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ON THE VALUE OF INFORMATION – WHAT FACEBOOK USERS ARE WILLING TO PAY

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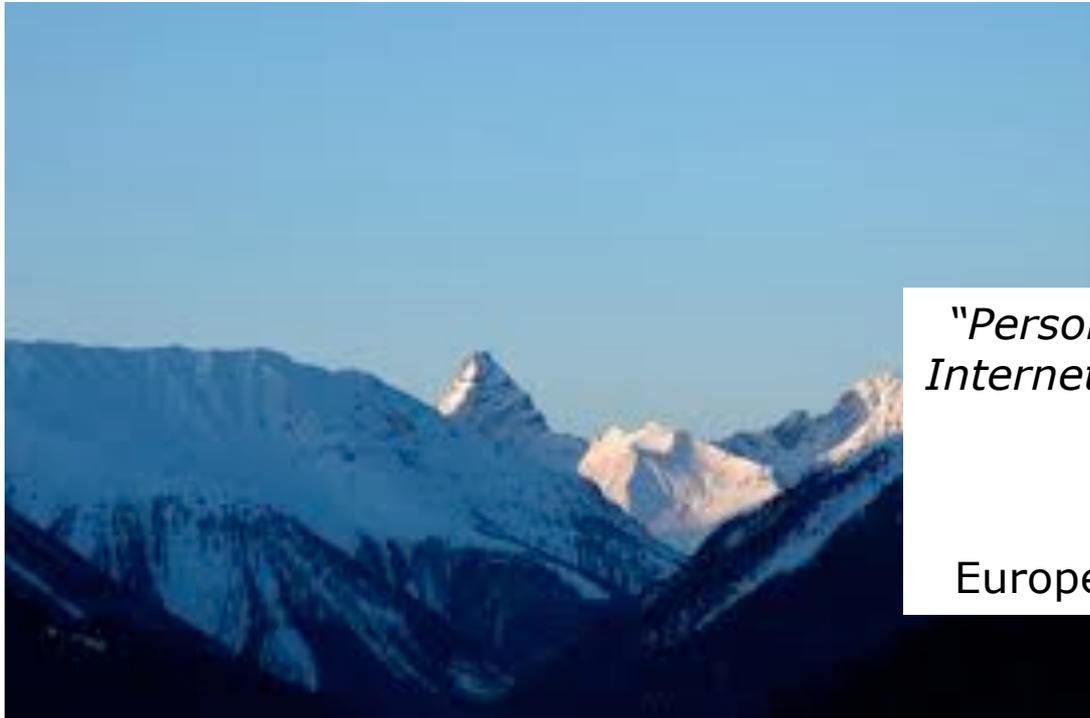
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Personal data has become a core motor of the digital economy.



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"Personal data is the new oil of the Internet and the new currency of the digital world."

(Meglena Kuneva,
Europe's Consumer Commissioner)

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We investigated personal information valuation on 1045 Facebook users and asked them how much their data is worth.

Facebook users know that their data is exposed, but what they are sharing is not valuable to them.



People state privacy concerns



of 1045 Facebook users:

48.1% would pay € 0 to protect their entire profile

1045 Facebook users were asked to imagine that one day they would not be able to log into Facebook...

The image shows a screenshot of Mark Zuckerberg's Facebook profile. At the top, the Facebook navigation bar is visible with the 'facebook' logo and a search bar. Below the navigation bar is a large background image of a dog's face. On the left side of the profile, there is a profile picture of Mark Zuckerberg. To the right of the profile picture is a dark blue text box with white text that reads: "...and Mark Zuckerberg would announce the closure of the platform... ALL personal data would be deleted ...but people could bid money to keep it". Below the profile picture, the name "Mark Zuckerberg" is displayed, followed by a "Subscribe" button. Underneath the name, there are four tabs: "About", "Photos", "Map", and "Subscribers". The "About" tab is selected, showing a list of biographical information: "Founder and CEO at Facebook", "Studied Computer Science at Harvard University", "Lives in Palo Alto, California", and "From Dobbs Ferry, New York". The "Subscribers" tab shows a count of "14m". At the bottom of the profile, there is a grey box with the text "Do you know Mark? Subscribe to Mark to get his public posts in your News Feed."

We wanted to understand the drivers of people's personal information valuation.

H1: Depth of Facebook usage (frequency of postings) drives the willingness to pay for one's Facebook information.

H2: Facebook behaviour patterns have an impact on the willingness to pay for keeping one's information.

Questionnaire-based online experiment

Part 1

- Becker, DeGroot and Marschak (BDM) mechanism method for eliciting users' **willingness to pay (WTP)**
- 4 alternatives of BDM (4 manipulations with different incentives)

Part 2

- asked people to report their Facebook **behaviour**

Part 3

- asked people about their **motives** for using Facebook

Sample

- Gross sample: 1967 participants
- Net sample: **1045** participants
 - 370 male, 675 female
 - rather young: $M = 24.52$, $SD = 4.75$
 - 93.5% students
- 62% have a job
 - 16.9% employed full-time, 20.2% part-time, 26.7% on occasion
- high usage of Facebook: 86.6% log in daily
- satisfied with Facebook: $M = 10.29$, $SD = 3.61$ on a scale from 1 not satisfied to 17 very satisfied

The manipulation clearly drove people's stated WTP.

Manipulations	N	Min WTP	Max WTP	Mean WTP	Median WTP	SD
Manipulation A with incentive iPhone 4S	147	0	150	15.27	2	26.017
Manipulation B with incentive Apple Adapter-Kit	226	0	100	5.60	0	12.654
Manipulation C with bundle as incentive	513	0	150	11.02	1	23.304
Manipulation D with +/-10% of average and incentive iPhone 4S	149	0	100	9.45	1	16.818

Results for H1:
Depth of usage (number of postings) does not drive WTP for information on Facebook

- BUT: those who log in less than daily would pay significantly less for keeping their information ($F = 10.187, p < .001$).

>> findings on H1 are therefore mixed

What behaviour can we observe on Facebook?

10 Behavioural Factors could be discerned	Number of items	Cronbach's Alpha
missionary communication	5	.874
attention seeking	4	.833
identity construction	3	.862
reading	4	.768
spamming	2	.542
diary keeping	2	.713
reflection on others	2	.801
business	2	.789
self-reflection	2	.697
audience seeking	2	.300

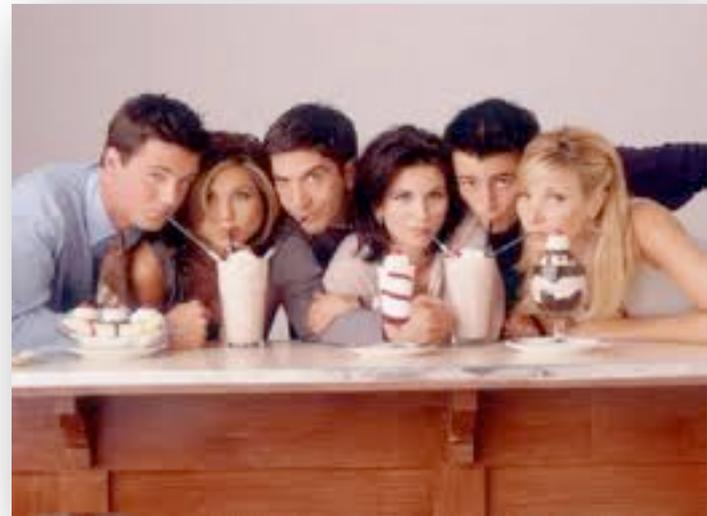
Diary keeping and spamming behaviour clearly influence WTP.

- Factor '**diary keeping**' has a high impact on WTP (odds ratio = 1.27, $p < .001$)
 - includes the behavior pattern to use Facebook for documenting one's life, and special moments in particular
- Factor '**spamming**' has a high impact on WTP (odds ratio = 1.42, $p < .001$)
 - includes posting 'rather everything' on one's wall incl. using the wall for personal communication



The number of friends on the platform is also very important.

- Users with <300 **friends** are less likely to be willing to pay more than 0€ than those with >300 friends.





**current model still explains
only 14.5% of variance!**

Take away messages

Methodology: The BDM method is not advisable to use!

- We advise the use of a Contingent Valuation Approach without incentives.

Surprise 1: Users don't value their data much.

- 48.1% at 0€
- average WTP when incentive is low: 5.60€; Median 0€

Surprise 2: A few activities drive WTP (diary keeping, spamming), BUT otherwise the use of the platform and subsequent profiles are NOT what drives the value of personal information

So what drives the value
of personal information?

Outlook: What we found in the new study!

- Study with 2193 Facebook users
- 5 manipulations with regard to:
 - service value effect
 - asset consciousness effect
 - effect of personal control
- **Asset consciousness** is the most important predictor for people's WTP for their personal information; not privacy!
- **Psychology of ownership** drives people's personal information valuation and propensity to delete.



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