

# The Digital Triple Jump Facing Up to the Challenges of Digital Transformation

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### SMART INDUSTRY

powered by AVIVET\*

Silica

The IoT Business Magazine

**GOOGLE** 

7,50 EUR | 2017

Tim Cole
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Marum kein Untern
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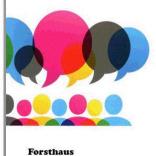
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Cole / Ossi Urchs

#### Digital ghtenment Now!

Internet is making us better and and in the process changing just out everything around us!



### What do YOU think?

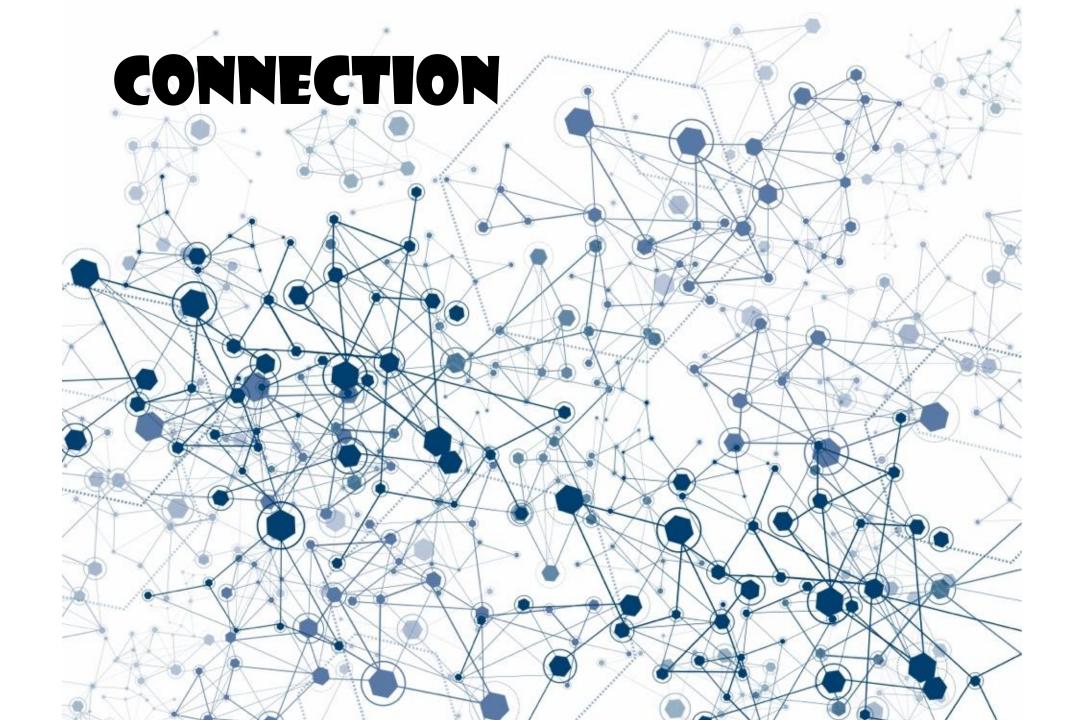




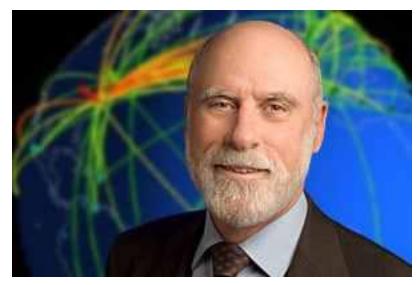
# Teally big trends







### "Connectivity means change!"

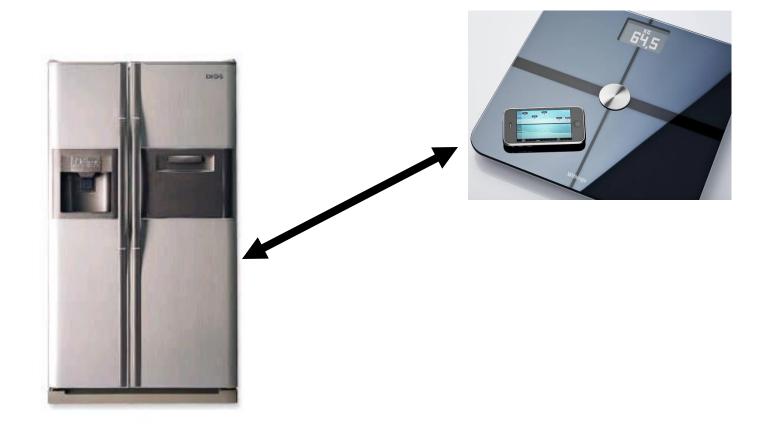


Vinton Cerf

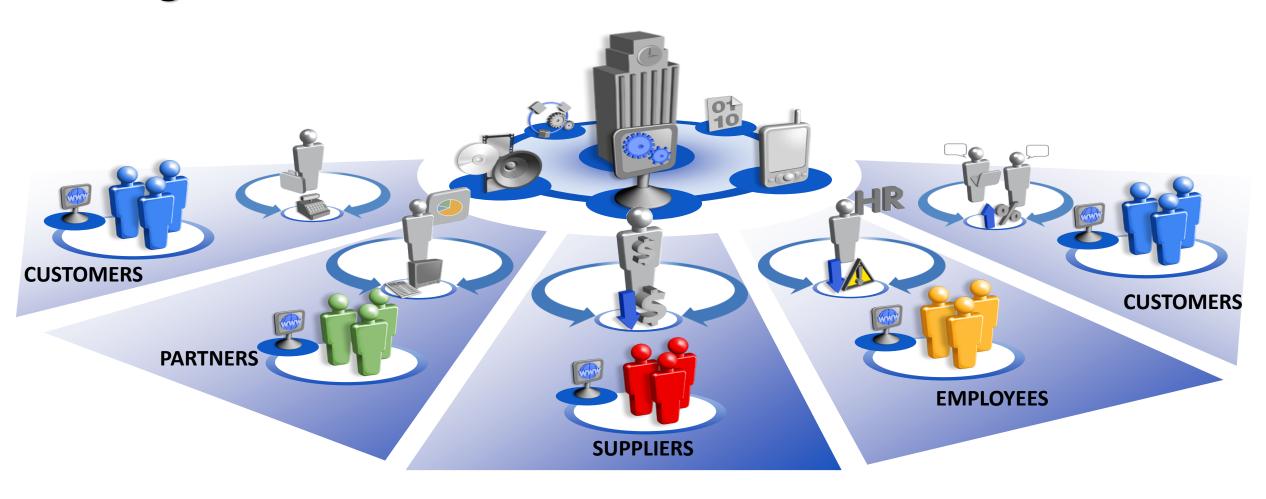




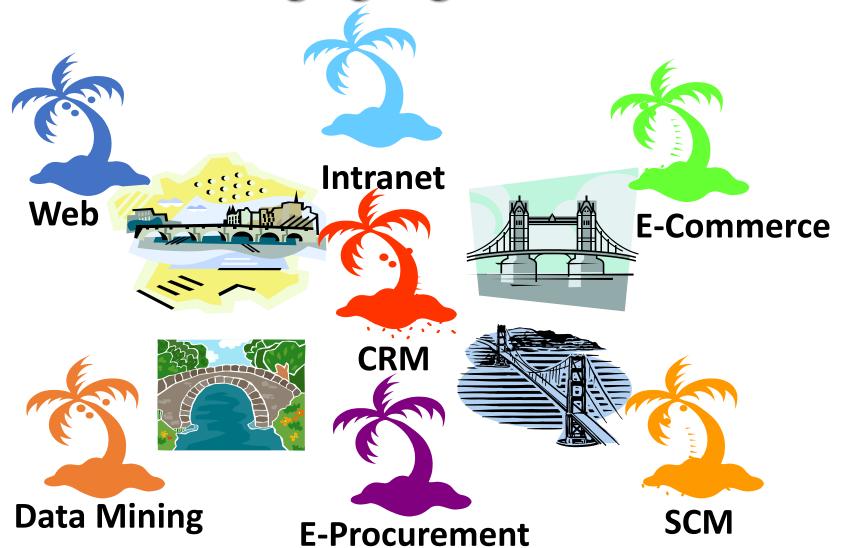
### What happens?

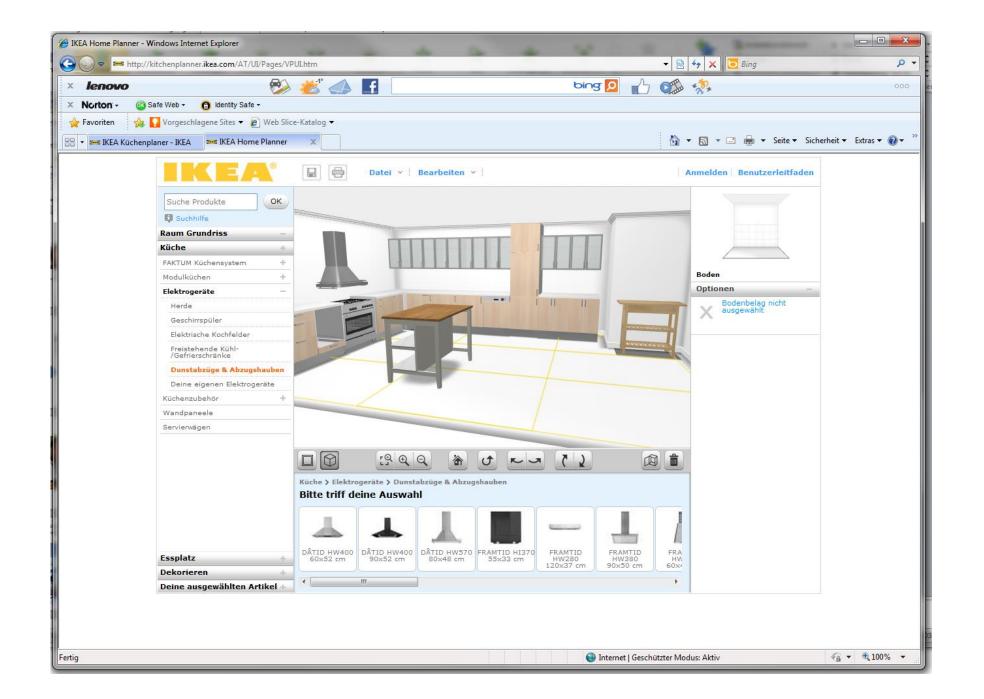


## "Right Information, Right Place, Right Time"



### Work in progress: Bridging Digital Islands







### The eternal dream of the "paperless office"





1.200 pieces of paper per day and employee



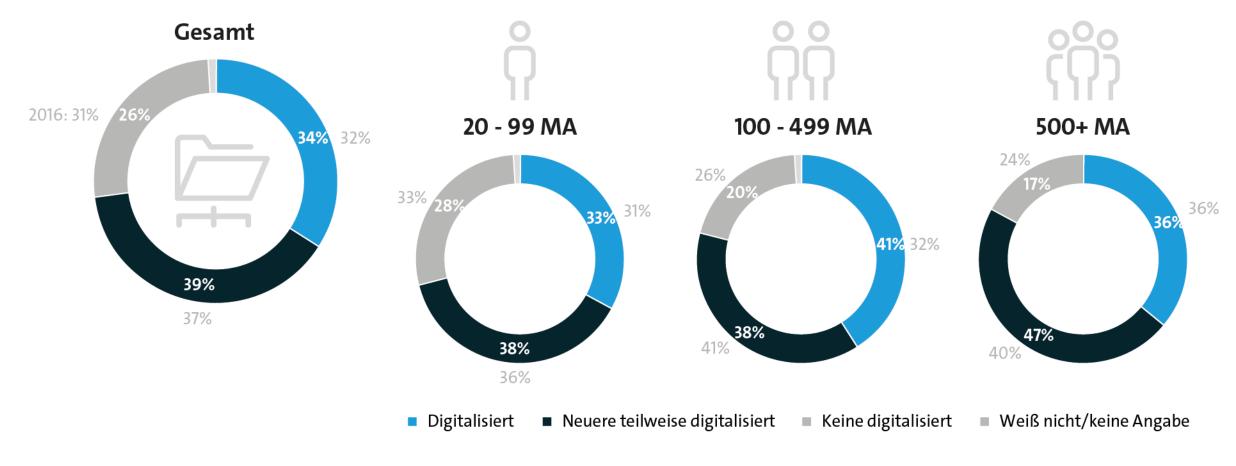
Brinda Dalal "Garbologist" Xerox Labs Canada



44,5% are recycled









Basis: Unternehmen ab 20 Mitarbeiter (2016: n=1.108; 2018: n=1.106) | Abweichungen von 100 Prozent sind rundungsbedingt Ouelle: Bitkom Research

### Kill E-Mail!



### Kill E-Mail!



**Thierry Breton** 

"E-Mails have become a major nuisance factor"



#### Overview

#### blueKiwi ZEN

#### **Core Features**

**Activity Streams** 

**Teamwork Spaces** 

**Blogging** 

Messaging

**Content Sharing** 

**Admin Tools** 

**Analytics** 

Security

Mobility

Collaboration

Integration

#### **Core Features**

#### Activity streams

Stay up-to-date. Track what's happening across your enterprise social network or communities in real-time. Your activity stream is always up-to-date with the most recent posts, comments or other contributions. 
More

#### Teamwork spaces

Create a public or private workspace or community for an organisational group, department or project, enabling cross functional sharing of information. At blueKiwi, we call them spaces.

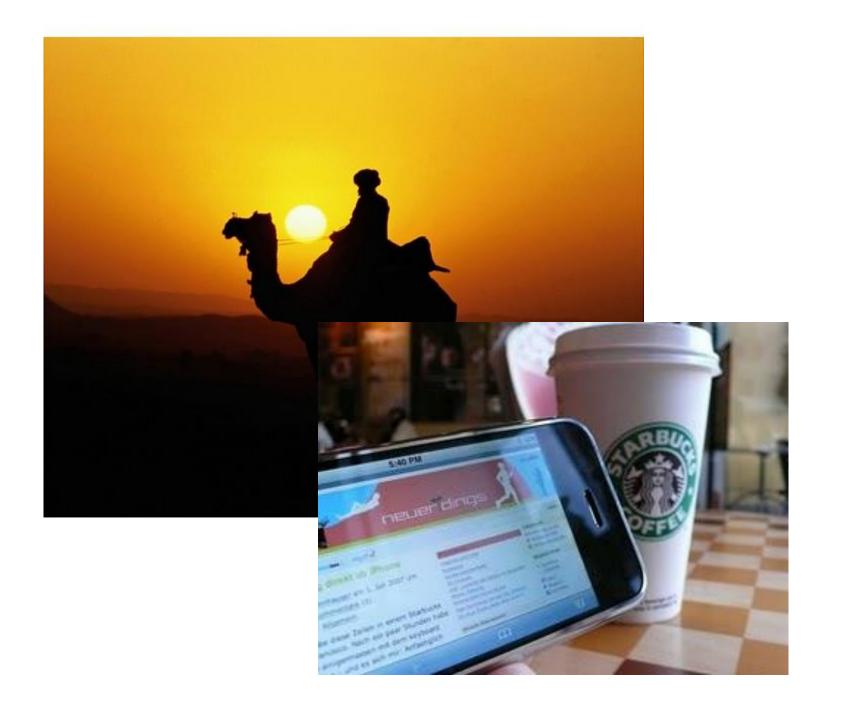
More

#### **Enterprise blogging**

Blogging is a way to express yourself in an interactive forum by creating a simple post containing your thoughts, opinions, or point of view on a specific topic. A blog post also allows readers to respond, stimulating discussions, suggestions, and new ideas. With blueKiwi, you can create and share your blog posts, as well as invite people to comment, enhance it with attachments, photos, or polls. More

### MOBILITY





### DIGITALIZATION

### CONNECTIVITY

MOBILITY

### **Digital Transformation**

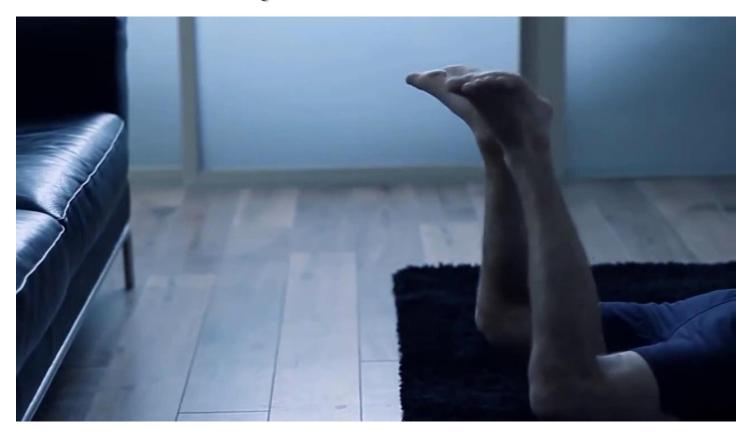


### Seeing the world through other eyes





### There's only one world!



### Disruption!





The world's most valuable retailer...
... has no inventory

UBER

The world's largest taxi company...
... owns no fleet



The world's most popular media owner...
... creates no content



The world's largest accommodation provider... ... owns no real estate

Source: http://techcrunch.com/2015/03/03/in-the-age-of-disintermediation-the-battle-is-all-for-the-customer-interface/

### "Kollmann's Law"



Prof. Tobias Kollmann Uni Duisburg-Essen

Which smart young kids in Silicon Valley with a great idea and loads of venture capital are thinking right now how to put you out of business?

### Would you wear Google Lens implants?



### DIGITALIZATION

### CONNECTIVITY

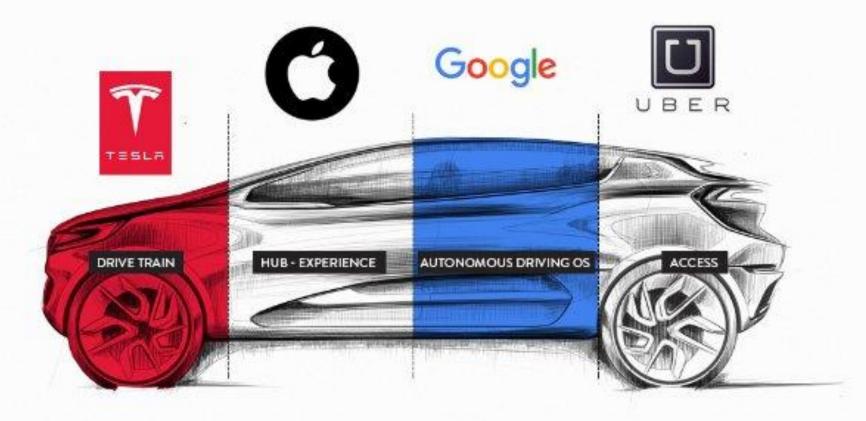
MOBILITY

### **Digital Transformation**



## Disruption!





#### VALUE CHAIN DISRUPTION

#### THIS IS YOUR CAR IN 2020

CAR SKETCH BY PRATHYUSH DEVADAS PRATHYUSHDEVADAS, WORDPRESS, COM



The world's most valuable retailer...
... has no inventory

UBER

The world's largest taxi company...
... owns no fleet



The world's most popular media owner...
... creates no content



The world's largest accommodation provider... ... owns no real estate

Source: http://techcrunch.com/2015/03/03/in-the-age-of-disintermediation-the-battle-is-all-for-the-customer-interface/

#### "Creative destruction"



Joseph Schumpeter (1883-1950)

#### "From creative disorder arise progress and growth."



Joseph Schumpeter (1883-1950)

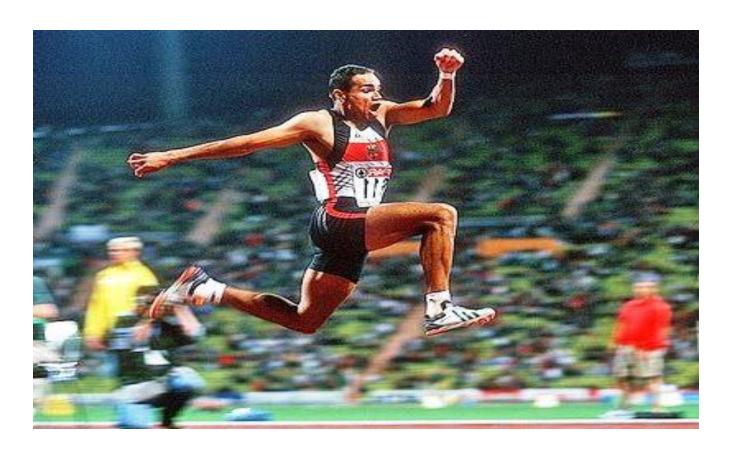
## "Kollmann's Law"



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## Digital triple jump



analog → digital → vernetzt

## Marketing 1.0



#### Marketing 2.0



## Marketing 3.0

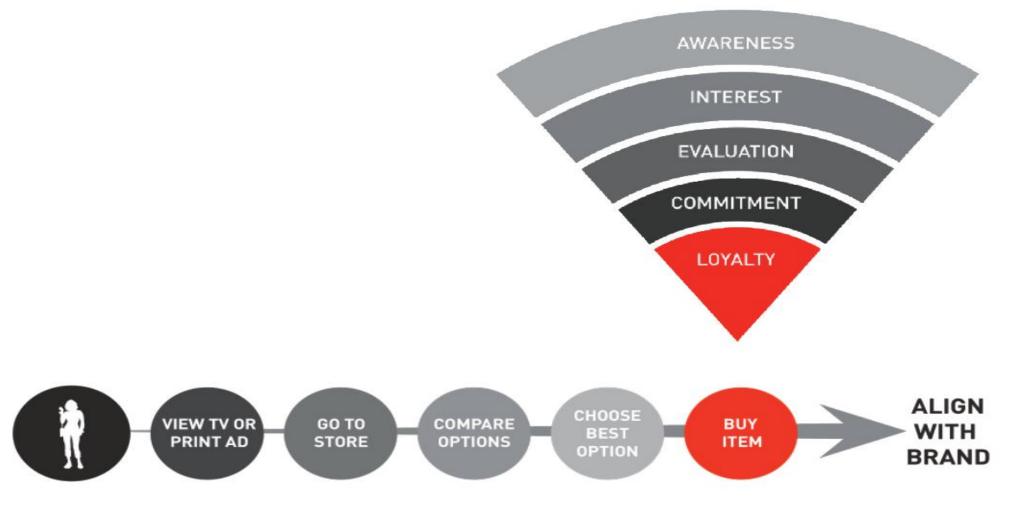




## **Inbound Marketing**



### Shopping 1.0

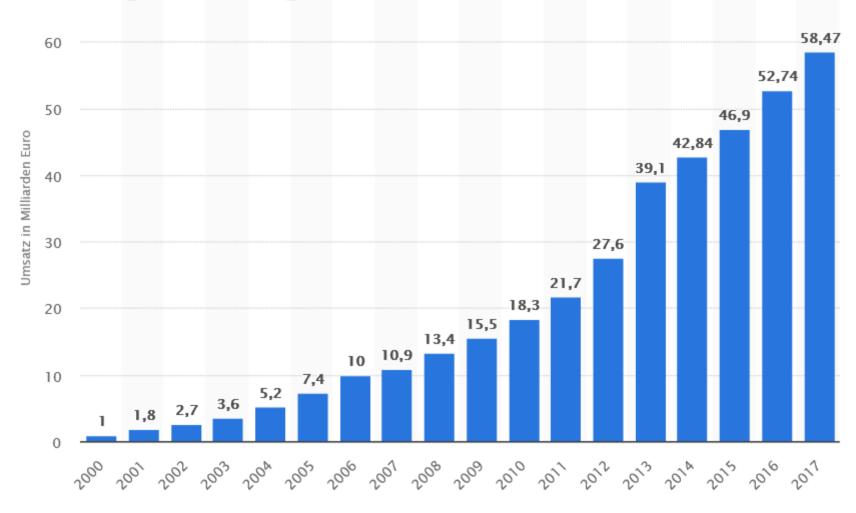


Quelle: SapientNitro

## Shopping 2.0



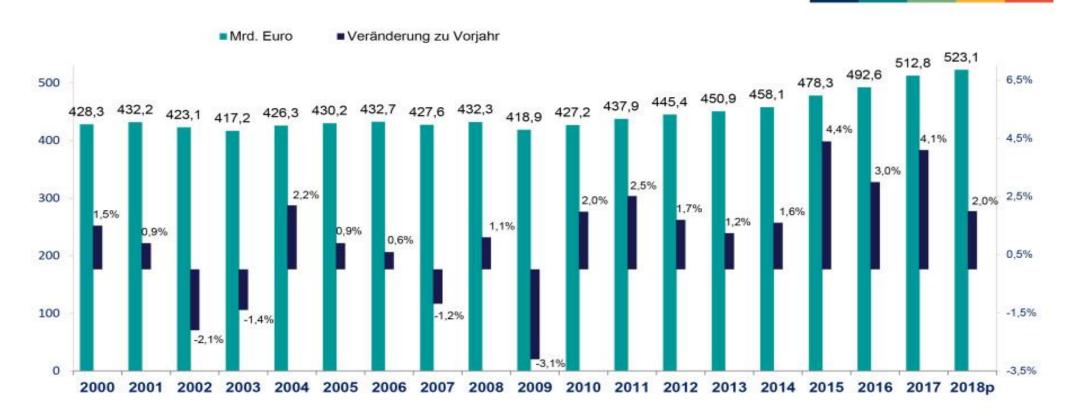
## Online is growing fast!



### Offline is growing slowly

Einzelhandelsumsatz Prognose 2018: +2 Prozent

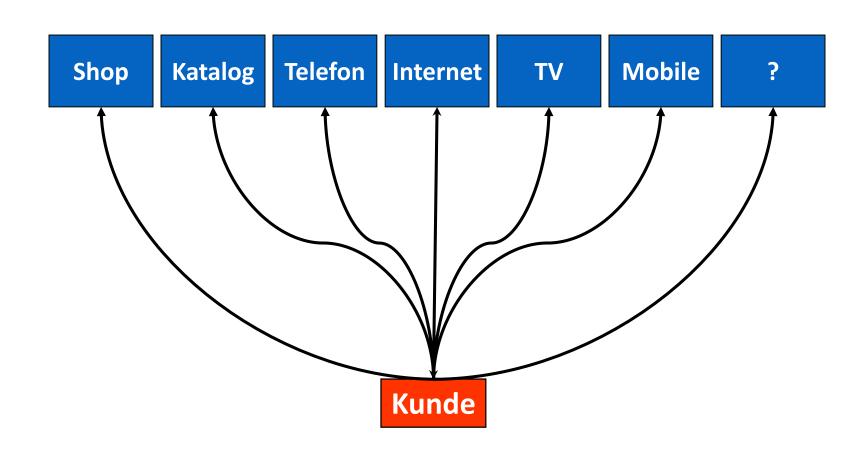




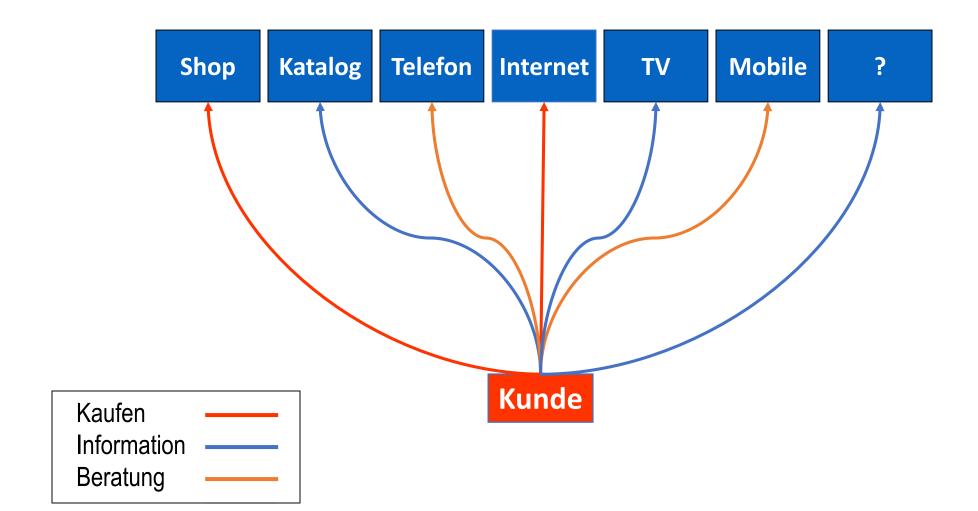
## Shopping 3.0



#### Channel competition

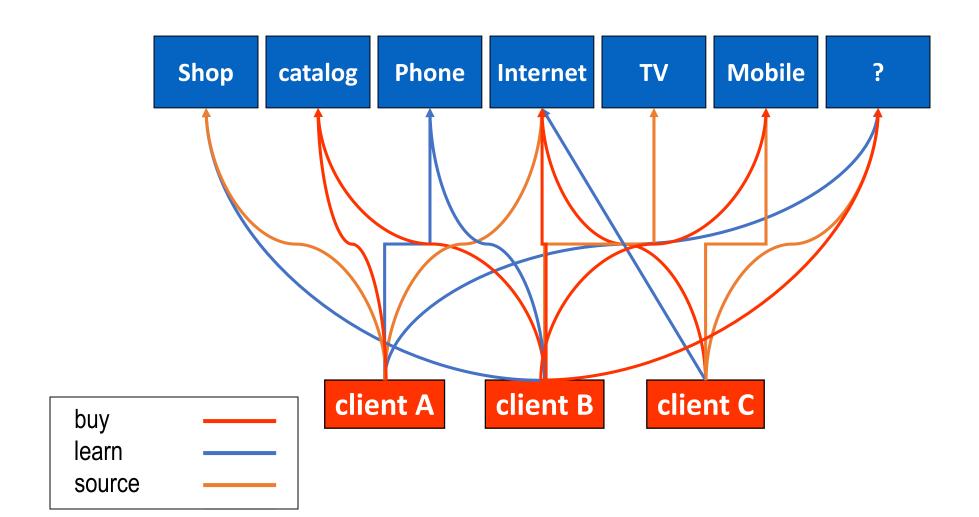


#### Multichannel as a way forward



#### Cutomer empowerment

Choice, transparency, interaction

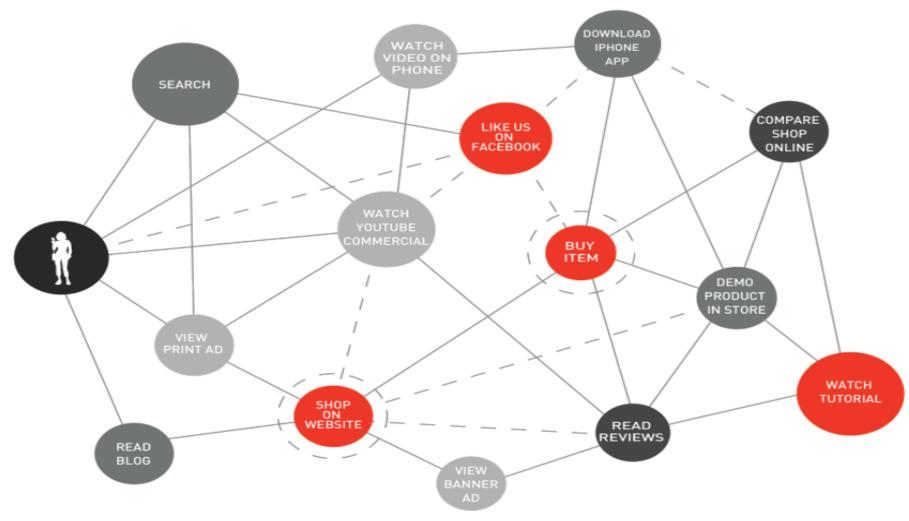




Thesis Nr. 1

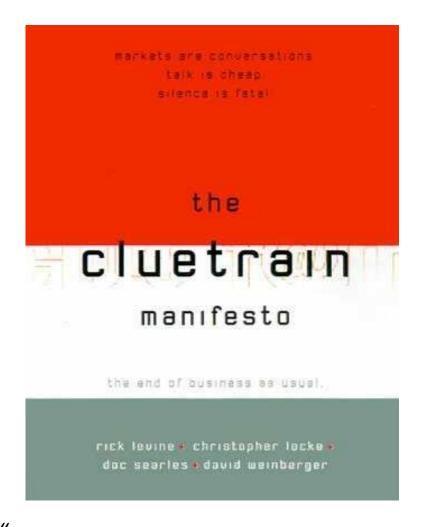
In the Age of the Internet, every customer is a target group!

## Shopping 3.0



Quelle: SapientNitro

#### "Markets are conversations"

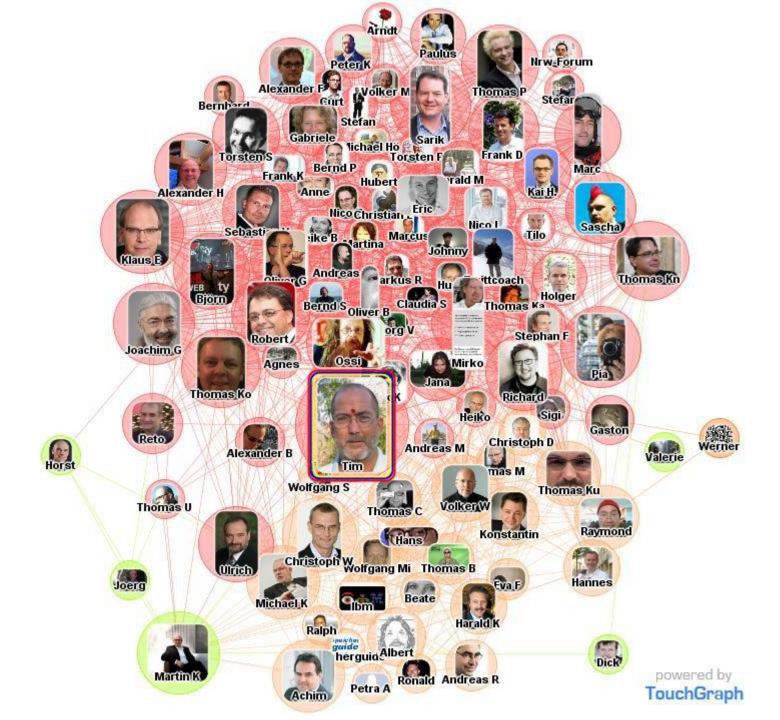


Qelle: "The Cluetrain Manifesto, 1999"

#### Social Media Landscape



# Everybody knows everybody



#### How good do we listen to our customers?



## Logistics 1.0



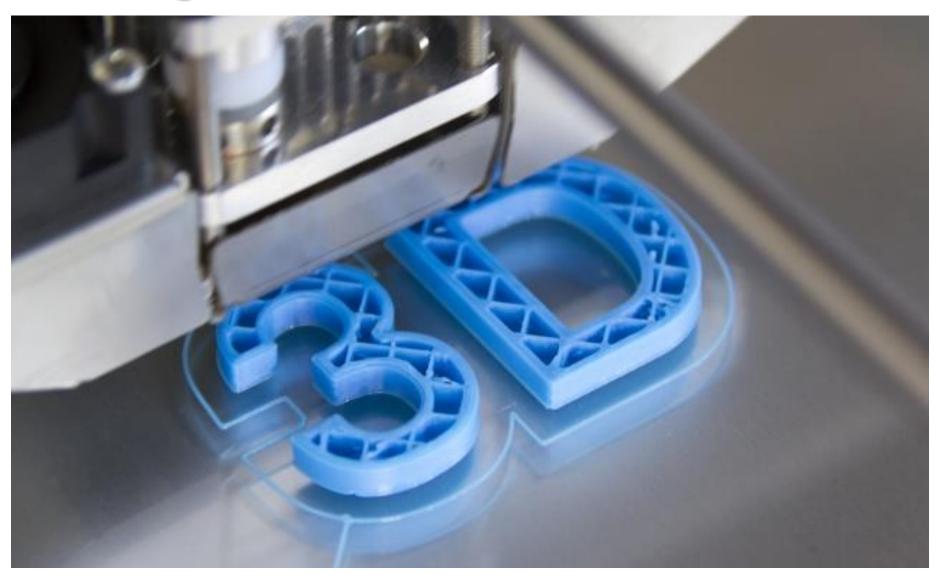
## Logistics 2.0



## Logistik 3.0: Finding new ways to reach the customer



## Digitale Logistik









## Digital delivery



"In future we won't sell stuff any more, we'll sell 3D data so people can print their own stuff"

**Nektarios Bakakis** 

#### **Printed Parts**



Boeing uses 3D titanium parts printed on site for the new 777 Dreamliner

#### **Printed Homes**



### **Printed homes**

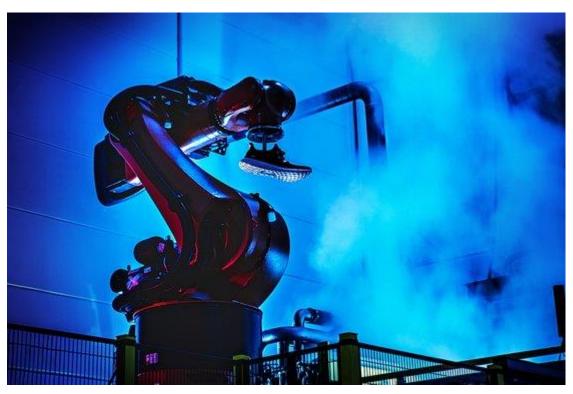


### **Bringing Jobs Back**

Donald Trump promised to bring back Jobs but he's still dead



### **Bringing Jobs Back**



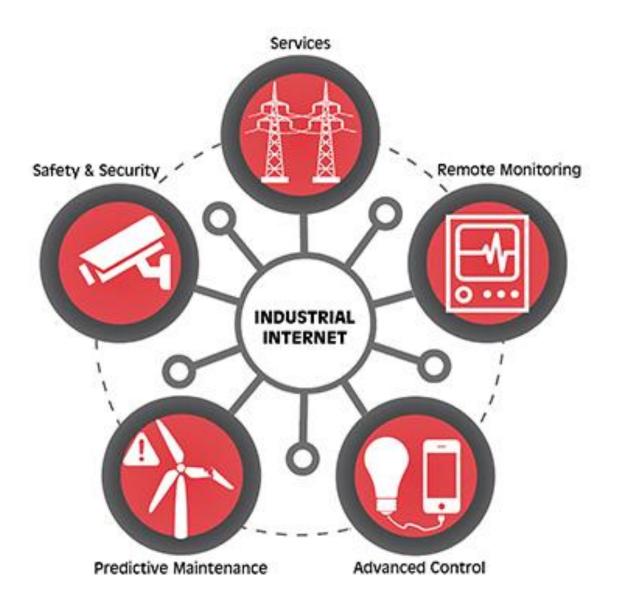
Adidas Speed Factory



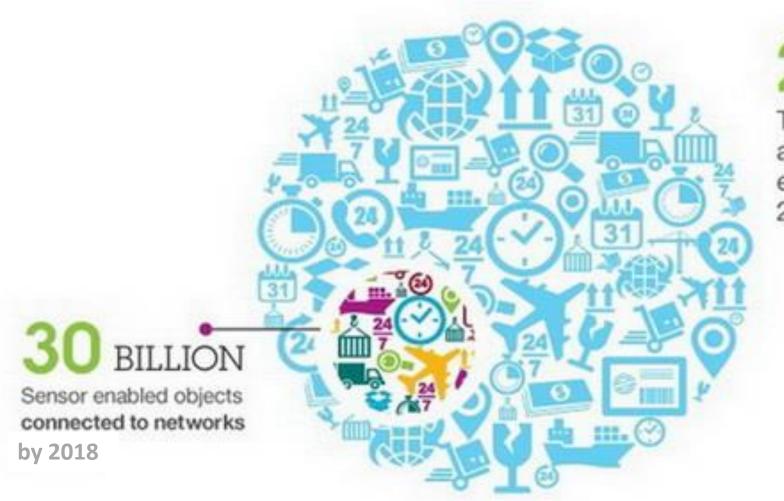
### Let me count the ways...



# INDUSTRIAL INTERNET **OF THINGS**



### Sensors – the eyes and ears of IoT



212 BILLION

Total number of available sensor enabled objects by 2020

> 212B is 28x the total population of the world





# PREDICT PREVENT

WITH INVESTMENT GENERALLY LIMITED FOR MODERNISING T&D EQUIPMENT, UTILITIES HAVE TO SQUEEZE MORE POWER FROM AGING GRIDS WHILE THE NEED FOR STEADY QUALITY GROWS.

MITCH BEEDIE EXPLAINS HOW PREDICTIVE MAINTENANCE CAN HELP SUPPLIERS TO PREVENT PROBLEMS IN TRANSMISSION



### **Predictive Analysis**





ประเทรร์ในเรื่อน

#### TECHNOLOGY

#### Microsoft Finds Cancer Clues in Search Queries

By JOHN MARKOFF JUNE 7, 2016

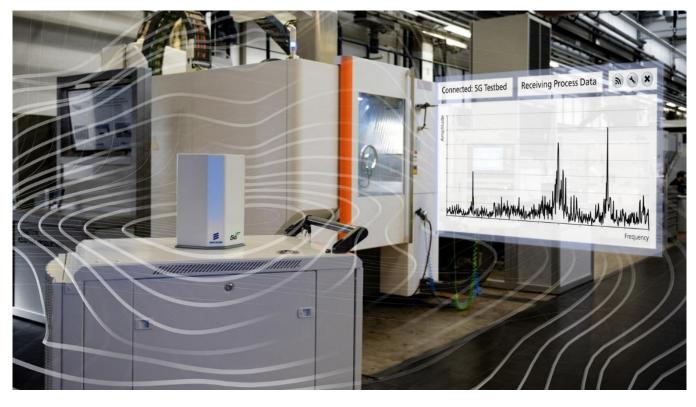


Dr. Eric Horvitz is one of the Microsoft researchers who conducted the study. Kevin P. Casey for The New York Times.





### **Prescriptive Analysis**



Fraunhofer IPT High Performance Networked Adaptive Production (Hannover Fair 2018)

# Do we use te latest technologies in our company?



# Das Digital Unternehmen braucht Wissensarbeiter!



"WILSON, WHAT EXACTLY IS A KNOWLEDGE WORKER AND DO WE HAVE ANY ON THE STAFF?"

Computing

Customer Service

Project Management

Teamwork

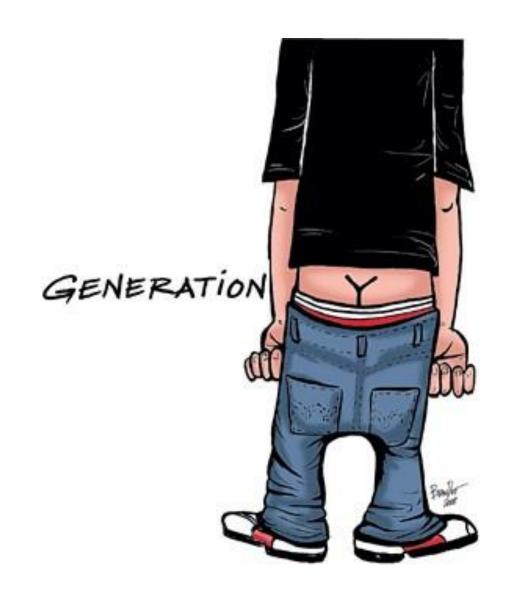
Knowledge Worker

Communication

Leadership

Problem Solving

In vielen Kompetenzenfelder zu Hause



1945 - 1960

"Baby Boomer"

1961-1980

"Generation X"

1981-1995

"Generation Y"



Bevölkerungskohorten

### Was will Generation Y?

2020: über 50% der Arbeitnehmer in Deutschland



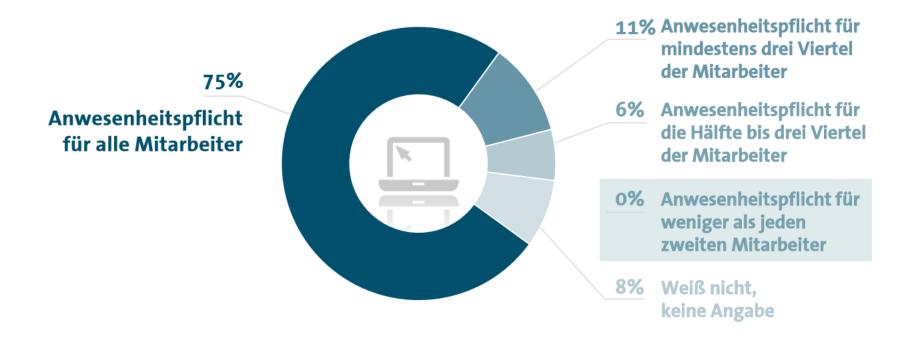
- 1. Herausfordernde Arbeit
- 2. Vergütung
- 3. Kollegiales Arbeitsumfeld
- 4. Arbeitsstandort in der Nähe des Wohnortes
- 5. Karrieremöglichkeit
- 6. Work-Life Balance
- 7. Weiterbildungs- und Entwicklungsmöglichkeiten

Quelle: Kienbaum-Studie "Was motiviert die Generation Y im Arbeitsleben?"

### **Generation Y Homeoffice** Sabbatical Elternzeit Flexible Arbeitszeiten **Karriere** Stress

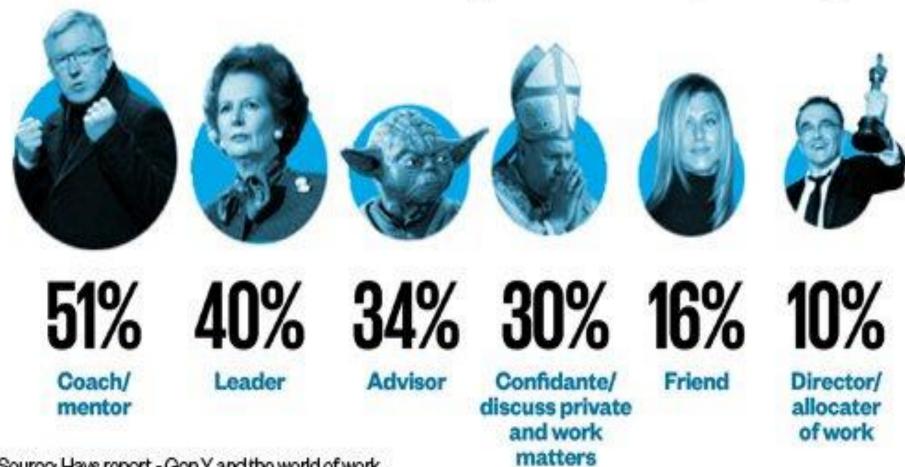
#### Büroarbeitsplatz mit Anwesenheitspflicht ist heute Standard

Wieviel Prozent Ihrer Mitarbeiter haben Anwesenheitspflicht und arbeiten an klassischen Büroarbeitsplätzen?

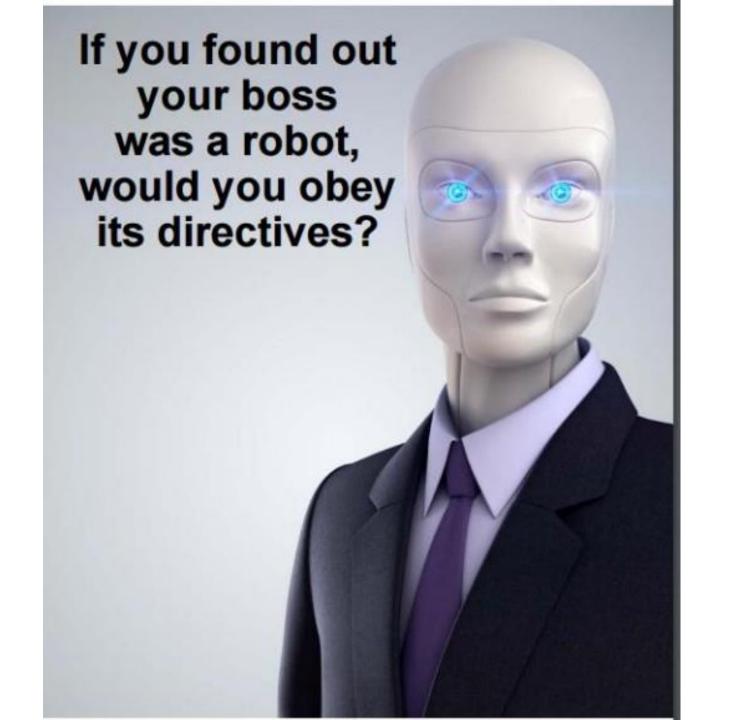




Gen Y's ideal boss Most pine for an Alex Ferguson style coach or mentor, while 40 per cent want a strong Thatcher-type leader



Source: Hays report - Gen Y and the world of work







### People Prefer Robot Bosses, Study Shows













Nina zthat the robots 'better understood them' and 'improved the efficiency

of the team."

MIT Computer Science and Artificial Intelligence Lab (CSAIL),

Here's a question: would you rather have a human boss or a robot boss? Researchers at

the Massachusetts Institute of Technology found when humans and robots teamed up



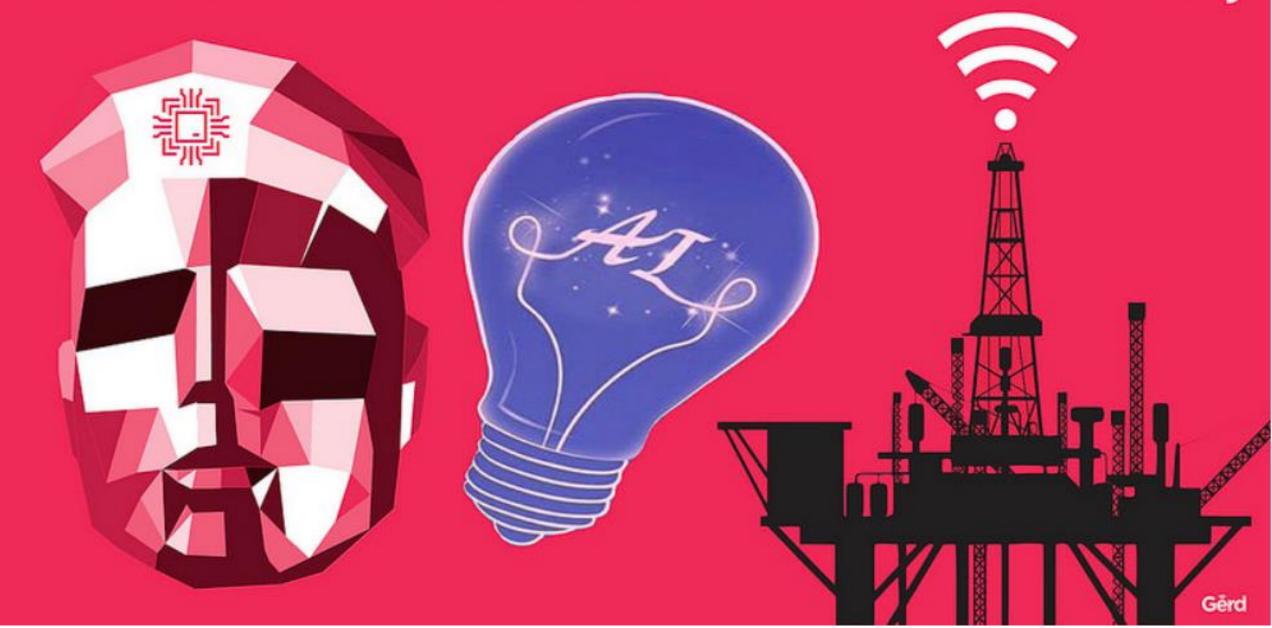
Today, more than three million workers globally are being supervised by robobosses. The number will grow exponentially!"

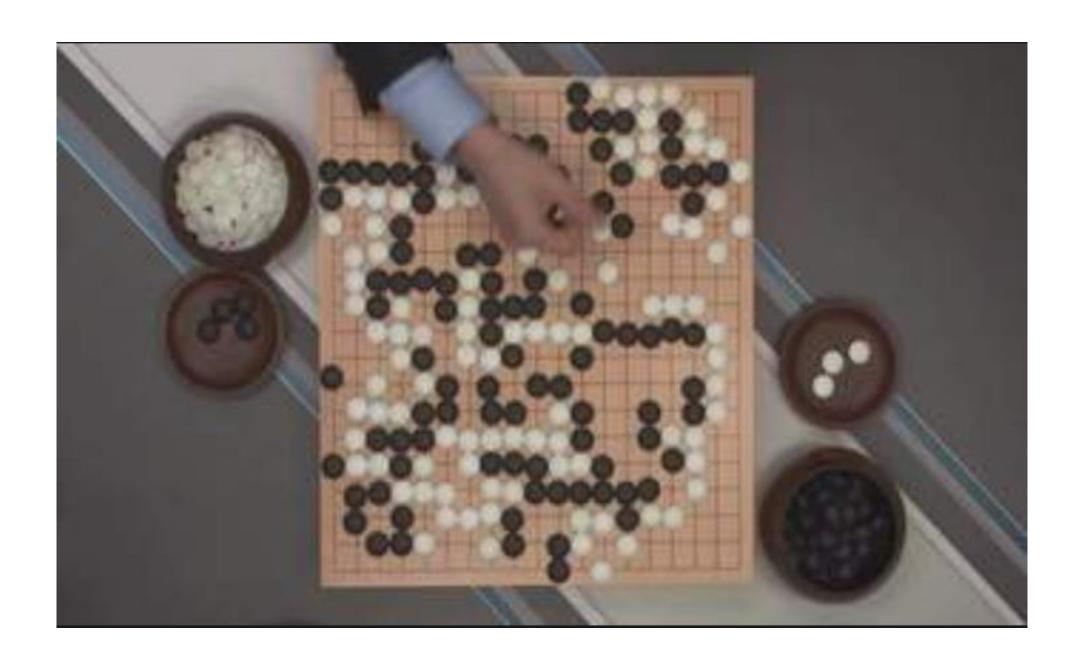
Frances Karamouzis, vice president and distinguished analyst at Gartner.

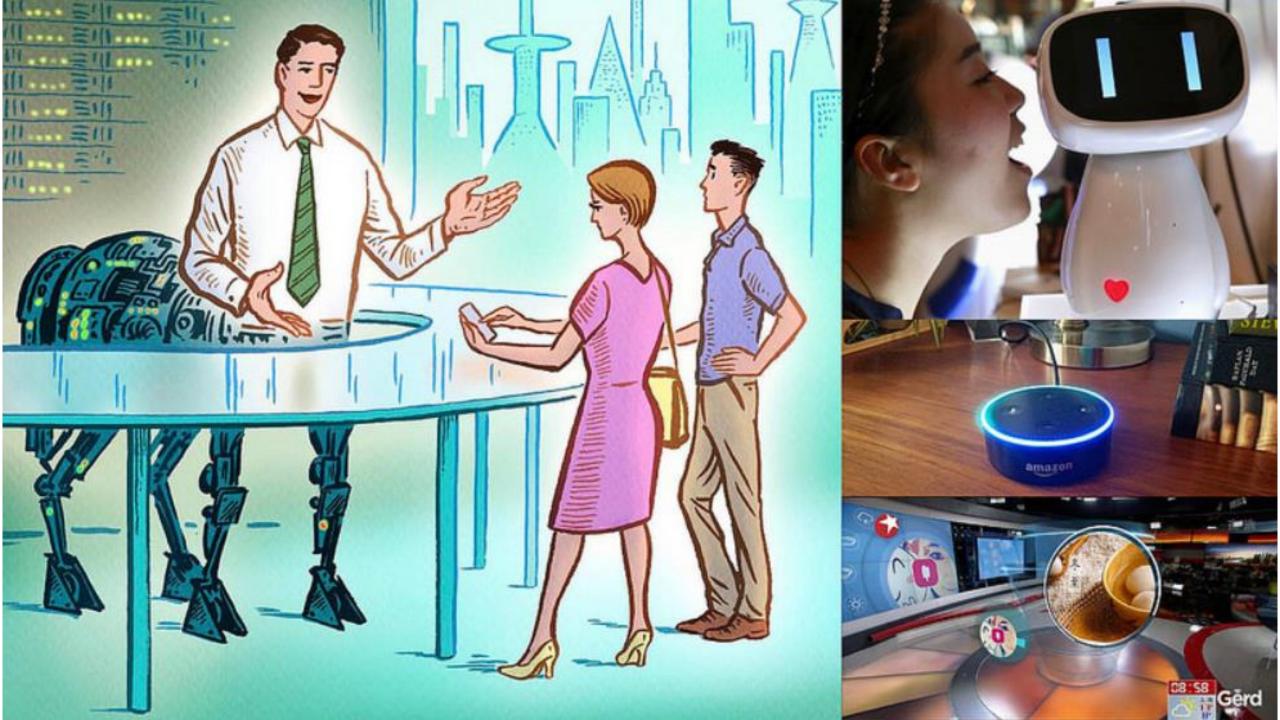
### How good are we at digital leadership?



## Data is the new oil, and AI is the new electricity













# Speaking to/with machines 'like with a friend'

Powered by machine learning and natural language processing



## How far should we take this?





### Technology is morally neutral - until we apply it



Security | Social Contracts | Ethics: Collective Benefits

Gěrd

## INDUSTRY

The IoT Business Magazine

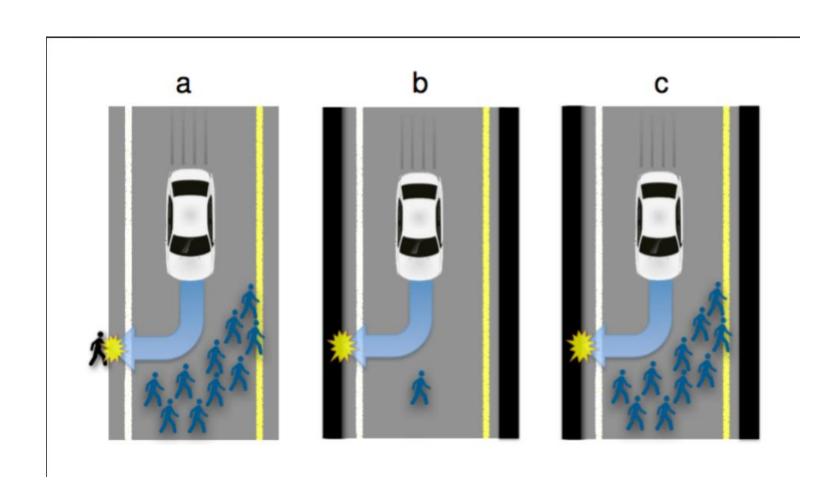
7.50 EUR | 2018







### "Maschine Ethics"



#### "What Ethics?"

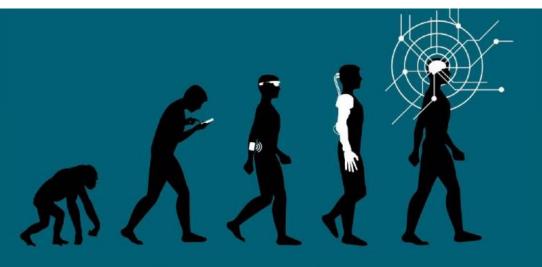


Prof. Janina Loh









### HUMANITY WILL CHANGE MORE IN THE NEXT 20 YEARS THAN IN THE PREVIOUS 300 YEARS



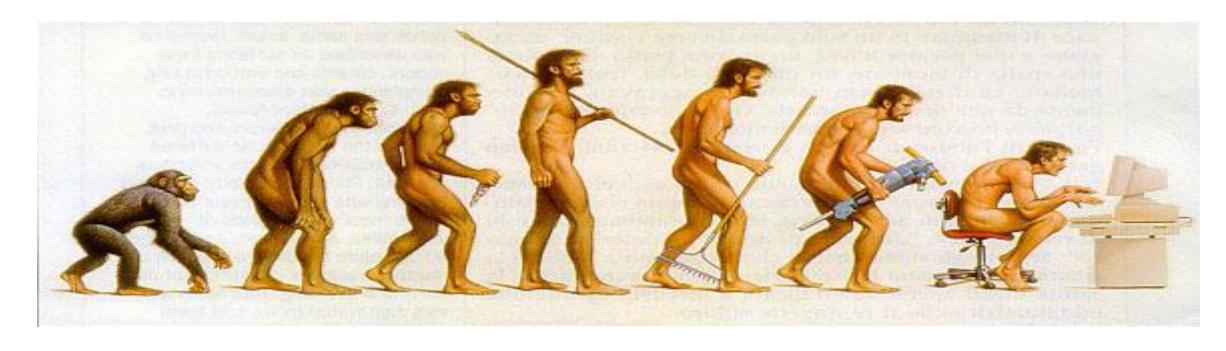




The biggest question of all:

### Are you ready?

#### You can't stop change from happening



...but you can slow it down (for a while)

# "If you're not part of the solution you must be part of the problem."

- Eldridge Cleaver

#### Thanks!

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Mail: tim@cole.de





