

**Digital Transformation** 

Ruediger Schoenbohm



#### Heard of them?







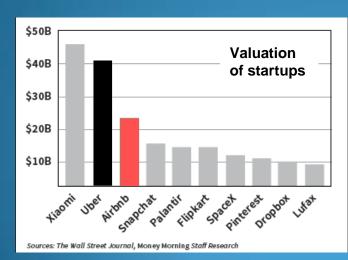
**SocietyOne** 

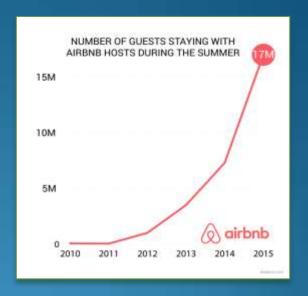




#### Some data...









### Digital Disruption?

- Transportation
- Accommodation
- Telecommunication
- Retail
- Media
- Movie
- Software

#### The Digital Disruption Has Anteauy Happened

- · World's largest taxi company owns no taxis (Uber)
- Largest accommodation provider owns no real estate (Airbnb)
- Largest phone companies own no telco infra (Skype, WeChat)
- · World's most valuable retailer has no inventory (Alibaba)
- Most popular media owner creates no content (Facebook)
- Fastest growing banks have no actual money (SocietyOne)
- World's largest movie house owns no cinemas (Netflix) Largest software vendors don't write the apps (Apple &

www.ibmforentra

Who's Next?

Source: IBM 2015

# What do they have in common? They...

- would not exist without the internet
- link demand and offer via the web
- put the customer in the center
- use digital to gain deep market insights
- use innovative, but simple business models

at... almost ZERO transaction cost!

#### Some preys of digital Darwinism...









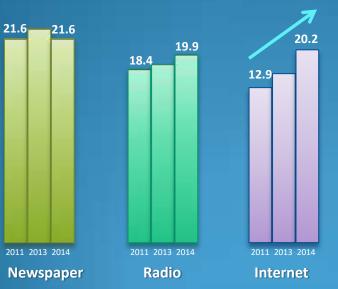


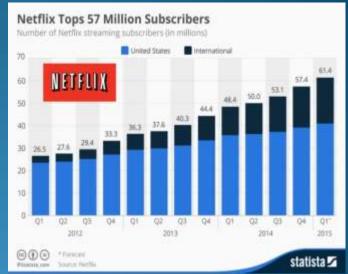


#### TV: the next loser?



Relative importance of various media channels for opinion formation





Source: NetFlix



#### Dematerialization...



#### Smart, social & powerful customers...



Brand advocates taking over **customer service** for free...

"How much would you rely on your *peer's ratings*?"



#### The (inter)net effect...

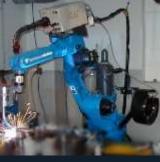


- Global availability
- Unlimited access to knowledge and information
- High level of transparency
- Constantly growing computing power
- Dematerialization of hardware
- Networks among people, among devices and...
  - ... between people and devices

# **Technology** is the driving force...



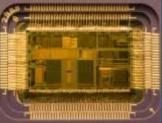




Robotics – 1950



Networking – 1990



Cloud // mobile data // bandwidth

Digitization

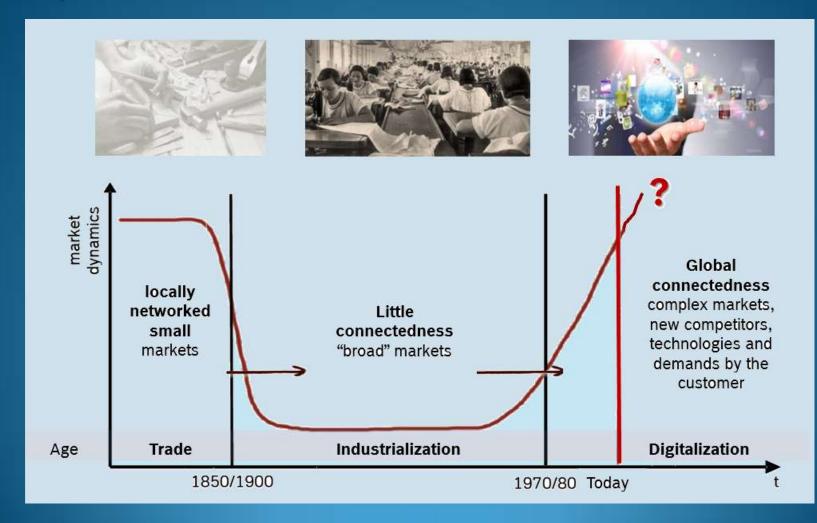
Industrialization

Steam - 1850

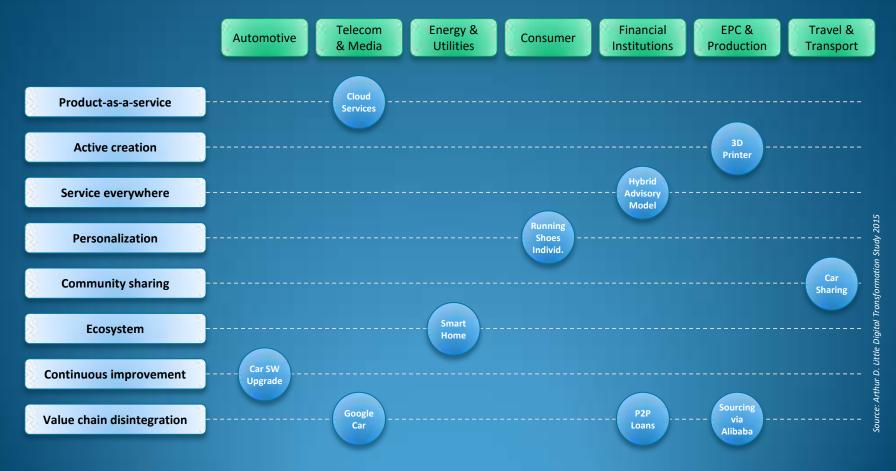
Images from wikipedia.de

# Source: BetaCodex - Organize for complexity

#### Dynamic markets...



#### Digitalization is here already...



#### Digitalization is a huge topic...

Social business: Involvement, Collaboration, Processes, Organization, Culture **Enterprise 2.0 Connected Company** Web 3.0 (IoT) **Industry 4.0 Connected Solutions Connected Industry** (Production & Logistics) (Products & Services) Connected Technologies: Infrastructure, Tools, Applications, Systems, Big Data

#### Customer

Sales & Marketing Customer Service Social Media Monitoring Social CRM Recruitment Project Management

Open Innovation Customer Platforms Customer Involvement Eco-Systems

Systems
Logistics & Packaging
After Sales
Online Services
Big Data Management

**Business Partner** 

(internal & external)

**Strategy Development** 

**Business Processes** 

**Idea Management** 

**Resource Pooling** 

Communication

Open Innovation

**Eco-Systems** 

**Online Services** 

**Project Management** 

**New Business Models** 

**Engineering Processes** 

**Production Processes** 

Big Data Management

**Logistics Processes** 

**Community Management** 

Collaboration

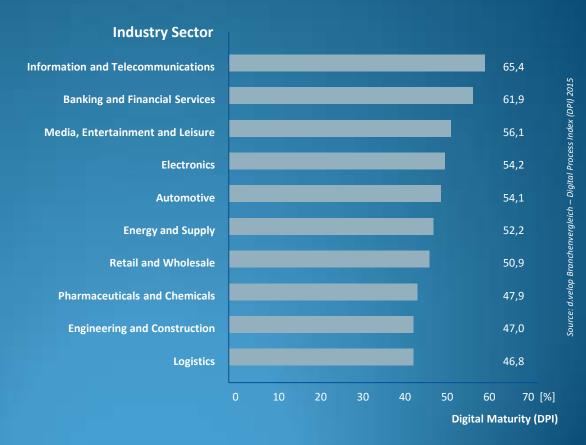
#### Every industry sector is affected...

... sooner or later

**Executives predict:** 

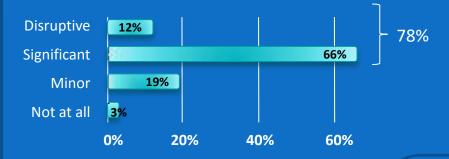
By 2020, **47% of revenue** will be
influenced by digital

Source: Forrester Research 2015



#### How does digitization affect your business?

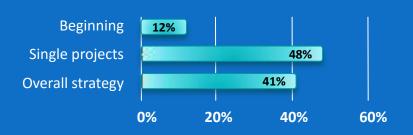
#### How is your industry branch affected?



→ 78% expect a fundamental impact

Sources: "Welt am Sonntag" 11.1.15, Accenture

#### What is your digitization approach?

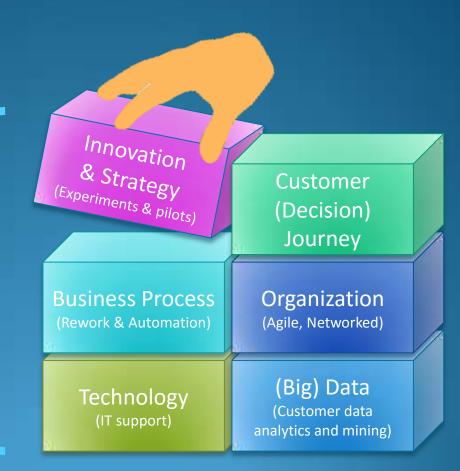


→ Only 41% have a digital strategy

#### **Building blocks**

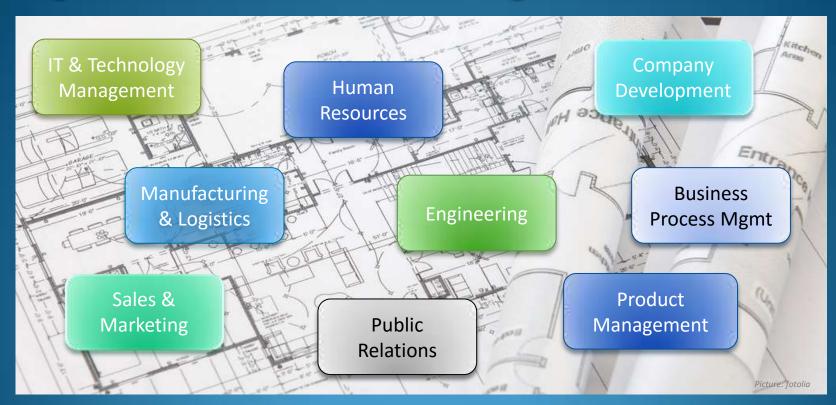
of the **Digital Transformation** 

You may start anywhere, but...



Based on: Six building blocks for creating a high-performing digital enterprise, McKinsey Digital Sep 2015

#### Digital affects the entire organization...



... eventually you will need to **rebuild the house** instead of just replacing the windows!

## The digital customer

How to create added value for the (digital) customer?

#### Customers seeking experiences...

(instead of just *products*)





**Eco-systems** 

#### Added value...



1.00 EUR



- + Brand image
- + Pleasant ambiance
- + Multiple selections
- + Bonus program
- + Community
- + Free Wi-Fi
- + ...

= Experience!



3.50 EUR

#### Digitization vs. customer experience (simplified)

Digitization

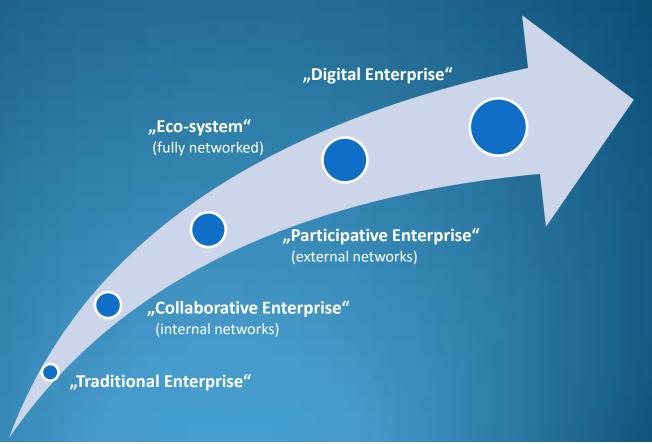
Agile, innovative, customer-centered business models

Operate in value creation *networks* 

Involve customers in value creation *chain* 

Make and sell systems

Make and sell **products** 

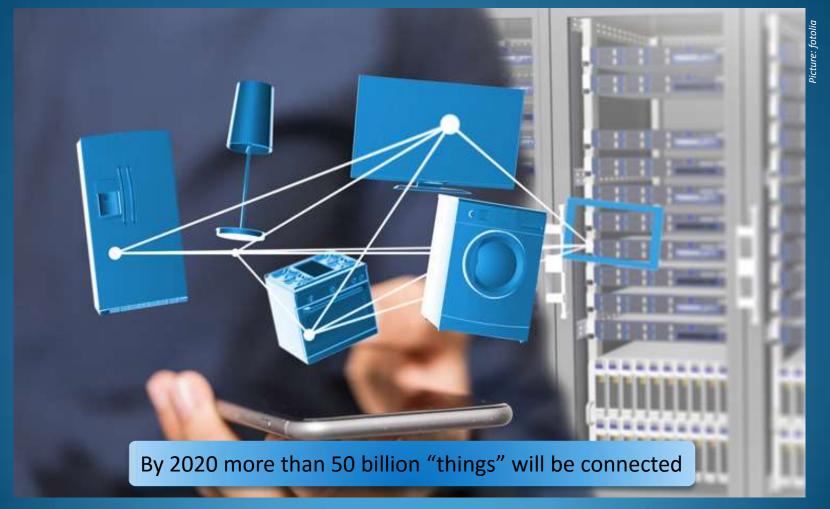


**Customer Experience** 

## Technology

Enhanced customer value brought by connected devices (IoT)

#### Internet of Things (IoT)



#### Smart Cities...



Source: http://www.urban-hub.com/wp-content/uploads/2014/11/stage\_large\_smart\_city-1920x864.jpg

#### Tower Bridge tweeting...



Example

Tower Bridge

@twrbrdg itself

Bot that lets you know when Tower Bridge is opening or closing. Not in any way official. photo from tinyurl.com/32blmc



@ tinyurl.com/32ksrn

iii Beigetreten Februar 2008



TWEETS FOLGEICH FOLLOWER GEFÄLLTMIR 7.325 12 6.255 5

Tweets

Tweets & Antworten



Tower Bridge @twrbrdg\_itself - 10. Apr. 2014

I am closing after the MV Dixie Queen has passed down riverstream.



Tower Bridge @twrbrdg itself - 10. Apr. 2014

I am opening for the MV Dixie Queen, which is passing down riverstream.











Tower Bridge @twrbrdg itself - 10. Apr. 2014

I am closing after the MV Dixie Queen has passed up riverstream.

#### Monitoring critical parameters...

Truck components – preventive maintenance



Food production – ambient conditions



Image: Libelium World, WaspNote

Image: Cisco, from IT World Canada

#### Automation

Industry 4.0: IoT in production & logistics

#### Transport & logistics applications...

IoT (I4.0) brings significant benefits in

- End-to-end visibility
- Warehouse and yard management
- Fleet management

Picture: fotolia



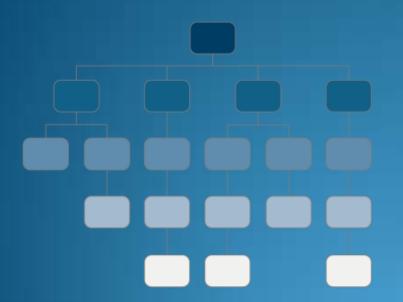
# Organization

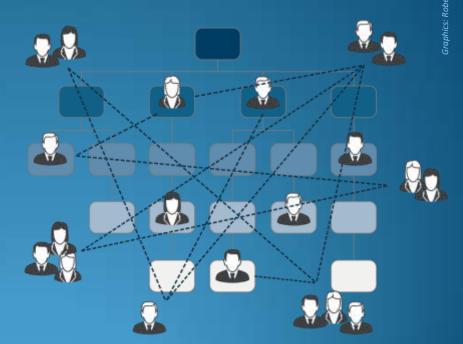
How to become connected and agile?



#### Connected and agile organization

(the best of two worlds?)

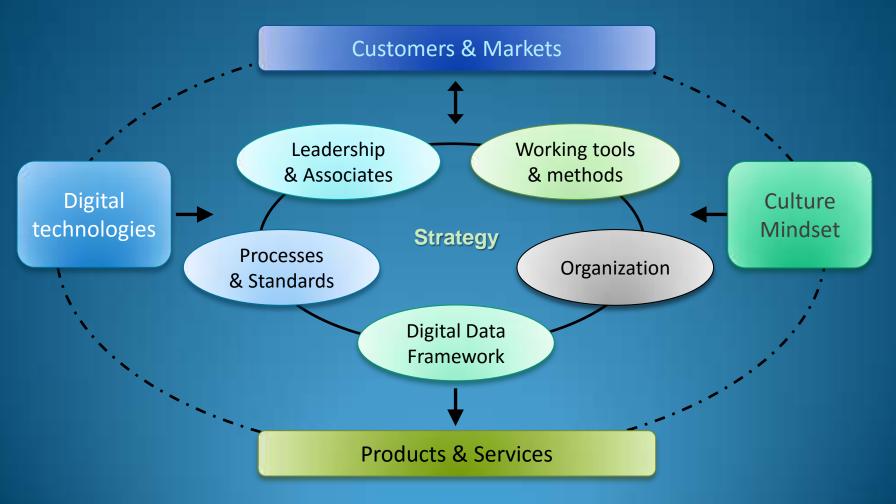




Traditional hierarchical organization

Connected & networked organization

#### Digital enabler mesh



#### Digitalization – a roadmap

"Digital" **Company Business** Integration Strategy-based continuous Professional-Platforms and improvement tools opened to ization Digital leadership the outside & collaboration Optimization of New processes & Introduction **Business processes** tools & platforms standards are & governance are Company-wide established Gradual introbalanced between **Piloting** launch of tools duction of new Further developstandardization, and platforms Evaluation of processes and ment is driven by innovation, speed. tools & platforms **Executive Mgmt** standards **Pioneering** business strategy funct, excellence support Multiple pilot use Digital gets inter-Digital is integrat-Networked and Individual cases / projects weaved with Strategic aligned into business agile organization initiatives ment of initiatives operations operations New processes External stakehol-Experimenting and principles Customer linkage First concepts of a New digital ders are involved Bottom-up networked, agile products emerge in value network Customer journey Maturity Assess. approach organization are Tracking/Monitor Leadership and Digital business Begin of digital implemented Virtual teams associates work has substantial business strategy **Enabling/training** Maturity rises differently business share Documentation development programs

Based upon: Dachis Group, The Community Roundtable, n:Sight, Frank Schönefeld, Emanuele Quintarelli, Group7 Consulting, Lee Ackermann, Robert Bosch GmbH



#### **Questions?**

#### Contact us:

E-Mail: info@tyscon.com

Fon: +49 173 201 7972

www.tyscon.com



