Solutions For A Small System

DOES THE DIGITIZATION PROVIDE A LEVEL PLAYING FIELD FOR EVERYBODY? A REALITY CHECK.
Solutions For A Small System

OR: DIGITIZATION VS. THE CREATIVE INDUSTRY: A LOVE STORY?
Who is the creative industry?
Some (german) figures
What is the creative industry?
The evil „content industry“...
The evil „content industry“…

• … is actually a small people business:
The evil „content industry“…

• … is actually a small people business: 248.600 companies…
The evil „content industry“…

• … is actually a small people business: 248.600 companies…

… with an average of 3,25 employees per company…
The evil „content industry“…

• … is actually a small people business: 248,600 companies…
  … with an average of 3,25 employees per company…
  … and 250,000 self employed „entrepeneurs“
The evil „content industry“…

• … is actually a small people business: 248.600 companies…
  … with an average of 3,25 employees per company…
  … and 250.000 self employed „entrepreneurs“
  … represent 3,56% of all the german workforce…
The evil „content industry“…

• … is actually a small people business: 248,600 companies…
• … with an average of 3,25 employees per company…
• … and 251,000 self employed “entrepreneurs“
• … represent 3,56% of all the german workforce…
• … but account only for 2,61% of the german GDP…
Part of the reason....
Not only the music industry…

„We can not all be collectively stupid. Our problem must have a systemic cause.“
Frank Schirrmacher
(German newspaper Icon, 2012)

„We cannot all be collectively stupid. Our problem must have a systemic cause.“
US perspective on the issue

(The book is much better than its cover slogans)
Conflict between infrastructure and content?

Music: Gema vs. YouTube

RIAA vs. Megaupload & Grooveshark

Books: Publishers vs. Amazon (Kindle)

Film: MPAA/GVU vs. Pirate Bay, & KinoX.to

TV: US Networks vs. YouTube & Boxee
Is there maybe some more empirical proof for this struggle?
Monitoring Report: Culture and Creative Industries
The Creative Industries

Architectural 
Galleries
Music (Live)
Performing Arts
Arts & Crafts
Etc.

Music Industry
Others

Film
Games/ Software
Music (Recorded)
Books
Newspaper/Media
Advertising
Gesamtüberblick

Abbildung 5.2: Entwicklung des Umsatzes in den Teilmärkten der Kultur- und Kreativwirtschaft
(Durchschnittliche jährliche Veränderung 2009-2013* in %)

Lesehilfe: Der Umsatz in der Software- und Games-Industrie ist im Zeitraum von 2009 bis 2013 um jährlich 9,0 Prozent gewachsen.
Anmerkung: *Werte für 2013 basieren auf Schätzungen.
Turnover of Creative Industries analogue vs. digital: DIVIDE
Number of Businesses: DIVIDE

Unternehmen

- Analog
- Digital

2009: 100
2010: 98
2011: 96
2012: 94
2013*: 107
Employment: DIVIDE

Beschäftigung

- Analog
- Digital

2009: Analog 100, Digital 97
2010: Analog 101, Digital 98
2011: Analog 103, Digital 98
2012: Analog 105, Digital 98
2013*: Analog 108, Digital 97

*Predicted value
Turnover Creative Industry vs. German GDP

Umsatzentwicklung der Kultur-/Kreativwirtschaft

Entwicklung des BIP

Index 2009=100

2009 2010 2011 2012 2013*

100 104 107 110 111

98 97 97 96

100 105 110 112 114

analog digital
Beschäftigtenentwicklung II

Erläuterung:
• Hätte sich die digitale KKW wie die analoge KKW entwickelt, dann wären 2013 gut 37.000 Jobs mehr drin gewesen
• Hätte sich die digitale KKW wie das BIP entwickelt, dann wären 2013 knapp 64.000 Menschen mehr in Arbeit gewesen

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<tr>
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Solutions For A Small System / Analyse II:

INFRASTRUCTURE VS. CONTENT

The role of digital platforms
Top Brands 2007

1. Coca Cola (65,3 Milliarden US$)  
   Nutrition
2. Microsoft (58,7 Milliarden US$)  
   Infrastructure/Content
3. IBM (55,2 Milliarden US$)  
   IT-Hardware
4. General Electric (51,5 Mrd. US$)  
   Diversified/Electronic
5. Nokia (33,7 Milliarden US$)  
   Hardware
6. Toyota (32,1 Milliarden US$)  
   Automotive
7. Intel (30,9 Milliarden US$)  
   Hardware
8. McDonalds (29,398 Mrd. US$)  
   Nutrition
9. Disney (29,2 Milliarden US$)  
   Content
10. Mercedes Benz (23,56 Mrd. US$)  
    Automotive

(20. Google (17,83 Milliarden US$))
(33. Apple (11,037 Milliarden US$))

Quelle: Interbrand
<table>
<thead>
<tr>
<th>Rank</th>
<th>Brand</th>
<th>2012 Value (Milliarden US$)</th>
<th>Change</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Coca Cola</td>
<td>77</td>
<td></td>
<td>Nutrition</td>
</tr>
<tr>
<td>2</td>
<td>Apple</td>
<td>76.56</td>
<td>+129%</td>
<td>Infrastructure / Hardware</td>
</tr>
<tr>
<td>3</td>
<td>IBM</td>
<td>75.53</td>
<td>+8%</td>
<td>IT / Hardware</td>
</tr>
<tr>
<td>4</td>
<td>Google</td>
<td>69.72</td>
<td>+26%</td>
<td>Infrastructure</td>
</tr>
<tr>
<td>5</td>
<td>Microsoft</td>
<td>78</td>
<td>-2%</td>
<td>Infrastructure / Content</td>
</tr>
<tr>
<td>6</td>
<td>General Electrics</td>
<td></td>
<td></td>
<td>Energy/diversified</td>
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<td></td>
<td></td>
<td>Hardware</td>
</tr>
<tr>
<td>10</td>
<td>Toyota</td>
<td></td>
<td></td>
<td>Automotive</td>
</tr>
<tr>
<td></td>
<td>Disney</td>
<td>17.290</td>
<td>-5%</td>
<td>Content</td>
</tr>
<tr>
<td></td>
<td>Sony</td>
<td>9.11</td>
<td>-8%</td>
<td>Content / Hardware</td>
</tr>
</tbody>
</table>

Source: Interbrand Best Global Brands 2013
Top Brands 2013

1. Google, (98,316 Milliarden US$)  +28%  Infrastructure / Hardware
2. Apple (93,291 Milliarden US$)  +26%  Infrastructure
3. Coca Cola, (79,212 Milliarden US$)  
4. IBM, (78,808 Milliarden US$)  +8%  Infrastructure / Hardware
5. Microsoft, (59,546 Milliarden US$)  -2%  Infrastructure / Content
6. General Electrics  
7. McDonalds  
8. Samsung  
9. Intel  
10. Toyota  

(14 Disney 28,147 Milliarden US$)  -3%  Content
(46. Sony 8,408 Mrd. US$)  -6%  Content / Hardware

Source: Interbrand Best global Brands 2014
# Top Brands 2015

1. Apple, (170,276 Milliarden US$) +43% Infrastructure / Hardware
2. Google (120,314 Milliarden US$) +12% Infrastructure
3. Coca Cola, (78,423 Milliarden US$) Nutrition
4. Microsoft, (67,670 Milliarden US$) +11% Infrastructure / Content
5. IBM, (65,095 Milliarden US$) -10% Infrastruc(B2B) / Hardware
6. Toyota
7. Samsung
8. General Electric
9. McDonalds
10. Amazon, (37,948 Milliarden US$) +29% Infrastructure

(58 Sony 7,702 Milliarden US$) -5% Content / Hardware
(63. Thomson/Reuters 6,4Mrd. US$) -6% Content / Hardware

Source: Interbrand Best Global Brands 2015
Disclaimer

(Not all added value of online intermediaries is derived by transfer of value from creative industry.)
Conclusion

Between 2007 and 2013 the brand value of all digital infrastructure companies has gone up (Apple, Google, Facebook, Amazon...) in an unparalleled rate.

In the same time frame the brand value of all creative industries/media corporations (Disney, Sony, Reuters, NY Times, MTV) has SIMULTANEOUSLY gone down and/or dropped out of the Top 100 brands.
The basic question

Should digitization not benefit both sides, the infrastructure AND the content side equally?
The digital frontline

The struggle is not content vs. technology as per the general perception.

The struggle is content vs. infrastructure.
The global digital tendency:

Infrastructure eats Content
In economic terms, that means:

The incentive for artists and creative industry to provide quality creative industry goods is becoming lower.

In economic terms, that means:

The incentive for artists and creative industry to **provide quality creative industry goods** is becoming lower.

(there are also obvious side effects to the culture and media industry and society!)

The digital unlevel playing field:
The last protective tool
Copyright: the last protective tool

Infrastructure

Content

© Mindbase Strategic Consulting Stefan Herwig Lukas Schneider
The suggested „Digital Agenda“:

Step one: Balance
The suggested „Digital Agenda“:

Step two: better situation for Copyright reform
The suggested „Digital Agenda“:

Step three:

Harmonization

Otherwise we might end up harmonizing failing markets.
So, did Europe's creative industry just snooze through the whole digitization process?
Internet-added value does not affect the whole value added chain:

Northwestern Univ. economist Prof Robert J. Gordon:

“The computer and Internet revolution (IR #3) began around 1960 and reached its climax in the dot.com era of the late 1990s, but its main impact on productivity has withered away in the past eight years.”

USA Economic Growth

Figure 4: Average Growth Rates of US Labor Productivity Over Selected Intervals, 1891-2012

<table>
<thead>
<tr>
<th>Period</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1891-1972</td>
<td>2.33</td>
</tr>
<tr>
<td>1972-1996</td>
<td>1.38</td>
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<tr>
<td>1996-2004</td>
<td>2.46</td>
</tr>
<tr>
<td>2004-2012</td>
<td>1.33</td>
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USA Economic Growth II

Figure 2. Annualized Growth Rates of Output per Hour, Output per Capita, and Hours per Capita, 1891-2013

Internet-added value does not affect the whole value added chain:

"The problem with the internet is it has provided jobs for relatively few people – Google has only 33,000 full-time employees. Furthermore, the financial gains from technology are **unevenly distributed**. (2012)

The internet has produced a handful of 20-something billionaires **but this does not move the needle when it comes to median household income**, which has been stagnant for decades."

(Financial Analyst & Economic Historian Edward Chancellor)

Source: Financial Times „Internet revolution has yet to pay off“ 27.09.2012
http://www.ft.com/intl/cms/s/0/52286386-093b-11e2-a5a9-00144feabdc0.html?siteedition=intl
Wirtschaftswoche June 2015: „The digital revolution is there, we just dont see it yet.“
Political task:
Think the digital single market in terms of optimal value added chains:
E.g. Content and Infrastructure
Is there a scientific background for the Transfer Of Value theory?

Is there a scientific background for the Transfer Of Value theory?

- Monopolies / Abuse Of Market Power
- External Effects
- Asymmetric Information (Privacy Markets)
- Public Goods (Impaired Exclusivity)

So, what should we discuss?
Do we need a new digital narrative?
Thank you for your attention!

For more Information:
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+49 209 38 650 670
DISCLAIMER!
Political agenda: create level playing field between

Service

Infra-structure

Journalist
Publisher
Marketing

Google
Apple
Amazon
(Blendle)
There are 4 constituting conditions for market failure:

- **Monopolies / Abuse Of Market Power**
- **Information Asymmetry**
  (Insufficient transparency in products and contracts)
- **External Effects**
  (uncompensated effects of transactions on third parties)
- **Public Goods (free rider problem)**
  (inefficient exclusivity on market goods)

Contract Closures
Principal-Agent Theory

Asymmetric information

hires

P
self
interest
performs

A
self
interest

Only online-services that cost money are trustworthy.

80% say NO

13% say YES
Adverse selection is a concept in economics, insurance, and risk management, which captures the idea of a "rigged" trade.

When buyers and sellers have access to different information (asymmetric information), traders with better private information about the quality of a product will selectively participate in trades which benefit them the most (at the expense of the other trader). A textbook example is Akerlof's market for lemons.

(Source: Wikipedia)
Employment Decline II

<table>
<thead>
<tr>
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Explanation

Employment in the digital creative industry has shrunk between 2009 and 2013 from 461,000 to 445,000 by 15,902 people. (social insured numbers and minimally employed)

• Had the creative industry developed as well as the analogue creative industry, then this would have resulted in 37,432 employed
• Had the creative industry developed as well as the german GDP, then 64,000 people more would have had work.


Hätte sich die digitale KKW wie die analoge KKW entwickelt, dann wären 2013 gut 37.000 Jobs mehr drin gewesen
Hätte sich die digitale KKW wie das BIP entwickelt, dann wären 2013 knapp 64.000 Menschen mehr in Arbeit gewesen.)
Private Goods: Structure

- Material
- Service
- Infrastructure
Private Goods: Example: Newspapers

- Material
- Service
- Infrastructure
Private Goods: Example: Newspaper

- Material
  - Service
    - Infrastructure

- Paper
- Printing plant (Manufacturing)
- Editors
- Publisher
- Marketing
- Distribution
  - Point Of Sale (Newsstand, etc.)
Digital Club Goods: Structure

Service

Infrastructure
Digital club goods: Newspapers

Service

Infrastructure

Editor
Publisher
Marketing
Digital Club Goods: Newspapers

Service

Infra-structure

Journalist Publisher Marketing

?
Digital Club Goods: Newspapers

Service

Infra-structure

->

Journalist
Publisher
Marketing

Google
Apple
Newspaper Websites
(iKiosk, Blendle)
Digital Club Goods: Conflict

Service

Infrastructure

Editors
Publisher
Marketing

Google
Apple
Conflict: Diverging Strategies

- Service
- Infrastructure

- Journalist
- Publisher
- Marketing

- Google
- Apple
„Not a result of the subprime crisis“ (R.J. Gordon):

„The weakness is especially surprising, because most industrialized countries are simultaneously going through a digital revolution that ought to improve the overall added value and should increase the general economy."
Media vs. Platform

Is there a regulatory level playing field for media and internet companies?

If not, what does this mean for the competition between media and internet platforms companies?
Are there any further indications of problems inherent in these market conditions?
Internet Economy and Market Failure

Goods

Rivalry

**Exclusivity**

- Private Goods
  - Nutrition
  - Clothing
  - CDs
  - Book

- Common Pool Resource
  - Book in public Library
  - Congested Highway

**Exclusivity**

- Club goods
  - Cinema Visit
  - Hairdresser Visit
  - Digital Content

- Public Goods
  - Public Monuments
  - National defense
  - Knowledge, etc.

Creative Industry goods are in the process…

Club Good (e.g. Music) → Loss of Exclusivity → ?
Creative Industry Goods are in the transition to become Public Goods

Internet Economy and Market Failure

Market Failure

Loss of Exclusivity

Club Good (e.g. Music) → Public goods

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Market Goods

- Nutrition
- Clothing
- CDs
- Book

- Book in public Library
- Congested Highway

- Cinema Visit
- Hairdresser Visit
- Digital Content

- Public Monuments
- National Defense

Rivalry

Private Goods

Unreines Öffentliches Gut

Club goods

Public Goods

Creative Industry Goods are in the transition to become Public Goods

- Club Good (e.g. Music)
- Loss of Exclusivity
- Public goods
Marktgüter

Scarcity

Private Goods
- Food
- Clothing
- CDs
- Books

Common Public Resources
- Book in public library
- Public Highway

Club Goods
- Cinema Visit
- Hairdresser Visit
- Digital content

Public Goods
- Public Parks
- National Defense
- Knowledge, etc..

Why do we actually regulate market power?
What is Market Failure?

Example: Cartel or Monopoly

Failing Market

Legislator must intervene
(E.g.: Anti Trust Law / Competition Law)

Market Failure

In economics, **market failure** leads to an inefficient allocation of resources and impaired macroeconomic welfare.

Market failure is the **necessary condition** for a legislator to regulate a market.

Sources:
There are 4 constituting conditions for market failure:

- **Monopolies / Abuse Of Market Power**
- **External Effects**
- **Asymmetric Information**
- **Public Goods**

There are 4 constituting conditions for market failure

- **Monopolies / Abuse Of Market Power**
- **External Effects**
- **Asymmetric Information (Privacy Markets)**
- **Public Goods (Impaired Exclusivity)**

AN EMPIRICAL LOOK AT PRIVACY & SOCIETY
Privacy Empiricism

→ Privacy Index study (EMC), June 2014

→ DIVSI – „Daten Ware & Währung“ Nov. 2014

→ Annenberg School For Communication „The Tradeoff Fallacy“ June 2015

Privacy Empiricism

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What is it about?

PERSONAL DATA AS ONLINE CURRENCY
THIS IS WHAT GERMAN USERS THINK*

(* Quantitative survey made by DIMAP market research institute: n=1002)
Is it OK, that services are being offered for free, but make money with the personal data of their users?

16% say YES

80% say NO
16%
The services need to make money somehow.
One can not change it anyway.
Main concern is: I don’t have to pay.

80%
I am afraid of data and privacy abuse.
I don’t know what my data is used for.
My data belongs to me only.
Would you spend money, so your data would not be used?

35% YES!

61% Would NOT spend money

- Even if I would pay, I can not be certain that my data will be safe.
- Everything online should be free, even the security of my data.
- My personal data is not so sensitive that I would pay for its protection.
- I don't care if someone uses my data.
... of the users believe that the users have little or no influence in the use of their own data.
Who should be responsible for the protection of privacy and enforcing rules on data use?
But if….

Is it OK, that services are being offered for free, but make money with the personal data of their users?

16% say YES

80% say NO
... then why?
Could this be an indication for a market failure?

- **Monopolies / Abuse Of Market Power**
- **Information Asymmetries**
- **External Effects**
- **Public goods**

„Are we harmonizing failing markets?“

INFORMATION ASYMMETRIES
“Asymmetric information is a term used in economics to describe situations in which the two parties to a contract do not have access to the same information at the point in time when the contract is concluded or fulfilled.”

(Source: Wikipedia.de)
Contracts closures: Principal-Agent Theory I

1. Hidden Characteristics
   (ex ante)
   → Influences the choice of agent
Which Big Data service was the most advertised in Europe in 2015?
Cortana: Microsoft Terms and Conditions

“Microsoft collects and uses various types of data to enable Cortana to provide personalized experiences and relevant suggestions such as your mobile phone location, data from your calendar, the apps you use, specific information from your emails and text messages, and your contacts...
Cortana: Microsoft Terms and Conditions II

... Cortana also learns more about you by collecting data about how you use your mobile phone, for example the music you listen to on your device, your alarm settings, whether the lock screen is on, what you view and purchase in the store, and much more.

...
Cortana: Microsoft Terms and Conditions III

…Microsoft uses data gathered by Cortana to **personalise and improve** other Microsoft products and services.”
„Test Cortana for a free coffee!“
„Try the Google app“
Contracts closures: Principal-Agent Theory I

1. Hidden Characteristics (ex ante)

→ Influences the choice of agent
Contract closures
Principal-Agent Theory

1. Hidden Characteristics (ex ante)
   → Influences the choice of agent

2. Hidden Action and hidden information (ex post)
   → Behaviour of agent during the contract term
Contract closures
Principal-Agent Theory

1. Hidden Characteristics
   (ex ante)
   → Influences the choice of agent

2. Hidden Action and hidden information
   (ex post)
   → Behaviour of agent during the contract term

3. Hidden Intention
   → Hidden strategic aim of agent
Regulation by transparency: Street traffic safety

Design can open markets for unpopular product attributes like traffic safety.
Market transparency: advancement

Design can simplify complex issues and give better market insights for customers.
Why transparency alone does not cut it:

1. Hidden Characteristics (ex ante)
   → Influences the choice of agent

2. Hidden Action and hidden information (ex post)
   → Behaviour of agent during the contract term

3. Hidden Intention
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Why transparency alone does not cut it:

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Privacy policies overburden their customers
Example of adverse selection?