



# Digital Transformation

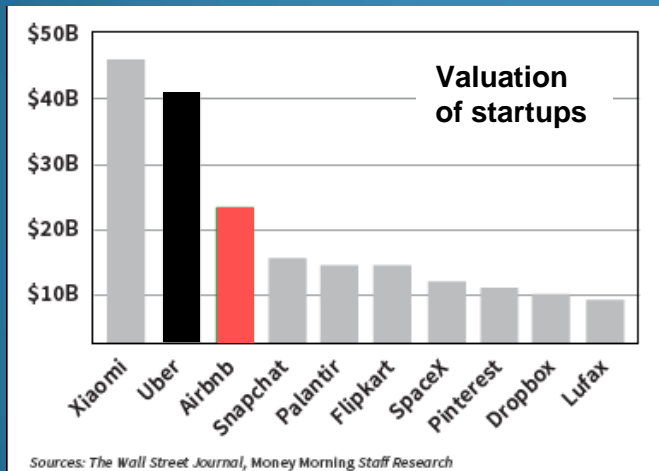
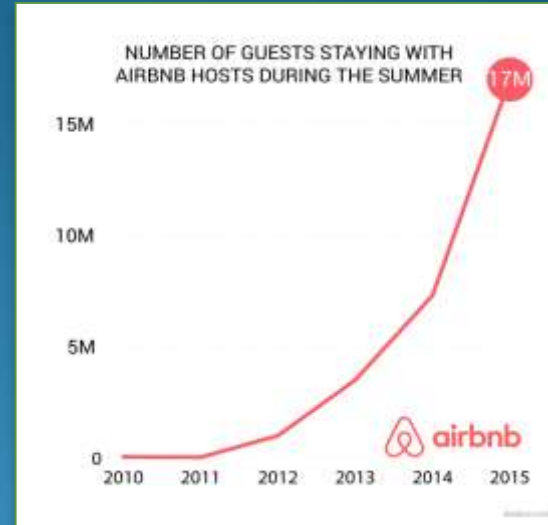
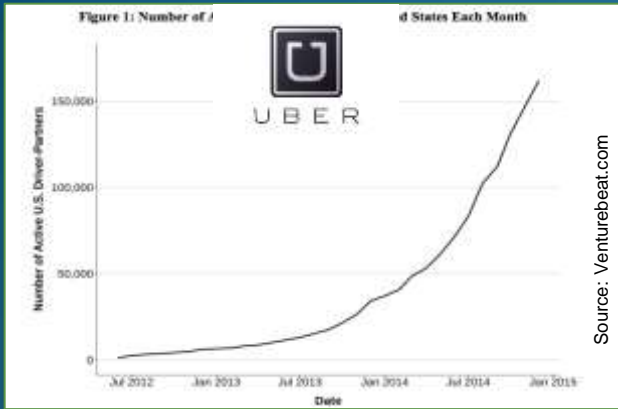
Ruediger Schoenbohm



# Heard of them?



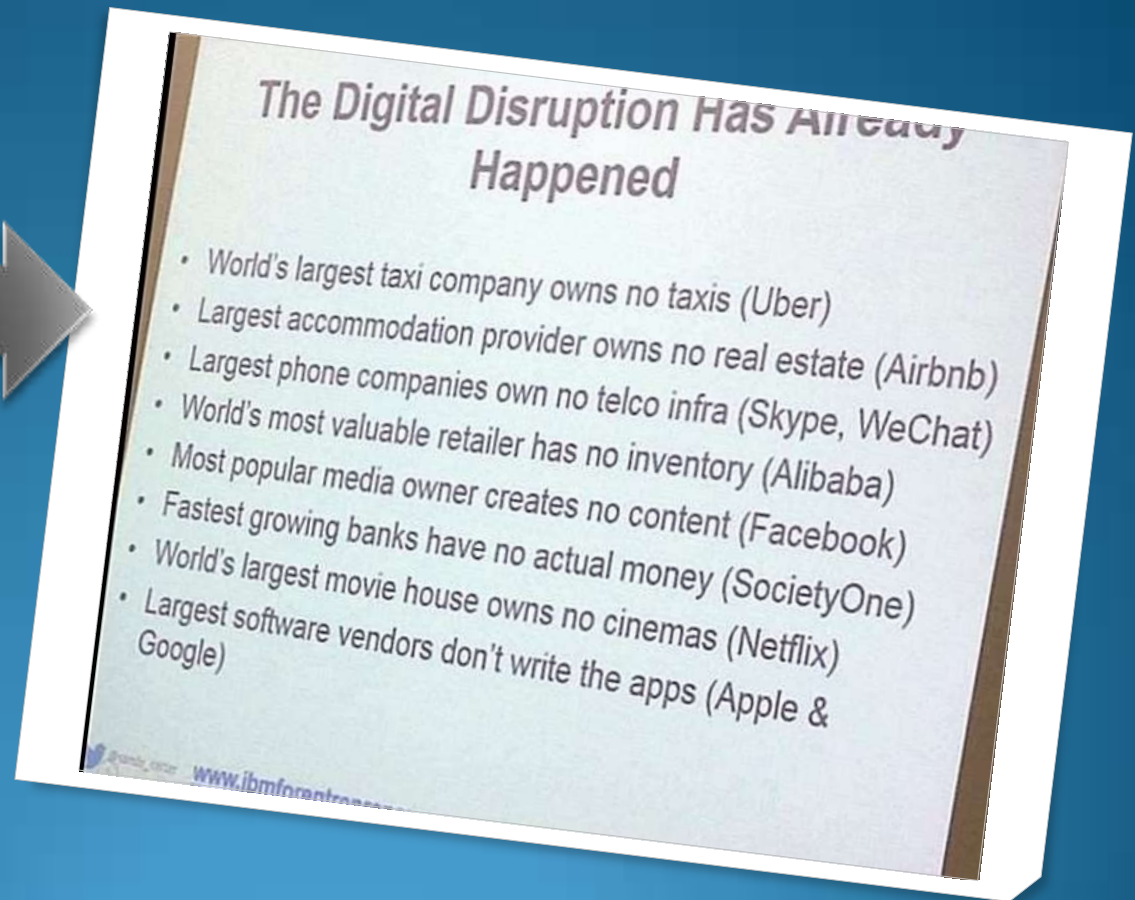
# Some data...



# Digital Disruption?



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



Source: IBM 2015

## Who's Next?

# 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...



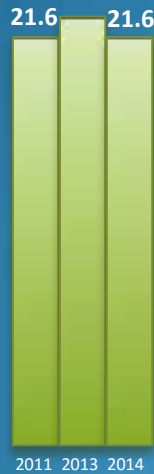
# TV: the next loser?

Relative importance of various media channels for opinion formation

Source: TNS infratest 2015



Television



Newspaper



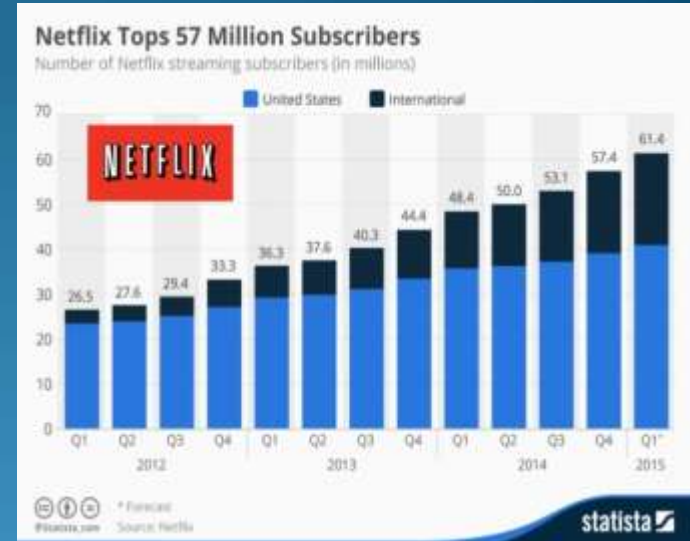
Radio



Internet

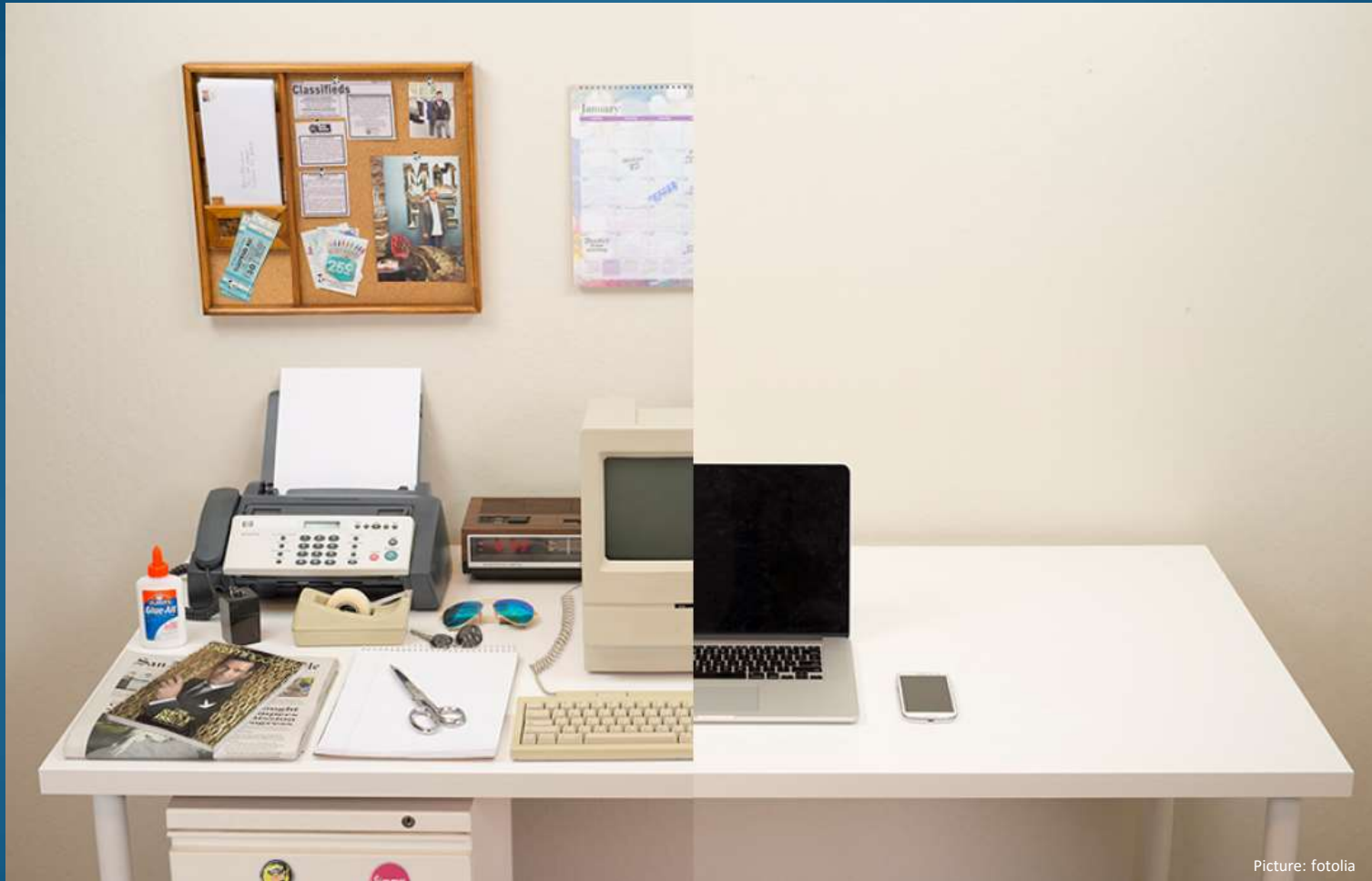


Magazines



Source: Netflix

# Dematerialization...



Picture: fotolia



# Smart, social & powerful customers...



Picture: amazon.de

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

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



Picture: telekomhilft.telekom.de

# 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...



Steam – 1850



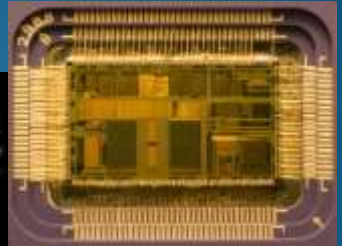
Electricity – 1900



Robotics – 1950



Networking – 1990



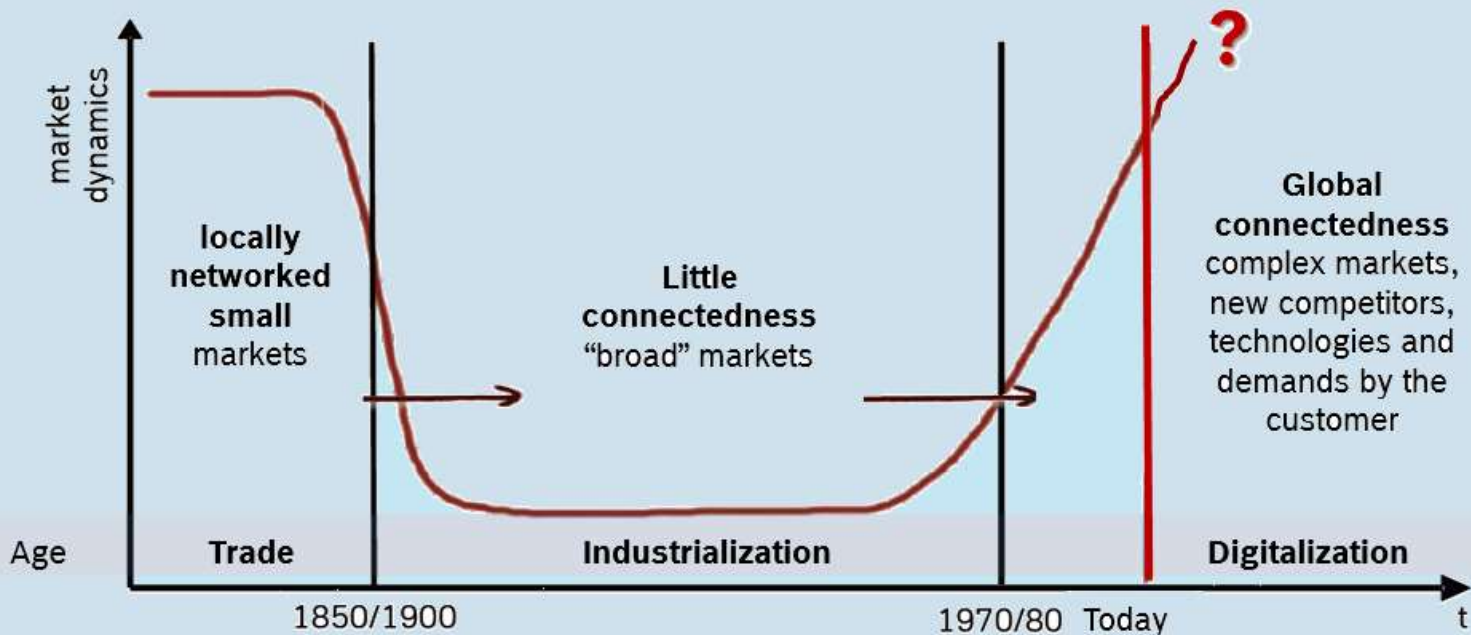
Cloud // mobile data  
// bandwidth

Industrialization

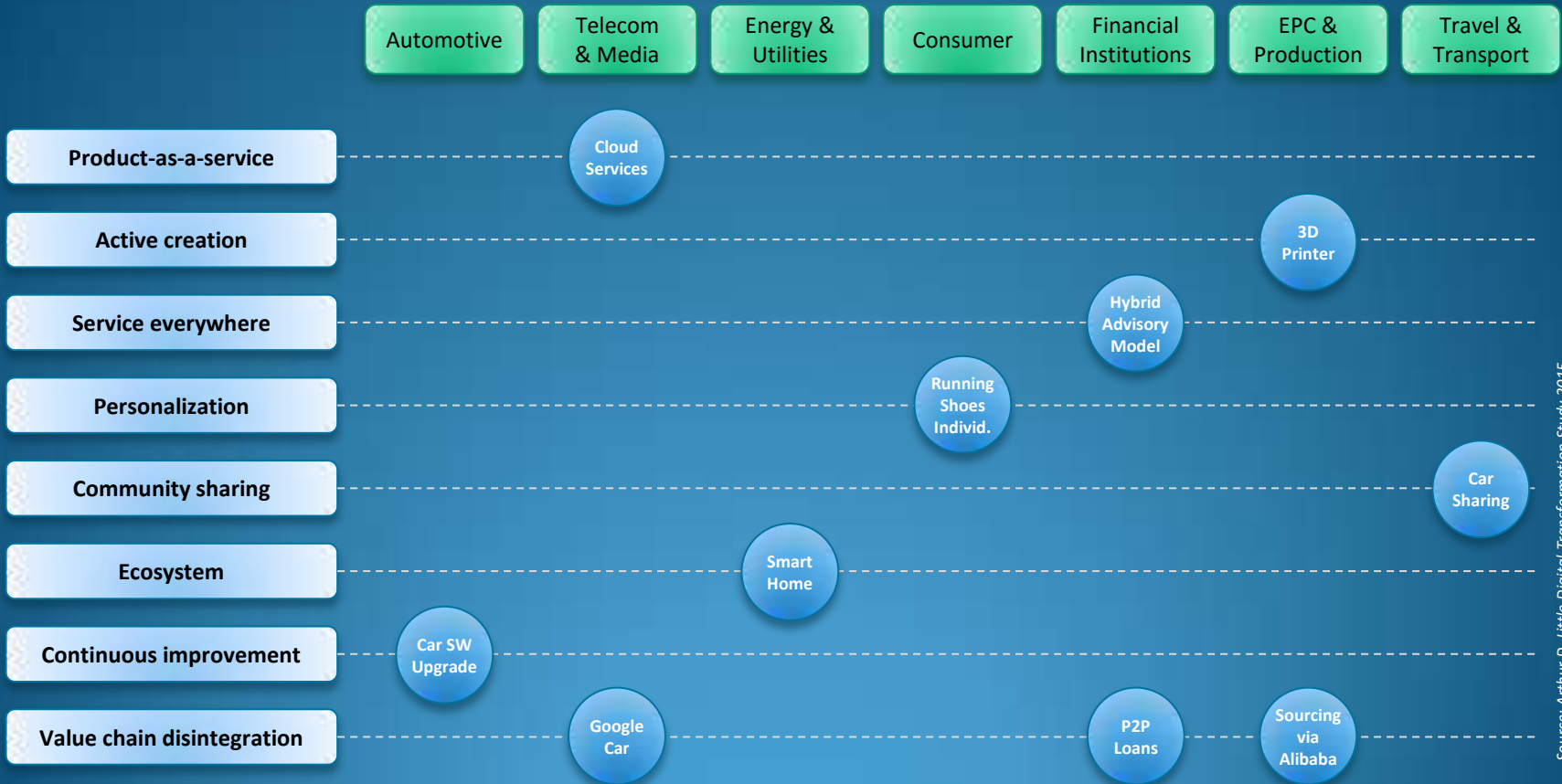
Digitization

Images from wikipedia.de

# Dynamic markets...

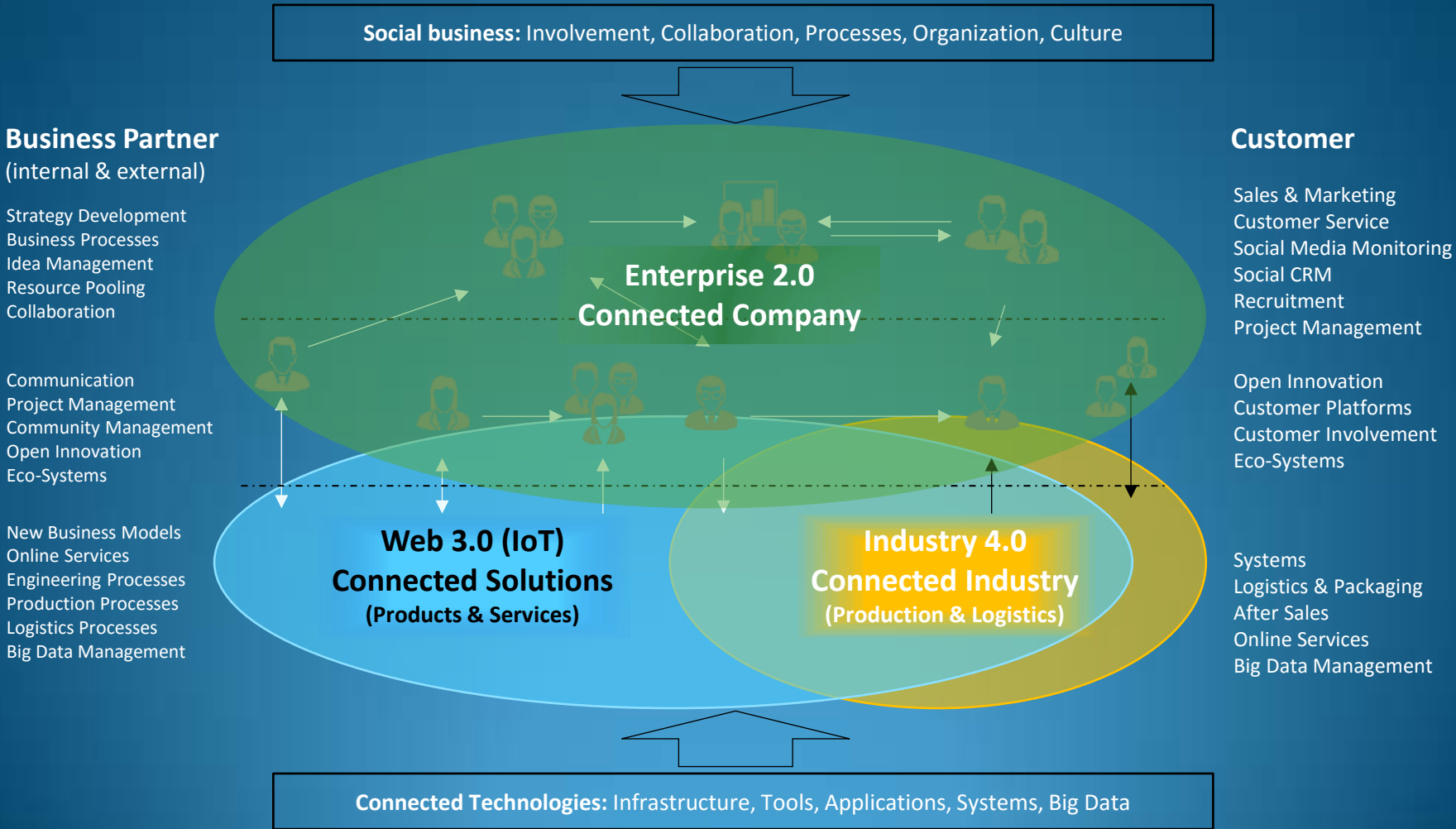


# Digitalization is here already...



Source: Arthur D. Little Digital Transformation Study 2015

# Digitalization is a *huge* topic...

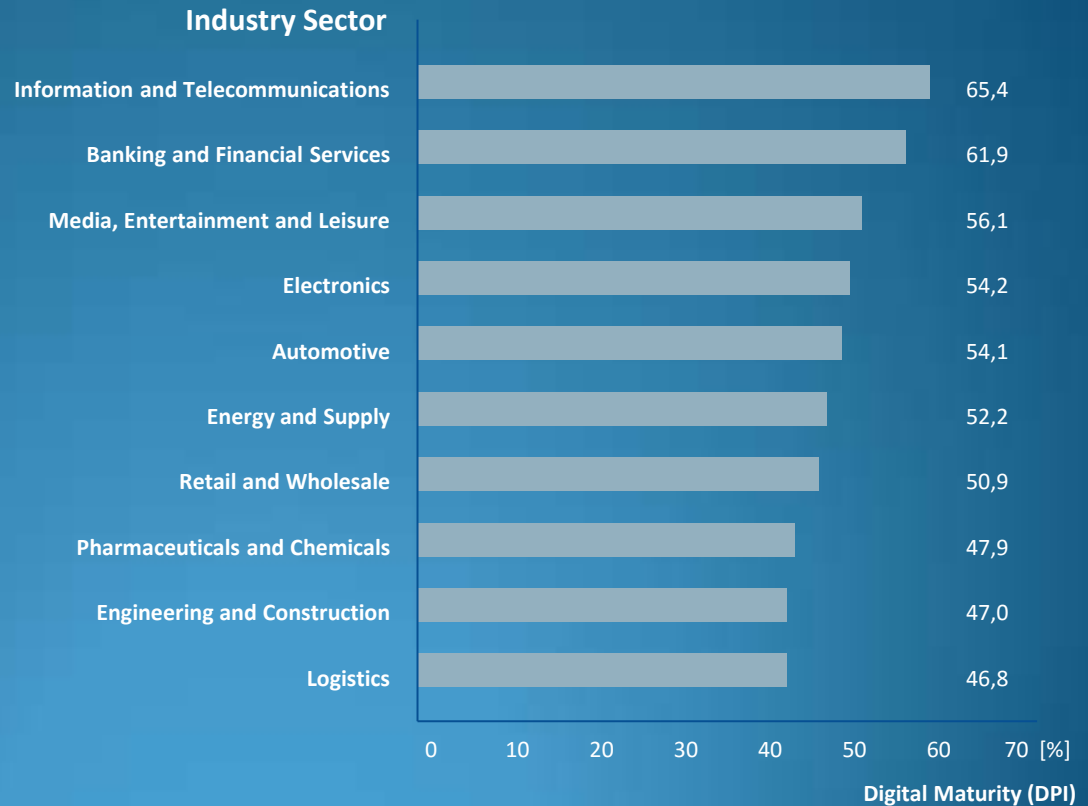


# Every industry sector is affected...

... sooner or later

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

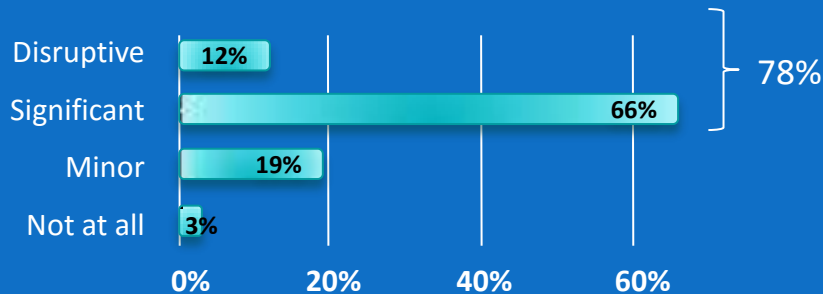
Source: Forrester Research 2015



Source: d.velop Branchenvergleich – Digital Process Index (DPI) 2015

# How does digitization affect *your* business?

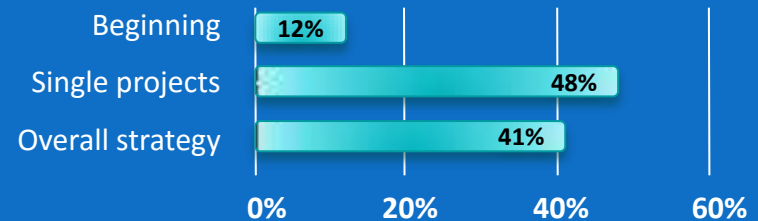
## How is your industry branch affected?



→ 78% expect a fundamental impact

Sources: "Welt am Sonntag" 11.1.15, Accenture

## What is your digitization approach?



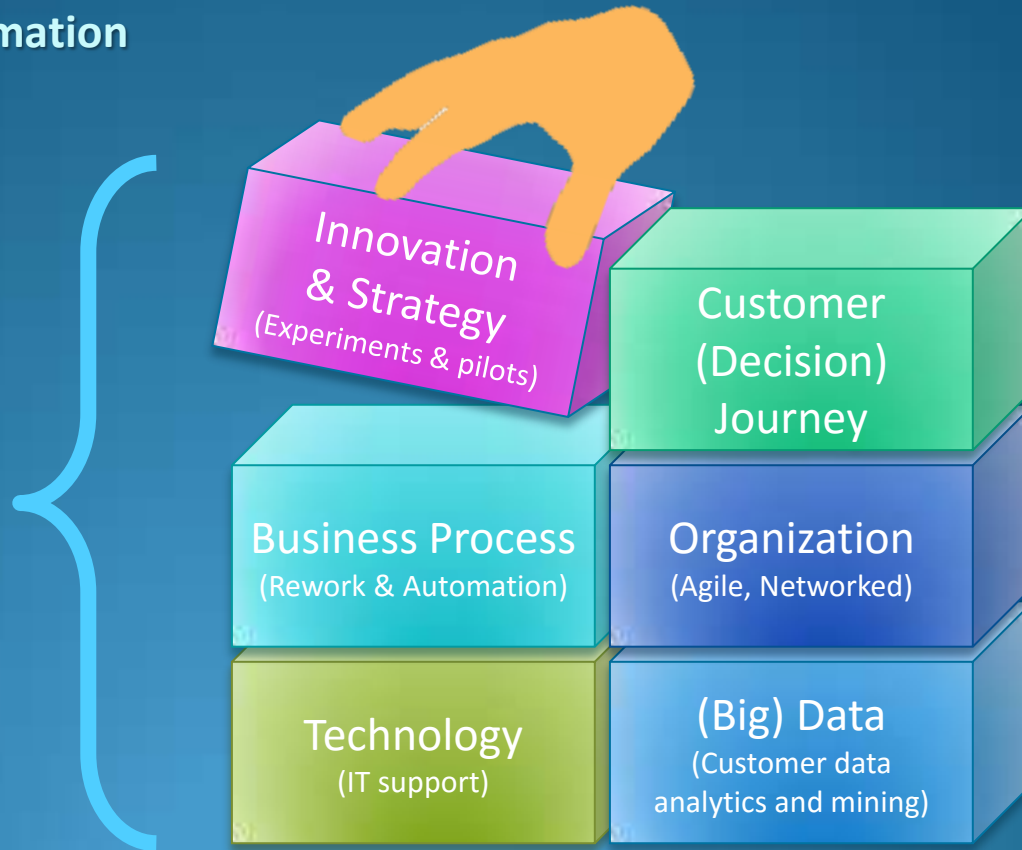
→ Only 41% have a digital strategy



# Building blocks

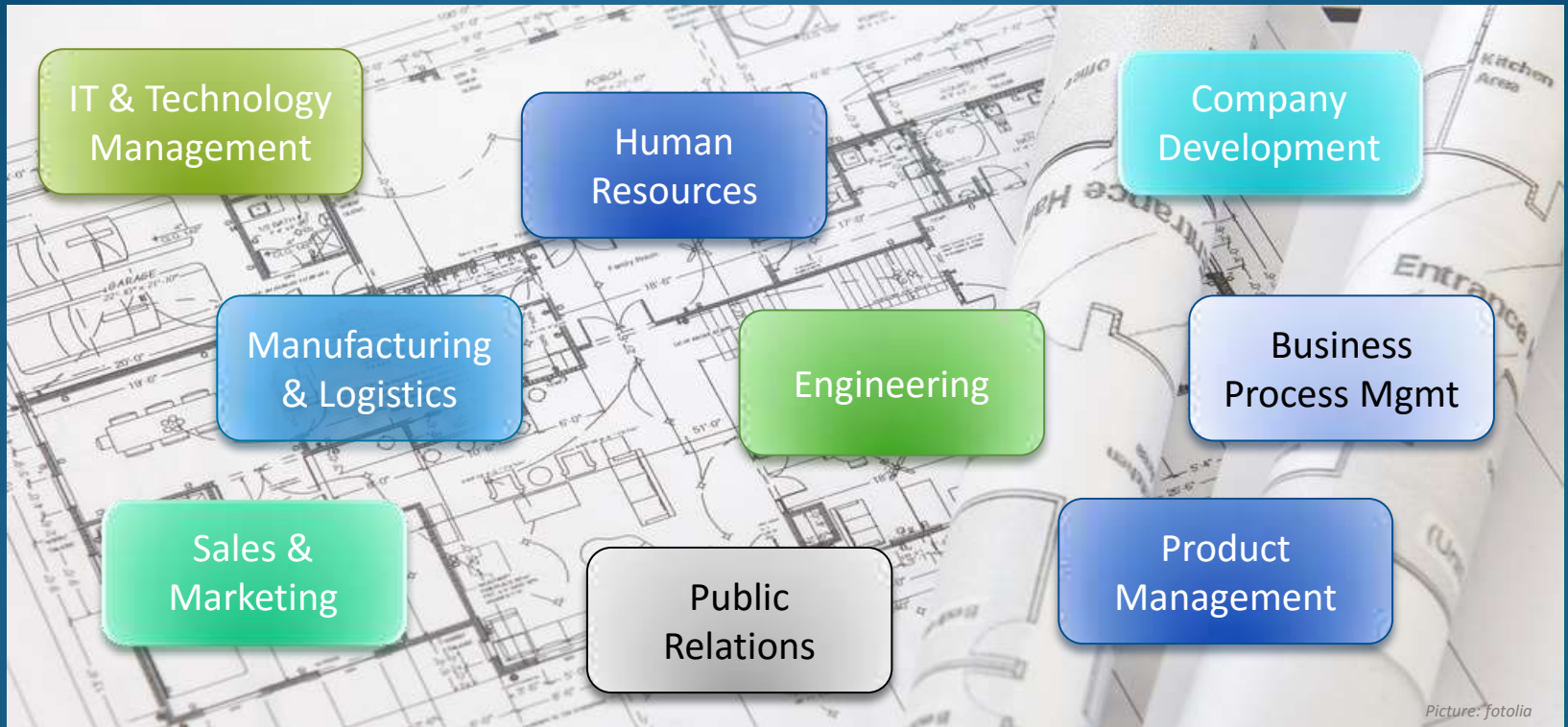
of the Digital Transformation

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*...

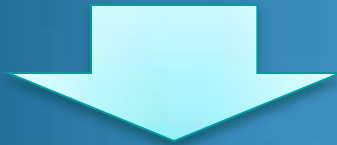
(instead of just *products*)



## Eco-systems

# Added value...

*Pictures: fotolia*



**1.00 EUR**



**3.50 EUR**

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

**= Experience !**

# 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*

„Digital Enterprise“

„Eco-system“  
(fully networked)

„Participative Enterprise“  
(external networks)

„Collaborative Enterprise“  
(internal networks)

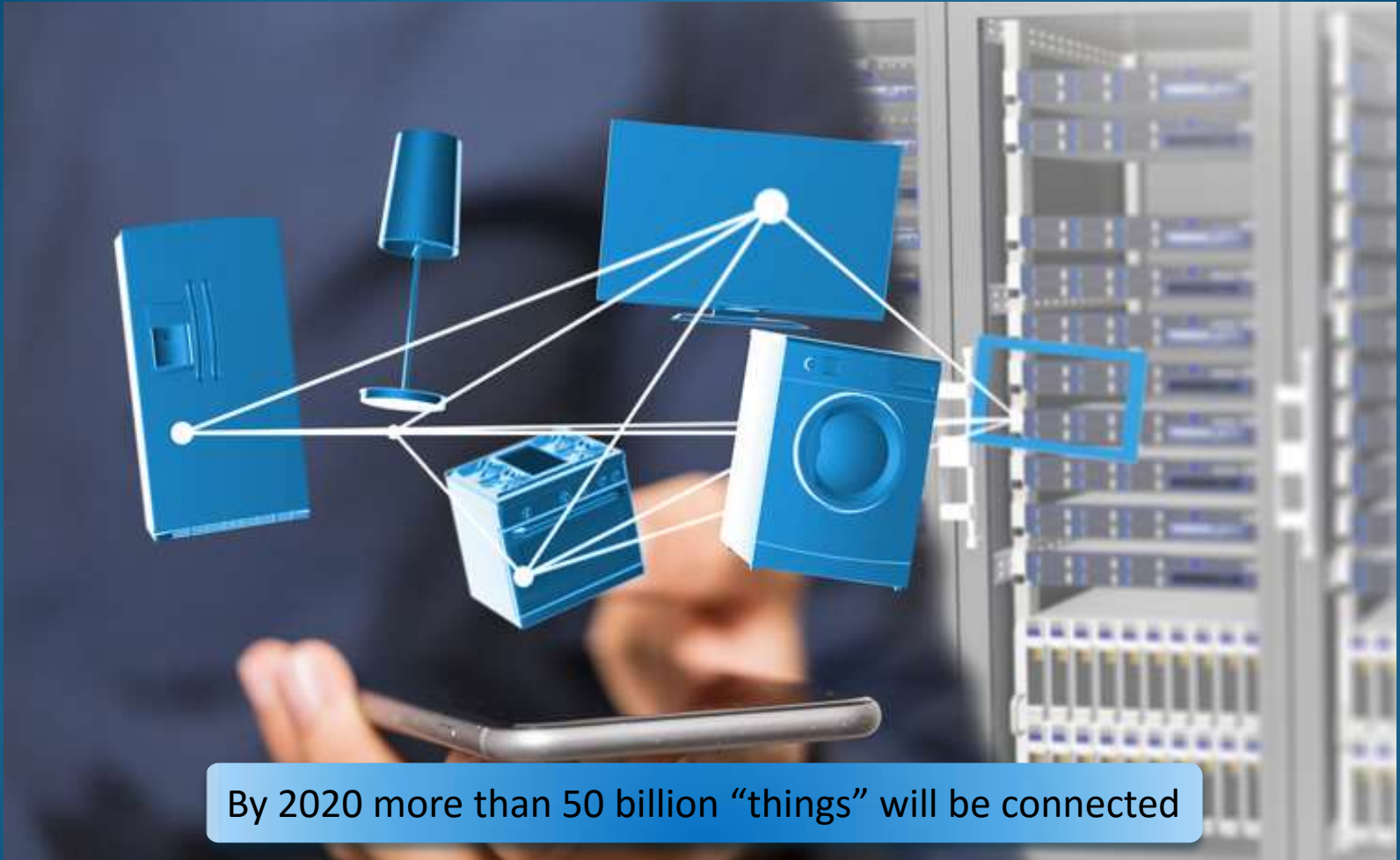
„Traditional Enterprise“

Customer Experience

# Technology

Enhanced customer value brought by *connected devices* (IoT)

# Internet of Things (IoT)



Picture: fotolia

By 2020 more than 50 billion “things” will be connected



# Smart Cities...



Source: [http://www.urban-hub.com/wp-content/uploads/2014/11/stage\\_large\\_smart\\_city-1920x864.jpg](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](http://tinyurl.com/32blmc)

📍 London

🔗 [tinyurl.com/32ksrn](http://tinyurl.com/32ksrn)

📅 Beigetreten Februar 2008

 Tweet an Tower Bridge

TWEETS  
7.325

FOLGE ICH  
12

FOLLOWER  
6.255

GEFÄLLT MIR  
5

Tweets

Tweets & Antworten



**Tower Bridge** @twrbrdg\_itself · 10. Apr. 2014

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

👤 🔄 ❤️ 1 ⋮



**Tower Bridge** @twrbrdg\_itself · 10. Apr. 2014

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

👤 🔄 1 ❤️ ⋮



**Tower Bridge** @twrbrdg\_itself · 10. Apr. 2014

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

Source: twitter.com

# Monitoring critical parameters...

Truck components – preventive maintenance



Image: Cisco, from IT World Canada

Food production – ambient conditions



Image: Libelium World, WaspNote

Examples

# 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?

We need to act more like  
speedy task forces...

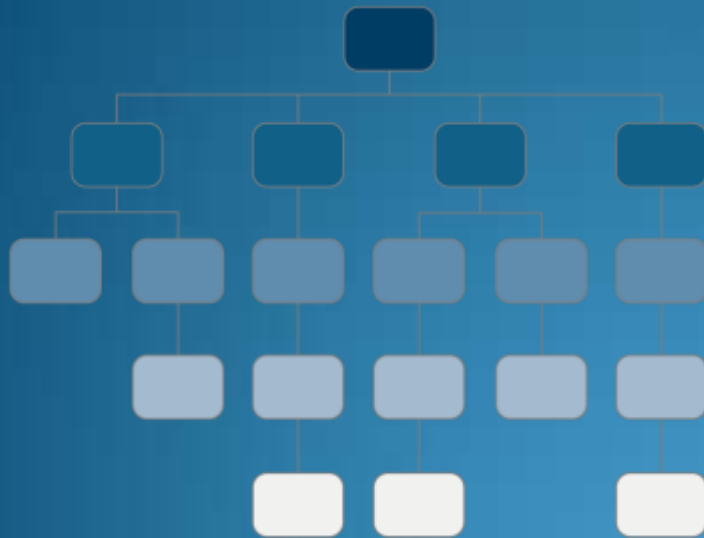
How to combine **flexibility**  
and **efficiency**?

Can this be **scaled**?

Picture: fotolia

# Connected and agile organization

(the best of two worlds?)



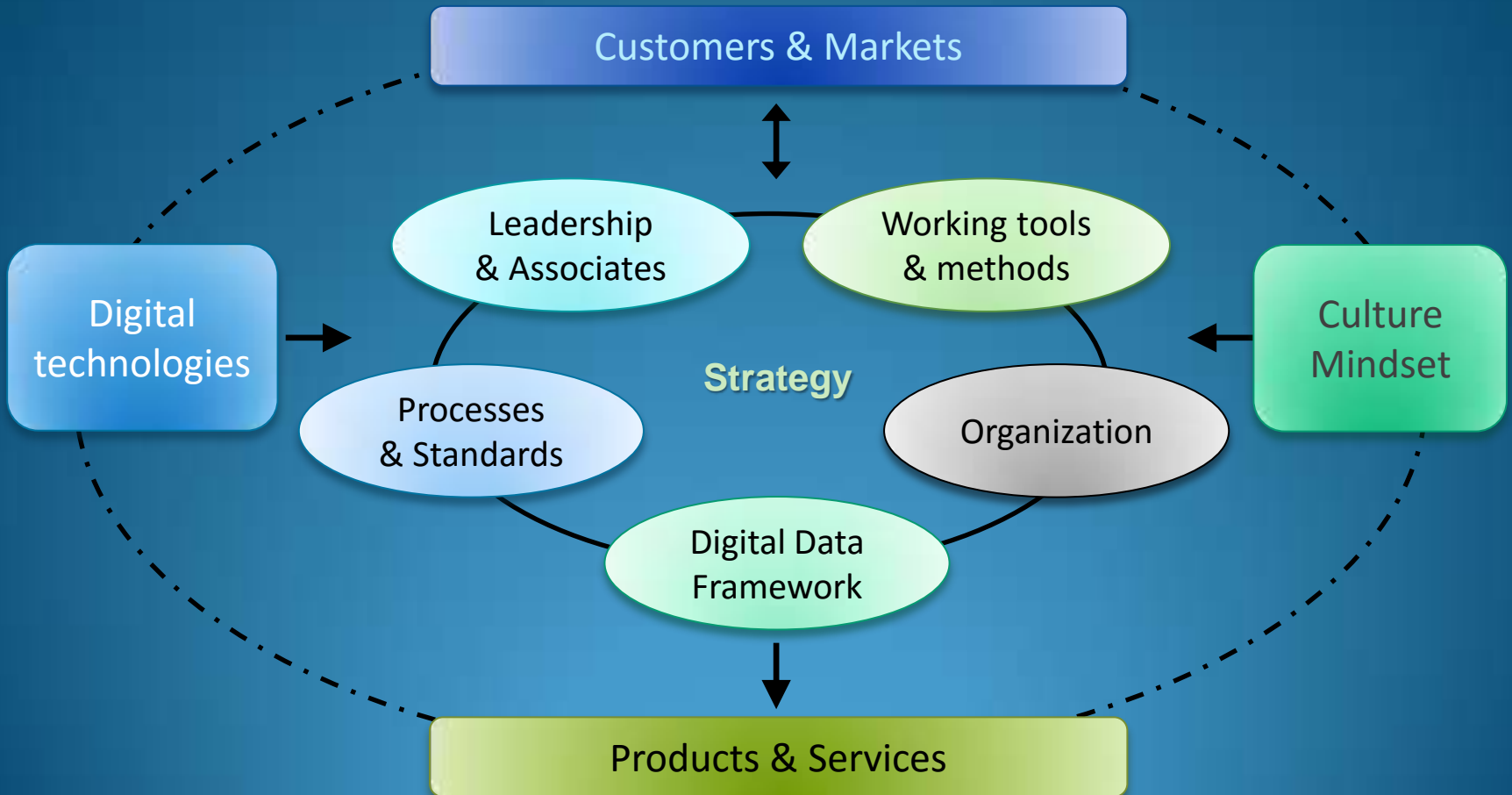
**Traditional hierarchical organization**



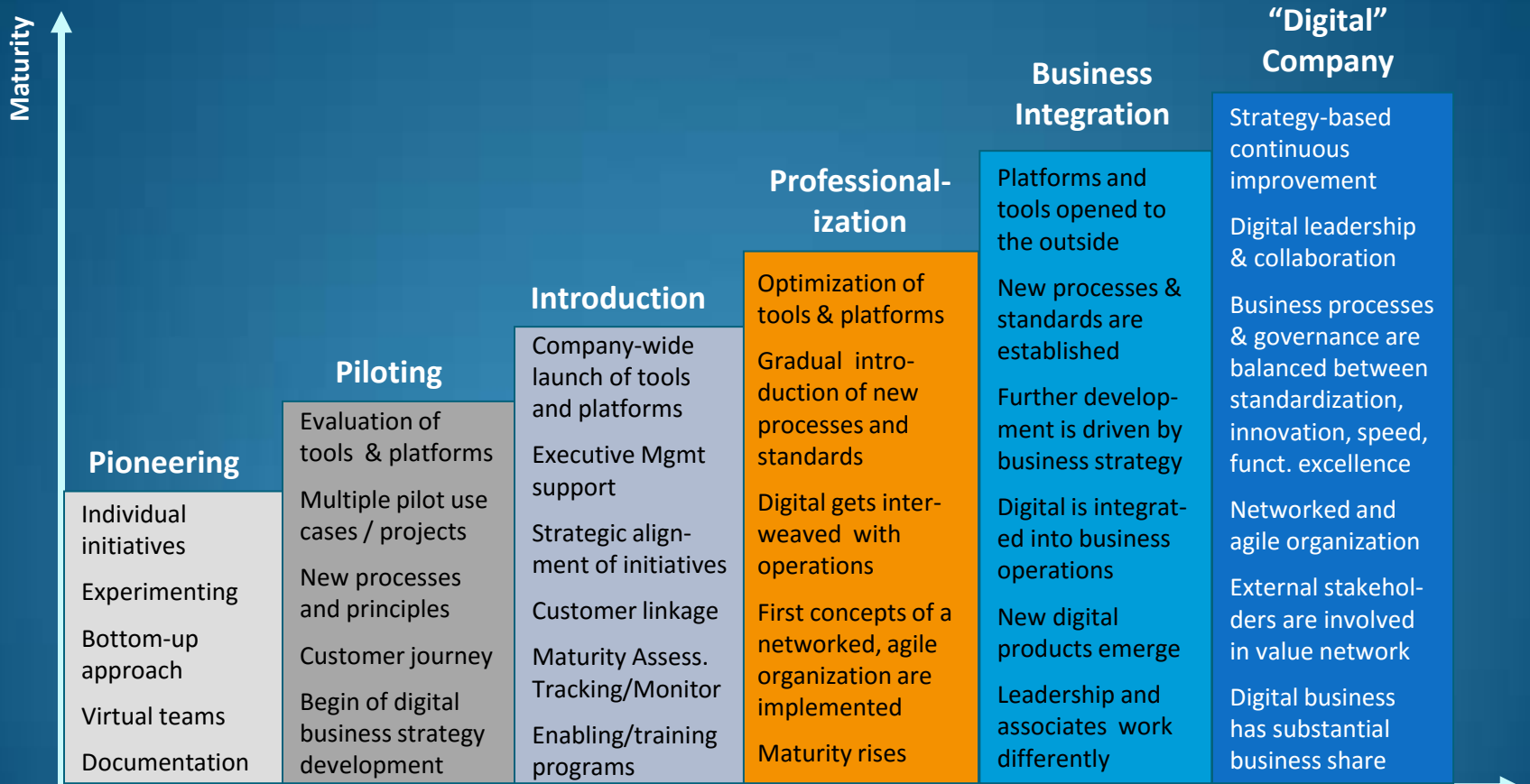
**Connected & networked organization**



# Digital enabler mesh



# Digitalization – a roadmap



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

# Questions?

Contact us:

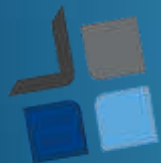
E-Mail: [info@tyscon.com](mailto:info@tyscon.com)

Fon: +49 173 201 7972

[www.tyscon.com](http://www.tyscon.com)



Image: fotolia



**TYSCON**  
Embrace change to grow