

Privacy vs. Data: Business Models in the digital, mobile Economy

Lecture 1 Introduction & Course Organisation

SS 2016

Dr. Andreas Albers



Why are we here?



Buzzword Bingo in the Age of Digitalisation



NSA

Internet of Things

3D Printing

Profiling

Industrie 4.0

Virtual Reality

Cloud Computing

Wearables

Surveillance

Trust

Chat Bots

Artificial Intelligence

Privacy

5G Mobile Networks

Drones

Security

Dark Commerce

Block Chain

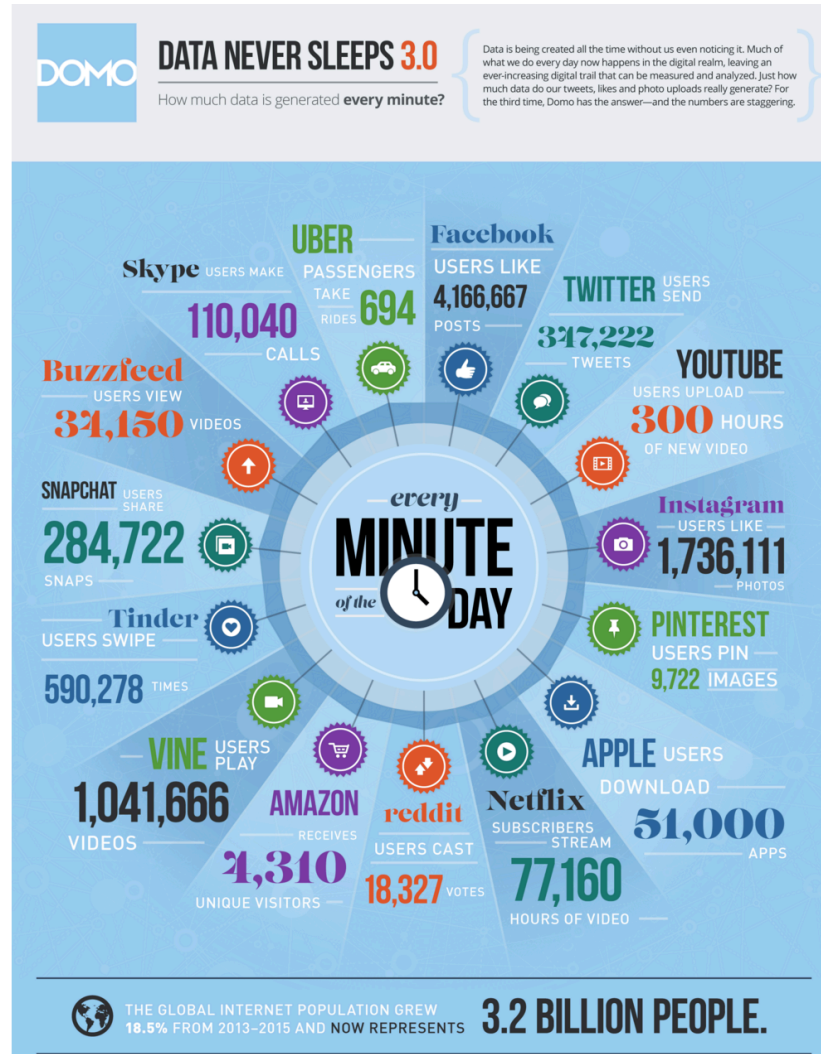
Ad Blockers

Reputation

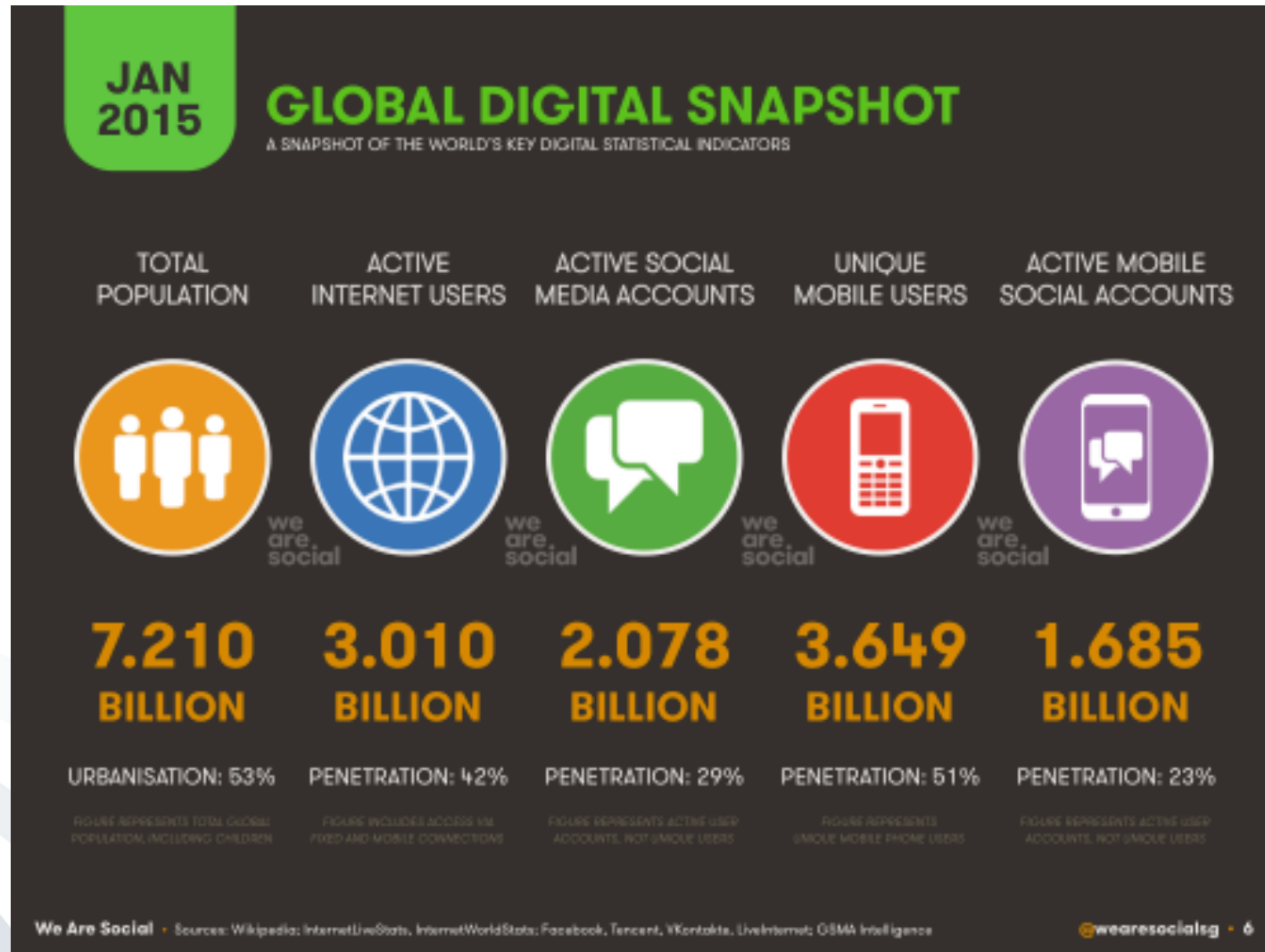
Ransom Ware

Smart Data

How to cope with an abundance of Information?



Source: <https://www.domo.com/blog/2015/08/data-never-sleeps-3-0/>



Source: <http://wearesocial.com/uk/special-reports/digital-social-mobile-worldwide-2015/>

Digital/Media Competence is Key



- Introduction of the Chair
- Course Organisation
- Introduction to (Mobile) Digital Age, Big Data & Privacy
- Scope and Outline of the Course

- Dissertation on
“Commercialisation of Context-sensitive Mobile Attention in Mobile Media Markets”
- Former Assistant Professor / Post Doc at M-Chair
- Since 2013
 - Product Manager at Telekom Group Innovation+ “Business Applications & Cloud Services”
 - External Lecturer & Fellow Researcher at M-Chair
- Lecture Focus & Research Interests
 - Impact of digitalisation on business, economy, social life and the rest of the universe ... ☺
 - What does A.I. while sitting on a pile of Big Data?
 - What good does privacy in the age of omnipresent media and abundance of data?
 - Why traditional IS Security cannot save us and why surrender is still not an option ... ☺



Premium*

Premium|Services

Chair of Business Administration, especially Business Informatics, Mobile Business and Multilateral Security

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www.m-chair.de



Vita of Kai Rannenberg

Einbeck, Göttingen, Eystrup, Wolfsburg, ...
TU Berlin (Dipl.-Inform.)
Uni Freiburg (Dr. rer. pol.)

Dissertation on “**Kriterien und Zertifizierung mehrseitiger IT-Sicherheit**“
Standardization at ISO/IEC JTC 1/SC 27 and DIN NI-27

Kolleg “**Sicherheit in der Kommunikationstechnik**“
Gottlieb Daimler- and Karl Benz-Foundation

Multilateral Security:
“Empowering Users, Enabling Applications“, 1993 - 1999

Recent History
1999-09 till 2002-08
Microsoft Research Cambridge UK
www.research.microsoft.com
Responsible for “Personal Security Devices and Privacy Technologies“

2001-10 Call for this chair
2001-12 till 2002-07 Stand-in for the chair

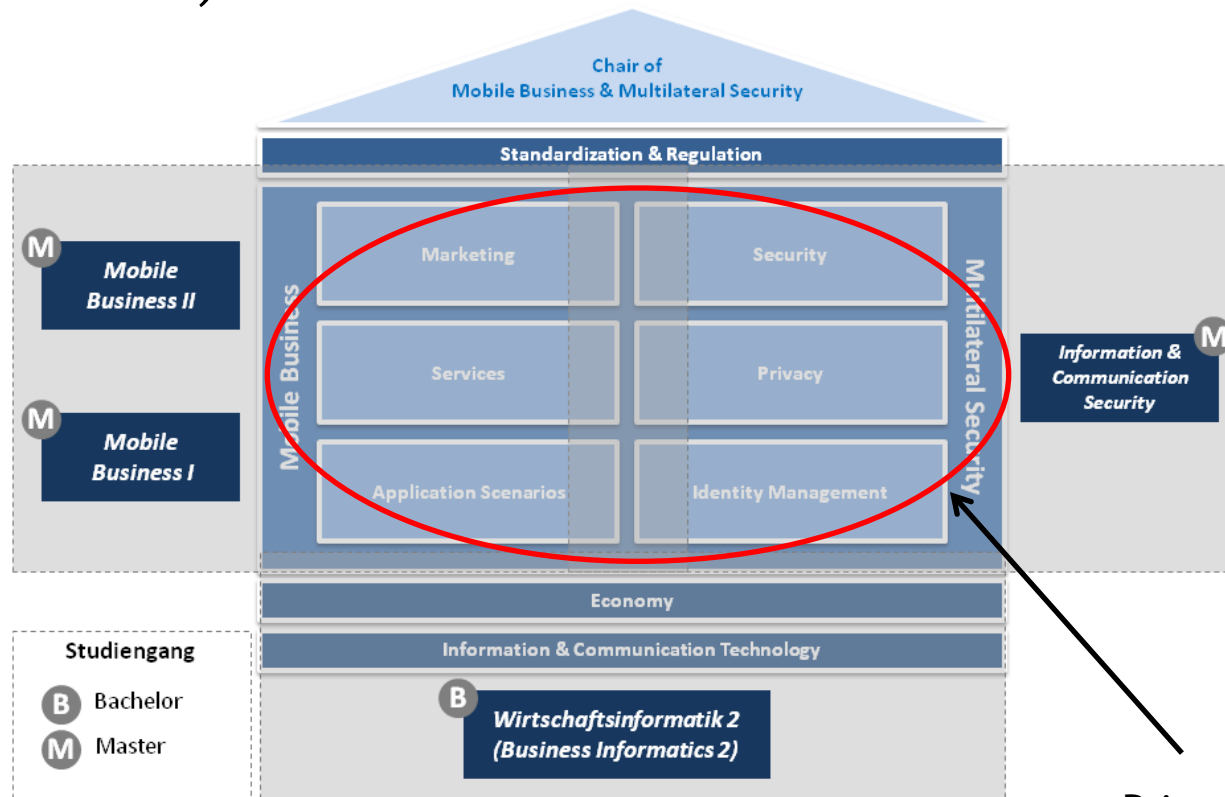
Since 2002-07 Professor



Department “Business Informatics” @ Goethe University Frankfurt

E-Finance Prof. Dr. Peter Gomber		Information Systems Engineering Prof. Dr. Roland Holten
	Business Informatics Junior Prof. Dr. Lukas Wiewiorra	
Information Systems & Information Management Prof. Dr. Wolfgang König		Mobile Business & Multilateral Security Prof. Dr. Kai Rannenberg

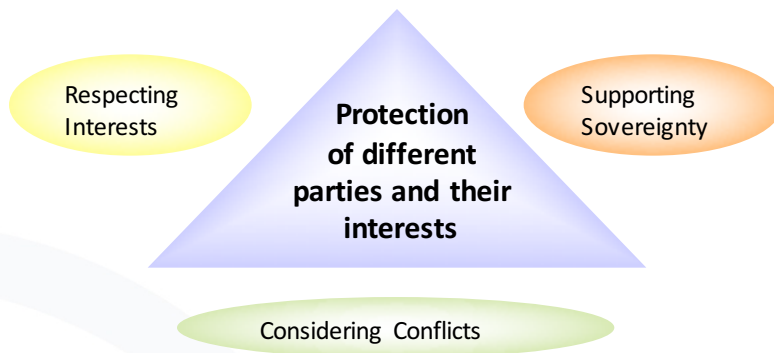
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Privacy vs. Data
Lecture

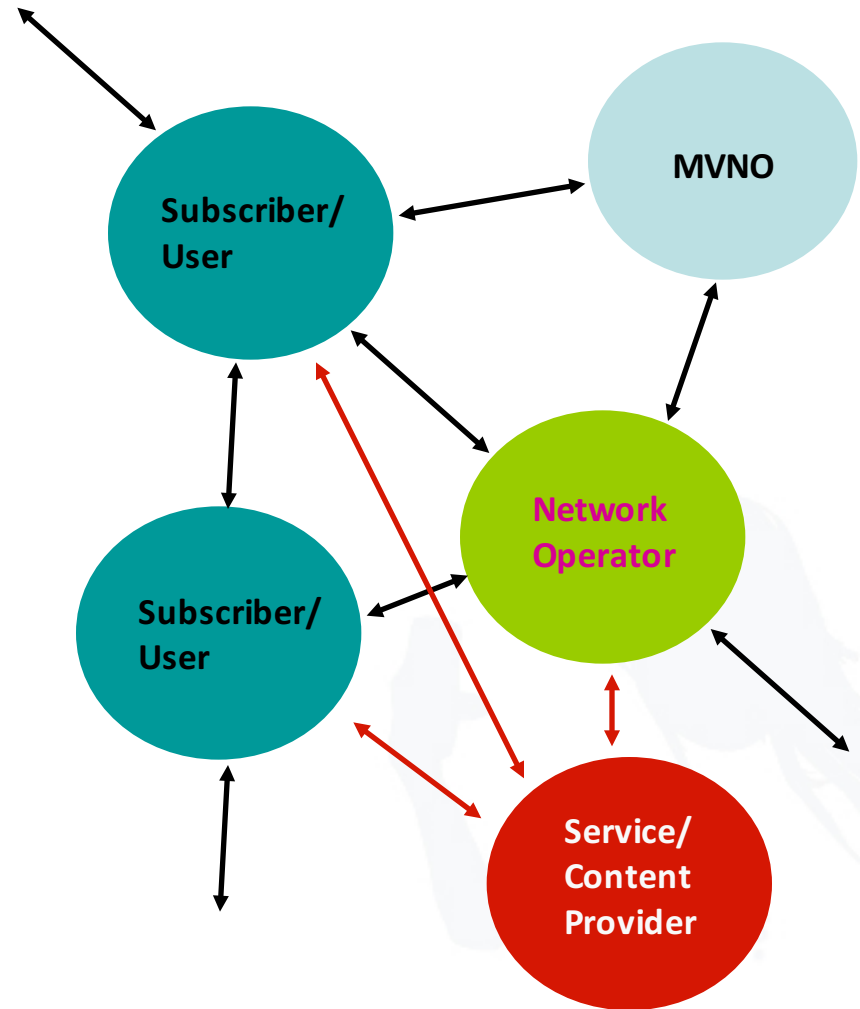
Different Parties
with different Interests

- Customers/Merchants
- Communication partners
- Citizens/Administration

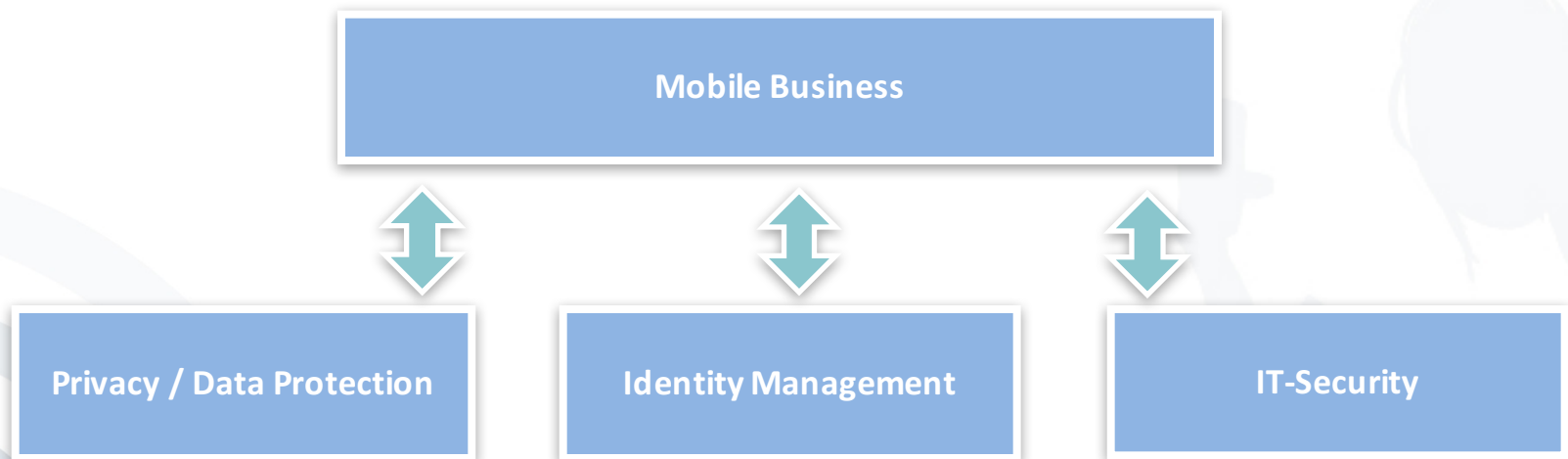


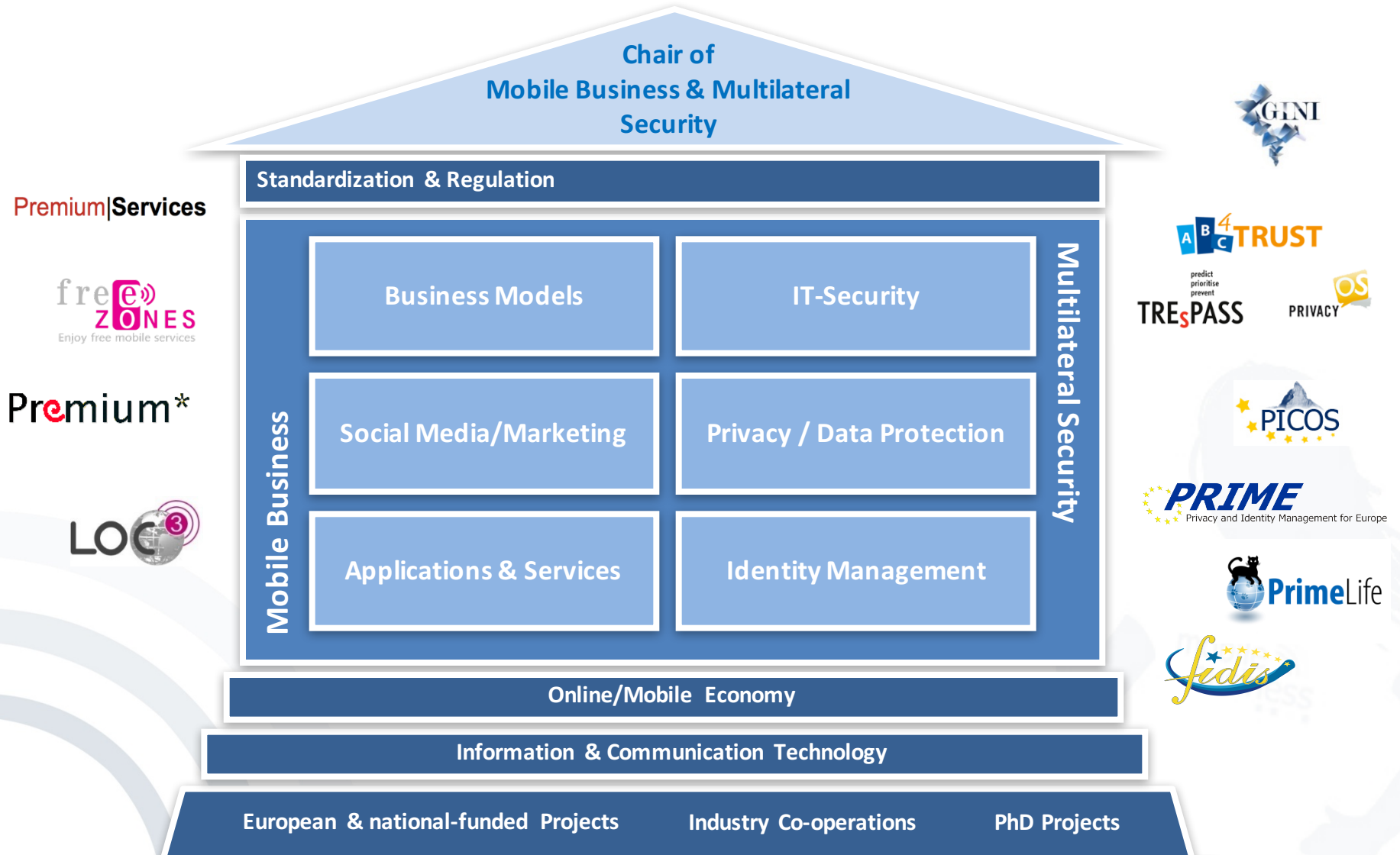
... in a world of consortia

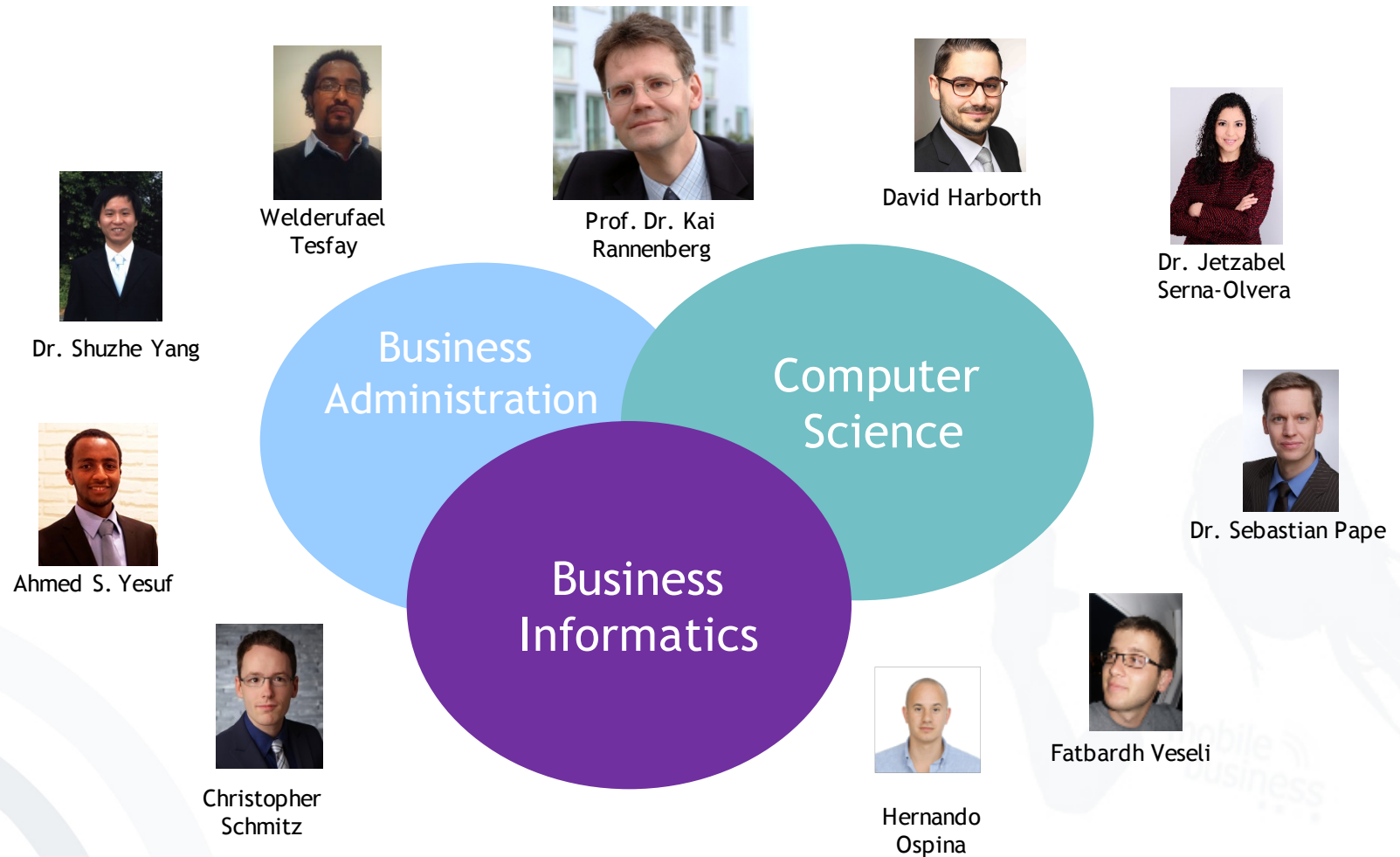
- more partners
- more complex relations



Advancing *Mobile Business* while enabling Individuals to be in control of their Personal Data by providing *Identity Management*, *Privacy Protection* and *IT-Security* within the Digital Economy









Architecture enabling
Privacy-friendly Attribute-
based Credentials



Industry Co-operation on
Fraud risks in Online
Services

predict
prioritise
prevent

TREsPASS

Industry Co-operation on
Fraud risks in Online
Services



Localisation
Infrastructure
incorporating and
managing COO,
LBS, and Wi-Fi
Location data



Pricing Mechanisms for
Context-sensitive Mobile
Consumer Contacts offered
to Mobile Advertisers



Means for Providing
Privacy throughout
Life



Personal Identity
Management
Environment for
Individuals



Industry Co-operation
on Identity Enabler
Services

Premium*

Context-sensitive Mobile
Advertising Models for
Mobile Portals

Premium|Services



Privacy and Identity Management for Europe

Enabling Privacy-
friendly Location-
based Services



Develop a deeper
understanding of how
appropriate identification
and Identity management
can be enabled

Infrastructure



(Mobile) Social Media
Concepts for Enterprises

Marketing/
Social Media



Privacy Concept for Mobile
Social Communities

Privacy

IT-Security

Identity
Management

M-Teaching in Frankfurt

Teaching Topics

Identity Management

Privacy

Information Security

Mobile Business

Business Informatics

Master Courses

Lectures

Mobile
Business 1

Mobile
Business 2

Information
Security

Privacy vs.
Data

Master
Thesis

Seminars

Bachelor Courses

Lectures

Business
Informatics 2

Bachelor
Thesis

Seminars

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Dr. Andreas Albers

External Lecturer at
Chair of Mobile Business & Multilateral Security
Goethe-University Frankfurt am Main

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WWW: <http://m-chair.de/index.php/staff/externals/16>

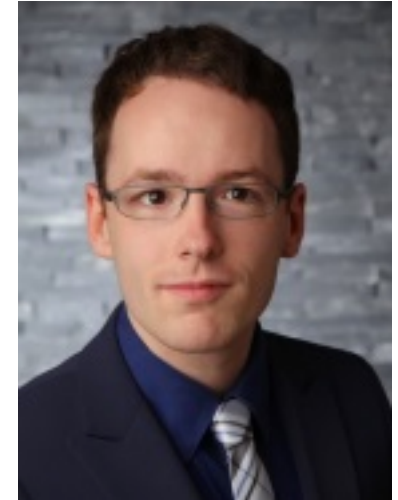
Consultation hours on appointment



Christopher Schmitz

E-Mail: christopher.schmitz@m-chair.de

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Elvira Koch

E-Mail: elvira.koch@m-chair.de

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Office Hours:

Mon.- Fri. 10am - 2pm



■ Course Slides

- Slides of the course can be downloaded from the website of the Chair at www.m-chair.de


■ Online News


- News about the course (e.g. room changes, announcements, etc.)
- Available via website of Chair

■ Twitter Updates

- Additional urgent, short notice information
- Follow [@mchair](https://twitter.com/mchair)

www.m-chair.de | [twitter](#) | [Imprint](#) | [Sitemap](#)



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■ Privacy vs. Data: Business Models in the digital, mobile Economy

■ Basic Information

Type of Lecture: Lecture
Course: Master
Hours/Week: 2
Credit Points: 6
Language: German
Term: Summer 2015
Lecturers:

- Dr. Andreas Albers
- Shuzhe Yang M.Sc.

Email: andreas.albers@m-chair.de

🔄 Content of the Course

Description: The majority of business models in the digital, mobile economy heavily rely on the existence of user data in order to enable a value proposition for users. For instance, advertisers use data for the targeting of advertisements whereas others apply it for the personalisation of their service offerings. However, what is beneficial for businesses often becomes of a threat to the privacy of users – especially if highly sensitive data, such as location data, is collected and processed without their consent. Within the digital, mobile economy field and beyond, this course is going to explore the area of conflict between data-centric online/mobile business models and user privacy. Thereby, the following topics will be covered:

- Means of data collection and its threat to privacy
- Privacy and Data Protection
- Basics of Information Security
- Interplay between data and privacy within digital business models
- ...

Latest News

- 2. INKO Klausureinsicht (2nd Exam review)
- INKO Klausureinsicht (Room for Exam review)
- INKO Klausureinsicht (Exam review)
- Successful Summit of ABC4Trust
- Information & Communication Security: Next lecture will regularly take place on January 21

Quick Links

- Courses
- Theses
- FAQ (Teaching)
- Job Offers
- How to find us

mchair @ twitter

twitter: [@mchair](https://twitter.com/mchair)



- Exercises
 - Working on exercises in groups (45 - 60 min)
 - Presentation and discussion of exercise results (30 - 45 min)
 - Addressing of open questions from lectures
 - Preparation for final written exam



- Duration: 90 minutes
- 6 Credit points
- Date of written exam on examination office's website
- All lecture and exercise content is relevant unless it is explicitly excluded



Written Exam Sign-Up Requirements

- Successfully registered course participants are IN ADDITION required to sign up for the course's written exam.
- Therefore, these students have to sign the written exam registration IN PERSON during the FIRST DAY OF THE COURSE (25.4.2016). Students failing to do so CANNOT take the written exam at the end of the term.
- If by the end of the first day of the course (25.4.2016) less than 32 students have signed up for the course's written exam, students on the waiting lists will be notified and asked to join the course.
- Withdrawal from the written exam registration is electronically possible via QIS until one week prior to the actual day of the written exam.

- Interest ...
 - ... in new technologies
 - ... in new business models for the digital economy
 - ... in protecting your privacy while still taking advantage of the digital era offerings
- Other taken Business Informatics lectures are helpful but not mandatory



Course Dates/Times and Places

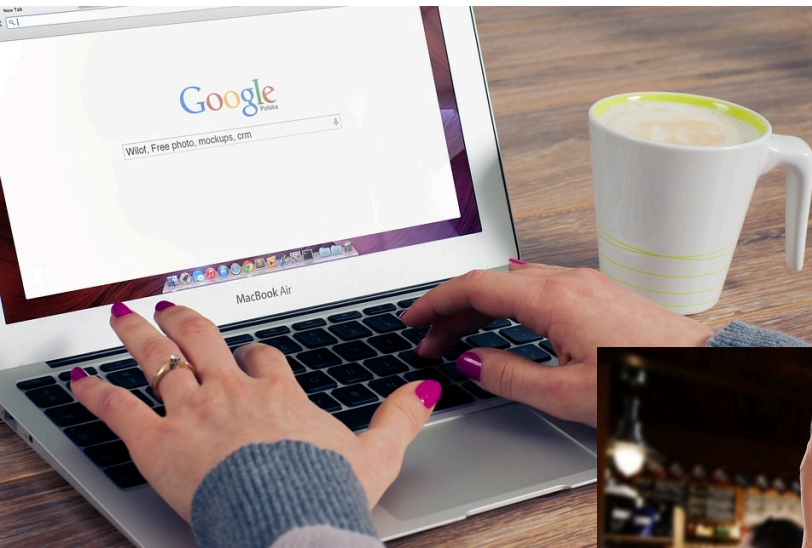


- Mon, 25.04.16, 9 am - 5 pm (Room 2.202, RuW building)
- Tue, 26.04.16, 9 am - 5 pm (Room 2.202, RuW building)
- ***Wed, 27.04.16, 9 am - 1 pm (Room 1.801, Casino)***
- Wed, 27.04.16, 1 pm - 5 pm (Room 2.202, RuW building)
- Thu, 28.04.16, 9 am - 5 pm (Room 2.202, RuW building)
- Fri, 29.04.16, 9 am - 5 pm (Room 2.202, RuW building)

Note: The course starts every day at "cum tempore" (ct.)

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What makes Mobile ICT & Media special?





100



... and IT/IS Security is an obligatory
foundation for society & business in the
Digital Age



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Objectives of the Course

- Learning about the special characteristics of the (mobile) digital economy (and its underlying technology) and what makes it unique
- Understanding what fuels the digital economy (data/attention) and learn how to protect/invest these resources carefully
- Acknowledging the balance between the required fuel of the digital economy and an individual's need/obligation to protect this resource/good (privacy & security)



Understanding **digitalisation** esp. in the mobile context and its impact on technology, economy, law and most importantly on society & privacy → **DIGITAL (MEDIA) COMPETENCY**

Topics covered by the Course

Introduction to the Digital Economy

Personal Data as digital Assets

Privacy & Privacy Protection

Cloud, Security & Identity Management

Data vs. Privacy

Outlook on the Digital Age





- Walking the line between academic claim and practical application



- Digital (Media) Competence *nicely balanced* 😊 in between an academic foundation and relevant practical applications