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Mobile Business 1

How digitalization enables
innovative Business Models
2nd of December 2014

Introduction

1

Today's speaker

***Digital
Transformation***

***Digital Business
Model***



Michael Pachmajer

Director

Friedrich-Ebert-Anlage 37

60327 Frankfurt am Main

Tel: +49 151 624 59 688

michael.pachmajer@de.pwc.com

***Digital
Culture***

Today's speaker

***Digital
Transformation***

***Identification of
Business & IT
Capabilities***



Dr. Carsten Hentrich
Director

Friedrich-Ebert-Anlage 37
60327 Frankfurt am Main

Tel: +49 151 62 45 97 10

carsten.hentrich@de.pwc.com

***IT
Architecture***

Course “Digital Business Models”

Overview

Today

- Digital Transformation – PwC’s Point of View
- Benchmark Method – Four Wave Model
- Business Model Design

20th Jan.

- Investor Call

Market overview & PwC PoV

2

Market overview & PwC PoV

Just a vision?

How global megatrends change the way
we live...



Any idea what lies behind this numbers?

\$5 Million vs. \$900

Price of the fastest supercomputer in 1975 (CDC-7600) and an iPhone 4 with equal performance



The election of the pope in 2005 ...



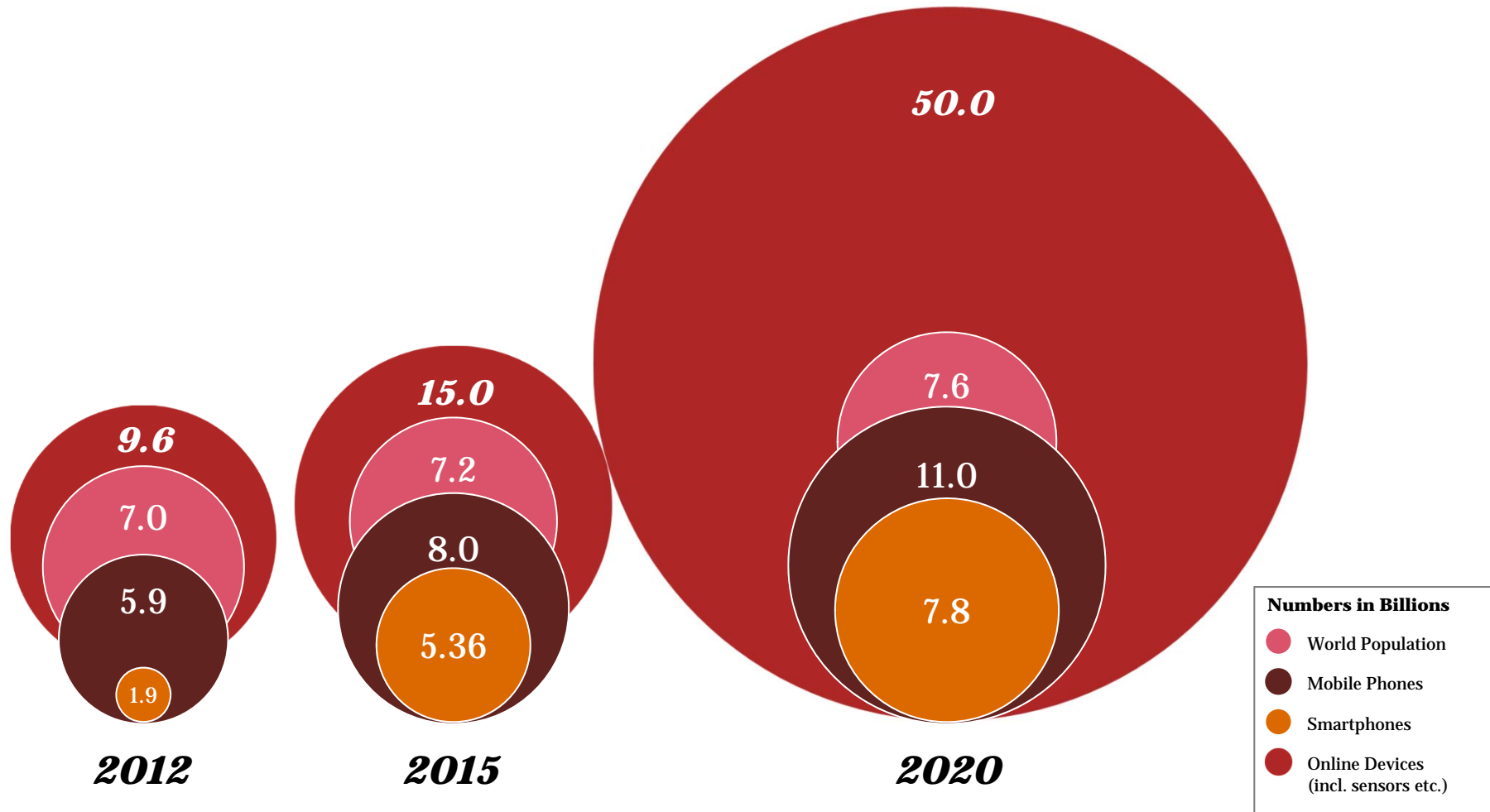
Source: Spiegel online

... and in 2013!

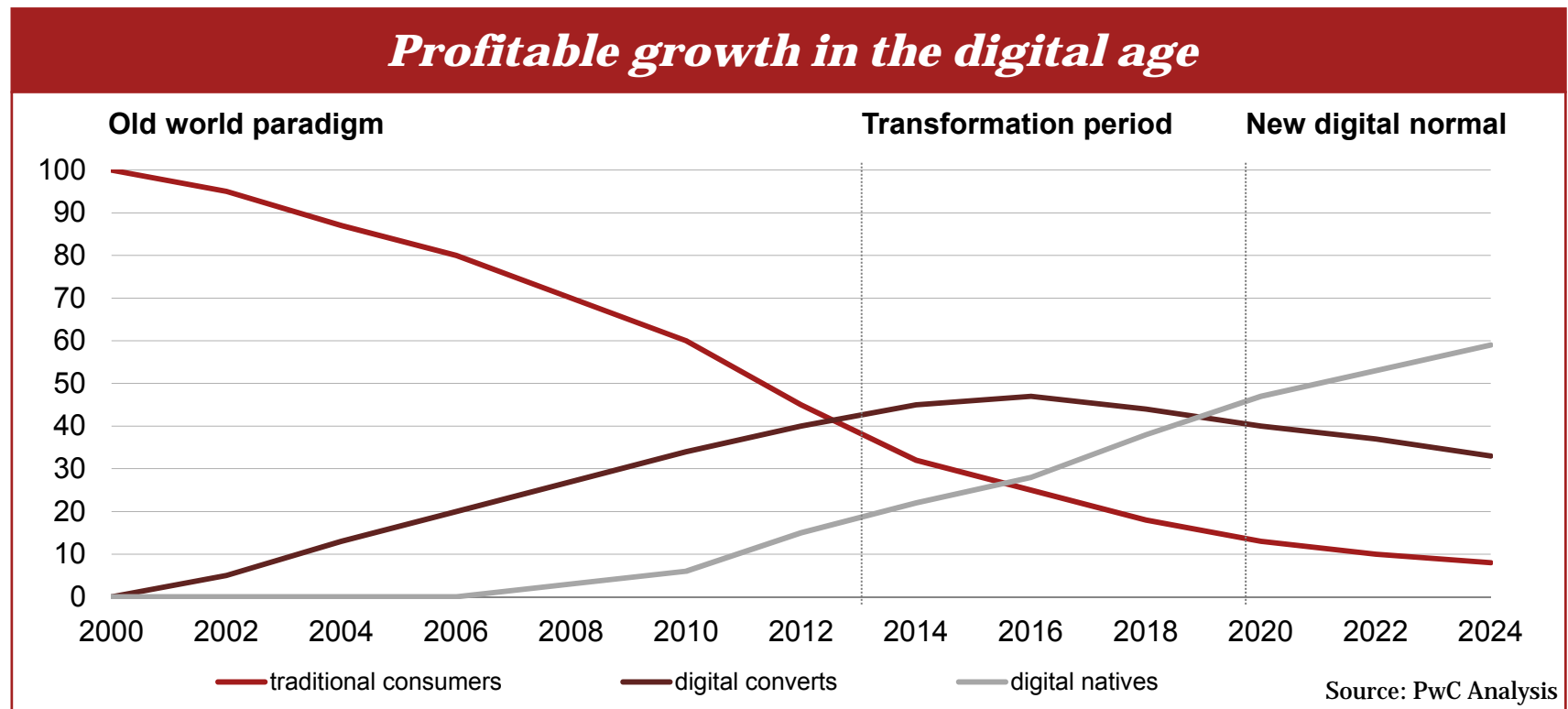


Source: Spiegel online

Digital Transformation ...with regard to the world's population



Digital consumers have already outnumbered traditional consumers



Increasing degrees of digital fitness are required to play and win!

Market overview & PwC PoV

Businesses have only just begun to understand how to create value with new digital tools ...



New technologies and a changing consumer behavior have a significant change impact on business world

What do we mean by “Digital Transformation”?



Change of Business Models

Business change, triggered or enabled by digital technology



Computing Power – everywhere available



Technologies and Applications – everywhere available



Customer behaviour change due to „***Digital Natives***“



Realtime analytics of large amounts of data – by intelligent ***Algorithms***



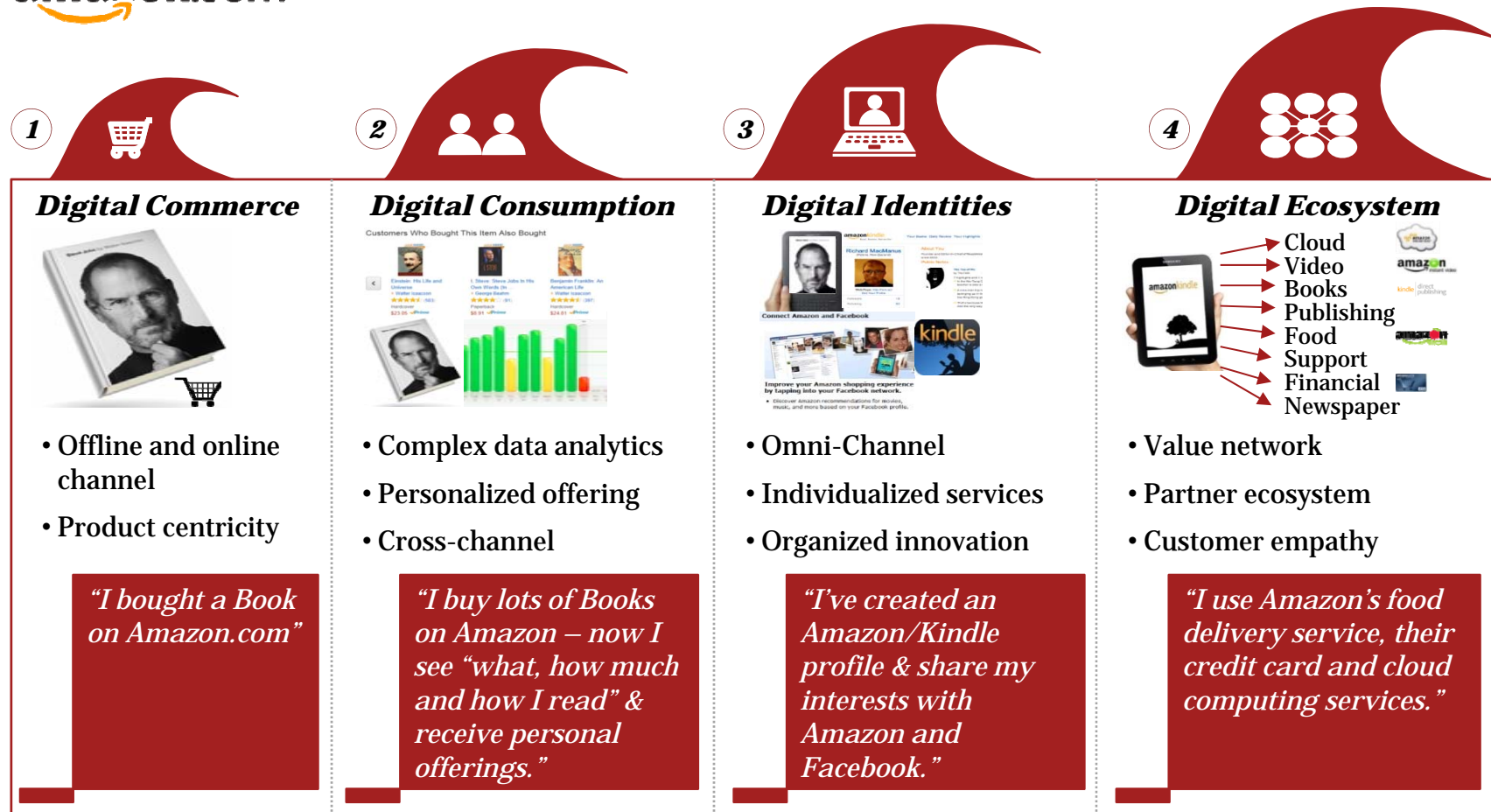
Transparency and Information – everywhere at any time



New interaction models – due to the “***Always on***” ***Culture***

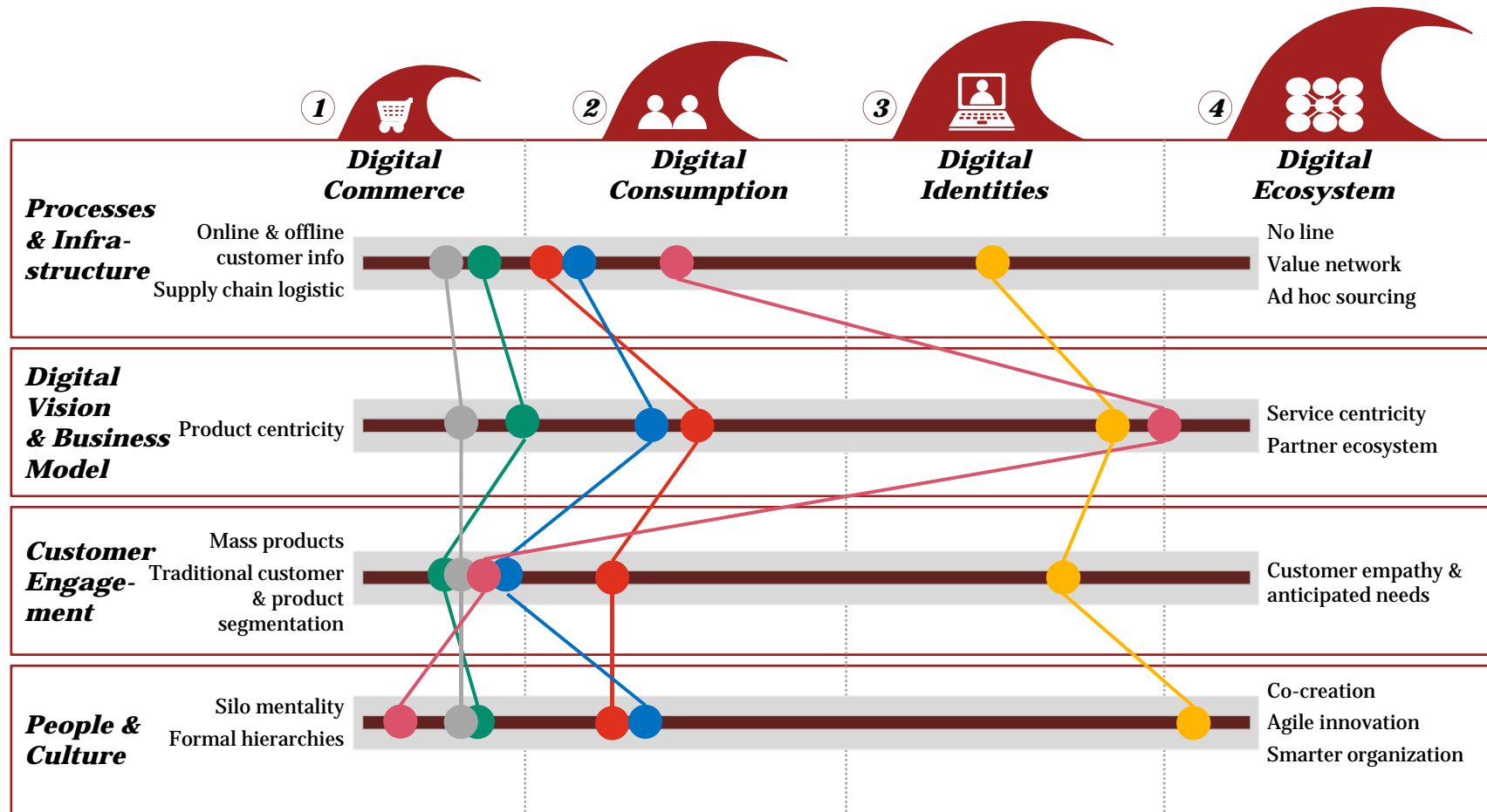
PwC's four-wave-model describes the digital maturity of client's business model (amazon example)

amazon.com



The current competitors are not beyond wave two, but new market player will enter the industry value chain

Outside-In-View



Company

Competitor

Competitor

Competitor

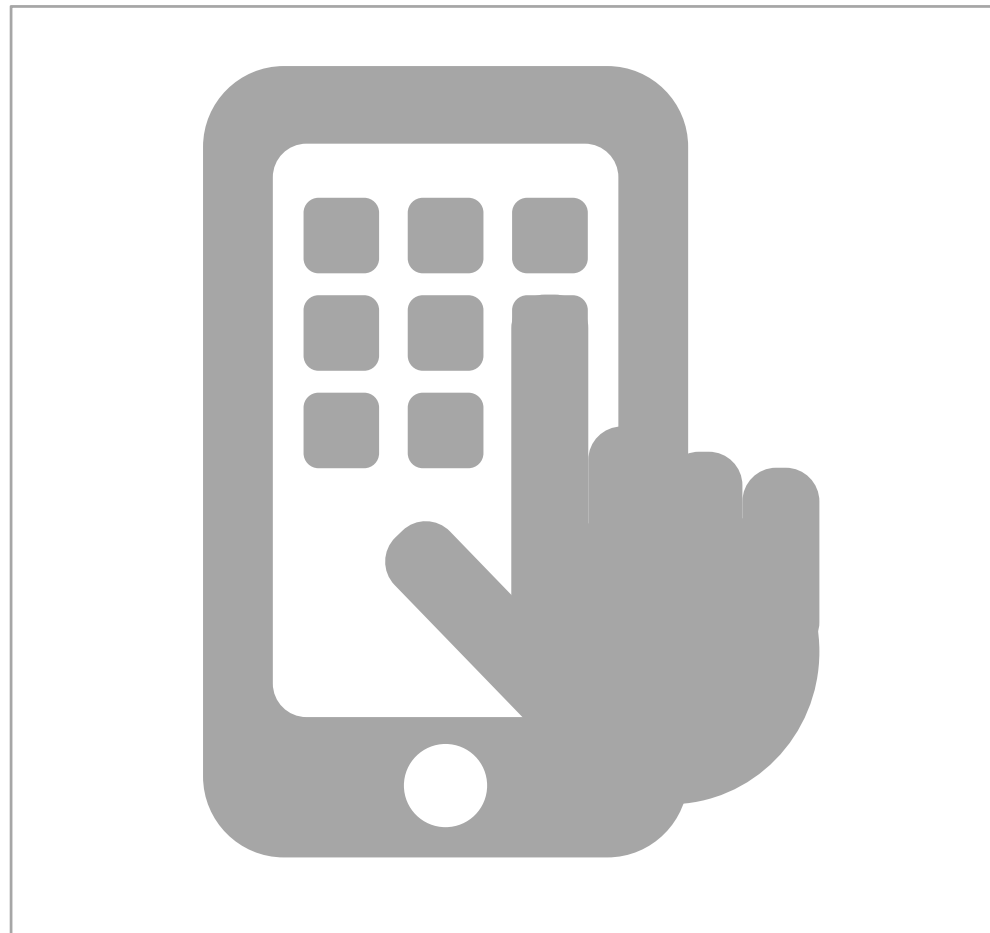
New Market Players

December 2014

SMAC

Digital Transformation Drivers

<i>S</i>	<i>ocial</i>
<i>M</i>	<i>obile</i>
<i>A</i>	<i>nalytics</i>
<i>C</i>	<i>loud</i>



A myriad of services is possible to be embedded due to SMAC



How Social Media is changing the world

News

50% of people learn about breaking news on social media.



Law Enforcement

In **2011** the NYPD added a Twitter tracking unit and has used social networking to arrest criminals who have bragged of their crimes online.



Social Media



Social Media has enabled greater **political awareness** and organization, which has in some cases rewritten entire political landscapes.

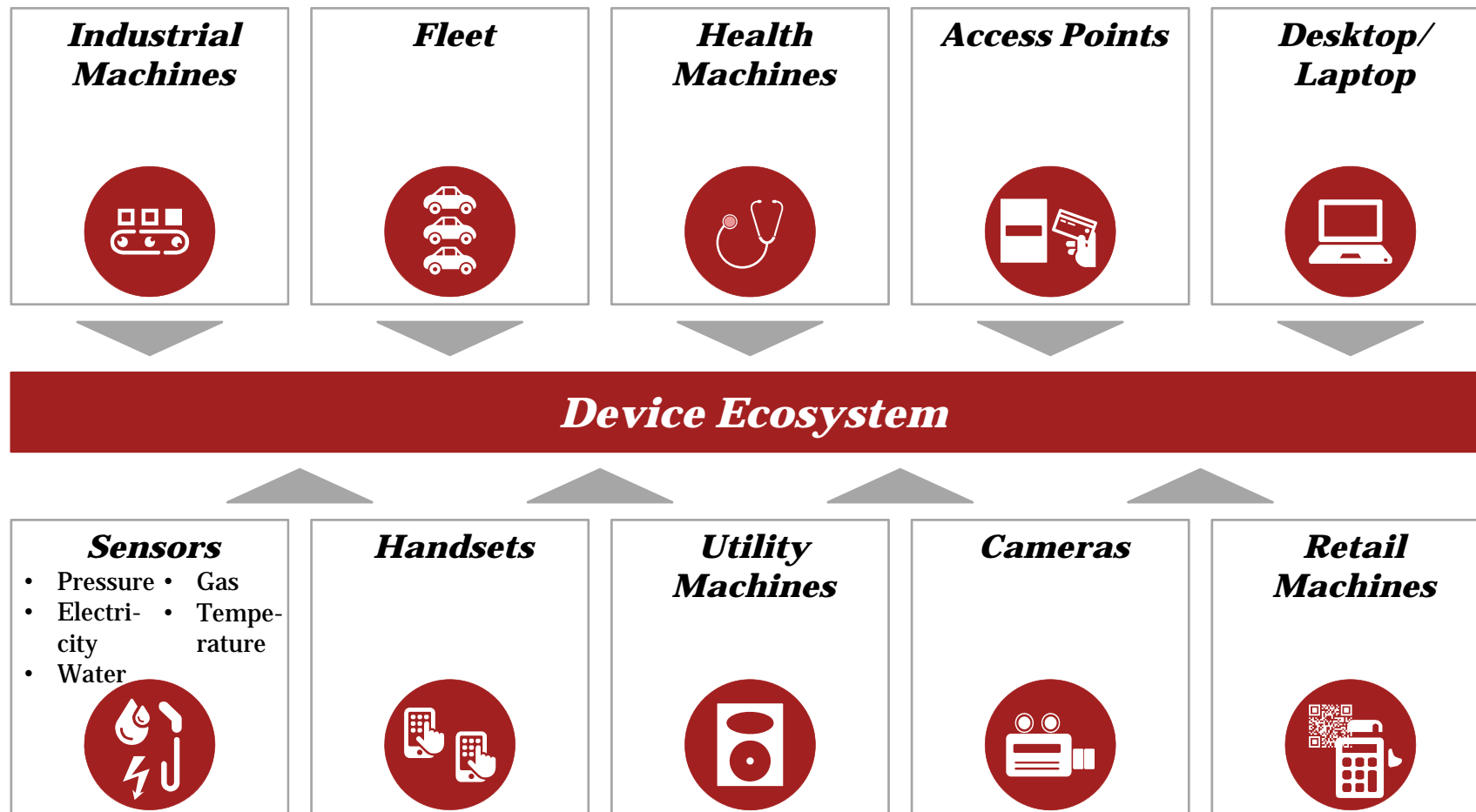
Political Change

In 2012, **210,000 years** of music was played on Facebook.



Music Industry

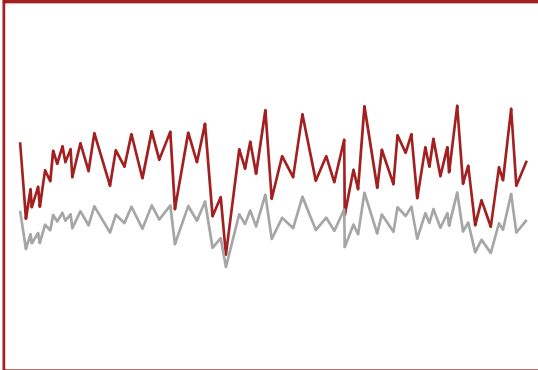
Mobility requires integration of a wide set of devices and technologies



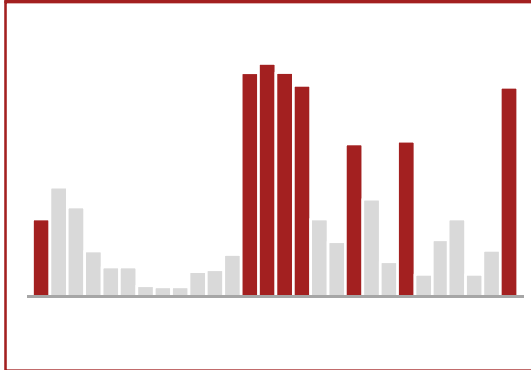
Real-time analysis of structured and unstructured data will become a core competence

Data analysis

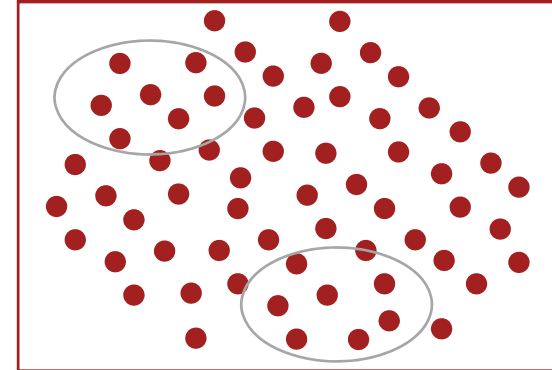
Detect correlation



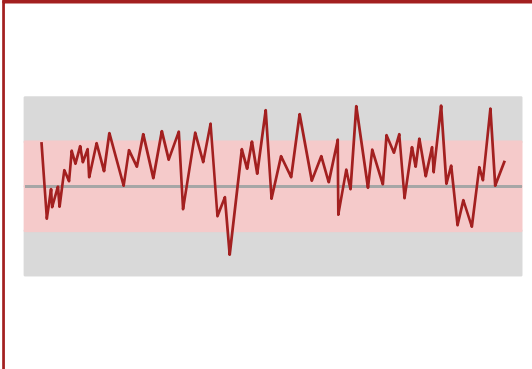
Search abnormalities



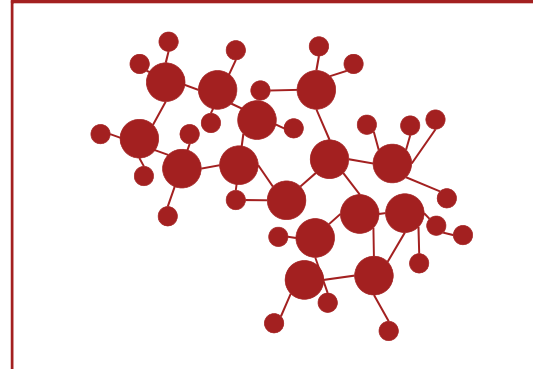
Identify groups



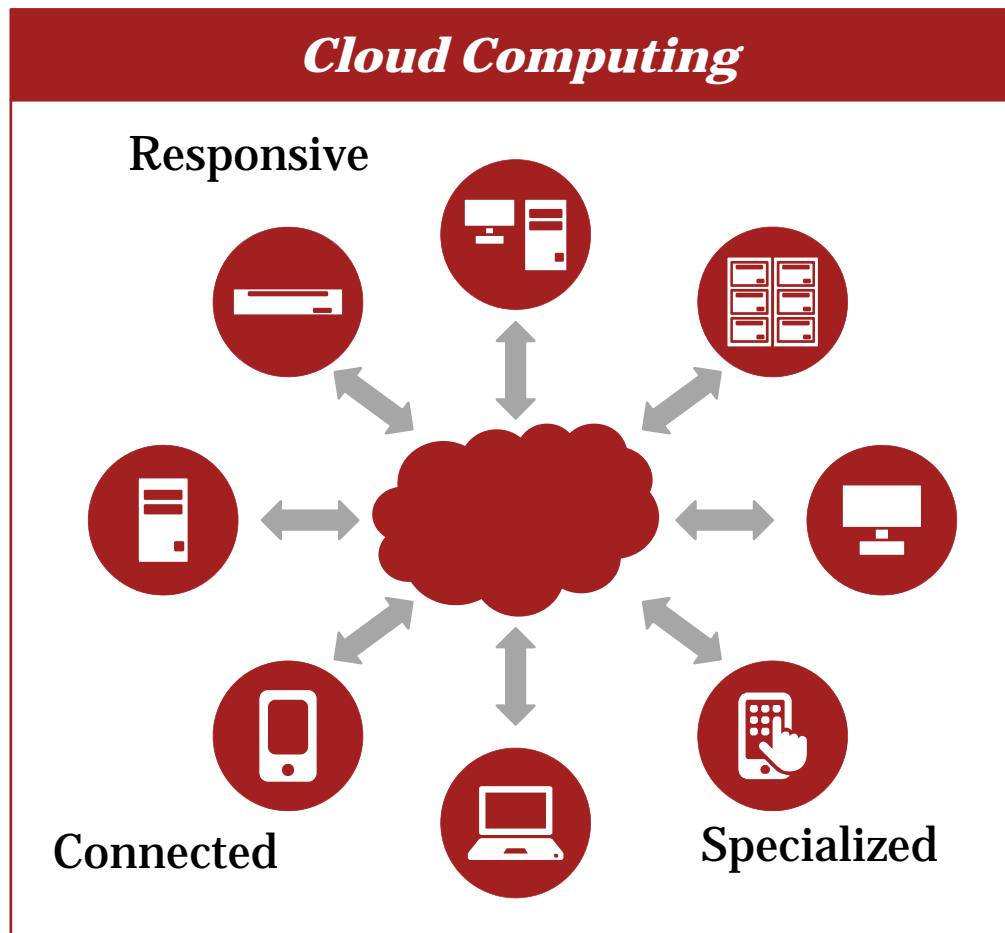
Predict events



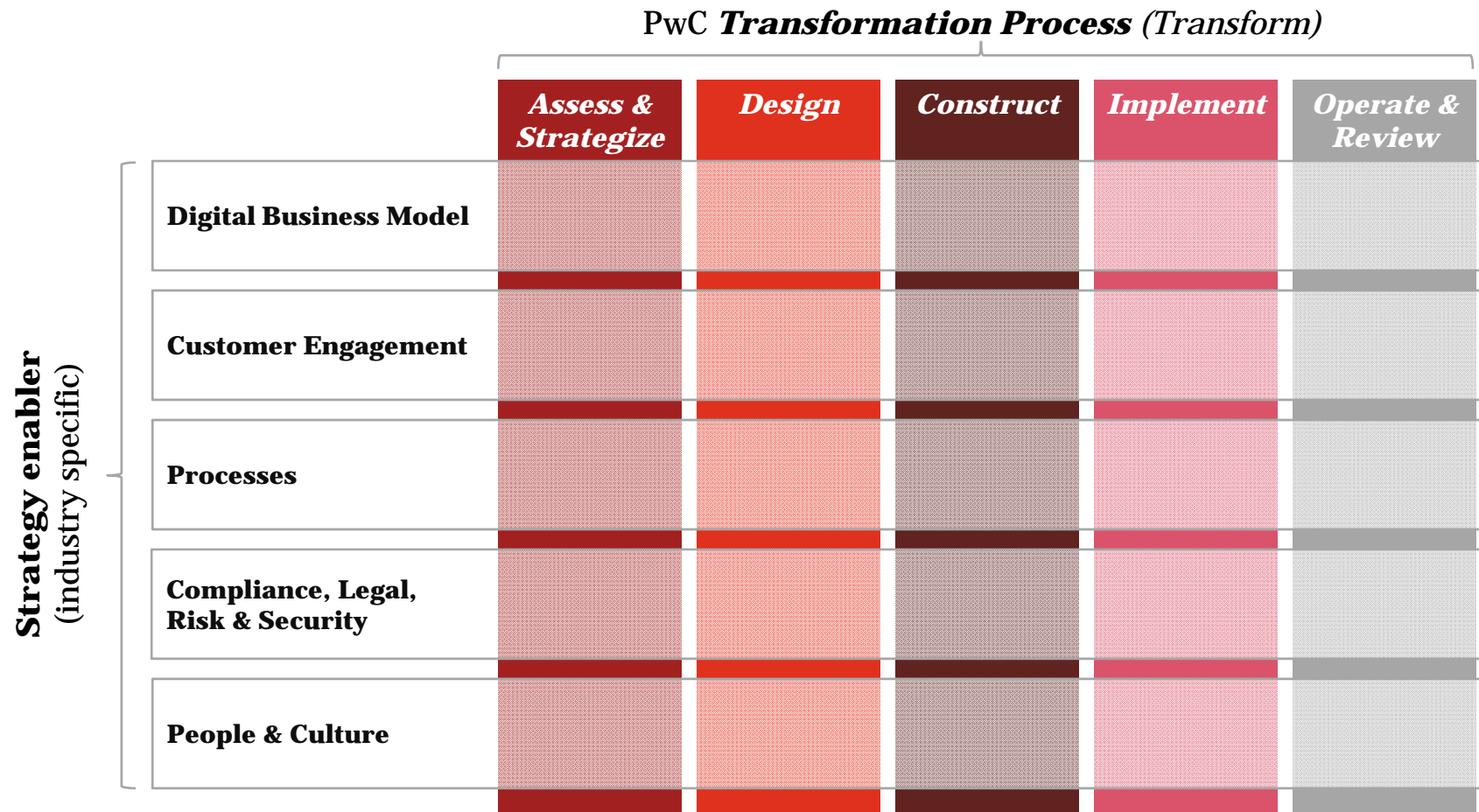
Analyze networks



There are three main factors enabling potential business benefits of using cloud computing



Holistic approach to cover Digital Transformation demand among whole lifecycle



Introduction: Business Model Design

The breakthrough of new technologies and its impact on existing business models is still to come...



The breakthrough of new technologies and its impact on existing business models is still to come

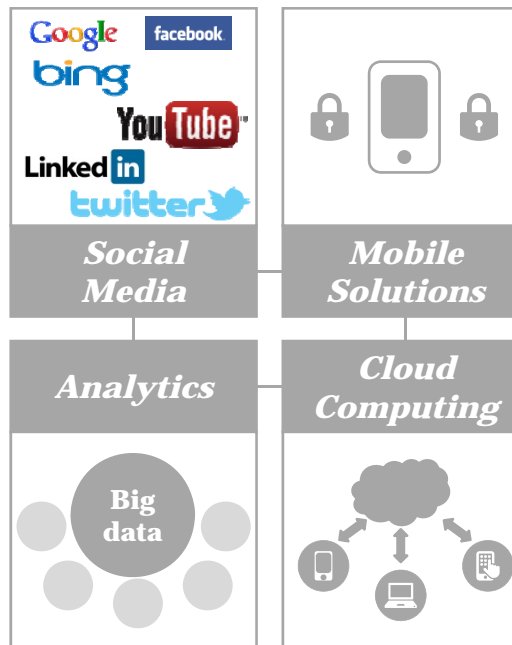
1999 - 2007: Increasing digitalization



- Internet as sales channel
- New digital market places
- Digitalization of products
- Digitalization of processes

From 2007: Establishment of disruptive technologies

Change of Business Models



Tomorrow: New digital ecosystems

amazon.com

Google

tripadvisor

- New partnering-models
- Flexible value chain networks
- Service-orientation
- Convergence of industries (Consolidation)

The term “business model” is used for a broad range of informal and formal business descriptions

Definition of business model

“A business model describes the rationale of how an organization creates, delivers, and captures value (economic, social, cultural, or other forms of value).”

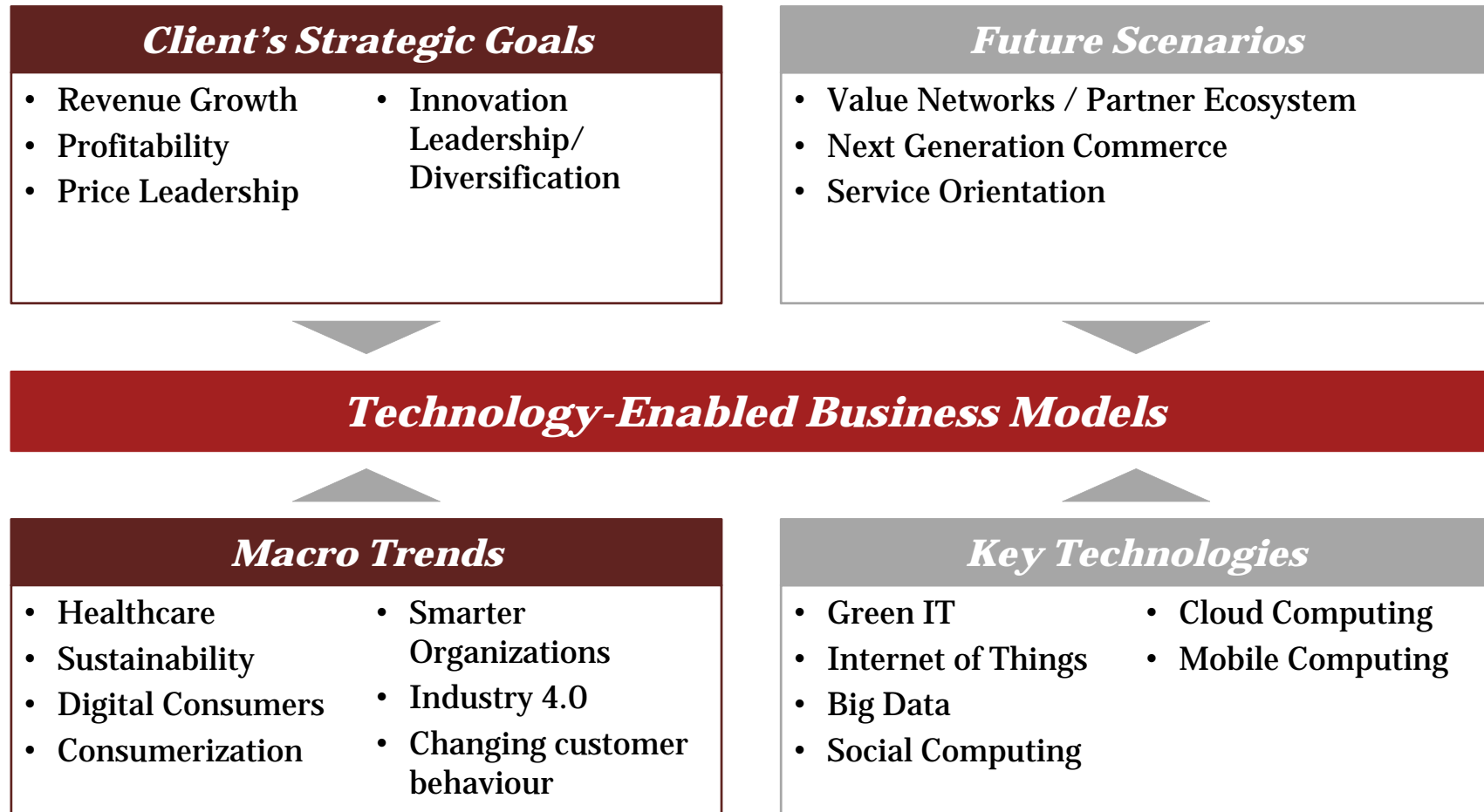
Source: PwC; Business Model Generation, A. Osterwalder, Yves Pigneur, Alan Smith, et. al, self published, 2010

Comments:

- This definition is based on “Business Model Generation”.
- It has become the most widely used definition for the term “business model”.

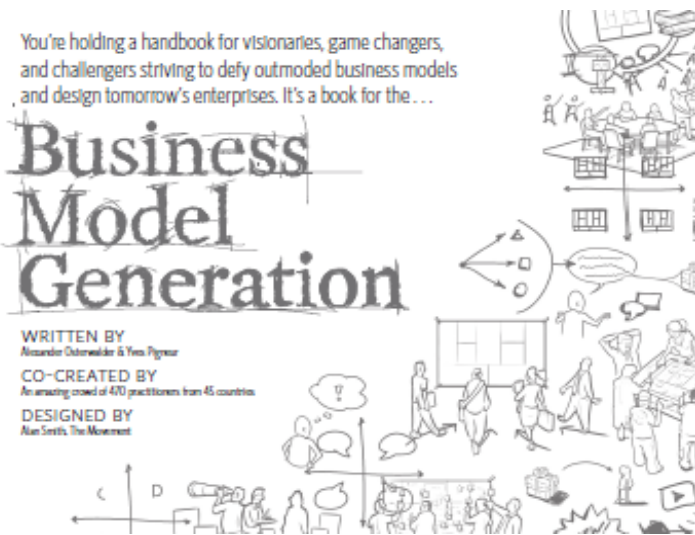
The choice of a suitable business model depends on different factors

Example



“Business Model Generation” framework and market trends are the basis for business model design

Business Model Generation



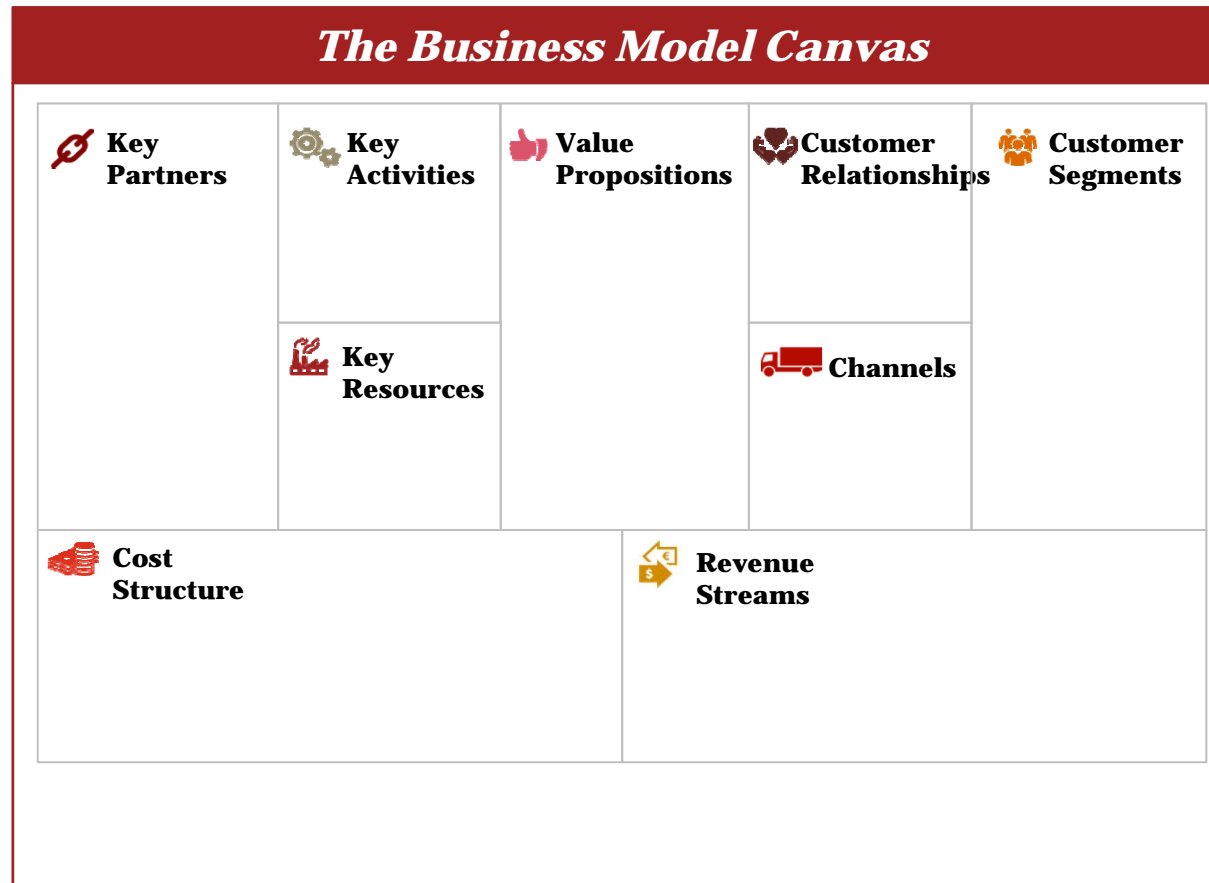
- Widely used design framework
- Business Model Canvas is a visual chart.

Market-economical key trends



- Key trends for technology enabled innovations
- New thinking and technological breakthroughs into existing ecosystems

Canvas is a template for developing new or documenting existing business models










Comments:

- Enables an opportunity to design business models creating value for business, customers, and society
- An easy to use method to illustrate ideas and dependencies of business models

Source: PwC; Business Model Generation, A. Osterwalder, Yves Pigneur, Alan Smith, et. al, self published, 2010

Business Model Canvas

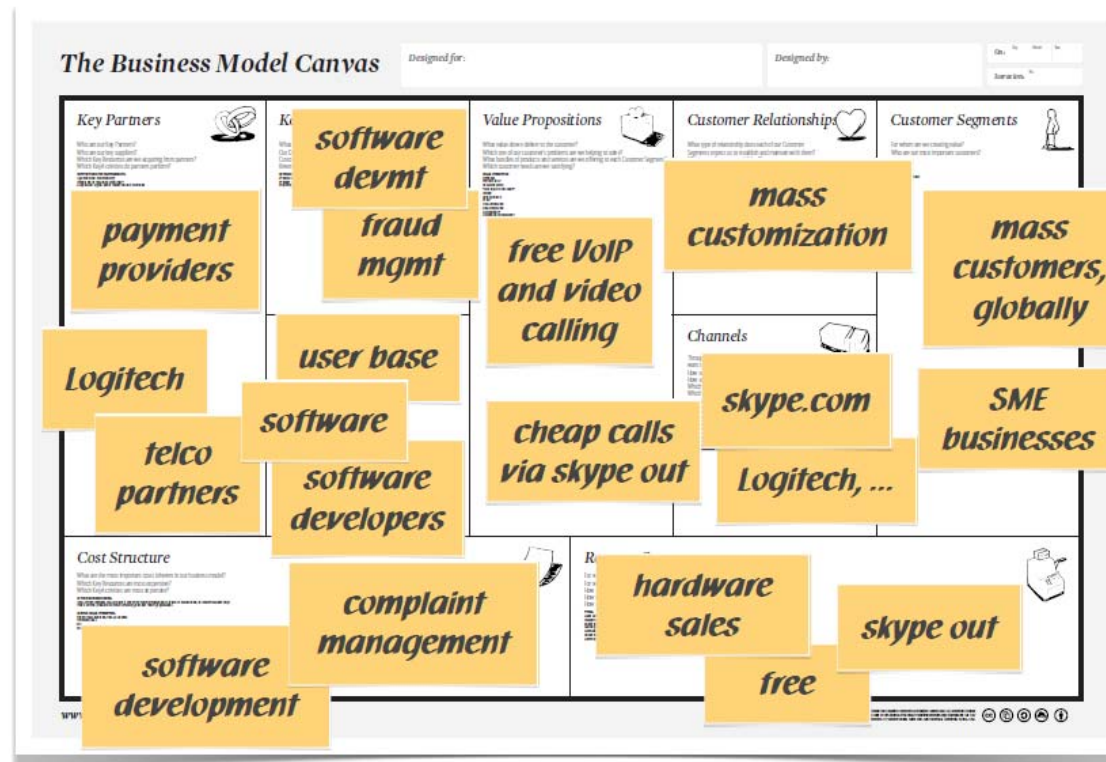
A template for developing new or documenting existing business models

 <p>Key Partners</p> <ul style="list-style-type: none"> Who are our Key partners? Who are our key suppliers? Which key resources are we acquiring from partners? Which Key Activities do partners perform? <p>Motivations for Partnerships Optimization and economy Reduction of risk and uncertainty Acquisition of particular resources and activities</p>	 <p>Key Activities</p> <ul style="list-style-type: none"> What key activities needed to deliver: <ul style="list-style-type: none"> our Value Propositions? Our Distribution Channels? Customer Relationships? Revenue streams? 	 <p>Value Propositions</p> <ul style="list-style-type: none"> What value do we deliver to the customer? Which one of our customer's problems are we helping to solve? What bundles of products and services are we offering to each Customer Segment? Which customer needs are we satisfying? 	 <p>Customer Relationships</p> <ul style="list-style-type: none"> What type of relationships does each of our Customer Segments expect us to establish and maintain with them? Which ones have we established? 	 <p>Customer Segments</p> <ul style="list-style-type: none"> For whom are we creating value? Who are our most important customers?
 <p>Cost Structure</p> <ul style="list-style-type: none"> What are the most important costs inherent in our business model? Which Key Resources cause which expenses? Which Key Activities cause which expenses? 		 <p>Revenue Streams</p> <ul style="list-style-type: none"> For what value are our customers really willing to pay? For what do they currently pay? 		

Separate areas of the Canvas can be used as a guideline to analyze a company's holistic situation

Example Skype

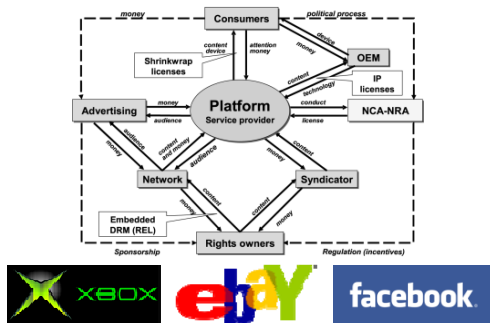
The Business Model Canvas



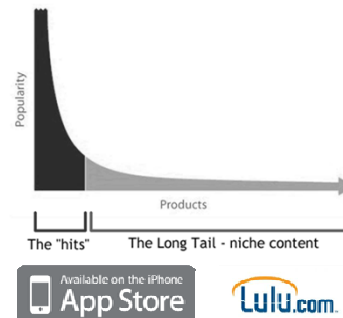
Source: PwC; Business Model Generation, A. Osterwalder, Yves Pigneur, Alan Smith, et. al, self published, 2010

Business model patterns are architectural design ideas used as archetypal and reusable descriptions

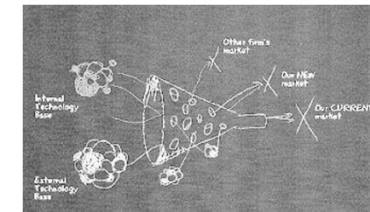
Multi-Sided Platforms



The Long Tail



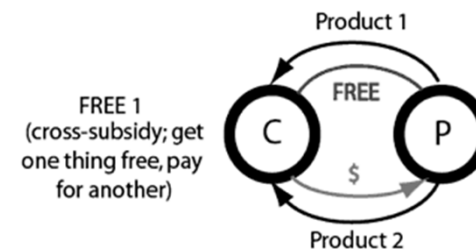
Open Business Models



Unbundling Business Models



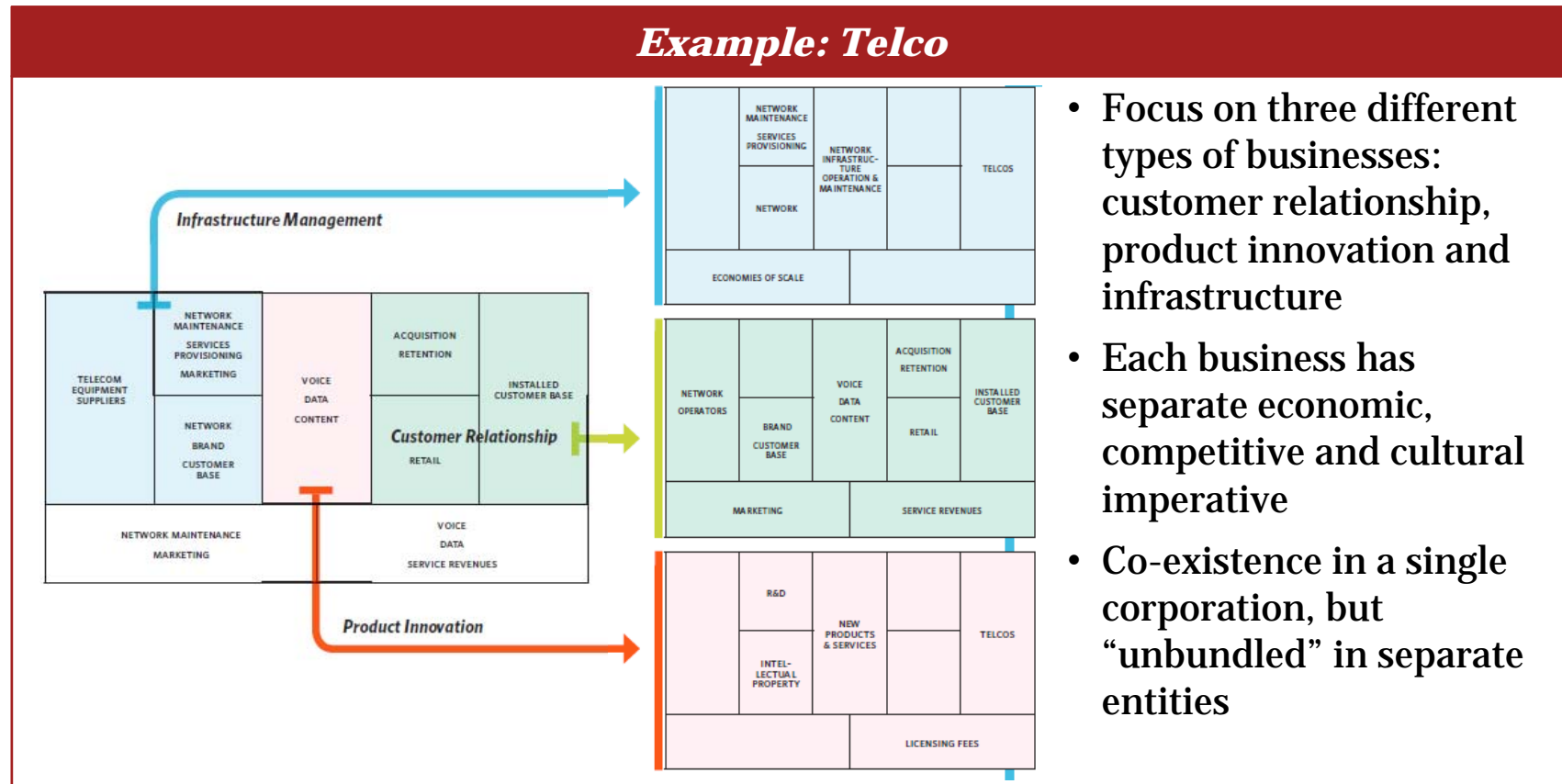
Free as a Business Model



Source: PwC; www.businessmodelgeneration.com; Business Model Generation, A. Osterwalder, Yves Pigneur, Alan Smith, et. al, self published, 2010

Unbundling Business Models combine fundamentally different types of businesses

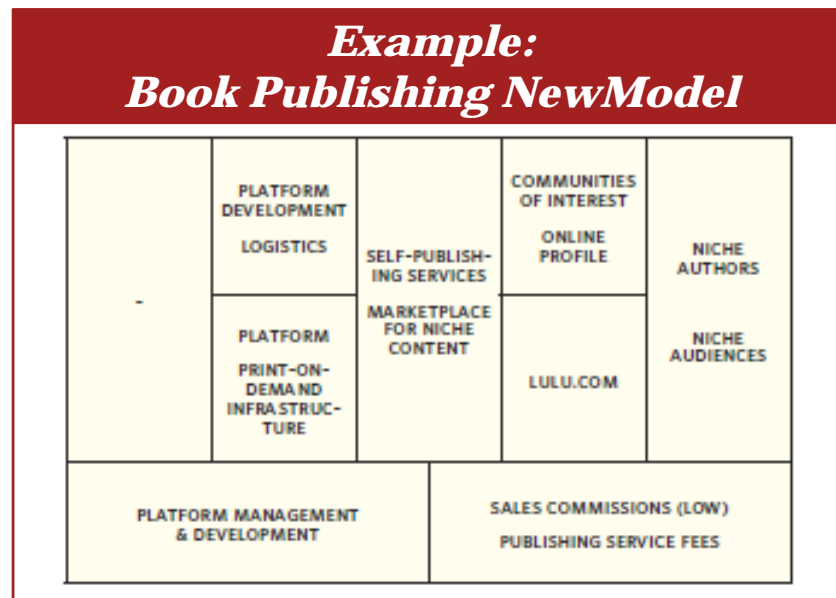
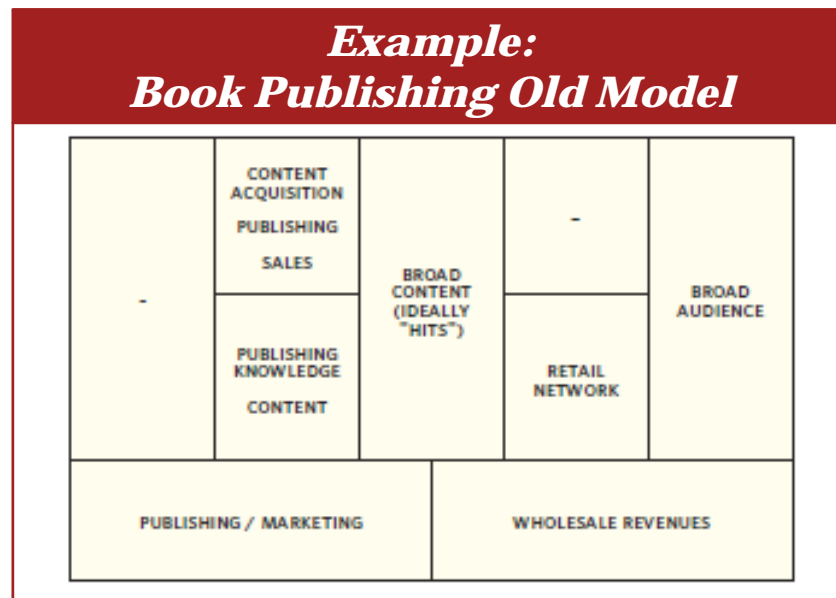
Example: Telco



- Focus on three different types of businesses: customer relationship, product innovation and infrastructure
- Each business has separate economic, competitive and cultural imperative
- Co-existence in a single corporation, but “unbundled” in separate entities

Source: PwC; www.businessmodelgeneration.com; Business Model Generation, A. Osterwalder, Yves Pigneur, Alan Smith, et. al, self published, 2010

Long Tail Business Models combine aggregated sales of niche products

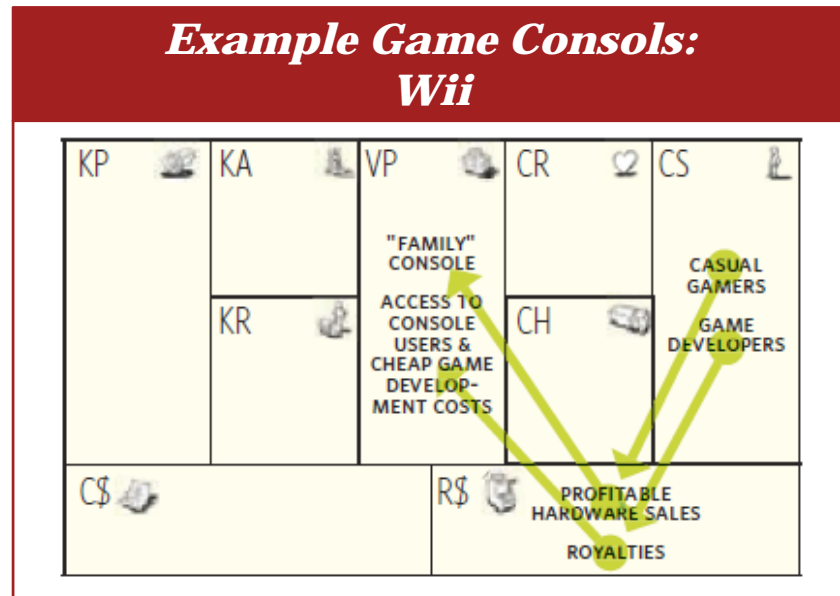
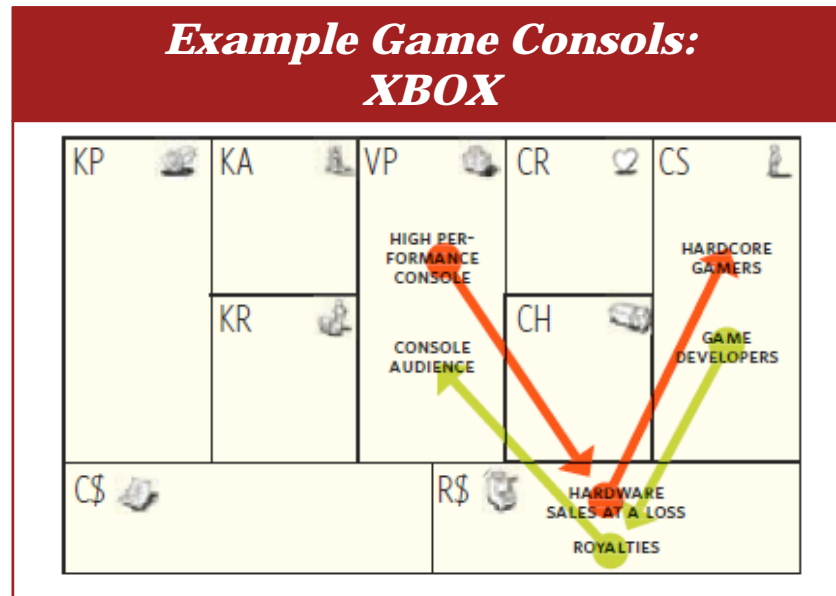


- Focus on offering a large number of niche products, each of which sells relatively infrequently
- A small number of bestsellers account for most revenues
- Require low inventory costs and strong platforms to make niche content readily available to interested buyers.

Source: PwC; www.businessmodelgeneration.com; Business Model Generation, A. Osterwalder, Yves Pigneur, Alan Smith, et. al, self published, 2010

December 2014

Multi-Sided Platform Business Models combine different groups of customer

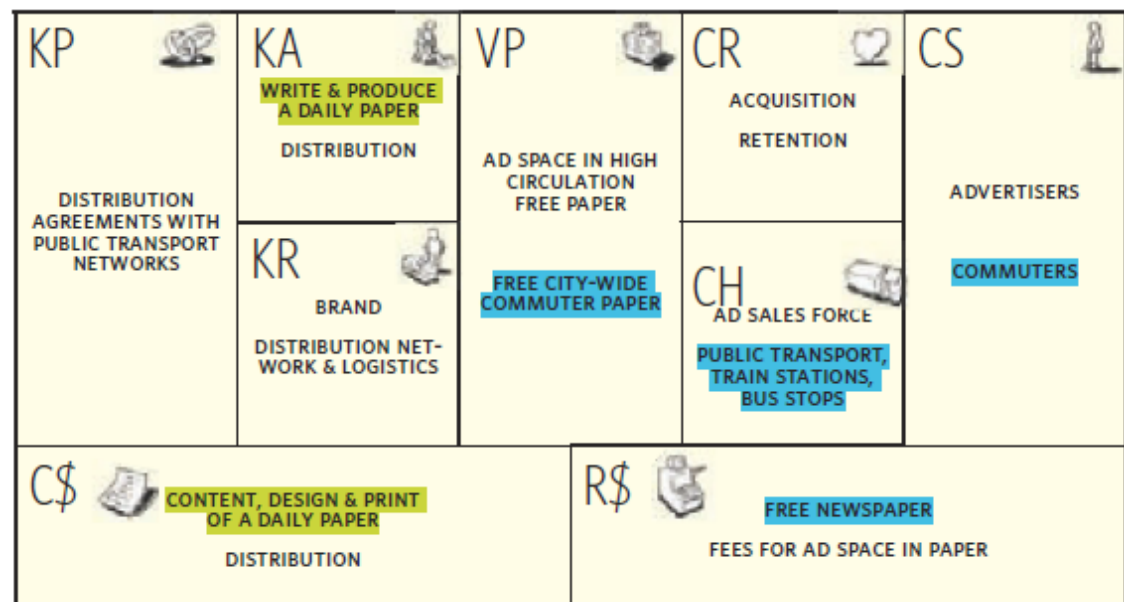


- Bring together two or more distinct but interdependent groups of customers
- Value to one group of customers only if the other groups of customers are also present, value creation by facilitating interactions between the different groups
- A multi-sided platform grows in value to the extent that it attracts more users, a phenomenon known as the network effect

Source: PwC; www.businessmodelgeneration.com; Business Model Generation, A. Osterwalder, Yves Pigneur, Alan Smith, et. al, self published, 2010

Freemium Business Models combine one non-paying and paying customer segments

Example: Metro

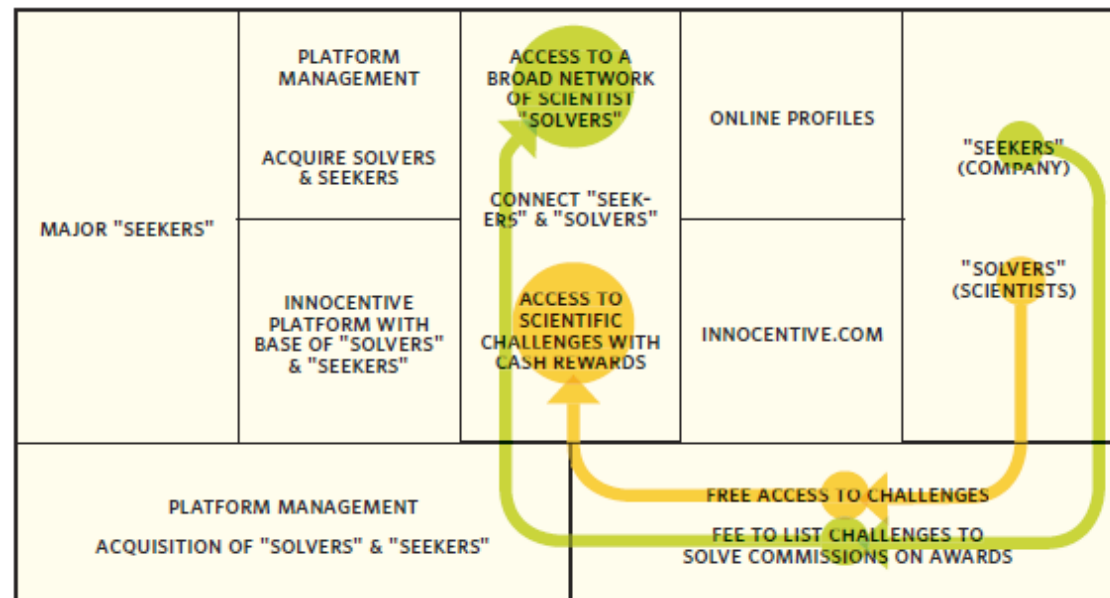


- At least one substantial Customer Segment is able to continuously benefit from a free-of-charge offer
- Different patterns make the free offer possible
- Non-paying customers are financed by another part of the business model or by another Customer Segment

Source: PwC; www.businessmodelgeneration.com; Business Model Generation, A. Osterwalder, Yves Pigneur, Alan Smith, et. al, self published, 2010

Open Business Models combine systematically collaboration with outside partners

Example: Innocentive



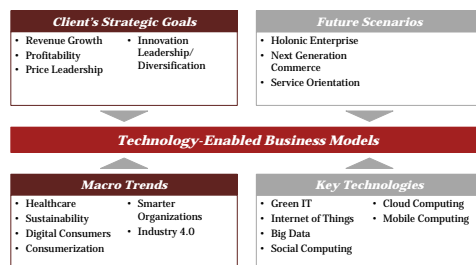
- Create and capture value by systematically collaborating with outside partners
- May happen from the “outside-in” by exploiting external ideas within the firm, or from the “inside-out” by providing external parties with ideas or assets lying idle within the firm

Source: PwC; www.businessmodelgeneration.com; Business Model Generation, A. Osterwalder, Yves Pigneur, Alan Smith, et. al, self published, 2010

Three-steps approach to Technology-enabled business innovation potentials foster firms to sustainable future

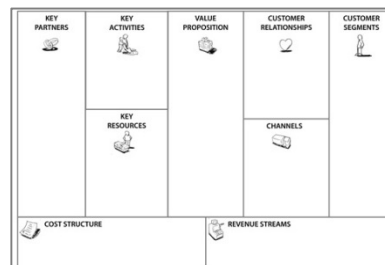
1 Preparation

- Analyze a firm's current (economic) situation and business goals
- Identify technology and market economical key trends relevant for client



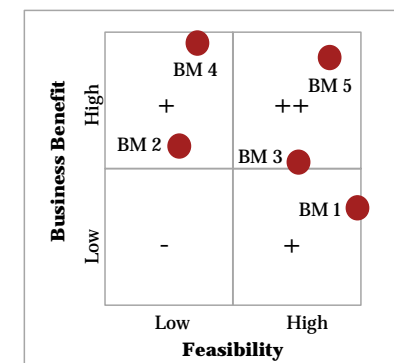
2 Business Model Generation

- Create understanding for key technologies and economical key trends
- Generate ideas for technology-enabled business models
- Design business models with “Business Model Canvas“



3 Business Model Assessment

- Define criteria for business model assessment
- Assess business models (strategic, finance, market, resource view)



Criteria (KPIs) to assess business models can be selected from different cluster

Business alignment	Market View	Competitive advantage	Resource orientation	Financial View	Technology View
Strategic Fit / Business Fit	Market Size / Market Demand	Competitive impact of technology	Manufacturing costs	Risks	Market entry costs
Impact on business	Market Growth	Durability of competitive advantage	Copyrights	Price elasticity of demand	Complexity
Cannibalization effects	Probability of commercial success	Competition (geographical limits, oligopoly)	Core competencies / strengths (technology, marketing, operations)	Market barriers (capital intensity of industry, limits of imitation)	Uncertainty
	Innovation potential (degree of innovation)		Feasibility	Time-to-break even	Experiences / size of skill-gap
	Market Risk (geographic, political situation, resources)	Protectability (Patents, proprietary knowledge)	Effort / Resource availability	Earned Value Added (EVA)	Probability of technical success
	Uniqueness		Synergies (ability to leverage Core competencies)	Net present value / Profitability	
	Market Share			Product margin	

Investor Call

Describe your new business idea for your customer

Your task

- Establish teams of 3-5 people and select one use case
- Brainstorm new business ideas refer to your use case
- Develop technology enabled business models to your idea
- Select the most promising 1-2 business model idea(s)
- Prepare a investor call meeting to present your business idea

Time

- 8 min. presentation
- 2 min. Q&A

Investor Call

Select one of the following five cases studies

***Customer
Loyalty@Insurance***

***Digitalization@
Media Industry***

***Value-adding Electric
Vehicle-charging
station services***

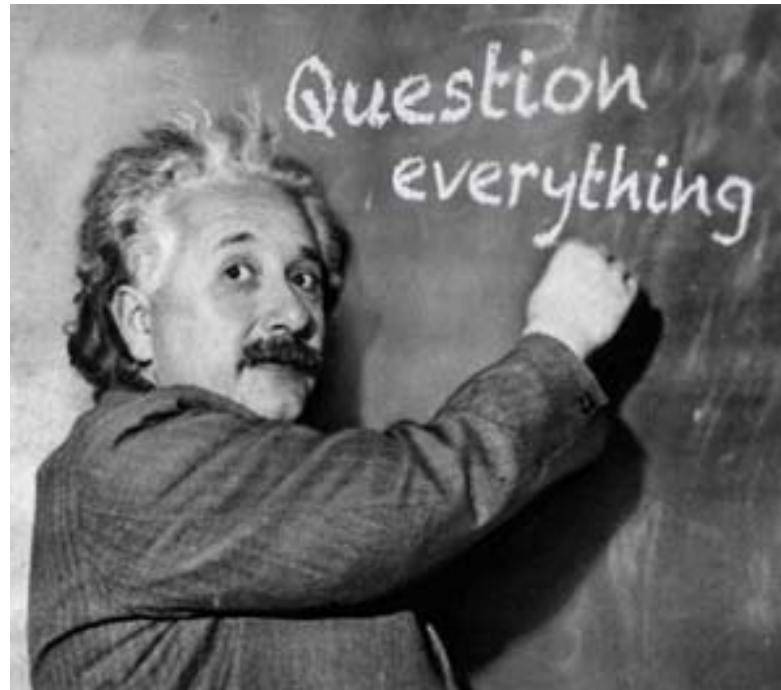
***eCommerce in
Food & Beverage
Retail***

mHealth

Wrap up of the day

Comments?

Questions?



Use Case No 1: Customer Loyalty@Insurance

Background

- The Insurance Company „**WeCareforYou**“ is an international corporation headquartered in Frankfurt, Germany with a **premium income of € 5bn in 2012**. With nearly 5.000 employees it is **one of the leading insurance companies** in Germany. It provides life- and property insurances for private and industrial customers
- „**WeCareforYou**“ is **quite active** in some social networks (**LinkedIn, Facebook, XING**), but failed to implement a comprehensive digital transformation strategy and **did not invest sufficiently** in digital opportunities
- Therefore, compared to the competitors, **the digital appearance lacks refinement**
- For the last two financial years the **customer figures have not grown**. „**WeCareforYou**“ is forced to act

Client- Challenge

- „**WeCareforYou**“ notices that **customer acquisition and customer retention become more and more difficult** whereas **customer needs become more complex**
- „**WeCareforYou**“ explores how to make more use of the existing client portfolio and **how to increase customer retention** and customer value (e.g. cross selling potential)
- Furthermore, the company has to **reduce costs and the complexity of its internal processes**
- **Digital opportunities might help** to manage these challenges – but „**WeCareforYou**“ **did not evaluate how this might work out** and how to integrate digital opportunities into their existing business processes

Use Case No 1: Customer Loyalty@Insurance

Your Task

- Please prepare **2-3 business models** for „WeCareforYou“ and **compare** them on a **qualitative** basis
- Please consider the **digital opportunities**
- How could „WeCareforYou“ enhance its digital appearance in order to take advantage of the opportunities of the digital transformation?

Use Case No 1: Customer Loyalty@Insurance

First Ideas to increase customer value

Customer Value@Insurance Companies - Examples

Attract new customers with gamification methods (e.g. insurance simulation on Facebook)

Rapid/ad-hoc recording liability cases via app

Integrate feedback forums for doctors and hospitals

Provide platforms for (critical) discussions (e.g. political aspects of insurance, scandals, liability cases)

Use Big Data from social media to customize customer approach

Cooperate with 3rd parties like gyms

Explain insurance policies in common speech

Evaluate online cases of damage input behavior, to detect fraud (if people cheat they act differently)

Channels

- Social Networks
- Blogs
- Twitter
- Website
- App

Revenue growth

Attract customers & increase selling's

Cost reduction

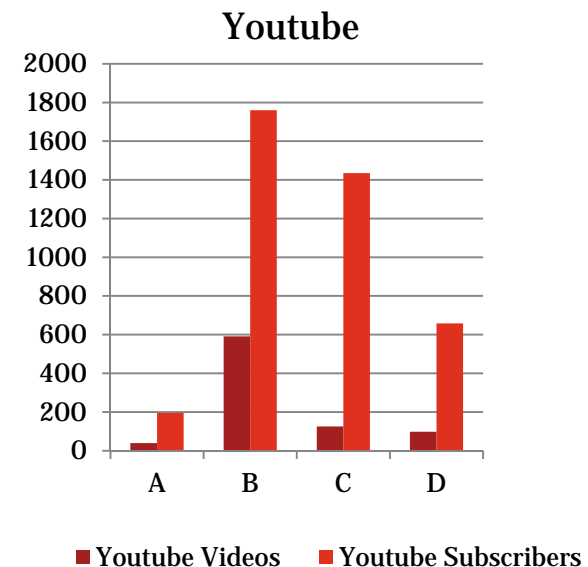
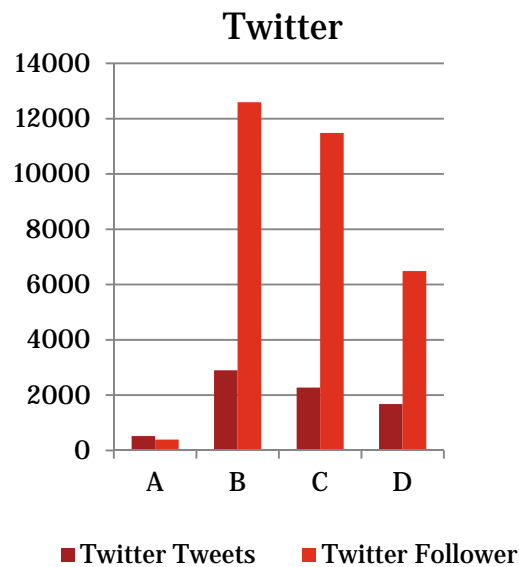
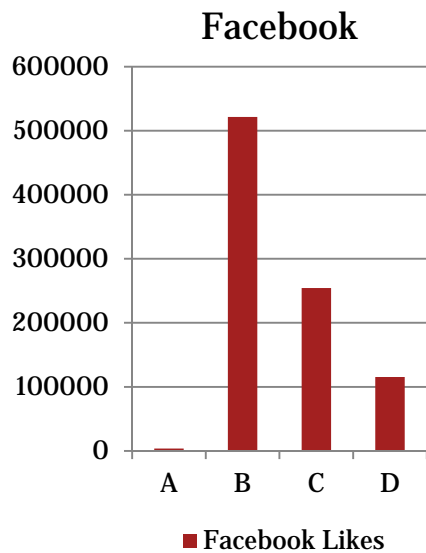
Accelerate self service & fraud detection

Reputation/Image measures

Improve attention & scandal management

Use Case No 1: Customer Loyalty@Insurance

Mini Benchmark



	Facebook Likes	Twitter Tweets	Twitter Follower	Youtube Videos	Youtube Subscribers
„WeCareforYou“ A	3.561	523	394	39	195
Competitor B	521.498	2.901	12.593	591	1.760
Competitor C	254.381	2.277	11.486	125	1.435
Competitor D	115.321	1.681	6.489	98	658

Use Case No 1: Customer Loyalty@Insurance

Business figures

		2012	2011	2010	2009	2008
Gross premiums written	Mio EUR	2.631	2.685	2.761	2.834	2.776
	%	-2,0	-2,7	-2,6	2,0	2,3
Net premiums earned	Mio EUR	2.523	2.591	2.658	2.753	2.695
	%	-2,6	-2,5	-3,4	2,1	1,9
Concluded insurance contracts	Nb	2.378.788	2.423.275	2.486.342	2.512.658	2.492.653
	%	-1,8	-2,5	-1,0	0,8	1,9

Use Case No 2: Digitalization@Media Industry

Background

- „TradMedia“ is a **national media company** (newspaper and magazines) headquartered in Hamburg, Germany. Its total revenues are about **€ 1bn per year**
- “TradMedia” divides its business activities into **two divisions**, each comprised of two business units. The publications cover the areas of the **economic and financial sector** and range from a weekly newspaper to a few magazines for both sectors
- Against the global trend the owner and head of “TradMedia” insisted to the traditional way of print media and **refused to develop new technologies**
- „TradMedia“ is **loosing customers**, so they are forced to work out a **digital transformation strategy**

Use Case No 2: Digitalization@Media Industry

Client- Challenge

- Media (especially publishing) companies **struggle with decreasing revenues** due to **declining circulation** of their print products
- They are seeking for new opportunities to **adapt their business models to the digital age**
- Most of the publishing companies have **not yet identified such a business model**, the media industry still seems to be in a “trial-and-error”-phase
- **Integration of the digital strategy** into the internal process – how can a media company stay visible?
- **What’s your USP that you offer your customers?** It’s necessary to get a value from digital print media. Digital media currently accounts for just 12% of the revenues compared to the traditional print media. However 1 of 10 magazine subscriptions is already digital
- **Using customer information** to create **opportunities** in digital media

Your Targets

- Please prepare **2-3 business models** for TradMedia and **compare** them with each other on a **qualitative** basis
- Please consider the **challenge of decreasing revenues** of media companies due to the **declining circulation** of print products

Use Case No 2: Digitalization@Media Industry

Key Questions for Media Companies – input for developing new business models

1. What is my **core business**? (e.g. regional newspaper: local information, providing value for people in a special region)
2. Which **technical platform** is suitable to support my core business? (e.g. separation of content creation and re-utilization → focus on core business)
3. Which **cooperation partners** are appropriate to boost my core business and offer added value to my customers? (e.g. create world of experiences for customers via different mediums and channels)
4. Which **USP** do I offer my customers?
5. How can I take my customers **through the digital transformation** (e.g. print subscriber becomes a free digital subscriber)

Use Case No 3: mHealth

Background

- The **Pharma Company „Health&More“** is an **international pharmaceutical corporation** based in Berlin, Germany
- „Health&More“ **discovers, developers, produces, and distributes new medicines** worldwide and with over 40.000 employees it's one of the 20 biggest pharmaceutical companies globally
- Its **core business is the development of pharmacy technology for cardiovascular heart disease and women healthcare**
- The **total revenues are about € 12 bn per year**
- „Health&More“ is **quite active** in some social networks (**LinkedIn, Facebook, XING**)

Use Case No 3: mHealth

What is mHealth?

- **mHealth** (mobile health) is a sub-segment of eHealth (electronic health) and **describes the practice of medicine and public health, supported by mobile devices** such as mobile phones, tablet computers and PDAs
- **mHealth applications** may for example **collect health data, deliver healthcare information to doctors, researchers, and patients, allow real-time monitoring of patient vital signs and direct provision of care**
- After the pharmaceutical and medical engineering markets **mHealth is already seen as the third largest growth area within the health care market**
- In developed countries **mHealth can help to meet the growing demand of health care services of ageing societies**
- In many less developed countries, which have seen a rapid rise in mobile phone usage in recent years, **mHealth is already a quite common feature which helps to provide medical assistance to people lacking regular access to health care**

Use Case No 3: mHealth

Client- Challenge

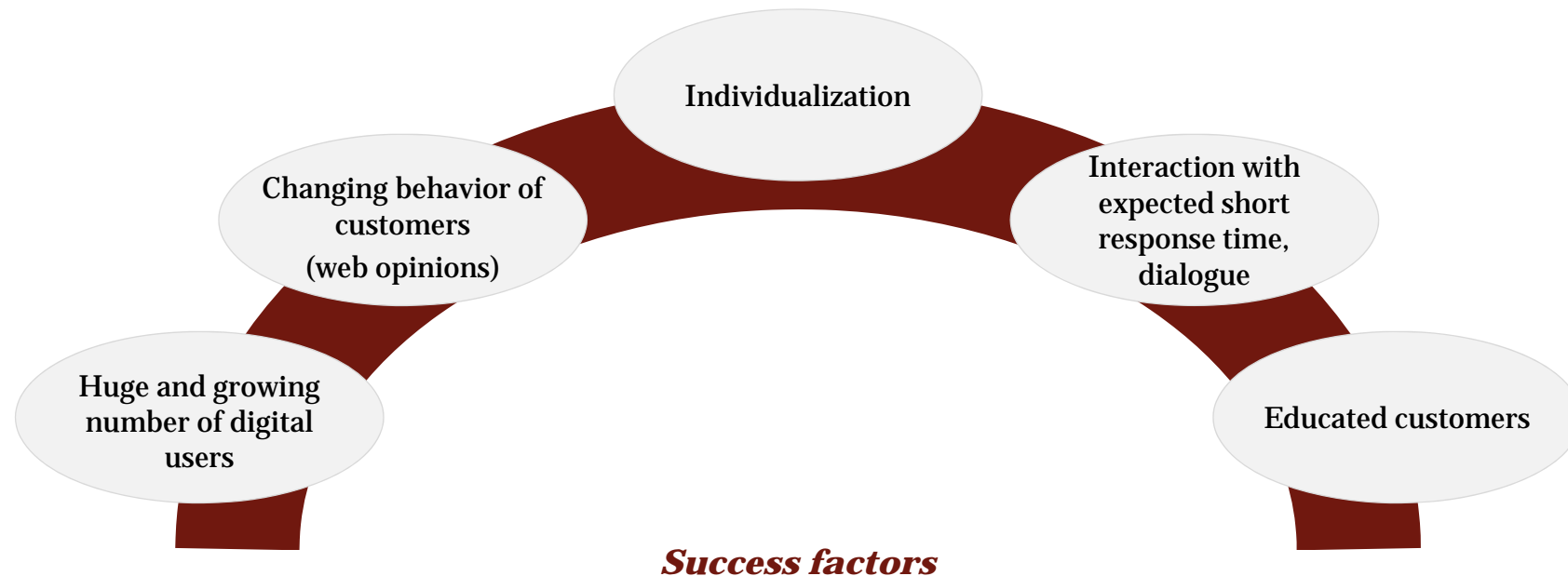
- **Growing significance** of **digital communication** channels
- Different and **more personalized way** to get in contact with patients and health care professionals
- **Improving access to clients** while **reducing costs**
- **Cultural changes** regarding healthcare delivery
- The **demographic change** and the **skepticism** of the elderly towards new technologies
- „**Make the right decision**“: It is difficult to take the right course through the variety of digital opportunities
- Healthcare is moving towards a **precision based model – or personalized medicine**
- The healthcare sector’s conservatism towards innovation **might slow down the adoption of innovative mHealth**
- The **pluralism of interests** in the sector contributes to its complexity
- Bad infrastructure in emerging countries

Your Targets

- Please prepare **2-3 business models** and **compare** them with each other on a **qualitative** basis
- Please **consider data privacy and information security** issues for interaction with clients and their personal data

Use Case No 3: mHealth

Trends & success factors



- Growing significance of digital communication channels
- Different and more personalized way to get in contact with patient and health care professionals
- Cultural changes regarding healthcare delivery

Use Case No 4: Value-adding Electric Vehicle- charging station services

Background

- “MyCar Company” is an **international car manufacturer** with over **120.000 employees** headquartered in Munich, Germany
- Its **total revenues** are about **€ 40bn per year**
- The product range covers **commercial- and non-commercial vehicles**. Additionally there is a great commitment for e-mobility
- “MyCar Company” is **planning to start a national car sharing service for electronic vehicles** in all German metropolitan as well as rural areas. In order to promote the presence of electric vehicles in Germany the company is planning to **develop and expand the infrastructure of charging stations**. Therefore it is looking for **feasible solutions to make charging stations attractive for partners and consumers** and **to maintain the station network at low costs**
- „MyCar Company“ is **quite active** in some social networks (**LinkedIn, Facebook, XING**)

Use Case No 4: Value-adding Electric Vehicle- charging station services

Client- Challenge

- Electric Vehicle (EV-)-market and EV-services **still lack attractiveness**
- Nevertheless **E-Mobility with growing potential in Germany**. Private and public initiatives in this sector are to be expected to reach the political target of 1m electrical vehicles in Germany in 2020
- The expansion of EV-charging station infrastructure is a **critical success factor and fundamental element of upcoming E-Mobility initiatives**
- There is a **multitude of charging station providers on the market** offering more or less the same type of product:
 - Many EV-charging stations are equipped **with often outdated and unmaintainable software**
 - The charging station market **is shaped by heterogeneous technology**
 - **Cross-/up selling potential** for new services is not leveraged due to missing insights and limited interaction models with consumers or partners to build lasting relationships

Your Targets

- Please **define possible charging station services** taking into account the different perspectives of the provider (in that case “MyCar Company”), consumers and potential partners. How does a typical service look like, which parts does it consist of?
- Please prepare **2-3 business models** and **compare** them with each other on a **qualitative** basis

Use Case No 4: Value-adding Electric Vehicle- charging station services

First Ideas for possible services – input for developing new business models

Potential Charging Station Service	
Basic Services	Charging Station-Service Basic Services (Authentication, Payment,...)
Centrally managed Services	Charging Station-Service Charging Station displays received content
User-centric, partner managed Services via WLAN	Charging Station-Service Charging Station displays partner specific content, Charging Station sends information via WLAN-interface to user´s car or mobile device
...	Charging Station-Service ...

Use Case No 5: eCommerce in Food & Beverage Retail

Background

- **„YourFood Company“** is an **international retailer for foodstuff** based in Hannover, Germany. With over **70.000 employees worldwide**, „YourFood Company“ is one of the biggest retailer in Germany. In 2012 they generated **total revenues of € 12bn**
- **Beside their traditional business** with stores, in 2012 the company **started as an eCommerce** retail service for nutrition, but **currently only for non-perishable food** (e.g. sausages and other meat products, canned food, delicatessen, staple foods such as noodles and sauces)
- **„YourFood Company“** is **quite active** in some social networks (**LinkedIn, Facebook, XING**), but they **did not develop a comprehensive eCommerce strategy** and **did not invest a lot** in promoting their eCommerce business
- They're planning to expand their product range for perishable food in the next year

Use Case No 5: eCommerce in Food & Beverage Retail

Client- Challenge

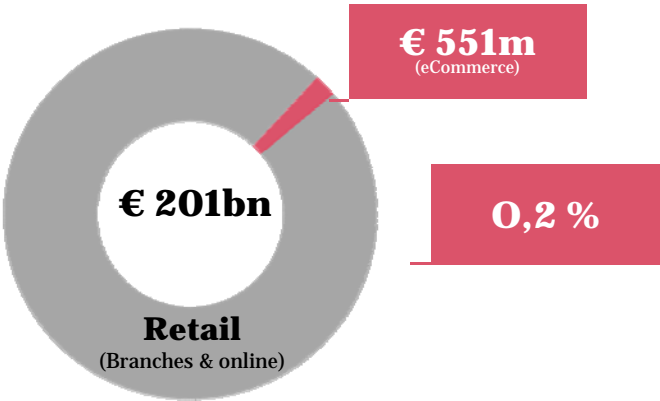
- Most of the Food & Beverage Retailers **have not designed and implemented an eCommerce-service yet**
- Very **limited market share** for foodstuff in eCommerce
- Clients with **missing experience and trust in eCommerce**, e.g. the elderly
- **Flexible delivering** with a moderate pricing system
- Delivering of **fresh foodstuffs**
- **Environmentally-friendly** packaging systems
- Especially younger clients expect that food companies **use digital opportunities to interact with clients**, e.g. extended packaging

Your Targets

- Please prepare **2-3 business models** and **compare** them with each other on a **qualitative** basis
- Please consider the struggle with inflexible delivery, production of packaging material and client expectations in terms of using digital opportunities

Use Case No 5: eCommerce in Food & Beverage Retail

eCommerce Revenue with food and beverages counts € 551m in 2012...



...but it is just 0,2 % retail capacities

The growth rate of whole eCommerce in 2012 is 20,5 %...



...however, the eCommerce market for foods & beverages grows above average with a growth rate of 24,5 %

Thank you.