

**WU**  
WIRTSCHAFTS  
UNIVERSITÄT  
WIEN VIENNA  
UNIVERSITY OF  
ECONOMICS  
AND BUSINESS

# Personal Data Markets AND Privacy

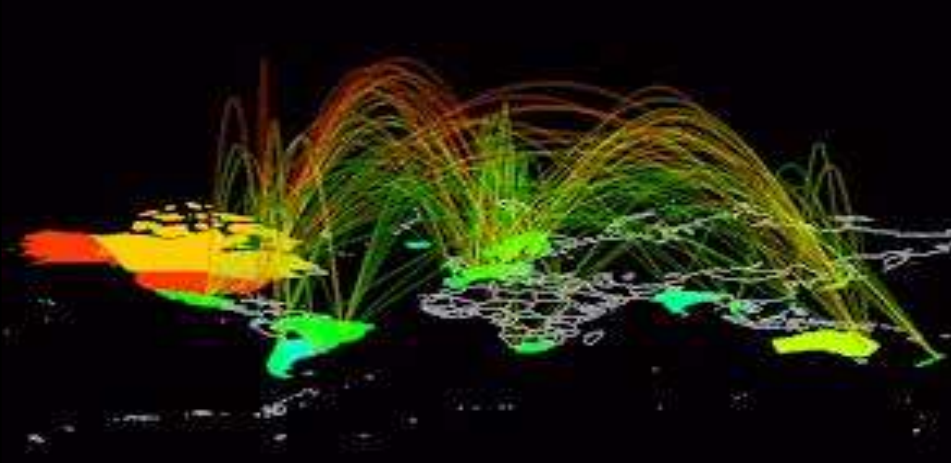
Univ. Prof. Dr. Sarah Spiekermann  
Wien, den 20. September 2012

1

**ispa** 



**WU**  
WIRTSCHAFTS  
UNIVERSITÄT  
WIEN VIENNA  
UNIVERSITY OF  
ECONOMICS  
AND BUSINESS



**Information richness  
is a promising  
reality.**

2



**WU**  
WIRTSCHAFTS  
UNIVERSITÄT  
WIEN VIENNA  
UNIVERSITY OF  
ECONOMICS  
AND BUSINESS

**People LOVE information rich services!**

4

## Behavioral advertisement is heralded as a huge success. Research suggests that...



- Click-through rate (CTR) of an ad can be improved by as much as 670%\*
- Action through rates (ATR) are more than double of those of standard advertising\*
- 20-30% of consumers find behavioral advertising „appealing“ and prefer it to non-targeted ads\*

\*Malheiros, M., C. Jennett, et al. (2012). *Too Close to Comfort: A Study of the Effectiveness and Acceptability of Rich-Media Advertising*. Computer Human Interaction (CHI'12). Austin, Texas, ACM.

5



**However, ...**

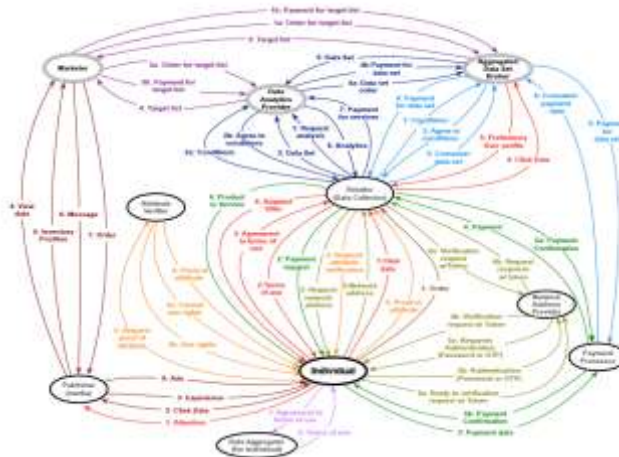
6



**Currently people confront digital service markets that deal with their customers' personal information as if we were in the Wild West.**



## Personal information markets are being blindly promoted without brakes.



9 Quelle: World Economic Forum, May 2012



Just one example, ...  
:

An average visit to a webpage triggers **56 (!)** instances of data collection (Angwin,2012)



10



# Marketers unscrupulously sell people's identities without their consent.



**RapLeaf Personalization Data Segments Pricing and Availability**

Segment	Field	Price <sup>1</sup>
<i>Worked Copy</i>		
1. Basic	Age	Free
2. Basic	Gender	Free
3. Basic	Location	Free
4. Premium	Household Income	\$0.00
5. Premium	Marital Status	\$0.00
6. Premium	Presence of Children	\$0.00
7. Premium	Home Owner Status	\$0.00
8. Premium	Home Property Type	\$0.00
9. Premium	Length of Tenure	\$0.00
10. Premium	Home Market Value	\$0.00
11. PREMIUM & VANDU	Income, Marital Status, Presence of Children, Home Owner Status, Home Property Type, Length of Residence, Home Market Value	\$0.25
12. Auto	Car in Household	\$0.00
13. Auto	Vehicle Make or Model	\$0.00
14. Auto	Vehicle Type	\$0.00
15. Finance	Ability to Use Financial Services	\$0.00

11



## Reactions?

**Customer start dropping out...**

## Behavioral targeting often leads to „personalization reactance“.

- **Users dislike the idea of being followed, describing behavioral advertisement as „invasive“.**<sup>1)</sup>
- **A „creepiness factor“ is being observed.**<sup>2)</sup>
- **Rich media campaigns combined with context-adaptivity lead to a DECREASE in user purchase intent!**<sup>3)</sup>
- **When people recognize that their personal data is used for targeting and did not expect this due to prior consent, they show reactance.**<sup>4)</sup>

1) Kean, A. and Dautlich, M. A guide to online behavioural advertising, Internet Advertising Bureau, London, 2009.

2) Knowledge@Wharton. Privacy on the web: Is it a losing battle? *Knowledge@Wharton Philadelphia, PA, 2008.*

3) Goldfarb, A. and Tucker, C. Online Display Advertising: Targeting and Obtrusiveness. *Marketing Science (2011).*

4) Malheiros, M., C. Jennett, et al. (2012). *Too Close to Comfort: A Study of the Effectiveness and Acceptability of Rich-Media Advertising.* Computer Human Interaction (CHI'12), Austin, Texas, ACM.



**Our experiments show 30% less willingness-to-pay for a brand that has been interrupting a person with an ad before.**

Alessandro Acquisti, Sarah Spiekermann.  
"Do Interruptions Pay Off? Effects of Interruptive Ads on Consumers' Willingness to Pay".  
*Journal of Interactive Marketing*, 25(4):226-240,  
November 2011.

**Advertising clutter drives us nuts. Ad avoidance and ever lower response rates are the consequence...**



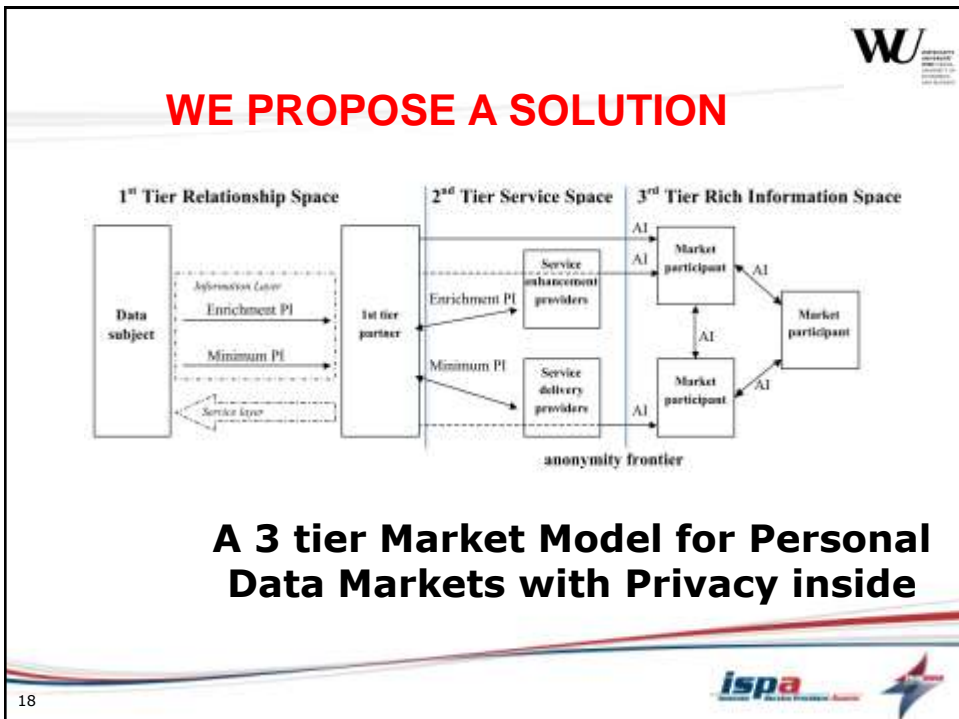
15




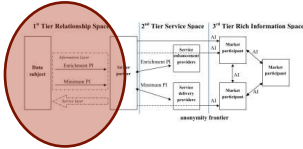
**Constant Surveillance...**  
**...without the knowledge and consent of the people**  
**... crazy data markets...**  
**...operating at the edge of the legal feasible**  
**... unnerved customers....**

**It feels like a deadlock situation...**





**WU**  
WIRTSCHAFTS  
UNIVERSITÄT  
WIEN VIENNA  
UNIVERSITY OF  
ECONOMICS  
AND BUSINESS

**The 1st Market Tier is a Relationship Space**

**ispa**  
INTEGRATED SERVICE PROVIDER ASSOCIATION

19

**WU**  
WIRTSCHAFTS  
UNIVERSITÄT  
WIEN VIENNA  
UNIVERSITY OF  
ECONOMICS  
AND BUSINESS

**1! visible partner...**



**1:1**

~~**1:N**~~ ... instead of 56...

**ispa**  
INTEGRATED SERVICE PROVIDER ASSOCIATION

20




**WU**  
WIRTSCHAFTS  
UNIVERSITÄT  
WIEN VIENNA  
UNIVERSITY OF  
ECONOMICS  
AND BUSINESS

## The 1st Tier Partner is Liable for the Personal Information He Collects

21




## Individuals have the choice between multiple service deals.



**Search.com**

<p><input checked="" type="checkbox"/></p> <p>€ 1</p> <p>You share your search terms.</p> <p>We deliver the best stuff we can find and delete your search terms.</p>	<p><input type="checkbox"/></p> <p>€ 1,50</p> <p>You share your search terms.</p> <p>We save your search history for 18 months to constantly improve your search experience.</p>	<p><input type="checkbox"/></p> <p>FREE</p> <p>You share your search terms.</p> <p>We save your search history for 18 months to constantly improve your search experience and put personalized ads on your service page.</p> <p><b>Ad.COM</b> will use your search history for 12 months</p>
--	--	---

22

**WU**  
WIRTSCHAFTS  
UNIVERSITÄT  
WIEN VIENNA  
UNIVERSITY OF  
ECONOMICS  
AND BUSINESS


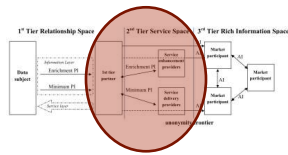


**People receive a property right in their personal information**

**ispa**  
INSTITUT FÜR  
INFORMATIONSPOLITIK UND  
ANWENDUNG

23

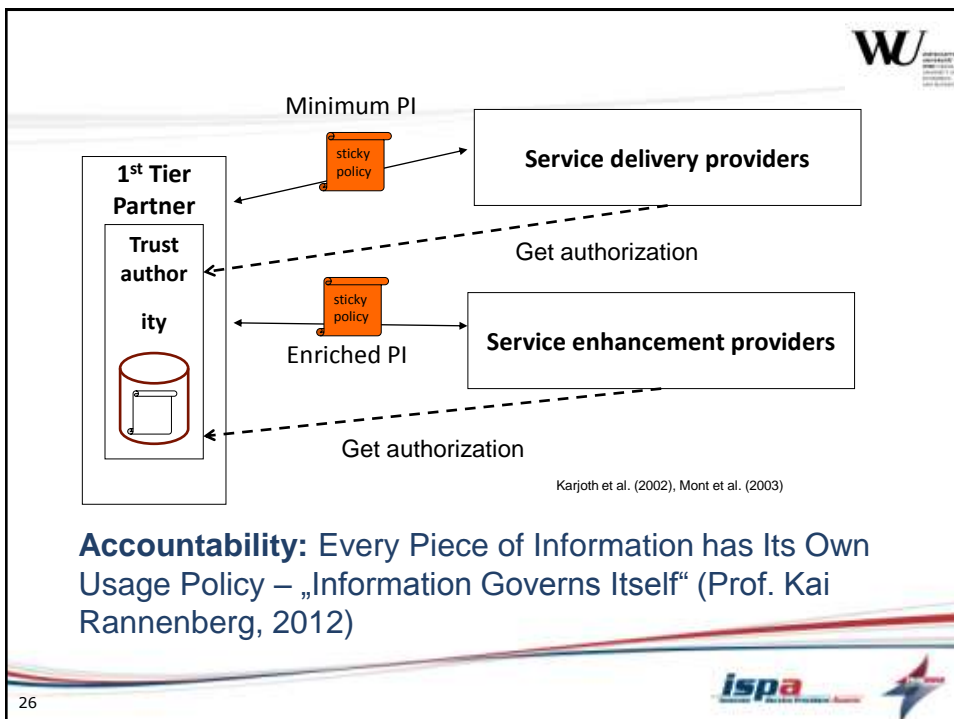
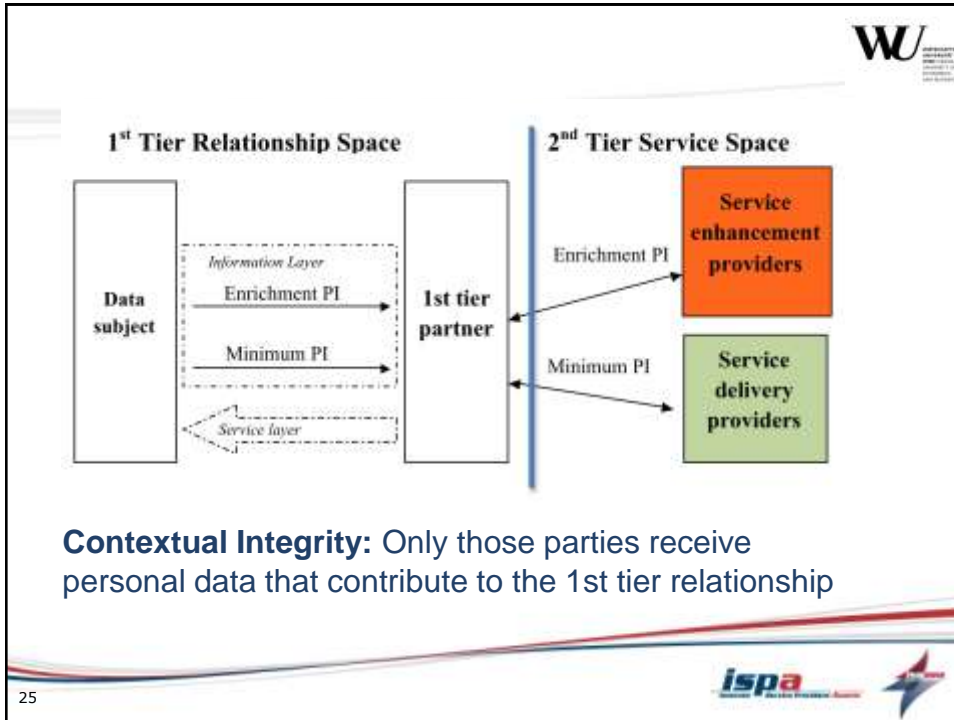
**WU**  
WIRTSCHAFTS  
UNIVERSITÄT  
WIEN VIENNA  
UNIVERSITY OF  
ECONOMICS  
AND BUSINESS


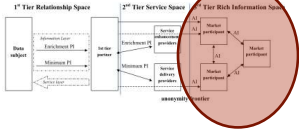
**The 2nd Market Tier is a Service Space**

**ispa**  
INSTITUT FÜR  
INFORMATIONSPOLITIK UND  
ANWENDUNG

24



**WU**  
WIRTSCHAFTS  
UNIVERSITÄT  
WIEN VIENNA  
UNIVERSITY OF  
ECONOMICS  
AND BUSINESS

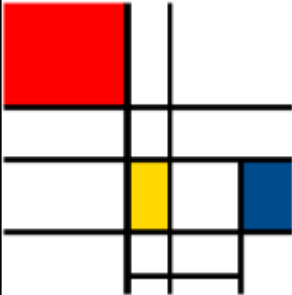


**1<sup>st</sup> Tier Relationship Space**    **2<sup>nd</sup> Tier Service Space**    **3<sup>rd</sup> Tier Rich Information Space**

**The 3rd Market Tier is a Rich Information Space**

**ispa** INSTITUT FÜR STRATEGISCHE INFORMATIONEN

27

**WU**  
WIRTSCHAFTS  
UNIVERSITÄT  
WIEN VIENNA  
UNIVERSITY OF  
ECONOMICS  
AND BUSINESS

**Anonymity is the technical basis of the 3rd Market Tier**

**ispa** INSTITUT FÜR STRATEGISCHE INFORMATIONEN

28

## Anonymity Breaches or Dealings in Data without Usage Rights lead to Heavy Penalties.



WU  
WIRTSCHAFTS  
UNIVERSITÄT  
WIEN VIENNA  
UNIVERSITY OF  
ECONOMICS  
AND BUSINESS

ispa  
INSTITUTE FOR  
INFORMATION  
SYSTEMS  
AND  
PROCESSES  
IN  
AUTOMATED  
MANUFACTURING

29

## A 7-point plan to make personal data markets work with privacy.

- Declare personal information as people's „property“.
- Enforce one (!) visible data collector who ...
- ... is liable for all personal information collected,
- ... and must prove contextual integrity, through a technical accountability scheme.
- Service- and information transactions shall be separated...
- ... with a standardized privacy-friendly base service set as default.
- All data not needed to serve the customer shall be anonymized for free trade.

WU  
WIRTSCHAFTS  
UNIVERSITÄT  
WIEN VIENNA  
UNIVERSITY OF  
ECONOMICS  
AND BUSINESS

ispa  
INSTITUTE FOR  
INFORMATION  
SYSTEMS  
AND  
PROCESSES  
IN  
AUTOMATED  
MANUFACTURING

PAGE  
30

18 July  
2012

