



# SHAPING. ONLINE. RESEARCH.



**GOR**

MARCH 05 – 07, 2014 IN COLOGNE  
16<sup>TH</sup> GENERAL ONLINE RESEARCH CONFERENCE



Lars Kaczmirek, Otto Hellwig, Oliver Tabino, Monika Taddicken, Alexandra Wachenfeld (Eds.)

## **16<sup>th</sup> GENERAL ONLINE RESEARCH CONFERENCE**

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German Society for Online Research

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# 16<sup>th</sup> GENERAL ONLINE RESEARCH CONFERENCE

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# Viele Meinungen – ein Resultat



**Bei Panelbiz finden Sie exklusive Vielfalt in höchster Qualität**

In Deutschland, Österreich und der Schweiz verfügt Panelbiz über 300.000 Teilnehmer. Seit Juli 2010 gehört Panelbiz zur Maximiles Gruppe und hat dadurch ebenfalls Zugriff auf qualitativ hochwertige Panels in Frankreich, Italien, Spanien und Großbritannien. Unsere exklusiven Spezialpanels beinhalten spezifische Zielgruppen wie Telekommunikationsentscheider, B2B oder Mütter von Babies. So vielfältig die Meinungen, so einheitlich sind dabei unsere Qualitätskriterien wie z.B. Identitätssicherung, Panelbereinigung und Double-opt-in-Registrierung.





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# GREETING FROM DGOF

## CONFERENCE LOCATION:

FACHHOCHSCHULE KÖLN/  
COLOGNE UNIVERSITY OF APPLIED SCIENCES  
CLAUDIUSSTR. 1, 50678 COLOGNE



## DEAR GUESTS OF THE GOR 2014, WELCOME BACK TO COLOGNE!

Back to the future: in 1997 the very first GOR conference took place in Cologne – at a time when not only digital research but also the Internet were something completely new. In 2014 we can proudly look back and state that this conference series has made an important contribution to digital research in market and social research over the past years. However, in some way we feel like we are again in uncharted waters as further technical and digital possibilities will fundamentally change online research in the coming years.

For 2014 we have made various innovations regarding GOR. We have a new local partner, the Cologne University of Applied Sciences. We have also joined forces with two program partners: marktforschung.de and the Alexander von Humboldt Institute for Internet and Society (HIIG).

We are very much looking forward to a great conference program. It is even more extensive than last year's. You can choose between up to five simultaneous conference tracks: Track A covers Online Research Methodology and Internet Surveys, track B Advances in Applied Online Research jointly organized with marktforschung.de, track C Social Media Research, track D Internet and Society jointly organized with the HIIG, and track E the GOR Thesis Award 2014 Presentations, where the best Master/diploma and doctoral theses in the field of online research are awarded.

Two additional awards complete the conference programme. We will select the winner for the GOR Best Practice Award 2014. This year we have seven contestants competing for the prize. Furthermore, there is the GOR Poster Award 2014 competition.

We also would like to draw your attention to our keynote speakers. Dr. Mark Mattingley-Scott, Principal at IBM Germany, will speak about "Technology and Culture: How Man and Society Change in a Time of Technological Revolution" on Thursday morning. Our keynote speaker for Friday is Prof. Mick P. Couper from the Survey Research Center at the University of Michigan. He will talk about "Social Media and Surveys: Collaboration, Not Competition".

Thursday night is party-time – the GOR Party 2014 opens its gates from 8 pm at the Gewölbe club in the city centre of Cologne.

We are especially grateful for the enthusiastic support and collaboration of Prof. Dr. Christoph Seeßelberg, Prof. Dr. Rüdiger Küchler, Prof. Dr. Sylvia Heuchemer, Prof. Dr. Klaus Becker and Prof. Dr. Simone Fühles-Ubach, Prof. Dr. Petra Werner, Prof. Dr. Matthias Fank and their team. We would also like to thank our program partners marktforschung.de and Alexander von Humboldt Institute for Internet and Society as well as our sponsors and media partners. And, of course, a big THANKS to you, the conference participants, presenters and speakers at this event!

Have a great time at the General Online Research conference 2014!

Dr. Otto Hellwig  
Chair DGOF Board and  
Conference Chair

Dr. Lars Kaczmirek  
Member DGOF Board and  
Chair Program Committee



# GET TOGETHER

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## ABOUT DGOF – DEUTSCHE GESELLSCHAFT FÜR ONLINE-FORSCHUNG E. V.

### Who we are:

The German Society for Online Research (Deutsche Gesellschaft für Online-Forschung e.V./DGOF) is an association specializing in online research. Online research is an extremely innovative research area comprising not only the classical fields of online research methods but also mobile and social media research.

We represent our members' interests by further developing guidelines in order to secure the quality of such research.

We share information on new methods and ideas in online research and give access to innovations in this field.

We connect people interested in online research and offer platforms where interdisciplinary dialogue and discussion on this topic can take place.

We bring forward online research and online researchers through financial support and competitions and awards.

The DGOF board consists of five members and is elected for a term of two years: Dr. Otto Hellwig (respondi AG), chairman of the board; Dr. Lars Kaczmirek (GESIS - Leibniz Institute for Social Sciences), deputy chairman; Oliver Tabino (Q | Agentur für Forschung GmbH), deputy chairman; Dr. Monika Taddicken (University Hamburg), deputy chairwoman; and Alexandra Wachenfeld (LINK Institut für Markt- und Sozialforschung GmbH), deputy chairwoman.

### What we do:

Current developments in online and mobile research are discussed at our General Online Research conference and at our local events called Research plus.

We give online researchers a chance to present their work and ideas to other researchers at our events and through our publications (DGOF book series and DGOF White Papers).

We support best practice studies and research projects financially and through competitions and awards.

We facilitate contact between academic online researchers and those working in applied market research, so they can develop projects

together. By doing this we also foster the critical dialogue between academic and applied research.

We support young online researchers by organizing PhD-workshops and financial support for dissertations and facilitate contact between potential employers and employees.

We develop and publish guidelines and standards for quality assurance in online research. We do this in cooperation with the other market research associations.

We support the public awareness campaign of the Initiative für Markt- und Sozialforschung (IMSF) in its quest to inform citizens about good practices in market and social research. We are one of the founding members of the initiative.

### Who are our members?

Our members work either in market research or at scientific institutions – or they might just be interested in online research without working in this field.



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[www.dgof.de](http://www.dgof.de)

[www.gor.de](http://www.gor.de)

[www.researchplus.de](http://www.researchplus.de)

## PORTRAITS OF THE DGOF BOARD



### OLIVER TABINO

CEO of linkfluence Germany and CEO of Q | Agentur für Forschung GmbH, Mannheim and Paris based market research and social media research specialists. He is lecturer for Social Media Research at the AACSB accredited Pforzheim University and published several articles about market research and social media. He is Co-Founder of the "mafolution", an independent grassroots platform for market and social researchers and initiator of the "I love Mafo"-Blog. Since March 2013, Oliver is member of the DGOF board.



### DR. MONIKA TADDICKEN

is a researcher at the University Hamburg, Institute for Journalism and Communication Research. She received her Ph.D. degree in 2008 from the University of Hohenheim. Her thesis was about mode effects of web surveys. For this, she received the dissertation award of the Alcatel-Lucent-Foundation. She coordinated the research project "the diffusion of the media innovation web 2.0" at the University Hohenheim. Research interests include online research, methodology, social web, audience and reception studies. She is member of the DGOF Board and past GOR program chair.

### DR. OTTO HELLWIG

has been the CEO of respondi AG since the company's foundation in 2005. He has been working in the field of market and social research since the early 90s: Dr. Hellwig has a degree in Social Science, Psychology and Media Studies. He worked as a researcher for a number of years at the Institute for Applied Social Research at the University of Cologne and gained his doctorate in 2000. Since March 2013 Otto Hellwig is Chairman of the DGOF Board.



### DR. LARS KACZMIREK

is team leader for several comparative social surveys in the department Monitoring Society and Social Change at GESIS - Leibniz Institute for the Social Sciences, Germany. He received his Ph.D. in psychology from the University of Mannheim. His publications address topics in survey methodology, especially sources of error, eyetracking, open-ended questions, software tools, and social media data. His research interests are at the intersections of psychology, computer science and sociology. He is program chair of GOR since 2012.

A list of papers and presentations is available at <http://tinyurl.com/gesis-kaczmarek>.

### ALEXANDRA WACHENFELD

is Research Director of LINK Institut for market and social research GmbH, a full-service institute with focus on online, CATI and quality research methods. In her role as research director she is responsible for the development of strategy, marketing and business development in terms of online research and the methodical monitoring of the completely active recruited (by representative telephone interviews) LINK online Panel.

She worked as a researcher for more than 15 years and has presented papers with focus on online research at a number of events such as Research & Results, M-Motionday, GOR and market research events in Switzerland. Furthermore she has published articles for various magazines.



WELCOME

TO THE 16<sup>th</sup> GOR CONFERENCE IN COLOGNE

# WELCOME TO THE 16<sup>th</sup> GOR CONFERENCE IN COLOGNE



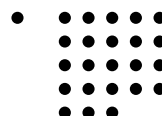
Ladies and Gentlemen,  
Dear participants of the GOR 2014,

20 years ago, the British scientist Tim Berners-Lee founded the World Wide Web Consortium and, in so doing, created a code of conduct for the Internet that is still valid. This was preceded by work on a hypertext project with the aim of facilitating the exchange of information between scientists and of enabling links between information beyond the boundaries of computer and scientific systems. „The vision I have for the Web is about anything being potentially connected to anything. It is a vision that provides us with new freedom, and allows us to grow faster than we ever could when we were fettered by the hierarchical classification systems into which we bound ourselves“, Berners-Lee explained. [Tim Berners-Lee „Weaving the Web“, Harper Collins, 1999].

This information and communication architecture, created on the pillars URL, hypertext linking and file transfer protocol, very quickly has spread from the world of science to everyday life. It is no exaggeration when we say that the invention of the World Wide Web has provided an innovation push to information and communication technology that is ongoing and that is creating new opportunities for use in ever shorter cycles. And by no means has every possible scenario been thought up, nor the full potential of information technology been exploited. The General Online Research Conference 2014 undoubtedly offers an excellent opportunity to present and evaluate the latest developments and to develop a vision for the future.

Change creates demand – including the demand for experts with a command of the new tools, both in terms of technical expertise as well as in applications and analyses. Experts of this kind are trained at the Cologne University of Applied Sciences – to a high scientific level and with a distinct practical focus. I am therefore particularly pleased that the DGOF German Society for Online Research has chosen the Cologne University of Applied Sciences as both its scientific partner and as the location for its international symposium in this „anniversary year of the World Wide Web“. This cooperation illustrates perfectly how we combine research-oriented learning with an extensive focus on practical orientation. I hereby also cordially invite you to use the conference as a platform for networking with our scientists and students, and extend a warm welcome to you here at the Cologne University of Applied Sciences.

Prof. Dr. Christoph Seeßelberg  
President of the Cologne University of Applied Sciences



Fachhochschule Köln  
Cologne University of Applied Sciences



# **WELCOME TO THE GENERAL ONLINE RESEARCH CONFERENCE 2014 IN COLOGNE**

We would like to welcome you to the University of Applied Sciences in Cologne to the General Online Research Conference 2014. We belong to the Faculty of Information and Communication Studies, to be more precise: to the Institute of Information Science.

We are proud to be the host and local partner of GOR conference this year, and we consider the Institute of Information Science to be just the right place for a conference with the subject relating to online research. This is the 16th conference in a row, so we are not exaggerating if we call the GOR conference one of the most important international conferences in this dynamic field.

For us this is the unique opportunity to show you in how many ways our institute is linked to GOR issues: Since quite a few years we offer three Bachelor courses: One in Applied Information Science, the second in Online-Editing and last but not least in Library Science all covering different fields of market and online research in several ways. In addition to that we started to offer a constitutive Master course that focuses on market and media research three years ago. This course concentrates on methods of quantitative and qualitative research, especially methods of online research.

In fact online communication is relevant to this course in two aspects: On the one hand it covers the subject of market and media research, on the other hand it is used as a research tool to analyze user and consumer behavior. In this way we combine traditional education for market researchers with modern questions on web research.

We hope you will all enjoy your stay in Cologne, get to listen to excellent talks and get engaged in interesting discussions, meet familiar faces as well as new people, and remember the Institute of Information Science as an inspiring place for online research!



Prof. Dr. Simone Fühles-Ubach  
Dean of the Faculty of Information Science and Communication Studies



Prof. Dr. Petra Werner  
Managing Director of the Institute of Information Science



Prof. Dr. Simone Fühles-Ubach



Prof. Dr. Petra Werner

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# PROGRAM OVERVIEW



## WEDNESDAY, 05/03/2014

9:00	<b>BEGIN CHECK-IN</b>
10:00 – 13:00	<b>WS 1: What's new in social media research?</b> <b>A quick guide through recent publications (2012-2013) for social scientists</b> Chair: Dr. Katrin Weller, GESIS-Leibniz Institute for the Social Sciences  <b>WS 3: R 101: Basic analyses and charts with R, an open-source software for statistical computing</b> Chair: Dr. Frederik Funke, LINK Institut · University of Mannheim · datamethods.net
13:00 – 13:30	<b>BREAK</b>
13:30 – 16:30	<b>WS 4: How to: Mixed-Mode-Studies</b> Chair: Holger Geissler, YouGov; Prof. Edith de Leeuw, Utrecht University  <b>WS 5: Forms that work: Understanding forms to improve their design</b> Chair: Caroline Jarrett, Effortmark  <b>WS 6: Social Media Analytics: Concepts, Models, Methods, and Tools</b> Chair: Prof. Ravi Vatrappu, Copenhagen Business School
16:30 – 17:00	<b>BREAK</b>
17:00 – 19:00	<b>DGOF members meeting (Rotunde, Cologne University of Applied Sciences)</b>
19:00 – 19:30	<b>BREAK</b>
19:30 – 00:00	<b>Get-Together (Im Schnörres, Im Ferkulum 30, 50678 Cologne)</b>

## THURSDAY, 06/03/2014

8:00 – 9:00	<b>CHECK-IN</b>
9:00 – 10:15	<b>Opening and Keynote 1: Technology and Culture: How Man and Society Change in a Time of Technological Revolution</b> Dr. Mark Mattingley-Scott (Principal, IBM, Germany)
10:15 – 10:30	<b>BREAK</b>
10:30 – 11:30	<b>A2: The mobile challenge in online panels</b> <b>B2: Best Practice 1</b> <b>C2: Politics and Social Media</b> <b>D2: Digital Research</b> <b>E2: GOR Thesis Award 2014 Presentations (Dissertations)</b>
11:30 – 12:00	<b>BREAK</b>
12:00 – 13:00	<b>A3: Measurement effects in mobile and web surveys</b> <b>B3: Best Practice 2</b> <b>C3: Intimacy, Gender and Age in Social Media</b> <b>D3: Open Science</b> <b>E3: GOR Thesis Award 2014 Presentations (Master, Magister, Diploma)</b>
13:00 – 14:00	<b>BREAK: LUNCH</b>
14:00 – 14:45	<b>B4: Best Practice 3</b>
14:00 – 15:30	<b>Poster Session</b>
15:30 – 15:45	<b>BREAK</b>
15:45 – 16:45	<b>A5: Instrument design for mobile and web surveys</b> <b>B5: Panel discussion</b> <b>C5: Facing Methodological Challenges</b> <b>D5: Network Analysis</b>
16:45 – 17:00	<b>BREAK</b>

## TRACK TOPICS

- A: Methodology and Surveys**
- B: Advances in Applied Online Research**  
program partner: marktforschung.de
- C: Social Media**
- D: Internet and Society**  
program partner: HIIG
- E: GOR Thesis Award 2014**



# OVERVIEW

All GOR events take place at the Cologne University of Applied Sciences, **Claudiusstrasse 1, 50678 Cologne**, unless stated otherwise in the Overview.

17:00 – 18:00

**A6: How mood, interest and personality impact on research**  
**B6: Angewandte Stichprobenziehung: Auf der Suche nach Repräsentativität**  
**C6: Social Media in Health Education**  
**D6: Online Outreach**

20:00

**GOR – Party (Gewölbe, Hans-Böckler-Platz 2, 50672 Cologne)**

## FRIDAY, 08/03/2014

8:30 – 9:00

**CHECK-IN**

9:00 – 10:00

**A7: Using paradata to identify cheaters/speeders**  
**B7: Schau mir in die Augen, User! Eye-Tracking und Emotionsmessung online**  
**C7: Social Media changes Company Culture**  
**D7: Digital Inequalities**

10:00 – 10:15

**BREAK**

10:15 – 11:00

**Keynote 2: Social Media and Surveys: Collaboration, Not Competition**  
 Prof. Dr. Mick Couper, Survey Research Center, University of Michigan

11:00 – 11:15

**BREAK**

11:15 – 12:15

**A9: Web questionnaire design**  
**B9: Innovation bottom up: Crowd Sourcing und Co-Creation**  
**C9: Facebook**  
**D9: Online Political Will**

12:15 – 12:35

**Award Ceremonies**

12:35 – 13:30

**BREAK: LUNCH**

13:30 – 14:30

**A10: Selecting or mixing modes**  
**B10: Medien zwischen Konvergenz und Divergenz: Reichweitenforschung im Wandel**  
**C10: Twitter**  
**D10: Online Public Sphere**

14:30 – 14:45

**BREAK**

14:45 – 15:45

**A11: Representativity and selectivity in online panels**  
**B11: Daten für alle! Do-It-Yourself in der Marktforschung**  
**C11: Privacy and Ethical Concerns in User Engagement**  
**D11: Challenges in Innovation**

## TRACK TOPICS

**A: Methodology and Surveys**  
**B: Advances in Applied Online Research**  
 program partner: marktforschung.de  
**C: Social Media**  
**D: Internet and Society**  
 program partner: HIIG  
**E: GOR Thesis Award 2014**

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# WORKSHOPS



## WORKSHOP 1

### WHAT'S NEW IN SOCIAL MEDIA RESEARCH? A QUICK GUIDE THROUGH RECENT PUBLICATIONS (2012-2013) FOR SOCIAL SCIENTISTS

**Time:** Wednesday, 05/03/2014: 10:00 - 13:00

**Instructor:** Dr. Katrin Weller (GESIS - Leibniz Institute for the Social Sciences, Germany)

Social media platforms such as Facebook, Twitter or YouTube can play several roles for social scientists and researchers study them with quite different perspectives. On the one hand side, data collected from social media platforms are being used as a basis for diverse case studies on communication behaviour – ranging for example from political crises or natural disasters to popular culture communication like fan interactions. On the other hand, the role of social media usage in people's everyday live is investigated through surveys and experiments, e.g. concerning knowledge sharing, information access and intimacy. Social media research is spread across various disciplines and is constantly growing in terms of publication output. For people new to the field it is difficult to get an overview of the variety of approaches and also for those who are generally interested it is sometimes difficult to stay up-to-date with the literature.

This workshop will summarize the most recent activities in social media research, based on a structured summary of works published in 2012 and 2013. This comprises an overview on popular research questions as well as highlighting novel findings.

There will also be room for questions on particular topics and approaches within the field of social media research.

#### *About the instructor:*

Dr. Katrin Weller is a senior information scientist at GESIS-Leibniz Institute for the Social Sciences in Cologne, Germany. She is working at the Data Archive for the Social Sciences and investigating new approaches to using social media in social science research.

Until 2012 Katrin worked at the Department of Information Science at Heinrich-Heine-University Düsseldorf, where she received her PhD in 2010 for her thesis on "Knowledge Representation in the Social Semantic Web". Within the fields of information science and web science her research focus is on social media, social semantic web, informetrics, web users and communication structures. In her current research projects she is mainly studying Twitter communication in different contexts – from scholarly communication to soccer fans. Furthermore, she is conducting a project on the evolution of standards and methods in social media research. Katrin Weller is co-editor together with Bruns, Burgess, Mahrt and Puschmann of the recently published book „Twitter and Society“ (@twitsocbook).



## WORKSHOP 3

### R 101: BASIC ANALYSES AND CHARTS WITH R, AN OPEN-SOURCE SOFTWARE FOR STATISTICAL COMPUTING

**Time:** Wednesday, 05/03/2014: 10:00 - 13:00

**Instructor:** Dr. Frederik Funke (LINK Institut · University of Mannheim · [datamethods.net](http://datamethods.net), Germany)

A basic introduction to descriptive analyzes and to data visualization. Participants will become acquainted with basic procedures, guidelines, and rules.

After the workshop participants will be able to perform basic operations (e.g., import of data sets, computation of new variables), use important functions (e.g., summary statistics, crosstabs), and build simple charts (e.g., bar charts, pie charts, box plots).

#### *About the instructor:*

Dr. Funke (see <http://datamethods.net>) is freelance consultant for statistics and surveys, focussing on questionnaire design, design of experiments, and methods of data analysis. He offers trainings on R and IBM SPSS Statistics and helps to optimize workflows. Furthermore, he works as senior project manager online research at LINK Institut (<http://link-institut.de>) and as scientific assistant at the University of Mannheim (<http://www.uni-mannheim.de>).

## WORKSHOP 4

### HOW TO: MIXED-MODE-STUDIES

**Time:** Wednesday, 05/03/2014: 13:30 - 16:30

**Instructors:** Holger Geissler (YouGov Deutschland AG, Germany), Prof. Edith de Leeuw (Utrecht University, The Netherlands)

As response rates declined significantly in nearly every western country, the popularity of mixed mode surveys rose. More and more studies allow the participants for example to choose between several modes their preferred one, as happened in the 2012 German Mikrozensus. Furthermore, due to increasing fieldwork costs, survey researchers are looking for less expensive ways to collect data, while maintaining quality standards regarding coverage and response. A good approach is a mixed-mode design, where respondents are first encouraged to complete the questionnaire through web or mail, and where more expensive interview methods are reserved for reminders and nonresponse follow up.

The topic mixed-mode refers to the variation of a survey method within a study. This leads to a number of methodological issues that could have significant impact on the study results.

#### *About the instructors:*

Holger Geißler studied Psychology in Heidelberg and Mannheim with the main focus on Market and Advertising Psychology. He is board member at YouGov Germany and lecturer at the FH Köln.

Edith de Leeuw studied psychology in Amsterdam and worked on her PH.D on data quality in surveys both in Holland and the USA. She is now MOA-professor in survey quality at the department of methodology and statistics, Utrecht University.

## WORKSHOP 5

### FORMS THAT WORK: UNDERSTANDING FORMS TO IMPROVE THEIR DESIGN

**Time:** Wednesday, 05/03/2014: 13:30 - 16:30

**Instructor:** Caroline Jarrett (Effortmark, United Kingdom)

Forms are essential to many processes: support forms, log-in and registration, downloads, grant applications, timesheet recording. From birth to death, every major life event seems to be accompanied by a form. This workshop will focus on key ideas for improving the user experience of your forms, with a combination of practical tips, references to the research, and concepts that you can apply to a wide range of different forms.

#### *About the instructor:*

Caroline Jarrett is the leading expert in usability of forms. She has worked on helping organisations to improve their forms for over 20 years, and has a particular interest in complex government and official forms. She is co-author of "Forms that Work: Designing Web Forms for Usability".

## WORKSHOP 6

### SOCIAL MEDIA ANALYTICS: CONCEPTS, MODELS, METHODS, AND TOOLS

**Time:** Wednesday, 05/03/2014: 13:30 - 16:30

**Instructor:** Prof. Ravi Vatrappu (Copenhagen Business School, Denmark)

This workshop will discuss issues in and aspects of social data analytics in terms of social graph analytics and social text analytics (Vatrappu, 2013). Social graph analytics is concerned with the structure of the relationships emerging from social media use. It focuses on identifying the actors involved, the activities they undertake, the actions they perform, and the artefacts they create and interact with. Social text analytics is concerned with the substantive nature of the interactions, it focuses on the topics discussed and how they are discussed, keywords that appear, pronouns that are used, and negative or positive sentiments expressed.

Several case studies will be presented. Social Data Analytics Tool (SODATO) developed at the Computational Social Science Laboratory (CSSL) will be demonstrated along with other commercially available tools. Participants will be able to interact hands-on with some of the social media analytics tools and meet the PhD students and Postdoctoral researchers at CSSL, ITM, CBS that are working on social media marketing, analytics and management.

#### *About the instructor:*

Ravi Vatrappu is a professor of human computer interaction at the Department of IT Management of the Copenhagen Business School, adjunct professor of applied computing at the Norwegian School of Information Technology, and director of the Computational Social Science Laboratory (CSSL). Prof. Vatrappu leads the Social Media Research Theme at the Department of IT Management, Copenhagen Business School. Prof. Vatrappu and his research group conduct research on social media engagement, social media analytics, social media management, teaching analytics and big data analytics. Prof. Vatrappu has published journal articles, conference papers, and book chapters on social media and has given invited talks at academic as well as industry conferences. He offers several popular courses on social media courses at the Bachelor, Master, and PhD levels. He is currently supervising five PhD projects on various aspects of social media and multiple Master Theses projects. Finally, Prof. Vatrappu has received external funding for social media projects from the Danish Ministry, the Nordic Innovation Centre, and the EU.

B-(

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## IS MR. X DEAD? ANONYMITY IN MARKET RESEARCH

**Time: Thursday, 06/03/2014: 15:45 – 16:45**

Is anonymity a blessing or a curse, a bastion or a tombstone for MR? Join six well known experts from market research, customer relationship management, social media, big data analysis and law in their discussion.

The promise of anonymity is a corner stone of market research. Protecting personal data is meant to encourage participation in surveys and honesty of answers. Furthermore, in many countries a strict distinction between anonymized data for research purposes and personalized data for sales purposes helps to exclude research activities from restrictive legal regulations that apply to direct marketing.

On the other hand anonymity seems increasingly to become a stumbling block to the MR industry. Social Media and Big Data tend to act beyond privacy. Clients demand individualized information for individualized marketing purposes. Big data and customer panels open new access to samples and behavioral data. Thus, many established MR providers experience massive competitive pressure from non-anonymizing competitors.

So, is Mr. X dead? Or even more essential to the profession than ever before?

Participants:

- Jörg Blumtritt, founder and CEO of Datarella
- Dr. Lorenz Gräf, founder Globalpark, Boostpark and StartPlatz
- Hans-Werner Klein, DataBerata, market research consultant
- Finn Raben, Director General ESOMAR
- Professor Dr. Rolf Schwartmann, Cologne Media Law Research Center
- Stephan Thun, CEO Maritz Europe
- Moderation: Professor Horst Müller-Peters, Editor marktforschung.de



Jörg Blumtritt  
(Datarella)



Dr. Lorenz Gräf  
(Boostpark & StartPlatz)



Hans-Werner Klein  
(DataBerata)



Finn Raben, (ESOMAR)



Prof. Dr. Rolf Schwartmann  
(Cologne Media Law Research Center)



Stephan Thun  
(Maritz)



Prof. Horst Müller-Peters  
(marktforschung.de)

# DR. MARK MATTINGLEY-SCOTT

PRINCIPAL, IBM, GERMANY

TECHNOLOGY AND CULTURE:

HOW MAN AND SOCIETY CHANGE IN A TIME OF TECHNOLOGICAL REVOLUTION

Time: Thursday, 06/03/2014: 9:00 – 10:15

At this conference we will spend our time examining the way the internet and its associated technologies such as big data, mobile and cloud computing changes how we behave in a particular aspect of life, where our goal is to understand why and how people make choices and decisions. The vehicle we use is the internet, a vehicle which didn't exist 30 years ago, but which is fundamentally changing the way we work, think and interact with each other. Social media was not a hot topic in 1989 when we were working on html and http, but it is the latest manifestation of the way in which our societal and commercial behaviour and structures are changing. The real-world changes are indisputable, unavoidable, and represent just the surface of a much more fundamental change.

Based on examples of internet based technology innovations I will explore how this change manifests itself in daily use, and from here also examine the impact and change process at a more fundamental level. From systems which help medical diagnoses and the supervision of critically ill patients in real time to optimising the maintenance costs of wind-turbines or finding the perfect market segment for a new product I will discuss where and how the internet is impacting our individual and corporate lives.

I can only speculate on the long-term impact on society, but the fact that there will be a major impact is, I believe, indisputable. The move from structures in which knowledge is power to ones in which the ability to generate knowledge is power is unstoppable, and I hope to be able to provide you with some clear examples and arguments which put this question in the context of how and why people make choices and decisions.

## DR. MARK MATTINGLEY-SCOTT

has a Bachelor of Science with Joint Honours in Computing and Electronics, and a Doctor of Philosophy on the subject of Code Division Multiple Access Local Area Networks from the University of Durham, combined with 25 years experience in the commercial exploitation of technology and research.

As a Principal at IBM he is specialised in the identification, nurturing and development of technological innovation, with a primary focus on Big Data Analytics and Industrie

4.0. He has developed several new business areas and transferred these into IBM's daily services and solutions business. He is an active member of IBM's worldwide patent assessment team, and the IBM Student Admissions and Supervision programme.

He was a member of staff at the University of Frankfurt where he taught Cognitive Science and Media Anthropology, at the University of Applied Sciences in Mannheim where he taught Intercultural Management and IT Management. He is a director of the Frankfurt Institute for New Media and a senior member of the IEEE, having founded the German chapter of the Systems, Man and Cybernetics Society.





# PROF. DR. MICK P. COUPER

**SURVEY RESEARCH CENTER, UNIVERSITY OF MICHIGAN, USA**

**SOCIAL MEDIA AND SURVEYS: COLLABORATION, NOT COMPETITION**

**Time: Friday, 07/03/2014: 10:15 - 11:00**

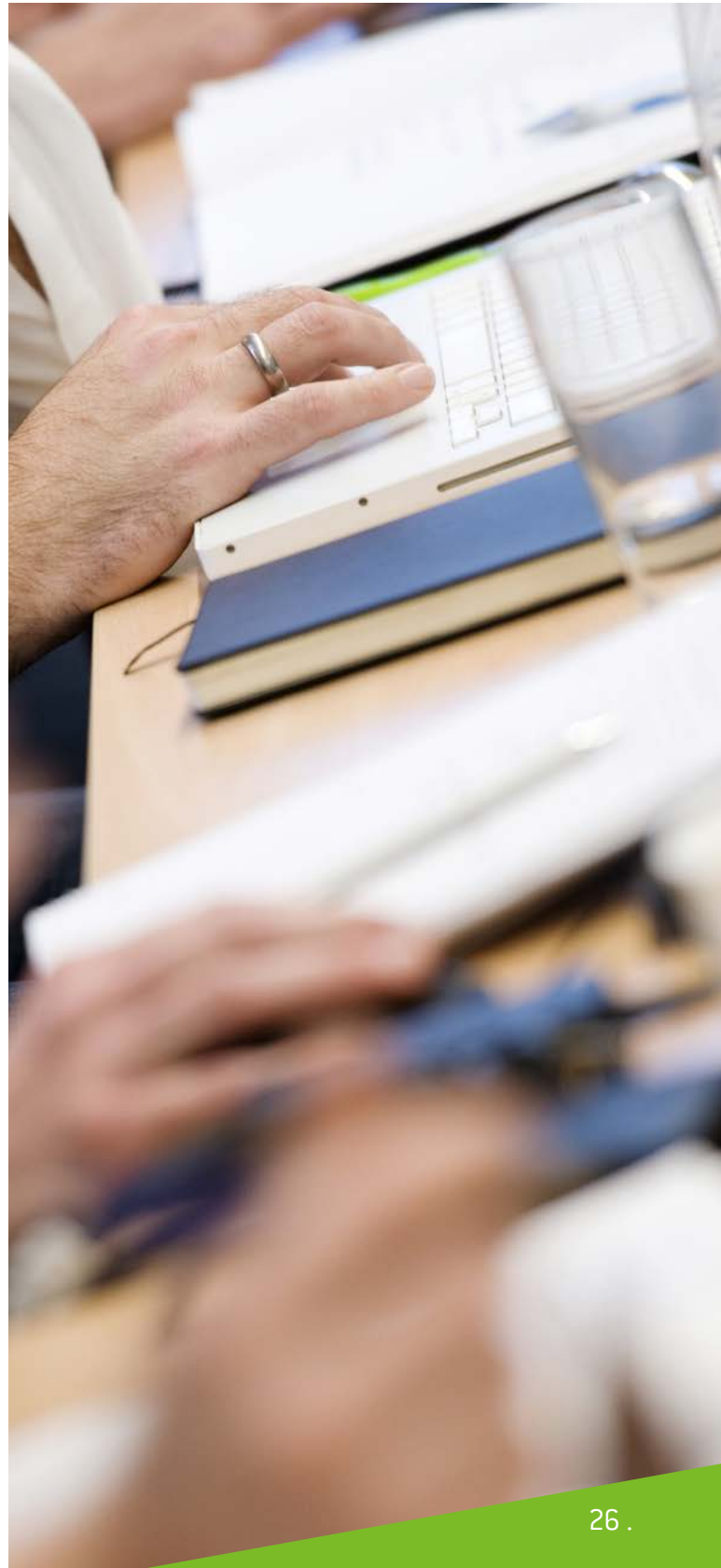
This talk follows on one I gave at the ESRA conference in Ljubljana in July 2013, recently published in *Survey Research Methods*. In that talk I focused on some of the claims made by proponents of „big data,“ especially those claiming that big data will replace surveys and make them redundant. I raised a number of concerns about big data and concluded that there is still an important role for surveys. In this talk I hope to take a more positive view, and explore specific areas of research where big data (and especially social media) analytics and surveys can complement each other. I outline some of the gaps in our knowledge at the intersection of surveys and social media analysis and offer some suggestions for a possible collaborative research agenda to exploit the strengths of each approach.



### MICK P. COUPER

is a Research Professor in the Survey Research Center, Institute for Social Research, at the University of Michigan and in the Joint Program in Survey Methodology (JPSM). He holds a Ph.D. in Sociology from Rhodes University, an M.A. in Applied Social Research from the University of Michigan and an M.Soc.Sc. from the University of Cape Town. He has been doing surveys and research on surveys for over 25 years. He is author of *Designing Effective Web Surveys* (Cambridge, 2008), co-author (with Roger Tourangeau and Frederick Conrad) of *The*

*Science of Web Surveys* (Oxford, 2013) co-author (with Robert Groves) of *Nonresponse in Household Interview Surveys* (Wiley, 1998), and co-author (with Robert Groves, F. Jackson Fowler, James Lepkowski, Roger Tourangeau, and Eleanor Singer) of *Survey Methodology* (2nd ed. Wiley, 2009), and has published widely on survey methodology in a variety of journals. His research has focused on the application of technology to the survey process and the design of computer-assisted surveys, and on the data collection process, including issues of coverage, nonresponse, and measurement error. His current research interests are on mobile data collection and the intersection of big data and survey research.



# GOR BEST PRACTICE AWARD 2014

**Time: Thursday, 06/03/2014: from 10:30**

Nominees for the GOR Best Practice Award 2014 come from ADAC, Axel Springer Media Impact, Deutsche Telekom, Dr. Berger Consult, RMS Radio Marketing Service, Cicero – Magazin für politische Kultur and SevenOne Media. The studies are presented by the authors in three sessions on Thursday.

The “best practice in commercial online market research” competition was introduced at the GOR in 2008 and has over the years rightly earned its reputation as an excellent and important tradition at the General Online Research Conference.

The winner of the award will be selected by the jury and a random sample of the audience via a mobile survey conducted by mo’web Research. Announcement of the winner will be at the GOR Party at the Gewölbe on Thursday evening. The prize is sponsored by mo’web Research, Duesseldorf.

Media partner is Germany’s leading web portal for the market research industry marktforschung.de.

The Jury is chaired by Moritz Kisselbach (mo’web Research). Further jury members are Sabine Menzel (Henkel), Dr. Andrea Piga (Schweizer Fernsehen) and Dr. Detlef Struck (alegas).

Former laureates come from comdirect Bank, Spiegel publishing house, Porsche AG, MAM, Telekom Innovation Laboratories and Barnes & Noble Inc.

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Media Partner:



Moritz Kisselbach  
(Jury Chair)



Sabine Menzel



Dr. Andrea Piga



Dr. Detlef Struck

# GOR POSTER AWARD 2014

Time: Thursday, 06/03/2014: 14:00 – 15:30

Posters offer the opportunity to present late breaking research, short research findings or discuss work in progress at the GOR conference. The presented works will be evaluated by a jury. The GOR Poster Award 2014 comes with a prize money of € 500.

Posters are presented in a plenary session on Thursday, 06 March 2014, 14.00 – 15.30. Access to the poster presentations will be possible during the whole conference. A poster may cover any topic of online research. All submissions in this category are considered for the GOR Poster Award 2014. The poster award ceremony will take place on Friday, 07 March 2014 at 12.15.

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Past winners of the GOR Poster Award are:

- GOR Poster Award 2013: Anna Schnauber (University of Mainz) and Dr. Teresa K. Naab (Hanover University of Music, Drama and Media) for their poster "Measuring Media Habits in a Self-Administered Online Questionnaire"
- GOR Poster Award 2012: Dr. Meinold Thielsch (University of Muenster) and Rafael Jaron (Nordlight Research) for their poster "From first impression to recommendation – users' view on websites" and Markus Baumann, Matthias Haber and Christian H. Wältermann (University of Mannheim) for their poster "Politician's Publishing Behavior"
- GOR Poster Award 2011: Dr. Cornelius Puschmann, Katrin Weller and Evelyn Dröge (University Düsseldorf) for their poster "Studying Twitter conversations as [dynamic] graphs: visualization and structural comparison".

The members of the GOR Poster Award 2014 jury are:



Prof. Dr. Simone Fühles-Ubach  
(Cologne University of Applied  
Sciences), Jury chair



Dr. Florian Keusch  
(University of Michigan)



Dr. Anke Müller-Peters  
(marktforschung.de)



Andreas Sperling  
(YouGov Deutschland AG)



PD Dr. Martin Welker  
(University of Leipzig)

# GOR THESIS AWARD 2014

Time: Thursday, 06/03/2014: 10:30 – 11:30 and 12:00 – 13:00

The GOR Thesis Award Competition is an integral part of the GOR conference series and takes place biannually. It comes with a prize money of 500 € for each of the competition parts. All submissions relevant to online research are welcome. Presentations in the last years covered a broad range of topics, be it online surveys or research concerning the Internet or social aspects of the Web.

Three Master/diploma and doctoral theses each will be presented at GOR in this category. Selected authors will present their findings at the GOR conference and the best presentations will be awarded a price. Theses must have been submitted in 2012 or 2013. Thesis language can be either English or German, but presentations are in English.

#### Nominated for this year's GOR Thesis Award are:

Dissertations:

Hooked on the Internet - The Prevalence, Risk, Theory and Presenting Problem of Internet Addiction by Daria Kuss (Birmingham City University, United Kingdom)

Distribution of Information and Knowledge in Collaborative Learning Systems. Structural and Relational Analysis about the Impact of Social Organizational Structures in Knowledge Networks in the Case of the Web Based Collaborative Learning System in Higher Education called OPAL by Cathleen M. Stützer (Technische Universität Dresden, Germany)

Lost in information? Social psychological aspects of selecting and processing online news by Stephan Winter (University of Duisburg-Essen, Germany)

Master/Magister/Diploma:

Electrophysiological Correlates of Aesthetic Processing of Websites by Thomas Hösker (Westfälische Wilhelms-Universität Münster, Germany)

The importance of perceived price fairness for paid content strategies by Sven Kopp (2hm & Associates GmbH, Germany)

How to rebuild your public image on Facebook by Ruoyun Lin (Eindhoven University of Technology, The Netherlands)

GOR Thesis Award 2014 jury:



Dr. Monika Taddicken  
(University Hamburg)  
Jury Chair



Dr. Frederik Funke  
(LINK Institut · University of  
Mannheim · datamethods.net)



Dr. Stephanie Steinmetz  
(Universität Amsterdam)



Dr. Olaf Wenzel  
(IPF Wenzel)



Andreas Woppmann  
(advise)



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# GOR PARTY 2014

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# ABSTRACTS



## TRACK TOPICS

**A: Methodology and Surveys**

**B: Advances in Applied Online Research**  
program partner: marktforschung.de

**C: Social Media**

**D: Internet and Society**  
program partner: HIIG

**E: GOR Thesis Award 2014**

## A2: THE MOBILE CHALLENGE IN ONLINE PANELS

### UNINTENDED MOBILE RESPONDING IN ONLINE PANELS. SO YOU THINK YOU CONDUCTED A REGULAR WEB SURVEY?

Author: de Bruijne, Marika Annukka; Wijnant, Arnaud  
Organisation: CentERdata, Tilburg University, The Netherlands

**Relevance & Research Question:** We present the results of an analysis on spontaneous use of tablets and smartphones when completing web surveys. Since the surveys concerned were designed for a PC input interface and were not adapted for mobile devices, we call this unintended mobile responding. We investigate the most recent trend of mobile responding in online panels. We also analyze the factors predicting mobile responding using demographic and social behavior related background characteristics as well as the general progressiveness of the respondents.

**Methods & Data:** Our findings are based on the data of two Dutch online probability-based panels, the LISS panel and the CentERpanel. We logged the user agent strings in several waves in these panels from 2012 onwards. Based on this information, we detected the type of device the respondents used to access the surveys. The results were analyzed in combination with a broad set of background information which is known of the panel members.

**Results:** Our findings show that unintended, mobile access to online surveys has increased from a couple of percent up to 11-16 percent in the past two years, mainly due to an increase of tablet usage. We also not only find that tablet and smartphone respondents differ from PC respondents by several characteristics but that there are also important differences between these two groups.

**Added Value:** Based on our findings we strongly recommend testing web surveys on tablets, even when mobile responding is not aimed at. Developing the general web survey design to be more suited for touchscreens is suggested. If participation of young respondents is important, a design accommodating smartphone access should be considered.

### ONLINE MOBILE SURVEYS IN ITALY: COVERAGE AND OTHER METHODOLOGICAL CHALLENGES

Author: Poggio, Teresio  
Organisation: Free University of Bozen, Bolzano, Italy

**Relevance & Research Questions:** The paper addresses the expanding possibilities and the methodological challenges of online mobile surveys in Italy. It discusses coverage and provides a discussion on main data quality implications of unintended online mobile interviews. Two main research questions: (a) What is the level of coverage across social strata? (b) Is the public opinion industry aware of the methodological implications of unintended mobile interviews? Do they take advantage of paradata on the type of device used, in order to gain some control over this phenomenon? Do they optimize questionnaire and questions for use on mobile devices, in order to prevent drop-offs and to assure homogeneity in measurement across devices?

**Methods & Data:** results from two related studies are presented. The first one addresses 'structural coverage', i.e. the diffusion of web-enabled mobile devices across the different segments of the Italian population, and its dynamics. It also compares it with coverage for other ICT-based survey modes (secondary analysis of data from a large-scale repeated survey, carried out face-to-face on a probabilistic sample). The second study is based on an original survey of Italian market research companies and pollsters. The aim of the latter is to assess to what extent – and how – Italian industry are dealing with unintended online mobile respondents, in terms of both generalization and measurement.

**Results:** results from the first study show current limitations, but also the rapid expansion, in coverage for online mobile surveys. It compares it with coverage for the main alternative modes: phone and web surveys, not exempt from coverage problems. Results of the survey on public opinion companies will be available in February 2014, as the survey field is scheduled for January 2014.

**Added Value:** The paper provides a contribution – limited to the Italian case – to the relatively underdeveloped methodological literature on online mobile surveys. It discusses in details coverage. It also discuss how the public opinion industry is dealing with unintended online mobile respondents in order to assure data quality.

## MIXED-DEVICES IN A PROBABILITY BASED PANEL SURVEY. EFFECTS ON SURVEY MEASUREMENT ERROR

Author: Toepoel, Vera [1]; Lugtig, Peter [1,2]  
Organisation: 1: Utrecht University, The Netherlands; 2: University of Essex, United Kingdom

Recent studies have indicated that members of Internet panel surveys now complete surveys on PCs, but also on subnotebooks, tablets or smartphones (Bosnjak et al 2013). This means that web surveys are displayed on very small and very large screens, and are completed with keyboard, mouse or touchscreen.

The fact that Internet surveys can now be completed with so many different devices may have implications for measurement. There have been only a few studies studying the effects on measurement error between different devices. Most studies have concentrated on comparing mobile phones to desktop PCs and have found no clear differences between them with regards to measurement error. Because respondents always self-select into particular devices, it is very difficult to separate selection effects from measurement effects of the device however.

This paper aims to fill this gap by using longitudinal data from a large Dutch probability-based panel survey (LISS) to analyse over time 1) whether the same respondents use different devices to complete Internet surveys and 2) assess whether a device switch over time affects survey measurement error. To this end, we coded the User Agent Strings of 6 waves of data, and categorized respondents according to the devices used over time. We identified several groups of 'stable'-device users (e.g. "always PC") and 'switchers' (e.g. PC -> tablet -> tablet -> PC).

We study the measurement properties of each of the devices using a within-subjects design. We look at 1) the number of Don't knows and item missing 2) interview duration 3) straightlining 4) the length of open answers 5) primacy effect in check-all-that-apply questions and 6) how the survey is evaluated at each wave.

We conclude with a discussion of the effects our findings have for the design of web surveys.

## B2: BEST PRACTICE 1

### INNOVATION FOR TELEVISION RESEARCH - ONLINE SURVEYS VIA HBBTV. A NEW TECHNOLOGY WITH FANTASTIC OPPORTUNITIES!

Author: Hercher, Johannes [1]; Adler, Michael [2]  
Organisation: 1: Rogator AG, Germany; 2: SevenOne Media GmbH, Germany

**Relevance & Research Question:** Since the last three years TV-sets are increasingly connectable to the internet. In 2013 11% of German households had a connectable TV-set and over 50% are actually connected to the internet. Apart from various manufacturer-SmartTV-portals the standard for hybrid broadcast broadband TV (HbbTV) has the unique ability to add interactive services to the broadcasted tv-programm, such as EPG, online-video, games, additional content, interactive advertisement etc. The first questions from a tv-broadcaster perspective are: What is the target group of such interactive services? Do HbbTV advertising campaigns have an impact on brand awareness and recognition? From a market researcher perspective the main questions are: How can we use a SmartTV-Set with a standard-remote control to run online surveys? What kind of media and market research topics can be examined? Is it possible to measure advertisement contacts and use this information in the survey data?

**Methods & Data:** The Rogator survey software G3plus was adapted to meet CE-HTML and XML specifications to enable online interviews under the HbbTV standard using only the standard TV remote control with arrow-keys and OK-button. Users were invited through a survey-button on the HbbTV start bar of four German tv stations. n = 623 finished interviews were generated within 11 days. Contacts with HbbTV campaign banners and a microsite were measured with cookies and transferred to the survey server during the interviews. The survey data was exported to and analyzed with SPSS.

**Results:** On the first testing surveys, demographic information about users was gathered successfully with this new approach, as well as usage patterns and desired services. On the actual case we could clearly show the advertising effect of an HbbTV-campaign distinguishing between banner contacts and microsite visits. Along the way we could prove the road capability of HbbTV online surveys.

**Added Value:** Using HbbTV for online surveys offers a completely new and seamless way to examine any media and advertising topics related to TV consumption. Any research can be done without time gaps or media breaks, usually occurring with CATI-interviews or online surveys.

## MINDTAKE AD TRANSPARENCY INDEX: CAPTURING VISUAL ATTENTION TO BANNER ADVERTISING

Author: Oberecker, Eva {1}; Oberecker, Klaus {1};  
Berger, Sebastian {2}  
Organisation: 1: MindTake Research GmbH; 2: Dr. Berger Consult KG

**Relevance & Research Question:** Internet advertising spending is continuously increasing and will probably exceed print advertising expenditure in 2015 for the first time. An important area here is banner advertising. Whether an advertising message placed in a banner is perceived by the target group depends on factors such as the graphic design and information content of a web page, the size and position of a banner and finally the dwell time and revisit frequency of visitors. However, so far there exists no web attention measure that allows media agencies and advertisers to objectively compare banner ad effectiveness within and especially across websites. Such a measure should include online eye-tracking data in order to be valid.

**Methods & Data:** MindTake Research developed based on the online eye-tracking solution "Spotlight-Viewer" of Dr. Berger Consult KG, the so-called MindTake Ad Transparency Index (named after the Greek word [ma-ti] meaning "eye"). For the first time online eye-tracking data is recorded and used in combination with exposure (= dwell time per page impression), size (= advertising material in pixels squared), clutter (= exclusivity of ad and relationship with content and other ads), loyalty (= relationship of unique users to visit frequency) and cost (per 1000 estimated views of the ad) in order to evaluate ad effectiveness of different banner products across various publishers and portals.

**Results:** The index is published regularly on its own website [www.mati.at](http://www.mati.at) and in Austria's leading digital marketing magazine "Update" by the media partner Werbeplanung.at. The higher the index value for a certain banner product on a particular website the more attention it could generate. The average value is 100.

**Added Value:** MATI is a benchmark that ensures transparency in the banner advertising business. It helps media agencies and advertisers to determine which banner product of which publisher/portal is the most effective for their campaign. Since its introduction one year ago, MATI has already become the standard in banner advertising planning in Austria, used by media agencies and portals for pricing and media planning.

## EVALUATING ADVERTISING EFFECTIVENESS OF WEBCAST CAMPAIGNS

Author: Domke, Uwe {1}; Thielecke, Florian {2}; Lehmeier, M {3}  
Organisation: 1: RMS Radio Marketing Service GmbH & Co. KG,  
Germany; 2: Nielsen, Germany; 3: Gelszus rmm Mar-  
keting Research, Germany

**Relevance & Research Question:** An increasing number of German consumers listen to internet radio webcasts that emerge to become an extremely relevant market in German advertising business. This offers challenges for research methodologies to evaluate advertising effectiveness of campaigns launched on online audio platforms. From September–December 2012, German address and telephone directory Das Örtliche launched an internet radio campaign for its new smartphone app on

- radio.de • rautemusik.fm • Aupeo! • 90elf.

Questions asked:

- What was the impact on the traffic to the advertiser's website?
- How did the campaign impact classic advertising effectiveness metrics (e.g. awareness, relevant set, usage)?
- Was an uplift of app downloads caused by the campaign?

**Methods & Data:** The best approach for answering those questions was to combine hard facts – website usage behavior – and consumer perceptions from a primary market research. Based on representative online measurement panel Nielsen NetView (size 30,000), RMS Radio Marketing Service and Nielsen developed a new measurement tool to evaluate the impact of campaigns launched on online audio platforms: Webradio Ad Effekt. In the same time Gelszus rmm Marketing Research set up an approach that provides primary measures on campaign effectiveness including test and control groups (500 each) in a representative access panel (size 110,000). For both –analysis and survey – tags were implemented in the ads to identify exposed panelists. Besides of demographics and click-through rates to the advertised web page, exposed and non-exposed panelists were surveyed with classic metrics of ad effectiveness.

**Results:** Positive impact was measured:

- Uplift of visits on the advertised website:
- With ad exposure: 17%
- Without ad exposure (same time period) in avg.: 8%
- Increase of classic ad effectiveness metrics:
  - unaided awareness: +17%
  - usage: +30%
  - app-download intent: +40%
- Strengthening of imageoffering solutions for smartphones:
  - +173% being an innovative service: +82%

**Added Value:**

- First evaluation of an internet radio webcast advertisement worldwide
- Definition of a new standard for internet radio ad effectiveness
- The case study „Das Örtliche“ was published in „HORIZONT“ issue 12/2003 on March 21st.

## C2: POLITICS AND SOCIAL MEDIA

### ISSUE OWNERSHIP IN PARTY-CENTERED ONLINE POLITICAL COMMUNITIES : A CONTENT ANALYSIS OF ONLINE POLITICAL BLOGGING

Author: Veny, Yoann  
Organisation: Université Libre de Bruxelles, Belgium

**Relevance & Research Question:** How to estimate political parties' positions is still not clear among scholars. "Salience theory" suggest that political parties compete one with the other, not by fighting on the same dimension, but by emphasizing different political issues. Most studies on party competition use aggregated data at the party level by using party manifesto, expert survey or opinion polls. We propose three methodological shifts to verify the "saliency hypothesis":

- moving to the level of individual political actors
- using online data
- using quantitative discourse analysis.

**Methods and Data:** We started our sampling procedure, with a set of 159 candidates at the 2009 Belgian regional elections who were maintaining a blog or a personal website. We then used a web crawling strategy based on triads identification to find new actors in these online communities. The final sample is composed of 226 political blogs. We run a quantitative discourse analysis on the textual content of these blog on a period on 20 months [January 2012 to July 2013]. This corpus of textual document is composed of 4406 blog posts. "Latent Dirichlet Allocation" [Blei, 2003] has been used to model the topics these blog posts are talking about.

**Results:** Our network data, show a very strong division of the hyperlink network into four densely connected communities, suggesting a strong ideological fragmentation of the hyperlink network. Results of the quantitative text analysis shows a strong partition of the discursive space. A logistic regression show significant difference on issues saliency at the [macro] party level, at the [micro] individual, and at the [meso] hyperlink dyadic level. The period of posting has also a significant influence suggesting that issue saliency has a temporal perspective. In conclusion, these data strongly support the "salience theory".

**Added Value:** This research present advanced results on issue membership in political party competition by using innovative data [individual online data] and methods [quantitative discourse analysis].

Also, all the analytical procedures [sampling and web crawling robot; text mining procedure] have been programed in "R". All the tasks are automated, and the algorithms are freely available for comparative, or time-series, researches.

### POLITICAL PARTICIPATION AND VOTING INTENTION OF SNS USERS

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**Relevance & Research Question:** The present study examines political participation through online social networks [OCN] and the intention to vote on the general election among Israeli students. Recent studies concerning the relationship between Internet usages and political participation, and particularly the use of OCN, have yielded contradictory findings [e.g. Boulianne, 2009; Kushin & Kitchener, 2009; Robertson, Vatrappu & Medina, 2010; Vitak et al., 2011]. Looking into the relationship between exposure to content and the active contribution of content, in relation to the elections, two hypotheses were postulated: H1- There is a positive correlation between users' active contribution of "election-related" content, on online social networks, and their intention to vote. H2- There is a significant difference in the amount "election-related" content contribution, on OCN, between those who already know for whom they would vote and those who are still undecided.

**Methods & Data:** The data for this study was collected through a survey among 275 undergraduate students. The questionnaire was distributed a month before the Israeli parliament general election.

**Results:** More than half of the respondents (56.2%) were exposed to 'election-related' content via OCN. Nevertheless, 70% did not click on the "like" button as a response to election related content. Only 1.5% shared such content and less than 1% uploaded related status. Less than 10% reported they talked about the election in online conversations within the social network, compared to 29% who reported they talked with their acquaintances face to face about this subject. H1 found a moderate correlation between active participation on the online social network and the tendency to vote ( $r=.15$ ,  $p<.05$ ). H2 found a difference ( $t(265)=2.88$ ,  $p<.01$ ) in the average active contribution of content in online social network between respondents who already decided on their voting ( $M=1.9$ ,  $SD=.95$ ) to those who have not yet decided ( $M=1.55$ ,  $SD=.71$ ).

**Added Value:** OCN contain many and varied participatory elements; however, they serve only as a platform that allows different activities on the part of the user. Examining the actual expression patterns of online social network users is paramount to understanding of its possible contribution in encouraging political participation.



## INFLUENCE OF INTERNET AND SOCIAL MEDIA ON CITIZENS' POLITICAL CHOICES

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Organisation: University of Warsaw, Poland

**Relevance & Research Question:** The main objective of this study was to diagnose correlation between internet and social media usage and their influence on political choices of citizens in democracy. Research hypothesis: Online media, including social media, have significant influence on political choices made by citizens.

**Methods & Data:** This CAWI quantitative research was conducted in February 2013 on SW Research ([www.swresearch.pl](http://www.swresearch.pl)) panel of 1068 adults (aged 18-65) in Poland. There were 16 interview questions concerning:

- internet incl. social media usage patterns,
- online and away from keyboard public participation levels,
- influence of media and other tools of political influence on political choices.

Additionally there were questions concerning demographic respondents' data.

**Results:** This study confirmed that internet and social media have significant influence on citizens' political choices and underline factors and tools which are the most influential. It proved that citizens using internet are more likely to vote in real-life election than average citizens. They are more likely to participate in online public activities than in those away from keyboard (as some say: in real-life). Research also brings details on types of media and types of content which have the biggest influence on citizens' political choices. They are: forums, comments below articles and post in social networking sites such as Facebook.com or NK.pl (second biggest social networking site in Poland). Much lower influence were assigned to blogs. Online videos, podcasts and pictures had much bigger influence on political choices than texts.

**Added Value:** This research helps to find arguments in discussion on online forms of political participation such as e.g. casting a vote online (which is still not possible in many countries including Poland). It shows which tools are the most influential and can be used to increase public interest in certain public issues or people. It also confirms the value of research conducted in social media and internet in general.

## D2: DIGITAL RESEARCH

### SCIENTISTS USE OF ONLINE TOOLS IN GERMANY – SURVEY RESULTS AND CHALLENGES FOR RESEARCH

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**Relevance & Research Question:** This paper focusses on the impact of the Internet on academic research – a field which is still largely unexplored. It analyses the results of an online survey among 780 scientists at German universities, investigating their use of and attitudes toward online tools, platforms and social media in the context of their academic work. The survey is thereby a rare example of large-scale surveys of scientists. It affords an opportunity to analyse the current state of the use of the Internet among scientists (called "science 2.0"), but also to assess the barriers and solutions in researching this special group of people. Against the background of public debates about big data, citizen science and the e-humanities, it is highly important to gain deeper, empirical knowledge of scientists' use of the Internet.

**Methods & Data:** The online survey was conducted over four weeks in autumn 2013, addressing academic staff members at 63 German universities that were selected with the help of a two-stage stratified random sampling technique. Data was collected on socio-demographic characteristics, use of various online tools as well as several attitude dimensions related to such use. This data is complemented by data about the research process itself (feedback from participants and metadata generated by the survey software).

#### Results:

- a) Use of online tools: Online tools have significant impact on all areas of academic work, yet social media are used mainly in private contexts. The main motivation for using a specific tool is its perceived usefulness. Sophisticated tools such as virtual research environments are still mostly unknown.
- b) Conducting research about scientists: Accessing scientists is difficult, especially in fields like medicine. Online surveys solve some problems, but pose others. Based on the experiences and solutions of this and previous studies a number of practical recommendations is concluded.

**Added Value:** The combination of insights into the subject matter of academics' use of online tools and into the practical aspects of studying this group's behaviour provides added value with regard to relevant and highly up-to-date questions concerning the impact of the Internet on science and its relation to society.

## OPEN SCIENCE! BUT HOW? WEB PLATFORMS AND THEIR CHALLENGE TO SCHOLARLY COMMUNICATION

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Austrian Academy of Sciences, Austria

**Relevance & Research Question:** In recent years more and more scholars and net activists have tried to open science with the help of ICT in an attempt to “democratize” academia and partially overcome an unyielding conflict of (post) modern knowledge societies: The increasing dependency on knowledge paired with an ever-growing knowledge gap between experts and laypeople. At the same time, there are strong forces trying to “turn back time” by holding on to traditional ways of knowledge production and distribution, criticizing trends towards Open Science as a threat to scientific quality and independence. Thus, the discourse on “Cyberscience 2.0” (as we have labeled the emerging academia shaped by Web 2.0) often takes place in the dichotomy of utopians versus dystopians. Both perspectives have their blind spots which often fail to identify further underlying problems. Therefore, we argue in favor of the rather sober perspective of technology assessment with which we analyzed central web platforms in regard to their potential for scholarly communication.

**Methods & Data:** Combining document analysis, participatory observation and literature reviews we conducted case studies focusing on popular tools and platforms potentially useful for scholarly communication: social network sites, microblogging (Twitter), wikis, search engines and virtual worlds (Second Life). This gives us an encompassing perspective on the central issues of Cyberscience 2.0.

**Results:** While we have observed typical issues along common utopian and dystopian perspectives (e.g. negative and positive effects regarding scientific quality), we also found that the platforms themselves significantly shape and structure the possibilities for scholarly communication. They do so by applying novel techniques, e.g. Wikipedia’s collaborative review system or opaque algorithms ordering search engine results or feeds within social network sites. Their impact is extremely diverse and goes beyond the dichotomy of utopian and dystopian perspectives.

**Added Value:** With our critical analysis we try to draw the attention to a rather neglected aspect of Open Science, namely the structuring impact of web platforms. We hope this will help to identify and potentially solve core problems of Cyberscience 2.0.

## E2: GOR THESIS AWARD PRESENTATIONS (DISSERTATIONS)

### HOOKED ON THE INTERNET — THE PREVALENCE, RISK, THEORY AND PRESENTING PROBLEM OF INTERNET ADDICTION

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As the Internet becomes increasingly ubiquitous and mobile, Internet addiction appears as a potential mental health problem in adolescents and students. From the reported negative consequences, it appears Internet addiction can have a variety of detrimental outcomes for young people that may require professional intervention. This doctoral research project aimed to assess the prevalence, risk, theory and presenting problem of Internet addiction in order to understand who gets hooked on the Internet, how common Internet addiction is, how it can be conceptualised and how it presents itself in the context of psychotherapy. The unique contribution to knowledge was the assessment of the interplay between certain personality traits and the usage of specific Internet applications in contributing to an elevated risk of Internet addiction, and the phenomenological exploration of the presenting problem of Internet addiction from the perspective of the psychotherapist. Researchers have now identified a number of activities and personality traits associated with Internet addiction. In this research, the prevalence and risk of Internet addiction were assessed in two large independent samples of adolescents in the Netherlands and university students in the UK. The first empirical study aimed to synthesise previous findings by (i) assessing the prevalence of potential Internet addiction in a large sample of adolescents, and (ii) investigating the interactions between personality traits and the usage of particular Internet applications as risk factors for Internet addiction in a total of 3,105 adolescents in the Netherlands. They filled out a self-report questionnaire including the Compulsive Internet Use Scale and the Quick Big Five Scale. The results indicate that 3.7% of the sample were classified as potentially addicted to the Internet. The use of online gaming and social applications (online social networking sites and Twitter) increased the risk for Internet addiction, whereas extraversion and conscientiousness appeared as protective factors in high frequency online gamers (Kuss, van Rooij, et al., 2013).

The second empirical study aimed (i) to assess the prevalence of clinically significant levels of Internet addiction, and to (ii) discern the interplay between personality traits and specific Internet uses in increasing the risk for Internet addiction using a cross-sectional online survey with data from 2,257 students of an English university. Results indicated 3.2% of the students were classified as being addicted to the Internet. A combination of online shopping and neuroticism decreased the risk for Internet addiction, whereas a combination of online gaming and openness to experience increased it. In addition to this, frequent usage of online shopping and social online activities, as well

as high neuroticism and low agreeableness significantly increased the chances of being addicted to the Internet (Kuss, Griffiths, et al., 2013). Taken together, the results of the first two empirical studies revealed comparable prevalence rates of Internet addiction, with adolescents scoring slightly higher on the respective measure.

The following two studies have established a theoretical framework to facilitate a conceptualisation of Internet addiction that emerged from the relevant literature and that was applied to the data collected. Study three aimed to test a parsimonious Internet addiction components model based on Griffiths' addiction components (2005), including salience, mood modification, tolerance, withdrawal, conflict, and relapse using two validated measures of Internet addiction in two independent samples ( $n_s = 3,105$  and  $2,257$ ). The fit of the model was analysed using Confirmatory Factor Analysis. Results indicated the Internet addiction components model fit the data in both samples well. The two sample/two instrument approach provides converging evidence concerning the degree to which the components model can organize the self-reported behavioural components of Internet addiction. The results suggest the psychopathology of addiction is a syndrome as Internet addiction appears to share criteria with other addictions, but it differs in its expression (Kuss, Shorter, van Rooij, Griffiths, & Schoenmakers, 2013).

Study four aimed to establish the construct validity of the Internet addiction components model via a nomological network by testing the predictive accuracy of personality traits on the Internet addiction components factor. Internet addiction and personality traits were assessed in two independent samples of 3,105 adolescents in the Netherlands and 2,257 university students in England. The results indicate low agreeableness and high neuroticism/low emotional stability predicted the Internet addiction components factor in both samples. Furthermore, low conscientiousness and low resourcefulness predicted it in the adolescent sample only. In sum, the main contribution of this study is the establishment of a nomological network for the Internet addiction components model, which can serve as the basis for future research endeavours regarding its extension and consequent complementation as well as its applications in other relevant settings, such as the therapeutic context.

The final study aimed to explore how Internet addiction therapy experts experience the presenting problem of Internet addiction. A total of 20 psychotherapists from six different countries were interviewed regarding their individual experience of treating patients suffering from Internet addiction. Data were analysed using Interpretative Phenomenological Analysis. Two superordinate themes were identified during the analysis: "risk" and "addiction". The first superordinate theme represents the individual, situational and structural factors that may put a person at risk for developing Internet addiction. Individual factors appeared to be age, gender, and their individual profile. Situational factors included neglect, being students, and having a trigger that sets Internet addiction development into motion. Structural characteristics referred to different Internet applications the excessive use of which may be pathogenic, with online gaming standing out as particularly problematic. The second superordinate theme noted Internet addiction as actual psychopathology, containing addiction symptoms, criteria and diagnosis, and drawing on the similarities of Internet addiction with other addictions.

Overall, this research supports the American Psychiatric Association's decision to include Internet Gaming Disorder as distinct condition in the appendix of the revised diagnostic (DSM-5), with beneficial consequences for treatment, research, and prevention efforts. Conclusively, additional support is offered for understanding Internet addiction as disease, not as a transient and easily dispensable by-product of a technophilic generation's new media consumption.

## **DISTRIBUTION OF INFORMATION AND KNOWLEDGE IN COLLABORATIVE LEARNING SYSTEMS. STRUCTURAL AND RELATIONAL ANALYSIS ABOUT THE IMPACT OF SOCIAL ORGANIZATIONAL STRUCTURES IN KNOWLEDGE NETWORKS IN THE CASE OF THE WEB BASED COLLABORATIVE LEARNING SYSTEM IN HIGHER EDUCATION CALLED OPAL.**

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A key strategy for web-based exchange of information and knowledge is their collaborative distribution and use. The emphasis of this work lay in the analysis of structures of social organizations and relationships of social aggregation within collaboration networks in case of the learning platform OPAL – currently the most popular learning management system in higher education in Saxony, Germany. The aim was to explore social impact factors on the potential for innovation and distribution of information and knowledge within knowledge networks. This work explored the structural conditions of OPAL's collaborative discussion networks and identified relationships between social role constructs in order to explain the effectiveness of collaborative activities on the process of diffusion of information and knowledge flow in learning networks. The work is related to the field of Learning Analytics and combines theories and models from both social sciences and informatics. Primarily the study is based on the paradigm of social network theory and relational research methods, including Social Network Analysis and Dynamic Network Analysis.

What emerged from the studies was that the organizational structure of the collaborative knowledge management in OPAL was based increasingly on a centralized form in which elite knowledge groups arised. It could be demonstrated that the global organizational structure of the institutionalized knowledge network in OPAL did not differ substantially from the structural character of open source networks like Wikipedia. The building of knowledge elites could be traced back to the concentration of popular action spaces, which proved to be multipliers in the transfer of information and knowledge, as well as to the effectiveness of core participants, who built on the range of interactions of the majority. The core participants revealed themselves by means of a combination of behavioral patterns. This involved a significant role being played by activity and diversity in the process of communication regarding both the choice of action space and the collaborating partner and how heterogeneous the strength of the connections was. It was confirmed that the participant's interactive behaviour within the knowledge elite exerted a significant impact on the potential for transferring information and knowledge throughout the knowledge network. In doing so, approx.

20% of the participants influenced the productivity and benefit of the whole collaborative knowledge management in OPAL. The relational identification of roles and positions of participants in the knowledge network could be established in three communication roles in accordance with the opinion leader concept and five emerging network roles which were identified by the specially developed hybrid equivalence method. It emerged that, in addition to the high level of a participant's interaction, it was switching roles and groups as well as the heterogeneous user behaviour in communication between the participants in particular that exerted influence on the collaborative ability of the participants and the associated networking potential of the knowledge network. The extraction of relationships in the emerging network roles resulted in five network positions in the knowledge network: Alpha Dog, Broker, Cosmopolitan, Individualist and Sightseer. It was made clear that the organization of the knowledge network depended on the effectiveness of these emerging network roles. From this, two levels of an effect influencing the distribution process of information and knowledge were specified. At global network level, the Broker guided and controlled the globalization of information and knowledge (polymorphic behaviour). At the group level, the Cosmopolitan, active and willing to collaborate, influenced the potential exchange of information and knowledge (monomorphic behaviour). Alpha Dogs largely took over the function of initiator in discussion forums and discussion threads in the knowledge network. Individualists were classified as experts, who hardly showed any efforts to collaborate. They acted as individuals, organized themselves and were independent of group processes. The potential for innovation by the knowledge network could be particularly ascribed to the role of the Sightseer, the majority of the participants, who performed as followers of discussion threads, albeit only for short periods and with below average involvement, yet still acquired information for others in the knowledge network. Finally, to assess the power of the collaborative knowledge management system within OPAL and to establish strategic action plans on how to proceed to optimize the infrastructure, long term studies were carried out using dynamic network analyses (DNA) at the micro and macro level. In addition, the impact of network roles on each evolutionary phase was clarified. The activist (Cosmopolitan) is deemed to be the entrepreneur, the majority (Sightseers) — the growth promoters and the information and knowledge broker — the controller of the globalization of information and knowledge in the OPAL collaborative knowledge management system. These investigations showed that the emergence of the Broker's network particularly influenced the development of the collaborative knowledge network. The analysis of evolutionary processes made it clear that in current research of participants, it is no longer sufficient to generate estimated growth forecasts of participant numbers as these primarily depict the majority of participants and mask the actual status quo of OPAL's collaborative knowledge system. It was shown that social network learning in a collaborative knowledge network is particularly dependent on the level of involvement of the participants. So to organize collaborative knowledge networks it's therefore necessary to promote social ties and thus, the potential for distribution of information and knowledge within the existing organizational structure. It is therefore necessary to strive for real-time analyses of the evolutionary processes in knowledge network in order to deduce evolutionary forecasts and for the optimal identification of strategies for how to proceed. Based on the results, three recommendations could be worked out for the OPAL administration to promote collaborative knowledge management further more. These are deemed to be potential strategies for intervention to counteract the increase in the concentration of information in knowledge cliques. In summary, dis-

covering new, strategic routes for decision making that are based on social network learning theories and concepts of learning in web-based research in higher education, and developing of instruments for quality assurance of CSCL systems are especially reliant on phase dependent structural and relational analyses, which depict organizational structures, potential for collaboration and distribution as well as the centralization of knowledge management.

## LOST IN INFORMATION? SOCIAL PSYCHOLOGICAL ASPECTS OF SELECTING AND PROCESSING ONLINE NEWS

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The Internet has changed the way in which individuals acquire information about current topics. First, the amount of available information has increased dramatically: With a simple click, users are able to select from a multitude of news out of various sources, which offers opportunities for retrieving relevant content (Walther et al., 2011) but may also lead to the problem of becoming lost in an overload of information. Second, possibilities of user participation have been included as central elements of current websites: Recipients are able to express their opinions on specific contents or topics via ratings, comments or recommendations. Against this background, this dissertation deals with the question of how users select and process journalistic articles in this new media environment and whether they are influenced by information about the source and user-generated content such as ratings or reader comments. In this context, it is discussed whether theories of media and social psychology concerning selective exposure and persuasion can be applied to the usage of participatory news sites. With regard to the selection of content, prior research has shown that readers tend to prefer attitude-consistent information and messages with a high utility (e.g., Knobloch-Westerwick & Meng, 2009). Although assessing the credibility of articles has become increasingly important due to the diversity of sources that can be found online, this factor has not been considered in prior models of selective exposure. The first study of this dissertation aimed to fill this gap by examining the influence of source reputation and other readers' reactions on credibility assessments and subsequent selection of articles. In a laboratory experiment, participants were asked to search for information on a website which was designed as an online news collection. The topic of the articles was the science-related debate on violence in the media — in order to create a situation with high external validity, participants were parents of minors (since the topic is likely to be personally relevant for this group). Source information (online magazines with high vs. low reputation), community ratings (valence: positive vs. negative) and the number of views (few vs. many) were varied as within-subject factors. Results showed that participants preferred texts which were attached to highly reputable sources (in terms of higher credibility evaluations and higher numbers of clicks) — although content was kept constant —, whereas social ratings were only relevant when the reputation of the source was low. The numbers of views did not affect readers' behavior. Participants' strategies of selection can be interpreted as thoughtful, which mitigates concerns of information overload — however, the other-generated cues (which are difficult to manipulate and therefore offer valuable information) have not been considered extensively.

Concerning the phase of information processing (after the selection decision), it was analyzed how the persuasive effects of a news article can be affected by source information and statements generated by other users. As theoretical framework, dual-process models of persuasion (e.g., Elaboration Likelihood Model, Petty & Cacioppo, 1986) on the interplay of source and reader characteristics are utilized. In an online experiment, participants were asked to read an online article which summarized positive aspects of genetically modified food. Source reputation (high vs. low) and the form of user feedback were systematically varied: The ostensible user reactions contradicted the slant of the article and were given in form of a negative user rating or with comments about negative aspects of Biotech food (either with relevant arguments or merely with subjective statements). Apart from a source effect, results showed that peer-generated postings influenced readers' attitudes toward the topic: The persuasive effect of the text was diminished by contradicting comments which presented reasonable arguments, while subjective comments did not have an effect. An interaction between source and user feedback showed that the user-generated statements were particularly relevant on a news site with a high reputation. On the low-reputation website, any type of user reaction tended to increase the persuasive effects of the main article.

However, comments and ratings were not used to infer the general opinion climate. These results clarify the conditions under which other-generated information can affect readers' opinions and underline the crucial role of argument quality.

In summary, it can be concluded that models of selective exposure should be amended by the aspect of source credibility and that social reactions of the Internet community have the potential to change traditional patterns of media reception. From the perspective of the producers of online news, results suggest that the use of ratings can be a promising means of arousing attention when source reputation is low – news media organizations which already have an established reputation are less dependent on recommendations and may therefore also be able to publish articles about important non-mainstream topics. User participation in form of comments may lead to a situation in which the “power” of the journalists is diminished – however, results also show that it can enhance the credibility of the whole site if there is an active community discussing the articles. From a theoretical point of view, user-generated statements from “the audience” appear as a crucial factor in the new media environment. This leads to a model which includes the interplay of source, content, and audience as well as the processes of preliminary credibility assessments, information selection and attitude formation. The dissertation concludes by discussing future challenges for journalists, readers and online researchers in the age of digital media.

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## A3: MEASUREMENT EFFECTS IN MOBILE AND WEB SURVEYS

### MOVING TOWARDS MOBILE READY WEB PANELS

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**Relevance & Research Question:** People are increasingly accessing the internet with touchscreen mobile devices, such as smartphones and tablets. Web panel statistics show that these devices are increasingly being used to complete questionnaires. The unique characteristics of mobile devices require a different type of user-interface, which the standard web interview systems do not offer. The research question is what web panels can do to anticipate to this trend.

**Methods & Data:** To find the specific needs of respondents that use touchscreen mobile devices, we conducted several methodological experiments in the CentERpanel. The CentERpanel is a representative web panel in the Netherlands. These experiments were conducted using C-MoTo, a mobile and touch optimized web questionnaire interface that works on top of the Blaise interviewing system.

**Results:** Offering traditional web interfaces to respondents that include mobile device users can be problematic. Different input mechanisms as touchscreens in combination with limited screen sizes make some questions hard to be answered by respondents. Especially if questions contain many options, radio buttons can become very small and nearly impossible to select with a finger that is relatively large compared to the screen. For this reason the use of traditional web interfaces is not a good solution for a web panel that consists of web users that use both mobile devices and traditional computers and laptops. An alternative option is to design your questionnaires in two different layouts: a web and mobile layout. This solution would be optimal for the respondents. However the implementation of two different survey layouts can be difficult (the data models should be compatible) and expensive. A last option would be to offer the mobile layout to both web and mobile respondents. The data quality did not suffer from this design for both modes. However, the respondent satisfaction was lower if the mobile layout was shown and the survey design is more limited for a mobile layout compared to a traditional web layout.

**Added Value:** Mobile web usage is increasing. With the results from our experiments we have a good base to transform our web panels to a mobile ready web panel.



## DEVICE EFFECTS: HOW DIFFERENT SCREEN SIZES AFFECT ANSWER QUALITY IN ONLINE QUESTIONNAIRES

Author: Fischer, Beat; Bernet, Felix  
Organisation: LINK Institut, Switzerland

**Relevance & Research Question:** The number of internet panelists accessing internet surveys with mobile devices has quickly bypassed the 20% mark. Yet, little is known about the influence of screen size on survey data quality. How do answers given on a small screen device (e.g. smartphone) differ from answers given on a large screen device (e.g. laptop or desktop computer)? LINK conducted a series of fundamental research on this subject. In the following presentation we would like to show our latest scientific results from an applied marketing research project on online and mobile shopping decision making.

**Methods & Data Method:** Online survey with adaptive questionnaire layout optimised for small and large screen devices. Sample: Representative Swiss sample from the LINK Internet Panel and LINK Mobile Panel. These panelists regularly answer questionnaires on both large screen devices (eg. laptop or desktop computer) and small screen devices (e.g. Smartphone). Applying an identical split sample approach, we examined the effects of the device used for answering the questionnaire:

Group 1 had to answer the questionnaire on a large screen device (invitation by e-mail)

Group 2 had to answer the questionnaire on a smartphone (invitation by SMS)

N=300 complete interviews per group

Participation rate for both groups approximately 50%

**Results:** Differences in answering behaviour of panelists using a large screen device compared to panelists using a small screen device. Effect can especially be found in various question types such as closed and open questions, matrix questions, etc.

**Added Value:** Sharing new and relevant results about the influence of different screen sizes on the answer behaviour in internet surveys. Showing possible ways to deal with increasing numbers of panelist answering by smartphones.

## STUDENTS FIRST CHOICE – THE INFLUENCE OF MOBILE MODE ON RESULTS

Author: Maxl, Emanuel  
Organisation: Context-Research, Austria

**Relevance & Research Question:** "Students First Choice" is a study about the job plans and attitudes of students on behalf of Career Services Austria, the umbrella-organisation of the 10 main Austrian universities. Research questions are concerning preferred entry into profession e.g. directly or as trainee, in which area students want to work, personal chances to get an appropriate job within 3 months after finishing study, which employers are preferred and which are disliked. In addition images of these employers are examined e.g. good vs. bad

work-life balance and innovative vs. old-fashioned. Purpose of this presentation is to show results of this major study from the methodological perspective regarding mobile vs. PC participation. More and more participants are completing their surveys via mobile devices. This is to compare subsamples of both completion groups regarding meta-data and answering-behaviour.

**Methods & Data:** The study was conducted in spring 2013, n=7.614 students from 10 Austrian universities took part in an online-survey.

**Results:** Results will be analysed regarding differences or similarities of data between mobile mode and PC-mode of completion the survey. In addition meta-data will be given about mobile completion of survey e.g. kind of mobile devices, duration of completion and drop-off rates.

**Added Value:** Since the study comprises a big sample and the target-group is young, and therefore mobile-minded, interpretations can be done about mobile completion of surveys in contrast to established mode.

## B3: BEST PRACTICE 2

### THE CICERO WAHLKAMPF-INDEX

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In times of an ever increasing share of late-deciding voters, electoral research has to adapt. "Cicero-Wahlkampf-Index" is at the same time a research design to measure people's attitudes in the course of a campaign as well as a condensed set of indices to visualize the election campaign over time based on these indices. It transfers long established tradition from the field of economics and consumer behavior ("ifö Geschäftsklimaindex" etc.) to the field of voters and election. In detail, the indices include a supply-side oriented index of "dynamics" which shows to what extent voters are actually reached by specific events and parties' campaigns. On the other hand, it comprises a demand-side oriented index of "voter volatility" which depicts to what extent voters are (un)decided and how certain their voting decisions are.

During the 2013 German election campaign, a longitudinal panel of 2.000 voters were randomly selected out of the YouGov online panel. The sample was a quota sample based on representative quotas for age, gender, region and electoral behavior in the 2009 election. In total, panelists participated eight times during July 2013 (start of campaign) to September 2013. The idea of tracking the course of the campaign based on these indices was successfully implemented, adding a new perspective to the study and coverage of campaigns. The results were continuously published in Cicero. In detail, the index of volatility showed – as expected – a negative trend during the campaign. Voters made up their minds – but many of them did so very late in the course of the campaign. Our second index of volatility showed, how difficult it is for parties these days to reach voters. Still, voters became more

involved and engaged with the campaign over time. But even late in the campaign, the index reached only 46.2 (out of 100) points. Cicero-Wahlkampfindex" is a valid tool to measure people's attitude at different stages of an election campaign. This means that it is possible to measure the effectiveness of election campaigns. Moreover, it is made up of 12 different items and allows therefore a precise analysis based on different dimensions.

## EXTRA INCENTIVES FOR EXTRA EFFORTS – IMPACT OF INCENTIVES FOR BURDENSOME TASKS WITHIN AN INCENTIVIZED ONLINE STUDY

Author: Schreier, Jan Hendrik [1]; Biethahn, Niels [3]; Drewes, Frank [2]  
Organisation: 1: ADAC e. V., Germany; 2: Harris Interactive AG, Germany; 3: BITS Business and Information Technology School GmbH, Germany

**Relevance & Research Question:** Research questions increase in complexity and surveys become more demanding for respondents. In cases where respondents are required to provide burdensome information an extra incentive can help to increase the response rate towards this type of questions. The presented research focuses on incentive type and height and potential impact on response rates for such burdensome information.

**Methods & Data:** At the beginning of a 20-minute online survey with panel points as incentive after completion, respondents of a commercial panel were asked to provide specific information from their vehicle registration documents (VRD). In a 5x4 design 5,422 people were randomly offered incentives and instructed in various ways to increase the share of respondents providing certain codes from their VRD instead of manually entering information about their car. Incentives were a) panel-points b) raffle with the winner informed at the end of the survey c) raffle with the winner informed four weeks after the survey, d) a choice of the three prior incentives and e) no incentive. If panel points were involved, subgroups were built offering 1 to 4 points.

**Results:** Respondents who used data from their VRD on average needed 3 minutes longer to complete the survey. Different instructions had no impact on the experiment's outcome. Compared to the "no incentive"-condition, monetary incentives increased the rate of VRD-used from 37.5 % to 47.3 %. The incentives' impact was independent of respondents' gender, age and number of points awarded. Respondents driving "premium brand"-cars reacted least on incentives, indicating a correlation between likeliness to react on incentives and economic situation (within the tested range of incentives).

**Added Value:** The study is the first study to investigate the impact of incentives offered for specific actions within a survey. It shows that incentives can significantly increase the response rate for burdensome information within a survey and that the incentive's height does not significantly impact the response rate. The findings also indicate that monetary incentives effectiveness depends on the respondents' economic situation. A raffle is economically the most efficient incentive but requires further investigation on long term effects on response rates.

## C3: INTIMACY, GENDER AND AGE IN SOCIAL MEDIA

### HOW TO REACH AND ANALYZE THE INTIMACY FEATURED ON THE WEB. THREE CASES ON SEXUALITY AND REPRODUCTION.

Author: Forgeau, Fanny  
Organisation: linkfluence, France

**Relevance & Research Question:** Spontaneous publications Internet users provide the web with are a direct access to their intimacy. Like ethnography, listening to the web allows to observe, in vivo, how their daily experiences, the social norms and their peers' discourse interact to bear on their motivations and beliefs. If the free and anonymous access to data offers a great context to approach topics such as sexuality and reproduction, the rules the web features involve caution to allow the researcher to reach a "true" representation of opinions. How then reach a valid comprehension of behaviors, beyond the noise, and above the balance of power that search engines have imposed? How to deal with the material extracted from the web, when it comes to intimate issues?

**Methods & Data:** This paper will lean on three cases of research conducted at Linkfluence. The methods are based on a combination of specific tools and human analysis. In the first case, on abortion, the main input is the mapping of websites according to their hypertext links. The second case, about contraception, leans on an exploration of thousands of discussion threads and a manual codification of a sample. The third case, on uterine fibroids, is based on a worldwide solution of listening, set-up according to complex queries.

#### Results:

- The mapping of the links shows the access to information on abortion is not free but connected to well-organized networks and driven to ideological websites.
- The exploration of discussion threads shows a heavy disaffection towards all types of contraception, beyond the noisy debate on third generation pills
- Listening to symptoms is a relevant way to reach not-yet diagnosed women – knowing that 50 to 75% of women worldwide have or will suffer uterine fibroids.

**Added Value:** These cases show how to proceed to treat and analyze substantial quantities of data in order to seize operating forces beyond the noise.

## PERCEPTION DIFFERENCES OF CROSS-GENERATIONAL ONLINE RELATIONSHIPS. HOW YOUNG AND OLDER PEOPLE EXPERIENCE THE GROWING AGE DIVERSITY ON SOCIAL NETWORK SITES.

Author: Kneidinger, Bernadette  
Organisation: University of Bamberg, Germany

**Relevance & Research Question:** The presentation addresses the question how young and older people experiences cross-generational contacts in social network sites (SNS). After more and more people over 45 years have entered social network sites like Facebook, the opportunity for cross-generational online communication grew rapidly. In times of demographic change and individual mobility the significance of online communication for maintaining social relationships even across generations can be observed. Besides these facts it was rarely analyzed if young and older users experience online relationships with other generations in the same way.

**Methods & Data:** Using the data of an online survey of 987 Facebook users from Germany, Austria and Switzerland between 12 and 73 years perception differences of cross-generational online relationships are analyzed. The survey took place in January 2012 and the participants are recruited by using the snowball principle. Although the data bases on a convenience sample, it allows the comparison of individual usage experiences of young and older SNS users.

**Results:** The survey reveals that Facebook users from all age groups appreciate the fast and simple way of communication and contact maintenance through SNS. Nevertheless, some significant differences in the perception and evaluation of cross-generational online contacts between the age groups can be observed. The younger users tend to estimate the number of contacts, the frequency of communication and the improvement of relationship quality with older generations significantly lower than the older participants do. The presentation will discuss the question if such perception differences are only based on different usage behavior or if they can be seen as an indicator for the validity of the "intergenerational stake hypothesis" (Giarrusso et al. 1995) even in the online environment.

**Added Value:** The project offers first insights in the significance of online communication for the maintenance of cross-generational contacts. These findings could be useful for further developments of online communication media and additionally helps to understand the increasing merge of online and offline interactions even in close social relationships.

## WHAT'S UP IN WHATSAPP WORLD? THE ROLE OF A POPULAR SMARTPHONE APPLICATION IN THE LIVES OF ISRAELI USERS

Author: Malka, Vered { 1 }; Ariel, Yaron { 1 }; Avidar, Ruth { 1 };  
Levi, Eilat Chen { 2 }

Organisation: 1: Yezreel Valley College; 2: University of Haifa, Israel

**Relevance and research question:** This research focuses on one of the most popular and intriguing smartphone applications, WhatsApp, aiming to map its usage patterns among Israeli users, in attempt to locate it within the concepts of privacy, community, and relationship strength. Thus, the main research question seeks to understand how users between the ages 21-31 perceive its role in their lives.

**Methods and data:** Data is based on two research methods: a representing survey of 515 smartphone users (maximum sample error 4.5%), and 60 in-depth interviews with undergraduate students (ages 21-31).

**Results:** Our findings ratify the popularity of WhatsApp. 67% of smartphone users send personal messages via Whatsapp on a daily basis. Only 11% had never used it for this purpose. 52% of smartphone users send group messages via WhatsApp on a daily basis, while 21% had never used it this way. Age is negatively correlated with the usages of Whatsapp, for both personal ( $r=-.279$ ,  $p<.001$ ) and group messages ( $r=-.289$ ,  $p<.001$ ). Subsequently we focused on the age group of 21-31 years old ( $n=132$ ) in which 83.3% are sending daily personal messages via WhatsApp and 63.6% utilize it for group messaging. The In-depth interviews reveal that for many, the main reason for purchasing a smartphone is WhatsApp. Among the leading themes that were also discussed were the ambivalent attitude towards groups' activities; new challenges to users' privacy; the personal and social implications of Whatsapp's user-friendly mms function; and changes in patterns of interpersonal interactions in the "WhatsApp era".

**Added value:** During the last few years, smartphones have become extremely popular, penetrating new markets in a constantly growing rate. As a result, scholars are renewing their interest in the usage of mobile phones, as well as in their social and personal implications (Brown, Green, & Harper, 2001; Katz & Aakhus, 2002; Rice & Katz, 2003; Katz, 2006). This study focuses on one of the most unique and interesting smartphone applications. Findings suggest that WhatsApp-related activities are becoming not only very common and frequent, but also highly significant in users lives. As this phenomenon keeps growing, scholars' interest in it should also be on the rise.

## D3: OPEN SCIENCE

### MAKING SCIENCE OPEN BY DEFAULT

Author: Colomb, Julien (1); Brembs, Björn (2)  
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**Relevance & Research Question:** Open Science is a useful and forward-looking concept, arising from the technical possibilities in the internet age. However, without dedicated institutional infrastructure, the additional work required to make one's science open constitutes one of several major obstacles towards a wider adoption of Open Science.

**Methods & Data:** We are developing our data evaluation software so that making data and code openly accessible is a default setting where no additional work is required on the part of the individual researcher. Whenever the researcher is evaluating the data for their personal use, lab meetings, presentations or publications, the data is simultaneously updated in an openly accessible institutional repository, without further action from the researcher. Each dataset receives a DOI for sustainable long-term referencing. Coding takes place using openly accessible platforms such as GitHub, but also here we are working on developing institutionalized repositories, which provide sustainable long-term accessibility for scholarly software.

**Results:** We will present work in progress and a version of the data evaluation software we are currently using for some of our experiments, using FigShare as data repository.

**Added Value:** Once our developments are concluded, our laboratory will be open by default: all our data and software will be openly accessible in real time, as well as archived in institutional archives for sustainable, long-term access. These are necessary, but not sufficient prerequisites for a future where Open Science is practiced, rather than projected.

### THE SOCIAL DILEMMA OF PUTTING THE IDEA OF OPEN SCIENCE INTO PRACTICE

Author: Scheliga, Kaja; Friesike, Sascha  
Organisation: HIIG, Germany

**Relevance & Research Question:** Open science – the idea of making the research process as transparent and accessible as possible – is a topic that concerns scientists, policy makers and the general public. Open science is said to have the potential to revolutionise science. This disruptive potential, however, does not necessarily translate into practice. While transformations are observed in some areas (e.g., open access) the individual researcher who wants to pursue open science is confronted with various barriers. In this contribution we explore these barriers and argue that core aspects of open science can be seen through the prism of a social dilemma; what is best for the collective interest is not necessarily in the best interest of the individual.

**Methods & Data:** The findings are based on 22 qualitative semi-structured interviews with an average length of 33 minutes with researchers based in Germany, England, Switzerland and South Africa. All researchers have a connection to the topic of open science or science 2.0. The interviews were transcribed verbatim and subsequently thematically coded. In analysing the barriers to open science we have used the notion of a social dilemma as the theoretical framework.

**Results:** Based on the interviews we have identified various barriers to open science. The fear of free-riding prevents scientists from sharing research materials. The current evaluation criteria of the academic system impede openness. In this context, the individual scientist needs to invest extra time and effort in putting open science into practice and is likely to be confronted with issues such as cultural and institutional constraints, acceptance problems, ineffective policy guidelines, difficulties of guaranteeing data privacy, lack of standards for sharing research materials, lack of legal clarity, no impetus to publish negative results, reluctance to share code, trouble with tools for science and financial aspects of openness.

**Added Value:** With this contribution we offer an insight into open science and its difficulties. We hope that our discussion serves as a starting point in developing the idea of open science further.

## E3: GOR THESIS AWARD PRESENTATIONS (MASTER, MAGISTER, DIPLOMA)

### ELECTROPHYSIOLOGICAL CORRELATES OF AESTHETIC PROCESSING OF WEBSITES

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**Introduction:** Visual aesthetics of websites represent a critical influence on constructs as satisfaction, urge to buy impulsively, customer loyalty as well as intend to revisit a website. Besides a website's content and usability aesthetics play a major role for the overall evaluation of user experience. Empirical studies show that website aesthetics are a determinant factor on user experience in particular under conditions of low usability (Moshagen et al. 2009) and in early stages of impression formation (Jaron & Thielsch, 2009).

How are aesthetic judgements formed? Theories about aesthetic processing assume an interacting relationship between attributes of the object and characteristics of the subject that together define the aesthetic judgement (Leder et al., 2004; Moshagen & Thielsch, 2010; Reber et al., 2004). Neuronal aesthetic processing starts with a bottom-up analysis of the physical characteristics of the stimulus. During its further progress it is being influenced by top-down processes such

as attention processes that result from the recipient's individual attributes. Those processes are accompanied by affective processing of the stimulus (Chatterjee, 2004; Leder et al., 2004). On the one hand, these assumptions are confirmed by findings of neuroaesthetic studies that show differences regarding the activation of specific cortical areas depending on varying stimulus characteristics (e. g. Jacobsen & Höfel, 2003; Kawabata & Zeki, 2004; Vartanian & Goel, 2004). On the other hand, empirical research points to interindividual differences regarding aesthetic processing at the neuronal level, one of the best examples in differences between experts and laypeople (e. g. Kirk et al., 2009a). Not for that reason alone, but also to maximize observable differences a comparison between experts and laypeople is a valuable instrument to measure the influence of individual characteristics of recipients on their aesthetic judgements. Recording of an electroencephalogram (EEG) allows capturing neuronal processes that are the basis for aesthetic judgements. Event-related potentials (ERPs) that are acquired during EEG recording can be considered as quantifications of neuronal responses to single visual stimuli.

In the light of the illustrated ideas the following question results: How does the expertise of raters affect aesthetic judgements depending on website aesthetics and how do these differences appear at the neuronal level, represented by event-related potentials?

**Method:** To address this question, 20 subjects have been selected to provide an expert group as well as a group of laypeople of ten subjects each. Professional involvement with design, graphic design or media design either in terms of studies or profession was the determining criterion for the allocation to one of the groups. At the time of data collection, subjects belonging to the group of experts were engaged in the mentioned field for 10.8 years on average (SD = 10.73 years). Laypeople participating in the experiment were lacking any kind of professional experience. Groups have been set up in a manner that its members do not differ regarding age, gender or education.

Subjects were given the task to assess the website aesthetics of 75 aesthetic and un-aesthetic screenshots of websites respectively in a positive or negative rating. Simultaneously, ERPs were recorded. Those 150 screenshots have been selected based on the results of a pre-test during that 136 subjects assessed aesthetic attractiveness of a total of 300 website screenshots. Those 75 screenshots rated highest and lowest respectively on aesthetics have been used in the main experiment.

With website aesthetics (aesthetic vs. unaesthetic) being one factor and group affiliation (experts vs. laypeople) being the other factor a 2 x 2 experimental design as well as two kinds of data resulted in particular aesthetic ratings and ERP data.

**Results:** Calculation of a regression model for aesthetic ratings shows a significant influence of aesthetic features of websites on aesthetic judgements. Furthermore, a significant interaction effect between website aesthetics and group affiliation indicates that experts and laypeople do differ concerning aesthetic judgements of aesthetic websites but do not differ concerning the aesthetic assessment of unaesthetic websites. ERP data shows a significant main effect for aesthetics as well as group affiliation but no interaction between those two factors. At occipital electrode sites a significant effect for group affiliation occurs between 80 ms and 140 ms after stimulus onset. For both website aesthetics and group affiliation significant main effects appear between 110 ms and 600 ms after stimulus onset.

**Discussion:** The results concerning aesthetic ratings lead to the conclusion that experts have higher standards regarding aesthetic websites and view website aesthetics considerably more critical than laypeople do. The presence of main effects for website aesthetics and group affiliation in the ERP data on the one hand with concurrent absence of an interaction effect between those two on the other hand suggest the conclusion that experts and laypeople process aesthetics of websites in the same way but in a different intensity or quality depending on expertise. Hence, both groups may process the exact same website features relevant to aesthetics in a similar manner resulting in the main effect for website aesthetics. Simultaneously, expertise is able to modulate top-down processes that cause a more intense processing of these features relevant to aesthetics. The main effect for website aesthetics that occurs between 110 ms and 600 ms after stimulus onset is very likely not only driven by visual analysis of the aesthetic website features but also induced by processes of aesthetic impression formation and evaluative categorization of the stimulus (e. g. Jacobsen & Höfel, 2003). The group difference observed in the electrophysiological data may be the result of differences in attention processes between experts and laypeople that modulate top-down processing of aesthetics.

**Practical Significance** Facing the fact that website aesthetics have a major impact on a recipient's decision to stay on or leave a website webdesign that meets the aesthetic requirements of a recipient offers a competitive advantage and can become a unique selling proposition. However, results provided here show clearly that recipients react in very different ways to the aesthetic features of a website. This gives rise to the requirement of a precise definition of the primary target group together with an aesthetic set-up of a website that corresponds to that group's preferences. At the same time, results imply to make much more use of the undoubted potential for customization of websites in order to respond to the particular aesthetic needs of inter-individual different recipients.

## THE IMPORTANCE OF PERCEIVED PRICE FAIRNESS FOR PAID CONTENT STRATEGIES

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**RELEVANCE.** In the winter of 2012 the first nationwide daily newspaper in Germany with relevant market share changed its strategy.

The news provided on welt.de will be "paid content" from now on with a metered model which takes effect after 20 complimentary articles. The concept "content for free" is no longer an enduring and successful business model. The advertising revenues cannot compensate for the lack of user generated revenues in the long run. However the danger remains that users may have adopted free content everywhere in the net as a basic fact or even as their right and view free news as a kind of entitlement. In this case, the start of a new paid content strategy leads to perceived unfairness. Users with this emotional mindset are willing to assume costs (monetary, time or cognitive) in order to punish the brand for the deemed unfair behaviour. This customer behaviour was observed and analysed within the "price fairness" (PF) research and as part of the behavioural economics for price increases in many industries. PF is multi-attribute construct with determinants, influencing factors and consequences.

**HYPOTHESIS.** The determinants of the construct price fairness are identified with theoretical and empirical literature. The initial questioning focuses upon the behaviours, which are perceived as fair or unfair, for a company that implements a pay for content strategy. The determinants of price fairness in this thesis are the time of introduction a paid content strategy in comparison to the competitors, the allocation of the increasing revenues, the motive for introducing paid content, the level and type of information in front of paid content, target groups for lower prices, the payment model with the decision between pay per month and pay per article, and the level of advertising within paid content.

The second area of interest is whether PF is determined via social norms and ethic/moral circumstances. If so, there should be consistent patterns in fairness perceptions and almost no inter-individual differences. With this in mind it is important to know which consequences are observed from perceived fairness and which from perceived unfairness and whether they are consistent, as well. Lastly, the varied influencing factors are of interest for the media environment; for example, the reader-newspaper relationship or the loyalty level. The goal of this approach is to measure if price fairness is relevant for introducing paid content, and if so, which user-types are more related to fairness perceptions and which are not. This leads to a better targeting and communicative approach when introducing paid content strategies.

**STRUCTURE.** The CAWI (Computer Assisted Web Interview) Survey was conducted via the SoSci online panel from LMU Munich. At the outset, the most important "first-choice" news brand was identified, followed by news reception data (intensity, level of loyalty, etc.). After this the individual fairness preferences, as determinants of price fairness, were measured via adaptive conjoint analysis (ACA). This then led to an individual fairest or least fair offer. The consequences of price fairness were measured via an experimental variation. One group answered the questions for the fair concept, the other for the unfair alternative. Consequences are willingness-to-pay, purchase likelihood, word-of-mouth behaviour and emotional feelings in regard to the offer. These consequences were measured with the price sensitivity meter from van Westendorp and scale based. The impact of price fairness on the consequences was measured with comparison of averages. The influencing factors, where observed, were measured with linear modelling.

**RESULTS.** The general pattern of fairness preferences is consistent throughout the whole sample. Communication is the most important determinant. A rationale for introducing paid content, a detailed description of every function and a test account is necessary for fair communication.

Re-investing in the quality of offer after introducing paid content is deemed fair, too. In this case, it is fairer to promote young and non-experienced journalists rather than to hire the top journalists in the country. In comparison to that, it's less relevant if you are the first or almost last brand starting with paid content. The level of advertisement within paid content is less relevant, as well.

In contrast to the constant general fairness preferences, there are some latent benefit-segments within the sample. There are fairness-orientated users, users more related to the competitors and readers who neglect advertisement. The fairness-orientated users, slightly more women, want to see an improved outcome for economically weak parties, such as young journalists or readers without enough money to

pay the normal bill. The competitor-related readers focus more on the time of introducing paid content compared to the whole market, and for the last group the advert-free paid content is more important.

Perceived Price Fairness is a panacea for a successful paid content strategy. Even with fair behaviour and a fair price, the purchase likelihood is just one-third. However, there are many additional options when establishing a correct price under fair circumstances; the potential revenues are almost doubled at the maximal price at 9 EUR per month. Within the fairest price (5 EUR) the revenues are still almost 40 percent higher than with an unfair behaviour. Loyalty and the level of usage have almost no effect on the determinants or consequences of price fairness, which indicates that there are almost no completely loyal customers to news brands in the internet. Younger readers are more sceptical in regard to paid content, while older readers are more willing to pay for daily news.

**CONCLUSION.** From a scientific point of view, the concept of price fairness was adapted for media news brands in the internet for the first time. Furthermore, it was experimentally verified for the introduction of a price for a monetary free product for the first time. From a methodology perspective, a conjoint-analytical approach was conducted for the first time in price fairness research. Even if the thesis has no methodical research focus, the conjoint appears to offer a feasible and very effective manner in measuring fairness determinants. The multi-attribute approach of price fairness is taken more into account than testing price fairness with the 2x2 to 3x3 experimental designs widely used in the price fairness literature. From a media management perspective, this thesis leads to a typology of fairness determinants and their relative importances for paid content strategies. Coordinating the communication politics and the quality of the offer is more important than the non-influencing factor of time of introducing paid content compared to the whole market, or the revenue reducing level of advertisement.

## ■ HOW TO REBUILD YOUR PUBLIC IMAGE ON FACEBOOK

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**Relevance & Research Question:** The presence of trust is fundamental for both individuals and organizations. Nevertheless, accusations of misbehaving/trust violation may occur, resulting in a decreased trust toward the accused party. In these cases, what type of reaction is the most effective way to repair trust? Two ways of accusation (namely, competence-based and integrity-based) were defined in previous online and offline studies. In traditional offline settings, it was showed that an apology is more effective than a denial in repairing trust after a competence-based accusation, whereas a denial repairs trust more successfully than an apology after an integrity-based accusation (Kim, Ferrin, Cooper, & Dirks, 2004). However, in online marketplaces, research revealed that apologies are always superior to denials in trust rebuilding, independent of the type of accusation (Utz, Matzat & Snijders, 2009; Matzat & Snijders, 2012).

In order to find a potential explanation for the prior divergent findings, this study investigates the effects of various strategies in rebuilding trust on Facebook. Following two types of accusations of trust viola-



tion (integrity-based and competence-based), five types of feedback comments and reactions (internal apology, external apology, denial, no reaction and deletion) were investigated.

**Methods & Data:** 459 worldwide active Facebook users answered an online questionnaire which includes several mocked-up Facebook pages (with the type of accusation and type of reaction as manipulations). The perceived trustworthiness of the profile owner (dependent variable) and the believability of a response were measured. Data were analyzed by the multi-level linear regressions.

**Results:** The results showed that the believability of a response explained the difference in previous online and offline findings: if a denial is highly believable, a denial repairs trust more successfully than an apology following an integrity-based accusation, which is in line with the offline findings; if a denial is not highly believable, apologies are always superior to denials in trust rebuilding, which is similar to the findings in the online marketplaces. In addition, the results showed that both a reasonable denial and an apology are effective ways to repair trust compared with offering no response, while deleting the accusation is detrimental for trust rebuilding when the accusation has been observed.

**Added Value:** To the author's knowledge, this study is the first one that focuses on the trust rebuilding model on Facebook. By investigating this topic, this study contributes not only to shedding light on the divergent findings of previous studies, but also to giving practical suggestions on interpersonal trust rebuilding on Facebook.

## B4: BEST PRACTICE 3

### NEW ENABLING OF ADVERTISING RESEARCH USING FACIAL CODING AND REAL TIME RESPONSE MEASUREMENT ONLINE

Author: Wenzel, Olaf [1]; Lauterbach, Christian [2]  
Organisation: 1: SKOPUS GmbH & Co. KG;  
2: Deutsche Telekom AG, Germany

I: When advertising research is dealing with TV commercials it is important to understand the drivers and drawbacks of a spot: Namely analyzing individual scenes of the spot to identify specific needs for optimization. Traditional research therefore divides the spot into single sequences which then get rated explicitly. Alternatively respondents are asked to rate the spot permanently while perceiving it visually (real time response measurement, RTRM) to express positive or negative emotions. Those approaches have a rather cognitive appraisal.

But the effects of advertising are processed implicitly. Emotions play an important role in information processing, regulate which information is perceived, and how it is stored in long-term memory. That's why different methods of implicit measurement are taken into consideration, e.g. automated facial coding (AFC). AFC decodes facial expressions into a set of predefined basic emotions using a computer algorithm. As

a result one derives a detailed measure of the emotions induced and a combined measure of emotional lift over time.

- RTRM and AFC both can be used in an online setting.
- This study investigates the following research questions:
- Added value of RTRM and AFC in advertising research?
- Can RTRM and AFC be implemented online, and which pitfalls have to be avoided?
- What have the measures of RTRM and AFC in common?

II:

- Stimuli: Two TV commercials of Deutsche Telekom
- Method: Online interviews (Access panel)
- Sample sizes: AFC n = 150; RTRM n = 150, control group n = 100  
Field: autumn 2013

III:

- AFC shows how different scenes and sequences of the TV commercials induce different emotions on a detailed level
- Data of RTRM and AFC in comparison show many similarities but also some major differences
- AFC measurement shows substantial correlations with indirect outcomes of advertising, whilst RTRM highly correlates with explicit ratings.

### AUTO BILD TABLET STUDY 2014 - A CROSS-MEDIA COMPARISON OF AD EFFECTIVENESS

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Organisation: 1: Axel Springer Media Impact; 2: eye square GmbH,  
Germany

**Relevance & Research Question:** Last year, AUTO BILD conducted a baseline study that was able to demonstrate the effect of interactive tablet adverts. It was time to investigate, for the first time, the advertising impact of ads in a cross-media comparison between print, on-line and tablet app. Our question was: How does advertising media from the same campaign work in the individual channels? How deeply is the content processed? A special focus was placed on the question of which emotions the adverts trigger. We therefore used Facial Emotion Tracking (FET) and established a link between the emotions triggered and the depth of processing of the advertising.

**Methods & Data:** We tested three campaigns each in the print, website and tablet editions of AUTO BILD among 150 readers of the magazine. First, the participants were to read one of the AUTO BILD editions. Meanwhile, we monitored their eye movements by using Eye Tracking and were able to measure the levels of attention that each participant gave the advertising material. At the same time, we measured which emotional responses were triggered by using FET. In a follow-up reaction time measurement and interview we determined how deeply the advertising material had been processed and what effect it had on the brand image. We also recorded advertising recall and explicit brand image and let participants rate the adverts and brands.

**Results:** The results demonstrate the possibilities of in-app advertising on tablets. For example, tablet ads have the longest and most intense viewing times and trigger positive emotions in 92% of the participants (print: 57%, on-line: 59%). The stronger activation and longer observation also lead to a more intensive processing, as can be seen in the reaction time measurement and in the amount of information remembered from an advertising.

**Added Value:** In our presentation, we show how, in an experimental research design using a combination of five different methods, we have analyzed the effectiveness of cross-media advertising along the perceptual process. By comparing the three tablet ads, we can additionally show how a different approach to in-app advertising effects the processing of the advert.

## A4 C4 D4: POSTER SESSION

### PROMINENT ON ONLINE KNOWLEDGE COMMUNITIES

Author: Avitay, Sharona [1]; Ariel, Yaron [2]; Rafaeli, Sheizaf [1]  
Organisation: 1: University of Haifa; 2: Yezreel Valley College, Israel

**Relevance and research question:** Online Knowledge Communities are a tool for creating and sharing knowledge between people who are not required to meet face to face and do not depend on coordination of time or geographic location. This study examines the characteristics of the prominent participants in online knowledge communities of Israeli Ministry of Social Affairs. These communities serve some 6,000 employees, identified by their full names, residence and role at work. Two hypotheses concerning the prominence of participants in these communities were formulated: H1: There is a positive correlation between the degree of the observed prominent of a participant and his assessment of his personal strength in the community. H2: There is a positive correlation between the degree of the observed prominent of a participant and the extent to which he is been valued as prominent by others

**Methods and data:** This study incorporated two sets of research - quantitative content analysis of posts in online knowledge communities (n=1000), and an online questionnaire of their registered (and full identified) members (n=106) examining usage patterns and attitudes towards the use of communities in order to evaluate personal strengths in the community. Participants names who received the highest prominent index score in the content analysis were presented after scrambled with other names to the respondents that were asked to select the most prominent contributors to the community.

**Results:** The main properties of the prominent participant are seniority, number of registered communities, a high sense of belonging and close relationships with community members. Statistical analysis revealed no significant correlation between participants index of prominence (measured by content analysis) and the index of 'personal strength' ( $r=.101$ ,  $p>.05$ ). A Spearman correlation tested H2, correlating personal assessment and peer evaluation, and revealed a positive and significant correlation ( $r=.426$ ,  $p<.05$ ). Thus, H2 was confirmed.

**Added value:** Alongside the aspect of sharing and exchanging professional information between members of the online knowledge community, it seems to be characterized by dimensions of social groups. We suggest that it is possible to link and identify the various forms of prominence measurement as a way to conceptualize 'opinion leaders'.

### HOW MUCH IS SHORTER CAWI QUESTIONNAIRE VS CATI QUESTIONNAIRE?

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**Relevance & Research Question:** Based on our experience in the mixed-mode (CATI-CAWI) field, we perceived a difference in the length of interview (LOI) between these two modes: CAWI interviews are always briefer than CATI's. Validating this work hypothesis we tried to find out which questions show the greater gap and why. Another aspect that we've investigated is the link between LOI and some socio-demographic variables. With CAWI interviews, we've tried to validate the existence of a link between LOI and the number of questionnaires completed by panelists in the past. We've also tried to estimate CAWI's LOI using CATI's LOI as input and viceversa.

**Methods & Data:** To carry out these analysis we've used both metadata, such as LOI and single page completion time, and socio-demographic respondent's characteristics. Those data come from two mixed-mode CATI/CAWI surveys. In both cases we've used an online panel (Opinionone.net) as CAWI framework, whereas CATI interviews were collected through a non-probabilistic quota sample design (geographically and demographically representative of Italian population). The first dataset has 1600 CATI interviews and 1020 CAWI interviews, the second one is composed by 752 CATI and 294 CAWI questionnaires respectively.

**Results:** As we expected LOI for the CAWI interviews is shorter than the LOI for the CATI interviews (t-test: p-value = 0). Both datasets confirm this work hypothesis. The difference increases when taking into account matrix question type (significant p-value). Correlation between LOI and socio-demographic variables is stronger in the CATI interviews than in the CAWI. In the former case Pearson's correlation index between LOI and the birth year is statistically significant for both datasets (p-value=0). In the latter case the correlation index is lower and statistically significant only in the first dataset. We didn't find any correlation between the LOI and the habit of completing questionnaires in the CAWI subsets (ranking+ # invitations) (correlation index = -0.014, p-value=0.63). Using the first dataset we've created a model for estimating the CATI LOI/CAWI LOI ratio. Applying this model to estimate second dataset's ratio, we've obtained a good result (estimated ratio: 1.46; real ratio: 1.5).

## FEAR OF MISSING OUT (FOMO): THE MISSING LINK IN EXPLAINING FACEBOOK ADDICTION?

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**Relevance/Research-Question:** While social networks clearly have positive effects for people's lives, they might also create negative consequences (Turkle, 2011). For instance, it is discussed whether – besides internet addiction – a type of Facebook addiction exists in today's online world (Masur, 2013). Still, it is not totally clear, why normal Facebook usage could turn into addiction. Lately, the term Fear of Missing Out (FoMO) is discussed as a new and potentially important aspect in explaining people's online behaviour especially in social networks (JWT, 2012; Przybylski, Murayama, DeHaan & Gladwell, 2013). However, the specific causal relationships between Facebook behaviour, addiction and FoMO have not been clarified yet.

**Methods/Data:** In a first exploratory study (N=85) we studied the relationship of Facebook usage (split into Input-behaviour like posting, uploading pictures, etc., and Output-behaviour like reading comments, looking at friend's pictures, etc.; see also Bosau, 2013), Facebook addiction (Masur, 2013 – based on the Internet addiction scale – ISS – by Hahn & Jerusalem, 2010) and FoMO (Przybylski et al., 2013). Several regression and mediation analyses were calculated to analyze a) the influence of the two kinds of Facebook usage on Facebook addiction including its five classical criteria (controlling difficulty, withdrawal state, evidence of tolerance, harm to social relationships and harm to work and performance) and b) the explaining power of FoMO in that relationship.

**Results:** First, the results show that Facebook usage can potentially lead to addiction, since users that highly use Facebook score higher on all of the addiction aspects. Second, it is indeed necessary to differentiate between Input-behaviour vs. Output-behaviour in Facebook usage, since both kinds of behaviour have dissimilar consequences. Third, FoMO plays an important role in explaining why Facebook usage can lead to addiction, since it seems to be an important mediator in this relationship. Even more, the mediation effect of FoMO differs systematically for the two different kinds of behaviour.

**Added Value:** The study is a first step in clarifying how the usage of social networks can make people become addicted. Furthermore, the importance of the fairly new term FoMO is emphasized because of its high explanatory power.

## EFFECTS OF WEBSITE DESIGN ON FIRST IMPRESSIONS, AESTHETIC JUDGMENTS, AND MEMORY PERFORMANCE

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**Relevance and Research Question:** Internet users come into contact with a wide variety of websites but often spend only a few seconds on them. Within this short time, lasting impressions are built which have consequences for future attitudes and behaviors. Since websites are a crucial part of marketing and communication for many companies, it is worthwhile to examine what types of websites evoke positive impressions. The current study thus investigates how different company website designs differentially influence first impressions, aesthetic evaluations, and memory performance after short presentation times.

**Methods and Data:** In a web-based pretest, 10 experts rated websites regarding their prototypicality and their belonging to a certain design category. In the online main study, 458 participants saw one website each and answered memory tasks (either once at the end or twice at the beginning and the end), completed a response time task with 16 attributes relevant for website evaluation, and gave an aesthetic evaluation (VisAWI). Differences between design categories were explored using MANOVA.

**Results:** Three design categories of company websites were confirmed by the experts in the pretest: SCOFA (strong colors of one color family), LAPIC (large pictures), and SAPAT (same amount of pictures and text). The data of the main study reveal that a) after an exposure time of five seconds, response times for eight website-related attributes differ between the categories ( $p < .001$  to  $p < .05$ ), b) LAPIC and SAPAT are perceived as more aesthetic than SCOFA ( $p < .001$ ), c) memory performance is best on SAPAT sites, especially when participants answer the memory tasks after spending some time with the website ( $p < .05$ ).

**Added Value:** This study provides a rough categorization of company websites based on their visual appearance for which no current classification exists so far. There is evidence that these different design categories have differential effects on users even after short presentation times, which underlines the importance of first impressions of a site's appearance. The results provide practical guidance for web designers by showing what users associate with certain designs, which designs they prefer and from which sites they remember the most.

## RESPONSIVE DESIGNED WEB SURVEYS

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**Relevance & Research Question:** The increasing usage of multiple devices such as smartphones, tablets, e-readers etc. is a big challenge for programming online surveys. Many providers claim their surveys are optimized for mobile usage – but in fact they are not. How does a sub-optimal mobile design influence data quality?

**Methods & Data:** We compare the data quality of several surveys with different degrees of mobile “optimized” survey design in order to give recommendations for improving the performance of online surveys.

**Results:** By providing a completely new created “responsive survey design” for an optimized presentation and usability on both desktop and mobile devices the performance of an online survey can be improved in multiple dimensions, such as response rate, interview duration and answer quality.

**Added Value:** Dos and Don'ts; recommendations for responsive designed web surveys; influence on answer quality and survey performance

## THE INTERNET AS A MENTAL HEALTH ADVISOR IN GERMANY— RESULTS OF A NATIONAL SURVEY

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The internet constitutes a popular source of health information. However, the use of the internet and other modern media in the domain of mental health remains widely unclear. This study aimed at exploring the readiness for seeking information online and making use of online counseling and media-assisted psychotherapy. A representative survey of N = 2411 Germans was conducted. Results indicated that more than one fourth of Germans would consider seeking help online in case of psychic strain. Participants reported that they would use the internet when needing to research about mental health topics and to communicate with persons concerned on internet forums. Only a small number of participants had already used psychological online-counseling. The majority of subjects reported not having known about the possibility of online counseling. However, the willingness to make use of this option in the future was in a medium range. Concerning the treatment of mental disorders, participants showed a clear preference toward conventional face-to-face treatment. Less than 10% of participants considered the use of treatment supported by mobile phones, the internet, or virtual realities as likely. Certainly, readiness was significantly higher in persons who were already using the relevant devices-mobile phones, computers, and the internet. In the future, there will presumably be an increasing demand for media-assisted psychological counseling and interventions. Members of the health care system should therefore prepare for current developments and help enlighten patients with regard to the possibilities, and also the potential risks of e-mental health.

## THE USE OF PARADATA TO PREDICT FUTURE COOPERATION IN A PANEL STUDY

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**Relevance & Research Question:** In panel studies, low attrition is especially important, because only complete data sets across waves can be analyzed. Survey paradata (e.g., response times, item nonresponse, or break-off) can be collected at moderate cost. In this explorative study, we analyze if paradata lend themselves to predict non-participation in future waves.

**Methods & Data:** Members of a commercial online panel were invited to participate in an academic study on the stability of personal preferences and traits. The questionnaire consisted of questions regarding biometrics (e.g., size, eye color, handedness), preference for certain pictures, preference for certain foods, and items to measure personality traits. Invitations to identical questionnaires were sent in December 2011, June 2012, December 2012, and June 2013.

**Results:** Overall, 807 respondents participated in Wave 1 and 249 respondents in all four waves. The completion rate continuously rose from 91.8% (Wave 1) to 98.4% (Wave 4). Break-off in one wave proved to be a good indicator for refusal to participate in the next wave: The chances that a participant completed wave n were more than 3.5 times higher for those who completed wave n-1 than for those who did not complete wave n-1. Reminder emails were most effective in the first wave. Neither item nonresponse nor response times were good indicators to predict future participation.

**Added Value:** In longitudinal studies there is a high risk of losing respondents. Break-off in one wave proved to be a predictor for break-off in subsequent waves. We discuss how paradata can be taken advantage of to lower panel attrition.

## EASY QUESTION, TRICKY ANSWER: RESPONSE LATENCIES AND DATA QUALITY OF EDUCATION QUESTIONS

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**Relevance & Research Question:** Education is one of the most frequently used variables in social science research, as it is one of the best predictors for different forms of social inequality. However, problems of measuring education adequately have increased in recent decades, due to rising differentiation of educational systems and migration. Consequently, showcards used for education questions have become rather complicated for respondents to answer. Thus, measurement errors in this commonly used variable should be the rule rather than the exception. Research of the reliable and valid measurement of an individuals' educational qualification is accordingly of vital importance

for high quality research using survey data. Indicators for measurement errors are measures of time, as well as, qualitative data checks. Hence, we address the following questions a) are different types of questions (e.g. fixed choice or open) associated with shorter or longer response times? b) is data quality positively associated with completion time and length of the question (measured in number of words) c) do our results hold when controlling for respondent characteristics answering such education questions?

**Methods & Data:** Therefore, our exploratory analyses focus on the time taken to answer a question as a function of item level characteristics and respondent characteristics. Furthermore, the assumptions will be tested by the experimental variation of question wording in a split ballot design. As a result, we have four open question variations and one fixed choice question module asking for educational attainment with answer categories. This provides the opportunity to make reliability checks of respondent's answers. How these question characteristics influence response time and data quality is analyzed with data from the GESIS Panel Pilot, which is a German online panel with about 500 respondents. Reaction times were measured by time-stamps between each question.

**Results:** Final results will be available at the end of January.

**Added Value:** Out of this we evaluate the quality of survey data collection in case of educational questions and give a novel optimized procedure for the question design in online surveys.

## ASSESSING MEASUREMENT EQUIVALENCE IN MIXED MODE SURVEYS

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**Relevance & Research Question:** Mixed mode surveys, where two or more different modes of data collection are combined (e.g. combining a face-to-face and a web survey), are increasingly replacing single mode surveys. Mixed mode surveys have the advantage of controlling costs while reducing coverage and nonresponse error. However, measurement errors may arise when using a mixed-mode survey. An example of this is that people might interpret questions differently when they are interviewed face-to-face or via internet, and give a different answer, just because of the way they are interviewed. This study will look into the quality of the data in a mixed-mode survey. Our research question is if the resulting data are comparable over modes. More specifically, we assess whether the measurements using multi item scales are equivalent across different modes.

**Methods & Data:** We use data from the Netherlands Kinship Panel Study (NKPS). This is a longitudinal study that has switched from a single mode face-to-face survey to a mixed mode survey. All participants were approached online, while telephone and face-to-face interviews were used for participants that could not be reached via the internet or who did not reply to the Internet invitation. For constructs measured by multi item scales measurement equivalence across the different modes is investigated to infer whether these scales measure the same construct in each mode. From the literature it is known that there is

still a digital divide: people that do not have access to the internet differ from people who do. This results in a selection effect: different people tend to end up in different modes. Therefore a correction procedure for such selection effects is incorporated in the analysis.

**Results:** There are mode effects for multi-item scales. Most scales show no complete measurement equivalence over the different modes, before or after correction for selection. However, partial measurement equivalence is a reachable goal.

**Added Value:** The increasing use of mixed-mode surveys needs methodological and statistical tools to investigate size and impact of mode effects, to improve data analysis.

## "THE ART OF SHITSTORM": FACTORS INFLUENCING THE LEVEL OF INVOLVEMENT IN IMPERTINENT SOCIAL MEDIA DISCUSSIONS

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**Relevance & Research Question:** With the diffusion of the Internet and social media usage a growing part of peoples' life happens online. Factors like anonymity and low technical barriers of access make it very easy to take part in online discussions on the one hand, but the inhibition threshold in regards of unbalanced and unfriendly communication may drop on the other hand. So called shitstorms are no rarity in the age of Facebook and Twitter. Many companies but also individuals have already become victims of outrages on the Internet. They begin innocently triggered by a person's comment which may not fit to others' opinion. Suddenly a wave of ridicule and insults starts. But how long does a shitstorm last and which factors can influence it?

**Methods & Data:** Two artificial posts, which differed by the rudeness of wording were sent to different so called "mock-someone" (ger.: "Verspottet") sites in German-speaking countries. These sites are Facebook fan pages, which are often associated to universities or cities. They are intended to ensure that users can blaspheme completely anonymous and uninhibited. Users send messages to the operator and these publish the posts publicly for all readers. After that they can be liked and/or discussed. The reactions on our two posts on three sites each were observed, documented and evaluated using quantitative content analysis.

**Results:** Our results indicate that the less rude posts were discussed longer than the ruder ones. Reactions to the ruder posts were slightly more insulting than to the less rude posts we made. Additionally the ruder posts got less likes than the other ones. Finally we assume that probably affected persons discuss more active than others.

**Added Value:** Our study gives a first insight into the dynamics of so called shitstorms in social media. Even though we used a descriptive and explorative analytical strategy for the quantitative content analysis, we can deliver a base for further research on the phenomenon of impertinent social media discussions. A list of final assumptions can induce further research in this highly interesting area.



## KNOW-HOW TO TALK IN SOCIAL MEDIA? COMMUNICATION MANAGERS' SOCIAL MEDIA SKILLS AS INTELLECTUAL CAPITAL

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**Relevance & Research Question:** Communication managers who previously managed mainly static, one-directional online communication have to deal with a greater variety of dynamic participation in social media. They have to prepare for this with rules and resources (Social Media Governance) (Fink et al. 2012; Owyang 2011). Specific skills are needed and therefore are intellectual capital for organizations. First studies however find poor states (Fink et al. 2011; Zerfass et al. 2013), but only address skills as a side question with no theoretical conceptualization. This is where this paper sets in, by asking: Which are the most relevant skill dimensions that communication managers need to deal social media communication?

**Methods & Data:** This conceptual paper aims to advance the research on social media skills of communication managers by establishing a theoretical framework and drawing on quantitative online surveys amongst communication managers in Germany and Europe.

**Results:** Most communication managers see changing conditions for their work but feel ill-prepared for it. They rate their skills as average or even worse. Organizations invest too little in appropriate training. However, there are differences regarding certain skill dimensions. Survey participants seem to be better prepared for operational than strategic tasks and for analysis and implementation as compared to planning and evaluation.

**Added Value:** Though social media have been considered relevant for organizational communication, only few studies address the needed structures like the intellectual capital of social media skills. This paper adds to this neglected field by developing a theoretical framework. It also shows new implications for practice by identifying where to improve training concepts and which topics to foster.

Literature: Fink, S.; Zerfaß, A.; Linke, A. (2011): Social Media Governance 2011 — Kompetenzen, Strukturen und Strategien von Unternehmen, Behörden und Non-Profit-Organisationen für die Online-Kommunikation im Social Web. Universität Leipzig/Fink & Fuchs PR. Leipzig / Wiesbaden.

Fink, S.; Zerfaß, A.; Linke, A. (2012): Social Media Governance. In: Pleil, T. & Zerfaß, A. (Hg.): Handbuch Online PR. Konstanz: UVK.

Owyang, J. K. (2011): Social Business Readiness: How Advanced Companies Prepare Internally. <http://www.altimetergroup.com/research/reports/social-business-readiness>.

Zerfass, A., Moreno, A., & Tench, R., Vercic, D., & Verhoeven, P. (2013). European Communication Monitor 2013. Brussels: EACD/EUPRERA, Helios Media.

## WHAT I DON'T KNOW WON'T HURT ME — DO FACEBOOK-USERS MONITOR THEIR ONLINE SELF-DISCLOSURES?

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**Relevance & Research Question:** Usage of Online Social Networks (OSNs) has become common practice amongst young people. To manage their online privacy, users need to monitor what they disclose and to which audiences they make their information accessible. When lacking this knowledge, users can compensate for it in becoming aware of this lack. However, it is unclear in how far OSN-users actually monitor their self-disclosures in these two ways. The present study aimed to fill this gap and assessed in how far Facebook-users know what they have disclosed and to which audience (first-order knowledge), and in how far their subjective confidence reflects their actual knowledge (metacognitive accuracy).

**Methods & Data:** We conducted standardized interviews with high school Facebook-users (N = 45, 25 male, 20 female; M = 16.53 years; SD = 1.35). Students were asked in which profile categories they had disclosed information and to which audience the information was visible. For each question students indicated their confidence about the correctness of their answer. Subsequently, students logged into their Facebook accounts to let us check their assumptions' correctness.

**Results:** Students were significantly more often correct in saying in which categories they had disclosed information (M = .84; SD = .11) than in saying to which audience it is visible (M = .45; SD = .31),  $t(44)$ ,  $p < .001$ ,  $d = 1.68$ . The correspondence between students' subjective confidence and their actual knowledge (metacognitive accuracy; modeled via Gamma correlations) was low, but tended to be higher for disclosed information (M = .25; SD = .91) than for the corresponding audience (M = -.13; SD = .83).

**Added Value:** Students knew well what they had disclosed, but not to which audience. As this can also be explained by Facebook's confusing privacy control options, this result cannot be interpreted as a deficit per se. The actual deficit can be seen in the lack of metacognitive accuracy, reflecting students' limited awareness of what they do and do not know about their privacy. Follow-up experiments however show that first-order knowledge and metacognitive accuracy improve in the presence of online risk cues, indicating users' potential for cognitive adaption.

## TWITTER SENTIMENT ANALYSIS – ALGORITHM OR SAMPLE?

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**Background & Research Question:** In digital life we are more and more surrounded by various opinion data. Rapid growth coincide with those of the social media on the web, e.g. Twitter and social networks. At the same time it is the first time in human history, we have a huge volume of opinionated text data recorded in digital forms. One way to extract and analyse meanings and sentiments is a algorithm based Sentiment Analysis. In recent years, the field has grown to be one of the most active research areas in natural language processing (NLP) in as well as text mining and machine learning. In approach 1 we apply a sentiment analysis based on Twitter data. Following that we compare the results with the outcome of manually coded texts based on resample procedures [approach 2]. Finally, we draw comparisons of both approaches in terms of accuracy to identify the best option. The poster shows the processes and first results.

**Data & Method:** Data base is a set of over 5000 English tweets to a specific topic. Comments were manually coded up-front with regard to their sentiment. Sentiments occurred in the following classifications: {1} positive, {2} negative, {3} neutral, {4} no sentiment and {5} irrelevant. For approach 1 we tested the statistical software R by using the package tm for the automated text classification in combination with appropriated sentiment dictionaries. Several algorithms are tested in order to find the most suitable classification. Accuracy is detected by comparing manual coded texts with the classifications by the algorithms. Approach 2 is based on a resampling procedure. Samples by increasing sizes are drawn from the overall data considering the sampling error. Following that, we compared the sentiment proportions of the samples with these of the total data set.

**Results & Added Value:** Core result is that time-consuming approach 1 offers significant weaknesses in terms of accuracy, whereby several limitations have to be considered. Added value is a trade-off by showing under which circumstances which approach is the better option. Additionally, we show how far statistical package R is appropriate for analysing unstructured text data.

## ONLINE EXPERIENCE SAMPLING METHOD: MEASURING USER BEHAVIOR COMBINING TRACKING AND SURVEY METHODOLOGY

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**Background and Research Question:** In the present study we were concerned to explain privacy-relevant behavior of adolescents and young adults on Social Networking Sites (SNS). Given that there is an often discussed gap between risk perceptions and user behavior (privacy paradox) we presumed that answering our research question holds special methodological challenges.

**Method and Data:** Methods of observation, like online tracking, are widely used to discover user behavior. Sadly, they are limited, if the user behavior shall be explained or if media effects are of interest. Here, survey methods are the only appropriate approach. However, participating in (ex-post-)surveys demands a considerable amount of cognitive effort and attention by the subjects. This applies in particular when the behavior of interest might be performed habitually, like SNS use. Answering errors can be an objectionable result. The implementation of Experience Sampling Method (ESM) [Hektner, Schmidt & Csikszentmihalyi 2007] into online tracking studies overcomes the limitation of both, survey and tracking methodology. The goal of ESM is to evaluate the quality of everyday-life directly during everyday situations. In our study we combined ESM and online tracking. Eight privacy-relevant actions, e.g. posting comments and adding friends, were tracked. The ESM questionnaires were delivered directly after participants performed predefined behaviors (based on a random generator). Respondents were recruited via an online access panel. There was a quotation on age groups, gender and formal education. At total 171 young SNS users participated in the three week tracking period. In sum, they responded to 1356 ESM questionnaires.

**Results:** The results of our study show, that affective needs and short term gains might overshadow long-term attitudes and risk-perceptions when privacy relevant actions on SNS are performed.

**Added Value:** The combination of ESM and online tracking proved useful to explain a gap between the user's privacy concerns and their specific actions. Online ESM adds additional value to conventional ESM since the relevant behaviors can be tracked precisely and questionnaires can be delivered immediately afterwards. Response errors can thus be further minimized.

Reference: Hektner, J. M., Schmidt, J. A. & Csikszentmihalyi, M. {2007}. Experience sampling method: Measuring the quality of everyday life. Thousand Oaks, Calif: Sage Publications.

## INCENTIVES ON DEMAND IN A PROBABILITY- BASED ONLINE PANEL: REDEMPTION AND THE CHOICE BETWEEN PAY-OUT OPTIONS

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**Relevance & research question:** Conditional monetary incentives are often seen as a measure to increase initial survey response and reduce attrition in panel surveys. However, they constitute a substantial share of survey costs. To reduce these costs, most panel providers use on demand pay-out options while assuming that not all panelists redeem their incentives. It is common to provide respondents with various redemption options such as cash or coupons. Our research goal is to investigate in what aspects the respondents who redeem incentives differ from those who do not. For the group of those respondents who redeem their incentives, we analyze respondents' preferences for redemption options of bank transfer, voucher, and charity donation.

**Method & Data:** We analyze data from the GESIS Online Panel Pilot study, an offline-recruited probability-based online panel of Internet users. Starting in February 2011, respondents were surveyed every

month for 8 months. The amount of incentives was varied experimentally during recruitment, comprising groups of 0, 2, 5 and 10 EUR per survey. Additionally, we have detailed information about patterns of incentive redemption. Panelists could request the payment of their collected incentives at any time such as collecting their money. Participants could mix the options of bank transfer, voucher, and donation.

**Results:** The analysis indicates that only half of potential incentive recipients use the redemption option. The probability of payment increases with every completed wave and incentive amount. Still among those who completed all 8 waves, about one fifth of panelists never initiate any incentive payment. About 80% of respondents chose only one type of incentive pay-out (among those, 48.75% bank transfer, 36.57% voucher, and 14.68% donation). The other 20% chose more than one incentive option. Further analyses show the type of incentive varies between groups of respondents. For example, men tend to choose the bank transfer option and women have a higher probability of donating the money.

**Added value:** Our analyses give useful insights into the patterns of incentive redemption and how different respondent groups can be reached by different incentive options.

## ONLINE SURVEYS AS A MANAGEMENT TOOL FOR MONITORING MULTICULTURAL VIRTUAL TEAM PROCESSES

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**Relevance & Research Question:** Online survey platforms can extend the boundaries of traditional business research. Consider the challenges managers face with multicultural virtual teams. Lack of face-to-face interaction among culturally diverse individuals can facilitate social loafing, conflict, and mistrust. Managers need a mechanism to better monitor team progress and handle the complexities that occur when team members are distributed across multiple locations in different countries. This study investigates the impact that periodic surveys and online self/peer evaluations have on productivity and individual satisfaction of multicultural virtual teams members.

**Methods & Data:** Twenty-two teams (n=176) from a multinational organization participated in this study. Participants were located in the German and US offices. Teams were assigned a similar task and given identical resources, support, and deadlines. Participants were divided into a control group with eight teams, and two experimental groups with seven teams each. The first experimental group used an online survey platform each week to complete a short report and rate overall team productivity and personal satisfaction. The second experimental group provided the same data twice a week. Both experimental groups completed self/peer evaluations halfway through the project and again at the end. The control group completed the online self/peer evaluation only at the project's conclusion. Managers monitored reports to identify developing issues that might hamper productivity. They intervened when appropriate. Team productivity was determined by output quality.

**Results:** Teams in the first experimental group produced significantly better output than both the control group and experimental group that completed reports twice a week. Personal satisfaction was also higher. These teams viewed online reporting as an opportunity to reflect on the project. Control group members felt disconnected and frustrated with managers' inability to identify when teams were having problems. Teams in the second experimental group felt burdened with the chore of continually reporting.

**Added Value:** Online survey platforms have value beyond traditional business research projects. By capturing qualitative and empirical data at regular intervals, managers can positively impact productivity and member satisfaction by keeping their fingers on the pulse of multicultural virtual teams.

## CREATIVE PROCESSES IN CROWDSOURCING: A QUALITATIVE ANALYSIS OF PROBLEM-SOLVING PROCESSES ON ONLINE CROWDSOURCING PLATFORMS

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**Relevance & Research Question:** Companies open their boundaries to integrate the knowledge of not only partners or consumers but a wide public. Why struggle with problems when somewhere in the world the solution already exists? The internet makes it possible to easily integrate a crowd of people into problem solution processes. Meanwhile some online platforms do not only bundle incoming ideas but start managing idea processes. However managing creative processes is more than just motivate users to contribute. It means providing a suitable working environment that supports creative thinking. For this purpose providers need to understand how users develop ideas. Research on thought-processes and creativity provide a basis. Nevertheless their adaption to online platforms still is unclear. The very general question to be answered is: How does the creative process on crowdsourcing take place on platforms for idea development?

**Methods & Data:** In the context of discovery, a qualitative method with little standardization was chosen in order to build up a suitable frame of reference to be set up for future studies within the field. Seven qualitative semi-structured interviews with contest winners and facilitators on the online platforms Innocentive and IdeaConnection were carried out, transcribed and made ready for analysis. The aim of the interviews was to outline the creative process participants of online crowdsourcing platforms go through while working on a challenge. The model proposed by Wallas (1926) with the stages preparation, incubation, illumination and verification served as a framework for the guideline.

**Results:** The analysis of the material is still in progress. First results reveal that the described stages of the thought process can be adapted. However the creative process of users is not bound to the platform environment but rather integrates a work environment out of the reach of platform providers – esp. during incubation.

**Added Value:** Being part of a multi-method design that has been set up to analyze creativity processes in online crowdsourcing this study is a first step towards a better understanding of creative processes in crowdsourcing.

## MEANINGFUL CUT POINTS FOR ONLINE USER RATINGS

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**Relevance & Research Question:** A variety of questionnaires are available to assess online users' perceptions of websites, e.g. usability, aesthetics, or, credibility — but it is unclear how such questionnaire scores should be interpreted in practice. One solution is to compare the ratings of a specific websites in a benchmark with one or several competitors. Inspired by methods in medicine we suggest to use participants' global impression ratings as anchors against which we evaluate all possible cut points for aesthetics by means of receiver-operating characteristic (ROC) methods. This allows defining those cut points as optimal that differentiate best between websites that are perceived as generally positive vs. those that are perceived as less good. We show how these methods answer the question whether or not practitioners should be satisfied with aesthetics scores of 5 on a 7-point Likert scale?

**Methods & Data:** 618 participants (51.9% females) between 15 and 82 years ( $M=34.94$ ;  $SD=13.65$ ) participated in this web-based study. They rated the aesthetics of one website out of a set of 30 fully-functioning websites with the 18-Item-Version of the VisAWI (Moshagen & Thielsch, 2010). Additionally, participants were asked to rate their first impression as well as their overall impression on a six-point grading scale ranging from "insufficient" to "very good".

**Results:** First, grades correlate highly with the VisAWI ( $r=.69$ , respectively  $r=.78$ , both  $ps < .001$ ). Second, the ROC-analysis revealed that a cutpoint of 4.5 on the seven-point VisAWI reliably differentiates between sites that are perceived as attractive vs. unattractive. Third, a bootstrapping analysis demonstrates that these cut points are variable, but only within a certain range.

**Added Value:** While ratings scales are well established in market research, these are often only of limited use to practitioners who have to make decision based on the data. We have shown that a score of 4.5 on the VisAWI is a meaningful cut point for users' first and overall impression. On a general level we suggest that others adopt our ROC-based approach for developing meaningful cut points for other measures such as credibility or usability.

## WEBDATANET: A NETWORK ON WEB-BASED DATA COLLECTION, METHODOLOGICAL CHALLENGES, SOLUTIONS, AND IMPLEMENTATION

Author: Tijdens, Kea [2]; Steinmetz, Stephanie [2]; De Pedraza, Pablo [1]; Serrano Herranz, Francisco [1]  
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Online data are relatively cheap, fast and easy to collect internationally, and are thus comparable across countries. Data comparability is

crucial for social and behavioural scientists in the current context of globalization and economic interdependence. Despite its advantages and popularity, web-based data collection research faces important methodological challenges that must be addressed to provide web-based data collection with the scientific validity that traditional research methods already enjoy.

Webdatanet network was established in 2011 in order to fulfil that goal by constituting a multidisciplinary network of web-based data collection experts — (web) survey methodologists, psychologists, sociologists, linguists, economists, Internet scientists, media researchers and public opinion researchers — to accumulate and synthesize knowledge of methodological problems and their potential solutions. At present, the network is composed by around 150 researchers from more than 30 countries from the European Union and abroad.

Since its inception, the Action has organized 6 biannual meetings, 4 independent workshops, 1 Training School and 17 scientific missions. As a result of the networking process, 26 Task Forces and Small Groups have been established within the 3 Working Groups: WG1 Quality issues of web surveys; WG2 Innovations in web-based data collection; WG3 Guidelines, codes, standards, implementation and dissemination. A new general concept, Webdatametrics, has emerged from the existing variety of disciplines related to web data collection methods and analyses. By putting this knowledge together, Webdatametricians aim at generating new knowledge to take advantage of ICT to collect data for scientific purposes.

Other achievements of the Action refer to the establishment of interactions with official bodies (i.e. World Bank, ILO), statistical offices (i.e. ESSnet project) or private sector companies (i.e. Google, TNS, eNET). Additionally, a Master programme in Webdatametrics will be introduced in 2014 as a response to the current educational demand for the formation of future experts in web-based data collection. Webdatanet has also fostered the collaboration between the four main probability-based panels of Europe (the Dutch LISS panel, the French ELIPPS panel, the German GIP and the new GESIS panel) and the National Centre for Research Methods of the UK (GenPopWeb).

## THE EFFECT OF DE-CONTEXTUALISATION — A COMPARISON OF RESPONSE BEHAVIOUR IN SELF-ADMINISTERED SURVEYS

Author: Wetzelhütter, Daniela  
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**Relevance & Research Questions:** In online surveys social de-contextualisation (as the counterpart to social desirability) has an effect on response behaviour. More clearly: social values and norms become less important in online-surveys compared to other self administered questionnaire (Taddicken 2009). This fact may especially influence the response behaviour of pupils in class room inquiry — since paper and pencil (p&p) reminds them more strongly of the usual class test situation and not filling out an online-survey. Consequently, it is expected that pupils participating in p&p-surveys take them more seriously and respond more accurately than in online surveys. Accordingly, the paper focuses on differences based on i) response patterns

(e.g. extreme response styles), ii) accurate answers vs. false statements (e.g. that appears in demographic data) and iii) the proportion of missing values.

**Methods & Data:** The aim of this research is to compare response behaviour between two schools and within one school. In order to measure differences, a stratified sample was drawn from two secondary schools — 22 classes from the first and 15 classes from the second school. The data collection in the first partner school was organized as a paper and pencil interview and in the second partner school (mainly) as an online survey and (additionally) as paper and pencil interview.

**Results:** Regarding the above mentioned expected results, evidence will be presented concerning the presence or absence of an effect of social de-contextualisation. Moreover, the paper focuses on the relevance of considering social de-contextualisation in the process of data cleaning and the interpretation of the results. Finally, the concern of data quality in connection with social de-contextualisation (especially in case of using mixed data collection methods) will be discussed.

**Added Value:** Taddicken (2009) has already pointed out that more empirical research concerning social de-contextualisation is needed. This paper may represent a further step towards reliability of online-surveys. Literature: Taddicken, Monika (2009): Methodenefekte von Web-Befragungen: Soziale Erwünschtheit vs. Soziale Entkontextualisierung. In: Weichbold, Martin; Bacher, Johann & Wolf, Christof (Hrsg.): Umfrageforschung. Herausforderungen und Grenzen. Sonderheft 9 der Österreichischen Zeitschrift für Soziologie, Wiesbaden: VS-Verlag, S. 85-104.

## META-ANALYSIS EVALUATING PREDICTIVE POWER OF ELECTORAL STOCK MARKETS

Author: Woppmann, Andreas  
Organisation: Advise, Germany

**Relevance & Research Question:** In recent years, the logic of stock markets had been increasingly used to forecast trends in social sciences and in market research. The most common setting for this methodology is electoral stock markets predicting the final results of elections. There were some remarkable good forecasts in the USA, but only few analyses of the validity of this method in Europe. As this methodology is recently used more often for market research topics, the validity and the goodness-to-fit should be evaluated. The essential research question is, if the setting achieves valid results and due to this can be used for market research purposes.

**Methods & Data:** A meta-analysis model was chosen to test the accuracy of the methodology by comparing the mean error, comparing effect sizes (using RevMan5). As classic literature research alone would not be sufficient, therefore we used additionally search engines to find all relevant stock markets. The final results of the election were compared with the results of the electoral stock markets and the standard polls. Two different meta-analyses were calculated. Primarily, 11 different elections in Germany since 2011 could be included. Therefore, the most often used real invest electoral stock market PESM as well as different standard polls (e.g. EMNID, Infratest, Forsa) were benchmarked

with the final results. In a second setting, the Bundestag election was compared analysing different stock markets (e.g. Spiegel, Handelsblatt) and standard polls.

**Results:** Regarding the forecast for the last election in Germany the predictive power is comparable for standard polls and the electoral stock markets as long as people invest their own money. Electoral stock markets without real investment achieve the worse results. If participants are not involved by their own money, the forecast is worse compared to standard polls.

**Added Value:** Using the methodology of real invest stock markets is a good way to achieve results comparable to standard polls. This gives the opportunity to get results faster, with smaller sample size and a less complex setting and analysis, as long as you remain within the logic of real invest stock markets, and not using fictive.

## A5: INSTRUMENT DESIGN FOR MOBILE AND WEB SURVEYS

### MOBILE WEB SURVEY DESIGN: SCROLLING VERSUS PAGING, SMS VERSUS E-MAIL

Author: Mavletova, Aigul (1); Couper, Mick (2)  
Organisation: 1: NRU Higher School of Economics, Russian Federation; 2: University of Michigan, USA

**Relevance & Research Question:** There is some evidence that questionnaire design (scrolling or paging) and invitation mode (SMS or e-mail) have an impact on response rates in PC web surveys. This presentation examines if these findings may be generalized to mobile web surveys. First, we explore the effect of scrolling and paging design on breakoff rate, item nonresponse, and completion time in mobile web surveys. Second, we investigate which type of invitation and reminder mode (SMS or e-mail) is more efficient in terms of producing higher response rate and maximizing percentage of the respondents who complete the survey via mobile device rather than PC.

**Methods & Data:** The paper summarizes the results of the experiment conducted among members of a volunteer online access panel in Russia. Participants were asked to fill out the questionnaire via mobile device. A total of 2,100 respondents completed the survey with an overall completion rate of 53% in April 2013. The survey contained 17 questions about volunteer activities. There were no screening questions, quotas, or skip logic in the survey. The scrolling version of the questionnaire was divided into two pages (9+8).

**Results:** There are two major findings from our experiment. First, a scrolling design makes the process of completing the survey easier and more engaging for mobile web respondents. Specifically, it signifi-



cantly decreases the completion time, produces fewer reports of technical problems, and increases the reported level of satisfaction among respondents. Second, taking into consideration both completion rate and the percentage of PC respondents, an SMS invitation is more efficient compared to e-mail in encouraging respondents to complete the survey via a mobile device.

**Added Value:** Our experiment illustrates possible ways to improve response rates and enhance the respondent experience in mobile web surveys. Though most of the current mobile surveys and experiments use paging design we show that scrolling design is more efficient in improving response rates in mobile web surveys.

## MOVING ANSWERS WITH THE GYROSCALE: USING THE MOBILE DEVICE'S GYROSCOPE FOR MARKET RESEARCH PURPOSES

Author: Lütters, Holger [1]; Kraus, Michael [2]; Westphal, Daniel [1]

Organisation: 1: HTW Berlin, Germany; 2: HWR Berlin, Germany

**Relevance:** Mobile research is largely discussed, but a lot of mobile approaches are asking questions in established forms — but on a smaller screen. A new approach of data collection integrating the measurement via a mobile device's gyroscope is used to answer market research question with physical movements of the device.

**Methods:** A research team from HTW/HWR Berlin integrated the new approach of answering market research questionnaires on a mobile device using the gyroscope. Integrating this technology into a market research questionnaire gives the respondent the opportunity to literally “move” the answer on a defined graphical scale. We call it “GyroScale”. In a study with 662 respondents the GyroScale was integrated for the examination of the possible effects on data collection. An identical questionnaire with different graphical and gyroscaling support was used in the context of an Analytic Hierarchy Process (AHP). The study made available three technologically different approaches of scaling which were integrated. Each group was confronted with the same Saaty scale in different technical appearances:

1. Classical representation of the scale on a desktop or laptop with an Ajax Slider
2. Representation on a Smartphone (iPhone and Android)
3. Representation on Tablet devices (iPad, Galaxy Tablet etc.)

Examined variables were:

- The overall result in comparison of the three different categories of devices
- Response Rate / Drop-Out
- Time needed to complete the interview (duration)
- Consistency of the answers (computation with Saaty algorithm)

**Results:** The results show no difference in the answering patterns created with the GyroScale. The GyroScale seems to be as reliable as a standard slider and could therefore be integrated in the world of market research.

**Added Value:** Still thousands of on-line studies are conducted without taking into account the respondent's time and effort to fill out a questionnaire. The GyroScale seems to be an interesting way to entertain the respondent while being interviewed. The presentation will point out the technical and methodical challenges while interviewing with the GyroScale.

## IMPACT OF RESPONSE SCALE DIRECTION ON SURVEY RESPONSES IN WEB AND MOBILE WEB SURVEYS

Author: Keusch, Florian; Yan, Ting; Han, Saram; He, Lirui

Organisation: University of Michigan, United States of America

**Relevance & Research Question:** Due to the rising penetration rate of smart phones, web surveys are increasingly accessed and completed on smart phones or tablets instead of personal computers. In addition, mobile web surveys are gaining popularity as an alternative self-administered data collection mode. However, the limited amount of space for displaying questions and scales on mobile screens poses new challenges for survey researchers. One of them is the optimal design of response scales. Survey literature has shown that design features of response scales affect survey responses and that answers to rating scales differ between web and mobile web respondents. This paper focuses on one design feature of a response scale — the direction of scale — and studies the impact of the direction of response scale on the actual answers. Drawing on empirical findings from web studies, we hypothesize a stronger scale direction effect among mobile web respondents than PC web respondents.

**Methods & Data:** We are conducting a methodological experiment crossing three factors (mode of administration, scale direction, scale alignment) in a full factorial design. Half of the sampled are invited to complete a web survey on their personal computer and the other half are invited to fill out the same questionnaire on their smartphone. All rating scales are shown to run either from positive to negative (or high to low) or from negative to positive (or low to high). In addition, all response scales are presented either horizontally, vertically, or as a drop-down menu. We recruit respondents who have access to the internet both on a computer and through their own smart phones via MTurk and Craigslist.

**Results:** The experiment is currently in the field and first results will be available in January 2014.

**Added Value:** Our study is the first to experimentally manipulate both the direction and alignment of rating scales in a web and a mobile web survey. Given the increasing interest in self-administered data collection through mobile devices, the results of the study will be of high relevance and significance to academic and non-academic survey researchers who consider collecting data through mobile devices.

## C5: FACING METHODOLOGICAL CHALLENGES

### WHO USES TWITTER? REPRESENTATIVENESS OF TWITTER USERS

Author: Blank, Grant  
Organisation: University of Oxford, United Kingdom

**Relevance and research question:** Twitter data are extraordinarily easy to collect. Furthermore, they are available in very large quantities; millions of tweets are not unusual. As a result of these attractive qualities, over 400 papers have been published in the past 5 years using Twitter data. Yet in Britain in 2013 Twitter users are a subset (30%) of Internet users, who are in turn a subset (78%) of the population. Inevitably, the Twitter subset is biased in terms of demographics, attitudes and engagement with politics, society and the Internet. These comparisons are used to discuss key questions raised by the research use of Twitter: What population uses Twitter? For what purposes is it an appropriate or inappropriate population?

**Methods and data:** The 2013 Oxford Internet Survey (OxIS) is a random sample survey of the British population. N=2,657. Comparison of Twitter users to other Internet users and to the population as a whole.

**Results:** Twitter users are younger than other Internet users or the British population. They are more likely to be male than other users or the British population. They are better educated than the rest of the Internet population, who in turn are better educated than the British population as a whole. Twitter users are wealthier. Twitter users are more likely to be students or employed. They are not retired or unemployed. They are more likely to be non-white than either other Internet users or all respondents. Finally, they are more likely to live in urban areas.

**Added value:** The answers to these questions show both the limits and value of using Twitter as a data source for research on social and political events. Twitter users are not representative of the Internet population, let alone the British population as a whole. Twitter users fit the profile of young, well-educated, wealthy elites. This means that research using Twitter data is not a proxy for research on the population as a whole. Instead Twitter users reflect the interests, values, skills, priorities and biases of elites.

### THE HIDDEN DATA OF SOCIAL MEDIA RESEARCH — FIRST RESULTS FROM EXPERT INTERVIEWS

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Organisation: GESIS-Leibniz Institute for the Social Sciences,  
Germany

**RELEVANCE & RESEARCH QUESTION:** Social media data forms the basis of research efforts in various disciplines and data is collected from different platforms like Twitter, Facebook and Youtube. New methods are being developed to gather, analyse, share and document social media data. However, there is a lack of common standards, which partly results out of what we call the "hidden" problems of using social media data. The practice of hiding decisions, procedures and techniques of data handling while focussing on the research topics often makes the data and the processes it undergoes invisible, while taking up much of researchers' time. The project recovers the hidden data and practices in social media research by talking with experts in the field about their experiences and tacit knowledge of data handling and methodology. Researching social media scholars offers the opportunity to map an emerging field and to witness the establishment of novel ways of generating scientific knowledge.

**METHODS & DATA:** 18 ethnographic interviews were conducted with researchers about methods for data collection, analysis and management as well as ethical and epistemological concerns. A follow-up questionnaire was sent to participants asking about details of data collection and analysis.

**RESULTS:** First preliminary results show researchers' high awareness of the unregulated and developing character of social media research methods. The highly interdisciplinary research initiatives were shaped both by the necessity to acquire technical skills and by researchers having to develop novel epistemological foundations. Participants discussed the establishment of shared methods (especially concerning comparability, validity, ethics) as important for the emerging field and recognized common shortcomings of current approaches. While best practices for handling data harvested from social media are still being developed, results from this type of research are starting to find their way into the production of broader scientific concepts. A reflection of methodology and epistemology is timely and urgent.

**ADDED VALUE:** This project helps initiate a broader discussion of methods and standards in social media research. It captures the formation of a new research field and also emerging practices and perceived challenges posed by its highly ephemeral and transient nature.

## GENERATING ONLINE CONSUMER ENGAGEMENT THROUGH SOCIAL MEDIA FOR SPECIFIC EVENTS: A FIELD STUDY.

Author: Demmers, Joris; Weltevreden, Jesse W.J.  
Organisation: Centre for Applied Research on Economics and Management, Amsterdam University of Applied Sciences, The Netherlands

**Relevance & RQ:** One of the biggest challenges for organisations with regards to the use of social media is to generate engagement among consumers. Compared to firms that use social media to build ongoing brand communities, generating engagement may be even harder for organisers of events that take place within defined temporal boundaries. To date little attention has been paid to firms' capabilities to generate online engagement for specific events through the use of social media. In the current study, we investigate factors that influence consumer engagement generated through social media by event organisers.

**Method & Data:** We collected 30,109 Facebook posts, 27,517 Twitter posts, and 1,706 YouTube videos by organisers of the 469 largest exhibitions that took place in the Netherlands in 2012. For every message, we recorded the engagement it generated in terms of the number of likes, shares, comments, views, and retweets. To test to what extent characteristics of both the event and the message itself predicted 1) whether or not a message led to engagement, and 2) the subsequent level of engagement, we estimated a series of zero-inflated negative binomial regression models.

**Results:** Results show that for Facebook, the probability of generating engagement was dependent upon, i.a. the type of event, the number of fans and the total number of posts, whereas the level of engagement was dependent upon, i.a. the topic, timing, and length of the post, but also on the number of visitors and length of the event. For Twitter, engagement was also dependent upon the use of links and hashtags, the medium through which a message was posted, and whether or not a post was a reply to or retweet of another tweet. YouTube engagement was dominantly predicted by the number of views.

**Added Value:** This study enhances our understanding of firms' capabilities to generate online engagement for events and the virality of firm-generated social media content. Specifically, it shows how event and message characteristics contribute to the level of engagement. To event organisers and other organisations looking to generate online engagement, this study provides concrete tools in optimizing social media strategies.

## D5: NETWORK ANALYSIS

### IS THE AFD A RIGHT WING PARTY? A SOCIAL MEDIA ANALYSIS OF THE AFD

Author: Scherrer, Felix (1); Holthausen, Dr. Klaus (2)  
Organisation: 1: Linkfluence Deutschland GmbH; 2: Dr. Holthausen GmbH, Germany

**Relevance & Research Question:** In the German public and media the AFD is often considered as a right-wing extremist and nationalistic party. The goal of our analysis was to find out if this is true or not.

**Methods & Data:** We set up 2 types of online-networkanalyses. First, we compared the Facebook-"like"-Informations of fans of the german nationalist party NPD with those of AfD-Fans. With this so called "social genome" we are able to get a good overview of the specific interests and the mindset of an online group. Second, we analyzed the hyperlink-structure of AfD owned and aligned blogs & websites within the ecosystem of political players, partys and the german online-media. Through the hyperlinkstructure we were able to create interactive maps showing us the most important websites within their specific communities, the connection of those communities to others and the degree of their integration in the ecosphere.

**Results:** The analysis showed us, that supporters of the AfD and those of the NPD have very little in common. While the AfD supporters are eurosceptic and have preferences for direct democratic principles, the NPD supporters prefer anti-Islamic, right-wing rock and German military topics. But we detected right-wing infiltration in the AfD. The hyperlink analysis showed that right-wing populist websites such as "Politically Incorrect", and "Pro-Deutschland" — often link to AfD content. This showed that the AfD is viewed in some circles as a legitimate mouthpiece for the right-wing populist cause. These circles are not connected to the traditional german right-winged parties like the NPD. They are settled deep in the very right-wings of the liberal and the conservative communities and so we like to call them the "nationalistic liberals". It seems that in Germany, this is a relatively new right-wing community and they are on the rise.

**Added Value:** The unique and innovative approach gives us the possibility to observe "real" and unbiased activities in the social web to gain structural insights and also to segment the web (based on the social graph theories).

## WRITING STYLES AND KNOWLEDGE DISSEMINATION IN ACADEMIC NETWORKS

Author: Puschmann, Cornelius [1]; Bastos, Marco [2]  
Organisation: 1: Humboldt University of Berlin, Germany; 2: Duke University

**Relevance & Research Question:** Science and scholarship are significantly impacted by the increasing digitization of everyday life. Technologies such as email and web-based course management systems have transformed academic work processes, and resources such as academic journals and books are increasingly available online, whether through digital library subscriptions or open access. While the means of distribution of scholarly knowledge has changed dramatically, the formats of formal scholarly communication have remained relatively stable. Though new formats, such as scholarly blogs and tagging systems have emerged, their role in established academic practices remains unclear. What is the impact of scholarly blogs and how does their writing style influence knowledge dissemination? We approach this question using a combination of literature review and content analysis.

**Methods & Data:** Our paper presents a longitudinal quantitative analysis of data from the scholarly blogging platform Hypotheses.org, focusing on two aspects: language use and hyperlink patterns. Our analysis spans a period of 9 years and over 50.000 posts published in more than 500 blogs. We discuss the network properties of blogs in the platform based on the links between individual blogs [1], different types of posts based on their linguistic properties [2], and the interaction between post content and comments [3].

**Results:** Our findings suggest that there is a stylistic continuum from blogs written in a very formal and scholarly tone to those which are simpler and easier to understand for lay audiences. While the former draws fewer but also longer and more complex comments, the latter provokes shorter responses, often expressing the gratitude or agreement of the commentator.

**Added Value:** We supplement our analysis with an in-depth review of existing literature on the topic in order to tentatively answer the question what role new forms scholarly communication such as blogs could play for the future of knowledge dissemination. Answering this question has both far-reaching consequences for the study of scholarship and practical implications for science policy, for example in relation to research evaluation.

## A6: HOW MOOD, INTEREST AND PERSONALITY IMPACT ON RESEARCH

### INCREASING DATA QUALITY IN ONLINE SURVEYS 4.1

Author: Höckel, Herbert  
Organisation: mo'web research GmbH, Germany

**Relevance & Research Question:** Our paper focusses on how to evaluate and increase data quality in online surveys. We will briefly recapp our past experiences (fraudsters, questionnaire design & incentives). This paper will include new empiric research on how the mood of respondents and how the incentives influence data quality. Part A: Respondent Mood: We will a series of experiments in which we can evaluate the influence of the respondent mood on data quality as well as vice-versa the influence of the survey on the respondent mood. Part B: Conditional & Variable Incentives: We are currently already experimenting with variable incentives — either chosen by the respondent themselves on a pre-defined scale or higher incentives paid if exceptionally good quality interviews are submitted (with a feedback loops).

**Methods and Data:** Part A: Empiric research with n= 1000 nat rep interviews conducted online and required booster samples for low (bad) and high (good) mood. Part B: Empiric survey with a minimum of n= 1000 nat rep interviews and any required booster samples.

**Results:** Our results show how the mood of respondent influences their behaviour in surveys and what effect this has on data quality. We also evaluate how the incentive can be used to motivate respondents to supply an increased reliability and data consistency. We will also be reviewing the effects of variable / conditional incentives and longitudinal learning effects by respondents.

**Added Value:** Contrary to stringent data cleaning and dedupe technology it has alsways been our firm belief that good respondent behavior can be nurtured. Our series of surveys proves clearly how good behaviour can be promoted and offers practical guidelines on how to evaluate and increase data quality with cost effective and pragmatic recommendations.

## ONLINE QUALITATIVE RESEARCH — PERSONALITY MATTERS

Author: Tress, Florian [1]; Dössel, Christian [2]  
Organisation: 1: Norstat Deutschland GmbH; 2: MM-Eye GmbH,  
Germany

**Relevance & Research Question:** During the last five years, qualitative online research methods have evolved constantly. However, it is not always clear how the plethora of different methods subsumed under the term “Market Research Online Communities (MROCs)” can be applied optimally. Today online recruitment of participants for MROCs became almost a ubiquity. MROCs are different from offline qualitative research not least because of higher degree of anonymity and absence of face-to-face conversation. This is especially important because similar to offline qualitative research single respondents in MROC-studies can have a huge impact on the quality of the study as such. The question is to what degree single personality traits affect the individual participation behaviour and if the pre-selection of qualitative master data such as personality traits can help the researcher to compose, moderate and analyse MROCs intentionally.

**Methods & Data:** Our study compares MROCs consisting of exchange and individual 1-on-1 modules in a split-half design, where the single test groups differ in the composition of the participants with regards to their Big Five personality traits (P. Borkenau & F. Ostendorf). Group 1 group consists of participants with average scores dimension of their personality; hence, group 1 is quite homogenous. Group 2 is composed by participants who score extreme values in one of their personality traits; hence, this group is quite heterogeneous. The personal performance on individual tasks will be assessed, as well as the social behaviour within the community. We will also gather a standardized feedback the participants' experiences after closing the community.

**Results:** As fieldwork is still not concluded, final results are not available, yet. We expect strong differences in both, the individual level of engagement and the group dynamics.

**Added Value:** As is it sometimes difficult to engage with MROC participants due to the specific conditions of the internet, it is key for project success to compose communities with right participants. Our case study sheds light on the practical implications for the researcher, when setting up MROCs, and gives best practice examples for qualitative online moderation of different configurations.

## INTEREST BIAS – AN EXTREME FORM OF SELF-SELECTION?

Author: Cape, Peter John [1]; Reichert, Kathrin [2]  
Organisation: 1: SSI, United Kingdom; 2: SSI, Deutschland

**Relevance & Research Question:** Most ethical codes around the world require researchers to give some information to the respondent about the nature of the survey they are asking them to undertake. In traditional modes it was part of the job of the interviewer to ensure that

people did not exclude themselves on the basis that they may not have views of interest (“your opinion counts!”), or that they may not ‘qualify’ (“all opinions count!”). Since we solicited people, they did not offer themselves to us, there were few ways they could self-select into a telephone or face-to-face study. With online research, and particularly access panel based research, respondents can actively choose to take part in any one of many invitations they receive, based on interest or perceived chances of qualification. The possibility of bias in interest in the subject matter questions the validity of the data collected and the projectability of the sample.

**Methods & Data:** We investigate three different categories, Pets, Automobiles and Sports. In each case we will be both specific about the item within the category (Dogs, Sports Cars and Football) and just use the general category heading. Experimental treatments reflect the solicitation methods available to us: the direct invitation that clearly mentions the subject matter; and using a router to direct willing respondents to a survey where they will be presented with an introduction stating the subject matter. Finally the survey is presented as an omnibus – a survey with many subjects – this will be both directly invited as well as being placed in the router, the survey here will contain all three subjects. Key dependent variables in the survey proper will be depth of interest in the subject matter.

**Results:** The survey has not been undertaken as yet. We do not foresee any issues completing the fieldwork and analysis since we would be utilizing our own resources.

**Added Value:** As a result of this research researchers will understand better the phenomenon of interest bias and how it can be overcome by proper use of modern solicitation methods and messages.

## B6: ANGEWANDTE STICHPROBENZIEHUNG: AUF DER SUCHE NACH REPRÄSENTATIVITÄT

**Session Chair:** Prof. Horst Müller-Peters  
(Herausgeber, marktforschung.de)

### Referenten:

- Alexandra Wachenfeld (Research Director, LINK Institut für Markt- und Sozialforschung GmbH): Offline, online, mobil: Was geht, was nicht?
- Christian Michael (Managing Director, Survey Sampling Germany GmbH): Über die Grenzen von Online Panels: Mit Multi-Sourcing und intelligentem Survey-Routing näher an die Repräsentativität
- Holger Geißler (Vorstand, YouGov Deutschland GmbH) und Holger Nowak (Manager Strategic Projects, YouGov Deutschland GmbH): Revolution des Online-Sampling? Sample-Matching bei der Bundestagswahl 2013



Eine möglichst gute Annäherung an Repräsentativität ist die Idealvorstellung zahlreicher Studien – aber immer schwerer zu erreichen. Fehlende Auswahlgrundlagen, Antwortverweigerung, Nicht-Erreichbarkeit, Übertestung und Selbstselektion sind nur einige Stichworte.

Das Repräsentativitätsthema hat sich in den letzten Jahren zu einem erheblichen Problem für die angewandte empirische Forschung entwickelt. Die Session soll zeigen: Wie viel Repräsentativität lässt sich im praktischen Einsatz – bei limitierter Zeit und Kosten – erreichen, offline, online und mobil? Was können neue Ansätze im Rahmen von Multi-Source-Rekrutierung, Mixed-Mode-Erhebung und intelligenter Panelsteuerung leisten?

## C6: SOCIAL MEDIA IN HEALTH EDUCATION

### SOCIAL MEDIA AS AN INNOVATIVE ELEMENT IN HEALTH EDUCATION – A PILOT PROJECT OF THE FEDERAL CENTRE FOR HEALTH EDUCATION (BZGA)

**Author:** Nöcker, Guido {1}; Quast, Thomas {2}; Jelitto, Marc {2}; Höwner, Jörg {3}

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**Relevance & Research Question:** In 2010 the Federal Centre for Health Education (BZgA) organised a workshop with experts called "Web 2.0 and Social Media in Health Education" [1]. The aim was to reflect on the opportunities provided by new access channels in the context of media campaigns. As a consequence, the "Pilot Project on Improving Confidence in the Use and Efficacy of Social Media in Health Promotion" was launched in 2012. Up to 2014 nine social media interventions for the BZgA's information and prevention areas of sex education and family planning are being developed by the participating partner agencies com.X and K12, linked with existing web sites and evaluated in terms of their possibilities of use, efficiency and efficacy for the educational work of the departments involved following the PRECEDE/PROCEED model [2]. In addition to acceptance, use and suitability for implementation in everyday working life, a practical evaluation concept in Web 2.0 is developed. The following questions are to be answered by the pilot project: How can social media be used successfully in health promotion? Which tools are particularly promising and how can they be used in the everyday work of a federal institution?

**Methods & Data:** 9 Interventions used: Web care in forums, forum cooperations, Facebook page, cooperations, ads and badges, blogger relations, location based service and crowdsourcing. 7 survey instruments used: Studio tests (n=10 pregnant women / n=14 young people), online survey groups (online panel in 3 waves n=150/200),

intensive interviews subsequent to the panel (n=10/14), on-site surveys (so far approx. n=1,300/2,400), persona-based cognitive walkthroughs, social media monitoring, web metrics analysis, process analyses, document analysis. Procedure: Different access channels to interviewees, incorporation of actual and potential users, mix of quantitative and qualitative methods together with surveys and tests for method control and triangulation.

**Results:** The surveys are still in progress; results and conclusions will be presented during the congress.

**Added Value:** The findings made can be transferred to other areas and institutions and their use of social media.

[1] <http://www.bzga.de/infomaterialien/gesundheitsfoerderung-konkret/?idx=2022>

[2] <http://www.leitbegriffe.bzga.de/?uid=c52eb61fb20632b69156ace6c593f796&id=angebote&idx=179>

### METHOD MIX IN THE RESEARCH OF SOCIAL MEDIA INSTRUMENTS

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**Relevance & Research Question:** As part of the "Pilot Project on Improving Confidence in the Use and Efficacy of Social Media in Health Promotion" conducted by the Federal Centre for Health Education (BZgA) between 2012 and 2014, the evaluation institute com.X and the social media agency K12, are developing nine social media interventions for the BZgA's information and prevention areas of sex education and family planning, linking these with existing web sites and evaluating the instruments in terms of their possibilities of use, efficiency and efficacy for the educational work of the departments concerned. Complex intervention and survey instruments are used in the pilot project. These were implemented for two different target groups (young people, pregnant women aged 20 and over). In order to provide informative results, multistage survey methods were used from a multiple perspective and for purposes of supplement and control (triangulation), and the results presented in relation to use. One main question in the pilot project is how different social media interventions on sensitive areas concerning health information and their impact can be researched using valid means.

**Methods & Data:** Seven interlinked survey instruments which have been aligned with interventions and target groups are used: Studio tests (n=10 pregnant women / n=14 young people), online survey/test groups (online panel in 3 waves n=150/200), intensive interviews subsequent to the panel (n=10/14), on-site surveys (so far approx. n=1.300/2.400), persona-based cognitive walkthroughs, social media monitoring, web metrics analysis, process analysis, document analysis,

sis. This facilitates different access channels to interviewees, incorporation of actual and potential users and multi-perspectivity. The mix of quantitative and qualitative methods as well as surveys and tests also serves method control and triangulation.

**Results:** The complex multi-perspective test and evaluation approach provides reliable information on the use of social media in providing information on sensitive subjects. It is still being investigated whether and how reliable assessments in the everyday use of social media are possible with a reduced evaluation set.

**Added Value:** The model multi-perspective evaluation approach can be transferred (once adapted) to other uses of and questions concerning social media.

## SELECTION AND IMPLEMENTATION OF SOCIAL MEDIA INSTRUMENTS

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**Relevance & Research Question:** As part of the "Pilot Project on Improving Confidence in the Use and Efficacy of Social Media in Health Promotion" conducted by the Federal Centre for Health Education (BZgA) between 2012 and 2014, the evaluation institute com.X and the K12, an agency specialising in social media i.a., are developing nine social media instruments (interventions) for the BZgA's information and prevention areas of sex education and family planning, linking these with existing web sites and testing and evaluating the instruments in terms of their possibilities of use, efficiency and efficacy for the educational work of the departments involved. As the social media prism (1) shows, numerous social media instruments are used in Germany. Organisations are frequently faced with the challenge of selecting suitable instruments for a specific purpose. One aim of the pilot project is to answer the question as to how suitable social media channels are selected for communication and intervention measures.

**Methods & Data:** Based on an analysis of second studies, a catalogue with 22 relevant instruments from the areas of "Publish, Games, Share, Discuss, Location, Network and Commerce" i.a. were identified as having the criterion of positive experience in use in the area of health promotion. Guided by the communication objectives and the communicative tasks, the instruments were then assessed and selected in terms of the properties of information dissemination, level of impact, target group affinity (range) and controllability (e.g. with respect to confidentiality/data protection) using a decision matrix.

**Results:** Nine social media interventions were selected following an initial research and assessment phase: web care in forums, forum cooperations, Facebook page, cooperations and ads, as well as badges, blogger relations, location based service and crowdsourcing. Surveys and ultimate assessment of the actual suitability are still in progress.

**Added Value:** One open research question is which form suitable selection help will take.

(1) <http://www.ethority.de/weblog/social-media-prisma/>

## ACCEPTANCE OF (STATE) EXPERTS IN (PRIVATE) USER FORUMS

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**Relevance & Research Question:** As part of the "Pilot Project on Improving Confidence in the Use and Efficacy of Social Media in Health Promotion" conducted by the Federal Centre for Health Education (BZgA) between 2012 and 2014, the evaluation institute com.X and the social media agency K12, are developing nine social media instruments (interventions) for the BZgA's information and prevention areas of sex education and family planning, linking these with existing web sites and testing and evaluating the instruments in terms of their possibilities of use, efficiency and efficacy for the educational work of the departments concerned. Young people and pregnant women frequently visit online forums to find out about subjects of importance to them. In the same way that street workers look after their clientele in their usual everyday environment (street, meeting point), internet users can be reached by experts online in their preferred environment with web care measures. The following questions are asked in the paper: Which forums are suitable and what form does cooperation take with the operators? What is the reaction of the users to the presence of the experts in (private) forums? Which subject areas, forms of address and presentation etc. are adequate?

**Methods & Data:** Practical test in different forums, survey by: Studio tests (n=10 pregnant women / n=14 young people), online survey/test groups (online panel in 3 waves, each n=150/200), intensive interviews subsequent to the panel (n=10/14), social media monitoring.

**Results:** The openly visible deployment of experts for specific sensitive information and prevention areas is largely accepted and even welcomed. The provision of information by experts is viewed to be important. There is criticism from a minority, even from forum operators and moderators. There is also the potential here of kindling reactance amongst other users. Emphasis is to be placed – also to avoid reactance – on a sensitive and suitable presence in the forum.

**Added Value:** General information, deductions and recommendations on the open deployment of specialists and experts in (private) forums – also on less sensitive subjects.

## D6: ONLINE OUTREACH

### PUBLIC AND POLITICAL INVOLVEMENT OF INTERNET RESEARCH CENTERS

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2: New Economic School, Center for the Study of New Media and Society, Russian Federation

**Relevance & Research Question.** Key words: Internet studies, Internet policies, think tanks. RQ: Internet studies are conducted in research centers all over the world. Understanding different aspects of usage and impact of the Internet is highly demanded by scholars, as well as politicians, economists and social actors. How do the Internet research findings become a part of polity and public communication?

**Methods & Data.** Key words: dynamic index, citation index, research centers rating. We measure and evaluate the public impact and political involvement of research centers through creating a dynamic index. We base our evaluations upon general information on the center (e.g., its founding date and stakeholders), key persons, their professional means of disseminating research findings, including organizing conferences and publishing habits. Additionally, our ratings consider key mass media publications mentioning the research centers and persons affiliated. Our study also investigates political references within these sources.

**Results.** Key words: communication, system theory. Theoretical: We initially follow Luhmanns' conceptualization of communication as a phenomena consisting of informing parties, providing an understanding of intentions, and the transmitted message itself. We apply this conceptualization to the Internet and the political context under which it operates. In order to evaluate the adequacy of this conceptualization, we systematically rate Internet studies and their involvement in the polity and public communication. Empirical: still in progress

**Added Value.** Key words: public knowledge. We evaluate the political and public impact of the researches on the Internet worldwide and develop the understanding of this communication type and knowledge transformation. It suggests an alternative understanding of research impact emphasizing the public value of the researches and investigates the interrelation with political issues. Theoretically we develop the Luhmanns' communication model demonstrating how the scientific knowledge becomes visible part of public and political communication fields.

### ANALYSIS OF THE ONLINE MARKETING MIX IN THE PREMIUM CAR SEGMENT WITH THE EXAMPLE OF BMW

Author: Lausch, Marco; Hagstotz, Karin; Weiß, Christian ;  
Organisation: Hagstotz ITM, Germany

**Relevance & Research question:** Analysis of the web-based marketing mix of BMW with a focus on the communication of manufacturers on the Internet, the target group's perception of the Internet and the effectiveness of the online CRM system via the manufacturer's website.

**Methods & Data:** An important challenge to the methodological project design: representing different perspectives in an overview of the company's online communication channels. For this requirement, three complementary project modules were defined: each with a specific methodological focus that - take advantage of synergies - and were carried out at different times.

Module 1: Secondary research (semi-automated Web Scanner)  
Key question: How do consumers perceive the BMW brand on the Internet?  
Objective recording and coding of ongoing communication  
--> scan of blogs, forums and news sites for 4 months.

Module 2: Primary research (Online expert forum)  
Key Question: How do experts perceive the communication and how would they rate it?  
--> Review online communication and social media

30 participants ( > 30 years , of at least higher education , managers with professional experience > 10 years , high to very high marketing relevance in daily professional life, good to very good knowledge of Web 2.0 / social media) , online -based questionnaire , followed by detailed discussion in the online forum ( 10 days)

Module 3: Market monitoring ( CRM functions )  
Key question: What happens when a (potential) customer expresses an interest in online purchasing?  
--> Observation and analysis of concrete CRM activities  
Usage of the car configurators, orders of material information and requests for a test drive on the manufacturer's website.

#### Results:

1. Optimization approaches for communication and Web 2.0 in general and for BMW as a premium brand on the Internet
2. Brand awareness of BMW on the Internet
3. Identification of possible disruptions between online communication and bridging to the CRM system

**Added Value:** Combination of three different analytical approaches to obtain a comprehensive overall picture.  
Development of criteria for display on the Internet for all analyzed marketing channels.

Description: How does the link between online communication and active sales in the real world (CRM system) serve as input for mutual optimization?

## A7: USING PARADATA TO IDENTIFY CHEATERS/ SPEEDERS

### PAGEFOCUS: A NEW JAVASCRIPT TO DETECT CHEATING IN ONLINE TESTS

Author: Diedenhofen, Birk; Musch, Jochen  
Organisation: University of Duesseldorf, Germany

**Relevance & Research Question:** The validity of unproctored tests is threatened by participants who decide to cheat when stakes are high. To address this problem, we developed PageFocus, a JavaScript allowing to determine whether participants abandon a test page to pursue other activities such as looking up the solution to a test item in a second browser. As a validation and a first application of the script, we conducted a study to explore the determinants of cheating in an unproctored online test.

**Methods & Data:** 541 members of an online panel participated in an experiment presenting 10 test items that could easily be looked up using a search engine (general knowledge questions) and 10 items for which the solution could not easily be looked up on the Internet (a logic test based on matrices). The incentive to cheat was varied experimentally in three steps: In a first group, participants received a monetary reward only when they performed well enough in the test; in a second group, participants were rewarded regardless of their performance on the test, and in a third group no incentive whatsoever was offered.

**Results:** The PageFocus script revealed that participants cheated more when performance-related incentives were being offered. As expected, this effect was however limited to those items for which it was possible to look up the solution using a search engine. Cheating participants achieved higher scores.

**Added Value:** Our study provides a first successful validation of PageFocus, a new JavaScript allowing to determine whether the participants of an online test switch to another web page while completing their test items. The script can be used to detect both, whether test takers look up the solution to items they would otherwise be unable to solve, or to detect participants switching back and forth from a survey to an unrelated application running in the background. PageFocus might be a promising new tool to improve data quality in online research.

### IMPROVING CHEATER DETECTION IN WEB-BASED RANDOMIZED RESPONSE USING CLIENT-SIDE PARADATA

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Organisation: Martin-Luther-Universität Halle-Wittenberg, Germany

**Relevance & Research Question:** Surveys sometimes include sensitive topics, e.g. sexual behavior or tax evasion. Respondents often hesitate to answer such sensitive items which results in high item non-response rates and a specific type of response error: a tendency to underreport socially undesirable and overreport desirable behavior. The randomized response technique (RRT) [Warner, 1965] is a well-known survey technique to reduce the problem of misreporting by protecting the privacy of the respondents. However, to obtain valid and reliable data, respondents have to understand and follow the technique's instructions. Cheating detection models (e.g. Clark & Desharnais, 1998) try to identify the respondents which do not act according to the instructions of the design (and, hence, are cheating). Web surveys offer the opportunity to "observe" the respondents' answering process by means of additional so-called paradata. In this study we present a new approach to detect cheaters using such client-side paradata (especially item response times).

**Methods & Data:** We conducted a web survey during the university's open house (N=159) using the RRT to estimate the prevalence of deceiving in a partnership. To assess the individual item response times we implemented two comparable experimental situations; the classical RRT (including a sensitive question) and a similar RR design (without a sensitive question). Assuming that cheaters give quick answers without paying much attention to the content of the question we finally tested whether the individual item response times are significantly different in both settings.

**Results:** We found a small proportion of cheaters. The detected proportion of cheaters has an effect on the estimated proportion of people carrying the sensitive characteristic as a comparison with the unadjusted estimator shows.

**Added Value:** Previous research on cheating detection has focused only on the aggregated quantity and not on the individual "quality" of cheaters. The data quality of answers to sensitive questions is improved with such a cheating detection method based on an individual level. Here item response times (and other client-side paradata) could prospectively contribute to improve the estimation process.

## USING LONGITUDINAL PARADATA TO DETECT SPEEDING PATTERNS ACROSS ONLINE PANEL SURVEY WAVES

Author: Weyandt, Kai Willem; Bosnjak, Michael; Callegaro, Mario  
Organisation: GESIS - Leibniz Institute for Social Sciences, Germany

**Relevance & Research Question:** Survey item response times are widely been used to explore measurement quality and non-response in cross-sectional online surveys. We are however not aware of any attempt to connect such paradata across online panel waves in a longitudinal fashion. In the present research, we fill this gap by using survey response time paradata across the first eight survey waves of a probability-based online panel in Germany.

**Methods & Data:** We analyze the available response time paradata to explore whether or not panelists tend to 'speed up' across survey waves, that is responding faster in subsequent waves compared to previous ones. Speeding in online panel surveys represents a potential threat to data quality, because it may indicate depleted motivation across waves.

**Results:** Our initial analyses do not show patterns of speeding for the entire group of panelists across survey waves. However, we find evidence for speeding as a stable behavioral pattern for a subgroup of panelists, meaning that being fast in responding to the initial survey wave tends to persist across all subsequent waves consistently.

**Added Value:** In the upcoming analyses, we seek to explain the membership to this 'speeding group', allowing us to derive actionable recommendations for online panel data quality management.

## B7: SCHAU MIR IN DIE AUGEN, USER! EYE-TRACKING UND EMOTIONSMESSUNG ONLINE

**Session Chair:** Prof. Horst Müller-Peters  
(Herausgeber, marktforschung.de)

### Referenten:

- Prof. Dr. Raimund Wildner (Geschäftsführer und Vizepräsident, GfK-Verein): Schwache Emotionen per Webcam in Echtzeit valide erfassen: Methodik und Einsatzbereiche des GfK EmoScan
- Prof. Dr. Sebastian Berger (Geschäftsführer Dr. Berger Consult AG und Projektmitarbeiter, Universität Wien) und Herbert Höckel (Geschäftsführer, mo'web research GmbH): Online Eye-tracking: Methodik, Validität und Einsatzbereich

- Stefan Schönherr (eye square GmbH) und Tobias Trame (eye square GmbH): Webcam Eye Tracking - die Online-Revolution in der Aufmerksamkeits- und Emotionserfassung

Die Erfassung von Blickverläufen ist eine wesentliche Grundlage zur Optimierung von Werbung und Medien. Die Durchführung entsprechender Studien ist aber traditionell teuer, langwierig und auf kleine Stichproben beschränkt. Neue Onlinemethoden versprechen Abhilfe. Durch Webcams oder alternative Methoden lässt sich das Nutzerverhalten erfassen und teils sogar Emotionen messen. Die Session zeigt anhand von Demonstrationen, Musteranwendungen und methodischen Überprüfungen den Stand der Forschung und deren Potential für den praktischen Einsatz.

## C7: SOCIAL MEDIA CHANGES COMPANY CULTURE

### EVERY COMPANY NEEDS A 'CHIEF CONSUMER OFFICER' — 5 STEPS TOWARDS BECOMING A CONSUMER-CENTRIC THINKING COMPANY

Author: De Ruyck, Tom  
Organisation: InSites Consulting, Belgium

**Relevance & Research Question:** This presentation discusses the journey towards becoming 'a consumer-centric thinking company': a company that structurally collaborates with the consumer world within all phases of decision making across its departments and that has established an outside-in thinking company culture.

**Methods & Data:** The piece is based on 15 interviews (Van Belleghem & De Ruyck, 2012) with senior executives from major corporations and best practices drawn from over 200 projects we conducted for our clients around the world, over the last 2 years. Includes cases done for IKEA, eBay, Unilever, Mars and many more.

**Results:** The paper elaborates on possible starting points for consumer collaboration and the steps an organization needs to follow to start collaborating in a more structural way. It also mentions the different tools one needs along the way in order to bring all internal stakeholders on board and activate them to take relevant action based on the consumer input. And finally, the positive effects that internal and external leverage of consumer collaboration has on the company's culture and performance, and their measurement are discussed as well. There will also be argued that a new board member needs to be installed to lead and coordinate this transformation from an inside-out to an outside-in thinking company: the 'Chief Consumer Officer'.

**Added Value:** The presentation will shed new light on: the future of qualitative research, the best possible use of Online Research Communities, sharing research results within the company in the most impactful way, the role of the researcher in the 21st century and how to create consumer-centric thinking company cultures.

## OPINION LEADERS IN SOCIAL MEDIA (MIXED-MODE APPROACH)

Author: Sobieszek, Krzysztof  
Organisation: Warsaw University, Poland

**Relevance & Research Question:** The purpose of this research is to describe characteristics of opinion leaders within internet social networks. Specifically, this project tries to define opinion leadership from three different research perspectives: behavioral influence indicators analysis, self-report survey and social environment survey (potentially influenced people). Research questions are focused on relations between these perspectives and their actual power to identify opinion leaders in social media. How potential opinion leaders perceive their power to influence? Are people who can potentially be influenced by opinion leaders realize the fact of influence? Are they aware of actual opinion leaders within their social network? All these questions are addressed in the study. Project is focused on digital social networks, communication and influence mechanisms in social media therefore it meets criteria of GOR 2014 Track C.

### Methods & Data:

Three different methods of research were used in the study:

- Social networking analysis (SNA). Large data set from NK.pl, 8 mln polish social networking site was analysed. This approach allows to describe all users within the network with "social influence score". (SIS)
- Survey of users with SIS strongly above the average. It allows to get specific characteristics of people having actual influence within the network along with their self-awareness of ability to influence others.
- Survey of people with defined relations with opinion leaders.

**Results:** Research shows what are the most important indicators in the process of defining opinion leaders. It focuses on different types of characteristics (psychological, relational, actual ability to influence behaviour and opinions, etc.). It also discuss methodological issues of opinion leadership research in mixed-mode approach.

**Added Value:** Concept of opinion leaders was developed along with two-step flow theory of media influence. In recent years, research focusing on the social influence of opinion leaders have increased, due to popularity of digital social networks. However, present works are focused rather on diffusion of innovation process and mostly bases on SNA methods. The role of opinion leaders become more and more important. Therefore using different perspectives to describe their characteristics along with understanding relations between different research methods is getting crucial.

## WHO USES SOCIAL MEDIA NETWORKS? ANTECEDENTS AND FIRM CHARACTERISTICS OF SWISS SME

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**Relevance & Research Question:** Recent developments in the social media communication for business activities of small and medium sized enterprises (SME) have led to a research interest in this field. So far, research has been mainly addressed to identify the business purposes of large firms, e.g. in the field of marketing and sales (Wang et al. 2012; Laroche et al. 2013). However, the professional use and adoption of social media communication for business purposes is relatively new to SME and only a number of firms have lately initiated these activities. Thus, only little is known about the characteristics and antecedents of early SME adopters. This study analyses the impact of SME's characteristics on their use of social media communication in general, and of specific channels, such as Facebook, Xing, LinkedIn, and YouTube.

**Methods & Data:** The survey is based on a representative sample based on data from Swiss Federal Statistical Office BFS. It draws a representative random sample of 10 per cent of all independent SME in East Switzerland. Based on this data, around 5'450 firms were surveyed by postal mail. 324 firms returned the questionnaires. 278 were included into the study as valid questionnaires. Quantitative analysis is applied, with the use of several logistic regression models.

**Results:** The results reveal that (1) only 35 percent of the SME used at least one social media channel, that (2) several characteristics of the firm (e.g., age, size, type of customer groups, business sector) influence whether a SME uses any social media channel in general, and (3) specific characteristics (e.g., percentage of revenues generated abroad, type of customer groups) of the firm have impact whether a firm is using a specific type of social media channel such as Facebook, Xing, LinkedIn or YouTube.

**Added Value:** The research findings can help the SME to better understand the role of social media networks for business communications. In particular, our results offer insights of how and when they adopt communication channels to compete against larger firms. The study reveals that age, type of customers and business sector are the influencing key factors for the usage of networks.



## D7: DIGITAL INEQUALITIES

### A BOURDIEUAN APPROACH TO RESEARCHING DIGITAL INEQUALITY

Author: Herzig, Richenda Grace  
Organisation: University of East Anglia, United Kingdom

**Relevance & Research Question:** This paper evaluates the potential of a Bourdieuan approach for enabling a more detailed understanding of power dynamics in online spaces. Dominant approaches draw on a utopian vision of the Internet, which invoke metaphors like the 'knowledge society' and 'public sphere'. While inequalities are recognised in the Digital Divide literature, this approach has been criticised for limiting itself to the 'haves' and 'have nots' surrounding Internet use. This has led critics to call for fresh conceptual tools capable of capturing the inequalities and struggles imbued in everyday online interaction (Livingstone, 2010, Halford & Savage, 2011). Bourdieu's dynamic framework traces different forms of power (capitals) and links them to specific processes, behaviours and agents. To explore the efficacy of this approach, I am conducting a case study of the The Student Room. With over a million users, the site caters for a wide range of interests and practical concerns relevant to teenagers and young adults. My goal is to identify distinct forms of capital circulated on the site. I progress to exploring the processes, relationships and actions that govern the distribution and value of these capitals. Finally, I look at how different capitals interact with one another in distinct settings. This allows me to identify the way in which some types of capital can be converted into different forms; across online spaces, and between online and offline spaces.

**Methods & Data:** Methods include the case study approach, netnography and online interviews. My paper presents rich examples from four contrasting sections of The Student Room: the Fitness, Religion, Chat and Universities forums. It also draws on interviews with users from each of these sections.

**Results:** Examples from The Student Room demonstrate that Bourdieu's framework is an effective tool for illustrating different power struggles underpinning engagement online. It is able to account for multiple inequalities simultaneously, and it also recognizes the ways in which online arenas remain embedded in wider contexts.

**Added Value:** The paper presents rich netnographic examples and demonstrates the effectiveness of Bourdieu's framework for theorizing digital inequalities that is suitable for qualitative and quantitative approaches.

### SMARTPHONES AND SECOND-LEVEL DIGITAL DIVIDE

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**Relevance & Research Question:** By the end of 2013, the number of mobile subscribers worldwide will reach 7 billion. Furthermore, online connectedness through mobile Smartphone is increasingly replacing regular internet access (Portio Research, 2013). Considering the rapid growth in smartphone usage, the purpose of this study is to examine the recreating of the 'second-level digital divide' (Hargittai, 2002) among Israeli Smartphone users. 'Second-level' indicates a usage gap of actual activities within Smartphone application environment, rather than access alone.

**Methods & Data:** This study compares data gathered from two surveys, based on a representative sample (maximum sample error 4.5%) of Israeli Jewish population aged 15 and above. The first survey was conducted in 2010 (n=969) and the second in 2013 (n=550). A usability Index was constructed, including 10 items (Cronbach's Alpha >.8) that stood for various usages of Smartphone applications (e.g. Voice calls, short text messages (SMS) and multimedia messages (MMS), pictures and video, social network, surfing the net and more).

**Results:** Our analysis investigated the gap of Smartphones' usability, depending on variables such as gender, age, education and income. Overall, we found a significant difference between the Usability Index of 2010 compared to 2013 ( $t(705)=15.4, p<.001$ ); 2013 Usability Index ( $M=3.3, SD=1.21$ ) is higher than that of 2010 ( $M=2.4, SD=.82$ ). A swift decline was found in Smartphone's use of telephone calls (from 88% to 63%) compared to increase usages such as surfing the net (from 5% to 39%), taking pictures (from 14% to 39%), sending Email (from 9% to 30%) and entering social network account (from 36% to 45%). A significant difference between men and women as men average usage was found higher than women average usage. In addition, we found a significant negative correlation between respondents' age and the Usability Index; a significant negative correlation between education levels to the Usability Index and a significant positive correlation with the income level.

**Added Value:** Findings suggest that despite the apparent ubiquity of Smartphones nowadays, being 'anywhere-everywhere', scholars should consider them more as a sort of enabled-medium. Enabled technology perspective would emphasize the need for accurate measurements of the medium usages.

## Ag: WEB QUESTIONNAIRE DESIGN

### MEASURING THE VERY LONG, FUZZY TAIL IN THE OCCUPATIONAL DISTRIBUTION IN WEB-SURVEYS

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**Relevance & Research Question** Most surveys have one or more questions with thousands of response categories, the so-called long-list variables, such as occupation, industry, car brand, and alike. Typically an open-ended format with field- or office-recoding is used for these questions. In PAPI, CAPI and CATI, a closed format question restricts the number of responses to at most 50, being the maximum of a show card. In web-surveys closed format questions offer new opportunities, because the number of responses is not limited. For the survey design this requires a lookup database with all responses, a search tree to allow respondents to navigate through the database, and text string matching to ease the search. This paper focuses on the requirements for a lookup database in web-surveys. The database can unfortunately not cover all possible responses, because no country has a full registration of job titles; in many countries the stock of job titles may well exceed 100,000. Typically, the occupational distribution has a very long tail, challenging the number of job titles in the database. The research aims to identify the share of respondents with job titles in the long tail of the distribution.

**Methods & Data** The paper uses the data of the 2009 representative LISS web-survey on work and wages for the Dutch labour force (N = 3,508). For the occupation question this survey used a compulsory 3-step search tree with a lookup database of 1,614 occupational titles. The search tree included an option 'other' with a text box. The responses were coded.

**Results** Of the 1,614 titles, 600 were ticked by 68% of respondents and 32% used the text box. 12% could have ticked an occupation from the lookup database. Of the remaining 16%, approximately one in ten had a job title that was mentioned at least twice and the rest had a unique job title. The long tail of the occupational distribution covered one in seven respondents.

**Added Value** This study contributes to the quest to prevent manual coding of occupations in CAWI and CAPI and to the optimal number of occupational titles in a lookup database.

### SWITCHING THE POLARITY OF ANSWER OPTIONS WITHIN THE QUESTIONNAIRE AND USING VARIOUS NUMBERING SCHEMES: EFFECTS ON DATA QUALITY IN ONLINE ACCESS PANELS.

Author: Struminskaya, Bella; Schaurer, Ines; Bosnjak, Michael  
Organisation: GESIS - Leibniz Institute for the Social Sciences,  
Germany

**Relevance & Research Question:** Verbal and numeric labels in scalar questions have received a lot of scholarly attention. It is well documented that verbal orientation of scales and adding numbers to anchor the scales influence respondents' answers. Little is known, however, about switching the scale directions within one questionnaire. This may affect the answers as some respondents miss the fact of the switch (Dillman et al. 2009).

**Methods & Data:** We test whether switching the verbal orientation of scales and whether the choice of a starting point of numbered scales affect the answers. For that purpose, two experiments will be implemented in the upcoming wave of the GESIS Panel, a probability-based offline recruited mixed-mode (online and mail) panel of the general population in Germany. The first experiment tests the effects of switching the direction of the scale ("strongly agree" to "strongly disagree" and vice versa). The second experiment tests different labeling options. It has three conditions: 1) verbal labeling for end points only and no numbers, 2) fully labeled, starting with 0 and 3) fully labeled, starting with 1.

**Results:** The field time of the questionnaire starts on December 12, 2013 and ends in the middle of January 2014. The results will be available at that point. The analysis plan for the first experiment is to examine measurement error by comparing means and response distributions. We expect these to differ due to switching as respondents overlook that the order has been reversed. Effects are expected to be more pronounced among respondents who tend to satisfice. Thus, we will compare respondent groups by motivation, cognitive ability, and panel tenure. For the second experiment we will examine the occurrence of a midpoint shift and which of the numbered scales is closer to the scale with polar labels only.

**Added Value:** This presentation will be of interest to survey researchers who work with online access panels as well as online access panel providers. Often the questionnaire is put together by multiple researchers or clients in which case using multiple scales and various numbering schemes within one questionnaire are very likely.

## THE QUALITY OF EGO-CENTERED SOCIAL NETWORK DATA IN WEB SURVEYS: EXPERIMENTS WITH A VISUAL ELICITATION METHOD

Author: Matzat, Uwe; Snijders, Chris; Marcin, Bober  
Organisation: Technische Universiteit Eindhoven, The Netherlands

**Relevance & Research Question:** Traditionally, the measurement of ego-centered social networks is done with the help of an interviewer who is available for assistance and who can motivate the respondent to continue with the answering procedure. The most often used method to collect ego-centered network data was proposed by Burt (1984): first a contact list with name generators, then name-interpreters, and finally the inter-alter response matrix. Nowadays, network data are often collected via web surveys using the same three kinds of questions. However, research has shown that this procedure leads to a reduction of data quality, probably because respondents tend to answer items mechanically (Matzat & Snijders 2010). We present the results of an online experiment that tests the usefulness of a visual way of eliciting participants' responses to network items. We test whether the 'quality of the data' (see below) collected in this way improves, when compared to the standard procedure implemented in web surveys. We hypothesize that participants find the experience more enjoyable, leading to an improved data quality.

**Methods & Data:** The implemented web survey tool presents the name interpreter and the inter-alter-response matrix in such a way that the participants immediately observe their own social network emerging. We test our hypotheses on a student sample and a sample of members of a commercial opt-in internet panel (total n=725). The randomized experiment uses a between subject design with the visual elicitation method as treatment and the standard data collection method as control condition. We test hypotheses about effects of the visualization method on, among others, the drop-out rate, the number of missing values, and the tendency to answer questions mechanically, using multivariate linear and logistic regression analyses.

**Results:** An important finding is that respondents answered less often mechanically. At the same time, more respondents had difficulties in understanding how to answer, leading to more missing values. Drop-out was negligible under both conditions.

**Added Value:** The findings indicate that the tool should be simplified more for respondents. Nevertheless, they demonstrate that a visual way of eliciting participants' answers about ego networks in web surveys is in principal useful.

## B9: INNOVATION BOTTOM UP: CROWD SOURCING UND CO-CREATION

**Session Chair:** Oliver Tabino  
(Geschäftsführer, Q | Agentur für Forschung GmbH,  
und linkfluence Germany GmbH)

### Referenten:

- Sabine Haas (Geschäftsführerin, result Institut für digitalen Wandel GmbH) und Johannes Mirus (Leiter Produktentwicklung, result Institut für digitalen Wandel GmbH): Crowdsourcing in der Marktforschung
- Detlef Happel (Leiter, Hello!nnovation, Dialego AG): Nutzenorientierte Innovation durch intelligente Co-Creation

Co-Creation bindet Kunden aktiv in die Produktentwicklung ein. Was kann Co-Creation? Welche Instrumente haben sich bewährt? Wo liegen die Grenzen? Die Session gibt einen aktuellen Einblick, wie sich die „Kreativität der Massen“ erschließen lässt.

## C9: FACEBOOK

### DISTINCTION 2.0 — RECEPTION AND EVALUATION OF CULTURAL CAPITAL ON FACEBOOK

Author: Oehrl, Mareike  
Organisation: Universität Hohenheim, Germany

**Relevance & Research Question:** Facebook is not just a web site. It has become one of the main platforms for young internet users' online activities and serves as a social space where users can stage their capital. By now, research on the implementation of Bourdieu's work on Facebook has hardly addressed cultural capital – in contrast to social capital. Therefore, this study explores the reception of demonstrating cultural capital in Facebook status updates by others and asks for criteria which define a post as legitimate or pretentious.

**Methods & Data:** In order to understand students' Facebook usage, 12 semi-structured interviews were conducted, based on a theoretically quoted sample. Besides open exploration of ways of self-expression, this study focused on the ratings of 8 presented Facebook status updates. These were pre-selected, using social support, information and humor as theoretical categories for choosing them, as they have already been identified as important for usage and reception of status updates by previous studies. Moreover, a fourth category contained posts which showed cultural capital, without including any of the categories mentioned before. Each of the four categories was presented as a (1) legitimate and (2) pretentious post to the recipients.

**Results:** Results indicate that there are different criteria for rating status updates: In addition to the deductive categories humor, information and social support, also achievement, presentation and form were identified as relevant by this study. For being received as legitimate, posts have to be trustworthy, modest, spontaneous and coherent with previous posts and only contain socially recognized knowledge or achievements. In contrast, pretentious posts are exaggerated, are characterized by narcissism, complacency and lack of personal performance. Moreover, users' criteria for evaluation seem not to be dependent from individual posting frequency.

**Added Value:** This study helps to broaden the understanding of Facebook status updates' reception and results can also be applied to commercial Facebook usage in order to boost legitimacy and therefore acceptance of posts.

## SOCIAL MEDIA RELEVANCE FEATURES AND THEIR IMPACT ON ONLINE RELATIONSHIP MANAGEMENT — INTRODUCING A MULTIDIMENSIONAL FRAMEWORK

Author: Wiedmann, Klaus-Peter; Fritz, Sebastian  
Organisation: Leibniz University Hannover, Germany

**Relevance & Research Question:** In this paper, a multidimensional framework of social media and its ascendant in its full complexity is provided and investigated. Consequently, the research focus is on social media unique relevance features (SMURF), consisting of four dimensions, namely (1) customer-brand relation, (2) customer-customer relation, (3) customer-community relation and (4) customer-channel relation, and their related outcomes for consumer's perception and behavior concerning a social media brand presence (SMBP). Each SMURF dimension is driven by ten indicators, e.g. intimacy, transparency and opinion-sharing.

**Methods & Data:** As SMBP perception and behavior are the defined constituents, adapted items of already existing and tested reflective measures for image, satisfaction, trust, loyalty and usage intention were used. In addition, ten formative indicators for each dimension of the SMURF construct were applied in this study. With regard to all reflective and formative measures, they were specified to those Facebook brand fan page which has been tracked most frequently within the last six month by the relative respondent.

**Results:** All four formative indicators, summarized as the essence of SMURF, show a significant correlation with this global factor in support

of external validity. All reflective measures exhibit satisfactory values in terms of item reliability, internal consistency and discriminant validity. Moreover, the calculated  $R^2$  values are indicative of a moderate to substantial performance. All Q-square values are clearly greater than zero, thus a high predictive relevance of the estimated PLS structural equation model is suggested.

**Added Value:** The first contribution of this paper is to provide a multi-dimensional framework of value-based drivers of SMURF. Second, the empirical findings contribute to explain the consequences of social media attractiveness which provide a great social appeal. In this study, customers who are strongly attracted to a brand fan page on Facebook experience a high positive SMBP perception as well as a high positive SMBP behavior. Third, the data analysis of the applied PLS-SEM approach demonstrates that being strongly attracted to a SMBP is primarily determined by a positive affective bond between customer and brand, here regarding perceived pleasure, resulting in an engaged social media relationship.

## EXPLORING THE FACEBOOK TWO-STEP FLOW: A SURVEY ON OPINION LEADERSHIP IN SOCIAL NETWORKING SITES

Author: Neubaum, German; Winter, Stephan  
Organisation: University of Duisburg-Essen, Germany

**Relevance & Research Question:** In the early days of mass media, Katz and Lazarsfeld (1955) described a two-step flow of communication in which opinion leaders received information from the media and passed them along to their acquaintances. Nowadays, this process of influencing peers' attitudes is also possible in current Web 2.0 applications: Social networking sites (SNS) such as Facebook offer various opportunities to express opinions on politics or public affairs and to direct the attention of the whole friend list to specific topics. This research aims to identify (1) the personality traits of Facebook opinion leaders, (2) the features they use for influence others and (3) the psychological motives they pursue.

**Methods & Data:** We conducted an online survey (N = 527) which included personality variables such as extraversion, personality strength, and political interest, as well as questions about participants' Facebook use in the context of politics and public affairs (e.g., writing status updates or sending private messages) and the related motivations. Furthermore, it was assessed to which degree participants perceive themselves as influential among their Facebook friends (based on Gnams & Batinic, 2011).

**Results:** Political interest and personality strength emerged as significant predictors of perceived Facebook opinion leadership, while the influence of extraversion was not significant. With regard to the motivations underlying the usage of specific features, the motive of distributing information predicted the frequency of private messages on political topics. Public postings via status updates were predicted by the motives information and self-presentation. Persuasion, as a motive, did not predict private or public postings.

**Added Value:** These findings contribute to re-defining the concept of opinion leadership in online realms: While people with high personality strength and political interest also influence others in the online context, extraversion (which was related to offline opinion leadership) does not seem to be relevant online. Opinion leaders online use specific SNS features according to whether they want to inform others (via private messages) or inform and simultaneously impress others (via public messages). These results have implications for how to identify and motivate opinion leaders in the context of online campaigns.

## D9: ONLINE POLITICAL WILL

### TOTALLY DIGITAL? PATTERNS OF INDIVIDUAL POLITICAL COMMUNICATION AMONG GERMAN YOUTH.

Author: Wiederholz, Jan-Erik  
Organisation: Heinrich-Heine-Universität Düsseldorf, Germany

**Relevance & Research Question:** In my dissertation, I have investigated patterns of individual political communication (reception of political information, interpersonal political communication and political participation) among German youth, with a special focus on their use of political online communication. My research deals with the following questions: To what extent do German youth use online media for individual political communication? Which patterns of individual political communication can be found? The goal of the dissertation is to (1) develop a typology based on a various activities related to political communication, and (2) investigate which factors determine the kind of individual political communication of German youth.

**Methods & Data:** The data was collected in August 2013 through a standardized web survey of 1000 young adults from Germany who were born between 1980 and 1994. The candidates are recruited via an online access panel, and selected using a quota sample based on demographic characteristics of the age group under study. Cluster analysis is used to identify the different patterns of individual political communication.

**Results:** Five types of individual political communication were found: (1) Apathetics (no use of political communication at all), (2) Passive Offliners (political information only offline, no participation except voting), (3) Slacktivists (political information online and offline, low degree of political participation), (4) Traditional Engaged (political information online and offline, high level of conventional political participation), (5) Digital Citizens (political information online and offline, high level of conventional and unconventional political participation).

**Added Value:** This study provides insights about various forms of political communication activities among German youth, both online and offline. The results of my research show that the generation of the

so-called 'digital natives' are in fact a very heterogeneous group with different patterns of individual political communication. Surprisingly, online forms of political communication are used by a relatively small proportion of young adults, whereas traditional forms of political communication are much more widespread.

### MECHANISMS OF ENGAGEMENT: HOW POLITICAL PROTEST STARTS ON SOCIAL MEDIA

Author: Batorski, Dominik; Grzywinska, Ilona  
Organisation: University of Warsaw, Poland

**Relevance & Research Question:** Protests against ACTA started in Poland in January 2012 when a local NGO's revealed that the Polish government accepted the Anti-Counterfeiting Trade Agreement without public consultations. The issue, publicized within social media, resulted in over 40000 people protesting across Poland and more than 500,000 mobilized online through social media. Facing unprecedented political pressure, the Polish Prime Minister agreed to withdraw from ACTA, becoming an example for other EU countries. In this paper we investigate what are the social mechanisms leading to the formation of a social movements and what is the role of social media like Facebook in this process? We focus on examining conditions necessary for mass mobilization.

**Methods & Data:** To examine these questions a triangulation of research methods was applied. Detailed data from communication on Facebook pages against ACTA were collected through Facebook API and quantitatively analysed. Furthermore interviews with government officials, key opinion leaders and protesters were conducted.

**Results:** Here we show how citizens can mobilize using social media in order to oppose controversial laws. We show the importance of communication through social media for the creation of common knowledge, which is a prerequisite for collective action. We describe the impact of social media on traditional media agenda and how grassroots expertise is produced by crowdsourcing. But also we prove that grassroots involvement is predominantly temporary and short-lived.

**Added Value:** The study shows the necessary conditions for the start of grassroots protests, as well as how new communications technologies can facilitate the fulfilment of these conditions. It is a source of a new knowledge about the mechanisms by which bottom-up collective action arise.

## A10: SELECTING OR MIXING MODES

### EVALUATING MIXED-MODE REDESIGN STRATEGIES AGAINST BENCHMARK SURVEYS: THE CASE OF THE CRIME VICTIMIZATION SURVEY

Author: Klausch, Thomas [1]; Hox, Joop [1]; Schouten, Barry [1,2]  
Organisation: 1: Utrecht University; 2: Statistics Netherlands, The Netherlands

**Relevance and research question:** Cost pressures continue to necessitate switching single-mode designs, such as face-to-face (F2F), to inexpensive mixed-mode (MM) designs. This, however, involves the risk of finding different estimates in the MM and single-mode designs, if total survey error is affected by the redesign strategy. Differences in measurement and non-observation error are particularly relevant candidates for design differences in total error, also called measurement and selection effects (MEs and SEs). Knowledge about these effects is relevant to evaluate the usefulness of a MM redesign. We demonstrate the estimation of MEs and SEs for the case of the Dutch Crime Victimization Survey (CVS).

**Methods and Data:** We administered a split-ballot design, in which four independent samples (n=2,200 each) were drawn from the Dutch population register and assigned either to one of three sequential mixed-mode surveys (web, mail, and telephone, followed by F2F, respectively) or to a single-mode F2F condition, which served as benchmark. Additionally, the respondents to web, mail and telephone were approached a second time in F2F after four weeks. This step made available 'within-subject' estimates of MEs, which were exploited to disentangle MEs and SEs in the split-ballot design.

**Results:** Largest design differences in estimates were found for the mixed-mode mail-F2F design and, with smaller magnitude, also for web-F2F. The telephone-F2F survey showed mainly insignificant differences against the benchmark. In evaluating MEs and SEs, we found that MEs were the predominant cause of the differences between both, mail-F2F and web-F2F, and the benchmark, whereas SEs were generally very small. MEs and SEs were absent when comparing telephone-F2F against F2F.

**Added Value:** In the CVS case, the large MEs for the mail-F2F and web-F2F designs would require further redesign of questionnaires (e.g. by unimode strategies) to balance measurement error in mail and web towards F2F. Telephone-F2F yielded comparable estimates vis-à-vis the benchmark due to similar measurement error properties and could be implemented directly. The absence of SEs might suggest that the MM designs were successful in mitigating non-observation error differences between designs. More generally, our method could be used by other researchers to evaluate MM redesigns for other surveys.

### EXPLORING SELECTION BIASES FOR DEVELOPING COUNTRIES — IS THE WEB A PROMISING TOOL FOR DATA COLLECTION?

Author: Tijdens, Kea; Steinmetz, Stephanie  
Organisation: University of Amsterdam, The Netherlands

**Relevance & Research Question:** The increasing popularity of web-surveys has triggered a heated debate about their quality for scientific use. Web-surveys offer advantages such as worldwide coverage, cost benefits and fast data collection, but are mostly not representative. Findings for developed countries consistently show that young highly educated men are overrepresented in web-surveys. While the topic of representativeness has been extensively discussed for developed countries, the question remains whether similar biases can be found for developing countries. This paper aims to explore to what extent web and face-to-face surveys produce reliable data regarding socio-demographic characteristics for eight developing countries (China, Ghana, Indonesia, Kenya, Mozambique, Senegal, Uganda).

**Methods & Data:** We pooled data of the self-administered WageIndicator web-survey and the representative WageIndicator face-to-face surveys on work and wages (8 countries, 2010-2012, N = 16,026 web-sample; N = 18,392 face-to-face sample). Using logit analysis, the chance of inclusion in the web-sample is explored, testing three hypotheses. Comparing the web and face-to-face samples with population characteristics, we assume that both modes are confronted with the same hard-to-reach groups (H1). We assume that young, high educated, male, single and high income individuals are overrepresented in the web-sample (H2). We assume that these effects will be smaller in countries with a higher internet penetration rate (H3).

**Results:** Whereas no support is found for hard-to-reach groups (H1), the analysis shows evidence for good-to-reach groups: men and women aged 20-35 are highly overrepresented in both modes. Concerning H2 across all countries we find support that individuals aged 20-24, male, single, high educated and with a high income are more likely to be included in the web-survey. H3 is not supported. In contrast, we find smaller effects of socio-demographic characteristics (except gender) on web-survey participation for low access countries.

**Added Value:** Considering the problems related to surveying in developing countries web-surveys might be a promising cost- and time-efficient data collection tool to access data of populations so far under researched. This study contributes to the understanding of the nature of bias in volunteer web-surveys. Though Internet access is still low in developing countries, their fast increase makes a growth in web-surveys likely.



## WHICH FIELDWORK METHOD FOR WHAT TARGET GROUP? HOW TO IMPROVE RESPONSE RATE AND DATA QUALITY.

Author: Wulfert, Tanja; Woppmann, Andreas  
Organisation: advise, Germany

**Relevance & Research Question:** The success story of the internet and the increasing distribution of mobile and tablet devices are elementary changing the world of data collection. At the beginning of online research it was heavily discussed about the validity of this research approach. Today we face the challenge to choose the correct technique for data collection: online surveys via mobile, tablet or computer? Or still with classical approaches as face-to-face or CATI interviews? This research will give us answers to the questions: when are respondents willing to disclose most reliable data? Which channels evoke the least rejecters and drop-out rates? And how long are respondents willing to give correct answers and what is the maximum amount of minutes respondents can be asked in each channel [online by computer, tablet or mobile, or interviewed by CATI or face-to-face]?

**Methods & Data:** In cooperation with the department of Sociology at the University of Vienna 200 face-to-face interviews are conducted within Austria. Quotas are set for age, sex, education and the usage of different devices in order to guarantee a representative sample and sufficient respondents using mobile devices like smartphones or tablets. Amongst others, respondents were asked in an approximately 20 min survey which kind of survey technique they prefer, they accept or reject, which type of question they prefer for each channel and how much time they are willing to spend to answer a questionnaire depending on the device.

**Results:** Fieldwork is still in progress and will be finished in December 2013. Final results will be available in January 2014 and include a multivariate analysis of the data in order to identify different user groups.

**Added Value:** Based on the findings of this research the setting of data collection can be adapted according to different groups of respondents (e.g. age, sex, education). This helps to reduce drop-out rates and rejecters. In addition to that, benefits and barriers for each setting can be evaluated. Using these results helps to improve the convenience and satisfaction for the respondents and therefore data quality.

## B10: MEDIEN ZWISCHEN KONVERGENZ UND DIVERGENZ: REICHWEITENFOR- SCHUNG IM WANDEL

**Session Chair:** Wolfgang Dittrich  
(Geschäftsführer, d.core GmbH): Mediennutzung und Medienforschung - Eine Zweckgemeinschaft und ihre Perspektive

### Referenten:

- Gabriele Ritter (Ressortleitung Print/Online, Arbeitsgemeinschaft Mediaanalyse {ag.ma}): Vom Fragebogen zum High-Tech-Tool-Kit. Ein JIC auf dem Weg in die Zukunft
- Dr. Hartmut Krause-Solberg (Marktforschung Axel Springer und Sprecher des Forscherkreises best for planning): Mediennutzung 360 Grad in der Markt-Media-Studie, best for planning - Möglichkeiten, Herausforderungen und Grenzen der Verbindung von f2f-Studien mit technischen Messdaten
- Sebastian Henning (Projektleiter, WEMF AG für Werbemedienforschung): MACH3 - die Schweizer Printforschung und der Gesellschaftswandel: Einführung innovativer Erhebungsmethoden

Die Reichweitenforschung als Königsdisziplin der Medienforschung fungiert als Grundlage für die Werbeplanung in allen Mediengattungen. Allein in Deutschland für die Verteilung von über 20 Milliarden Werbeumsätze. Die früher überschaubare Zahl an Werbeträgern hat sich zu einer Vielfalt an Mediengattungen entwickelt, die aus Nutzersicht kaum noch zu überblicken sind. Was nicht überblickt wird, kann auch nicht erfragt werden, was immer und überall stattfindet, kann nicht mit den bewährten Methoden gemessen werden.

Der aktueller Stand der Forschung in den verschiedenen Mediengattungen sowie die Versuche, Befragung und technische Messung im Konsens aller Mediengattungen den neuen Rahmenbedingungen anzupassen, ist der Schwerpunkt der Session.

## C10: TWITTER

### IDENTIFYING AND CATEGORIZING TWITTER PUBLICS

Author: Maireder, Axel; Schloegl, Stephan  
Organisation: University of Vienna, Austria

**Relevance & Research Question:** The concept of 'publics' is used in political campaigning and public relations to define groups relevant for an organisation's communication strategy. Hereby, a public is defined as

a group of individuals concerned with the same problems or issues, who regularly exchange information and arguments related to these issues. While 'traditional' forms of online interaction [e.g. discussion boards] often take place at virtual 'places' we can 'localize', this is not the case in a Twitter context where 'spaces' are structured by connections between users. We developed a method to identify Twitter publics, methodologically based on the assumption that shared follower connections are a good indicator for common interest.

**Methods & Data:** Starting with distinct sets of Tweets (containing a specific Hashtag for example), we crawl information on follower/followee (f/f) connections for each user represented in the dataset from Twitter's API. Next, we calculate the f/f-network and run a cluster algorithm ('walk trap') to identify congestions within the network. We then analyse and categorize the profiles of the users within each cluster to identify common characteristics in order to describe them as meaningful social aggregates.

**Results:** We tested the method for three cases that considerably differed in terms of the timeframe of monitoring and the number of users: (1) Tweets with the Hashtag #aufschrei that refers to a socio-political debate on sexism (collection period 24 hours, 8K users), (2) Tweets mentioning Austrian political parties (6 months, 2K 'top' users), and (3) Tweets referring to the sports event 'Red Bull X-Alps' (2 weeks, 900 users). In each case, we identified several main clusters (>1% of users), all representing specific publics/communities connected to political parties (cases 1, 2), specific practices (1, 2), geographical locations (all), professional interests (2, 3), or other characteristics. As expected, users clusters also significantly differed in terms of activity structure.

**Added Value:** Our method can be used to identify meaningful social structures within Twitter networks, allowing political parties, organisations or companies to identify interest groups and influential users for different campaign, PR and marketing purposes.

## PREDICTIVE MODELING IN TURBULENT TIMES – USING TWITTER TO FORECAST THE EUR/USD EXCHANGE RATE DURING THE EURO CRISIS

Author: Janetzko, Dietmar  
Organisation: Cologne Business School, Germany

**Relevance & Research Question** Fast, global and sensitively reacting to political, economic or social events of any kind – These are features social media like Twitter share with foreign exchange markets. The research question of this paper asks whether data harvested from Twitter facilitates prediction of the EUR/USD exchange rate.

**Methods & Data** The leading and as yet unexplored assumption guiding this work is that time series of Tweet counts have the potential to forecast exchange rates. This assumption prompted the development of a Twitter-based model that harnesses regARIMA analyses for out-of-sample ex post forecasts of the EUR/USD exchange rate. The analyses made use of Tweet counts collected from 01/01/2012 – 27/09/2013 via an R application that used the Otter API of topsy.com. Given two billions Tweets a day, selection of concepts was imperative. The dis-

course on the Euro crisis was expected to be such a selector that has the potential to predict the EUR/USD exchange rate. To identify suitable concepts the analysis followed a 2-step selection. (1) A heuristical qualitative analysis assembled a candidate-set of 594 concepts, e.g., Merkel, Greece, Cyprus, crisis, chaos, which are expected to covary with the volatility of the EUR/USD exchange rate. (2) Cross-validation using window averaging with a fixed-sized rolling origin was deployed to select concepts and corresponding univariate time series with error scores below chance-level as defined by the random-walk model.

**Results** With regard to 17 concepts (covariates), in particular Italy, Standard & Poor's risk and banking, the out-of-sample predictive accuracy of the Twitter-based regARIMA models was found to be repeatedly better than that obtained from the random-walk model in 1-step ahead forecasts of the EUR/USD exchange rate. This advantage was evident on the level of forecast error metrics (MSFE, MAE) and on the level of model fit metrics (AIC, BIC) when a majority vote over different estimation windows was conducted.

**Added Value** The results challenge the semi-strong form of the efficient market hypothesis [Fama, 1991] which when applied to the FX market maintains that all publicly available information is already integrated into exchange rates.

## CANDIDATES' TWITTER USE IN THE GERMAN ELECTION 2013

Author: Gummer, Tobias; Roßmann, Joss; Wolf, Christof  
Organisation: GESIS - Leibniz Institute for the Social Sciences, Germany

**Relevance & Research Question:** Twitter gained popularity around the world within the last few years. This development did not happen unrecognized by the political sphere. Consequently, political parties increasingly use Twitter in electoral campaigns. Our research questions are twofold and focus on how candidates made use of Twitter in the German Election 2013: First in a descriptive and static manner, how is the political Twitter landscape shaped – how is Twitter used and by whom? Second taking dynamics into account, how does the usage evolve during the election campaign and in the post-election period?

**Methods & Data:** This paper uses a unique data set, which relies on an improved sampling method. Candidate lists of the well-established parties are used to identify the full population of candidates using Twitter. Hence, we can draw conclusions on a very solid base. Data collection started 3 month before Election Day and continues until government formation will be completed. The data set will contain all tweets of the candidates as well as all tweets which directly address a candidate.

**Results:** As the data collection is still in progress, we will be able to present first results after the government has been formed. Results will include an indicator for the intensity of Twitter campaigning based on the frequency with which candidates tweet. Thereby, we will compare the intensity between pre- and post-election period. Furthermore, we will provide a categorization of different patterns of Twitter usage. Hence, we can investigate whether Twitter is used as a supplement to traditional means of campaigning or as a new way of interaction.

**Added Value:** By using the tweets of all candidates as well as including the post-election period, we can analyze the big picture of the candidates' Twitter usage in the German Election 2013. This allows us to gain new insights into the campaigning of candidates. That said, our analyses draw an important distinction between tweeting as a means of campaigning by the candidates and tweeting as a more general form of political communication. In summary, our work enhances the knowledge on the role of Twitter in electoral campaigning.

## D10: ONLINE PUBLIC SPHERE

### IS THE INTERNET EXPANDING CITIZENS' OPPORTUNITIES FOR SOCIAL AND POLITICAL PARTICIPATION? SOME EVIDENCE FOR THE EUROPEAN UNION

Author: Vicente, Maria Rosalia  
Organisation: University of Oviedo, Spain

**Relevance & Research Question:** As countries have started to open their governments on the Internet, a central debate has emerged on whether this would facilitate citizens' social/political participation or whether online engagement would mirror the traditional inequalities observed in offline participation, which refer to the fact that the most advantaged groups (in terms of income, education, etc.) are the most likely to participate. Research has found mixed empirical evidence. This paper tries to throw some light on this issue by addressing the following question: Is the internet expanding Europeans' opportunities for participation? With this aim, the paper analyzes whether Europeans participate through the following online activities: contacting political representatives, consulting policy documents, taking part in online consultations, discussions and collaborative platforms.

**Methods & Data:** Data comes from an online panel survey on e-government use, carried out in November 2012 with 25,000 respondents. The population are Internet users in the 28 members of the European Union. Probit regressions are used to explain individuals' decisions on online participation. The set of explanatory variables included: individuals' socio-economic characteristics, digital skills, opinion about public services' quality, and participation in online social networks. Cross-country variation is controlled for by including an index which measures e-government development in each nation.

**Results:** Results show that online participation is mainly associated with digital skills and the participation in online networks, whereas income does not matter. However, significant gender and age gaps are found: women and older people tend to participate less. A new interesting finding is the negative association found between education and online participation: Europeans with lower educational attainment are more likely to participate in online consultations, discussions and collaborative platforms and to contact political representatives by e-mail than those with higher education.

**Added Value:** The contributions of this paper are threefold. It analyzes a wider scope of online participation activities compared to prior works. It presents cross-country evidence, while previous research has focused on single countries. Finally, the recent data used for the analysis allows to draw a very up-to-date picture on the European situation, and might provide useful inputs for policy-making.

### FRAGMENTATION AS A STRUCTURAL FEATURE OF ONLINE PUBLIC SPHERE

Author: Grzywinska, Ilona; Batorski, Dominik  
Organisation: University of Warsaw, Poland

**Relevance & Research Question:** The discussion over Internet public sphere is almost always indissoluble with the issue of discourse fragmentation. Many authors claim that, despite the enormous diversity of views appearing online, users generally seek out information and interaction that reinforces their private positions, avoiding engagement with difference. Other internet-democracy commentators point out that on the contrary, Internet enhances clashing of different views and opinions claiming that users online are much more exposed to difference than in offline world. However the research undermining the idea of fragmentation was mainly conducted in fostered environment like political discussion groups (Minnesota e-democracy) or was based on data from interviews with the users and there is very little research supporting this thesis conducted in social media i.e. users everyday environment. In this study authors show fragmentation within popular social networking sites, verifying if online national media (the online platforms of traditional media outlets) play the role of general interest intermediaries or are they also subjected to fragmentation.

**Methods & Data:** The outlined issues will be analyzed within the biggest global social networking site — Facebook. To answer the research questions, authors analyzed data from Facebook pages of Polish political parties, politicians and main traditional media (press, radio, TV and internet news sites). All together 206 fan pages were analyzed and the data set considered all the active users within them. Data was collected using Facebook API with the help of a tool Sotrender. In order to examine the issues presented in the paper, affiliation networks between users and fanpages were analyzed.

**Results:** The results show that the public domain in the social media does not have a homogeneous character and is divided into smaller sub-groups with consistent ideology.

**Added Value:** This research shows the significance of traditional media for the fragmentation of online public sphere. The authors also present the importance of mechanisms supporting traditional media systems for the quality of political debate.

## A11: REPRESENTATIVITY AND SELECTIVITY IN ONLINE PANELS

### OFFLINE HOUSEHOLDS IN THE GERMAN INTERNET PANEL

Author: Bossert, Dayana; Holthausen, Annette; Krieger, Ulrich  
Organisation: University of Mannheim, Germany

**Relevance & Research Question:** This presentation examines how including offline households (households without access to the internet) in a probability-based online panel counters the problem of undercoverage which online surveys are prone to. Taking into account coverage error is a central issue when conducting a survey which aims to be representative for the general population.

**Methods & Data:** We use data from the recruitment and first 8 waves of the German Internet Panel (GIP), a longitudinal internet survey run by the University of Mannheim. The GIP is based on a probability sample of individuals living in private households. The recruitment was done offline by short face-to-face interviews in 2012. All offline households were offered a simple PC and a 3G internet connection. In a first step we use data from the recruitment interview to visualize the differences between respondents with and without internet. In a second step we compare online panel registration rates between those two groups. To evaluate the impact of the participation of offline households on sample representativeness we compare the panel composition with and without offline households to the German entire population. We use German Census data as benchmark for this comparison. Using longitudinal data of the GIP we analyze differences in participation and attrition rates between online and offline households over time.

**Results:** Analyses show that offline and online households differ in several aspects from each other. People without internet are older, more often female, more often low and medium educated and live more often in single households. These results illustrate the coverage error which is usually connected to online surveys. Sign up rates to the panel are considerably lower for offline households (15%) compared to online households (50%). However, we can show that adding these people to the panel improves sample representativeness with respect to the variables (age and gender) we compared.

**Added Value:** Researchers and practitioners will learn about the benefits and quirks of our approach to counter noncoverage of non-internet households in an online survey.

### TARGETING THE BIAS – THE IMPACT OF MASS MEDIA ATTENTION ON SAMPLE COMPOSITION AND REPRESENTATIVENESS OF VOLUNTEER WEB-SURVEYS

Author: Steinmetz, Stephanie (1); Öz, Fikret (2); Tijdens, Kea (1)  
Organisation: 1: University of Amsterdam, The Netherlands;  
2: Institut Arbeit und Technik (IAT), Germany

**Relevance/Research Question:** The increasing use of volunteer web-surveys has often been criticized as their results are not representative for the population of interest. While the discussion has mainly focused on different weighting techniques to correct for selection biases, this study addresses the question whether the bias of such samples might be corrected through specific mass media attention. Scientific literature, so far, has not addressed the different recruitment strategies of volunteer web-surveys in more detail. The knowledge of how to reach a large and heterogeneous group via web-marketing has, however, increased tremendously. Our study aims to explore whether selection bias in a volunteer web-survey might be tackled through media attention. Three sub-questions are addressed: How long does the effect of media attention last on average? Does the sample composition change in the periods of massive media attention? Which sample characteristics are subject to changes?

**Methods/Data:** The 2009-2013 data from the continuous, volunteer German WageIndicator web-survey (Lohnspiegel) will be used. The Lohnspiegel website has a 'Salary Checker' where web visitors can calculate their monthly wages, based on the survey data. Since 2009, the overregional newspaper 'Bild Zeitung' has published every six months on its first page the top-hundred highest earning occupations. First, we analyse the change in the number of web visitors per day (prior and posterior to the event) via Google analytics. Second, we divide the sample between the period of increased and regular web visits and compare the two samples for socio-demographic and work-related characteristics.

**Results:** The preliminary findings show that in periods of mass media attention the number of visitors doubles and the number of questionnaire submissions increases fourfold. However, for the composition of the sample hardly any effects can be observed. This implies that groups so far underrepresented in the web-sample are hardly motivated to take part in a survey through mass media events.

**Added Value:** This topic has not been addressed in the scientific discussion about volunteer web-surveys. Therefore, it will offer new insights and an alternative approach to deal with selection biases in volunteer web-surveys.

## USING PARADATA TO PREDICT AND TO CORRECT FOR PANEL ATTRITION IN A WEB-BASED PANEL SURVEY

Author: Roßmann, Joss; Gummer, Tobias  
Organisation: GESIS - Leibniz Institute for the Social Sciences, Germany

**Relevance & Research Question:** Attrition is an important methodological challenge to panel surveys (Lynn 2009). Still, there is a remarkable shortage of variables which are associated with both, the propensity of respondents to stay in the panel and the variables of interest. As a result, propensity score weights which are designed to correct for this type of nonresponse frequently yield mixed results. This paper addresses the question whether paradata can successfully be applied to improve the prediction of attrition in panel Web surveys. Their main advantage is that they are collected as a byproduct of the survey process. However, it is still an open question which paradata can be used to model attrition and to what extent these paradata are correlated with variables of interest (Kreuter and Olson 2013).

**Methods & Data:** We use logistic regressions to model attrition in a 7-wave panel Web survey and to compute propensity score weights. The models are fitted with sets of socio-demographic, substantial, survey evaluation, and paradata variables. The latter include measures of response times, user agent strings to determine the device used by the respondent, as well as indicators of the respondents' response behavior. Finally, we use supplemental cross-sectional Web surveys to assess the effectiveness of propensity score weights based on different sets of variables.

**Results:** Our results show that including paradata significantly improves the prediction of panel attrition. However, the paradata variables do not supersede socio-demographic, survey evaluation and substantial variables, but they complement them. Yet, the paradata are only moderately correlated with variables of interest at best. As a result, including paradata does not significantly improve the effectiveness of propensity score weights.

**Added Value:** This paper enhances the existing knowledge in several ways: It presents a set of paradata variables and provides empirical tests of their capability to explain attrition. We show that these paradata can successfully be used to create auxiliary data in a cost-efficient way. At the same time, we demonstrate that they do not ultimately help to correct for panel attrition. Thus, we conclude that further research on paradata, panel attrition and its correction is needed.

## B11: DATEN FÜR ALLE! DO-IT-YOURSELF IN DER MARKTFORSCHUNG

**Session Chair:** Claas Lübbert (Redaktionsleiter, markforschung.de)

### Referenten:

- Martin Grupe (Geschäftsführer, Vision Critical GmbH)
- Andera Gadeib (Gründerin, Smart Munk GmbH): Nach dem DIY Prinzip Online gewinnbringende Erkenntnisse generieren
- Hilarius Dreßen (Geschäftsführer, QuestBack GmbH)

Erst Ikea, dann Ryanair, jetzt die Marktforschung? Do-it-yourself setzt sich immer mehr durch: Bei betrieblichen Marktforschern, bei Entscheidungsträgern in unterschiedlichsten betrieblichen Funktionen, an Hochschulen und zunehmend selbst bei Laien. Wird Marktforschung so schneller, günstiger, einfacher, und so endlich für alle und alles verfügbar? Oder bildet sich ein Tummelplatz für Artefakte, Scheinergebnisse und teure Fehlentscheidungen? Diese Session lotet aus, was DIY-Marktforschung heute kann und wo die Grenzen liegen.

## C11: PRIVACY AND ETHICAL CONCERNS IN USER ENGAGEMENT

### ADDRESSING THE ONLINE PRIVACY DILEMMA: USING OPT-IN AND PRIVATE MESSAGES TO OVERCOME PRIVACY CONCERNS ASSOCIATED WITH NEW SNS MARKETING TECHNIQUES

Author: Demmers, Joris {1,2}; Dolen. van, Willemijn M. {2}; Weltevreden, Jesse W.J. {1}  
Organisation: 1: Centre for Applied Research on Economics and Management, Amsterdam University of Applied Sciences; 2: Amsterdam Business School, University of Amsterdam

**Relevance & RQ:** Technological advancements are increasingly allowing companies to collect, combine, and analyse consumer data from different online sources, including social network sites (SNS). This offers great new possibilities to marketers to target consumers with highly customized marketing content and enables companies to proactively address customers that voice their brand experiences and opinions online. However, the processes that facilitate these practices typically also lead to concerns regarding consumers' online privacy.

In a series of studies, we investigate to which extent customized targeting and online customer service on SNS lead to privacy concerns, how these concerns affect consumer decision-making, and how these concerns can be effectively addressed.

**Method:** We conducted one field study, three online experiments, and a survey. For the field study, we collected data from 153 people who voiced their experience with airlines on Twitter. For the experiments, we exposed a total of 991 participants to different conditions regarding companies' customer service (e.g. proactive versus reactive, private versus public) and customized targeting (e.g. opt-in versus no opt-in, disclosure versus no disclosure) on SNS. Finally, we questioned 190 participants on their attitudes towards customized targeting based on SNS data.

**Results:** Results show that proactive intervention with voiced brand experiences on SNS and customized targeting based on SNS status updates leads to perceptions of privacy infringement, which in turn negatively affects brand attitudes, ad effectiveness, and patronage intentions. However, no privacy concerns were reported when companies responded through a private rather than public message, customers could opt-in for the use of online personal data, or companies voluntarily disclosed that SNS data was used to target the consumer. Under these conditions, participants reported feelings of relational commitment instead, which increased customer acceptance of the message content.

**Added Value:** This study offers insights into the mechanisms underlying the effectiveness of SNS marketing practices, shows the impact of privacy concerns on consumer behaviour, and demonstrates under what conditions privacy concerns are evoked. To companies, this study underlines the importance of considering consumers' privacy when designing SNS marketing strategies and demonstrates how privacy concerns can be prevented by implementing a set of simple strategies.

## SUCCESSFUL COMMUNITY MANAGEMENT: WHAT DRIVES USER PARTICIPATION IN ONLINE RESEARCH COMMUNITIES?

**Author:** Klammer, Julia [1]; Van den Anker, Fred [1]; Fröhlich, Julia Katharina [2]; De Groote, Zacharias [3]

**Organisation:** 1: University of Applied Sciences and Arts Northwestern Switzerland, School of Applied Psychology, Institute for Research and Development of Collaborative Processes; 2: University of Bern Faculty of Business, Economics & Social Sciences, Institute for Organization & HRM, Department HRM; 3: Liveloop GmbH

**Relevance & Research Question:** Little empirical as well as conceptual work has been done on user participation in the context of online research communities using web 2.0 technologies. Still, recent studies on user participation show some good examples of how to apply online participation of open user crowds to new product development (e.g. Brabham, 2013; Füller, 2008). However, these findings cannot be generalized to private, small-scale online research communities that aim at stimulating intensive user participation as well as interaction in a rather short amount of time. The present study addresses this gap by empirically investigating the question what influences user participation in short-term online research communities.

**Methods & Data:** We initiated three online research communities within innovation processes using a social network based platform. All communities were small-scale communities with 34 to 50 members (N totaling 128). The communities lasted between 2 and 6 weeks and were moderated through discussions, diary, observation and ideation tasks as well as quick polls and videos. User participation was assessed by the amount of entries (blog post, discussion post etc.) posted by each community member. At the end of each community project we conducted an evaluation survey. This survey contained questions on moderation, instruction, usability, joy of participation and interaction with other participants.

**Results:** The results showed that the perception of moderation and instruction, like for example alternating questions, are positively related to user participation in online research communities. Moreover, joy of commenting posts and the interactive setting appeared to be positively related to user participation. Qualitative data analysis showed that aspects of social interaction, personal relevance and the opportunity to express one's voice were perceived as main drivers for participating in the community.

**Added Value:** This study is one of the first to systematically investigate user participation in online research communities. It contributes to theory and practice by investigating drivers of participation and takes an important step towards the integration of findings in this field with existing research on customer integration in the context of web 2.0 applications.

## ONLINE OBSERVATIONS AND VIRTUAL ETHNOGRAPHY – ETHICAL ISSUES OF A QUALITATIVE EXPERIMENT REGARDING FACEBOOK

**Author:** Belentschikow, Valentin; Müller, Nicholas Hugo

**Organisation:** Technische Universität Chemnitz, Germany

**Relevance & Research Question:** Social media platforms like Facebook allow people to build social relationships for reasons of social compensation and social enhancement (Zywica & Danowski [2008]. Empirical research focuses on reasonable cues why people form online relationships (e.g. Lemieux 2012; Khoo 2010; Boyd 2008; Walther et al. 2008; Whang et al. 2010) but tends to rely on quantitative measuring methods (Anderson et al. 2012; Schrammel et al. 2009): people are often asked to specify or rate how they would act in certain circumstances – what might be contradictory to what they would really do. The authors therefore conducted a methodologically triangulated experiment to confront the participants with their true online behavior, while considering ethical issues of (hidden) online observations and virtual ethnography (Hine 2000).

**Methods & Data:** A fictitious, female student account was created on Facebook considering all aspects of identity formation (e.g. profile picture, interests, timeline postings). Supported by a confederate, two theme-oriented, closed online groups (n=120) were accessed and friendship-requests were sent to almost all of its members (n=102). The participants were interviewed in independent group discussions and presented with a quantitative questionnaire afterwards, asking about their habits regarding online relationships as well as security related issues.



**Results:** Most of the invitations were accepted (1st group: 44/53, 2nd group: 40/49). The group discussions revealed a certain group behavior interfering with all other cues and the fact that no one had ever met Anna. Interestingly most of the participants emphasized the fact that accepting a request from the previously unknown Anna was an exceptional act. This contradicts most of the existing Facebook research using quantified self-reporting surveys. Still, the cheated access to and observation of a closed online group remains to be a highly critical barrier for scientific and market researchers.

**Added Value:** Following a case-based-ethics approach (Markham & Buchanan 2012) the authors discuss the need for hidden online observations and present implications for future research, focusing on people's behavior in online communication settings. Even though hidden observations have the appearance of being unethical, their results seem to get closer to people's true modes of behavior.

## D11: CHALLENGES IN INNOVATION

### COLLABORATIVE CROWDS: A QUANTITATIVE ANALYSIS OF COLLABORATIVE STRUCTURES ON CROWDSOURCING PLATFORMS

Author: Altmann, Julia; Bauer, Navina; Göldner, Stephan; Kalka, Romy; Solf, Anja; Schultheiss, Daniel  
Organisation: Technische Universität Ilmenau, Germany

**Relevance & Research Question:** Creative online crowdsourcing as a modern problem solving model is conquering traditional R&D. Diverse skills, expertise and talent of an undefined public are bundled on platforms for idea creation. So it comes as no surprise that collaboration has meanwhile come into focus. Experts state that in the future collaboration will become more important in crowdsourcing; platforms for creative ideas attract users with a collaborative ideology and provide collaboration features such as likes, ratings and commenting functions. It seems that online crowdsourcing is turning away from a concept of searching existing ideas towards a method to foster collaborative value creation. The present study was to examine the actual extent of collaboration on online crowdsourcing platforms and furthermore asked what type(s) of collaboration do exist.

**Methods & Data:** A quantitative content analysis of three completed idea contests on the online platforms Atizo, Innovationskraftwerk and Jovoto was conducted. A total of 8985 posts were analyzed. Most of the contributions were given on Jovoto (N=7517; 84 %) followed by Atizo (N=833; 9 %) and Innovationskraftwerk (N=608; 7 %).

**Results:** A descriptive analysis of the data showed that results varied among the online platforms concerning the contribution of ideas, likes or dislikes of ideas, and postings that did not refer to ideas directly such as complimenting contest winners ('others'). While on the platforms Atizo and Innovationskraftwerk contributions affected mainly new ideas (Atizo: 67 %, Innovationskraftwerk: 65 %) contributions on Jovoto mainly included likes or dislikes (40 %) and others (42 %). On

an average the level of collaboration was low; identified types of collaboration are: enhancing ideas (3 %), calling to enhance ideas (1 %), providing information (5 %), comparing ideas to existing products (1 %), asking questions (4 %), and finally telling that an idea has already been posted (1 %).

**Added value:** The results reveal that collaboration in online crowdsourcing is still in its infancy. Although the study is limited to three contests, the results show that crowdsourcing is not per se collaborative.

### MOBILE INNOVATION IN AUSTRIAN COMPANIES – STATUS QUO & FUTURE DEVELOPMENTS

Author: Glatz, Daniela; Klaus, Bernhard; Tarkus, Astrid  
Organisation: evolaris, Austria

**Relevance & Research Question:** The use of mobile technologies has increased over the last years, in the private daily routine as well as in the corporate sector. Although there are a variety of studies in respect of technology usage, no detailed study about the corporate mobile technology usage in Austria including questions about motivations and mobile innovations is available. Thus, we conducted a study to gather deeper knowledge about aspects of current and future usage of new mobile technologies – besides applied and planned mobile devices and operating systems in the different corporate sectors or the fields of application; we also investigated the potentials, motivations, advantages and barriers from the companies' viewpoints.

**Methods & Data:** In total, 52 interviews with the target group, CIOs of Austrian companies, took place. The interviews were realised by means of an online survey, and for gaining more in-depth knowledge in respect of qualitative aspects, face to face and telephone interviews were carried out. The study was conducted from April to August 2013. As a foundation for the survey design, the business model for digital economies of Staehler (2001) was used for specifying application areas in the digital economy. Based on the results, predictions have been derived about the mobile corporate technology usage and motivations in the future.

**Results:** Currently, mobile technologies are applied mainly for internal organisation and information purposes. An essential aspect of the usage motivation is the internal and external image of the company itself. In the future, the most relevant planned mobile technologies are in the field machine to machine technologies and NFC/RFID. Further investments will be made optimising mobile websites, incorporating QR Codes and collecting feedback via mobile phones. Detailed background information about motivations influencing future decisions is included in the results.

**Added Value:** Novel insights about the status quo of applied mobile technologies in the company sector are presented, especially incorporating motivation and decision-making processes of CIOs for the introduction of new technologies. Moreover, statements about near future plans as well as predictions for the development of corporate mobile technology use are made.



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