

WEIZENBAUM-INSTITUT
FÜR DIE VERNETZTE GESELLSCHAFT

DAS DEUTSCHE INTERNET-INSTITUT

Weizenbaum Symposium 2018

**The Future of Work and Innovation
in a Networked Society**

Tuesday, May 15, 2018
Technische Universität Berlin
Straße des 17. Juni 135, 10623 Berlin

#weizenbauminstitut

SPONSORED BY THE



Federal Ministry
of Education
and Research

An Initiative of the Federal Ministry
of Education and Research

Science Year | 2018

**WORKING LIFE
OF THE FUTURE**

Contents

Welcoming Addresses	1
Keynote Speakers	4
Symposium Programme	6
Overview of Sessions	8
Floor Plan	28

Greeting from the Federal Minister of Education and Research



Federal Minister
of Education
and Research
Anja Karliczek

Do people change when they work hand-in-hand with robots? How do emerging digital technologies affect our everyday working lives? How do they influence the way we live together in society? The first Weizenbaum Symposium addresses key questions regarding the future of work and innovation in a networked society. These issues concern each and every one of us. We need sound scientific analyses if we as users, researchers, representatives of interest groups or politicians want to understand and shape the diverse developments in digital technology.

I am delighted that the Weizenbaum Institute for the Networked Society is enriching our research landscape and is contributing to a deeper understanding of the processes in the context of digital transformation.

I wish all the participants in the symposium stimulating discussions!

A handwritten signature in black ink that reads "Anja Karliczek". The signature is written in a cursive, flowing style.

Anja Karliczek MdB
Federal Minister of Education and Research

Welcome from the Directors



Founding Director
Martin Emmer



Founding Director
Axel Metzger



Founding Director
Ina Schieferdecker

Dear participants,

A warm welcome to the first academic symposium of the Weizenbaum Institute for the Networked Society, an ambitious project which brings together expertise from seven distinguished universities and non-university research institutes from the Berlin-Brandenburg area.

The mission of the institute is to explore the reciprocal relationship between digitalisation and society. Its interdisciplinary basic research addresses the question how individual and societal self-determination and participation can be ensured in light of the ever-increasing digitalisation and automatisisation of all aspects of our daily lives. To this end, the Weizenbaum Institute strives to provide both scientific impetus and a forum for dialogue and exchange between the scientific community, industry, civil society, and the individual. Since its inauguration in September 2017, the Weizenbaum Institute has formed its 20 research groups, hired more than 80 doctoral and postdoctoral researchers and has set up an administrative structure to ensure the sustainable organisational development of this large-scale collaborative project.

At our first academic symposium, we discuss the transformation of the working world, of innovation models in the digital society, and the key challenges in this process. We wish you exciting new insights and fruitful discussions, and hope for continued exchanges with all of you. Thank you for your participation!

Welcome from the Programme Committee



Programme
Committee Chair
Manfred Hauswirth



Programme
Committee Chair
Martin Krzywdzinski



Programme
Committee Chair
Axel Metzger

Digital technologies already have a profound impact on innovation systems, business models and the work environment. Specifically, networking technologies reshape how we cooperate in our work environment. The new technologies support and facilitate innovative ways of work organisation but can also be used for new forms of monitoring of work whose effects are yet to be assessed by legislators. The potential promise to transform a wide range of professions comes at the cost of potentially replacing human work through automation to a certain degree. As a society we will be faced with the task of creating innovation systems and shaping the world of work in a way that balances opportunities with potential risks to find solutions which meet broad societal consensus.

Interdisciplinarity and joint discussions of researchers from the fields of social sciences, legal studies, business and economics, computer science, and engineering are needed in order to answer such questions and to distinguish between discursive hypes and actual disruptions. We are confident that our Symposium “The Future of Work and Innovation in a Networked Society” will help to identify approaches and means by which political and societal actors can shape the digital transformation in a way that is beneficial to society.

We are looking forward to interesting sessions and discussions!

Keynote Speakers



Cornelia Quennet-Thielen has been State Secretary at the German Federal Ministry of Education and Research since 2008. Cornelia Quennet-Thielen served as Deputy Head of the Office of the German Federal President and was the President's senior advisor on domestic policy and constitutional law (2004–2008). She held different positions in the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (1987–2004). Quennet-Thielen started her career in the federal state of Rhineland-Palatinate as a judge and in the Ministry for Environment and Health. She studied law in Freiburg and Trier; she is alumna of the Studienstiftung des Deutschen Volkes and a World Fellow of Yale University, USA.



Steffen Kampeter studied economics at Westfälische-Wilhelms-Universität (WWU) in Münster, graduated in economics. Research assistant at the Institute of Transport Economics of the University of Münster. Member of Bundestag from 1990 to 2016. From 1999, leader of CDU/CSU group in the Budget Committee. From 2005 to 2009, CDU/CSU group's spokesperson on budget policy; from 2009 to 2015, Parliamentary State Secretary to Federal Minister of Finances. Since July 2016, CEO of German Employers' Associations (BDA Bundesvereinigung der Deutschen Arbeitgeberverbände).



Anke Hassel is the Academic Director of the Institute of Economic and Social Research (WSI) of the Hans Böckler Foundation and Professor of Public Policy at the Hertie School of Governance in Berlin (on leave). From 2009 until 2012 she was Senior Visiting Fellow at the European Institute of the London School of Economics. She studied political science, economics and law in Bonn and at the London School of Economics and Political Science (LSE). In 1996, she joined the Max Planck Institute for the Study

of Societies in Cologne, obtained her PhD in 1998 and completed her postdoctoral lecture qualification in 2003. She was a visiting scholar at the Social Science Research Center Berlin and King's College, Cambridge, UK. In 2003/2004, Anke Hassel worked for the Planning Department of the Federal Ministry of Economics and Labour (BMWA) and then joined the Jacobs University Bremen as Professor of Sociology. In 2012/13, she served as an Expert Member of the Enquete Commission of the German Federal Parliament on "Growth, Wealth, Quality of Life".



Kathrin M. Möslein is Vice President at the Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU) and professor of information systems at FAU's School of Business and Economics. She is also a professor of management and member of the team of directors at the Center for Leading Innovation & Cooperation (CLIC) at HHL Leipzig Graduate School of Management. She has been researching, teaching and consulting in the field of strategic innovation and innovation systems since the early 1990s. Her current research focuses on the implementation of innovation strategies and technologies as well as leadership systems in service organisations.



Sabine Pfeiffer holds the chair for Sociology (Technology – Labour – Society) at the Friedrich-Alexander-Universität Erlangen-Nürnberg. As a sociologist of work her research focus lies within the field of the digitalisation of work and labour. She conducted more than 30 research projects focusing on the role of human labour for and within technological change, doing research within different industries (e.g. manufacturing, automotive, software engineering). Sabine Pfeiffer is member of the scientific board of the German platform „Industrie 4.0“.

Programme Overview

Tuesday, May 15, 2018 | Technische Universität Berlin

8:30 a.m. – 9:00 a.m.	Registration		
9:00 a.m. – 10:30 a.m.	Opening of the Symposium / Opening Discussion: The Future of Work and Innovation in a Networked Society		
10:30 a.m. – 11:00 a.m.	Registration / Coffee Break		
11:00 a.m. – 12:30 p.m.	Session 1: Internet-based Business Models and Innovation	Session 2: Socio-technical Systems Perspectives on Digitalisation	Session 3: Learning and Knowledge in the Era of Digitalisation
12:30 p.m. – 1:30 p.m.	Lunch Break		
1:30 p.m. – 3:00 p.m.	Keynotes: Kathrin Möselein: Working Differently: Is the Future Already Here? Sabine Pfeiffer: Doing Future. Innovating Society.		
3:00 p.m. – 3:30 p.m.	Coffee Break		
3:30 p.m. – 5:00 p.m.	Session 4: Platforms and Crowds	Session 5: Digitalisation and Changing Workplace Organisation	Session 6: Managing Innovation and Technological Change
5:00 p.m. – 5:30 p.m.	Coffee Break		
5:30 p.m. – 7:00 p.m.	Session 7: Digital Entrepreneurship and Work	Session 8: The Bright and the Dark Sides of Digital Work	Session 9: Artificial Intelligence and the Future of Human Work
After 7:00 p.m.	Reception		

Weizenbaum Symposium: The Future of Work and Innovation in a Networked Society

Plenary Sessions / Lichthof (Lower Level)

9:00 a.m. – 10:30 a.m.

Opening of the Symposium / Opening Discussion: The Future of Work and Innovation in a Networked Society

- Greeting by [Christian Thomsen](#), President of Technische Universität Berlin
- Greeting by [Axel Metzger](#), Founding Director of the Weizenbaum Institute for the Networked Society

Keynotes by:

- [Cornelia Quennet-Thielen](#), State Secretary at the German Federal Ministry of Education and Research
- [Steffen Kampeter](#), CEO of German Employers' Associations (BDA Bundesvereinigung der Deutschen Arbeitgeberverbände)
- [Anke Hassel](#), Academic Director of the Institute of Economic and Social Research (WSI) of the Hans Böckler Foundation

1:30 p.m. – 3:00 p.m.

Keynote Session

Keynotes by:

- [Kathrin Möslein](#), Faculty of Business, Economics, and Law / Friedrich-Alexander-Universität Erlangen-Nürnberg. Keynote: Working Differently: Is the Future Already Here?
- [Sabine Pfeiffer](#), Faculty of Humanities, Social Sciences, and Theology / Friedrich-Alexander-Universität Erlangen-Nürnberg. Keynote: Doing Future. Innovating Society.

Session 1:

Internet-based Business Models and Innovation

11:00 a.m. – 12:30 p.m. / Room H 2035

Katharina Hölzle
University of
Potsdam

Mapping the Field: Internet-based Business Models and Innovation: America and China First?!

In research and practice alike, internet-based business models and internet-based innovation have received a lot of attention over the last 20 years. However, it is not clear yet whether the internet is in fact fundamentally changing the way we do innovation and business or not. Furthermore, why is not Europe but rather the US (i.e. Silicon Valley) and China driving internet-based business models and innovation? What are the skills and competencies needed to be successful with internet-based business models and innovation? What fundamental changes are needed to think and act in an internet-based way?

Ulrich Dolata
University of
Stuttgart

The Volatile Power of the Leading Internet Companies. Market Concentration, Competition and Innovation Strategies

Based on a systematic review and evaluation of business reports, documents, statistics, literature and press releases, this presentation analyses the market concentration and the expansion and innovation strategies of the five leading internet corporations Google, Facebook, Apple, Amazon and Microsoft. The findings invalidate any claims that a decentralisation of the market and a democratisation of the internet are taking place, or that research, development and innovation processes are becoming more open and

collaborative. Not decentralisation, democratisation and open innovation, but market concentration, control and power struggles are categories to adequately describe the fundamental dynamics of the internet.

**Simon
Lansmann,
Stefan Klein**
University of
Münster

How Much Collaboration? Balancing the Needs for Collaborative and Uninterrupted Work

The proliferation of collaboration platforms in organisations has benefits for knowledge workers in terms of access to knowledge and social resources. However, negative effects, specifically collaborative overload, have only recently been acknowledged and are still rarely considered by companies. Collaborative overload is a multi-faceted construct, which covers downsides, unintended or side-effects of collaboration platforms and their organisational use. To introduce and explore what we believe is an important phenomenon, we conducted a narrative literature review to contextualise collaborative overload. Moreover, we propose a research agenda to extend prior and enable future research about this important syndrome of modern workplaces.

Session 2:

Socio-technical Systems Perspectives on Digitalisation

11:00 a.m. – 12:30 p.m. / Room H 2036

Hartmut Hirsch- Kreinsen

TU Dortmund
University

Mapping the Field: On the Relationship Between Technology and Work in Digitised Work Processes

The contribution aims at a critical discussion of the socio-technical systems approach that is well suited to grappling with the analysis of the challenges of digitised work. From a sociological perspective, however, the approach leaves many questions unanswered. Therefore, elements of a sociologically extended conceptual framework will be presented.

Gregor Engels

Paderborn
University

The Digital Twin of Humans in Adaptive Assistance Systems

The transition to Industry 4.0 opens up great opportunities for modernisation and the associated increase in the efficiency of production processes. In addition to the still largely existing technical challenges, the role of employees throughout the entire value chain is undergoing considerable change.

Günter W. Maier

Bielefeld
University

An interdisciplinary team of researchers from Paderborn University and Bielefeld University have bundled their expertise in two graduate schools to work on this topic of Work 4.0. These are the NRW Graduate School "Design of flexible working environments – human-centered use of Cyber-Physical Systems in Industry 4.0", and the NRW Research Focus "Digital Future".

**Zofia Saternus¹,
Katharina Rost²,
Oliver Hinz¹,
Ruth Stock-
Homburg²,
Gisela Gerlach²**

¹ Goethe
University
Frankfurt

² Technische
Universität
Darmstadt

Analysis of Stakeholder Preferences Regarding a Smart Assistant for Availability Management

Permanent availability caused by communication technologies use is a growing problem, especially for knowledge workers. One possible solution can be a smart assistant tool that limits the availability. To better understand the needs and demands of potential users, we conducted standardised qualitative open-ended interviews with 22 stakeholders from different professional environments and management levels. The survey revealed that the assistant tool should enable different stages of availability which can be chosen and adapted individually. Calls and text messages should be filtered by the contacting person, situation, and actual content. Further, feedback loops and compatibility with existing applications are also desirable.

Session 3:

Learning and Knowledge in the Era of Digitalisation

11:00 a.m. – 12:30 p.m. / Room H 2037

Wolfgang Nejd

Leibniz
Universität
Hannover

Mapping the Field: Digital Transformation, Interdisciplinarity, Qualification

Intelligent algorithms and intelligent production are increasing both performance and complexity of production processes and solutions. Progress and innovation in this context can only be achieved in an interdisciplinary way. L3S (computer science) and IFW (mechanical engineering) are therefore collaborating in the BMBF funded Applied Machine Learning Academy (AMA), focusing on machine learning methods for intelligent production.

AMA will provide qualification offers for engineers already working in SMEs and industry as well as project oriented courses for university students. We will start with a Leibniz Symposium Machine Learning in May, and continue with pilot projects on various Industry 4.0 related aspects, courses and tutorials, and will also build up a learning community based on our search and collaboration platform LearnWeb.

**Gergana
Vladova***,
André Ullrich,
**Malte
Teichmann,**
Norbert Gronau*

University of
Potsdam

Learning, Understanding and Acceptance in Industry 4.0

Main human-oriented issues in the context of digitalisation are these of integration, motivation, skills and competence development and employees' participation. This addresses the acquisition of task-related competences as well as the development of general comprehension and meta-knowledge. Hence, appropriate learning concepts allowing interaction with technology play an important role. Against

* and Weizen-
baum Institute
for the
Networked
Society

this background, the contribution focuses on possibilities to improve Industry 4.0 qualification, competencies and acceptance using the examples of process simulation within designed realistic work environment as well as learning scenarios addressing the group of works councils as participants, both within the environment of an Industry 4.0 application centre.

**Johannes
Hoppe,**
Renate Rau
Martin Luther
University
Halle-
Wittenberg

Task Design and Psychological Strain – Allocation of Cognitive Functions in Man-Computer-Systems

Due to digitalisation of work we expect changes of jobs with mental task requirements. Employees can be supported by replacing inhuman tasks, by creating new demands for qualification or by the flexibility to decide where and when to work. However, when specific work content is allocated to software, tasks might be partialised and thus become more monotonous and stressful. What is performed by man and what by machine must not be determined by what is technologically possible and economically advantageous. The aim should be a learn- and health-oriented task design that allows employees to adapt, develop and stay healthy.

Session 4:

Platforms and Crowds

3:30 p.m. – 5:00 p.m. / Room H 2035

Frank Kleemann
University of
Duisburg-Essen

Mapping the Field: Platforms and Crowds – Sociological Perspectives

Crowdsourcing, crowdfunding, the gig economy, open innovation, ... – internet platforms provide new means to address both anonymous masses, and distinct groups of web users and motivate them to participate in various activities; be it the creation of a free encyclopaedia, design contests by companies, the microfunding of music or art projects, or freelance work tasks. The presentation will sketch the main applications, the characteristics of the platforms and the morphology of the participating crowds, and point to social consequences of new platform- and crowd-based applications. Special attention will be given to effects on work organisation and labour relations.

Nina Pohler
Humboldt-
Universität zu
Berlin

The Cooperative as Crowd – Organisational Slack and Intraorganisational Crowdfunding

Crowdfunding platforms like Kickstarter make it possible to raise external financing from a large audience of strangers. What happens when crowdfunding is applied inside organisations? Based on the case study of a worker-cooperative that develops web and data-driven applications, the paper illustrates how organisations can use crowdfunding for decentralised decision-making and valuation. The studied cooperative uses crowdfunding to make decisions on the distribution of organisational slack. Organisational slack is as an excess resource that can be used to further organisational learning and experimentation. Crowdfunding is therefore used to amplify innovative projects, following a logic of exploration, and not exploitation.

**Martina
Franzen**
Berlin Social
Science Center
(WZB)

Crowdsourcing in Science and its Broader Implications

The normative interpretation of citizen science as a more or less desirable democratisation of elitist science is misleading. Instead, this paper argues from a sociological point of view that citizen science is a transitional phenomenon – an intermediate step on the path from individual knowledge acquisition via the crowdsourcing of routine scientific activities to the automation of knowledge production. Such a reading of participatory data-driven research now raises the same question for science as for other areas of society: To what extent can the human element be replaced and what does this mean for the future of work?

Session 5:

Digitalisation and Changing Workplace Organisation

3:30 p.m. – 5:00 p.m. / Room H 2036

Sabrina Schneider
University of Kassel

Mapping the Field: Workplace Organisation in the Digital Age – Implications for Organisations and Individuals

We experience an exponential pace of change caused by digital technologies. They enable an increasingly connected world with an unknown availability of data and intelligence. This affects the way we work by providing new technological connections and enabling new forms of social and organisational configurations. While firms are empowered by digital technologies, they also increasingly depend on their effective usage. Work-related implications for organisations include the necessity to reconsider the time and space where work takes place and the organisational design that surrounds it. Individuals face challenges concerned with constant adaptation, collaboration with technology and role conflicts.

Florian Butollo
Berlin Social Science Center (WZB) and Weizenbaum Institute for the Networked Society

How Lean is Smart? Rethinking Industry 4.0 by Looking at the Present State of Work in Multi-Variant Series Production

The claim of an imminent fourth industrial revolution rests on the bold assertion that the customisation of industrial products represents a new stage of production empowered by the Internet of Things. This contribution takes empirical observations from an assembly plant in the automotive industry as a point of departure for a theoretical discussion about the similarities and differences of the envisaged "Industry 4.0" in relation to advanced lean production models

while focusing on changes in the realm of work. The empirical observations point to an enhanced role of low-skilled functions in the inner logistics departments of the assembly plant due to the increased number of components that are needed to manufacture according to individual orders.

Florian Irgmaier,
Florian Eyert,
Rainer Rehak
Berlin Social
Science Center
(WZB) and
Weizenbaum
Institute for
the Networked
Society

Algorithmic Regulation at the Workplace – On the Way to Taylorism 4.0?

We propose to enrich the current debate about the digitalisation of work by understanding it as part of the rise of a new form of governance: algorithmic regulation (Yeung 2017). By analysing the effects of digital technologies on the key components of regulation – information gathering, standard setting and behaviour modification – we gain a deeper understanding of how artificial intelligence, big data and algorithmic decision-making currently transform the coordination and organisation of work. Revisiting case studies from the sociology of work, we illustrate the analytical potential of this perspective and discuss whether we witness a development towards Taylorism 4.0.

Session 6:

Managing Innovation and Technological Change

3:30 p.m. – 5:00 p.m. / Room H 2037

**Bernhard
Lingens**
University of
St. Gallen

Mapping the Field: Ecosystems – the New Paradigm of Doing Business

Business Ecosystems are of growing significance in both industry practice and academic research. They base upon the idea of several companies creating a joint value proposition one could not create in isolation. This allows firms to improve their value proposition, tap into novel markets, and get access to external resources. Ultimately, they offer novel growth opportunities beyond the boundaries of what a single firm can achieve. However, they also come with considerable disadvantages: Creating a joint value proposition implies mutual dependency. Collaboration is always connected to transaction costs. The resulting question is: How can firms manage these issues whilst making use of the growth potentials Business Ecosystems can offer.

Janine Hacker
Friedrich-
Alexander-
Universität
Erlangen-
Nürnberg

Conceptualising and Assessing Community Health in Enterprise Social Networks

While Enterprise Social Networks (ESN) are increasingly employed in companies, many organisations fail to achieve a state in which an ESN community can be considered as a thriving space for knowledge conversations, i.e. a state of healthiness. Against this background, this study conceptualises ESN community health, explores factors potentially influencing ESN community health as well as develops indicators and metrics to assess ESN community health based on a literature review. The theoretical insights

are compared with findings from a real-life scenario. The contributions of this study include a deeper understanding of what makes an ESN community work.

**Sidney A.
Rothstein**
Haverford
College

Coordinating the Digital Transformation: The Discursive Context of Production in the Knowledge Economy

This article introduces the concept of the “discursive context of production” in order to explain why the transition to the knowledge economy has made corporatist institutions less effective. With the digital transformation, employers have adopted the financial discourse of the knowledge economy, which allows managers to dissuade workers from enforcing national institutions, such as those for job security. Relying on a case study of downsizing at a technology firm in Germany, this article uses process-tracing to illustrate how discourse constitutes the causal linkage between the digital transformation and the erosion of job security among otherwise privileged workers.

Session 7:

Digital Entrepreneurship and Work

5:30 p.m. – 7:00 p.m. / Room H 2035

Knut Blind
Technische
Universität
Berlin /
Fraunhofer
Institute
of Open
Communication
Systems

Mapping the Field: Challenges and Opportunities of Big Data for Innovation Policy and its Impact on Digital Entrepreneurship and Work

Evidence-based policymaking has emerged related to innovation. The justification of innovation policy is rooted in market or system failures and recently mission driven. What specific tangible evidence do innovation policymakers require to justify policy measures in the context of increasingly dynamic environments? In order to provide this evidence, options of Big Data can be used to get access to timely information, but also to respond to specific inquiries at every stage of the innovation policy cycle. The contribution will elaborate the opportunities, but also the challenges of Big Data for the innovation policy life cycle, in particular related to digital entrepreneurship and work.

Carsten Schwemmer
University of
Bamberg

Social Media Sellout – The Increasing Role of Product Promotion on YouTube

Over the last decade, the video-sharing site YouTube developed into a leading marketing tool used for product promotion by social media influencers. Past research indicates that these influencers are regarded as opinion leaders and cooperate with brands to market products on the platform. We make a first attempt to quantify product promotion and use an original dataset of 139,475 videos created by German YouTube channels between 2009 and 2017. Using methods of automated content analysis, we

Sandra Ziewiecki
University of
Bayreuth

find that YouTube users indeed are confronted with an ever-growing share of product promotion, particularly in the beauty and fashion sector.

Annett Heft
Freie Universität
Berlin and
Weizenbaum
Institute for
the Networked
Society

Leyla Dogruel
Johannes
Gutenberg
University
Mainz

Digital News Entrepreneurs – Autonomy in Innovative Working Environments of Journalism?

The presentation addresses the question in how far journalistic entrepreneurship allows for enhancing professional autonomy on both the organisational as well as the individual level. We analyse how news entrepreneurs design their work environment including (1) the formation of innovative organisational structures and business models and (2) the establishment of daily working routines in order to permit procedural and organisational autonomy. We conducted interviews with both founders of twelve German news entrepreneur projects as well as journalists working in these organisations. The entrepreneur projects cover three types of news organisations: journalistic networks of collaborative content production, journalistic online platforms and journalistic online media.

Session 8:

The Bright and the Dark Sides of Digital Work

5:30 p.m. – 7:00 p.m. / Room H 2036

Sandra Ohly
University of
Kassel

Digitisation of Work: Demands, Stressors and Resources

Previous research suggests that information and communication technology (ICT) can have detrimental consequences, but it suffers from a number of shortcomings. My own research findings from longitudinal and diary studies suggest that detrimental outcomes might be falsely attributed to ICT, and that a more balanced view is needed to determine if ICT is really the cause of stress and reduced well-being. In my talk, I will describe how traditional stress theories can inform future research on ICT-related stress. Specifically I will describe how technology can be seen as a demand, a resource and as stressors.

Christine Gerber
Berlin Social
Science Center
(WZB)

Community Building on Crowdtwork Platforms: Between Incorporation and Autonomy of Digital Workers

Crowdtwork is commonly described as an extremely isolating and anonymous form of work. Platforms invest, however, increasing efforts into community engineering as central element of performance regulation. The article examines the different community strategies of microtask and macrotask platforms and crowdworkers' interaction within them. The results show that platforms assume either more controlled or lose strategies, which results in rather low or dynamic crowdworker interaction respectively. The article also highlights the limits of managerial strategies and sustained forms of labour autonomy. Overall, the findings suggest that platforms develop more diverse and complex managerial systems than often assumed.

Christoph Lutz,
Gemma
Newlands
Nordic Centre
for Internet and
Society and
BI Norwegian
Business School

Choice and Discrimination in the Sharing Economy

Sharing economy services enable flexible access to under-used assets. However, the selection process of such services can swiftly transition into a mechanism of discrimination. Previous research has found evidence for discrimination and noted a tension between the principles of freedom of choice and anti-discrimination. We complement these investigations through a mixed-methods study that combines focus groups and a quantitative survey. Our results indicate that large part of sharing economy users desire a high degree of choice and flexibility. Sharing platforms are thus in the difficult situation of allowing choice while curbing discrimination.

Session 9:

Artificial Intelligence and the Future of Human Work

5:30 p.m. – 7:00 p.m. / Room H 2037

Klemens Budde
Charité –
Universitäts-
medizin Berlin
and Plattform
Lernende
Systeme

Mapping the Field: Artificial Intelligence at Work – Implications for Healthcare

The talk will illustrate implications of AI in the workplace using the example of healthcare. Recent progress in self-learning systems affects various aspects in this field – reaching from cancer treatment to rehabilitation or the cure of orphan diseases. However, there is a threat that decision makers in healthcare might try to replace human labour with AI, which would harm the patients' interests first and foremost. The talk will discuss prerequisites for a successful usage of AI in healthcare – such as data aggregation and protection – and how a complementary division of labour between humans and AI technology becomes feasible.

Diana Alina Serbanescu,
Martin Schüßler
Technische
Universität
Berlin and
Weizenbaum
Institute for
the Networked
Society

Handing Over Uncertainty – Critical Collaborations between Humans and AI

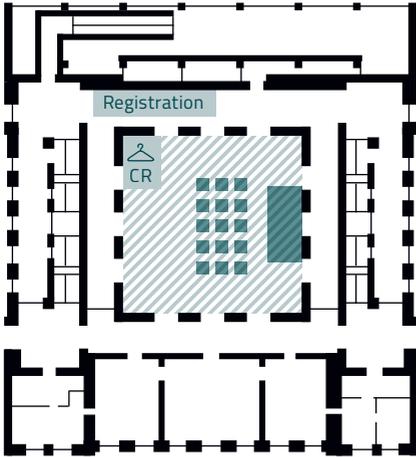
The work environments of the future will be transformed by the amplification of humans' capabilities with artificial intelligence. Through atomising repetitive and unchallenging tasks as well as through creating cognitive augmentations, productivity for individual workers or for teams will be increased. Instead of becoming our rivals, intelligent systems have the potential to become our teammates and enhancers. But this new form of collaboration is prone to encounter situations of uncertainty in decision making originating from the human as well as from the machine. This talk aims to inquire collaborative strategies between human and non-human intelligence for agency and decision making.

**Tomás Albrecht,
Martyna Nowik,
Lon Hansson,
Adrian
Latupeirissa**
KTH Royal
Institute of
Technology,
Stockholm

Regular Humans Need Not Apply: A Design Fiction Exploration

Although physical enhancements have been exercised in the medical field or communities of enthusiasts, recent trends signify a growing interest for commercial self-enhancements in the form of biohacking – and employers are eagerly incorporating the new technologies in the working environment. Some forerunners offer their employees RFID chips implanted into their hands, while visionary tech leaders start tinkering with brain-computer interfaces. Working environment of the future is undoubtedly standing before a major change of accessible skills. Within the scope of a design-fiction project, the future of work is visualised as a divide in working conditions and expectations.

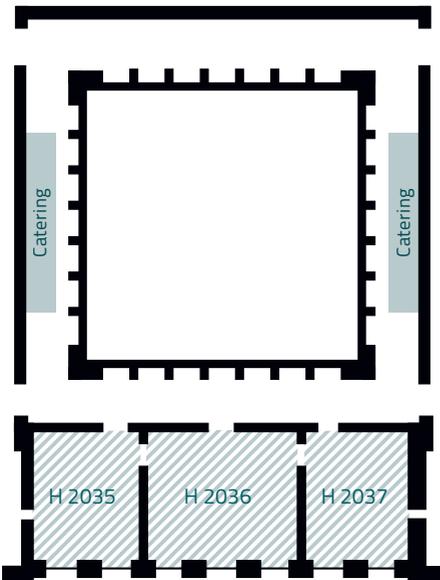
Floor Plan



Lichthof (Lower Level):
Registration & Information
Cloak Room

Opening Session
9:00 a.m. – 10:30 a.m.

Keynote Session
1:30 p.m. – 3:30 p.m.



Lichthof – Gallery (Upper Level):

Panel Sessions
11:00 a.m. – 12:30 p.m.
3:30 p.m. – 5:00 p.m.
5:30 p.m. – 7:00 p.m.

Reception after 7:00 p.m.

Imprint

Picture Credits:

Presse- und Informationsamt der
Bundesregierung, Steffen Kugler, p. 1 /
Presse- und Informationsamt der
Bundesregierung, p. 4 (top) /
BDA | Chaperon, p. 4 (center) /
FAU | Thomas Einberger, p. 5 (top) /
Oskar Eyb, p. 5 (bottom)

Design: Sisters of Design

Contact:

Weizenbaum Institute for the Networked Society
The German Internet Institute
Dr. Karin-Irene Eiermann
Head of the Administrative Office

c/o WZB Berlin Social Science Center
Reichpietschufer 50, 10785 Berlin

WEIZENBAUM-INSTITUT
FÜR DIE VERNETZTE GESELLSCHAFT

DAS DEUTSCHE INTERNET-INSTITUT

Weizenbaum Symposium: The Future of Work and Innovation in a Networked Society

The Weizenbaum Institute is a collaborative project of the following partner organisations:

