OTT and on-demand.

All things are interconnected and online.

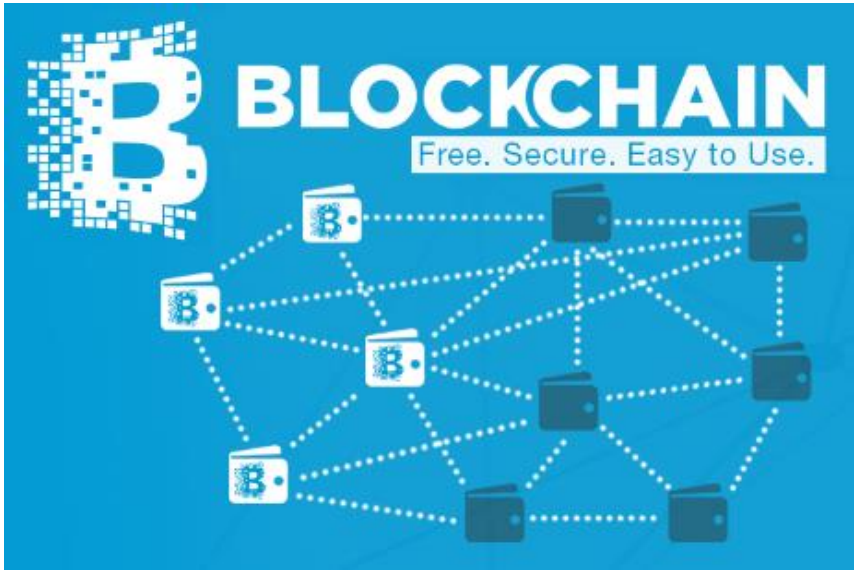
Smart machines and artificial intelligence is becoming alive.

Massive data avails huge possibilities for analysis.

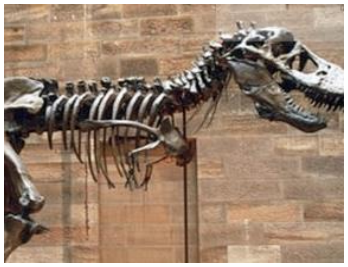
Everything becomes digitalized and cloud-based.

Blockchain

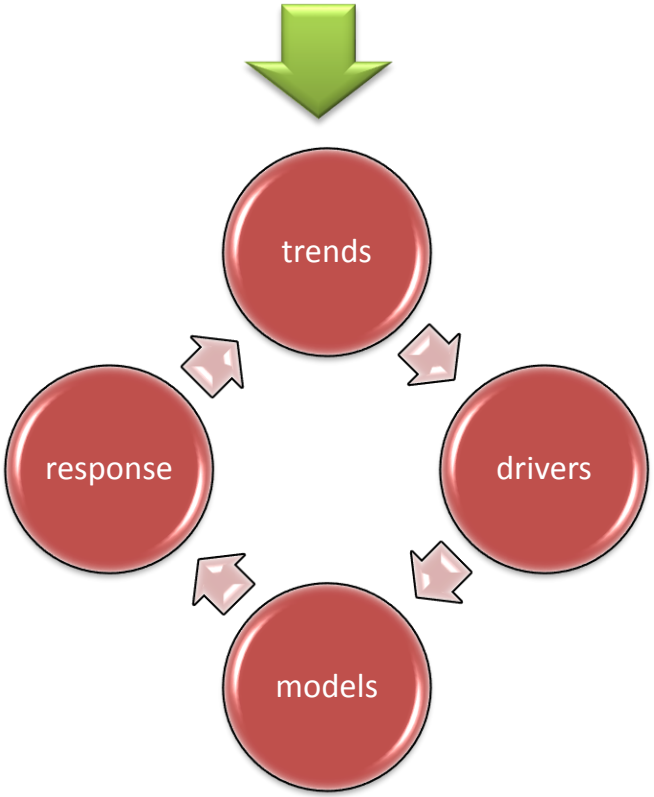
- Concept: shared ledger
  - Virtual
  - Decentralized
  - Bookkeeping system
- Examples
  - Bitcoin ☹
  - But in the near future
    - Mortgages
    - Passports
    - Gun licenses



Dematerialization



Digital Disruption Trends: A Wake-Up Call



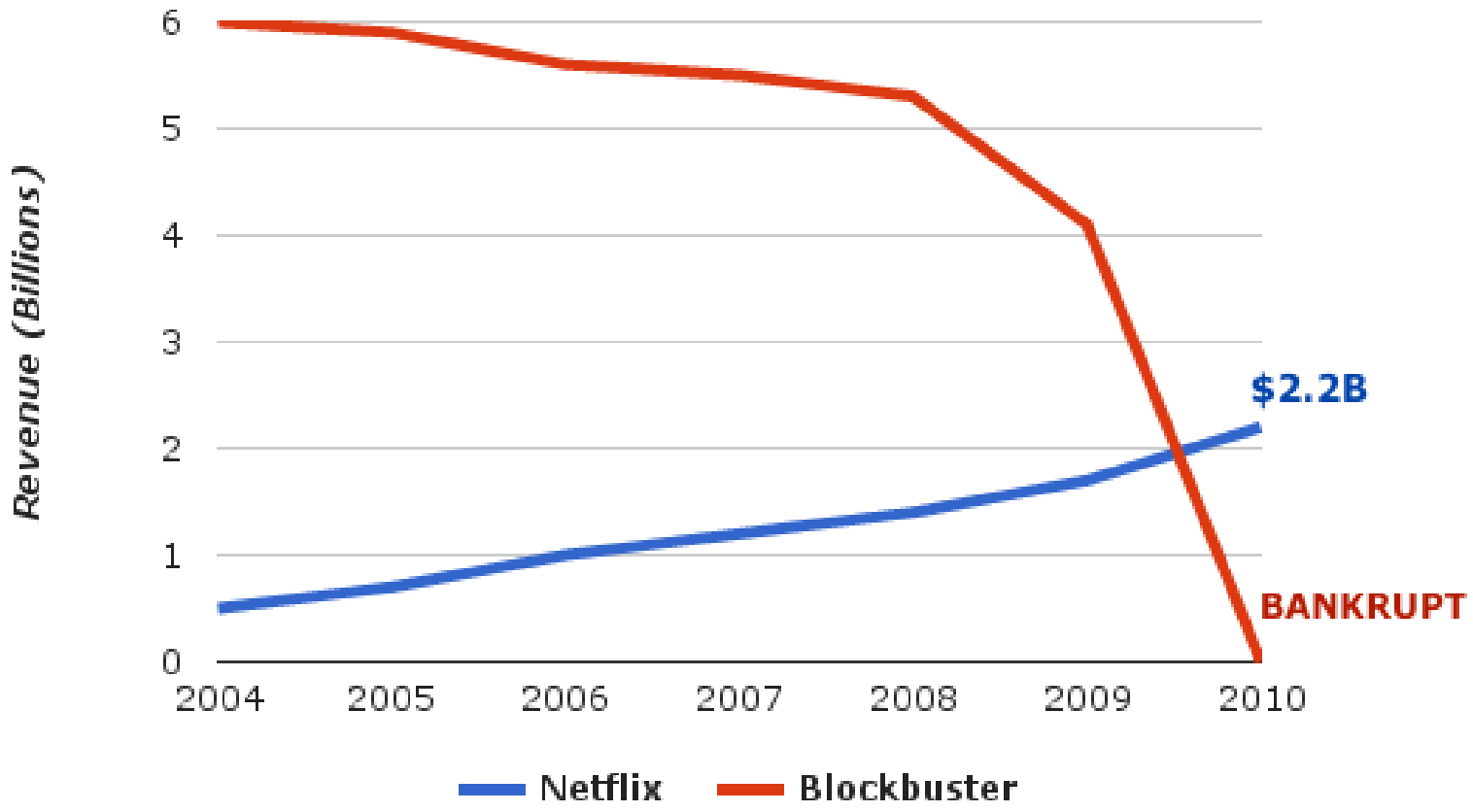
Photography

Music

Movies

In February 2008, Blockbuster assessed the risk of disruption from Netflix. Management decided there was no immediate risk of disruption.

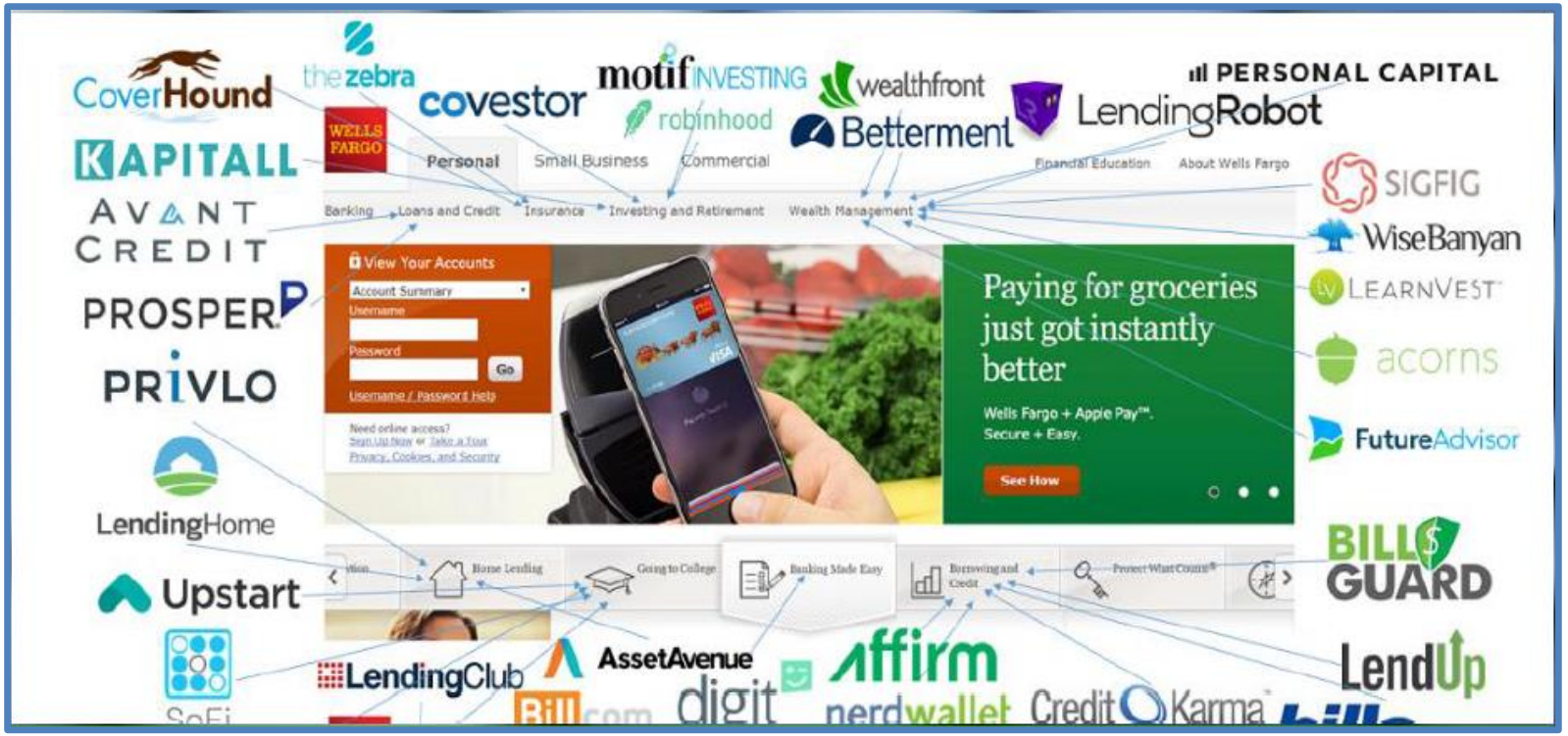
Netflix versus Blockbuster



Optical Lens Shopping

EHang one person drone carry 220 pounds

Banking of the Future



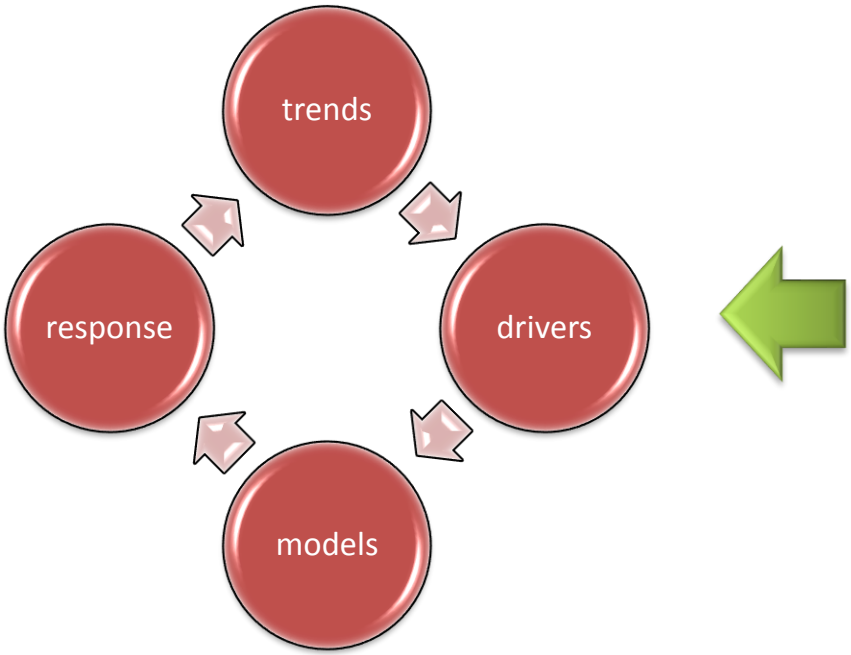
Loans

The Alibaba Story

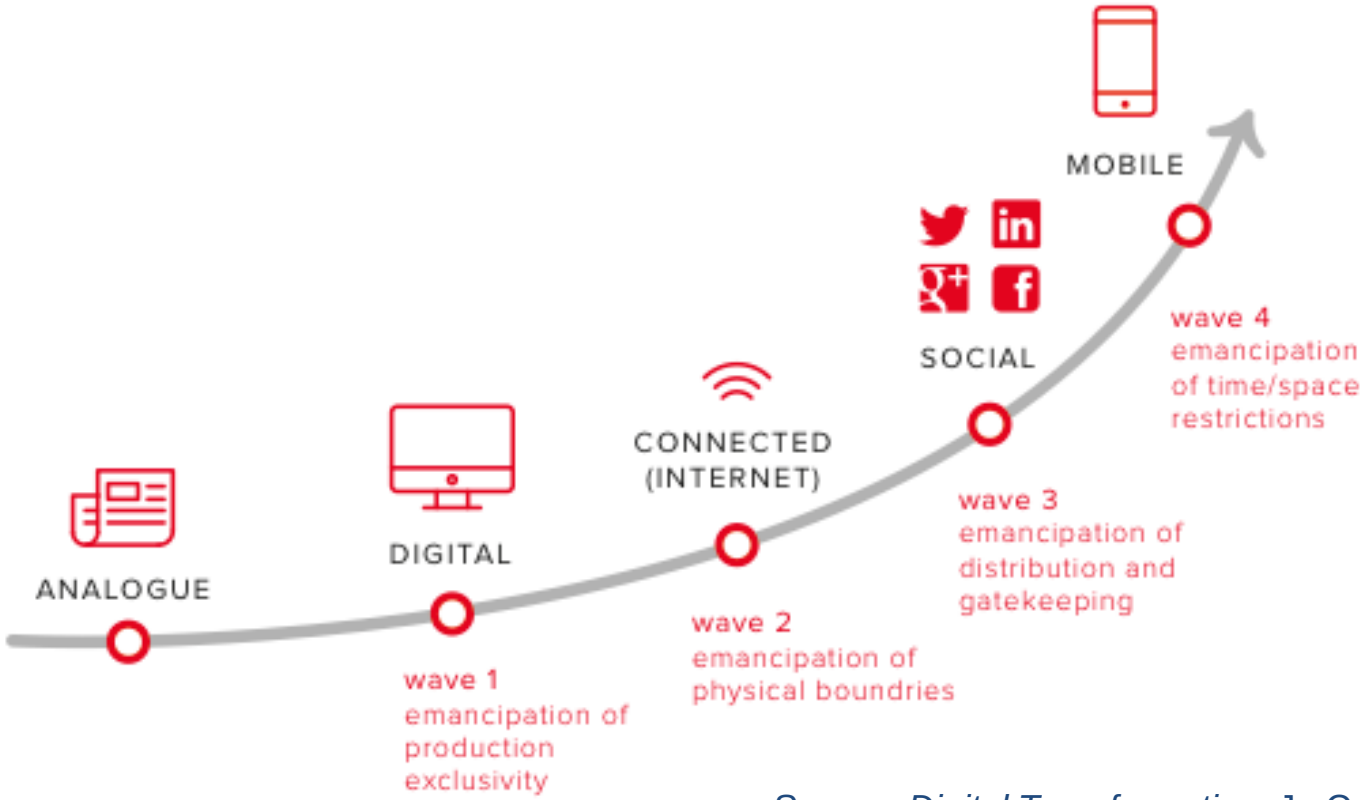
Facts on Alibaba

- On 11/11 2016 revenue was $ 17,8 billion
- US Black Friday was $ 3,4 billion
- 100 chartered planes, 300 distribution centers, 800.000 part time staff
- All delivered in 3 days

Digital Disruption Drivers



The Speed of Change



Source: *Digital Transformation*, Jo Coudron

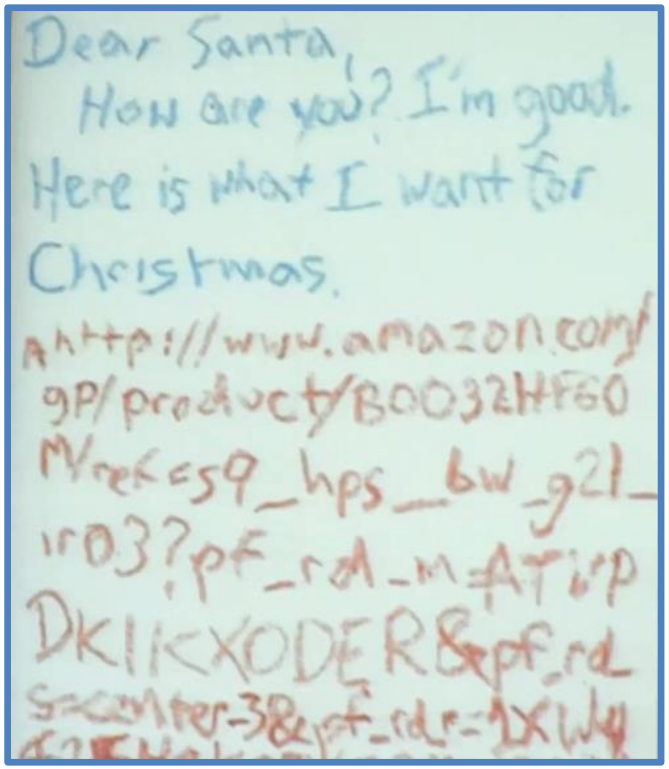
Speed of disruption

- Filling a stadium with water
- Water drips from a hose 1 drop/min but doubling every minute starting 12.00
- When will stadion be full?

Filled completely at 12.49

New Customer

- Generation Z

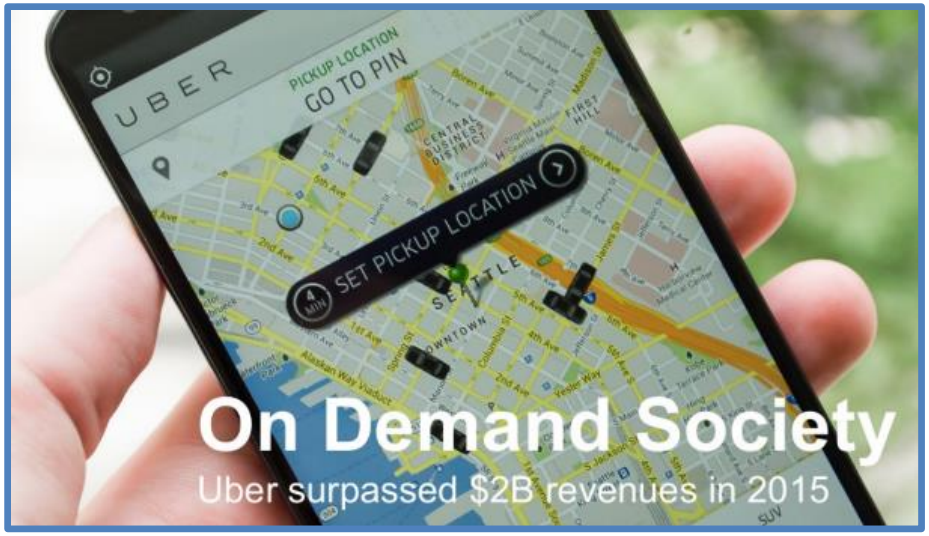


Gen Z = Extremely Connected

- Fear
  - Off the network
  - No Wi-Fi
- At ease when:
  - Full battery
  - Five bars
- Constantly sharing:
  - We feed the network

Instant Gratification

- Smartphone + app
- Anything is on the tip of your fingers
  - Swipe
  - Click
- Example
  - Uber

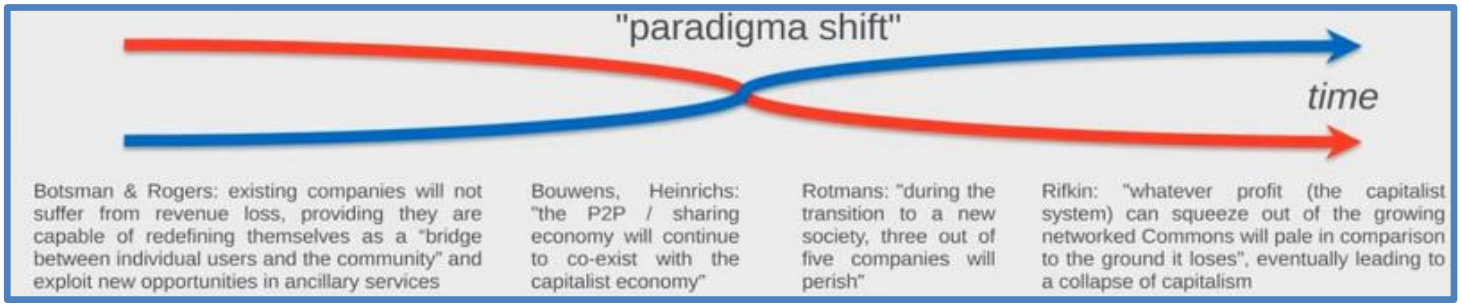


Growing Concern About Climate

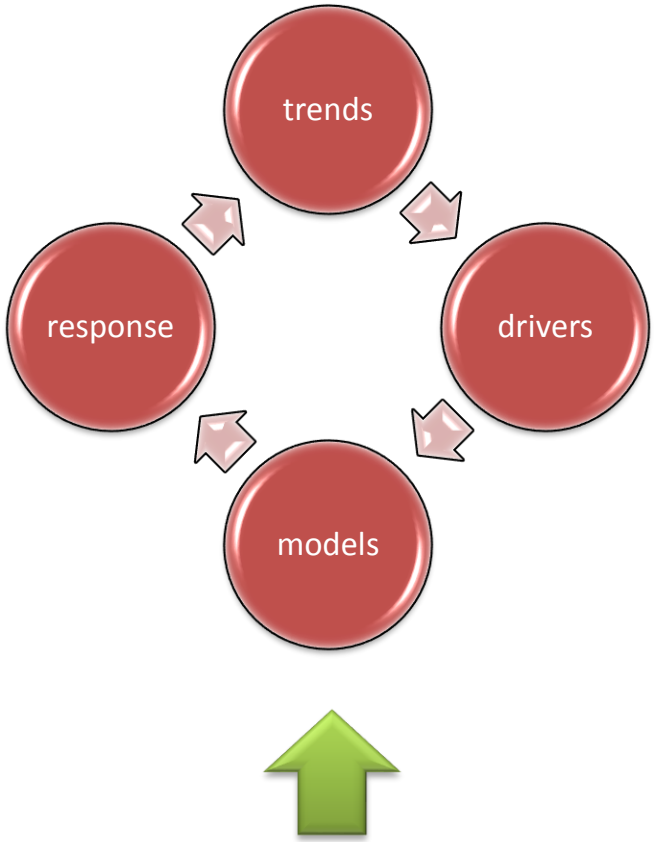
Content Shock

Paradigm Shift

"This is not an era of change, but a change of era.
(Rotmans, 2014)

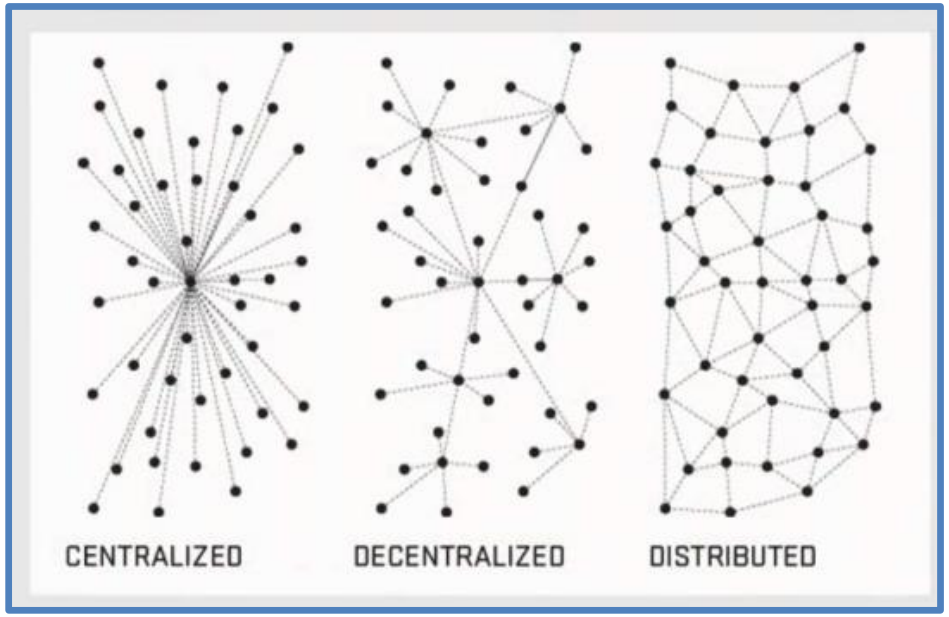


Digital Disruption Models



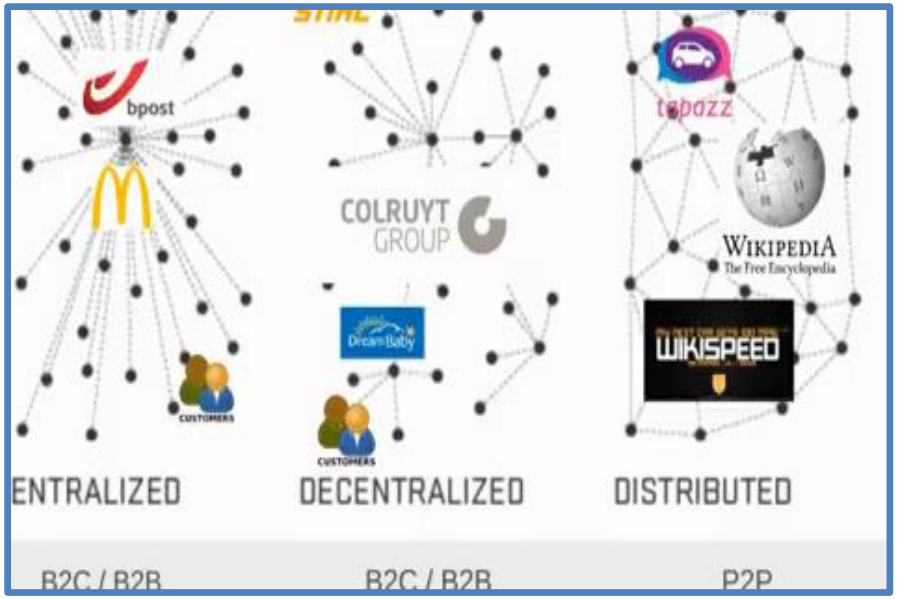
Network Terminology

- Centralized
  - Client-server model
  - Only 1 node
  - You always need to pass the center
- Decentralized
  - You can bypass the center
  - Several nodes
- Distributed
  - No nodes anymore
- Question:
  - Are the decentralized or distributed models relevant in your industry?



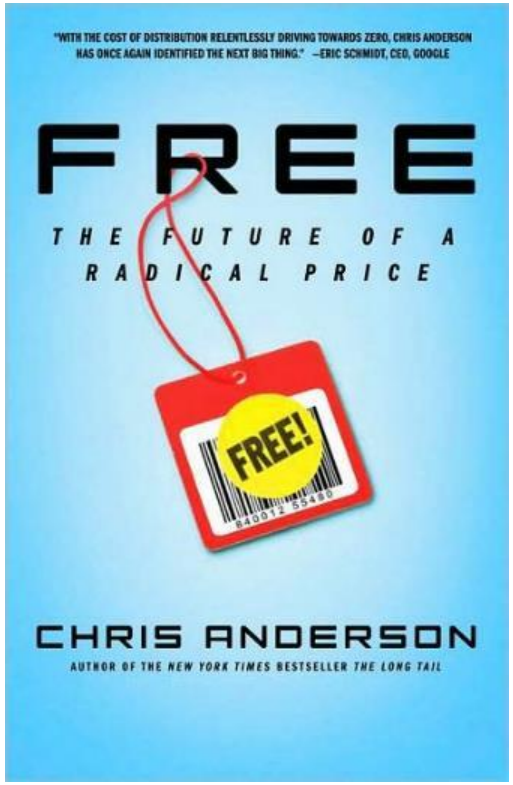
Business Terminology

- Centralized
  - McDonald's decides
  - US military
  - Catholic church
- Decentralized
  - Sapa = aluminum company
  - Colruyt Group
    - Dreambaby
- Distributed (P2P)
  - Wikipedia
  - Wikispeed
  - Airbnb
  - Tapazz (car rental)



Free Model

- Flagships
  - Google
  - Facebook
  - Twitter
  - Instagram
- Where do they get the money?
  - Advertising

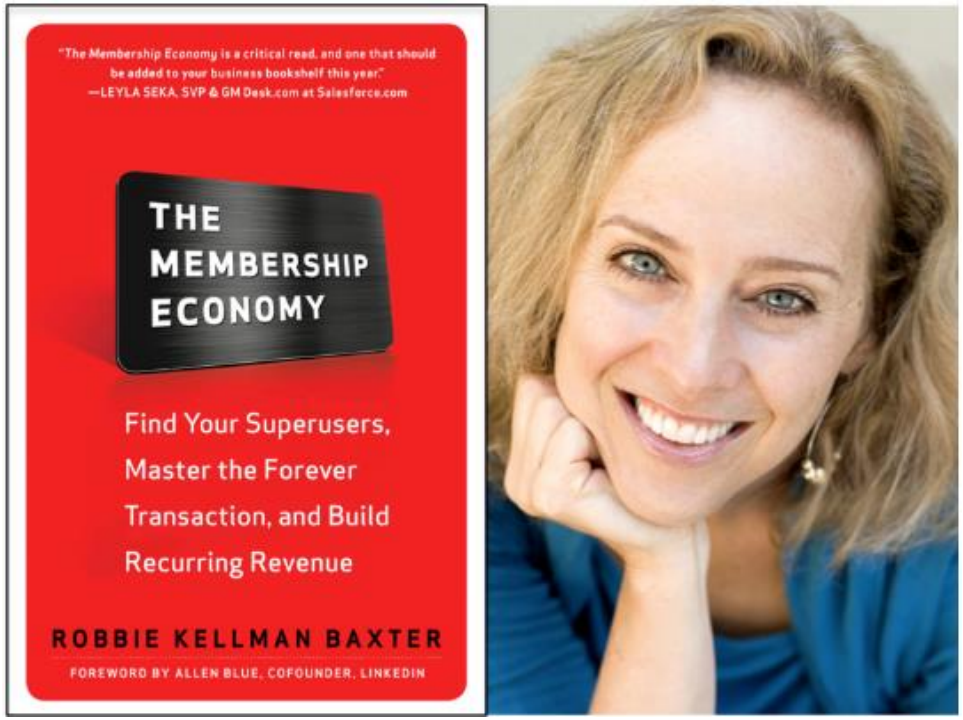


Freemium Model

- This concept is based on
  - Free
  - Premium

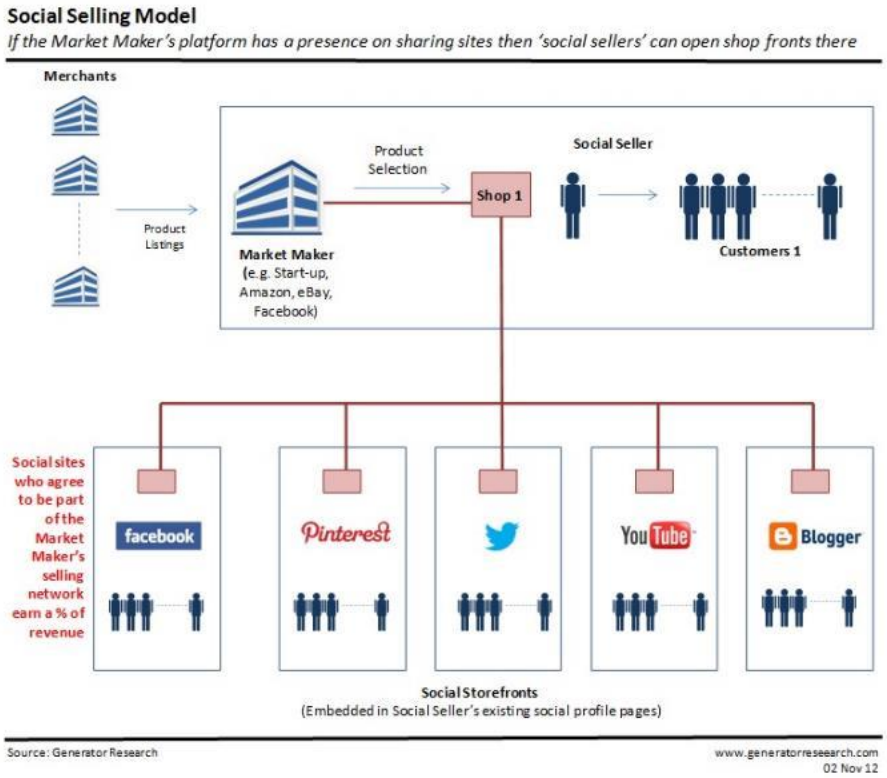
Membership Model

- Music
  - You don't buy CDs
  - You "rent" streaming music
    - Spotify
    - iTunes
    - Deezer
- Videos
  - Netflix
- Data
  - Dropbox
- Software
  - Office 365

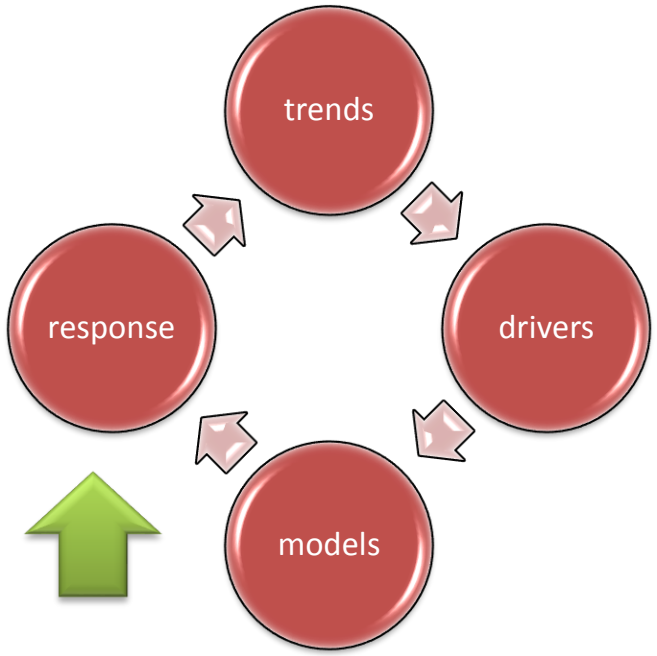


Affiliate Marketing

- Social selling
- Affiliate marketing
  - Bloggers



Digital Disruption Response



Create Your Digital Transformation Vision

Sold in +35 countries

Digital Transformation Modeling

Spot and **understand** the dynamics of digital **disruption**

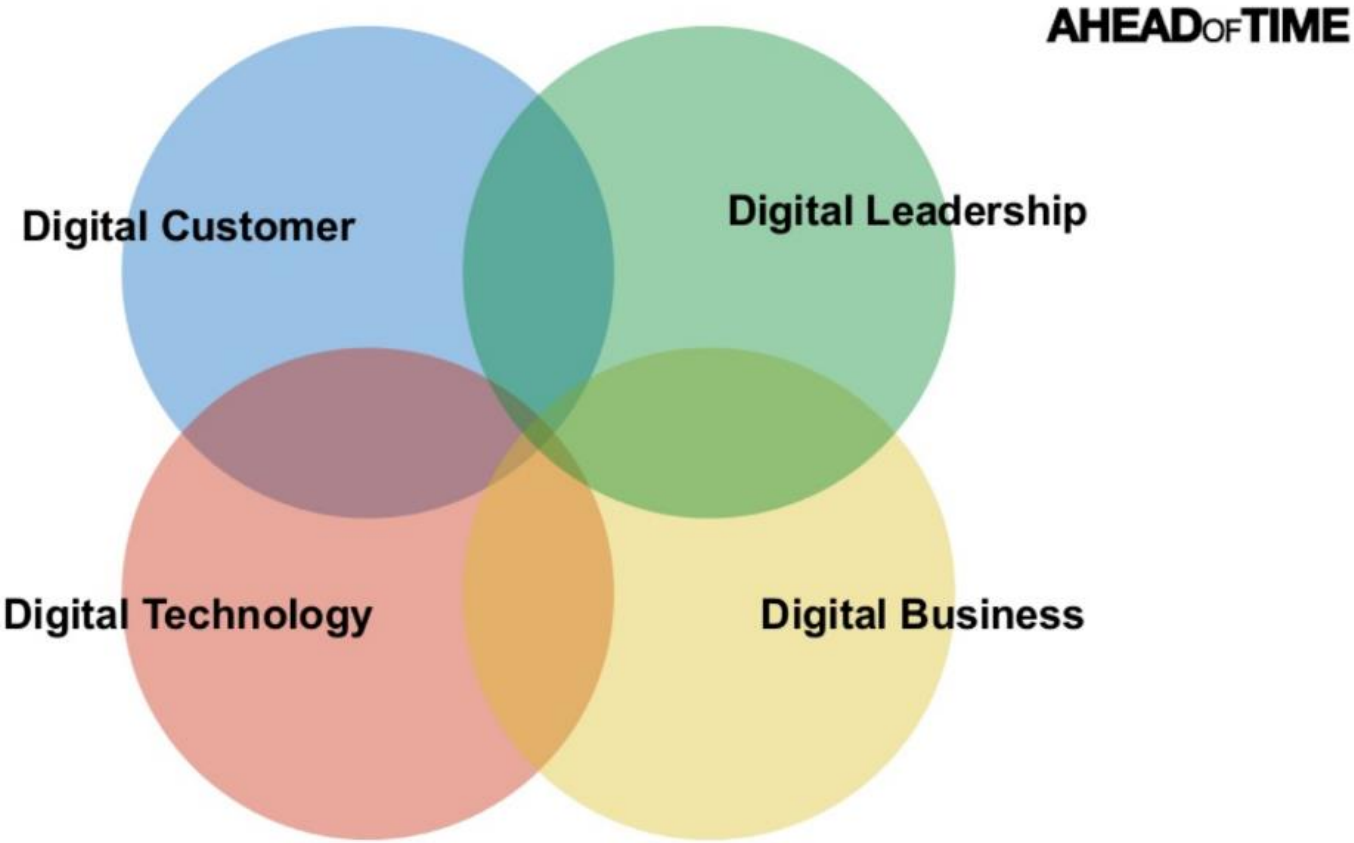
Analyse the impact on your industry and business

Create a future vision and a transformation strategy

Create a **Digital Agenda** that gets you there.

https://www.youtube.com/watch?v=8wGq0e_n3n4

Source: *Digital Transformation*, Jo Coudron


AHEADOFTIME
Digital Customer
Digital Leadership
Digital Technology
Digital Business

One of Google's most famous management philosophies is something called "20% time."

Founders Larry Page and Sergey Brin highlighted the idea in their 2004 IPO letter:

"We encourage our employees, in addition to their regular projects, to spend 20% of their time working on what they think will most benefit Google," they wrote. "This empowers them to be more creative and innovative. Many of our significant advances have happened in this manner."

Huge 20% products include the development Google News, Gmail, and even AdSense.

Google employees

New World of Work

- Example for Microsoft employees
- In company 10h-14h --- at home (Skype business + Office 365 + …)

Questions?
Comments?

Break

Have you and your organization embraced digitalization??

Digital Transformation

The use of digital technology to radically improve the performance and/or reach of any company or organization

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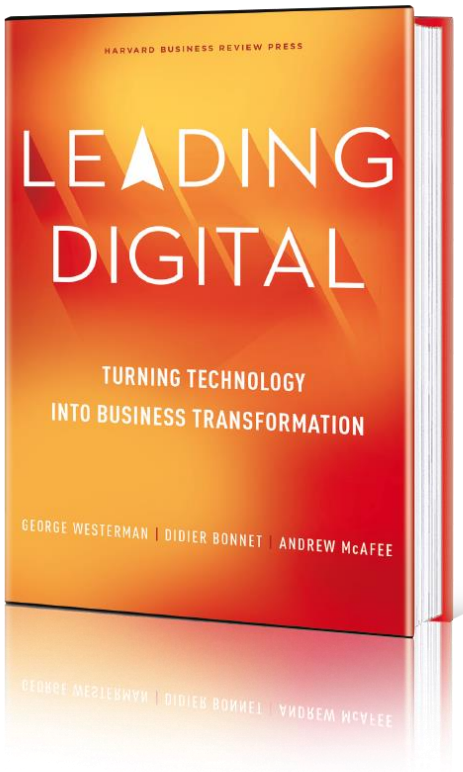
Leading Digital Transformation



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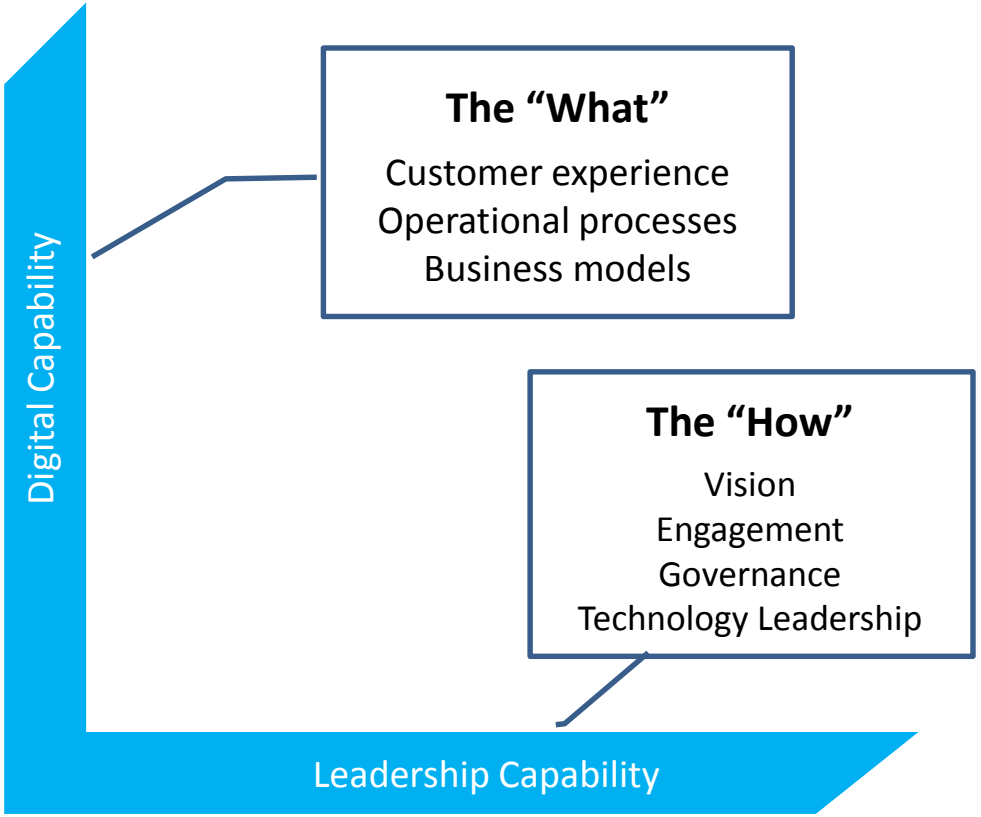
Bogazici University
Department of Management Information Systems 10th May 2017

The DNA of Digital Masters



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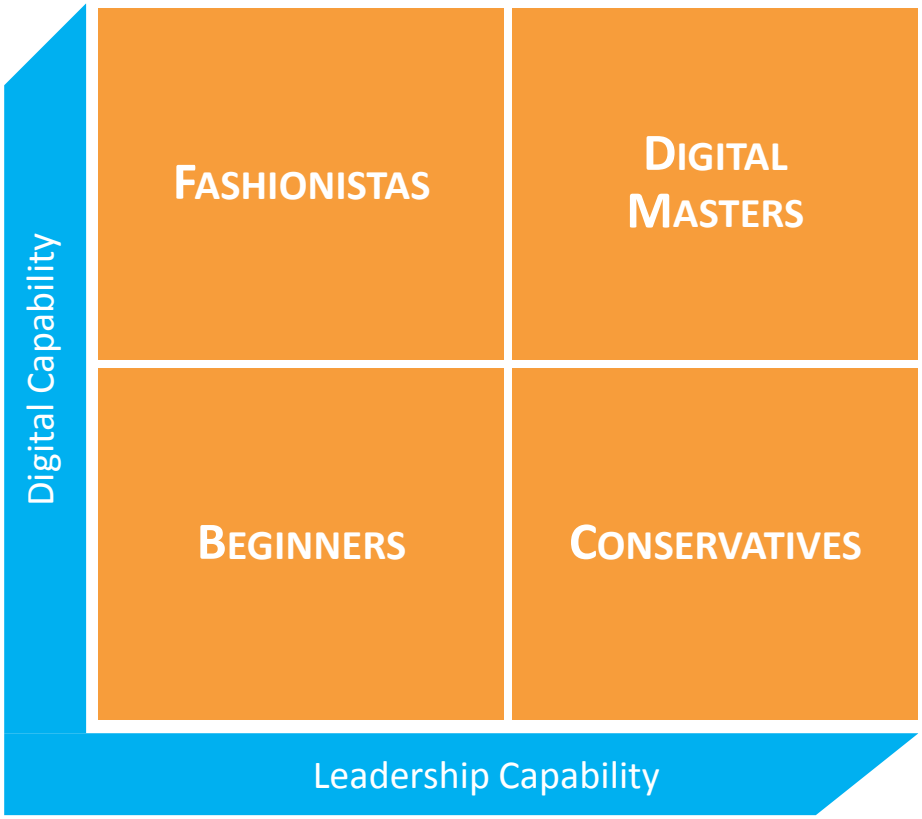
The DNA of Digital Masters



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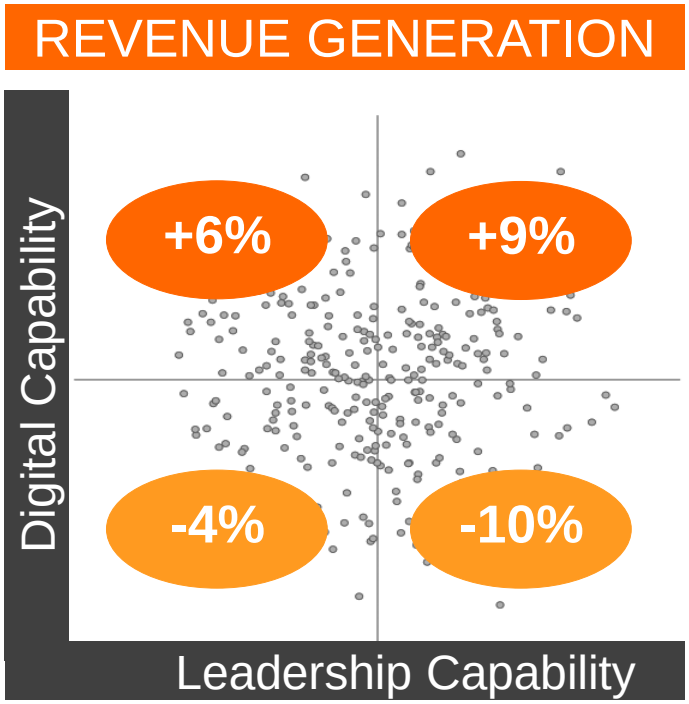
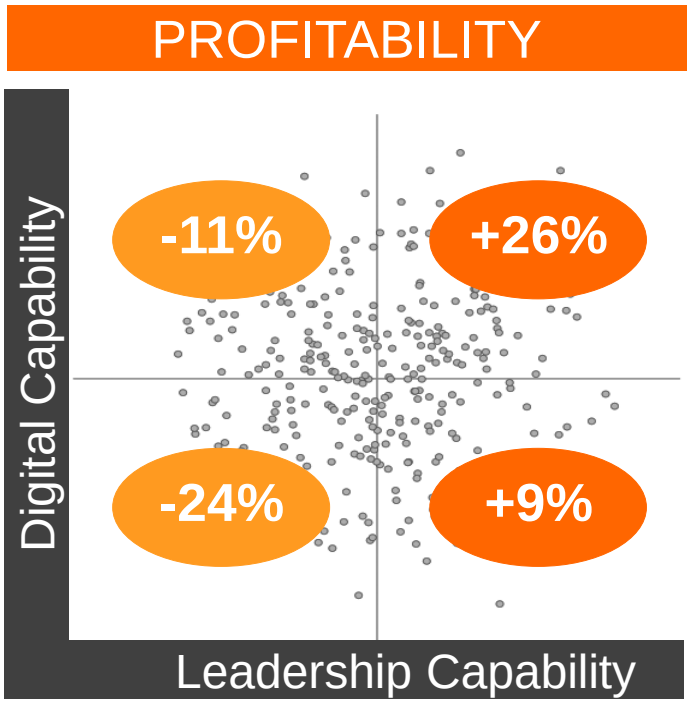
Digital Masters Outperform Their Peers





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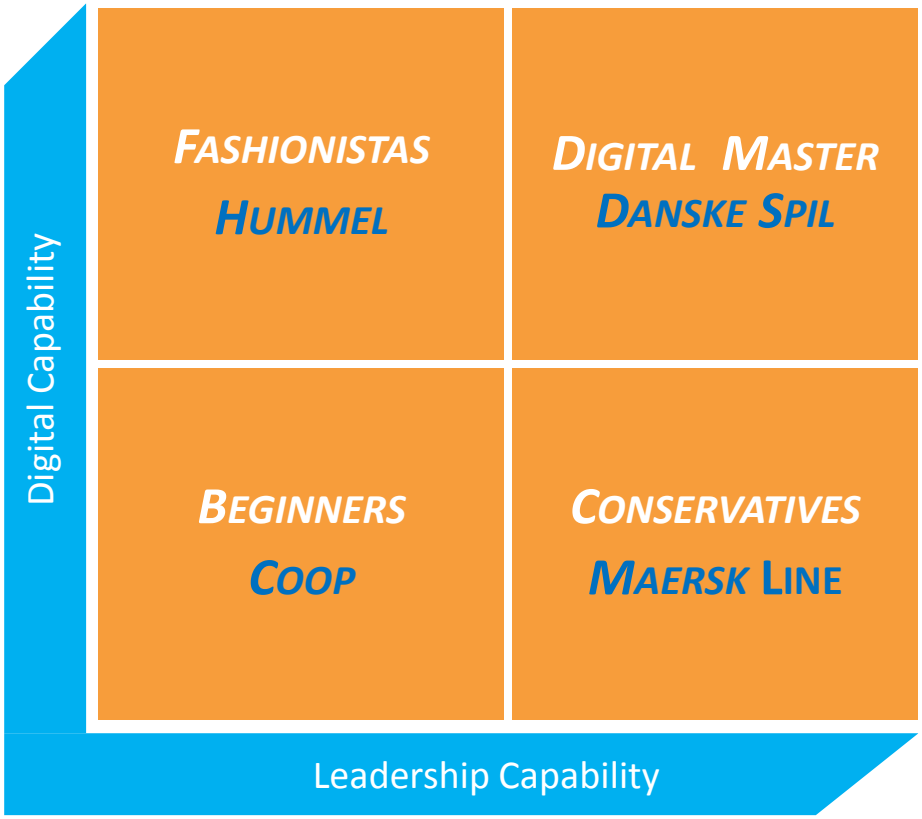
Note: Chart shows average 2012 performance difference for firms in each quadrant vs. average of all large public firms in the same industry for the 184 publicly-traded companies in our sample.

The DNA of Digital Masters

Innovation/Digitalisation

Keeping the lights on



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Digitalization and IT governance in keeping the lights on companies (Coop and Maersk Line)

Bogazici University
Department of Management Information Systems 10th May 2017

Beginner
IT Governance challenge in COOP

Coop – a Group of strong brands

Largest retailer of fast moving consumer goods in Denmark.

40,000 employees and a turnover of $ 5 billion

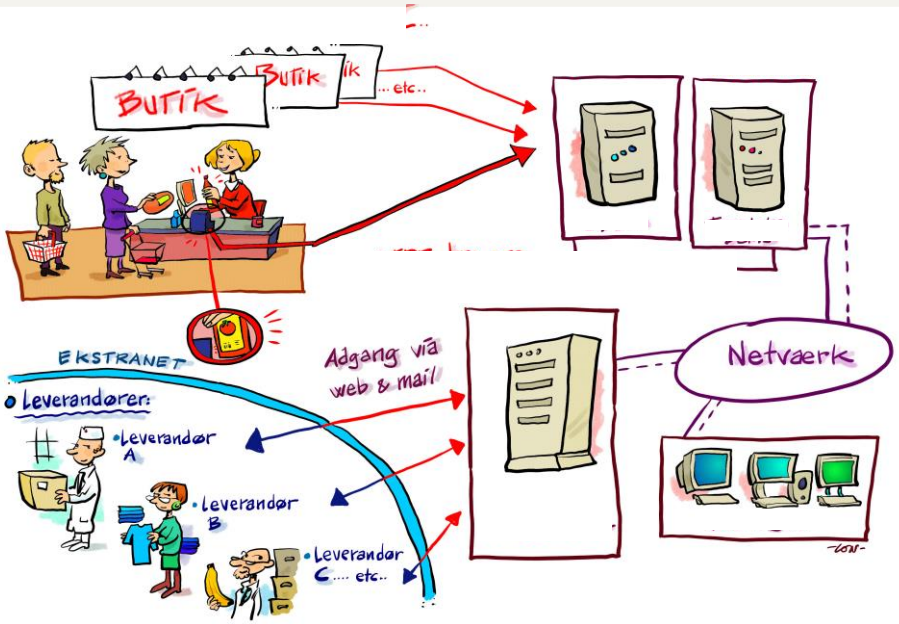
Coop Danmark A/S owned by 1.3 million members

Irmatorvet.dk

“A couple of snapshots” in infrastructure

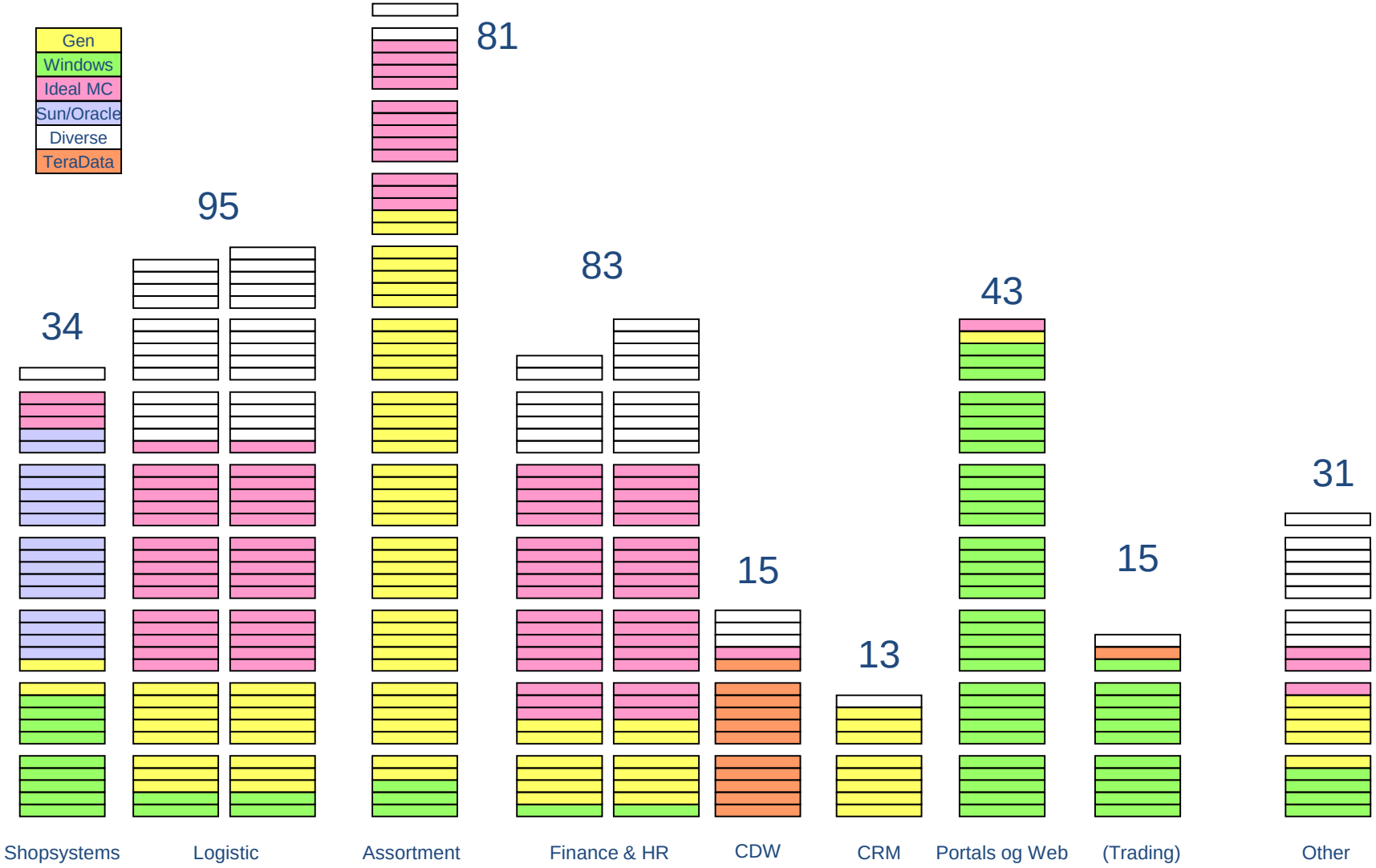
Coop IT undertakes operation and development of Coop’s IT systems

- Round-the-clock operation 365 days a year
- Helpdesk for stores, warehouses and Head office
- Business Intelligence: DataWarehouse (all goods – all stores – every day)
- EDI with over 900 suppliers
- Webshops: Coop.dk and Irma.dk
- Store, salary, accounting, logistics, HR, CRM and goods systems
- Telephone system and network

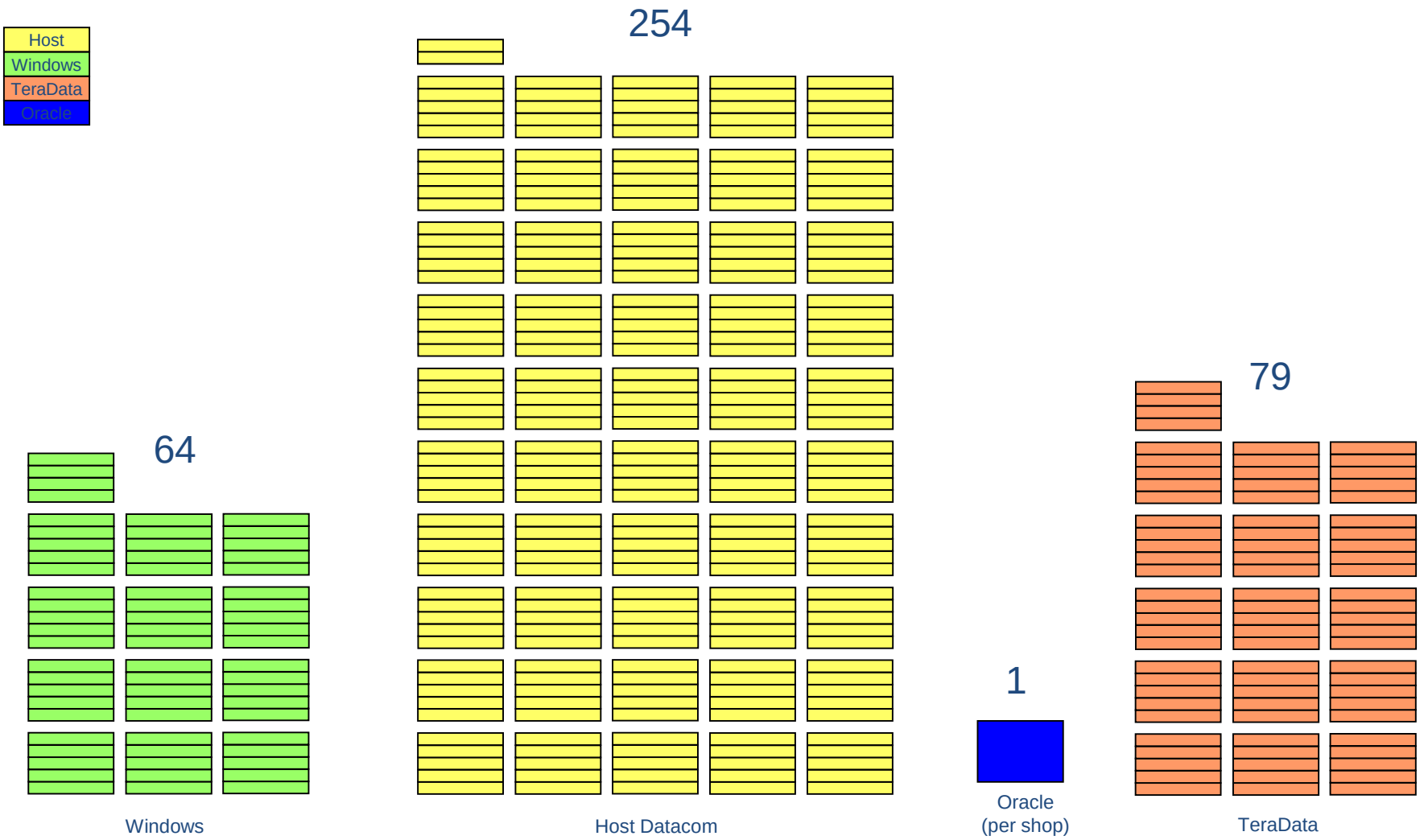


Coop IT		
140 employees	1,200 stores 8 distribution centers Head Office	>5,000 POS-terminals >5,000 PCs >2,000 servers

410+ application platforms and components



398 data models/databases

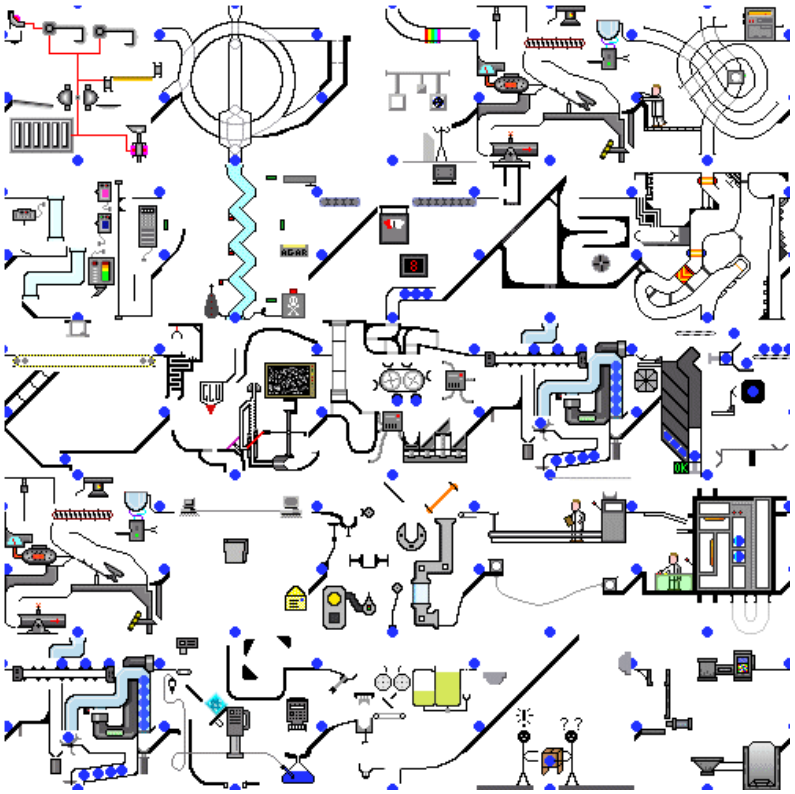


Technology landscape

System landscape ….

… more then 55.000 software programs and objects

… and too many different technologies



Strategy 615
… the goal and ambition

Coop IT will delivery 6 times the business value per dollar spent on operating the IT landscape as well as delivering a 100% stabile IT operation in 2015

and

Coop IT will deliver on the business needs of Coop with readiness, meet expectation and keep our promises on time – every time!

… the reality and consequences

To establish the infrastructure, COOP needs to invest $ 300 million – more than profit in the last five years together

CIO René Munk-Nissen confronted CEO Peter Høgsted with this requirement in December of 2015 – otherwise he could not take the responsibility

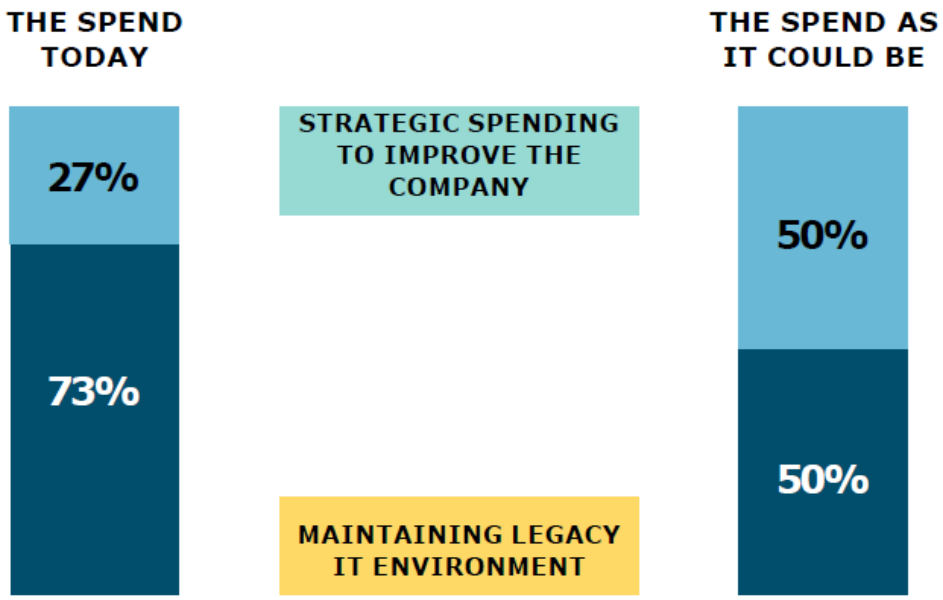
On 3rd December 2015 René drove home from COOP for the last time

In one of the shops in Kvickly last Saturday, it took 2 minutes to serve me

Conservative

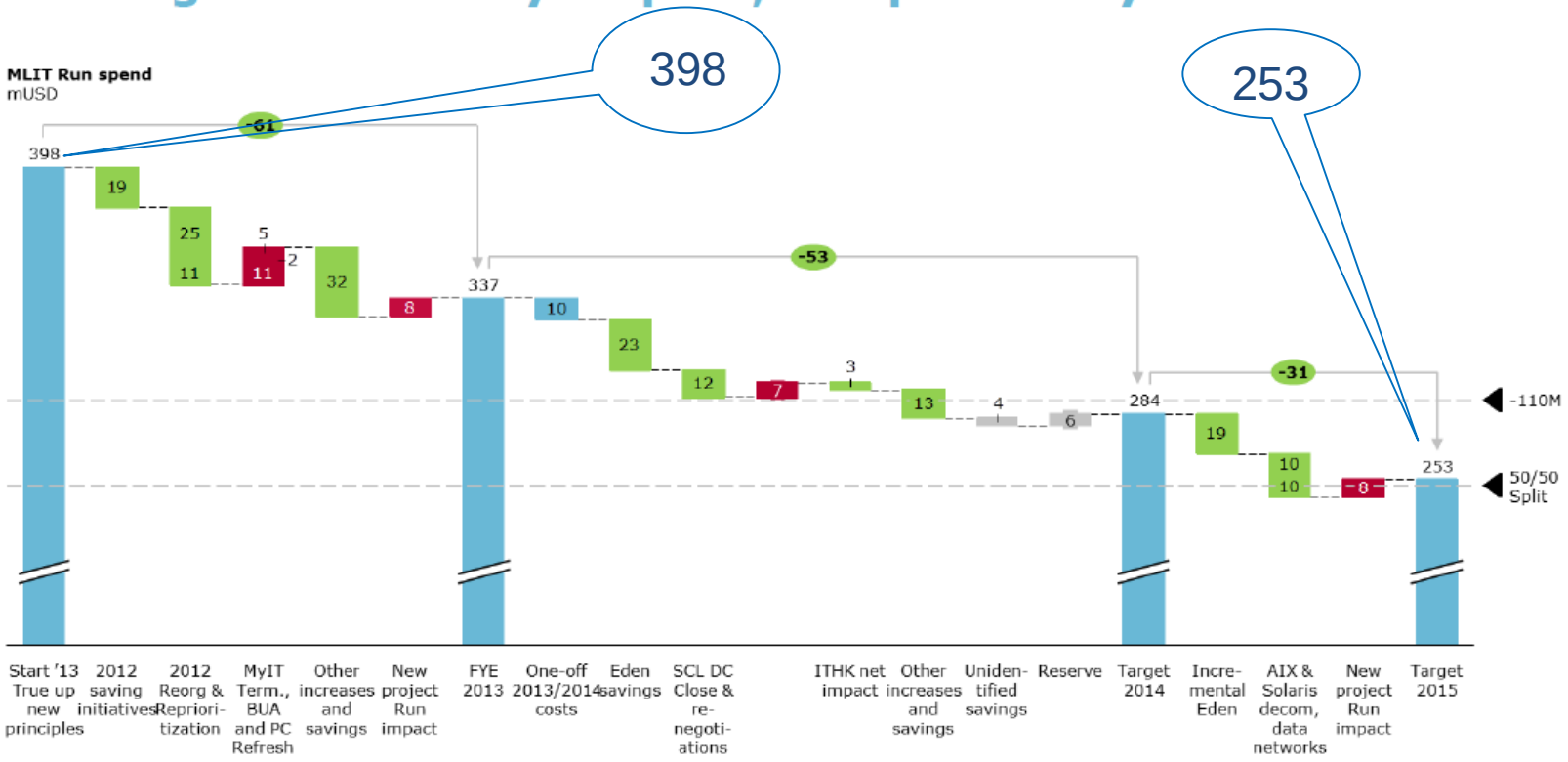
IT governance challenge in Maersk

Where are you placing your bets



MAERSK LINE

At Maersk, this is actionable, resulting in more money to spend, but spent wisely?



At the same time achieving almost a 50/50 split between Run and Build

MAERSK LINE

Digitalization and IT governance in leading digital companies (Hummel and Danske Spil)

Bogazici University
Department of Management Information Systems 10th May 2017

Fasionista

IT governance challenge in Hummel

CHANGE *THE* WORLD
THROUGH SPORT

hummel

OBOV

One Brand One Voice

Bogazici University
Department of Management Information Systems 10th May 2017

Historical development

Ecommerce Concerns
& Strategic Priorities

Aligning the Online Branding Globally:
-Global website
-Global Facebook page
-Digital Communication Matrix
-Digital governance

Building the Omnichannel Customer Community:
-Integrated Global Campaign Calendar
-Hummel "Happy Moments"
-Sport Sponsorship Mobile game
-Social outreach through Hummel Karma

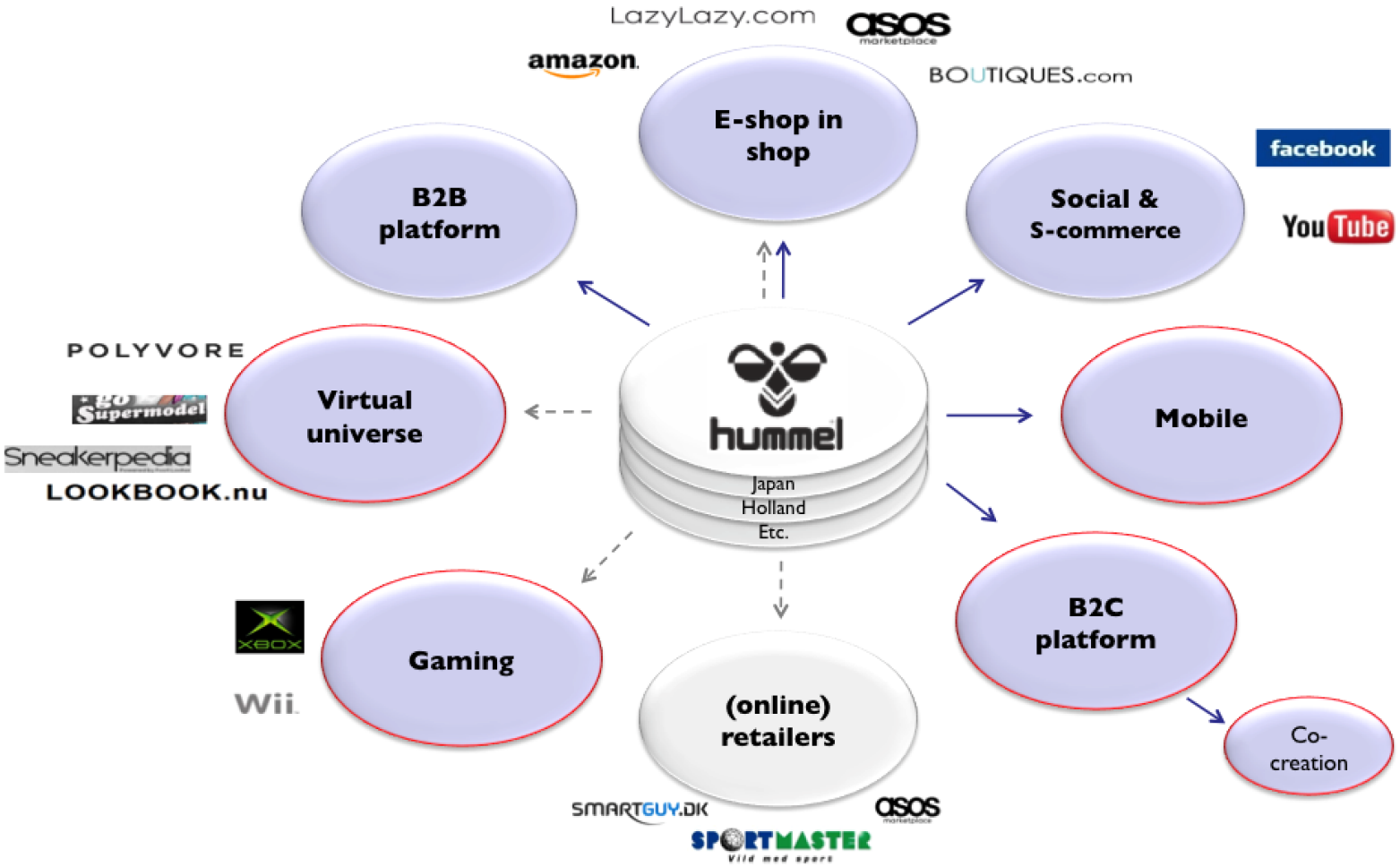
2010 **2011** **2012** **2013** **2014**

Head of Digital
hired

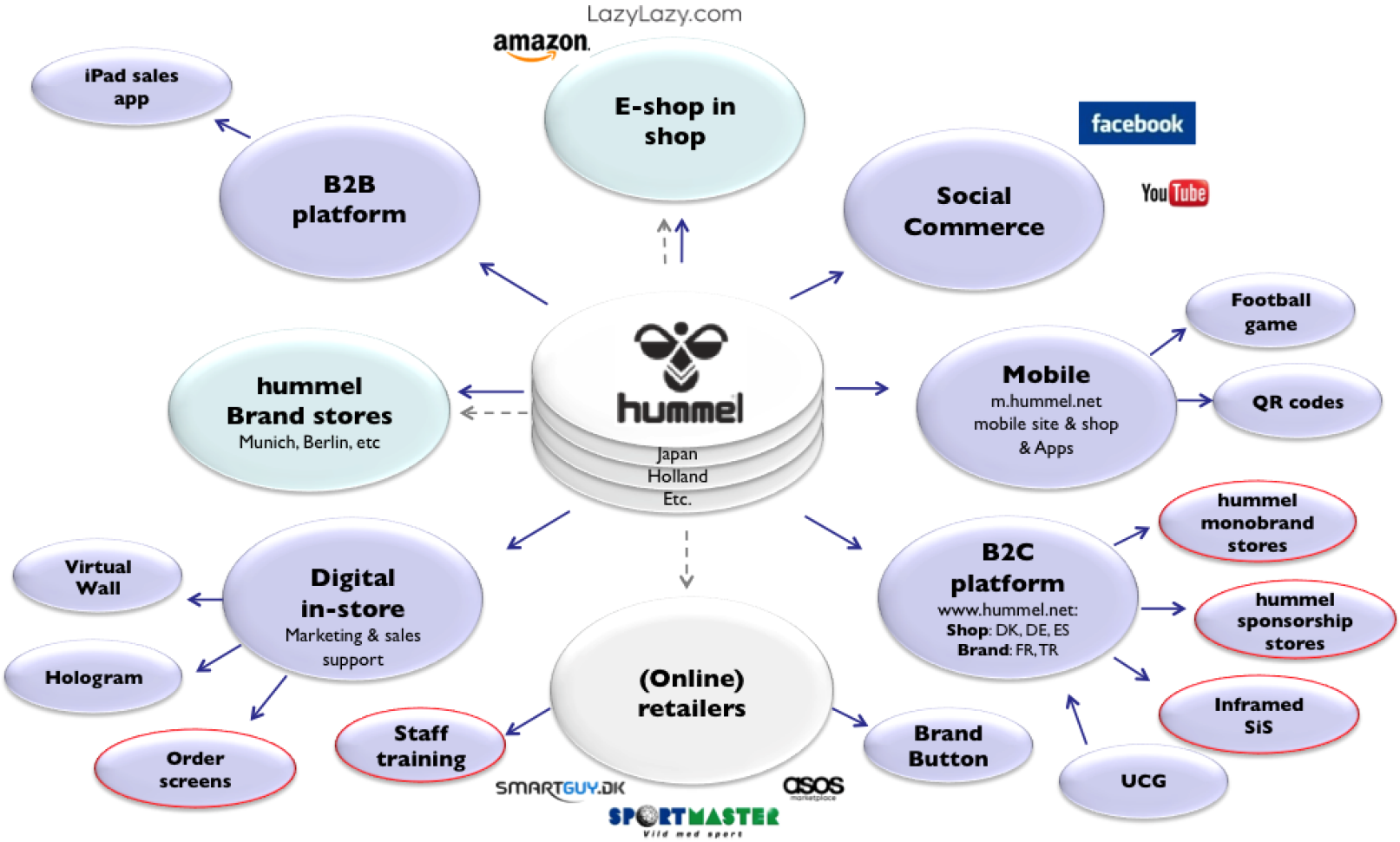
Enhancing the Ecommerce
Support for B2B Partners:
-B2B ecommerce platform
-B2C ecommerce integration
-Brand Button
-Store Finder

Complementing the Physical
Store Experience:
-Shop-in-Shop
-Holograms & Virtual Walls
-QR codes
-Mobile Instagram uploads
-Monobrand stores

Hummel multichannel strategy 2013



Hummel omnichannel strategy 2015



What happened?

- In summer of 2015, we celebrated the PhD graduation of Rina Hansen, and the CEO of Hummel Søren Skriver asked me to find a good Turkish PhD student – I did, but he did not follow follow up??
- In November of 2015, Rina Hansen left Hummel, because the new marketing director did not appreciate her work, and wanted to get 'back to basics' (focus on the ERP-system)
- In spring of 2016, the CEO Søren Skriver, who's main strategy was to develop and grow the Türkish market, was fired for theft and embezzlement. He got ten minutes to leave his desk
- In April of 2017, Hummel has got a new CEO, who might get Hummel back on the digital track

Digital master

IT governance challenge Danske Spil

Danske Spil

1. How many of you thought that Danske Spil would survive loosing the monopoly in 2012?
2. How important is IT for Danske Spil?

Udbydes af Danske Licens Spil A/S
Oddset TIPS POKER CASINO ZEZAM

Udbydes af Danske Lotteri Spil A/S
LOTTO EUROJACKPOT QUICK keno Bingo Dantoto

Tilmeld dig PLUS abonnement
og vær automatisk med hver uge

NYHEDER

oddset 4. marts 20:00

Mere pokalfodbold

Torsdag aften afvikles de to sidste kvartfinaler i DBU Pokalen, når der spilles fodbold på begge sider af Storebælt

Læs hele nyheden

Mere pokalfodbold

Magnussen får svært ve

Lotto-millionær: "Jeg

Vestjyde vinder første

Danske Spil udbetaler

Keno-millionær: "Hvad

Jørgen Hemmingsen løbe

PULJER OG JACKPOT

EKSTRACHANCEN

A few facts

- Danske Spil was owned by the state
- They had about 80% of market due to its monopoly (many gamers were playing illegally on the Internet)
- Total staff was around 250
- 70 IT staff for development and keeping the lights on

Annual statement

- Danske Spil main figures (USD - $):

– Gross revenue		700
– State taxes	100	
– Dealer fees	100	
– Other fees	30	
– Administration	130	360
– Profit		340
– Tax on profit		80
– Result		260

- Societal profit of > 50% = 440

Perception of CIO and IT - before

Danske Spil IT governance insights

- Søren Weeke could not extend or further develop existing systems to meet new demands
- They needed a new platform, a new digital strategy, and a heap of new digital games, some of which could take 500 person yers to develop! How?
- Had to start with needs defined by marketing and sales – Market and business basically needed that newest and most exciting games – the best in the world! How??
- Hybrid model with sourcing games from global leaders and make these available on white labeling basis to Danish customers

Conclusion

Birds do it .. (Danfoss)

Niels Bjørn Christiansen, CEO of Danfoss, the second largest industrial group in Denmark, decided not to for achieving record profit. Instead, a large part of the surplus is invested in bringing Danfoss into digital leaderhip.

Berlingske Business 25th august 2016 at 16.40

Bee's do it (Rockwoll)

Rockwoll (a 100 year old and very traditional manufacturer of insulation material – yawn!) have just completed a 5 month program on digitalization and innovation (especially focusing on customer value) with 'Digital Ventures' in LA. Five employees including CIO participated.

All members of the board of directors (including CEO Jens Birgersson) spent 7 full days in US

Even educated fleas do it (NOVO)

"Novo has to go through a digital transformation. However, I don't think, I would be the best person to lead Novo through that digital transformation"

Lars Rebien
CEO Novo until end of 2016
Statement at Management Conference August 2016

Lars Rebien was chosen as the
worlds best performing
CEO in 2015 and 2016
Harvard Business Review

But left the role of CEO at end of 2016 to
Lars Fruergaard Jorgensen (former CIO)

Conclusion

- Everybody needs a **digitalization strategy**
- Extremely large **difference** between organizations
- Do we have the adequate **digital technical capabilities** to fence off disruption from others?
- Do we have the adequate **digital leadership** capabilities to fence off disruption from others?
- Do we have the capabilities to **disrupt others**?
- How do we **provide better value** to our customers and how do we expropriate this value