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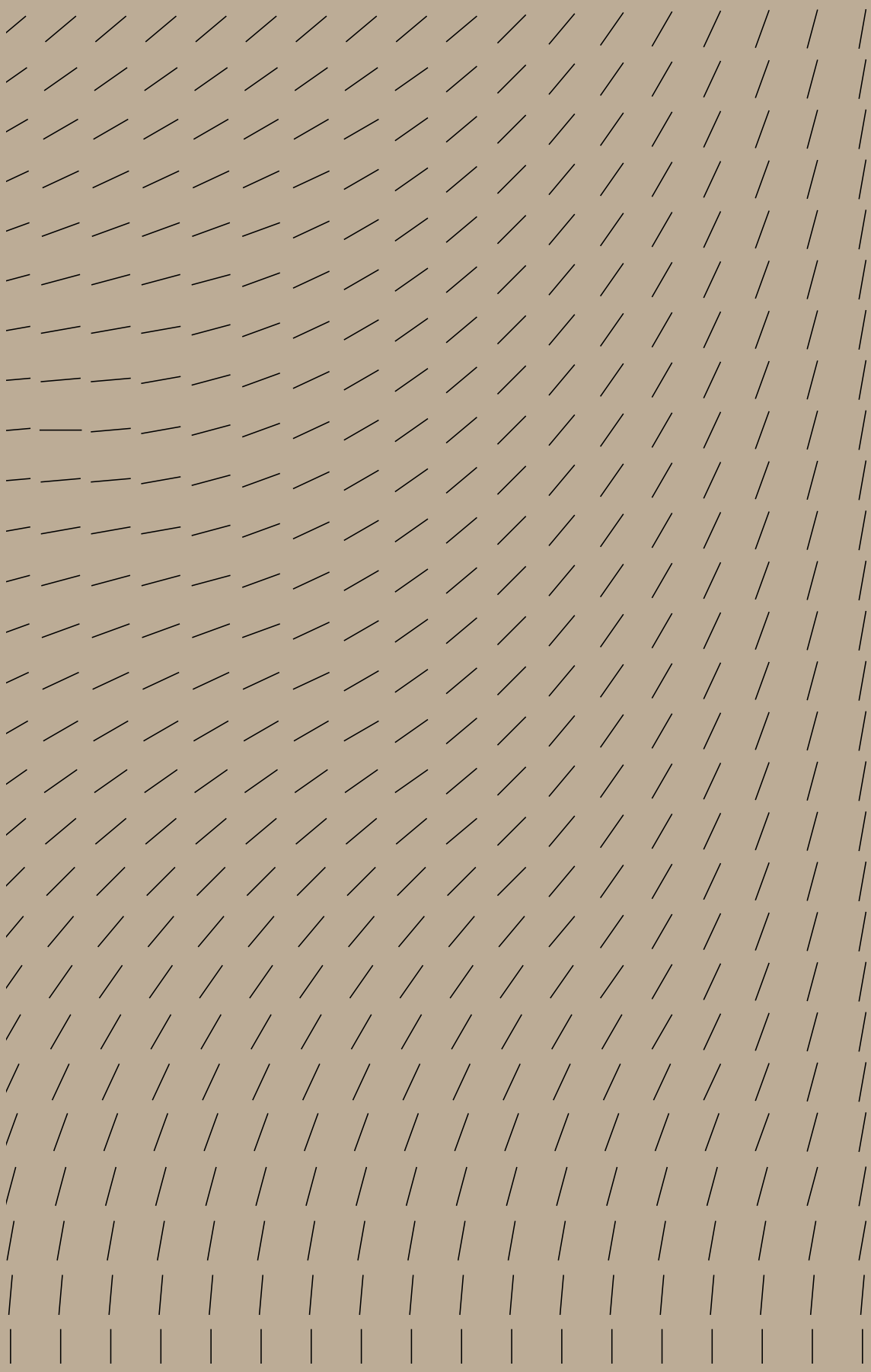

Annual Report

2021/2022

Weizenbaum Institute for the Networked Society –
The German Internet Institute

About the Weizenbaum Institute

The Weizenbaum Institute conducts fundamental, interdisciplinary research into the transformation of society as a result of digitalization and develops possible approaches for politics, the economy and society as a whole. The aim is to better understand the phenomena, conditions and consequences of digitalization. With this aim in mind, ethical, legal, political, journalistic, economic, social, aesthetic and IT-based aspects of the digital transformation are investigated at the Weizenbaum Institute. In this process, the empirical and theoretical basis is created for organizing digitalization in a self-determined, sustainable and responsible way. In order to develop options for society to take action, the Weizenbaum Institute links interdisciplinary and problem-based fundamental research with an exploration of specific solutions in dialog with society.

The Weizenbaum Institute for the Networked Society – The German Internet Institute – is a joint project funded by the Federal Ministry for Education and Research (BMBF) and the Federal State of Berlin. The consortium comprises: the four universities in Berlin – the Free University of Berlin (FU Berlin), the Humboldt University of Berlin (HU Berlin), Berlin Institute of Technology (TU Berlin), Berlin University of the Arts (UdK Berlin) – and the University of Potsdam (Uni Potsdam), the Fraunhofer Institute for Open Communication Systems (Fraunhofer FOKUS), the Berlin Social Science Center (WZB) and – since September 2020 – the Weizenbaum Institute as the coordinator of the consortium.

This report relates to the period from September 15, 2021 to September 14, 2022.

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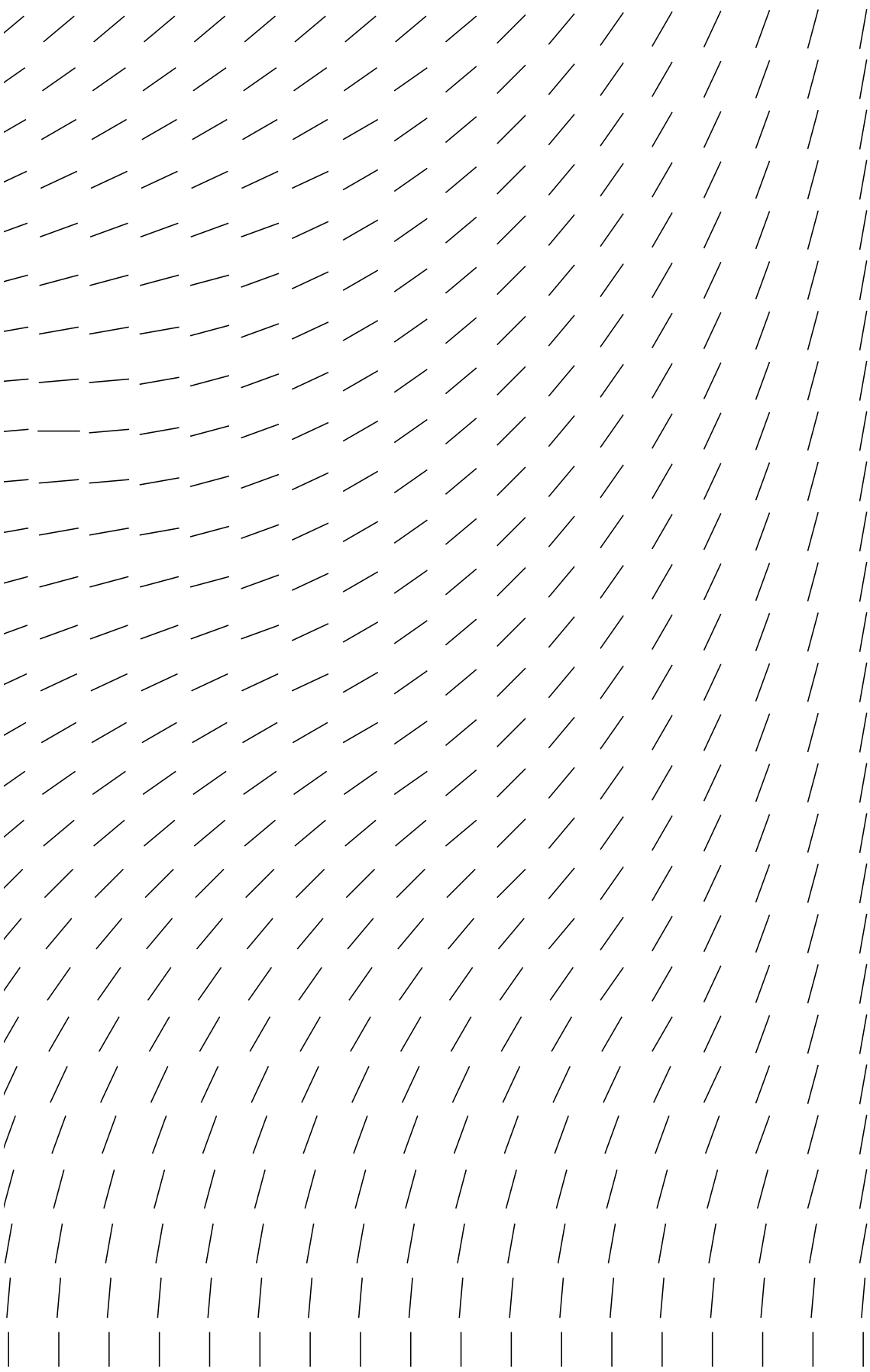


Annual Report

2021/2022

Weizenbaum Institute for the Networked Society –
The German Internet Institute

Editorial

The Board of the Weizenbaum Institute: Dr. Karin-Irene Eiermann, Prof. Sascha Friesike, Prof. Christoph Neuberger, Prof. Martin Krzywdzinski (left to right)

Dear readers,

This year we are presenting you with the fifth annual report of the Weizenbaum Institute – and we are looking forward to presenting many more. Our evaluation has been a successful one. In its report, the commission assesses the quality of our research as “consistently positive” and recommends funding for our institute for a further three years.

After two years of the pandemic when most of us worked from home, we have also finally been able to return to the office in the reporting period. In the rest of this report, you will learn about the other key developments, research highlights and activities that have taken place between September 15, 2021 and September 14, 2022.

We begin with a foreword from the Directorate about the current position. Here we explain the fundamental considerations from which our research agenda is derived and reflect on the programmatic mission of the person who gave us our name, Joseph Weizenbaum.

We also present you with some of the highlights of our research and knowledge transfer work in a more detailed and diverting way in the dossier section. The reports from the 21 research groups on their research topics, projects, knowledge transfer activities and collaboration in the reporting period follow on from that.

The final sections of our Annual Report are devoted to the organizational structure of our institute and list relevant events and facts, including the prizes and awards and the offices and functions of our leading academics.

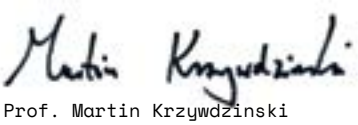
We have provided you with an updated list of our academic publications, papers and teaching courses in the reporting period online on our website at www.weizenbaum-institut.de/publikationen. You will also find information about events, the latest news and reports about the people and activities of our institute on our website. If you want to avoid the risk of missing anything important, we recommend subscribing to our newsletter. Of course, you can also follow us on Twitter and LinkedIn.

All that remains is for us to say that we hope you enjoy reading our Annual Report! We would welcome any feedback.

The Board of the Weizenbaum Institute

Prof. Christoph Neuberger
Academic Chief Executive
and Director (FU Berlin)

Prof. Sascha Friesike
Board Member and Director (UdK)



Prof. Martin Krzywdzinski
Board Member and Director (WZB)

Dr. Karin-Irene Eiermann
Administrative Director
(Weizenbaum Institute)

Contents

I. Foreword

For the Weizenbaum Institute, which is still in its infancy, September 2022 was an important turning point: After the five-year development phase, we started the establishment phase in the fall. This makes it an appropriate moment at which to take stock, as we will do in this Annual Report: What have we achieved? What route have we taken to turn the "Weizenbaum Institute" project into an independent research establishment?

ASSESSMENT OF THE YEARS OF DEVELOPMENT, START OF THE ESTABLISHMENT PHASE

The core of our work is research that is intended to have an international profile and an interdisciplinary slant. The 16 newly established research groups are taking topics from the initial project phase forward or are devoting themselves to new research questions. We are therefore striking a balance between continuity and flexibility. We define the research groups not by means of research subjects but through four areas of social tension that are of continuing relevance: We examine the tensions between claims to social participation and inequality (focal point 1), between economic interests and objectives relating to the common good on digital platforms (focal point 2), between the public domain and exclusivity in relation to the digital organization of knowledge (focal point 3) and between security and freedom in connection with digital infrastructures in democracy (focal point 4). With this approach, we at the Weizenbaum Institute can do justice to the high degree of ambivalence and complexity of digitally networked society and play our part in shaping it. At the same time, the four areas of tension frame the work of the interdisciplinary research groups and serve as common reference points.

We will be developing our research further in the new project phase and in doing so make it even more wide-ranging. The fellowship program will be extended, we are setting up a methodology lab for advice and advanced training, and our research is becoming more reflexive. In other words: We are observing and assessing digitalization research ourselves in surveys and analyses of its structures, for example, and of research output. In this way, we are able to show how the research field is developing and provide guidance to other academics.

DIGITALIZATION AS FUNDAMENTAL CHANGE

Digitalization is doubtless one of the biggest challenges facing contemporary society. If it is placed against the broad framework of history, it sits alongside mechanization and electrification, both of which were revolutionary in their impact. It is no exaggeration to claim that we are currently experiencing the start of a new epoch – and it is up to us how digital technology will be used and what far-reaching consequences it will have for society. Digitalization has also triggered a wide range of legislative activity at national and, in particular, European level. At the Weizenbaum Institute, we are able to carry out fundamental research into the digital transformation with a high degree of independence. We want to make the most of this privilege.

Digitalization is a long-term process that affects all areas of life. We found out exactly what this means during the coronavirus pandemic: We all moved large parts of our public and private lives from the analog world into the digital world. This push towards digitalization triggered plenty of debate about the strengths and weaknesses of the digital infrastructure and its application. We discussed them many times in our Weizenbaum Forum and we have focused on the consequences of coronavirus in a series of projects.

Digital technology can be shaped, which is precisely why it is so complex and hard to assess in terms of its consequences. It demands an academic approach that addresses both technology and society and is therefore interdisciplinary. It also requires an interactive relationship with society: Handling digital technology is not just a subject of study, rather we see our work as an interaction between academia and society, as a cycle of analysis, assessment and formation.

Two core principles of digitalization are participation (i.e. wider opportunities to get involved) and automation (i.e. replacement of human actions with algorithms). These two areas of potential are full of both promise and temptation. In recent years, the dark side of digitalization has become more apparent. Negative consequences are impacting on both participation – we can see a coarsening of public debate, digital divisions and privacy under threat – and automation, such as a lack of transparency in behavioral control. But technology does not determine itself, it is those who use it who shape its purpose and objectives. It therefore depends which guiding values the design of the digital world follows.

KEY POINTS OF OUR CONCEPT

All of this places particular demands on research into digitalization. At the Weizenbaum Institute, we have developed an integrated concept of digitalization research that is intended to stand up to these heavy demands. We draw on current concepts in academic research and academic policy relating to the big challenges in society (such as “Mode 2”, “Transdisciplinarity” and “Great Challenges”). The three key points of our concept are: fundamental research, interdisciplinarity and social relevance.

Fundamental research is required to overcome the digital challenge. We note particular shortcomings in the research landscape here, which is highly fragmented and often driven by short-term hypes.

Interdisciplinarity is the principle underlying our research: Digital applications are socio-technical systems that arise from the interaction between aspects of society and technology. We complement the normative perspective, which defines the design objectives and serves as a corrective measure. The range of disciplines represented at the Weizenbaum Institute and the relationships between them are derived from this.

Finally, the *social relevance* of our research is an important factor. Only through interdisciplinary, fundamental research do we have anything important to contribute to the dialog and knowledge transfer. We strive to make a wide range of social connections, participate in public discourse and interact with stakeholders in the fields of politics, the economy and civil society.

ON THE ROAD TO CONSOLIDATION

In the establishment phase, we are creating appropriate structures to turn our vision of the Weizenbaum Institute into reality. We are planning the transition from project support to institutional funding, which means consolidation, independence and networking. Going forward, our institute should be funded institutionally by the federal and regional states in accordance with Art. 91b(1) sentence 2 of the German Basic Law (GG).

With the beginning of the establishment phase in September 2022, the research is gradually being moved over to the Weizenbaum-Institut e.V.: Nine of the total of 16 research groups are now based in the association, the seven other are distributed around its partners (Fraunhofer FOKUS, FU Berlin, HU Berlin, TU Berlin, UdK Berlin, University of Potsdam, WZB).

We see a particular opportunity in our association with our academic partner institutions to bring together great strengths in academia and digitalization. The key structures for future collaboration have already been set out in a cooperation agreement. The partners intend to complement one another and achieve objectives together through mutual aid and support. The central points of the agreement are joint appointments, the development of a coherent research program which can be developed flexibly, externally funded projects, support for the next generation of researchers, teaching, joint reporting on performance and usage of infrastructures. In 2023 we will face our next big challenge: the evaluation of the Council of Science and Humanities.

CENTENARY OF JOSEPH WEIZENBAUM

So we have plenty ahead of us! And reflecting on Joseph Weizenbaum, the man who gave his name to our institute and who would have been 100 in 2023, offers some helpful guidance. He was a combative scientist and straight talker. In an essay that appeared in the Süddeutsche Zeitung in 2008 – just a few weeks before his death – he addressed the limits of knowledge: “In principle, it is impossible to grasp a human being purely scientifically. That explains why the attempt to make robots in human form is absurd.” He sees a fundamental difference between human beings and computers and considers it a big mistake to assign human capabilities to computers. In doing so, Weizenbaum says, human beings are surrendering their freedom and making themselves subject to computers. He expands his argument into a critique of scientific thinking and expertise: Practical constraints should not predominate, questions of value should not be excluded.

Indeed, Joseph Weizenbaum repeatedly took a stance on such value questions. He criticized not only the military use of computers, but also the tendency to strive for wealth and power. In the aforementioned essay, he urges: “An awareness that all human beings are brothers and sisters should replace the zeitgeist. Cooperation instead of economics, modesty instead of unlimited consumption, veneration of life rather than robots: These objectives must replace our current values.” Only a rethink can save humanity from the consequences of climate change. His words sound as if they were written for the present day.

Self-determination and sustainability are the two core values of our institute. They can be identified in Weizenbaum’s work: Self-determination means individual autonomy and collective decision-making in a liberal democracy. Sustainability means a holistic view of digital society: In terms of time, what matters is the long-term view, the consequences of our actions for subsequent generations; in terms of place, global relevance is the key; in practical terms, what matters are the ecological, economic and social dimensions of our actions. Through our research, we want to show how these two values can be realized in a digitally networked society.

The Directorate of the Weizenbaum Institute

Prof. Christoph Neuberger
Academic Chief Executive and Director (FU Berlin), Principal Investigator

Prof. Sascha Friesike
Board Member and Director (UdK), Principal Investigator

Prof. Martin Krzywdzinski
Board Member and Director (WZB), Principal Investigator

Prof. Bettina Berendt
Director (TU Berlin), Principal Investigator

Prof. Manfred Hauswirth
Director (Fraunhofer FOKUS), Principal Investigator

Prof. Hanna Krasnova
Director (Uni Potsdam), Principal Investigator

Prof. Herbert Zech
Director (HU Berlin), Principal Investigator

II. Overview of 2021/2022

The fifth year of the Weizenbaum Institute finally brought a return to working on site. At least in the second half of the year, it was possible to hold our events and meetings in atmospherically appealing locations. We are now benefiting once again from direct encounters with research fellows, colleagues, other researchers and people from the fields of politics, economics and society. We have completed another successful evaluation and we still face the task of facilitating self-determined design and sustainable implementation of the digital transformation of society with our research. This overview explains how we addressed this task over the last "Weizenbaum year" (from September 15, 2021 to September 14, 2022). It examines our activities in the areas of dialog and knowledge transfer, political communication and internationalization. Finally, we have focused on institutional development. We are looking back on a five-year development phase of the institute, the fruits of which we are now harvesting, and looking forward to the establishment phase, which we now have to manage. We assess our research in the following dossier contributions and in the reports of the research groups. Academic publications and papers presented are recorded in a database, the entries in which can be accessed on the institute's website at www.weizenbaum-institut.de/publikationen.

2.1 Dialog and transfer

The transfer of knowledge and mutual learning through interaction with stakeholders outside academia are central to our understanding of ourselves as researchers at the Weizenbaum Institute. We tackle the development of the research agenda, the completion of projects and knowledge transfer in a participatory, co-creative and interdisciplinary way. We place heavy emphasis on multifaceted debates, create formats for them, invite everyone to get involved and also get involved ourselves whenever the opportunity arises. Our commitment in the area of dialog and transfer serves various purposes: First of all, we get ideas for research projects which can answer urgent questions concerning digital transformation. Our advice is often sought explicitly. We attempt to even out imbalances in knowledge, interpret existing knowledge and help to deal with specific challenges and problems of the networked society. Over the following pages, we report on selected collaborations and projects for various stakeholders in the fields of politics, the economy and society, which have taken place in the reporting period.

POLITICS AND SOCIETY

Our contacts in the areas of politics and society are extremely varied. Below we present a selection of the interactions and activities that took place in the reporting period. They are intended to give an impression of the breadth of our political and social work.
The "News, campaigns and rationality of public discourse" research group continued its research and transfer project on social media communication in the context of election campaigns over the previous year. The project began in the lead-up to the federal elections and regional elections in Berlin and Mecklenburg-Vorpommern in September 2021. The cooperation partners were the European New School of Digital Studies of the European University Viadrina, the NRW School of Governance and the Leibniz Institute for Media Research | Hans Bredow Institute. It received external funding from Reset.tech. As part of the project, the website www.zahlen-zur-wahl.de was created, which, by visualizing the data collected, provides information about the topics surrounding the elections which were being discussed on social networks, about which individuals and organizations were particularly active and whether there was any evidence of disinformation campaigns. The site was mainly aimed at journalists, teachers and anyone else with a particular interest. The success of the election campaign project is confirmed by the high level of media attention and daily visits in the five-figure range.

Making the online election campaign 2021 more transparent – that was the aim of the Figures on the Election project team.

Podium discussion "AI. Or the Future of the Arts?": Prof. Jesko Fezer, Michelle Christensen, Dr. Uta Brandes, Prof. Erik Spiekermann (from left to right)

Emilija Gagrčin from the "Digital citizenship" research group has been working as a youth representative on the Advisory Council on Youth of the European Parliament and is responsible there for the topics of digitalization and AI. In the course of the committee meetings, she gave presentations before government representatives of the Member States and worked as an expert on the "AI Skills" working group in the educational events of the youth sector of the European parliament. She is also part of the Goethe Institute's AI network and leads the cooperation project "We and AI".

Initiated by Michael Vaughan, a former research fellow and currently a post-doc in the "Digitalization and the transnational public" research group, a comprehensive database of European right-wing extremist organizations has been created in collaboration with the Centre for the Analysis of the Radical Right (CARR) and numerous national experts from the Member States of the EU. This database is intended to help internet companies to monitor the online content of banned organizations more effectively.

Gergana Vladova, head of the "Education and training" research group, has been involved as an expert in creating a "knowledge store of data skills and data culture" as part of the digital strategy of the German federal government. She has also been identifying the digital transformation in companies in collaboration with associate researcher André Ullrich Hürden. They are contributing to solutions to minimize inequalities on the path to digital transformation in companies on the "Involvement of Employees in the Digital Transformation" working group, funded by the Senate Department for Economy, Energy and Enterprises as part of the implementation of the Industrial City of Berlin master plan.

The "Work in highly automated, digital-hybrid processes" research group is involved in the "Policy Lab Digital, Work & Society" of the Federal Ministry of Labor and Social Affairs (BMAS), which is working on the consequences of the COVID-19 pandemic. It presented its research results there on June 22, 2022.

The "Critical maker culture" research group is involved in various social transfer events. On November 11, 2021, for example, Michelle Christensen, head of the research group, moderated the "AI. Or the Future of the Arts?" discussion session, which was held as part of the "Anti-Dystopian Congress" of the Goethe Institute in Prague. At "Design Talk" in the Museum of Decorative Arts in Berlin on November 12, 2021, she spoke as a guest expert on the dark side of design. Together with research group head Florian Conradi, she developed a concept for the "Art & Computation" workshop series, which took place in September 2022 in cooperation with the Goethe Institute and the German Informatics Society and made use of interactive storytelling elements. Selected artists and IT specialists interact here in a fictional live role-play. On their journey through the game, they experience social and political challenges in the development of AI, learn about alternative and sustainable technologies and activistic approaches, and develop AI art installations.

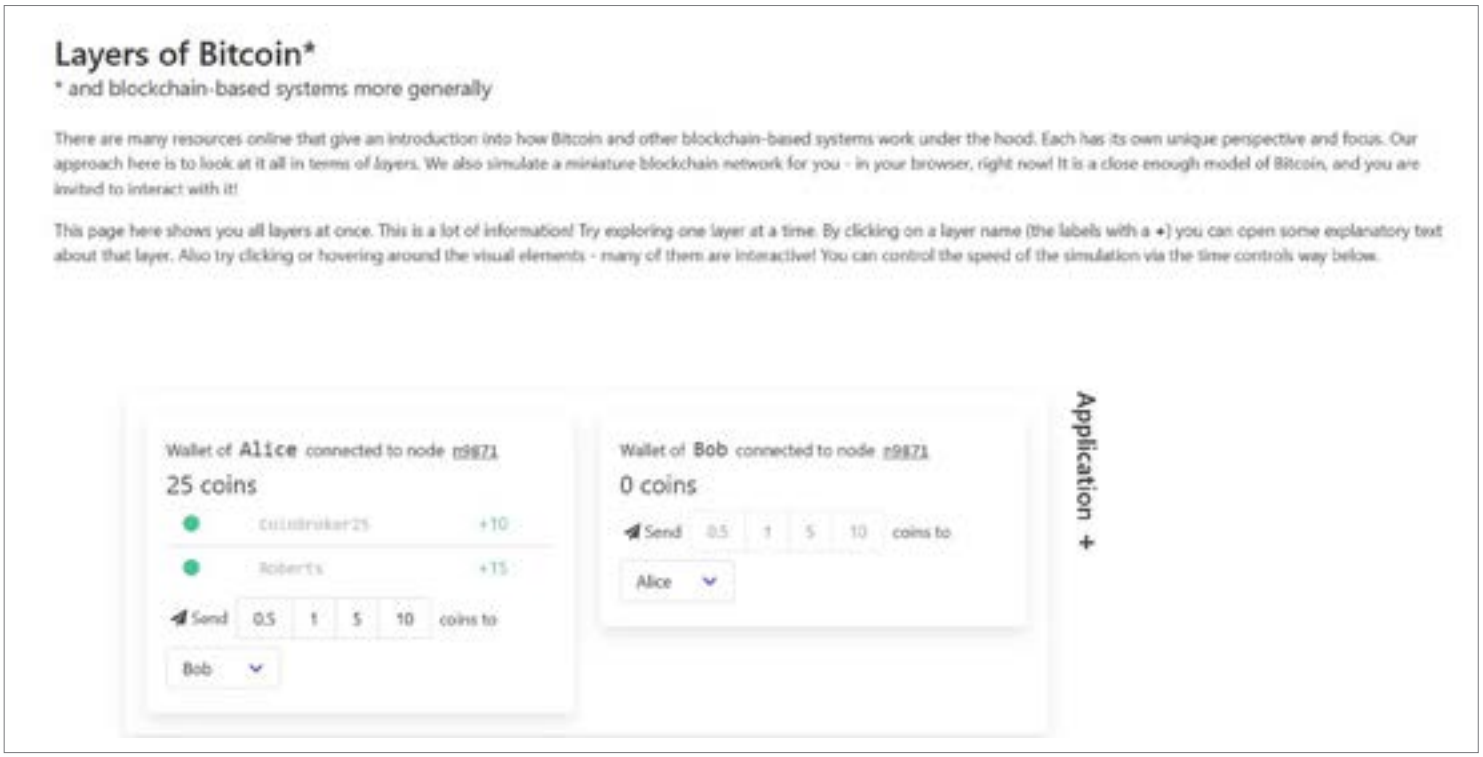
Organizers of the online course of the TIME Akademie on the topic of creativity: Sascha Friesike and Jennifer Haase.

A glimpse behind the scenes: The making of an online course.

We like to take the innovative route to knowledge transfer. Jennifer Haase, “Education and Further Training” research group, also made use of new digital opportunities and was involved as a professor in the creation of an online course of the TIME Akademie on the topic of creativity. Together with two other professors, one of them Director Sascha Friesike, a three-hour course was created to introduce the psychological principles of creative work and provide a pragmatic guide to integration into working life. The course has been available to anyone interested through the TIME Akademie since the end of May 2022.

Tatiana Ermakova also took part in an experiment and used video clips as a medium as part of the "Secure Digital Future" communication initiative of the Federal Ministry of Education and Research (BMBF) in order to present the "VERITAS: VERIfication through Trusted ASsociation" project to a wide public. In the project, researchers are developing a platform to offer support in searching for reliable information on the internet.

Shortly before completion of this annual overview, Martin Florian, head of the "Trust in distributed environments" research group, provided us with a browser-compatible simulation of a bitcoin-like system to explain how cryptocurrencies and blockchain technology actually work. A blockchain network is broken down into various levels that can be explored individually. Many interactive elements on the site (https://layers.trudi.group) also encourage visitors to take a look at the system in action.



Martin Florian describes the interactive website he has developed to make the technology behind Bitcoin and blockchain a little clearer as "edutainment".

ECONOMY

Digitalization is changing the economy fundamentally. In order to remain competitive, companies are digitalizing their supply chains and production processes and developing new, data-based business models. Following its triumphal march through the business-to-consumer sector, the platform economy is now increasingly dominating business-to-business relationships.

Many of our research groups are working on these dramatic changes and are entering into cooperation agreements with companies, business associations, and trade unions. The activities of the "Work in highly automated, digital-hybrid processes" research group serve as an example here. Robert Koepp completed a study for the European Transport Federation trade union association on the effects of the technical transformation in transport logistics. He presented the results of his study to the association members in two webinars. The research group, together with the Münchner Kreis, organized an online event for companies with the title "Automation and Technology: Toward Prosperity or Rising Inequality?", which was held on June 28, 2022 with leading speakers from the USA and Germany. The research group also focuses specifically on individual companies as necessary. Florian Butollo and Lea

The “Work in highly automated digital-hybrid processes” research group is working, among other things, on the effects of digitalization in companies.

Schneidemesser, for example, presented the results of their study of digital platforms in the semi-finished goods sector at a meeting with representatives of the startup Facturee, which operates in this field. A close cooperation agreement also connects the research group with the “Future of Work” department of IG Metall. Joint events are organized once or twice a year to discuss research findings with works council members and trade unionists. At the event on February 22, 2022, about eighty participants shared their views on the use of wearables and digital assistant systems. The impacts of these new technologies on working processes were discussed, together with the types of business design required to ensure a high quality of work.

The “Education and training” research group also cooperates closely with the business sector. Small and medium-size enterprises (SMEs) often face the challenge when digitalizing production and supply chains that they first have to develop the necessary skills in the workforce. Malte Teichmann and Jana Gonnermann are researching the training situation in eastern German SMEs in collaboration with the IHK-Projektgesellschaft mbH Ostbrandenburg. The current status of the training situation was the topic of a joint stakeholder workshop held in Frankfurt/Oder on February 1, 2022. The findings are intended to feed into the development of an assessment tool which will help companies to identify relevant aspects of training and to approach them strategically, such as structuring the onboarding process, sharing knowledge in the workplace, and the opportunities for using learning technologies. In another research project in cooperation with Prof. Ines Langemeyer from the Karlsruhe Institute of Technology, the group is also working on various issues relating to target-group-specific training in SMEs.

SUSTAINABILITY

Our institute is committed to the common good as defined in the UN sustainability goals. Sustainable development of the digital transformation therefore constitutes a thematic focus in the area of dialog and transfer. Below are some examples from this area.

Bits & Bäume is an initiative for digitalization and sustainability, in which the Weizenbaum Institute is involved as a partner organization and member of the support group. From September 30 to October 2, 2022 a conference was held for the second time at the TU Berlin with the aim of creating a broad network of environmental and equality activists, technical experts, and business founders. Rainer Rehak from the “Quantification and social regulation” research group is a co-initiator and was involved in the preparations for the conference.
The “Critical maker culture” research group also organized a conference on the topic of sustainable development in collaboration with the Art Laboratory Berlin and the Einstein Center Digital Future in May 2022. “Hackers, Makers, Thinkers – Collective Experiments in Social Fermenting” brought together academics, artists, and activists from Europe, South America, and Asia to engage critically with issues of (agrarian) cultures, symbioses, bio-politics, and cultural-political, post-colonial approaches to programming, human computing, and open AI.

Bits & Bäume
Die Konferenz für Digitalisierung und Nachhaltigkeit

Along with twelve other organizations, the Weizenbaum Institute was involved in the preparations for and organization of Bits & Bäume 2022.

The “Hackers, Makers, Thinkers – Collective Experiments in Social Fermenting” conference came about in collaboration with the team from the Art Laboratory Berlin: Regine Rapp, Tuçe Erel, Christian de Lutz, Tengal Drilon.

The "Responsibility and the Internet of Things" research group was a co-founder of the Sustainability and Digitalization working group of the German Informatics Society. In its research work, it focuses among other things on the topic of the Social Internet of Things and the question as to whether and how sensor technology can be used by citizens' initiatives and journalists for a more sustainable future in towns, cities, and communities.

The two research groups "Education and training in the digital society" and "Inequalities and digital sovereignty" are both addressing the ways in which digital skills can be developed and the effects that has on digital sovereignty and socio-ecologically sustainable action. In the context of the CO:DINA research line "Digital sovereignty & sustainability" of the Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV), Gergana Vladova, Bianca Herlo, and André Ullrich analyzed the interactions between digital sovereignty and sustainability on behalf of the Institut für Zukunftsstudien und Technologiebewertung (Institute for Futures Studies and Technology Assessment). Their study "Responsible, democratically sustainable digital sovereignty" brought together findings from current research with the results of social and academic workshops to draw up recommended action points for politicians and society as a whole. This project bridges the gap to another thematic focus of our work: individual and collective self-determination in the networked society.

SELF-DETERMINATION

We understand self-determination as a design principle that is central to the preservation of human dignity and democracy. Our aim is to research, develop, and continuously facilitate it under the conditions of the digital transformation in politics, the economy, and society as a whole. Below are some examples from this topic area.

The development of data competence – which means a basic knowledge of data, its use, technical requirements, legal aspects, and cultural impacts – is fundamental to self-determined decision-making in our datafied society. In order to research the basic prerequisites for data competence in various areas – from schools, through the economy, to the healthcare system – and to lay the groundwork for effective action, the "Data-based business model innovations" research group has set up the Data Literacy transfer project. A "Whitepaper on Data Competence", which appeared in November 2021, brings together the various findings of the project. The research group also participated in workshop discussions on data literacy run by the Federal Office for Statistics in the reporting period.

Self-determination as a design principle

In a further project, the researchers from this research group are focusing on increasing the comprehensibility of data and metadata in European portals for open government data. They are surveying users and carrying out usability tests to improve the human-centered design of these portals.

The social media platform TikTok frequently attracts negative headlines because of censorship accusations and shortcomings in data, child, and youth protection. The "Responsibility and the Internet of Things" research group is taking a close look at this powerful intermediary with over a billion active users and is examining how the new European regulations regarding transparency obligations are being implemented here.

Bonny Brandenburger from the "Education and training" research group is focusing on digital citizen participation in a joint research project with the Open Knowledge Foundation DE, the Wissenschaftsladen Potsdam and the AWO Südbrandenburg and is looking at the question of whether the participation of citizens in the Lausitz region can be improved by means of technical training.

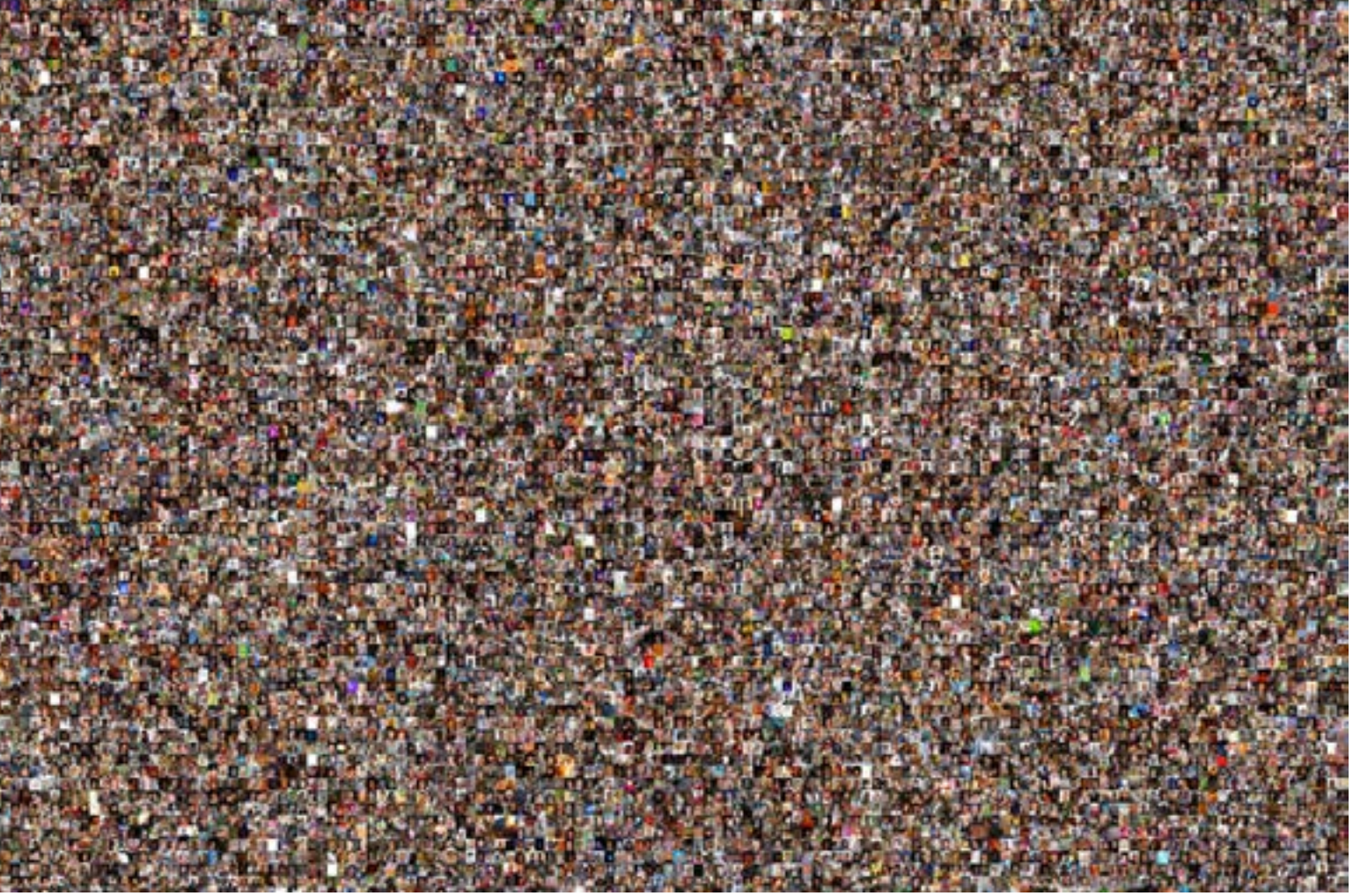
The "Open Research" working group at our institute presented a poster on open research projects and initiatives at the Weizenbaum Institute at the "OpenX – eine Strategie für offene Wissenschaft an der Berlin University Alliance" (OpenX – a Strategy for Open Science at the Berlin University Alliance) conference on July 8, 2022. The event is intended as the lead-up to better networking in open projects in the Berlin research area. For us, it was another opportunity to highlight our commitment to open science.

TRANSFER FORMATS

Our aim is to communicate our research findings in a comprehensible way and to engage in an active dialog with other academics, citizens, politicians, and individuals in the social and economic fields. To do so, we create and use formats that are target-group-specific, innovative, and original.

The fourth Weizenbaum Conference under the title “Practicing Sovereignty. Interventions for Open Digital Futures” took place on June 9 and 10, 2022 at the Alte Münze in Berlin. The conference was opened by Mario Brandenburg, the Parliamentary State Secretary of the BMBF, and Berlin’s State Secretary for Science, Armaghan Naghipour. In lectures, project presentations, workshops, and an exhibition, we examined the question of what digital sovereignty means from the perspective of critical digitalization research and what practices can contribute to a fairer digital future.

1st row right: Armaghan Naghipour, Berlin’s State Secretary for Science, Research and Equality | **2nd row left:** Renata Ávila Pinto, activist, Managing Director of the Open Knowledge Foundation | **2nd row center:** Adam Greenfield, internationally renowned expert in urban computing | **2nd row right:** Gilberto Vieira, Director of datalabe.org | **3rd row left:** Mario Brandenburg, Parliamentary State Secretary of the BMBF | **3rd row right:** Academic committee of the conference: Gesche Joost, Bianca Herlo, Daniel Irrgang, Jan-Willem Marquardt



At the exhibition, digital artists and tech-activists presented works through which they cast a critical eye over invasive technologies. Adam Harvey highlighted the vulnerability of the individual in his work. He presented 700,000 faces from the online platform Flickr that were used to develop facial recognition software without the agreement of those involved. The work provoked public interest, as the personal rights of those depicted had been breached.

Topics such as the increasing vulnerability and manipulation of the individual, breach of basic rights by mass surveillance, and digitally created erosion of democratic institutions and practices were discussed. The starting point and framework was provided by the term “digital sovereignty”, which is currently heavily debated because of its different uses and ambiguity, as it refers to various concepts relating to competences, obligations, and rights in the digital age.

The mix of various formats resulted in an inspiring and extremely intensive festival atmosphere. The highlights included an informal discussion about the common good and digitalization, a concert with generative art, an exhibition of work from artistic research and various workshops, which were organized in collaboration with the Federal Agency for Civic Education. Over the two days, we once again saw how productive it is if we look at both current problems and future opportunities of digitalization from a variety of perspectives with different types of knowledge and approaches that stimulate one another.

The intensive discussions and lively participation from academia and practice made clear that there are some important and extremely urgent questions about digital inequality, gender and diversity, discriminatory technologies, power structures in the digital world, and interaction between politics and technology. Along with the analysis of the state of the digital world, which the keynote speaker and activist Renata Ávila characterized as a “building at risk of collapse”, the roughly three-hundred international participants were interested in highlighting options for greater practical participation in digital society. How can we create more infrastructures designed for the common good, support local initiatives throughout the world, combat digital divisions, and protect vulnerable groups more effectively?

Since the fall of 2020, the Weizenbaum Forum has become a successful format for knowledge transfer and academic communication for the institute. The series of events regularly brings together three experts from various areas to discuss a current issue relating to digitalization and illuminate the social consequences of the development from various perspectives. A total of six Weizenbaum Forums were held in the reporting period as online events.

Weizenbaum Forums 2021/2022

June 14, 2022:
"The case of Twitter and Elon Musk: To whom does an opinion medium belong?"

Guests: Prof Judith Möller (University of Amsterdam), Jun-Prof. Juliane K. Mendelsohn (Ilmenau University of Technology), Benjamin Zeeb (Head of Partnerships & Co-Founder Alliance for Europe)

Moderation: Jakob Ohme, "News, campaigns and rationality of public discourse" research group

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April 26, 2022:
"Media and War – Online Journalism During Russia's Invasion of Ukraine"

Guests: Dr. Anna Litvinenko (FU Berlin), Dr. Daria Orlova (Kyiv Mohyla Academy, Ukraine), Marian Vogel (Media in Cooperation and Transition)

Moderation: Weizenbaum Director Christoph Neuberger, "News, campaigns and rationality of public discourse" research group

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April 12, 2022:
"Mobile, digital and disconnected – New inequalities in the world of work after the coronavirus"

Guests: Hajo Holst, University of Osnabrück, Barbara Susec (ver.di), members of the "Work in highly automated, digital-hybrid processes": Florian Butollo, Jana Flemming, Christine Gerber, Martin Krzywdzinski and David Wandjo

Moderation: Katharina Berr, "Reorganization of knowledge practices" research group

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March 15, 2022:
"Smart Borders? Digitalization and migration control"

Guests: Prof. Steffen Mau (HU Berlin), Anna Biselli (netzpolitik.org), Michelle Pfeifer (University of New York)

Moderation: Alexandra Keiner, "Relocation of the standardization process" research group

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February 8, 2022:
"I accept – Why consent on the net is no longer an individual decision"

Guests: Aline Blankertz (SINE Foundation), Rainer Mühlhoff (University of Osnabrück), Jacob Kröger ("Responsibility and the Internet of Things" research group)

Moderation: Robert Peter, Representative for Transfer and Public Affairs.

October 12, 2021:
"Good work in the platform economy"

Guests: Semih Yalcin (Lieferando works council), Frederik Fahning (managing director of Zenjob GmbH), members of the "Work in highly automated digital-hybrid processes" research group: Martin Krzywdzinski, Christine Gerber

Moderation: Prof. Franz Hofmann (Friedrich-Alexander University of Erlangen-Nuremberg)

The successful launch of the "Weizenbaum Journal of the Digital Society" also deserves a mention, the first issue of which appeared in November 2021. It provides academics from home and abroad with a forum for contributions to interdisciplinary research on the digital society. The four articles in the first issue focus on digital inequalities, the redesign and international regulation of legal aspects of platform work, and expressions of political opinion in social media. A second issue is due at the end of 2022.

The "Working and cooperating in the sharing economy" research group, under the leadership of Volker Stocker, has developed the successful PLAMADISO Talks (Platforms, Markets, and the Digital Society) series of online lectures into a platform for interdisciplinary interaction between researchers and between the academic world and those sections of the public interested in this area. Once again in this reporting period, a large number of leading guest speakers from Germany and abroad and from various disciplines presented their research findings and discussed them with the participants. Recordings of the lectures have been published on the YouTube channel of the research group.

A particular highlight was the PLAMADISO Talk with Geoffrey Parker – one of the leading academics in the field of the platform economy.

Berlin Science Week is a fixed date on the knowledge transfer calendar every year. In cooperation with the Einstein Center Digital Future (ECDF) and the Alexander von Humboldt Institute for Internet and Society (HIIG), a podium discussion was held on November 3, 2021 at our institute on the subject of "Airbnb, Uber, Lieferando: The future of the economy?". Director Martin Krzywdzinski discussed the issues with Prof. Philipp Staab (ECDF) and Tina Krell (HIIG). The discussion was moderated by Katja Weber (radioeins). The event was broadcast live on the Berlin channel Alex TV. The "Digitalization of science" research group also organized a Science Slam on the National Research Data Infrastructure for the public at Berlin Science Week 2021.

Podium discussion on the topic "Airbnb, Uber, Lieferando: The future of the economy?": Katja Weber, Tina Krell, Prof. Philipp Staab, Martin Krzywdzinski (from left to right)

The Weizenbaum Movie Night is an effective format of the Weizenbaum Institute that attracts a large audience. Feature films and documentaries are shown that highlight relevant aspects of the digitally networked society. On August 25, 2022, the documentary "Alles ist eins. Außer der 0" was shown at the Kreuzberg open-air movie theater. It tells the story of Wau Holland, who went from being a subversive hacker to a defender of democracy. It is also the story of Germany's most famous hacker association, the Chaos Computer Club, which developed from being an exclusive community to a body which is now often consulted on questions of internet policy. The movie night was organized in collaboration with the Regional Agency for Civic Education of Berlin. The film was preceded by a presentation of the first joint publication on the topic of "Democracy and digitalization" and a podium discussion on the question of what the state has to do and what society is permitted to do to facilitate and strengthen democracy.

A highlight of the summer: The Weizenbaum Movie Night

Berlin's State Secretary for Science Armaghan Naghipour and MinDir Dr. Roland Philippi (BMBF) on a visit to the Weizenbaum Institute.

2.2 Political communication

Through our research, we want to facilitate an evidence-based way of shaping politics, the economy and society. Political communication at the Weizenbaum Institute is intended, on the one hand, to communicate expertise to political stakeholders in the form of research results or assessments of legislative processes and, on the other hand, to open up space for political discourse between politics and academia.

As our intention in this approach is to exercise influence with our research results and the options derived from them, the Weizenbaum-Institut e. V. has registered with the Lobby Register for Interest Groups of the German Parliament and Federal Government and with the new Transparency Register of the EU, and has undertaken to comply with the corresponding codes of conduct.

Our researchers welcome the opportunity to use personal contact with political decision-makers to feed their findings directly into the political sphere. This was the case, for example, on the visit of State Secretary Armaghan Naghipour from the Berlin Senate Department for Science, Health, Care and Equality and Head of Department Dr. Roland Philippi from the BMBF in May 2022. At the meeting, researchers from seven research groups presented their topics, from a digital school, through the organizational transformation in companies, the role of assistant systems in the learning process and communication by anti-democratic forces in the public digital sphere, to the current position of the Weizenbaum Institute on the draft of the Data Act of the European Commission, the Digitalization Act of the state of Schleswig-Holstein, and the digital euro.

When politics meets science at the Weizenbaum Institute, not only is there expert input, but also pizza. Here on the topic of cyber security.

New transfer formats in the area of political communication were also developed in the reporting period: Since March 30, 2022 “Pizza and …” has been running as a regular format offering space for political discourse. In the weeks when the German parliament is not in session, our researchers meet for background discussions with members of parliamentary offices and political foundations and ministry officials. The reason for the meetings is the respective topic of the day – and, of course, the pizza. The first events were entitled “Pizza and cyber security”, “Pizza and digital education”, “Pizza and platform work” and “Pizza and the democratic resilience of social media”. Through this format, we have been able to bring together a total of thirty guests with ten academics from our institute, as a result of which follow-up meetings such as academic advisory sessions have been arranged.

The “Update & Upload” format is used for internal interaction on politically relevant topics. Here, our academics regularly find out about digital political developments in the EU, in Germany, and in its federal states (“Update”). At the same time, they have the opportunity to address issues that are politically urgent in their view or that should be carried over from their research into the political sphere (“Upload”). In some cases, guests are also invited here to explain the status of certain debates or to clarify the needs of the political sphere.

In the first round of discussions in the new “Upload & Update” format in March 2022, the topic was the digital policy of the new “traffic-light” coalition.

Alongside proposed legislation, we not only write position papers and take part in hearings, but also offer discussion formats. With our Dutch partner organization ALLAI, we developed a series of round tables to accompany the European AI Regulation in the reporting period: the "AIA In-depth Policy Round Table". The European Commission presented an ambitious proposal for a legal framework for AI in April 2021. The proposal is currently being reviewed by the European Parliament and by the Member States in advance of the trialog, which is due to begin in 2023. It is therefore time for political decision makers to familiarize themselves with the proposal. During the round table, experts from the Weizenbaum Institute and ALLAI explain the most important elements of the legal framework process, its objectives, practical implementation, and consequences. There is also time for discussion and questions. The series of events is aimed primarily at German political decision-makers, in particular those from parliament, the government, and the ministries. Members of the European Parliament from other countries are also invited to explain their points of view. The first AI round table took place on June 26, 2022 and was followed by events in September and October 2022.

As part of the "AIA In-depth Policy Roundtable", experts from the Weizenbaum Institute and from ALLAI discussed the effects and consequences of the European Artificial Intelligence Act (AIA).

A series of political reports were also drawn up in the reporting period: The two research group leaders Martin Florian and Ingolf Pernice from the "Trust in distributed environments" research group formulated a position paper on the digital euro. The report was submitted as part of a public consultation process by the European Commission. The aim of the initiative, launched in April 2022, was to collect information about the possible design and regulation of a digital euro. In the report, the authors point to the potential of the digital euro to protect the rights of EU citizens, but also to the danger of its misuse as a surveillance infrastructure. They also explain possible effects on monetary policy, financial innovation, and financial stability. Finally, they address the impact on the resilience of the currency system on far-reaching failures and the trust in the euro system.

The "Framework conditions for data markets" research group took a position in February 2022 on the proposal of the European Commission for a European Data Act. The legislative proposal includes a package of measures with the aim of making it easier for data-driven companies to use IoT data. The most innovative and wide-ranging regulation instrument in this context is the obligatory regulation of access rights that is intended to facilitate data flow in the business-to-business and business-to-government sectors. In the position paper, the research group comes to the conclusion that the effects of regulation of access rights on manufacturers of IoT devices, third parties, and the data economy are difficult to foresee in general. At the same time, the authors argue that the legal positions and rights that the Data Act would create require further review and that there is room for clarifications and improvements in the proposed legislation. Their analysis includes several specific recommendations. The report was backed up by discussions in the Federal Chancellor's office and several ministries.

At the request of the Environment, Agriculture and Digitalization committee of the Schleswig-Holstein state parliament, the “Framework conditions for data markets”, “Relocation of the standardization process” and “Digitalization of science” research groups drew up a report on the draft of a digitalization act for Schleswig-Holstein. In the hearing at the state parliament on February 7, 2022, the researchers were also able to give their views on individual points of the act and on questions about the use of AI in public administration and about open data.

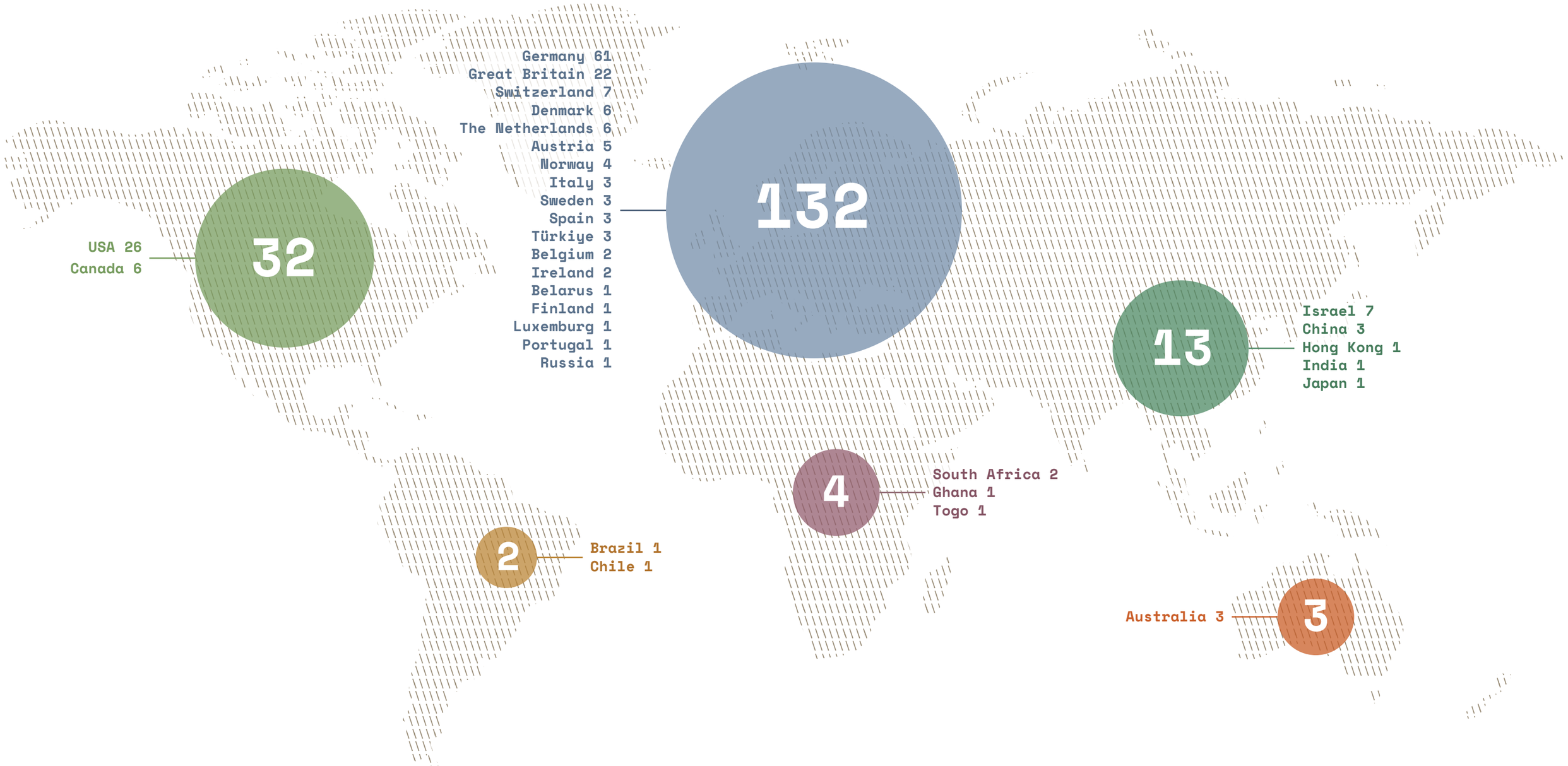
And finally, Michael Vaughan, “Digitalization and the transnational public” research group, wrote a report for the European Commission as part of the “Proscribed Right-Wing Extremist Organizations” project in collaboration with Michael Zeller (Central European University, Hungary) and Richard McNeil-Willson (European University Institute, Italy), which was presented on November 16, 2021 to the Senior Officials Meeting of the EU Internet Forum.

2.3 Internationalization

Digital transformation is taking place even in the most remote corners of the world. It is therefore not enough to look only at Germany or Europe when it comes to researching the basic conditions, means, and processes for individual and collective self-determination and sustainable development of the digital society. Research into digitalization is therefore a global task, and first-class research can only take place through international collaboration. Ever since it was launched, our institute has laid the foundation stones for international networking and is continually developing them. Our aim is to provide worldwide orientation, networking and infrastructure services. We are certain that the value-based European perspective in particular can lead to greater fairness, participation, and self-determination in the digital world.

With our fellowship program, we invite academics of all career stages to Berlin not only from the rest of Germany but also from abroad, in order to carry out research projects together and develop long-term international cooperation. We are relieved that, after the restrictions caused by the coronavirus pandemic, we are finally able to run the fellowships in the form of several months of residence at our institute once again. In the reporting period, we were able to welcome a total of 54 research fellows from 15 countries in Africa, America, Asia, Australia and Europe – both in person to Berlin and online. The appeal of our fellowship program results not only from its size and the fact that our institute is based in one of the liveliest cities in the world, but also from the opportunity to work with interdisciplinary research groups and establish long-term cooperation. The following graphic shows the various parts of the world from which the previous research fellows at our institute originate.

186 fellows from 31 countries
have worked at the Weizenbaum Institute since 2017.



At the regular Weizenbaum colloquia, our research fellows present their projects and findings to the whole institute and to any researchers with an interest from outside. Up to the end of August 2022, 17 of these events had been held in the reporting period:

November 2021: "Crossing Political and Technical Spaces in Social Media Communication: Evidence from the US Elections and Brexit", Michael Bossetta (University of Lund, Sweden)

December 14, 2021: "Social Conservatism in the Digital Environment: Research Directions", Nicola Righetti (University of Vienna, Austria)

December 14, 2021: "Medical Liability and Artificial Intelligence in the Context of the European Commission Proposal", Alfio Guido Grasso (University of Catania, Italy)

December 14, 2021: "Not Your Parents' Politics: The Unexpected Forms of Youth Political Expression", Neta Kligler-Vilenchik (Hebrew University of Jerusalem, Center for Advanced Study in the Behavioral Sciences, Stanford, USA)

March 15, 2022: "Populist User Comments: Assessing Their Automated Measurement and Their Impact on Online Deliberation", Daniel Thiele (University of Vienna, Austria)

March 15, 2022: "Decentralized Autonomous Justice – Blockchain Technology as Key to a 'Fairer Justice System'? A Reality Check", Katrin Becker (University of Luxembourg, Luxembourg)

May 10, 2022: "Discriminability and Confirmation Bias in Fake News Web Experiments: A Mixed-Model Based Signal-Detection Approach", Reinhold Kliegl (Uni Potsdam)

May 24, 2022: "Logics of Rhetorical Delegitimization of Democratic Institutions: A Case Study of the 2020 U.S. Presidential Election (and its Aftermath)", Jennifer Stromer-Galley (University of Syracuse, USA)

June 28, 2022: "Deconstructing Technostress: A Configurational Approach to Explain Job Burnout and Job Performance", Prof. Jason Thatcher (Fox School of Business, Temple University, USA)

June 28, 2022: "'Technik' im Patentrecht: Verlagerung der Normsetzung?" ('Technology' in Patent Law: Relocation of the Standardization Process?, Fabienne Graf (University of Zurich, Switzerland)

July 12, 2022: "The Effects of Algorithms on Competition", Prof. Michal Gal (University of Haifa, Israel)

July 26, 2022: "Rechtsrahmen der Wertbildung: Gleichlauf zwischen Kryptowährungen, Token und Wertpapieren?" (Legal Framework for Value Creation: Synchronization of Cryptocurrencies, Tokens and Securities?), PD Dr. Michael Denga (HU Berlin)

July 26, 2022: "Multi-scale Community Detection in the Network Society: Theory, Applications and Epistemological Questions for a Critical Network Science", Dominik Schindler (Imperial College London, UK)

August 9, 2022: "Die Veröffentlichung rechtswidrig erlangter Geheimnisse" (Publication of Unlawfully Obtained Secrets), Leonie Jüngels (University of Trier)

August 9, 2022: "Access and Benefit-Sharing bei digitaler Sequenzinformation – Eine immaterialgüter- und datenrechtliche Perspektive auf Policy Options in Hinblick auf den UN Biodiversity Summit" (Access and Benefit-Sharing in Digital Sequential Information – An Intellectual Property and Data Legislation Perspective on Policy Options with regard to the UN Biodiversity Summit), Irma Klünker (HU Berlin)

August 23, 2022: "Right to Self-Determination or Protection of Children: Does GDPR Strike the Right Balance?", Nafiye Yücedağ (University of Istanbul, Turkey)

August 30, 2022: "How the Role of 'Digital Avantgarde' is Manifested in Russian Students' Political Discourse", Dr. Oleg Kashirskikh (Moscow Higher School of Economics, Russian Federation)

Other components in our internationalization include the participation of our researchers in large international conferences, organization of our own international conferences – such as the Weizenbaum Conference and the "Hackers, Makers, Thinkers – Collective Experiments in Social Fermenting" conference in the reporting period, participation in large international projects and transfer formats with an international orientation, such as the PLAMADISO Talks (Platforms, Markets, and the Digital Society), in which many well-known international guest speakers have taken part, for example from the Oxford Internet Institute, the London School of Economics, Strathclyde University in Glasgow, Imperial College London and the Swiss Federal Institute of Technology Lausanne.

All these activities contribute to making our institute globally visible and creating permanent international research cooperations. Below we have provided a brief presentation of three examples of established international research networks of research groups.

The guest academics Dr. Alfio Guido Grasso (University of Catania, Italy) and Djamila Batache (University of Basel, Switzerland) from the "Relocation of the standardization process" research group are focusing on specific questions of liability when using AI in medicine. Medical technology – whether for prevention, diagnostics, or treatment of diseases – benefits increasingly from autonomous and partly autonomous systems. Image recognition for skin and breast cancer and algorithmic detection of heart rhythm disruptions in ECGs are just one example of the potential offered by AI in medicine. Our research fellows attempt to clarify forthcoming regulatory questions from a legal perspective: How can the relationship between the attending physician, the manufacturer of the (autonomous) medical products, and the patient be set out in legal terms? And what does that mean for established concepts such as medical liability? What are the risks involved in using various procedures? And how can they be countered in a coherent, future-proof way in terms of liability law? In addition to the discussion of the German, Swiss, and Italian legal position, they have also examined the anticipated significance of the planned EU Act on AI.

The interactive application from the “Carbolytics” project of Joanna Moll illustrates the global consumption of cookies in real time. The top 1 million websites distribute over 21 million cookies per visit from more than 1200 different companies. This accounts for 11,442 metric tons of CO2 emissions per month.

The internationally renowned artist and researcher Joanna Moll, former research fellow in the “Inequality and digital sovereignty” research group, was able to complete her “Carbolytics” collaboration project with our institute in 2022. This project is intended to raise awareness of the environmental impact of ubiquitous surveillance within the technological advertising system and to call for action and a new perspective on the social and ecological costs of non-transparent data recording practices. Specifically, Joana Moll developed an interactive web-based installation that shows the average worldwide cookie consumption in real time. The accompanying research analyzes the CO_2 emissions of the cookies on the most important websites in the world. The project was presented in the exhibition at the Weizenbaum Conference on June 9 and 10, 2022.

Researchers from the “Education and training in the digital society” research group – Norbert Gronau, Gergana Vladova, Bonny Brandenburger, and Jennifer Haase – have developed a series of digital lectures in the context of the “EDUCating for Positive Management” project under the title “Management for the Digital Age”. The series is offered in the course catalog of the European Digital UniverCity, an alliance of eight universities from seven countries (including the University of Potsdam) which is funded by the European Commission. This alliance is intended to create a European university area in which students, employees, faculty, and researchers at the partner universities learn, teach, work, and develop new learning materials to encourage sustainable approaches to management.

At the end of 2021 the European Commission launched a multi-stage reform initiative to modernize the assessment of research. The process for concluding a corresponding agreement is expected to be completed by the end of 2022. In May 2022, our institute joined the coalition to reform the assessment of research and has since played an active role in shaping this process of coalition building, together with more than three-hundred other organizations from all EU member states.

2.4 Career support

Excellent research also entails committed support for academic and non-academic careers. We attach importance to the lively interaction between principal investigators, research group leaders, and doctoral students to ensure high-quality, successful delivery of research projects. Central aspects of academic career planning, such as publications, teaching, and externally funded projects, are discussed within and across the research groups. In addition, there are other forms of career support at our institute, details of which are provided below.

Research days are held once or twice a year and offer researchers the opportunity to present their own research results and ideas and their methodological reflections internally in the institute. The focus of the research day held on September 16, 2021 was bringing together expertise in an interdisciplinary way. The challenges and opportunities of interdisciplinary research practice were discussed, as were the experiences of the researchers with interdisciplinary formats and projects and the institutional-organizational and methodological-practical consequences that can be derived from them. The second research day was held on June 30, 2022. In brief three minute pitches, the doctoral students and employees of the institute presented their research work and projects. This was also the kick-off event for the alumni program and network, through which former employees can be linked to the institute over the long term. The event ended with a summer party on the steps of the institute building, offering plenty of opportunity for further discussions.

Doctoral students and employees of the institute presented their research work and projects at the research day in June.

Concentrated work by doctoral students at this year's research retreat in Bad Belzig

At the annual research retreat, researchers normally go away for three to five days to work in a focused way on their dissertations and written project work in guided writing workshops. In view of the ongoing restrictions resulting from the COVID-19 pandemic, there was no traditional research retreat in 2021, as was the case in 2020. As the majority of the doctoral students were also in the end phase of their dissertations, customized training and career topics were covered in individual digital events instead. Those who were interested were able to take part in individual events or in the entire series. On September 21, 2021, the focus was on the principles of career support for doctoral students, with a look beyond the confines of academia, in the course of which participants were given the opportunity to get individual advice from lecturer Edda Wilde (Polyfon Coaching, Berlin). On November 3 and 10, 2021, attention turned to acquiring external funding. The overview of the German funding landscape with its various sources was intended to help to develop independent project applications on completion of doctorates and submit them in a targeted way to the funding bodies.

In July 2022, it was possible to hold the first in-person retreat for doctoral students since 2019 at the Springbachmühle Bad Belzig. The three-day program included in particular individual sessions for concentrated written work and supporting practice-based training courses on academic writing with Dr. Beate Richter from the Wissenschaftliche Schreibwerkstatt Berlin.

The research group leaders also met for the closed meeting at the Erkner Education Center in July. They spent two days discussing current issues and sketched out the research agenda for the coming years.

Our research group leaders met at a closed meeting in Erkner in July.

On March 16, 2022 the first “day of resilience” was held – in virtual form because of the pandemic. The whole-day program included workshops on self-management and self-regulation and practical exercises to reduce stress and improve perception. This way of strengthening self-care and well-being is also to be offered on a regular basis in future.

For two years we have also had a permanent working group on career support, members of which can advise the academics at the Weizenbaum Institute as needed about funding options at all career levels and other topics relevant to academic career development. In addition, we offer confidential contacts in the event of conflict and advice on issues relating to good academic practice. The current confidential contacts are the research group leaders Annika Baumann and Martin Florian and the principal investigators (PIs) Barbara Pfetsch and Thomas Schildhauer.

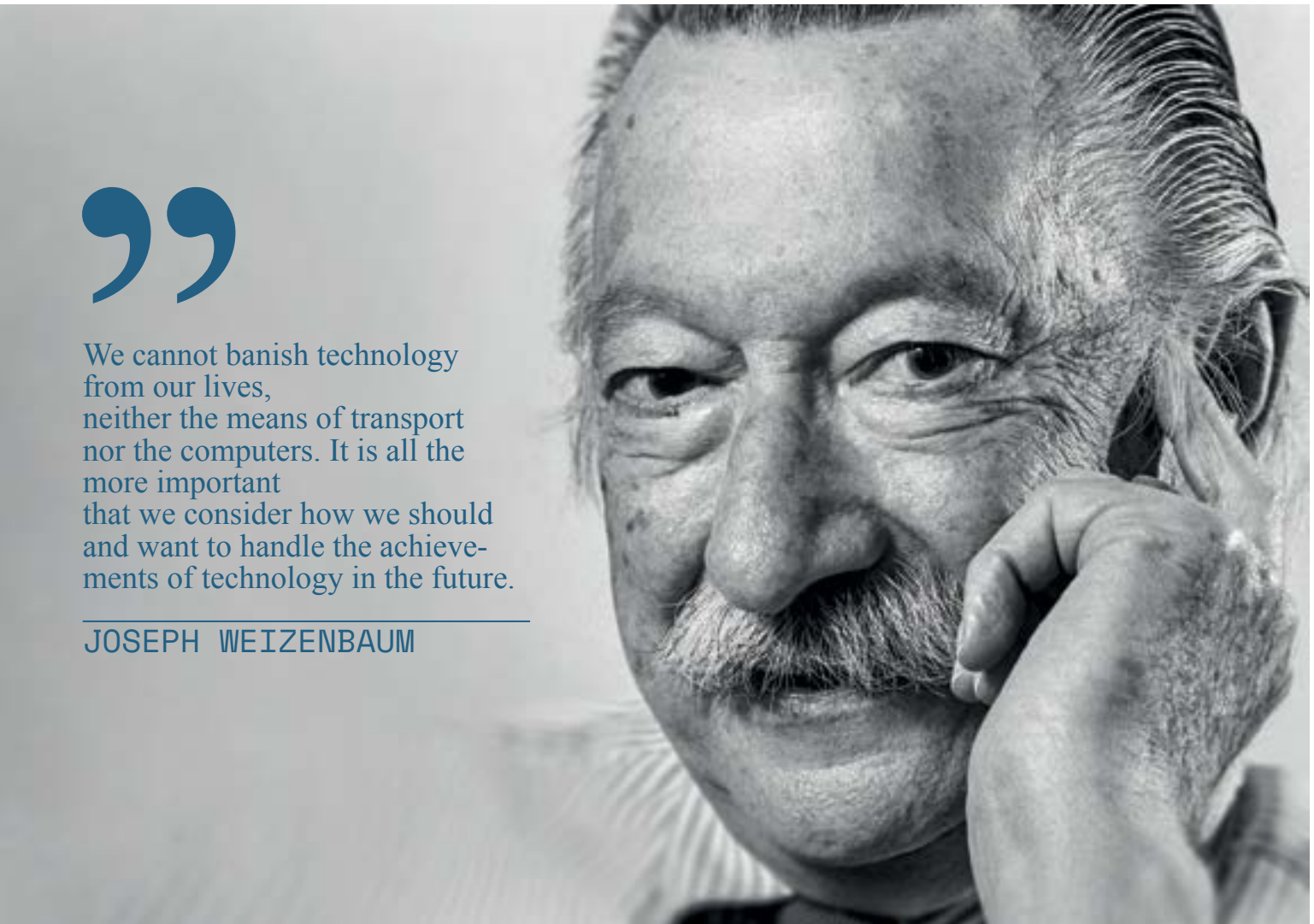
We work on career development with two other important national stakeholders in digitalization research: the Bavarian Research Institute for Digital Transformation (bidt) and the Center for Advanced Internet Studies (CAIS). In this career network, two formats for networking (Digitalization Research and Network Meeting, DigiMeet) and interdisciplinary interaction (Digitalization Research Seminar, DigiSem) have been held alternately since 2021. Following a successful virtual DigiMeet in 2021, the DigiSem 2022 was held for the first time in Nuremberg at the end of September 2022 on the topic of data literacy. The aim is also to build up a common pool of trainers through a cooperative qualification program, to integrate the training courses of the three establishments conceptually, to open them up to researchers in partner institutions, and to network more closely through research visits on all sides.

The 2nd Network Meeting for Digitalization Research was held at the Weizenbaum Institute in March 2022. In addition to the WI as host, bidt, CAIS, the Alexander von Humboldt Institute for Internet and Society (HIIG), the digiloga bw joint project, the Leibniz Institute for Media Research | Hans Bredow Institute (HBI) and the Center for Responsible Digitalization (ZEVEDI) were present.

2.5 Institutional development

FIVE YEARS OF THE WEIZENBAUM INSTITUTE

On September 15, 2022 we marked five years of development work. Today, the Weizenbaum Institute as the German internet institute occupies a visible place in German digitalization research. We have gone through some fulfilling years of hard work in which many "Weizenbäume" have contributed with great commitment and enthusiasm to creating something new in the research landscape: an institute that meets the particular requirements of first-class, interdisciplinary, fundamental, and socially relevant digitalization research. Our institute is able to develop its research program itself. Its structures guarantee coherence and flexibility, allowing digitalization to be captured in its full variety and dynamism. With its seven partner institutions in Berlin and Potsdam – five universities and two research institutions outside universities – it is able to bring together the full force of digitalization research in one region and cover a broad spectrum of disciplines. In the spirit of Joseph Weizenbaum, who gives us our name and who would have turned one hundred in 2023, the aim of our institute is to contribute meaningful research for a self-determined and sustainable way to deal with digital technology. Two successful evaluations in the development phase gave us the opportunity to take stock and set a course for the future.



Since 2017, our employees have been laying the foundations for the future consolidation of the institute. Year on year we have shown in our detailed reports how we are living up to our ambitions: in research, dialogue and knowledge transfer, internationalization, and career support. In transfer, numerous formats have now become established which convey the research results of the institute out into networked society – to schools and universities, to the fields of politics, the economy, and society, and to those members of the public who are interested in our work. Among the most important formats are the Weizenbaum Conference with its high status in the international academic landscape, the Weizenbaum Forum as a regular discussion format with experts addressing current digital issues and the Weizenbaum Movie Night, which brings the work of our institute closer to a younger audience in particular.

In addition, we have developed fundamental strategies for academic career support, free access to our academic work, networking and internationalization communication with the outside world, which bring our guiding values of self-determination and sustainability to life. As an innovation in interdisciplinary digitalization research, we set up the "Weizenbaum Journal for the Digital Society" in 2021 as a digital open access publication.

We have also achieved a great deal organizationally in the last five years. Launched as a joint project, the institute now has its own legal identity and – after two positive evaluations – good prospects for consolidation. The new opportunities of Article 91b of the new version of the Basic Law are to be exploited here: Our aim is to obtain permanent direct funding from the federal government through the Joint Science Conference, in which we as an organization would play a pioneering role in this form of funding.

The institute's site at Hardenbergstraße 32 in Berlin offers over 120 workstations, meeting and seminar rooms, and communal areas. An independent, modern administration and efficient departments supporting academic work provide the best possible support for research at the institute and beyond.

To summarize: Over recent years, a dynamic research institute of a unique type has been created through close cooperation – of both the consortium partners and the academic and administrative stakeholders – which is making valuable contributions to research and assessment of the interactions between digitalization and social change.

EVALUATION OF THE SECOND DEVELOPMENT PHASE

The fifth year of the Weizenbaum Institute was a year of consolidation and stock-taking, but also of looking forward and moving on to the next project phase. The evaluation of the second development phase of our institute in November 2021 was an important confirmation of our position for all employees. The highly qualified members of the evaluation commission assess the research quality as "consistently positive" in their report. Interdisciplinarity is a "cornerstone" of our institute. The commission also concludes that the social relevance of our research topics is "very high" and has even increased during the coronavirus pandemic. The report also praises the good networking at regional, national, and international level and highlights our achievements in supporting the next generation. In view of the progress achieved, the evaluation commission recommended to the BMBF to continue funding our institute from September 2022 for a further three years. With this good report, we can enter the establishment phase with even more motivation.

The report of the evaluation commission, which refers to the period from September 2019 to October 2021, includes a fundamental analysis of six target areas: the excellent interdisciplinary research, internal academic visibility, dialog and transfer with the fields of politics, economics, and society, socially responsible use of digitalization, support for the next generation of academics, and sustainable organizational development and profitability of the institute.

From its investigation of these target areas, the commission drew up a series of helpful and constructive recommendations. For example, it recommended strengthening the coherence of the research areas even further. We will also continue to work on finding a good balance between flexibility and a recognizable profile and to walk the line between fundamental research and social impact. Further recommendations relate to the "Weizenbaum" brand, which should have a stronger profile, and the strategic direction in the areas of the economy, sustainability, and infrastructure services. In its report, the commission confirms that the institute has implemented the recommendations of the first evaluation report of March 2020 almost without exception.

The commission not only reviewed what had already been achieved in the past, but also took a close look at the future and at our plans for the future course of our institution in consolidating itself and strengthening its cross-regional significance. The commission was presented with two documents in this connection, which were assessed in detail and approved overall: the concept paper with its vision of future development and the cooperation agreement between the consortium partners.

The two documents are the result of an intensive consultation process between the employees of all status groups at the institute, its Advisory Board and the Board of Trustees, on which the BMBF and the state of Berlin as the funding bodies and the seven consortium partners each have a seat and a vote. In the Weizenbaum vision, we set out in detail how we want to align ourselves in our research and which services we will deliver in the long term to support and network digitalization research and the dialog with the fields of politics, the economy, and society as a whole. In the cooperation agreement, the consortium partners have committed to long-term collaboration in the Weizenbaum-Institut e. V. as an organizationally independent institute. This design of the research institute promises close interaction for mutual benefit. The central points of the agreement are joint appointments, the development of a coherent research program which can be taken forward flexibly, externally funded projects, support for the next generation of researchers, teaching, joint reporting on performance, and usage of infrastructures. This meets the optimal requirements for excellent, internationally visible research with a social impact. Our institute is able to develop and implement an independent research program which is flexible, coherent, and interdisciplinary in approach, financed from public funds.

In a hearing in February 2022, the Science and Research Committee of the Berlin parliament focused on our institute. In the session, Senator Ulrike Gote stressed the fact that, although the Weizenbaum Institute is still very young, "it is already a success story". Many questions in the hearing, which lasted over an hour, indicated great interest on the part of the parliamentarians. Along with the BMBF, the state of Berlin funds the institute.

THE TRANSITION FROM THE DEVELOPMENT TO THE ESTABLISHMENT PHASE

The BMBF has followed the recommendation of the evaluation commission to continue the funding and asked our institute and its association partners to submit an application for the next project phase in April 2022. With the start of the first three-year establishment phase in September 2022, the greater part of the research will move to the Weizenbaum-Institut e.V. Nine of the total of sixteen research groups from the establishment phase form part of the association, while one research group remains with each of the seven consortium partners. This was another big step in the direction of consolidation of the institute, which also contributes to reducing the complexity resulting from the association structure. Beyond the research groups, new research formats are now being introduced, including a methodology lab, long-term studies, meta-research, and research syntheses. The extremely successful fellowship program is being extended to promote international networking. The administrative area is also being extended to include further posts.

The transition from the development to the establishment phase is an important threshold: After five years, some of the research groups are coming to an end, others are being continued with different focal points, and some groups are being re-founded. Many doctoral students and post-docs are remaining at the institute as tried-and-tested supporters, while others are being added. In this way, the institute is preserving the balance between continuity and flexibility – it is developing its strengths and simultaneously following the digital transformation in an agile way.

In the lead-up to the establishment phase, Federal Minister for Research Bettina Stark-Watzinger commented: “The Weizenbaum Institute is on an excellent footing to become the leading institute for the internet and networked society in Germany.” It stands, she went on to say, for excellent research, sound academic counsel, and international networking. And the Berlin Senator for Science stressed: “With the consolidation that is the aim from 2026, Berlin as a center for science is gaining an important hub for research into digitalization, which will also take on a leading role internationally in this area.”

We welcome this wind in our sails, as the next challenge for the Weizenbaum Institute is already on the horizon with the planned evaluation by the Council of Science and Humanities in summer 2023.

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The Weizenbaum Institute is on an excellent footing to become the leading institute for the internet and networked society in Germany.

BETTINA STARK-WATZINGER
Federal Minister for Education and Research


weizenbauninstitut

III.
Dossier

3.1 “A pair of glasses with which you can see through everyday life”

The YouTube format “Ding an sich” (Thing in Itself) explains social scientific theories in an engaging way so that viewers can understand everyday phenomena better. Filming takes place at rbb, with whom the project team around Sascha Friesike is collaborating.

Since February 2022, Weizenbaum Director Sascha Friesike has been explaining in monthly YouTube videos how we can use concepts and theories from the social sciences to understand our everyday lives better. His science format the “Ding an sich” (Thing in itself) is produced in cooperation with rbb. Previous episodes have focused on topics such as “emotional work”, “expertise” and “isomorphism” – a theory which, for example, explains why so many companies are currently opting for offices with no fixed workplaces, few walls and open lounge areas, even though employees are not able to work particularly well there. A discussion about the pleasure in explaining things.

Mr. Friesike, what is the "Ding an sich", or "Thing in itself" all about?

In each broadcast we present theories from the social sciences which we hope will allow our viewers to understand everyday phenomena better. Before coronavirus, I used to like working with such elements that explain theory in lectures and I noticed that they hit a nerve. The series is an attempt to put that on a professional footing. It fits in very well, because one of the priorities of our institute is knowledge transfer. I hope to be able to reach a larger audience in the long term through YouTube than with individual lectures.

How does "Ding an sich" or "Thing in itself" differ from other forms of academic communication?

I noticed in my research that academic broadcasts usually fall into one of two camps. Either they address scientific questions, such as: What actually is a black hole? Or they start with phenomena and ask, for example: How are sausages made? What was everyday life like in the Middle Ages? How does a fax machine work? But no one was explaining theories from the social sciences. And we are trying to fill that gap a little.

What are the typical topics of your videos?

They always focus on one theory. It must be small enough to explain in about 15 minutes and also have a recognition value in everyday life. If the theory allows viewers to give something a name that they were not able to identify before, then it's a good fit. A general sociological theory of society, on the other hand, is not suitable for us.

What would be typical "Ding an sich" or "Thing in itself" topics for future videos?

We have a long list of potential topics. "Uncomfortable knowledge" is one of them, for example. That term describes information which is actually unpleasant to have in your possession. The theory of uncomfortable knowledge explains why, for example, organizations do not simply fail to address certain issues by accident, but do so for a reason. Another example: We just made a video about an old concept of Niklas Luhmann: "useful illegality". It explains that organizations would be unable to function if everyone always adhered to all the rules. Or "path dependency", that concept is on the agenda for August. It explains why many things are very difficult to change once they have become established, such as the arrangement of letters on a keyboard. "Paradigm change" would be another candidate. That's a term from scientific theory that explains why, in many circumstances, scientific progress does not simply move forward gradually, but rather goes along with the fact that previous views of the world and knowledge systems have to be thrown out. "Not-invented-here syndrome" is another good example. It describes why, as a group, we find it so difficult to accept ideas that do not come from the group itself.

How time-consuming is the production of a video for you?

I've never actually put a stopwatch on it. I guess I spend about three working days on each video. The two doctoral students who come up with the scripts definitely put more time into the format. Every two months we spend a whole day at rbb on Theodor-Heuss-Platz. Then comes post-production with the professionals from rbb for visualization. We comment on their drafts online, explain what fits well and what does not. We plan the topics with an editor from rbb.

Do you have any role models?

Of course, but less from the area of scientific communication. I like broadcasts that combine a certain curiosity with a specific position. Off the cuff, I immediately think of the former CNN series "Parts unknown". It was actually a cooking program, but it was never about cooking, but about introducing viewers to other countries and cultures. I would like to do something similar for science at some point.

Do you also see yourself in the tradition of the German children's TV program "Sendung mit der Maus"?

Of course, I grew up with "Sendung mit der Maus" and with "Löwenzahn". But explaining things to children is in a different league. I recently went to a careers day for the 9th grade and realized relatively quickly that my university approach to teaching did not go down that well with 14-year-olds. You have to work with completely different metaphors and a different form of address. I have the greatest respect for people who are good at that. But I am not in that league.

How would you compare your science format with classical scientific journalism?

The first difference that comes to mind is actuality. Scientific journalism often attempts to react to current topics. I am more interested in dealing with fundamentals. I would like to make videos that will still be relevant in ten years' time. Classical scientific journalism also tends to focus on intervention. What do we have to do now? How do we respond to it? What political demands should we be making? The research I feel connected to takes place at the other end of the spectrum. The priority is not developing options for taking action, but firstly being able to identify things and name them. Making the invisible visible and giving it a name, if you like.

And which science podcasts do you listen to? "Radiolab" for example?

I have always preferred "This American Life" to "Radiolab". But I am a real fan of "99% Invisible", that's a podcast that focuses on the design of everyday things. Each episode takes you away to a little world you did not know about. In one episode, which was recorded as a TED-Talk, the presenter explains why most town flags are complete nonsense. I never thought much about town flags before that, but since I saw that episode, I can't even look at them. Then there was another great episode about the workers' movement in England which won the right to go hiking through the countryside. And another about everything that can be made from sand and the consequences for our society that we need so much sand. That podcast is probably a role model, because it is always about a better understanding of things you come across in everyday life.

Do you have any plans about where to take your scientific format?

We began with a format based heavily on lectures. As university people, it was familiar territory. I would like to get to a point dramatically where we could take a more questioning approach. And I would also like to make better use of the opportunities that moving images offer. Based on my experience, I have learned that things work differently in videos than in text. In the episode on the topic of expertise, we use a multi-lane highway as a metaphor, on which people with a scientific background are traveling at a different speed to people from other areas. This metaphor is illustrated in the episode. It is perhaps not the most elegant metaphor in the world, but it works brilliantly on video. I would like to learn more about how to narrate in this medium. I hope that we are only just at the beginning of a long-term collaboration with rbb.

Thank you for talking to us.

You can already find out about seven different theoretical concepts with Sascha Friesike on YouTube at: #dingansich.

3.2 The COVID-19 crisis as an accelerator of digitalization

Martin Krzywdzinski, Florian Butollo, Jana Flemming, David Wandjo, Christine Gerber

The research group around PI Martin Krzywdzinski (left) and research group leader Florian Butollo examined the ways in which coronavirus impacted the world of work.

How has the world of work changed as a result of the coronavirus pandemic? A study by the research group “Work in highly automated, digital-hybrid processes” compares various sectors and also identifies significant differences within sectors. A clear need for action can be derived from the results.

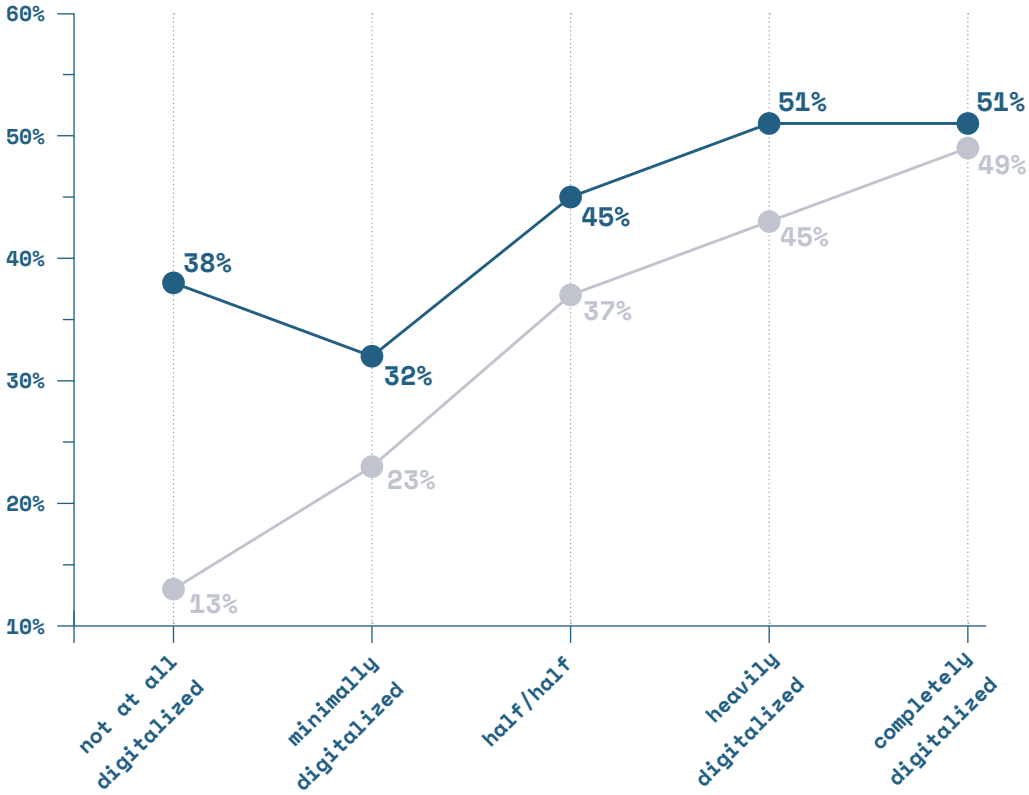
The COVID-19 crisis has had a massive influence on the world of work. Companies had to come to terms with some employees moving out of the office and working from home in a very short time. Forms of work organization and many business processes had to be changed ad hoc for this. So while the crisis doubtless had immediate and short-term effects on companies and employees, the question arises as to how sustainable and comprehensive the associated push towards digitalization is. A research project being carried out at the Weizenbaum Institute and the Social Science Center Berlin (WZB) with funding from the Federal Ministry for Labor and Social Affairs is attempting to answer this question.

The project focuses on the following question: What role do digitalization and automation measures play in overcoming the COVID-19 crisis? In which areas are digitalization and automation being driven forward by companies? And finally: How are technical innovations in the area of digitalization linked to organizational changes? The study combines a standard survey of 540 companies with 34 qualitative case studies in six industries: the automobile industry, the chemical industry, mechanical engineering and system construction, the logistics industry, the health sector, and the financial services sector.

The first results indicate: It is noticeable that the companies investigated came through the crisis economically well overall, even though there are sector-specific differences. While, for example, the chemical industry largely came through the crisis without any interruptions to production, the automobile industry had to overcome a huge fall in demand, especially in 2020. In the area of the service sector, turbulences in some production industries had an effect on logistics in particular. Financial services, on the other hand, were hardly touched economically by the COVID-19 crisis. Finally, the health sector experienced some extremely contradictory developments: On the one hand, the crisis brought many organizations to the edge of capacity, on the other hand, the state intervened with large support packages.

There were some significant differences within individual sectors, too. Companies that had already made strong progress in digitalization before the COVID-19 crisis also increased their investment in digitalization more than companies with a low level of digitalization. While among companies that had not digitalized at all only 13 percent reported increased investment in digitalization, that figure was 49 percent for those that had digitalized completely.

DIFFERENCES BETWEEN PIONEERS AND STRAGGLERS



Source: our own findings

Across sectors, our study shows that the focus for digitalization at the height of the coronavirus crisis was in particular administrative processes, internal training, and sales. Progress in the area of production automation was evident in hardly any of the companies examined. Despite these changes, no significant reduction in the workforce is expected in most companies investigated. Only 23 percent of the companies surveyed expected effects on employment from digitalization within the next five years (i.e. up to 2026). These companies mentioned in particular an increase in the number of employees with university degrees and vocational qualifications as impacts, and a decrease in the number of semi-skilled workers.

The general changes outlined here played out differently according to sector. In the health system, digitalization before the pandemic had been very slow, despite the development of services such as virtual consultations, which resulted both from a lack of resources and particularly complex regulation. Some organizations – most care homes in particular – lagged behind with even the most basic digitalization projects. The pandemic brought the importance of fast, digital, standardized availability of data clearly to the surface, not only inside hospitals (for bed management, for example), but also in the interaction between health organizations. The coronavirus crisis is acting as an accelerator of digitalization in the health system, as it has increased the pressure of problems, with the result that the government has made additional investment available for digitalization with the Future of Hospitals Act.

In industry, the push towards digitalization remains largely restricted to the area of employees. In the automobile and chemical industries, there is no evidence of a link between the pandemic and investment in the digitalization of production processes. This is understandable to the extent that investment in the sectors is often complex and has no practical link to protection from infection. However, some mechanical engineering companies reported an increase in the importance of applications for remote maintenance and digitally supported system installations.

The close connection between technical and organizational innovation is very clear in our study. Companies that invested in digitalization during the COVID-19 pandemic also often made organizational changes. 45 percent of the companies surveyed revised their working time arrangements to make them more flexible. 48 percent attempted to change communication processes to strengthen collaboration across teams and departments. At the same time, 32 percent of companies surveyed implemented coaching and moderation measures (at least in part) to modify management styles. The impetus for these changes was often the necessity to re-organize work because of the arrangements for working from home. Managers had to adapt to the fact that they could no longer control the way in which work was being carried out directly and had to allow employees greater scope for self-organization. At the same time, 17 percent of companies surveyed had started to make their hierarchies flatter.

An example of the response to the challenges of the COVID-19 crisis was the formation of a "Smart Work Team" in a company in the automobile industry. This team has since been analyzing experiences of mobile working in various areas and at various locations. This relates to the organization of the tasks of employees and scope for autonomy in terms of content, location, and time. The team is also trying to initiate a change in management culture, away from controlled management that is based on the presence of employees on site, towards management based on the results achieved by employees. In the long term, the team will also be looking at office design, which is changing in light of more mobile working and the reduction in individual workstations.

Our study shows that the COVID-19 crisis not only brought about a short-term increase in working from home, but also gave rise to changes to the way work is organized in particular in the areas of administration, training, and sales. Despite these general tendencies, the details of the picture remain very heterogeneous. In the area of production, there was far less of a drive towards digitalization and not such a big difference between individual organizations as there was in administration and sales. In general, it seems that the gap between pioneering companies and those that have little or no digitalization is becoming ever greater. This could lead to economic and social problems in the long term. Support for the digital stragglers is therefore an important political task.

3.3 A data protection risk checklist and guide for apps and websites

Lukas Seiling, Rita Gsenger, Zohar Efroni

Lukas Seiling (left), Rita Gsenger, and Zohar Efroni from the "Framework conditions for data markets" research group outlined the progress on their privacy icons project in their article.

The "Framework conditions for data markets" research group has developed a model with which data protection information in various apps can be analyzed scientifically in terms of possible risk scenarios and potential. A set of icons is also to be developed in future to present the results of the analysis, showing relevant data types and data processing procedures.

It would take a good 200 hours, i.e. 25 working days, to actually read all the data protection information that you come across on websites or when installing apps and that you normally just click on to accept. Aleecia M. McDonald and Lorrie Faith Cranor already calculated this back in 2008 at Carnegie Mellon University in the USA. The way in which we currently handle information about data protection and privacy risks therefore seems not to be working very well.

How could it be made easier for website visitors and app users to get some guidance about which data they are disclosing and what the associated risks are? One approach that has been tried out in recent years is the visualization of data protection information with symbols – so-called privacy icons. As information markers, these icons are intended to provide better guidance through long sections of data protection information full of legal and technical details. Various bodies have been involved in developing icons of this sort in parallel, including the "Privacy Icons" association set up by Swiss companies and academics and researchers in Bologna and Luxembourg, who have not only created comprehensible symbols with their Data Protection Icon Set (DaPIS) but also tested their impact. But none of these icon sets has achieved a reach comparable to the icon projects of Google and Apple.

The fact that the intention of making data protection content more accessible to a wide audience by illustrating it with icons was not working as it should was already apparent when we began with our own "Privacy Icons" project at the Weizenbaum Institute. None of the existing icon sets really seemed to catch on. Rather, there is now a veritable cemetery of icon catalogs that have been developed but never used. Our conclusion is that it is not only the approach to visualization that is at fault, but the specific concept underlying the first generation of privacy icons. In fact, non-experts could not make a lot of sense of these icons. Certainly, the icons make it easier to find your way through various privacy policies, in a similar way to sub headings, and thus make them quicker to read. But they do not provide information about the risks that you are taking as a user when you make use of a digital service. That is precisely what we wanted to do differently in our "Privacy Icons" project. Methodologically, this was an extremely challenging undertaking, as we quickly discovered; it is still preoccupying us and has done so for much longer then we had planned when the project was launched and the project team was much larger.

How do you arrive at as objective an assessment as possible of the potential risk associated with the use of a digital service? Our answer: We cannot check all apps and websites in the laboratory ourselves like a good German authority – such as the Federal Institute for Risk Assessment or the Federal Institute for Drugs and Medical Products – would, but we must rely on the manufacturers' information, in other words on their privacy policies. Theoretically, millions of text documents would have to be read and assessed to do this. A guide to checking them is required to make the analysis of this information easier.
For this purpose, we have developed a risk model that covers various aspects of processing of personal data. With this model, the data

protection information in various apps can be analyzed in terms of possible risk scenarios and potential. There will also be a set of icons to present the results, designed specifically around relevant data types and data processing procedures. For the first time, the possible consequences of processing of personal data will also be represented.

To be clear: We have not finished designing the icons in our project, which is due to end in fall 2022. At the same time, however, we know that we have covered much larger and more difficult ground with the creation of a risk model than we had anticipated at first.

We began by subjecting the General Data Protection Regulation to a qualitative analysis of its content in order to discover what the law regards as processing of personal data that is associated with possible risks. We refined the results of this analysis further in interviews with 35 experts from the fields of law, technology, psychology, and the social sciences. Following on from that, we carried out a broader study with users to verify the extent to which the assessment of the experts corresponds to the perceptions of laypeople.

In our analyses, we looked at various types of users and stakeholders involved in storage and processing of data. We made distinctions between types of data (such as biometric, health, and financial data) and data processing procedures (such as storage, use for algorithmic decision-making, and creation of a personal profile). And we looked at purposes of data processing (such as market research and academic research) and security standards (such as encryption and anonymization) – always with a view to identifying which categories and combinations are considered particularly problematic.

There are particular risks in combinations, as the experts surveyed pointed out to us, which can be particularly problematic because they move almost under the radar of data protection legislation. A striking example of what can happen is provided by the latest development in a country which, you might think, is not that far away from the situation in Europe in terms of data protection and rights to freedom: the USA. At the end of June 2022, the Supreme Court revised a fundamental decision in the “Roe v. Wade” case from 1973 and gave the federal states the right to prosecute abortions. Just under half of the US states are actually making use of the newly granted right. All of a sudden, collections of data are relevant to criminal prosecutions in a way that was not the case before. This is precisely the scenario about which data protection experts have always warned: “Imagine that the social and legal position changes: What might happen with all the collected data?”

Even data that was collected in what was apparently a private context is now relevant to criminal cases. Many women use apps to document their cycle, for example. If the data from these apps is not kept securely and anonymously, prosecutors can draw conclusions about pregnancies. If, moreover, a woman travels to a state in which abortions are legal and if her smartphone documents the journey with movement data, the case is complete. The fact that scenarios of this sort are not some dystopian nightmare but already reality is shown by research into data handling businesses, as was recently made public in the online magazine Vice under the title “Data Broker Is Selling Location Data of People Who Visit Abortion Clinics”. What is relevant for our context is that the location and movement data itself is usually not classified in the highest protection levels compared to health data, for example. It is, however, becoming a candidate for the highest protection levels, in combination with data from period apps.

This example shows that the development of a practical guide with which digital services can be analyzed systematically for risks of this sort that are not highlighted by the legislation is something of a mammoth task. We hope that we can make a significant contribution here with our project.

3.4 New rules, new technologies, new market mechanisms – Challenges for jurists in research and practice

Hans-Christian Gräfe

The Telemedicus Summer Conference 2022 was organized and curated by Hans-Christian Gräfe from the Weizenbaum research group “Responsibility and the Internet of Things”.

The Weizenbaum research group “Responsibility and the Internet of Things” organized the Telemedicus Summer Conference 2022 on law in the information society. It links legal research with legal practice in a particular way. Just as important as sharing legal views is embedding legal issues in a social and technological context.

The legal issues around rules and regulations for the internet and data are developing quickly. Although they are of interest and relevance to a broad public, the area still represents a specialism. This is precisely where the annual Telemedicus Summer Conference comes in. The event combines legal experts who are practicing IT law with research jurists. The latest iteration, the Telemedicus Summer Conference 2022, was organized and curated by Hans-Christian Gräfe from the research group "Responsibility and the Internet of Things".

The two-day conference took place at the beginning of July on the premises of Microsoft in Berlin. In accordance with the Weizenbaum motto of transferring research material into society, legal practices, associations, and think tanks supported the conference in terms of both content and finance. The program consisted of a mix of contributions from practice and legal research questions, especially in the areas of IT and media law. One distinctive feature of the Summer Conference 2022 was certainly that the speakers were both professors and students, academics and attorneys.

Benjamin Brake, Head of the Department of Digital and Data Policy at the Federal Ministry of Transport and Digital Infrastructure, outlined the current political agenda in his keynote speech. Germany's data strategies should ensure that the need to catch up in many areas of digitalization is rectified. These include pushing forward with the development of digital infrastructures. Digital sovereignty and the question of how to deal with disinformation and hate speech in social networks are also important. In the end, it is necessary to create the right framework conditions for self-determined, secure use of the net.

A need for public discussion is evident in particular in connection with forthcoming revisions of the provisions of internet law.

One block of the Summer Conference 2022 was devoted to the topic of media and communication law. New national and European regulations, such as the Digital Products Act, the Digital Services Act, the Digital Markets Act and the EU Chips Act, are currently casting a long shadow. The revisions, some of which have already been passed and some of which are still pending, are socially relevant in view of the power of the market for so-called media intermediaries, i.e. the social networks and search engines. On the other hand, phenomena such as influencer marketing and concepts for the future metaverse show how cutting-edge the issues are. In the legal discussions, regulation of big tech plays a part along with decentralized communications solutions.

In two parallel workshop tracks, speakers from the Weizenbaum Institute picked up on these issues across areas of the law and various disciplines. Director Christoph Neuberger first highlighted the influence of intermediaries on the digital public and thus on liberal democracy. According to Neuberger, the realization of values such as information and discourse quality, variety and distribution of opinion power is crucial. Neuberger outlined in his lecture how shortcomings in relation to the realization of these values are currently supposed to be offset by legislative measures, such as the Network Implementation Act (NetzDG), the Media State Treaty or, at EU level, the Digital Services Act. Mireille Thierfelder, a student at the University of Potsdam, addressed in her paper the question of whether the Media State Treaty is adequate with its measures to ensure plurality.

Her conclusion was ambivalent. Although it was not a question of privileged status for alternative thinkers, as is claimed in some cases, the rules on transparency and retrievability did not convince Thierfelder. The subsequent discussion explored approaches to a solution involving science and business with the involvement of the experts present in the audience.

A further topic block focused on space, and Prof. Marcus Schladebach, Head of the Research Center for Public Law, Media Law and Aerospace Law at the University of Potsdam and Prof. Enrico Stoll, Head of the Space Technology Department at the Institute for Aerospace of TU Berlin examined the exciting technological and legal questions relating to satellite mega-constellations. Their papers examined the question of whether space legislation dating back to the 1960s can provide answers to conflicts relating to the positioning of satellites. One of the questions dealt with was whether scientific freedom relating to the use of space has certain limits, precisely because it is no longer countries that are acting as conventional stakeholders in space, but private companies. Limits could result from capacity restrictions on the positioning of satellites. The usability of orbits around the earth for all countries could be put at considerable risk if all the satellite positions were already occupied by a small number of states or companies.

The topic of Web 3.0 or the metaverse was also represented in a block of events at the conference. After Weizenbaum PI Stefan Schmid had explained the technical principles of the blockchain, such as encryption and extended reality (XR), Prof. Boris Paal, Chair of Civil and Information Law, Data and Media Law and Director of the Institute for Media Law, Data Law and Digitalization at the Faculty of Law of the University of Leipzig focused on issues relating to cartel law. According to Paal, dealing with data and AI is also crucial in connection with cartel law. Ensuring fair market access is relevant to cartel law, in particular for new stakeholders, including the technical guarantee of interoperability. Internal growth, Paal emphasized, cannot be addressed by means of cartel law, in contrast to agreements that restrict competition between companies.

Data protection law and data law constituted another item on the program. The emphasis here was on the proposal for a supra-individual data protection law that could possibly solve structural problems associated with the current framing of data protection by the concept of informational self-determination. Another topic was decentralized processing in machine learning. So-called federated learning could be an opportunity for data-protection-friendly AI. The rather specialist topic of e-sports was the subject of two papers. One dealt with the rights of data subjects under data protection law, the other with players' accounts being blocked. In relation to IT security, the phenomenon of "Ransomware as a Service" was examined. Enforcement of the law was regarded as a particular problem in this form of marketing of malware through standard models of software monetization.

In the context of AI and big data, the focus was on new challenges for data protection resulting from so-called predictive analytics. Prof. Rainer Mühlhoff, Head of the Research Department of Ethics of Artificial Intelligence at the Institute for Cognition Science at the University of Osnabrück, and Prof. Hannah Ruschemeier, Junior Professor of Public Law specializing in digitalization law/data protection law at Hagen Distance Learning University, addressed the capacity of large platform companies to predict information from almost any data subject. This can be information that the data subject has not knowingly disclosed and would not voluntarily reveal. The models used for the prediction methods can be trained with anonymously processed data of social media users.

Another highly topical phenomenon that was addressed at the conference is so-called non fungible tokens (NFTs). These are unique, indivisible, and irreplaceable digital tokens by means of which rights or ownership structures can be established on the technical basis of a blockchain. Patricia Ernst, Counsel of the German Office of Morrison & Foerster in Berlin, and Susan Bischoff, doctoral student at the University of Freiburg and academic assistant at Morrison & Foerster, share their views regarding the question of whether this was merely a new buzzword or a real opportunity for the art and movie market. Their conclusion: NFTs are currently an interesting technology at least from an economic point of view, even if the opportunities they offer in the future are still uncertain – not least because there is still no reliable legal assessment of the transferable tokens.

A separate room was set up as an exhibition space for posters and presentations to allow speakers and visitors to interact more closely. Researchers, activists, and start ups presented their projects relating to IT, the law, and the media here, including on AI, avatars, and the public legal sphere. By the end of the year, the research group will have worked up the papers and presentations into a conference volume for the Summer Conference 2022, which will be open access.

3.5 Gender and dissent from all corners of the world

Founders and hosts of the “Purple Code” podcasts: Sana Ahmad, Bianca Herlo, Lena Ulbricht (from left to right)

Three researchers from three research groups are developing a podcast together. “Purple Code. Intersectional feminist perspectives on digital societies” allows underrepresented voices to speak out – in discussions on gender and technology, ethics and AI, and participation in the digital society. Bianca Herlo (head of the “Inequality and digital sovereignty” research group), Lena Ulbricht (head of the “Quantification and social regulation” research group) and Sana Ahmad (doctoral student in the “Working in highly automated, digital-hybrid processes” research group) explain how it came about in interview.

What are listeners expecting when they listen to the first episode of your podcast?

Herlo: We started the podcast a year ago with the intention of making marginalized perspectives on digital technologies and society heard. The impetus came from our own experience of exclusion and dissatisfaction with existing structures. There was also a significant need to find or create a community of like-minded people. In the individual episodes, we look at the interfaces between science, art, activism, and politics. It's about gender. About dissent. About perspectives from all corners of the world. And in the podcast we want to talk to both famous people and less famous people. We do not specify any topics to our guests, but we ask them to tell us their experiences of technology, feminism, and intersectionality, both personal and professional.

Lena: Let's take the example of the episode with Eliana Quiroz. Eliana is a digital rights activist from Bolivia who has plenty of experience with the development of technology in the public sector. We expected her to talk about violence against women on the internet. And she did so. But many other topics were also raised. She talked, for example, about what it means to support open source as a woman in Bolivia, not from an academic perspective but from the perspective of an activist on the ground who is not a computer scientist. I found it interesting how Eliana told us about her problems with being taken seriously in the male-dominated tech community in Bolivia. But as soon as she had mastered the relevant technical specialist terms, she was accepted.

You produced another episode with Mona Sloane as a guest. What can we learn from her?

Herlo: Mona is a sociologist and works at the interface between design, social inequality, AI, and ethics. In our discussion with her, we focused on how prejudices feed into the design of technology and algorithms. And also on her role as a woman in the academic world – even though she is white and therefore privileged.

Lena: I think the question as to what you can take away from the podcast or learn from it leads you in the wrong direction. "Purple Code" is not an educational podcast. You might still learn things about open software or how algorithms can disadvantage people in weaker positions. But we are primarily interested in our guests, who all have very interesting experiences and views. In their stories and in the fact that we want to hear from them.

Sana: I recently read in a tweet that the most radical thing that you can do as an academic is not to go to the university but to sit in your room and read a book. The podcast is no different. If I wanted pure information, I would read a newspaper. But I also want to talk to people, listen to them, hear their voices.

So it's more about personal experiences?
Herlo: As a listener, you take part in what is going on in the life of another person. Eliana and Mona both told us a lot about their personal work and life decisions. About how they live and work as women in the tech world and try to change that world a little. In the case of Mona, it was also about how she as an academic works not only with researchers from other disciplines, but also with people from outside the academic world and thus, in turn, tries to change the academic system.

Sana: In the conception phase of the podcast, we carried out a lot of research and listened to many other podcasts to identify the gaps we could fill with "Purple Code". Our podcast is intended above all to inspire and motivate our listeners. Social criticism is, of course, part of it. But the bottom line is simply that we want to make a podcast that we would like to listen to ourselves.

Who is your target audience?
Sana: When we presented the podcast at re:publica in spring 2022, we noticed considerable interest in the tech scene, among artists and academics. We have also targeted people who tend to be Eurocentric but are beginning to consider what role gender, class, and race play in digitalized society. We may probably really surprise some people with "Purple Code". But we are actually still in the starting phase and still learning who our listenership is.

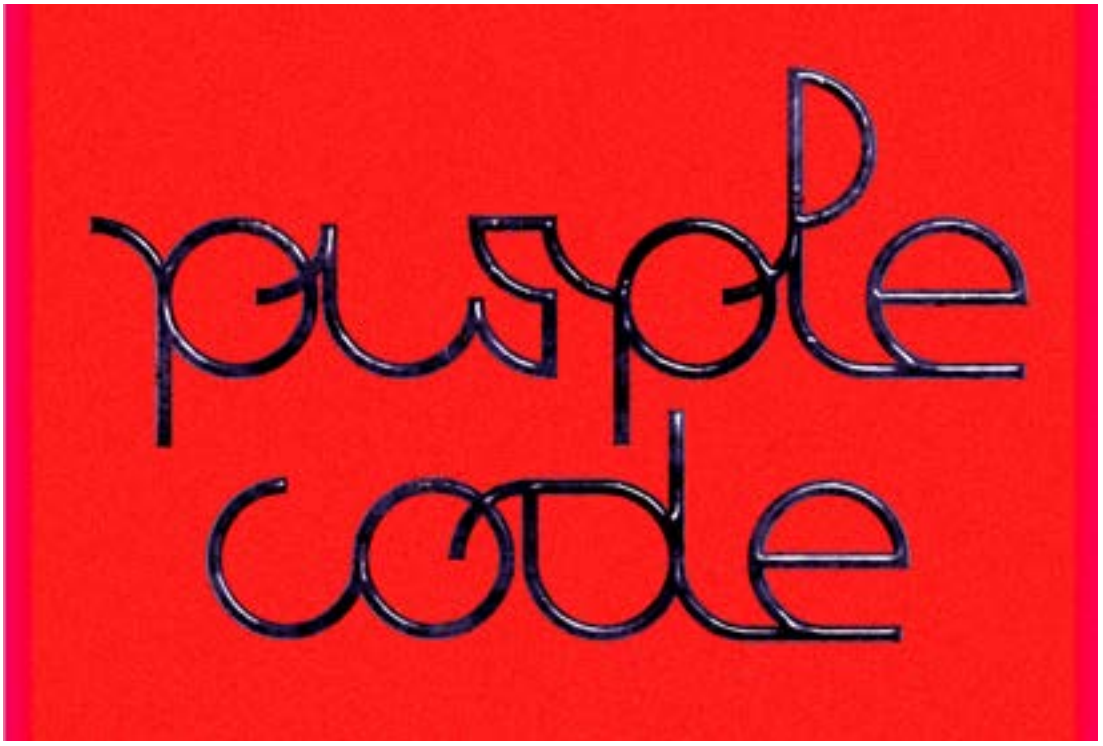
Do you have plans for the future?
Lena: Our plan is to continue with the podcast as long as we are passionate about making it. So hopefully until we are very old and have white hair.

How do you prepare for an episode?
Herlo: Of course, we consider in advance precisely what we can use about the experience of our guests. Usually one of us has already had contact with the person we want to invite in advance. We record the podcast itself in the studio, on the one hand because of the sound quality, but also because the intimacy that comes about in this rather small space helps the conversation along. We don't have a strict plan with questions that we follow for the podcast itself. We tend to set up the situation as a conversation that takes place in a relaxed atmosphere and which listeners will want to hear.

What are your own favorite podcasts?
Herlo: I like "Alles gesagt?" from Die Zeit. The people involved in those discussions are allowed to talk until they themselves think that everything has been said ("alles gesagt"). And then there is "Design Matters" by Debbie Millman. "99% invisible", also on the subject of design. And the Deutschlandfunk culture podcast "Lakonisch elegant" ("Laconically elegant").

Lena: For me it is Frauen und Computerkram (Women and computer stuff) from the Chaos Computer Club. It calls itself "F.U.C.K." And then a feminist podcast from Chile.

Sana: I think "Academic Aunties" is brilliant, I'd definitely recommend it. Then the German podcast "Future histories". And "The Nagrik Podcast", which takes place mainly in India. A friend of mine got that up and running.



Purple Code has its own website (https://purplecode.org) and can also be accessed via the standard streaming portals such as Podtail, Podchaiser and Spotify.

3.6 Networked society – Crises with no boundaries

Clarissa Walter and Katharina Berr

Clarissa Walter (left) and Katharina Berr from the “Reorganization of knowledge practices” research group were part of the Crisis Science Project of the BMBF.

Crises transcend spatial, chronological and thematic boundaries. Dealing with them therefore requires cross-border forms of collaboration between academia and the political sphere. Authors Clarissa Walter and Katharina Berr from the “Reorganization of knowledge practices” research group have explored what such forms might look like in the “Crisis Science Project” of the BMBF.

Coronavirus pandemic, climate change, the war in Ukraine – the list of crisis phenomena is long and never-ending. Dealing with all these diverse crises requires specialist knowledge and systematic collaboration between political decision-makers and academic experts. But whereas – or precisely because – these decision-making situations are fundamentally threatening, urgent and uncertain, relevant knowledge often has to be generated and made usable first. In addition, there are numerous tensions and conflicts of objectives in the collaboration of two different systems that follow different logic. The "Crisis Science Project" of the BMBF has examined precisely these challenges and developed initial prototype solutions for collaboration in times of crisis. As part of the eleven-person, transdisciplinary development team, we were able to represent the Weizenbaum Institute and work on the idea of a new, permanent form of organization between science and administration: the so-called Crisis Science Hub (CSH).

The idea of the Crisis Science Hub is based on a concept of crises according to which they are phenomena which dissolve boundaries. As such, they transcend spatial, thematic and chronological limits. In a crisis, fast decisions and political action are required.

The fact that scientists give advice to politicians in these critical decision-making situations with specialist knowledge is nothing new – you need only think of Leopoldina, numerous commissions of enquiry or the coronavirus expert council of the federal government. But what we discovered in conversations with employees working in the administration was: In the everyday life of the administration, established contacts in research who can be called on by phone in the event of urgent questions are what count. This might help to deal with urgent issues, but the variety of perspectives from different disciplines and a valuable diversity of academics are lost.

Along with the conflict of objectives between a variety of perspectives and urgency, confidentiality and transparency are often diametrically opposed in the collaboration between science and public administration. The preparation and development of political decisions requires confidentiality from the perspective of the administration, so that critics in the world of political combination do not know too much too soon. Scientific working principles, on the other hand, rely on transparency to facilitate collaboration and confirm findings in critical discourse with colleagues. These areas of tension cannot be broken down completely and searching for compromises takes a lot of time. But time is particularly short in the event of a crisis.

A stronger organization based on permanence that can intervene quickly in a crisis could, in our opinion, resolve the problems described. We have developed a model for a Crisis Science Hub in which conflicts of objectives and areas of tension in cooperation are moderated and options for a better response to a crisis are drawn up together. The CSH makes it possible to practice systematic, transdisciplinary collaboration between science and politics before a crisis happens, to strengthen the ability to respond in acute crises by providing applied knowledge, and to organize transdisciplinary reflection in the post-crisis phase. In addition, the CSH supports the prevention of crises by allowing transdisciplinary teams to prepare proactively for possible crisis scenarios in the future.

These new approaches in the CSH also require new career profiles that can cope with

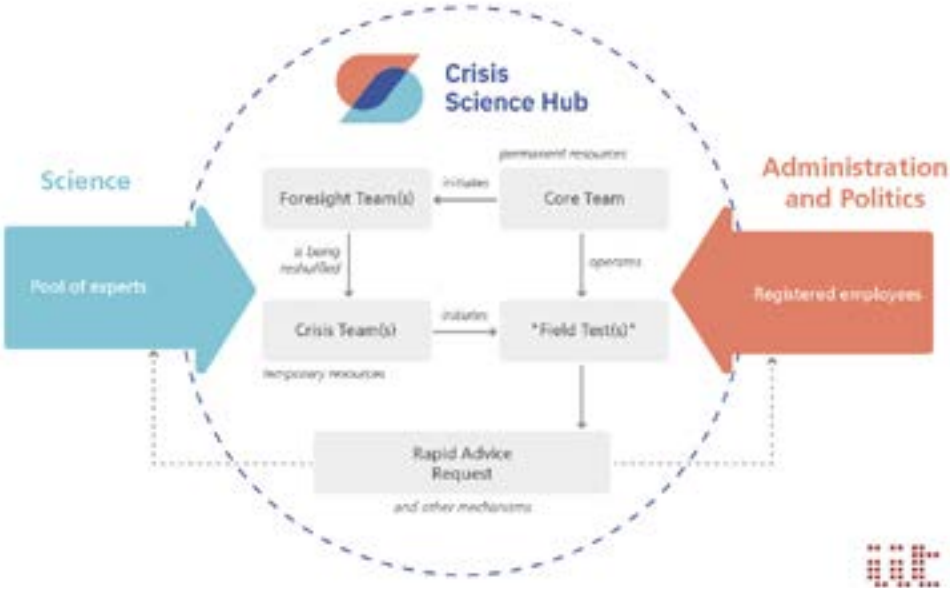
the challenges in a transdisciplinary context. A permanent core CSH team comprises administration, knowledge brokers, and process and crisis specialists. While the knowledge brokers are characterized in particular by their expertise in interactions and their familiarity with both the "language" of the administration and of science, the process and crisis specialists possess knowledge of processes in the CSH and moderation skills from co-creation processes.

The **core team** is responsible, on the one hand, for setting up and managing a pool of academic experts, on the other for putting together various teams to work in the CSH both in the long term and temporarily. This includes:

1. **Foresight teams**, which work preventatively and identify gaps in knowledge for predictable crises at an early stage and deal with them scientifically or commission the work to do so.

2. **Crisis teams**, which work reactively and are put together ad hoc in acute crises. The role of this team includes a careful response to a crisis situation by initiating a co-creation process between science and administration. The aim of this transdisciplinary co-creation is common translation of interdisciplinary expertise into application-related options for action.

3. **In real laboratories** the various options can be tried out to verify their effectiveness.



If there is a need for specific knowledge in the CSH, the core team contacts scientists either directly or via the **Rapid Advice Request** (RAR) online application. This involves a specific matching mechanism, which links the needs for knowledge of the public administration with scientific expertise and facilitates direct contact. The RAR is a central mechanism for entering into the process. Both administration employees and scientists can create profiles in the RAR. Scientists register for the pool of experts by giving their disciplines, specialist areas, and publications. If, as a scientist, you get a RAR request from the administration, you can offer direct advice or (at the request of the core team) participate in one of the expert teams. Rapid Research Funding makes it possible to finance advisory work quickly and provides funds for short-term posts on the foresight teams, crisis teams and in real laboratories.

As, however, a large hurdle for an employee in the administration is often formulating relevant questions and gaps in knowledge explicitly for the scientists and identifying the expertise required, we suggest providing a visual search function in the RAR. Registered scientific topic areas are located on a digital knowledge map, which allows rapid orientation by means of keyword searches. Topic-based selection leads on the one hand to an interdisciplinary range of perspectives, on the other to diversification of the experts who are called in.

We propose a transdisciplinary co-creation process as a mode of collaboration between science and administration, in the crisis team for example. It is a matter not only of bringing together various perspectives, but also honing the questions of the public administration and preparing and delivering interdisciplinary scientific expertise for the specific context. In terms of methodology, we suggest structuring the co-creation in four steps: (1) Knowledge generation, (2) Sense-making, (3) Consolidation, and (4) Development of an application-related output (e.g. a written report, prototype). The four stages are based on a differentiation of evidence levels that provide information about the reliability of the knowledge level in question (based on evidence classes in medicine). They allow the strength of recommendation of the options identified to be specified. The application-based output arrived at together can finally be passed on to support political decision-making processes.

The structure of this mode of working largely takes away the area of tension between scientific quality and focus on the application. On the one hand, scientific expertise is translated into options for action that are based around the logic and implementation options of politics. On the other hand, various scenarios are sketched out in the process and possible uncertainties in the development of options for action are taken into account.

With the Crisis Science Hub, we offer structures and methods for systematic collaboration between the administration and science. The essential point is that this infrastructure allows networks and trust to build up at an early stage and before a crisis, so that they can take full effect when a crisis occurs. The Crisis Science Project was concluded in January 2022 with an online event. The ideas developed were presented to an international audience of politicians and scientists and were then discussed.

Further information about the project can be find on the pages about the Crisis Science Project (CRISP) at www.iit-berlin.de

3.7 Don’t just stand by and watch! How users of social media deal with hate on the net

Laura Leißner, Emilija Gagrčin

Doctoral students from the “Digital citizenship” research group: Laura Leißner (left) and Emilija Gagrčin played a key part in the study on the way users deal with hate speech.

How do users of the net perceive hate speech – and when and how do they intervene? These questions were the subject of a qualitative study by the “Digital citizenship” research group. The research group also collected quantitative data on the way users deal with hate speech in the context of the Weizenbaum Panel. The Weizenbaum Panel is a representative telephone survey that is carried out once a year. The brief report gives an insight into previous research results.

Social media have long held the promise of offering a democratically organized discourse space with a wide range of opportunities for forming opinion and participation. Now Twitter, Facebook and other social networks have fallen into disrepute. Hate, defamation, insults, and threats go along with discussions held online and often seem to prevent rational debate about political and socially relevant topics. While on the one hand state institutions and platform operators are struggling to find the right solution, grassroots movements such as *#ichbinhier (#iamhere)* are showing how citizens themselves can take action against hate and rabble-rousing on the net.

Intervention of this sort by citizens on the net is the subject of a study by our research group. We wanted to know how users of social media deal with hate speech and incitement on the internet. How is hate speech perceived by them and how do they assess it? How, why, and under which conditions do users intervene in cases of hate speech by arguing back, for example?

Representative figures for perception of online hatred in the German population are provided by the Weizenbaum Panel, a representative telephone survey that our research group has been conducting annually since 2019. According to the results of the survey from 2021, 43 percent of internet users saw a hate comment on the net in 2020. Asked what citizens should *ideally* do in such situations, a clear picture emerges: 93 percent of Germans state that they consider it ("very" or "rather") important to counteract hate and incitement. Even more (96 percent) emphasize that respectful interaction should be supported in political discussions. While the ideal thus seems to be clear, this only results in actions for a small section of the population. Only 39 percent of those who have seen a hate comment in the last year have spoken out against it themselves and urged others to remain respectful. 32 percent have reported a hate comment to the platform operator.

In qualitative surveys, we have researched why some people intervene in cases of online hate and others do not, what motivates them, and which situational conditions this depends on. Between 2018 and 2022, we surveyed about 70 people aged between 18 and 35 in guideline interviews and focus group discussions about how "good citizens" should act online, especially when dealing with hate and rabble-rousing, what stops them from doing so, and what they do themselves. In these discussions, it also emerged that users perceive social media hate speech as a threat to online debates against which – at least ideally – a stand should be taken. But in the discussions it also becomes clear: The cost of such an intervention is high. The people we spoke to describe the extensive resources that are required to intervene against hate speech in online discussions: From the time required, through the knowledge about the discussion topic, to the emotional strength required to expose yourself to further hatred if you stand up to it.

Further information about the Weizenbaum Panel, the methodological details of the surveys, reports of the results, and further publications are available online at: https://panel.weizenbaum-institut.de/

Those who intervene despite all these hurdles report that they see it as their obligation and responsibility to take action against hatred on the internet. One interviewee said, for example: "It is a type of social responsibility to take a stance against something like that and intervene (...). If you notice someone expressing themselves in a racist, hate-filled way, you have to respond, you can't let it go without comment."
What is noticeable, however, is that the majority of those surveyed fundamentally doubt that the originators of hate comments will be moved to interact more moderately and respectfully as a result of an intervention. "You cannot convert people", was one comment in this context. Consequently, a "conversion" of this sort is not the motivation of those who intervene. Those who argue back or call for respect in online discussions are usually not addressing the authors of the hate comments – they seem to be "lost" anyway – rather, they are addressing the audience for these debates. Observers should see that the denigration of others does not remain unopposed and is sanctioned. One interviewee said in this connection: "It should not come across that that [the hate comment] is an opinion that you should share, and no one has anything to say against it."

Those who are not prepared to counter online hate with their own posts can also use the reporting function of the platform operator instead (so-called flagging). In our interviews, it emerged that people who, despite a strong feeling of responsibility for online discussions, are not prepared to engage with other people's hatred will use this form of intervention. One interviewee explained: "If people are insulted or bombarded with hate speech, I report the comments. I think it's my duty to say, OK, that's going too far ... but I would never post my own comments because they would tear into me."

But a large proportion of those surveyed have hardly any confidence in the effectiveness of reporting hate comments, as the action and efforts of platform operators are regarded as inadequate. But, as some of the respondents see it, just doing nothing was not an option either: "Facebook should simply be monitoring it (…). Whether it then actually blocks anyone or does anything else with it is not my responsibility. But I think it's important at least to report it."

In summary, the results of our study show that a large proportion of the users of social media feel obligated to the ideal of a respectful debate and also think it important to defend the debate on the internet. Whether and how they intervene against hate speech depends above all on their resources and competences. The fact that many people are not discouraged, despite the perceived limited effectiveness of the intervention options, says a lot about the democratic maturity of citizens in Germany. Giving citizens support in their action against hate speech on the net therefore offers great potential for the future development and improvement of the political discourse and also of the civic self-perception of people in Germany.

Users of social media perceive hate speech as a threat to online debates, against which intervention is required.

IV. Research

The aim of the research at the Weizenbaum Institute is to better understand the mechanisms, ways of functioning and impacts of digitalization and the digital transformation in accordance with democratic principles and to give people guidance. 21 thematically different research groups are investigating the digitalization of society in four key research areas – in an interdisciplinary and fundamental way. Based on the research findings, evidence-based options for taking action in the fields of politics, the economy and society are identified in order to shape the digital transformation sustainably, responsibly, and with self-determination.

The work of the 21 research groups is complemented by three accompanying cross-sectional formats. Research results are brought together here to address general questions of ethics and political organization of the relationship between technology and civil society. In addition, these cross-sectional formats are used to create innovative ideas and provide impetus for the further development of the research agenda at the Weizenbaum Institute. The cross-sectional format “Autonomous systems & self-determination” focuses on the question of how the increasing use of autonomous and semi-autonomous IT systems affects the opportunities for individual and collective self-determination. Within the framework of the “Security & openness” format, our scientists interact across disciplines about the area of tension between these two conflicting objectives and look for design perspectives for bringing them into harmony. The cross-sectional format “Digitalization & sustainability” supports the transformation to a sustainable networked society. Sustainable digitalization processes of energy networks, mobility, and education are scrutinized, as are substitution effects in the worlds of work of the future.

I	People – Work – Knowledge
	Work in highly automated, digital-hybrid processes
	Critical makers culture
	Education and training in the digital society
	Digital technologies and well-being
	Digitalization of science
	Reorganization of knowledge practices

II	Market – Competition – Inequality
	Work and cooperation in the sharing economy
	Framework conditions for data markets
	Data-based business model innovations
	Inequalities and digital sovereignty
	Digital integration

III	Democracy – Participation – Public Life
	Democracy and digitalization
	Digital Citizenship
	News, campaigns and rationality of public discourse
	Digitalization and the transnational public

IV	Responsibility – Trust – Governance
	Responsibility and the Internet of Things
	Relocation of the standardization process
	Trust in distributed environments
	Quantification and social regulation
	Digitalization and networked security
	Criticality of AI-based systems

V	Cross-sectional formats
	Autonomous systems & self-determination
	Security & openness
	Digitalization & sustainability

4.1 Research area I
People – Work – Knowledge

Digitalization of society brings changes to the world of work and production processes, knowledge production, knowledge orders, and individual well-being. In the research area People – Work – Knowledge, six research groups are working on the effects of these changes on individuals and organizations.

The digitalization of global value creation chains has various effects on the world of work. Automation, networking, and the use of AI technologies create new production opportunities and services with radically positive or negative effects for employees. Self-determination, openness, inclusion, and cooperation are principles of the maker communities and labs which are offering people all over the world the option to develop artifacts that meet their needs with open technologies and digital production opportunities. Conveying knowledge and developing skills for the digital world are also concerns in school, university, and professional environments. Here, new educational technologies are being developed and tried out. The digitalization of all areas of life is having an impact on the well-being of users of digital technologies. The psychological and social mechanisms that are at work here are a further field of the research area. Furthermore, in the course of digitalization, knowledge practices in general must be reorganized and the role of academic value creation in these processes must be reconceived. Among other things, this involves creating open infrastructures for data-based findings and the documentation of technologies.

RESEARCH GROUP
“WORK IN HIGHLY-AUTOMATED, DIGITAL-HYBRID PROCESSES”


Martin Krzywdzinski


Florian Butollo


Sonata Cepik


Jana Flemming


Christine Gerber


Lea Schneidemesser


Philip Wotschack


Sana Ahmad


Franziska Lotte Cooiman


Robert Koepp


Patricia de Paiva Lareiro


Ann-Kathrin Katzinski

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ASSOCIATE RESEARCHER

Dave Rejeski

The research group is examining how automation impacts employees in industry, logistics, and the service sector and what potential for organization business and political stakeholders have. To this end, business case studies are carried out in sub-projects, and companies are surveyed and concepts developed, which are verified in experimental tests.

Martin Krzywdzinski has been able to identify the largely gradual course of automation in the automobile industry in recent years and is thus making a contribution to an accurate assessment of substitution potential for technology, which has been well received.

Florian Butollo and Lea Schneidemesser are exploring digital platforms in industry. They are investigating the role software and e-commerce platforms play compared to industrial companies and identifying factors which favor concentration of power in the hands of the platforms. They are passing on their findings to associations and companies. This work is part of the broader project to investigate changes in global value creation chains in the context of digital transformation and geopolitical tensions. An international workshop was held on this in September 2022 with leading representatives of the research area at the Weizenbaum Institute.

Sana Ahmad is concentrating in her research on Indian content moderators who work for social media providers on the question of how work materials are conveyed via software infrastructures. For this purpose, she organized a design thinking workshop with Caroline Sinders, a researcher in the area of machine learning in the field of design. In collaboration with employees, the way placement and acceptance of orders functions was reconstructed and the design options were explored.

Philip Wotschack and Patricia Paiva de Lareiro presented the results of an interdisciplinary project with the research group "Education and training in the digital society", in which a production line was simulated and the use of digital assistance systems tested. The results show that transferring holistic production knowledge improves the quality of production processes in the long term.

In his research on the logistics sector, Robert Koepp was able to identify that companies in the industry often intensify their efforts to recruit cheap labor abroad, instead of opting for costly automation solutions that are sometimes susceptible to faults. He advised the European Transport Federation trade union association and produced a study for the development of transport logistics following the COVID-19 pandemic.

Lotte Franziska Cooiman's research on the political economy of risk capital in Europe reconstructs the institutional framing of the digital economy and the setting of its political course.

In addition, the research group has started or continued new, externally funded projects. Since January 2021, Florian Butollo and Martin Krzywdzinski have been leading a project on the consequences of the COVID-19 pandemic for digitalization of the world of work, which is funded by the BMAS. The initial results of the project were presented as a working paper in the Weizenbaum series at several academic conferences and as part of the "Mobile, digital and disconnected – New inequalities in the world of work after the coronavirus" Weizenbaum Forum held on April 12, 2022. Florian Butollo and Martin Krzywdzinski have been involved in many discussions on this topic as advisers to the BMAS. Since September 2022, Florian Butollo and Philip Wotschack have been working on the EU project "INCODING – Democracy at Work through Transparent and Inclusive Algorithmic Management", the aim of which is to investigate organizational opportunities for works councils in relation to work-related software systems.

The focus of international cooperation fell on collaboration with Prof. John Zysman (University of California Berkeley, USA) and Prof. Mark Graham (Oxford Internet Institute, UK). Fellows of the research group were: Dr. Alexander Ziegler (ISF Munich, research field: data-based business models), Prof. Chris Chan (Chinese University Hong Kong, China, research field: technological change and work in China), Prof. Tobias Schulze-Cleven (Rutgers University, USA, research area: comparative labor market research) and Prof. Vera Trappmann (University of Leeds, UK, research field: platform work). In June 2022, Florian Butollo was guest academic at the Joint Research Council of the EU Commission in Seville (Spain) and guest academic at the Berkeley Round Table on the International Economy in California (USA) in July/August 2022.

RESEARCH GROUP
“CRITICAL MAKERS CULTURE”


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Michelle Christensen


Florian Conradi


Marie Munz


Ben Siegler


Rashid Owoyele


Katharina Bellinger


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Ben Siegler

Berkay Soykan

Hannah Tatjes

Pablo Torres

Lukas Wirsching

The research group focuses on maker spaces and open labs, which open up potential new ways of strengthening social self-determination. The term "maker culture" describes networks of producers who develop new artifacts decentrally through digital production opportunities such as open source code and rapid prototyping. This decentralization brings potential for new forms of collaboration and access to technologies. In the context of the digital division, research is carried out to determine how bottom-up initiatives make a critical contribution to overcoming inequalities and opening up opportunities for participation. The research group focuses in particular on the areas of gender and diversity, post-colonial and post-western perspectives and the approaches of ecological and economic sustainability. Through the explorative methods of design research and of critical making, contributions to the discourse are formulated with interventions and designs, in the form of prototypes, for example, and through participatory workshops, conferences and exhibitions.

In the area of gender, a particular focus has been on networking and collaboration with stakeholders from academia and society at large. The academic and artists Dr. Patricia J. Reis (Vienna Academy of Arts / Mz* Baltazar's Laboratory, Austria) was taken on as a research fellow with the explorative project "Feminist Hacking: Building Circuits as an Artistic Practice". In her work, she focuses on issues of production of open hardware to explore and develop ethical and critical questions from a feminist perspective. The "iphiGenia Gender Design Award" of the International Gender Design Network was also co-organized and run at the Museum for Applied Art in Cologne (MAKK). The award ceremony took place on November 25, 2021. In the categories Revolution, Evolution and Volition (young designers' award), critical and gender-sensitive design work and interventions were displayed and recognized.

In the topic area of sustainability, the research group organized the international "Hackers, Makers, Thinkers – Collective Experiments in Social Fermenting" conference in collaboration with the Art Laboratory Berlin and the Einstein Center Digital Future in May 2022. Academics, artists, and activists from Europe, South America and Asia engaged critically with issues of (agrarian) cultures, symbioses, and bio-politics and with cultural-political, post-colonial approaches to programming, human computing, and open AI. In the context of economic sustainability, Rashid Owoyele explored the effects of cooperative principles in the networked society, in particular how technological design and alternative ownership concepts are able to facilitate supportive economic systems and social sustainability. In his research, he focuses on platform cooperativism and examines the question of which framework conditions support shared responsibility for ethical production processes.

In the field of internationalization, the research group conceived and organized the interdisciplinary conference "Politics of the Machines – Rogue Research", which was held in Berlin and online from September 14 to 17, 2021, in collaboration with the Einstein Center Digital Future in Berlin, Dr. Laura Beloff (Aalto University, Finland), Dr. Morten Søndergaard (Aalborg University, Denmark), Dr. Hassan Choubassi and Joe Elias (International University of Beirut, Lebanon). The topics of gender, post-colonialism, and ecological sustainability in the context of digitalization were addressed and scrutinized critically. Academics, artists, and activists from 31 countries in Europe, the USA, South America, the Near East, Asia, and Africa were present. Along with the academic papers, performances and an exhibition of student work provided the framework for this hybrid conference. In addition, a two-week student trip to Lomé (Togo) took place in collaboration with the UdK and the University of Lomé in April 2022. Students from the Faculty of Art and Design visited the cities of Lomé, Kpalimè, and Agouégan to research and discuss post-colonial perspectives, animism, African cosmologies and cosmogonies as a new paradigm for design. The student trip was organized in collaboration with Prof. Mathilde ter Heijne (UdK Berlin) and former Weizenbaum Research Fellow Senamè Koffi Aboudjinou.

The research group took part in various transfer events, including the Design Talks in the Museum of Decorative Arts in Berlin, the Anti-Dystopian Congress of the Goethe Institute in Prague and the "Art & Computation" workshop series of the Goethe Institute in collaboration with the German Informatics Society. The current status of research of the group was presented in papers given at various universities and conferences. In addition, the research topics were combined with various teaching courses as part of the Research Learning approach, and compact seminars were held at the UdK Berlin and the TU Berlin.

RESEARCH GROUP
“EDUCATION AND TRAINING IN THE DIGITAL SOCIETY”


Norbert Gronau


Niels Pinkwart


Gergana Vladova


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The research group investigates knowledge transfer and the development of skills in the context of the digital transformation. Various research and application projects focus on education and training in schools, universities, and in the professional sphere. Particular attention is paid to inequalities in access and mastery of digital technologies. These can be addressed through the development of appropriate skills and framework conditions.
In the reporting period there was a particular focus on educational technologies. In a bibliometric study carried out with the "Data-based business models" research group, André Ullrich, Gergana Vladova, André Renz, and Felix Eigelshoven analyzed research into the use of AI in teaching and administrative processes in universities and published the results. Malte Teichmann and Jana Gonnermann researched the use of Augmented Reality technologies in the design of age-appropriate, process-oriented and interactive business training in SMEs. In this type of extension of reality, virtual information overlays the perception of real environments. Leo Sylvio Rüdian carried out a study with the Goethe Institute into auto-correction tools in the area of language learning. Working with the Open Knowledge Foundation, Bonny Brandenburger offered technology-based training courses and workshops using mobile FabLabs for the public in rural areas, through which open hardware projects were supported in particular. The research group's joint project with the "Work in highly automated, digital-hybrid processes" group on the use of digital assistance systems in company training processes continued.

A further focal point was the impact of the development of digital skills on digital sovereignty and on socio-ecologically sustainable action. This research was carried out with the "Inequalities and digital sovereignty" research group. In the context of the CO:DINA research line "Digital sovereignty & sustainability", Gergana Vladova, Bianca Herlo and André Ullrich analyzed the interactions between digital sovereignty and sustainability on behalf of the Institut für Zukunftsstudien und Technologiebewertung. Their study "Responsible, democratically sustainable digital sovereignty" extends the findings of current research with the results of social and academic workshops to draw up recommended action points for politicians and society as a whole. Digital skills were examined as a normative factor in digital sovereignty and sustainability. Research group leader Gergana Vladova was also involved as a member of an expert group in creating a "knowledge store of data skills and data culture" as part of the digital strategy of the German federal government. As members of the "Involvement of Employees in the Digital Transformation" working group, funded by the Senate Department for Economy, Energy and Enterprises as part of the implementation of the Industrial City of Berlin masterplan, Gergana Vladova and associate researcher André Ullrich were involved in identifying hurdles and developing solutions to minimize inequalities in companies going through a digital transformation.

The results of the research were published in various publications and conference papers and transferred into teaching. A good example of this is a seminar in which students were given the skills to develop their own online courses on a specific topic. The seminar was run for the first time in parallel in the summer semester of 2022 at the University of Potsdam and at the HU Berlin by Gergana Vladova and Sylvio Rüdian, with more than eighty students attending.

As the conclusion to her dissertation project on the topic of creative work processes, Jennifer Haase spent four weeks in June and July 2022 as Researcher in Residence at the University of Liechtenstein researching with her joint supervisor Prof. Stefan Seidel. She used the findings from her creative research to create, among other things, an online course on the topic of "Creativity" with the ZEIT-Akademie. She lectured on this course, together with two other professors, one of whom was Director Sascha Friesike. The three-hour course provides an introduction to the (psychological) principles of creative work and provides a pragmatic guide to integration into working life.

RESEARCH GROUP
“DIGITAL TECHNOLOGIES AND WELL-BEING”


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Fenne große Deters


Katharina Baum


Margarita Gladkaya


Hannes-Vincent Krause


Hugo Hinze


Olga Abramova


Faysal Mizan


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ASSOCIATE RESEARCHER

Dr. Olga Abramova

The research group is concerned with investigating the long-term individual and social consequences of the use of digital technologies. From the smartphone to social media, these are ubiquitous in our everyday lives. They are changing how we work and spend our free time, which information we are exposed to, and how we interact with one another. The aim of the research group is to develop a better understanding of how the use of digital technologies affects the well-being, behavior, perception, and decision-making processes of users. There must be clarity in society about the possible negative consequences of the use of digital technologies. At the same time, the findings of the group provide indications of how positive consequences can be enhanced. The group makes use of a multitude of empirical research methods, such as surveys, interviews, experiments, and methods of machine learning.

In the reporting period, the research group was able to launch numerous new research projects and continue with and conclude existing ones. Hannes-Vincent Krause, Annika Baumann, Hanna Krasnova, and research fellow Prof. Jason Thatcher (Temple University, USA) carried out experiments on the effect of the emotion envy on negative social interactions between social media users. A conference paper has already been published, and the project is now being prepared for submission to a journal.

In a new research collaboration by Hannes-Vincent Krause with Prof. Drew Cingel (University of California, Davis, USA), a narrative literature research on the effects of social media on feelings of self-worth of users was carried out and published. In addition, a discussion paper was completed in cooperation with Dr. Adrian Meier (Friedrich Alexander University of Erlangen-Nuremberg) on the established distinction between active and passive patterns of use of social media.

Last but not least, a long-term project by Hannes-Vincent Krause, Fenne große Deters, Annika Baumann, and Hanna Krasnova was submitted to a journal in the reporting period and is currently in the first round of peer review. The project involves an experimental, longitudinal study of the causal effect of active social media use on well-being.

Together with research fellow Prof. Jason Thatcher, Katharina Baum, Margarita Gladkaya, and Hanna Krasnova have launched a project to investigate the conscious consequences of certain content on users of social media. The underlying experimental design is currently being worked out and the study is due to be conducted soon.
Along with the presentation of its research work at conferences, the work and findings of the research group have been presented to a broad audience. Particularly worthy of mention in this context are a radio interview with rbb Inforadio, participation in a video podcast of Discover Neuland, a lecture as part of the MINTMagie program aimed at children and young adults, and a TED-Talk at TEDxYouth. All transfer activities to the broader public were based on the basic theme of “digital technologies and well-being”, with a different specific focus in each case. Research presentations on current projects were also given at the Hertie School of Governance and at Hagen Distance Learning University.

Thanks to the lifting of travel restrictions, the research group was able to welcome research fellows back to the institute. In June and July 2022, Prof. Jason Thatcher (Temple University, USA) was our guest, discussing and initiating a wide range of project ideas, some of which have already been implemented, as mentioned above. Prof. Sabine Matook (University of Queensland, Australia) was a guest of the research group in July and August 2022. Her visit strengthened the existing research link between the University of Queensland and the Weizenbaum Institute. A new joint project with Annika Baumann and Hanna Krasnova was initiated, the focus of which is on an experimental investigation of the motivation for helpfulness and social support between users on social media.

RESEARCH GROUP
“DIGITALIZATION OF SCIENCE”


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Sonja Schimmler


Fabian Kirstein


Qian Liu


Sebastian Urbanek


Mareike Bauer


Carlos Franzreb


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Mathieu d’Aquin


Isabel Steinhardt


Leonard Mack

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ASSOCIATE RESEARCHERS	Prof. Mathieu d’Aquin Leonard Mack	Prof. Isabel Steinhardt

The group researches the digitalization and opening up of science and plays an active part in shaping it. Its current focus is on data infrastructures and data tools for interdisciplinary, data-intensive researchers. The work of the research group is marked by current scientific and technical developments in the areas of the semantic web, linked data, data science, and AI. In doing so, it draws on the extensive experience of the Fraunhofer FOKUS in the areas of open data management and open data platforms.

At the heart of its work are research data infrastructures that put users in their center. Three individual research projects were continued over the last year in this connection: "A Decentralized Provenance Network for Linked Open Data" (Fabian Kirstein), "IoT Provenance Management over Incomplete Provenance Graphs" (Qian Liu) and "Assessment and Improvement of Metadata Quality in Linked Open Data" (Sebastian Urbanek).
It was also possible to publish the results of a joint project last year and present them at conferences and in workshops, including at the Web Conference/KnOD in April 2022, in the journal Quality & Quantity in fall 2022, and in the journal Data Intelligence also in fall 2022.
The research group itself works as openly as possible and makes publications available as open access, data as open data, and software as open source wherever possible.

The group has attended various events over the last year. Among other things, it organized a "NFDI Science Slam" at the Berlin Science Week in December 2021, at which scientists from various consortia of the National Research Data Infrastructure initiative presented their disciplines and subject areas to the public.

The research group is also responsible for developing a research data infrastructure at the Weizenbaum Institute. It continued the development of the Weizenbaum Library, a repository for publications and research data, over the last year. The aim is to capture all the publications and research data of the Weizenbaum Institute and make them publicly available for further use.

Sonja Schimmler also acted as editor of the "Weizenbaum Journal of the Digital Society", the first issue of which appeared in November 2021. She was also involved in the IT working group in supporting development of an open IT infrastructure at the Weizenbaum Institute. The research group introduced the newly established Open Research working group in the last year, the aim of which is to establish open academic practice at the Weizenbaum Institute.

The research group has also been active in further networking, both nationally and internationally. Over the reporting period it has cooperated closely with its associate researchers Isabel Steinhardt (University of Paderborn) and Mathieu d'Aquin (University of Lorraine, France), which led, among other things, to two publications over the last year. Within the Weizenbaum Institute, the group carried out research with the "Reorganization of academic practices" research group into the unintended effects of sharing preprints that are still associated with epistemological uncertainty on Twitter, in particular in connection with the dissemination of conspiracy theories. The results were presented at the Weizenbaum Conference in June 2022.

In the context of a successful application in the last funding round of the Excellence Strategy, the group was active over the last year in the Berlin University Alliance (BUA) in developing a digital research space. A particular highlight is the involvement of Sonja Schimmler in the OpenX strategy of the BUA in summer 2022. At national level, the research group was involved in the National Research Data Infrastructure (NFDI) initiative. Sonja Schimmler acted as co-spokesperson for the NFDI section Common Infrastructures, which was launched in the last year. The research group was also involved in the consortia "NFDI for Catalysis-Related Sciences" and "NFDI for Data Science and Artificial Intelligence". Internationally, Sonja Schimmler continued to contribute her expertise to the G7 Open Science Working Group on the topic of "Interoperability and Sustainability of Infrastructures".

RESEARCH GROUP
“REORGANIZATION OF KNOWLEDGE PRACTICES”


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Maximilian Heimstädt


Eva-Marie Geier


Katharina Berr


Sebastian Koth


Clarissa Elisa Walter

Sandrine Faißt


Paul Börsting


Moritz Neumann


Philipp Stachowiak

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Moritz Neumann

Philipp Stachowiak

Clarissa Elisa Walter

The research group focuses on the production, application, and negotiation of knowledge in digitally networked societies. Changing knowledge practices are investigated through the perspective of organizational science and analyzed in terms of their properties as networks, heterogeneity, and dynamism.

A central objective of the group is to understand how the reorganization of academic principles in accordance with digital principles can contribute to individual and social self-determination. The research activities of the group are structured around several projects:

Maximilian Heimstädt investigates how preprints and preprint servers are changing the form of knowledge production and the perception of science in society. In the course of digitalization, preprints have gained rapidly in significance as an academic text genre. The peculiarity of preprints lies in the fact that, in the absence of peer review, it is still uncertain whether they can be considered reliable scientific knowledge or not. The project shows that this epistemological uncertainty of preprints can lead both to an acceleration of knowledge production and to an instrumentalization of science by tendential groups that are hostile to science.

Katharina Berr investigates so-called science ultras, which are digital communities that are active on social media platforms in promoting the dissemination of scientific knowledge. Until now, such communities have been understood primarily as recipients or challengers of scientific knowledge. This project shows that digital communities can also have a much more active role in the circulation of scientific knowledge, but in a way that is difficult to control for science itself.

Sebastian Koth uses the example of the innovative field of "Blockchain for Science" to explore how new digital technologies are changing established academic assessment practices. The project shows how fundamental tensions between digitalization and science become evident in the development of innovative infrastructures. On the one hand, scientists fear that deep digital infrastructures will limit academic autonomy and thus organizational and material diversity will be lost. On the other, many scientists welcome the fact that new digital infrastructures make the productivity of their work clearer and new forms of cooperation with industry and other interest groups are becoming possible.

The project of Clarissa Elisa Walter focuses on transfer activities of the group, such as the scientific videos "Ding an sich", ("Thing in itself" which are produced in cooperation with rbb, published on the YouTube platform, and presented by Sascha Friesike. Clarissa Elisa Walter is closely involved in the production of the innovative transfer format for research in the social sciences. Through an ethnographic analysis of the production process, her project seeks to understand how digital knowledge communication can succeed in the area of tension between scientific precision, the aim to entertain, and the attention economy.

The group has also been closely involved in another transfer project. Clarissa Elisa Walter and Katharina Berr worked on the "Crisis Science Project" of the BMBF from September to December 2021. An interdisciplinary and transdisciplinary development team developed prototypes of new forms of organization and digital tools for systematic, co-creative interaction between science, administration and politics at times of crisis.

The group has also begun a new externally funded project under the leadership of Maximilian Heimstädt. The project, funded by the Hans Böckler Foundation, is examining the use of new prediction technologies in global supply chains. These technologies are promising to create knowledge about working conditions and social unrest in individual supplier companies more quickly and precisely than previously. The project is being carried out in cooperation with St. Pölten University of Applied Sciences and the Momentum Institute in Vienna. It complements the program of the research group, as it provides results relating to the legitimation of new knowledge practices.

The focus of our international cooperation (in addition to St. Pölten University of Applied Sciences and the Momentum Institute, Austria) was on collaboration with Prof. Malte Ziewitz (Cornell University, USA) on the topic of meta-expertise and collaboration with Prof. Philipp Tuertscher and Prof. Hans Berends from the Vrije Universiteit Amsterdam. A fellow of the research group was Emma Cavazzoni (London School of Economics, UK), who worked on new knowledge practices in biomedical research.

4.2 Research area II
Market – Competition – Inequality

In this area of research, on the one hand innovative data-based business models, changed market dynamics, and forms of competition and their regulation are examined, on the other hand the effects of digital services and new value creation ecosystems on social and economic inequalities are investigated.

A characteristic of digitalization is that social reality is carried over into objectifying data structures and data usage that creates value then becomes ubiquitous in ever more areas. This leads to a multitude of ambivalences that affect us in almost all areas of life and are constantly challenging us in new ways. Thus, for example, digitalization makes our participation easier and opens up new innovation spaces, but simultaneously challenges the formation of digital sovereignty and the definition of corresponding framework conditions.

The debate over digital participation and the design of data-structured ecosystems therefore occupies an increasingly important role, which is a focus of this research area. The aim here is to determine new dynamics, development potential and needs for action for the triad of market – competition – inequality. The central subjects of investigation are data-based business model innovations, especially in the area of education, and the framework conditions of data markets which facilitate these and other innovations. Moreover, the change processes of value creation chains and economic activity are examined, in the context of the platform and sharing economy, for example. Finally, the potential and impact of digitalization on social inclusion, digital participation, and digital sovereignty are considered and analyzed in relation to digitalization strategies and design policy-making oriented around the common good.

RESEARCH GROUP
“WORK AND COOPERATION IN THE SHARING ECONOMY”


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Evelyn Adams


Saba Rebecca Brause


Aaron Kolleck


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ASSOCIATE RESEARCHER

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The research group focuses mainly on the sharing economy. This socio-economic phenomenon, which is gaining in importance, promises to make fundamental changes to consumer habits, value creation chains, and economic activity. Sharing concepts open up new types of allocation opportunities for capacities that otherwise lie dormant, bringing new potential for efficiency, and in this way can improve both economic and ecological sustainability. Exploiting such potential presupposes, however, that the associated challenges and risks are identified and addressed appropriately. The result is a wealth of research questions, meaningful answers to which can benefit from interdisciplinary approaches and even require them in some cases.

The research group meets this requirement through its cross-discipline composition and multi-disciplinary research collaborations, which combine methods and perspectives from economics, legal studies, sociology, and informatics. The studies therefore make it possible on the one hand to arrive at a sophisticated understanding of individual phenomena and on the other to identify and describe the relationships between them.

In the reporting period, the members of the research group focused on the core questions of the sharing economy in their research projects. Among other things, current research projects are examining the interplay of data and regulatory frameworks in the sharing economy with a particular focus on the online platform Airbnb, network effect dynamics on sharing platforms using the example of Airbnb, and, based on three case studies, the concept of liquid consumption in the platform economy. In addition, further research projects are dealing with the evolution and materiality of digital infrastructures (including in the context of the COVID-19 pandemic) and with alternative sharing approaches of corresponding infrastructures.

In addition to publications, including in high-quality, refereed conference volumes and journals and various papers given at international conferences and seminar series, there was a particular focus in the reporting period on work on dissertation projects of doctoral students. Furthermore, the successful (online) lecture series PLAMADISO Talks (Platforms, Markets, and the Digital Society) continued and was developed into a platform for interdisciplinary interaction between researchers among themselves and also between the academic world, decision-makers, and those sections of the public interested in this area. Once again, it was possible to attract a wide range of notable guest speakers from a variety of disciplines at home and abroad (for example from the Oxford Internet Institute, the London School of Economics, Strathclyde University in Glasgow, Imperial College London, the Wharton School at the University of Pennsylvania and the Swiss Federal Institute of Technology, Lausanne) to present and discuss their research results. Recordings of the lectures have been published on the YouTube channel of the research group.

In addition to these activities, in which research and knowledge transfer are in the foreground, work on the networking of the research group moved ahead. In the period from November to December 2021, Prof. Christoph Lutz (BI Business School, Norway) visited the research group as a fellow. Together with the research group leader Volker Stocker, he is working on the concept of liquid consumption in the platform economy. In addition, the research visits of Volker Stocker to the Quello Center at Michigan State University in East Lansing and to the Center for Technology, Innovation and Competition at the Carey Law School of the University of Pennsylvania (USA) served to network the research group further. In the course of these research visits, joint research projects were initiated into innovation dynamics in the internet ecosystem with Prof. Johannes Bauer (Quello Center) and on issues of resource allocation in the context of 5G and on the topic of network neutrality with Prof. Christopher Yoo (University of Pennsylvania, USA), which are due to continue in the forthcoming funding phase.

The collaboration of Volker Stocker with the former fellows Prof. Jason Whalley (University of Northumbria, UK) and Dr. William Lehr (Computer Science and Artificial Intelligence Laboratory at the Massachusetts Institute of Technology, USA) are also worthy of mention. A book is being published together that looks at the impact of the COVID-19 pandemic on the internet and the role of digital technologies in overcoming the crisis. It includes articles from various well known academics, including on digital infrastructures and digital policy, work and remote work, cyber crime and cyber security, infodemics and content regulation, and smart cities. In addition to the research collaboration already mentioned, other research projects with academics at home and abroad were continued during the reporting period, including with TU Berlin, the Technical University of Delft (Belgium) and the Polytechnical University of Madrid (Spain).

RESEARCH GROUP
“FRAMEWORK CONDITIONS FOR DATA MARKETS”

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Jana Pinheiro Goncalves

Rita Gsenger

Prisca von Hagen

Jakob Metzger

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Jakob Metzger

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Mariam Sattorov

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Lisa Völzmann

Prisca von Hagen

The research group analyzes the use of data in the digital economy from a legal, psychological, and economic perspective. It focuses on private autonomy in the tension between data protection and contract law, the way digital markets function with the implications for competition, and the civil rights context of collecting, sharing, and handling data.

Specifically, the group researches market phenomena such as "data against services". In addition, members of the group are researching personalized pricing strategies, sector-specific and general data access rights, visualization of aspects of data processing, and the trust of users when interacting with digital content and services.

In the Privacy Icons project, technical and design-based solutions for strengthening the private autonomy of consumers' decision-making capacity regarding disclosure of their data are being explored. The central research question is: To what extent can image symbols, so-called privacy icons, reflect the specific aspects of data processing and the risks inherent in them and contribute to an informed and self-determined decision-making process by users, before they consent to processing of their data? On the basis of human information processing, the factors that affect the decision-making of online users in the context of data protection and the ways in which they can be helped in their decision-making are analyzed. Research into privacy-by-design approaches and the risks of disclosing data and data processing with particular reference to safeguarding the information rights of data subjects also play an important role in this subject area. Those cognitive and emotional-motivational dynamic processes which underpin often full disclosure of personal data by users of digital services and the resulting individual and overall social consequences are a particular subject of the psychological research.

With the publication of its proposal for a Data Act in February 2022, the European Commission has reached an important milestone in the implementation of its data strategy. The legislative proposal includes a package of measures with the aim of providing data-driven companies with more access to IoT data. The group responded with a position paper on this draft legislation. The position paper focuses primarily on the regulation of access rights and the associated rules and comes to the conclusion that the consolidated impact of regulation of access rights on manufacturers of IoT devices, third parties, and the data economy are difficult to foresee in general. At the same time, it is argued that the legal positions and rights that the Data Act would create require further review. The analysis concludes with several specific recommendations.

On May 13, 2022, research fellow Jan Winterhalter organized an interdisciplinary design workshop on regulation of the digital economy with the support of the research group. Specifically this addressed the questions: What is actually behind the Amazon Echo system? What human resources, hardware, and software are required to offer this product and the digital services behind it? And what does that mean for the regulation of the digital economy? A cooperative publication is being planned for this.

RESEARCH GROUP
“DATA-BASED BUSINESS MODEL INNOVATIONS”

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Bennet Etsiwah

Stefanie Hecht

Ana Teresa Burgueño Hopf

Romy Hilbig

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ASSOCIATE RESEARCHER	Dr. Romy Hilbig	

The research group combines forming theories on business model innovations with empirical analysis of sector and data-based innovation processes in the areas of education, training, and open data. In the context of digitalization and the associated datafication of society – i.e. the modeling of social reality data structures and the use of that data – this research field is enjoying a new boost of dynamism. Thus, data is now having a sustainable effect on the way in which business models are set up and optimized. At both a theoretical and a practical level, the work of the research group is intended to help companies and institutions to identify the opportunities of datafication processes and to use them for business model innovations. Both qualitative and quantitative research methods are used for this purpose, including interviews, surveys, observation studies, test procedures relating to the behavior of users, and activity and action research.

The research group focused in particular on three key areas of investigation in the reporting period:

1. Datafication and implementation of AI technologies in the education sector

Various contributions to books and articles on the effect and development opportunities of AI technologies were published. For example, in the context of collaboration with the "Education and training in the digital society" group, the research group carried out an extensive bibliometric analysis of AI technologies in the university sector. Among other things, the study systematizes research results on AI technologies in the university sector from the last ten years and formulates a research agenda. The publications and papers delivered stimulate ideas on an ethically responsible and self-determined use of data and AI technologies in the education sector.

In the course of a research visit to ESADE University in Barcelona (Spain) in October 2021, research group leader André Renz was able to conduct interviews with Spanish EdTech companies. The results have fed into an international comparative study on market entry barriers for technologies of this sort.

2. Data competence and data culture as elements of successful data-based transformation

In order to represent the social challenges and the relevance of data competence in selected business areas, the research group has set up the Data Literacy transfer project. The project brings together existing publications and transfer formats with cross-sector impulses and expert contributions from stakeholders across the breadth of society. In addition, academics from the research group have contributed to interactive events on the topic of data competence with political and industry experts. In September 2021, academic assistant Bennet Etsiwah visited the Utrecht Data School in the Netherlands, where, among other things, he took part in various stakeholder workshops on the topic of data ethics. Based on a series of qualitative interviews, a case study of the empirical representation of a data culture is being created with a partner company from business as part of an ongoing project. The results of the study are contributing to the formation of a theory relating to data culture, which is still a new research area, and is opening up new perspectives on current challenges in the development and representation of data cultures in companies.

3. Human-centered design of data portals in general and open government data portals in particular to generate data-based business model innovations

Data portals, in particular open government data portals, can be the starting point for data-based business model innovations. Software design that is as intuitive and human-centered as possible is therefore required. This also includes the language used, the UX writing. In a survey on the comprehensibility of data and metadata, users were asked about the European open government data portal. So-called usability tests were also carried out to improve the human-centered design of open government data portals.

The results of the three thematic focal points were published successfully in various volumes of collected articles and recommendations for action, such as the "Whitepaper on Data Competence". In addition, the members of the research group were able to contribute their expertise to various committees and working groups, such as the workshop discussions on data literacy of the Federal Office of Statistics, the expert committee of the School Transform Alliance for Education, and the internal expert discussions on interoperable data spaces.

A presentation was delivered successfully at an international conference on the knowledge transfer project "Digital design for schools", a collaboration of the research groups "Data-based business model innovations" and "Education and training in the digital society" with the Käthe-Kollwitz-Gymnasium Berlin. The first podcast series "Voices for the Networked Society" was also completed in December 2021 after 14 episodes. In March, the group started a new podcast series with the title "Datenhappen". The focus here is on various sectors such as e-health and FinTech, and the more general question of how data is used for existing business models and their development.

RESEARCH GROUP
“INEQUALITIES AND DIGITAL SOVEREIGNTY”


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The research group investigates the scope for taking action and decisions about sovereign use and ownership of digital technologies and options for their design. The aim is to contribute to the construction of new role models for people in the digital world and to develop a European perspective. Qualitative research is carried out in the area of tension between regulation, technological development and digital skills, and the following questions are addressed:

- how individuals and collectives deal with ever more complex technologies and changing relationships of inequality;
- how informal acquisition and usage practices play a part in shaping the negotiation processes for control;
- how questions of regulation can be framed as a prerequisite for social and political policy and participation.

The various perspectives of the research group are based in participatory and transdisciplinary design research, in which methodological access points such as real laboratories and social living labs are anchored. On the basis of the research questions, dissertation projects, studies, and knowledge transfer projects are developed which deal with the different practical and discursive developments in relation to data sovereignty, digital participation, digital skills, digitalization strategies aimed at the common good, and political policy, in order to arrive at general conclusions on questions of digital inequality and digital sovereignty.

Highlights in the reporting period included:
Publication of a volume of collected essays on the concept of digital sovereignty in times of crisis: In March 2020, the research group was planning to hold a symposium at the UdK Berlin with an accompanying exhibition and workshops on the question of what it actually means to have digital sovereignty. Because of the pandemic, however, this event had to be cancelled one day before it was due to open. In order to carry on the debate in a different format, the researchers, artists, designers and activists from Germany and abroad were invited to submit their contributions in writing. The results were published by the Transcript Verlag in open access format in an English volume in November 2021.

Weizenbaum Conference 2022: The fourth Weizenbaum Conference 2022 was held under the title “Practicing Sovereignty. Interventions for Open Digital Futures” on June 9 and 10, 2022 at the Alte Münze in Berlin. In addition to the central question of the meaning of the term “digital sovereignty”, the papers, discussions, and workshops focused among other things on inequality in relation to digital skills, the autonomy of the academic system, the relationship between datafication and democracy, and digital policy in engaged cities. Around 300 participants from the fields of science, art, activism, and society took part in the conference.

“Purple Code. Intersectional feminist perspectives on digital societies” podcast: In collaboration with Lena Ulbricht (“Quantification and social regulation” research group leader) and Sana Ahmad (doctoral student in the “Working in highly automated digital-hybrid processes” research group), a podcast was created in which invited guests discussed questions of inequality and digital rights, gender and technology, ethics and AI, and participation in the digital society.

Digital City Alliance Berlin: The Digital City Alliance Berlin is a transdisciplinary network of organizations and individuals from the academic and social fields, co-initiated by the research group. Since March 2019 the Alliance has been supporting the process of development of the Berlin digitalization strategy – with the aim of building up a broad consensus between representatives of society, academia, and parliament. Since 2021 the Alliance has been trying out innovative formats for participation and interaction between urban society and political administration, for example the “Round Table Digital Policy”. For the parliamentary elections in 2021, the Alliance organized digital policy election touchstones and an online party discussion to make digital policy more comprehensible to a wide audience and open it up for debate.

A further focal point is the connections between digital skills, sustainability, and digital sovereignty. In the context of the CO:DINA research line “Digital sovereignty & sustainability” and in collaboration with Gergana Vladova, leader of the “Education and training in the digital society” research group, and associate researcher André Ullrich, Bianca Herlo is researching the interactions between digital sovereignty and sustainability on behalf of the Institut für Zukunftsstudien und Technologiebewertung (IZT - Institute for Futures Studies and Technology Assessment). Their study “Responsible, democratically sustainable digital sovereignty” extends the findings of current research to include the results of social and academic workshops in order to draw up recommended action points for politicians and society as a whole.

Through cooperation with the research group, research fellow Joana Moll was able to complete her work “Carbolytics”, which focuses on the ecological footprint of cookies. Moll’s work was presented at an exhibition in July 2022 at designtransfer run by the UdK Berlin, which Bianca Herlo organized in collaboration with the “Inequality and digital sovereignty” research group and curator Ika Schaumberg, alongside other artistic projects from courses at the UdK Berlin on the topics of surveillance, digital identities, self-optimization, and self-determination.

RESEARCH GROUP
“DIGITAL INTEGRATION”

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The "Digital integration" research group focuses on current important topics of social integration, social cohesion, and social inequality. These socially significant challenges are taken up by the research group and have gained worldwide attention through the refugee movement, migration, and the coronavirus pandemic. The focus of the research is on the influence of the use of social media on the processes of social inclusion, social perception of inequality in society, and the form of stressors and signs of fatigue.

The group's studies are carried out with empirical methods. Surveys and qualitative interviews are used as the main tool here. The research shows that the use of social media can affect the subjective well-being of users. It is increasingly becoming clear that social media not only triggers psychological processes, but can also have a significant impact on social processes (e.g. through fake news and political advertising). The research in this area is still only just beginning, which is why it is precisely at this interface that our current studies begin. Below is a selection of current projects:

1. Social media and the perception of society

This research project investigates the role of social media in the perception of economic inequality. It has already been possible to show that users of social networks such as Instagram and Facebook perceive a lower inequality in wealth in society. A further study in the reporting period was able to show that the use of Instagram also affects the perception of physical characteristics. The connection between use of Instagram and social status is also being explored in a current research project. These projects are being carried out in conjunction with the "Digital technologies and well-being" research group.

2. Social media and information

This research project analyzes the effects of the organization and presentation of information in social media on psychological stresses on users and on problematic behaviors (stereotyping, for example). A published study of initial results has formed the basis for further specialist articles. One of these articles surveys current research into misinformation and fake news on social networks.

3. Social inclusion of refugees

In this topic area, the potential of information and communication platforms to affect social inclusion of refugees in their host country is examined. One research project in the reporting period is investigating the situation of refugees with children during the coronavirus pandemic, with a focus on the technologies and means of communication used for home schooling. It focuses on the benefits of digital media and the associated challenges, as experienced by both the children affected and their parents. Qualitative interviews were conducted with Syrian families for this project.

4. Increased use of smartphones and tablets by children

This research project is concerned with the usage behavior of children in relation to digital technologies. As the influence of parental behavior on children's use of technology has already been investigated, a new study is focusing on the increase in children's screen time during the pandemic and the potential effects associated with it. The research group discussed the challenges and advantages of digitalization for children online in the form of a panel with its research fellows and other participants at the business informatics conference in February 2022. Other research directions were also formulated in this process.

5. Digital working and the pandemic-driven changes in collaboration

At the heart of the project is the observation that the digitalization of everyday life has advanced considerably. This brings with it multilayered changes, which in many cases have remained in place after the pandemic: From digital communication and collaboration in organizations, through levels of conflict between work and family, to concern for psychological hygiene and health. One research project investigated how zoom meetings impact subjective well-being. Another examines the negative effects of the use of AI technologies on everyday working life on the basis of case studies.

Some of the research projects described took place in cooperation with research fellows, with Prof. Monideepa Tarafdar, University of Massachusetts Amherst (USA), and Prof. Ofir Turel, University of Melbourne (Australia).

4.3 Research area III
Democracy – Participation – Public Life

On the one hand, politicians, activists, and citizens are the target of hate speech, lies and manipulation in social media, on internet forums, on websites with a public comment function and in public groups of messaging services. On the other, they need online media to convey their content and messages, to take part in public debates, and to observe public issues.

This research area investigates how standards and communication and participation processes are fundamentally changing for the long term in modern democracies under the influence of digital technologies and how this development is affecting public opinion and discourses.

The consequences of digitalization for public life in Germany are varied, full of opportunities to express opinions, but also often concerning. Among other things, this subject area deals with the change in public life, the role of social media in election campaigns, new forms of engagement and political participation for citizens, the dynamics of political mobilization, propaganda and extremism on the internet and the importance of the internet in connection with depoliticization, radicalization, and mobilization processes.

RESEARCH GROUP
“DEMOCRACY AND DIGITALIZATION”

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The research group studies how democratic societies appropriate digital technologies and change in the course of this appropriation. The research is carried out in topic blocks: digital constellation, political participation, law and governance, and change in public life.

1. Digital constellation

Here the group has developed an approach to interpretation based on democratic theory which makes conceptual and methodological principles of digitalization research accessible, especially for political science. In the reporting period, a special issue of the Zeitschrift für Politikwissenschaft on the relationship between political theory and open access digitalization was published by Sebastian Berg, Thorsten Thiel, and Daniel Staemmler (research fellow of the group from April to July 2022). It includes a total of 15 articles that explore the capacity of conceptual work for investigation of digital transformation.

2. Political participation, law and governance, and change in public life

Here the focus was on the completion of three doctoral projects. These investigated:

- how the datafication of political representation relates to older forms of statistics and opinion research;
- how freedom of association can be organized in virtual space;
- how deliberative-democratic approaches must be extended to cope with a culture of discourse that is changing through social networks.

In addition, the group has continued with two special projects that are devoted to the general issue of how individual and collective capacity for action is changing in view of digitalization and how this transformation can be assessed from the perspective of democratic theory: On the one hand, members of the group examined the new democratic challenges from developments in the field of machine learning and the automation of political processes based on that in several papers and publications. On the other, an international publication of the group that deals with the question of the re-applicability of Jürgen Habermas's theories on structural change in public life attracted a lot of attention.

The research group had four research fellows as guests in the reporting period: Amélie Heldt (Leibniz Institute for Media Research | Hans Bredow Institute) and Ronja Kniep (WZB and FU Berlin) were here from September to November 2021 and worked with the group on various aspects of regulation of digital public life (social media governance and monitoring). From April to July 2022, Daniel Staemmler (HU Berlin) was part of the group. He focused on the development of civic tech in Germany. Prof. Hannah Bloch-Wehba (Texas A&M University School of Law, USA) worked with the group in May and June 2022 on issues of automated decision-making.

RESEARCH GROUP
“DIGITAL CITIZENSHIP”


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The research group investigates how political participation and engagement by citizens develop under the conditions of digitalization and which factors can explain political and social participation. Changing and newly created attitudes to engagement in democracy by citizens are identified and their consequences for the political actions of people are analyzed. The research group is particularly interested to discover how people understand their relationship to democratic processes and values and how that relationship changes over time through the context of digital media environments. Representative telephone surveys, qualitative interviews, and focus groups were carried out to this end. Research into methodology is also part of the research group's area of work.

Three focal points shaped the research over the reporting period:

1. Long-term development of political participation

The research group examines which factors shape political participation in Germany in the "Weizenbaum Panel", an annual, quantitative panel survey. These factors were investigated for the first time in fall 2019 in a telephone survey of just under 1,300 people as representatives of the German population; the third longitudinal survey was carried out with around 1,600 respondents in fall 2021. The results provide an insight into the particular conditions under which participation took place in the first two years of the COVID-19 pandemic. A further focal point in 2021 was the role of gender norms and feminist attitudes. The findings of the survey are prepared for a wide audience in the annual "Weizenbaum Report". In addition, all information, findings, and materials on the series of studies are made available on the website of the "Weizenbaum Panel": https://panel.weizenbaum-institut.de.

2. Discursive citizens' standards

Using qualitative interviews and group discussions, a study was carried out into how ideals of citizenship are shaped by the use of social media and the experiences there. Such "discursive citizens' standards" include, for example, the expectation of careful composition of one's own information menu and commitment to positive discourse conditions on the internet. In cooperation with Prof. Ariadne Vromen (Australian National University) and Dr. Michael Vaughan ("Digitalization and the transnational public" research group), the role of discursive norms for the signing of online petitions was investigated, among other things. As part of the qualitative sub-project, three interview studies with young people from Germany and Serbia also came about in relation to

- various mechanisms of composition of personal information menus;
- the responsibility felt by users to intervene to combat hate speech on the internet;
- the question of the extent to which social identities shape normative conceptions relating to the expression of political opinions on social media as a form of political participation.

3. Inequalities in political participation

The research group has increasingly been addressing structural inequalities in political participation. This includes, for example, differences in perception of the role of citizens, which are conditioned by belonging to certain social or political groups and the uneven distribution of socio-economic and political resources. They are also linked to attitudes to certain obligations, rights, and norms in respect of the state and society and to political participation. The research group placed particular emphasis on gender-specific differences, research into which had already been included in the Weizenbaum Panel 2021. The role of different milieus and skills, in the area of media usage, for example, will also be examined in future in order to understand the conditions under which citizens perceive their options for participation in politics and society.

In the course of a research visit by Emilija Gagrčin to the University of California in Santa Barbara (USA) in April and May, data collection began for another empirical project in cooperation with Prof. Daniel S. Lane. Using quantitative computer-based and interpretative analytical procedures, the project investigates the framing of the political use of social media in US newspapers in the period from 2000 to 2022.

The cooperation with research fellows continued to be severely restricted by the COVID-19 pandemic. The planned visits of Prof. Michael Xenos (University of Wisconsin-Madison, USA) and Ariadne Vromen were postponed to fall 2022. Prof. Pablo Boczkowski (Northwestern University, USA) and Dr. Neta Kligler-Vilenchik (Hebrew University of Jerusalem, Israel) completed their fellowships virtually in September and December 2021 respectively. Through summer 2022 Dr. Oleg Kashirskikh (Moscow Higher School of Economics, Russia) and Dr. Karsten Schubert (Albert Ludwig University of Freiburg) also visited the research group as guests.

RESEARCH GROUP
“NEWS, CAMPAIGNS AND RATIONALITY OF PUBLIC DISCOURSE”


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The research group investigates the content and processes of political communication in digital public life theoretically and empirically with the focus on the election campaigns and the discourse dynamics of social media like Facebook and Twitter. In addition to the classical methods of communication science such as (quantitative) content analyses, new methods such as (dynamic) social network analyses are used.

Over the past year, we continued our research and transfer project on social media communication in the context of election campaigns. The project began in the run-up to the federal elections and state elections in Berlin and Mecklenburg-Vorpommern on September 26, 2021 in cooperation with the European New School of Digital Studies (European University Viadrina), the NRW School of Governance and the Leibniz Institute for Media Research | Hans Bredow Institute. It was funded externally by Reset.tech. As part of the project, a website was created on which we provided continuous information about which topics surrounding the elections were being discussed on social networks, which individuals, groups, parties and organizations were particularly active, and whether there was any evidence of disinformation campaigns (https://www.zahlen-zur-wahl.de). The site was mainly aimed at journalists, teachers, and anyone else with a particular interest. Media reports and user visits in the five-figure range testify to the success of the project. Following on from the elections, the collected data was archived and prepared for scientific analysis. One data set, which was made available by the Citizen Browser/The Markup and includes Facebook timelines from citizens from the election campaign, was analyzed and evaluated in terms of content in cooperation with Ulrike Klinger, who holds the Chair of Digital Democracy at the European New School of Digital Studies.

Jakob Ohme and Anna-Theresa Mayer (doctoral students) have developed new open source research software that makes it possible to track media usage in social media newsfeeds.

A research project on campaign and network dynamics of the protest against the UN Global Compact for Migration, which we carried out in collaboration with Lance Bennett (University of Washington, USA) and the Weizenbaum research group “Digitalization and transnational public life”, concluded with publication of an article in March 2022.

The research group was also delighted to welcome research fellows back to the institute after a break caused by the pandemic: In November 2021, Dr. Michael Bossetta (University of Lund, Sweden) was here and presented his research to the Weizenbaum Institute on the elections in the USA and the Brexit referendum through the mirror of the use of social media by citizens and politicians. Prof. Jennifer Stromer-Galley (University of Syracuse, USA) came as a fellow in May 2022 and presented her research into toxic rhetoric in the US election campaign of 2020. From March to August 2022, Timothy Charlton-Czaplicki (Copenhagen Business School, Denmark) was the visiting academic to the research group. He worked with the group on open source secret services and used his stay to develop the notion of the digital public, which is of central importance to his doctoral work on the operation of digital platforms.

RESEARCH GROUP
“DIGITALIZATION AND THE TRANSNATIONAL PUBLIC”


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The research group focuses on the role that digital technologies and media play in the creation of (trans)national public spheres, communication infrastructures, political issue networks, and processes of political mobilization. It concentrates on right-wing populist and extremist groups, media, and parties and investigates digital communication environments and online topic-based public spaces relating to critical issues such as migration and anti-feminism.

Over the previous year, there has been a focus on the qualification work of young academics and cross-group research projects, some of which have involved research fellows. In addition, the group developed a research program for a future research group and initiated new cooperation projects with fellows and academics abroad. Finally, the members of the group were involved in teaching and in the committees of the Weizenbaum Institute.

The cross-group research work on digital communication and interaction of right-wing populist parties from six countries in the context of the European elections of 2019 was completed in the reporting period with considerable success and included three publications in internationally respected journals and another publication in preparation.

Susanne Reinhardt, who is researching discursive alliances against feminism and equality politics in her dissertation, published an article in a journal that specializes in media and communications research from a feminist perspective. She also presented the international comparative research project on gender topics in the communication of right-wing parties, which has been carried out in collaboration with the visiting academic Dr. Elena Pavan (University of Trento, Italy) and research group leader Annett Heft, at three national and international conferences and prepared it for publication.

Vadim Voskresenskii prepared sub-projects arising from his dissertation on transnational connections between social media in Russia and European right-wing online communities for publication. Kilian Bühling is currently completing his doctorate on the topic of "Market incentives and their influence on knowledge generation and transfer" and is also working with Annett Heft on a research project that focuses on mobilization dynamics on alternative platforms in the context of the coronavirus pandemic. They are examining digital communication of the alternative thinking movement on Telegram in the period 2020 to 2022 and want to find out which participants were influential and how the focus of the content has changed. In other research work, the academics have focused on the diffusion dynamics of content from a cross-platform perspective.

There was a change in personnel in 2022, as Vadim Voskresenskii left the research group. Since June 2022 the doctoral student Baoning Gong has been researching the issues of digital communication in a comparison of platforms.

Once again this year, the research group has cooperated with academics from abroad, who were integrated into the work of the group as research fellows or associate researchers. A publication on digital interest representation of those on the right was prepared with Dr. Nina Hall (Johns Hopkins School of Advanced International Studies, Bologna, Italy). Other fellows in 2021/2022 included Prof. Christian Baden (Hebrew University of Jerusalem, Israel), Prof. Juha Herkman (University of Helsinki, Finland), Dr. Nicola Righetti (University of Vienna, Austria), Daniel Thiele (University of Vienna) and Dominik Schindler (Imperial College London, UK), with whom research cooperation was prepared and academic interaction facilitated through talks and workshops.

The research group set up two workshops with fellows and academics from other countries: Under the title "Researching right-wing digital visual cultures", Annett Heft, Michael Vaughan, Dr. Jordan McSwiney (University of Canberra, Australia), and Dr. Matthias Hoffmann (University of Copenhagen, Denmark) organized a worldwide exchange with researchers in September 2021. In addition, Annett Heft and Prof. Christian Baden organized a workshop in June 2022 to discuss methods and concepts for cross-platform research into social media with experts from other countries. Annett Heft also established a cross-institution joint research project as part of the project "Neovex: patterns and dynamics of conspiracy theories and right-wing extremist ideologies at times of crisis", which is funded by the BMBF.
In the area of knowledge transfer, the project co-initiated by Michael Vaughan on right-wing extremist organizations is worthy of mention, which is developing a database of right-wing extremist organizations in collaboration with the Center for the Analysis of the Radical Right and regional experts from the member states of the EU. At the same time, other transfer activities such as participation in events, media interviews and guest lectures helped to disseminate our research results in society.

4.4 Research area IV
Responsibility – Trust – Governance

This research area investigates the responsibilities that arise or should arise from digitalization, the way in which digitalization promotes trust but can also lead to systematic disadvantage, and the governance structures that can be used to overcome the challenges of digitalization.

Big Data, AI and machine learning promote innovation in society and the economy. Digitalization and networking lead to ever more complex digital ecosystems. Many of these technologies are difficult to understand, and data is often collected without the knowledge of users and processed in a non-transparent way. As a consequence of this and associated with new, complex opportunities for misuse and attack, academic and social discourses are increasingly marked by concern about IT security, protection of privacy, and maintaining self-determination in relation to information and justice. A crisis in confidence is also apparent in this regard, which is throwing up questions of responsibility and liability and appropriate governance mechanisms.

RESEARCH GROUP
“RESPONSIBILITY AND THE INTERNET OF THINGS”


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Within the framework of its interdisciplinary research, the research group investigates key concepts in digitalization, from Industry 4.0, through smart citizenship, to data platforms in relation to responsibility, liability, and regulation.

A focal point of current research is sensor data from networked devices. On the one hand, the group deals here with data protection issues. On the other, it focuses on the topic of the Social Internet of Things and the question as to whether and how sensor technology can be used by citizens' initiatives and journalists for a more sustainable future in towns, cities, and communities.

Another focal point of all our research lies in the legal assessment of automation and the use of AI in production, distribution, and regulation of digital materials in (social) media. In the area of production, we examine the legal categorization of automated text generation. In the context of distribution, the group looks mainly at the intermediaries, for example one of the latest intermediaries TikTok, and the question of how the new regulations on transparency obligations will be implemented. The legal assessment of automation and AI in (social) media is carried out in part on the basis of social media law. At the same time, general civil law, the Basic Law, European law and parts of conventional media, intellectual property law and copyright are involved.

The results of the research group are fed directly into its work commenting on data, AI and digital strategies of the federal government and the European Commission.

Proposals and current drafts for regulation of the internet were considered in cooperation with Telemedicus in July 2022. In future, we are planning to focus even more precisely on the decision-making structures relevant to setting standards.

RESEARCH GROUP
“RELOCATION OF THE STANDARDIZATION PROCESS”


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Who creates standards? How are they implemented? And how is the potential for social stakeholders to set standards changing? The research group systematically investigates developments and interdependencies of social, legal, and technical standards against the background of networking and digitalization of society.

Social standards are the least obvious, but also the most fundamental rules that seem to be changing with digitalization of society. The work of the research group also systematically includes the socio-normative dimensions that underlie its subjects of study.

Legal norms – whether they are national or European laws, international agreements, or private codes – are increasingly changing because of digitalization. Shifts in the authority to set standards and application of relevant law to new regulatory subjects make the analysis of legal standards urgent and relevant. The research group also includes technical norms, i.e. setting of standards in technical systems and processes, in its analytical horizon. In accordance with this three-dimensional conception of standards, the research group focuses on the following areas of the networked society, among others: corporate (self-)regulation, European legislation, transformation of the culture industry, and automated and autonomous communication. All these are examples of processes in which the potential to regulate aspects of life and set standards is changing fundamentally as a result of digitalization.

On March 10 and 11, 2022, the research group organized the "Verdicts, Processes, Relocations" workshop. In the context of the fact that state institutions are increasingly leaving platforms and networks to regulate themselves in terms of law and order, over twenty academics investigated the institutionalization, legitimacy, and consequences of such private decision-making structures from an interdisciplinary perspective. The fruitful discussions and research results achieved are currently being brought together in a volume of articles, which will appear as an open access publication with NOMOS-Verlag.

The research group had the opportunity to welcome eight research fellows in the reporting period, who worked on the current topics of the group. Questions concerning the platform economy and regulation of AI were at the center of the fellowships in 2021/2022. Lea Ossmann-Magiera (HU Berlin) carried out a fundamental investigation of regulation strategies for AI systems during her time with the research group. Researchers Dr. Alfio Guido Grasso (University of Catania, Italy) and Djamila Batache (University of Basel, Switzerland) spent their time at the institute on specific questions of liability when using AI in medicine, while Irma Klünker (HU Berlin) focused on the protection of biodiversity through laws on genetic information. Fabienne Graf (University of Lucerne, Switzerland) dealt with questions of intellectual property and the topic of the patentability of software, taking account of biometric data processes. The fellows Dr. Carola Westermeier (Goethe University of Frankfurt) and Tim Sprenger (University of Erlangen-Nuremberg) worked on themes relating to the meeting in March. Dr. Westermeier is researching the topic "(Digital) Money as Social Memory", while Mr. Sprenger is looking at procedural principles on platforms. Supporting such fundamental questions about platforms, PD Dr. Michael Denga (HU Berlin) investigated pricing and remuneration mechanisms on crypto platforms. Leonie Jüngels (University of Trier) examined questions about the publication of information obtained illegally.

Along with publications in books and journals, the research group communicated its findings to the outside world. This included, for example, an event on digitalization of migration control as part of the Weizenbaum Forum. A report compiled with other researchers at the Weizenbaum Institute is also worthy of mention: At the request of the Environment, Agriculture and Digitalization committee of the Schleswig-Holstein regional parliament, comments were submitted on the draft of a digitalization act for Schleswig-Holstein. In the hearing at the regional parliament, the researchers were also able to give their views on individual points of the act and on questions about the use of AI in public administration and about open data.

RESEARCH GROUP
“TRUST IN DISTRIBUTED ENVIRONMENTS”


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Sebastian Rust


Timnah Weckner

MEMBERS OF THE RESEARCH GROUP	Sophie Beaucamp Moritz Becker Dr. Martin Florian (research group leader) Lukas Gehring Leon Hellbach Sebastian Henningsen	Charmaine Ndolo Ingolf Pernice Jana Pinheiro Goncalves Rainer Rehak Sebastian Rust Prof. Björn Scheuermann (PI) Timnah Weckner
ASSOCIATE RESEARCHER	Leonard Balduf	

The research group investigates automated systems that restrict the opportunities for wrongdoing and exercising influence and thus are intended to reduce the necessity for "trust". The group focuses mainly on distributed systems and blockchain technologies of the sort used, for example, in cryptocurrencies and so-called Decentralized Autonomous Organizations. Such systems are transparent in relation both to the way they work and the data stored in them. They therefore promise to do away with intermediaries and anchors of trust and promote bottom-up structures. The research group investigates both the actual technical characteristics and opportunities of innovative approaches and their implication for existing social, legal, and (financial) economic contexts. The key questions here are: What can the technical measures under consideration actually achieve? To what extent and in which contexts is their use within the framework of existing legal principles and established social values desirable in the first place?

Five complementary projects have been developed to explore the research questions:

1. Resilience and decentrality of technically distributed systems

The research group investigates and assesses different approaches to decentralization. The project both identifies fundamental boundaries and legal compliance and carries out experiments and continuous empirical measurements in public productive systems. In addition to multiple academic publications, papers, and participation in workshops, Sebastian Henningsen was able to defend his dissertation on the topics of the project and publish it. The technical infrastructure that has been set up and a cooperation project won by the research group and financed by Protocol Labs ensure that some of the work that has begun can continue when the project comes to an end.

2. Setting technical rules and collective decision-making processes

The research project at the interface of organizational and technical sociology investigates how collective decision-making practices in communities of software developers are changing as a result of the technical opportunities presented by blockchain technologies. Particular attention is paid here to behavior-coordinating effects of the technology and the normative role models that are associated with the technology in current discourses. Over the last year, the study data collected previously has been evaluated and key parts of the findings have been written up.

3. Enforcement of the law through technology

Enforcement of the law through algorithms throws up fundamental questions beyond the specific technologies. The research group examines the use of automated systems for the enforcement of the law using the example of filter technologies in copyright law and develops transferable guidelines for handling automated enforcement of the law. Sophie Beaucamp defended a dissertation on this subject and published it in the reporting period.

4. Price instability in digital, decentralized money systems

The wide use of decentralized cryptocurrencies like Bitcoin is being prevented, among other things, by their high volatility. The group examines the causes for volatility, ways of forecasting volatility, and approaches to price modeling and price stabilization. With their unique characteristics, cryptocurrencies offer innovative opportunities to verify existing economic models and theories. Ingolf Pernice's dissertation on this subject was submitted in the reporting period. The doctoral examination process is currently taking place. In addition, Ingolf Pernice worked with the Center of Alternative Finance of the University of Cambridge (UK) on the topic of the use of blockchain-based assets in Latin America.

5. Legal and social challenges

The narrative around blockchain and cryptocurrencies is characterized by disruption – as a result, numerous developments are in conflict with existing standards in this area. An example here is the facilitation of anonymous and unlimited financial transactions, which throws up fundamental questions about the relationship between freedom and security. The research group works on various specific questions in this area, with a focus on knowledge transfer. The research group took part in consultations on the digital euro in the reporting period and in institute-wide knowledge transfer events such as "Pizza and cyber security". The group also created a browser-compatible simulation of a bitcoin-like system to explain how cryptocurrencies and blockchain technology actually work.

Other highlights from the reporting period include two extended periods abroad, which resulted in more extensive cooperation with the University of Cambridge (UK) and the University of California, Berkeley (USA). The group also initiated some events with academics from abroad, including one-day workshops on so-called asset pricing and on blockchain governance.

RESEARCH GROUP
“QUANTIFICATION AND SOCIAL REGULATION”


Jeanette Hofmann


Lena Ulbricht


Sonata Cepik


Florian Eyert


Florian Irgmaier


Rainer Rehak

Guillermo Díaz Morales


Ole Fechner


Florian Kirsten


Jana Pannier

MEMBERS OF THE RESEARCH GROUP

Sonata Cepik

Guillermo Díaz Morales

Florian Eyert

Ole Fechner

Prof. Jeanette Hofmann (PI)

Florian Irgmaier

Florian Kirsten

Jana Pannier

Rainer Rehak

Dr. Lena Ulbricht (research group leader)

The work of the research group pursues the key question of how regulation and governance are changing through the use of digital technologies such as big data, algorithmic decision-making systems, and AI. In the reporting period, the group mainly worked on written work for qualifications, carried out further research, presented and published findings, and increased its networking.

In her dissertation, Lena Ulbricht analyzed how state control is being changed by algorithmic governance. Using a practice-based concept of power and on the basis of empirical studies of algorithmic governance in the various areas of state control (executive, legislative, and judicial) and various fields of politics, she concludes that state power is changing through citizens and is tending to expand. At the same time, she notes shortcomings in state control in respect of big technology corporations, which new regulation initiatives are attempting to rectify. A particular highlight of the reporting period was the submission of her dissertation and successful completion of her habilitation qualification at the University of Bremen in the Department of Political Science.

In his dissertation, Florian Eyert examines the role of computer modeling as political evidence and questions the relationship of knowledge production and governance practices. Among other things, he continued to analyze modeling practices in the context of the COVID-19 pandemic empirically and conceptually in the reporting period and identified how the temporalities of the crisis affect the social use of models. He also continued to investigate the implications for knowledge participation and scientific communication.

Florian Irgmaier developed further theoretical building blocks for the main argument of his dissertation, namely that scientific-technical change contributes to problematization of established norms by influencing ideas of what is possible and feasible. In particular, he developed the sociological concept of modal and availability judgement, with which it is possible to determine precisely what type of object is involved in conceptions of the possible and feasible and how these are affected by science and technology.

For his dissertation on the socially orientated design of IT systems, Rainer Rehak has already published academic articles on social evaluation of technologies such as blockchain and applications of AI, on the social implications of coronavirus apps and on the critical link between ethical questions and questions of data protection theory. He is currently working on the political implications of (un)certainties in digital infrastructures and is drawing up a conceptual framework for systematic evaluation of IT security measures. The perspective obtained from “systemic IT security” is intended to bring together and extend the cyber security and data protection discourses. The aim is to deal theoretically and practically with the peculiarities of current infrastructures, which are rife with networked, complex, and therefore vulnerable digital systems.

Advanced conceptual and empirical results of individual projects of colleagues were presented at international conferences and events. The group members also published the results of their research in various journal and book articles.

The successful launch of the “Weizenbaum Journal of the Digital Society” in November 2021 also deserves a mention, for which Lena Ulbricht is co-editor. In this role, she edited the first edition of the journal and a special issue on “Democracy in Flux” and was involved in writing two editorials. In addition, a special issue edited by Lena Ulbricht and Karen Yeung on algorithmic regulation appeared in its print version in January 2022 after an initial online transition phase, which again raised the profile of the essays published in it – including an introduction by Lena Ulbricht and Karen Yeung and an article by Florian Eyert, Florian Irgmaier, and Lena Ulbricht.

The members of the research group also contributed to the networking of the Weizenbaum Institute in the international research landscape. For example, in September 2021 Rainer Rehak led a session on the future of science and technology at the Digital Humanism Workshop as part of the IS4SI Summit 2021. During the reporting period, Rainer Rehak also worked on the preparations for the “Bits & Bäume” conference in October 2022, in which the Weizenbaum Institute was involved as a partner organization. Florian Eyert was a member of the conference team that prepared the 5th junior academics’ conference of the Interdisciplinary Network for Studies Investigating Science and Technology (INSIST), which also took place with the support of the Weizenbaum Institute in October 2022.

RESEARCH GROUP
“DIGITALIZATION AND NETWORKED SECURITY”


Manfred Hauswirth


Lars Gerhold


Tatiana Ermakova


Selma Lamprecht

Yannick Fernholz


Otto Hans-Martin Lutz

Pouyan Fotouhi Tehrani

Vasileios Ververis


Elena Golimblevksaia


Shih-Chi Ma

Arman Pairavi

Manuel Schneiderbauer


Pooja Pathak


Benjamin Fabian

MEMBERS OF THE RESEARCH GROUP

Dr. Tatiana Ermakova (research group leader)

Yannick Fernholz

Pouyan Fotouhi Tehrani

Univ.-Prof. Lars Gerhold (PI)

Elena Golimblevskaia

Prof. Manfred Hauswirth (PI)

Selma Lamprecht

Otto Hans-Martin Lutz

Shih-Chi Ma

Arman Pairavi

Pooja Suryaprakash Pathak

Manuel Schneiderbauer

Vasileios Ververis

ASSOCIATE RESEARCHER

Prof. Benjamin Fabian

The research group focuses on functional security and IT security across digitalization and the associated networking of previously separate infrastructure systems. The emphasis here is on both digital infrastructures and technological solutions on the one hand and an understanding of the patterns of behavior and thinking of stakeholders on the other. The research group concentrates above all on determining the need for digital infrastructures and technological solutions that are secure (robust), compliant with data protection, and ethically acceptable and also ensure security, protection of privacy, and informational self-determination of citizens. Another focus is on the needs-based design of such infrastructures.

Doctoral student Pouyan Fotouhi Tehrani continued his work on extensions to the security of the domain name system in the reporting period, supported by student assistant Arman Pairavi and in collaboration with HAW Hamburg and George Mason University (USA).

Associate researcher Benjamin Fabian (Technical University of Applied Sciences Wildau and HU Berlin) and research group leader Tatiana Ermakova contributed to topics including the ethics of AI-supported autonomous driving, (risk/robustness) assessment of interconnectivity, and a comparison of commercial solutions for AI-supported mood analysis. Their research papers on these and other topics appeared in leading international outlets and were presented at reputable international conferences.

Tatiana Ermakova was also involved in knowledge transfer on the topic of disinformation with a video portrait as part of the “Secure Digital Future” communication initiative of the BMBF and an interview for the website Wissenskommunikation.de.

A few months ago, the research group was strengthened by the arrival of some new, extremely well-qualified colleagues with experience of research and practice.

In May, Yannick Fernholz arrived as a new doctoral student and Pooja Suryaprakash Pathak, Shih-Chi Ma, and Elena Golimblevskaia joined the research group as student assistants.

Doctoral student Yannick Fernholz completed his Master of Science degree in Business Informatics and Bachelor of Science degree in Business Studies at the HU Berlin and was one of its top graduates. He is working on an analysis of existing digital (including critical) AI-based infrastructures and technological solutions relating to security, data protection, and ethics and the perception of them by users in this connection.

Student assistant Pooja Suryaprakash Pathak received her Bachelor’s degree in Information Technology from the University of Mumbai (India) and is currently completing her Master of Science in Information Systems Management at the TU Berlin.

Student assistant Shih-Chi Ma obtained her Bachelor’s degree in International Business from the National Cheng-Chi University (Taipei, Taiwan) as one of the best graduates and is currently working on her Master’s degree in Economics and Management Science at the HU Berlin.

Student assistant Elena Golimblevskaia completed her Bachelor’s degree in Information Systems and Technologies at the North Caucasian Federal University in Stavropol (Russia) with a distinction and is currently studying for her Master’s in Data Science at the University of Potsdam with a DAAD grant.

Our new colleagues are currently evaluating algorithmic procedures and technologies for text classification (including in ethically correct form) and they are carrying out empirical investigations into identifying messages with the character of disinformation. The work of the research group on these topics is being carried out in collaboration with researchers and developers from the Fraunhofer FOKUS, Trustami GmbH, and Ubermetrics Technologies GmbH as part of the “VERITAS: VERIfication through Trusted ASsociation” BMBF research project. Student assistant Manuel Schneiderbauer is developing ideas for the design of a digital platform in this connection.

In June 2022, the research group welcomed Vasilis Ververis as a new doctoral student. He received his Master of Science in Network Services and Systems from the KTH Royal Institute of Technology in Stockholm (Sweden) and his Bachelor of Science in Business Administration with a major in IT from the American College of Greece (Greece). Vasilis Ververis has been working for several years on internet censorship, including as part of well-known projects such as OONI and The Tor Project.

The work on research projects is considered in the weekly doctoral student seminar with PI Manfred Hauswirth. Manfred Hauswirth was able to gain the services of Prof. Lars Gerhold (Professor at the FU Berlin, Leader of the Interdisciplinary Security Research Working Group, and Project Leader of the Public Security Research Forum) as an additional PI for the group.

RESEARCH GROUP
“CRITICALITY OF AI-BASED SYSTEMS”


Bettina Berendt


Diana Serbanescu


Evelyn Adams


Gunay Kazimzade


Milagros Miceli


Martin Schüßler


Tianling Yang


Antonio A. Casilli

MEMBERS OF THE RESEARCH GROUP	Evelyn Adams Prof. Bettina Berendt (PI) Gunay Kazimzade Milagros Miceli	Martin Schüßler Dr. Diana Serbanescu (research group leader) Tianling Yang
ASSOCIATE RESEARCHER	Prof. Antonio A. Casilli	

The role of the research group consists in identifying critical aspects of newly created AI-based systems. These systems are already present in many aspects of private and public life. They have the potential to extend human knowledge and to help people, but they can fail in unexpected ways because of their complexity and cause systematic disadvantage.

We are therefore striving to develop a quality framework for AI-based systems that is tailored to the specific challenges of such systems. The following focal points of our research emerge from this:

- identification of bias, i.e. distortions of results;
- discovery of power asymmetries in the production of training data;
- assessment and increase in comprehensibility, transparency, and interpretability of AI systems.

These aspects are multi-dimensional and linked to one another. Interdisciplinary collaboration combined with social dialog is therefore required to develop guidelines for a responsible, reliable, and human-centric design of AI-based systems. The research group is interdisciplinary and has researchers from computer science, the social sciences, human-computer interaction, and the natural and cultural sciences.

The research group is approaching its objective with four complementary projects. The four projects are:

1. Analysis of the causes of bias and systematic discrimination (on the basis of gender or background, for example) in AI-based systems

This research project focuses on the way in which human cognition, prejudice, and culture affect the processes of data creation for AI-based applications. In international cooperation with other researchers, for example from the Media Lab at Massachusetts Institute of Technology (USA), the Technical University of Delft (Netherlands) and the HU Berlin, Gunay Kazimzade studied the integrative design, market economy, power asymmetries, and cognitive distortions that arise in the design of data labelling tasks for computer vision applications. Several companies from various industries, such as Zalando, are also involved in this project in relation to applications such as content moderation and fraud detection.

2. Working relationships and power asymmetries in the production of training data

This project, which is being carried out in collaboration with industrial partners, focuses on the question of how power inequalities in data work (data generation and annotation) shape training data sets. Based on ethnographic field research and participatory design methods, Milagros Miceli studied companies in which ground truth data for machine learning is produced and conceptual and prototypical recommendations for documentation of data production processes are given.

3. The benefit to users of comprehensible AI

In this project, Martin Schüßler is using user studies to examine the specific requirements of explainability and comprehensibility that AI systems have to fulfill to be reliable and trustworthy.

4. The shape of things to come

This project combines AI with the visual arts and investigates democratic and participatory practices for the design of sustainable future technologies. In doing so, it draws on the concepts of embodiment, collective co-creation, and dialogic collaboration between various communities and encourages knowledge transfer and practice-based experimentation.

In the reporting period, the doctoral students moved forward with their research and published their results in various journals and presented them at important conferences. Milagros Miceli has already submitted and defended her dissertation. Gunay Kazimzade, who is currently completing an internship in the research team at Zalando, is planning to submit hers towards the end of September 2022. Martin Schüßler, who completed an internship at the University of Heidelberg in the reporting period and is currently employed by the Berlin Institute for the Foundations of Learning and Data, is planning to submit his dissertation by the end of the year. Tianling Yang is currently completing her Master's dissertation, in which she uses an ethno-methodological approach to investigate the way in which meaning is constructed through data labelling of image data sets in various companies in China. Diana Serbanescu is continuing with her ethno-methodological research work by using design and performance-based techniques to develop non-extractivistic approaches to physical data recording.

The research group had six research fellows as guests in the reporting period: Prof. Florence Chee (Loyola University of Chicago, USA), Prof. Ujwal Gadiraju, (Technical University of Delft, Netherlands), Prof. Scott deLahunta (University of Coventry, UK), Julian Posada (University of Toronto, Canada), Prof. Geoffrey Rockwell (University of Alberta, Canada), Mika Satomi (designer and artist, Berlin).

V. Management, association and committees

5.1 Organizational chart of the Weizenbaum Institute

Board of Trustees

Advisory Council

Scientific Advisory

Board of Directors

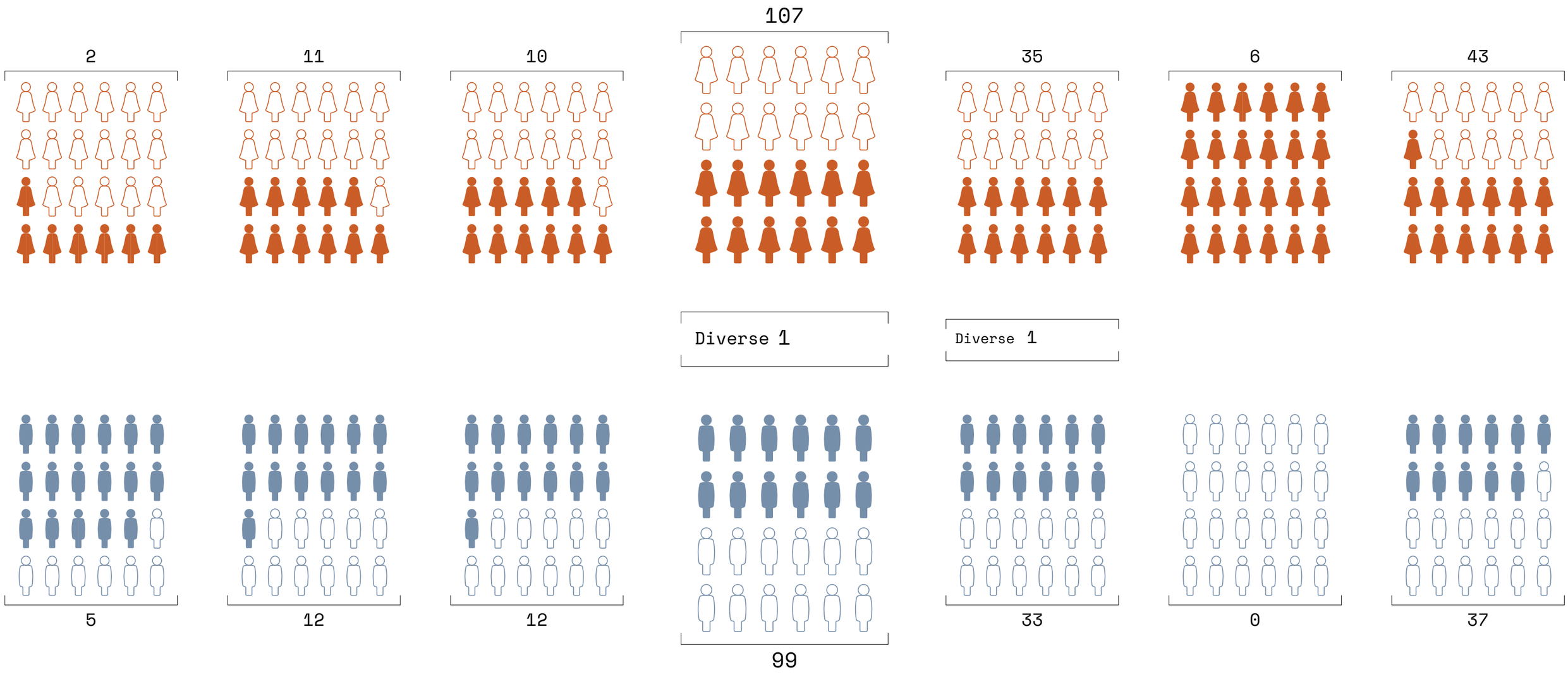
Principal Investigators

Weizenbaum-Institut e. V.

Administrative Board / Business Office Management
Research management and project coordination
Communication
Knowledge transfer and events
Finance
IT administration

	I People – Work – Knowledge	II Market – Competition – Inequality	III Democracy – Participation – Public Life	IV Responsibility – Trust – Governance	V Cross-sectional formats
	Work in highly automated, digital-hybrid processes	Work and cooperation in the sharing economy	Democracy and digitalization	Responsibility and the Internet of Things	Autonomous systems & self-determination
	Critical makers culture	Framework conditions for data markets	Digital Citizenship	Relocation of the standardization process	Security & openness
	Education and framework in the digital society	Data-based business model innovations	News, campaigns and rationality of public discourse	Trust in distributed environments	Digitalization & sustainability
	Digital technologies and well-being	Inequalities and digital sovereignty	Digitalization and the transnational public	Quantification and social regulation	
	Digitalization of science	Digital integration		Digitalization and networked security	
	Reorganization of knowledge practices			Criticality of AI-based systems	

5.2 People at the Weizenbaum Institute



TOTAL
207

The employees of the institute who are financed from the BMBF fund for the joint research project “Weizenbaum Institute for the Networked Society – The German Internet Institute” are shown here

5.3 Academic management

The Board together with the Directors and the Principal Investigators (PIs) are responsible for the academic management of the Weizenbaum Institute.


Bettina Berendt


Martin Emmer


Anja Feldmann


Sascha Friesike


Lars Gerhold


Norbert Gronau


Manfred Hauswirth


Jeanette Hofmann


Gesche Joost


Hanna Krasnova


Martin Krzywdzinski


Jan Mendling


Axel Metzger


Christoph Neuberger


Barbara Pfetsch


Niels Pinkwart


Björn Scheuermann


Thomas Schildhauer


Stefan Schmid


Herbert Zech

DIRECTORATE

The Directorate of the Weizenbaum Institute for the Networked Society comprises five W3 chairs from the universities involved and one representative each from the WZB and the Fraunhofer FOKUS. The role of the Directorate is academic-strategic coordination of the association project.

In conjunction with the Business Office, the Directorate is responsible, among other things, for coordination of the research groups and projects of the institute. With the collaboration of the PIs, it develops concepts for strategic development. Setting up and dissolving research groups, including appointment and dismissal of PIs, is also in the hands of the Directorate. The Directors are also PIs at the Weizenbaum Institute and are responsible for the academic work of the research groups.

The members of the Directorate in the reporting period were the Chief Executive Director Prof. Christoph Neuberger (TU Berlin), Deputy Executive Directors Prof. Sascha Friesike (UdK Berlin) and Prof. Martin Krzywdzinski (WZB), and Directors Prof. Bettina Berendt (TU Berlin), Prof. Manfred Hauswirth (Fraunhofer FOKUS), Prof. Hanna Krasnova (Uni Potsdam), and Prof. Herbert Zech (HU Berlin). Directors Christoph Neuberger, Sascha Friesike, and Martin Krzywdzinski were also simultaneously members of the four-person Board of the Weizenbaum-Institut e. V. in the reporting period.

PRINCIPAL INVESTIGATORS (PIs)

The following PIs worked at the institute in the reporting period: Prof. Bettina Berendt (TU Berlin), Prof. Martin Emmer (FU Berlin), Prof. Anja Feldmann, Ph.D. (TU Berlin), Prof. Sascha Friesike (UdK Berlin), Univ.-Prof. Lars Gerhold (Fraunhofer FOKUS, FU Berlin), Prof. Norbert Gronau (Uni Potsdam), Prof. Manfred Hauswirth (TU Berlin / Fraunhofer FOKUS), Prof. Jeanette Hofmann (WZB), Prof. Gesche Joost (UdK Berlin), Prof. Hanna Krasnova (Uni Potsdam), Prof. Martin Krzywdzinski (WZB), Prof. Jan Mendling (HU Berlin), Prof. Axel Metzger, LL.M. (Harvard) (HU Berlin), Prof. Christoph Neuberger (FU Berlin), Prof. Barbara Pfetsch (FU Berlin), Prof. Niels Pinkwart (HU Berlin), Prof. Björn Scheuermann (HU Berlin), Prof. Thomas Schildhauer (UdK Berlin), Prof. Stefan Schmid (TU Berlin). and Prof. Herbert Zech (HU Berlin).

5.4 Weizenbaum-Institut e. V.

The Weizenbaum-Institut e.V. is the operator of the Business Office and coordinator of the research association project "The Weizenbaum Institute for the Networked Society – the German Internet Institute". The association is responsible for the central administration and legal representation of the institute. It coordinates the academic association and is also responsible for PR work, knowledge transfer in the fields of politics, the economy, and society, the internationalization of the institute and career development.

The members of the Weizenbaum-Institut e. V. are the seven partners in the joint research project: FU Berlin, HU Berlin, TU Berlin, UdK Berlin, Uni Potsdam, the Fraunhofer-Gesellschaft and the WZB.

The Board of Trustees of the association includes:

- two members delegated by the Federal Republic of Germany
- one member delegated by the State of Berlin
- the presidents of the institutional members and members with voting rights

The Members' Meeting of the Weizenbaum-Institut e. V. was held on April 27, 2022. The Board of Trustees met on December 7, 2021 and April 27, 2022.

THE BOARD OF THE WEIZENBAUM-INSTITUT E.V. COMPRISED THE FOLLOWING MEMBERS IN THE REPORTING PERIOD:

Dr. Karin-Irene Eiermann (Administrative Director and Head of the Business Office of the Weizenbaum Institute), ex officio board member

Prof. Christoph Neuberger (Chief Executive Director of the Weizenbaum Institute, FU Berlin)

Prof. Sascha Friesike (Deputy Executive Director of the Weizenbaum Institute, UdK Berlin)

Prof. Herbert Zech (Deputy Executive Director of the Weizenbaum Institute up to February 28, 2021, HU Berlin) (up to April 19, 2021)

Prof. Martin Krzywdzinski (Deputy Executive Director of the Weizenbaum Institute from March 1, 2021, WZB) (since April 19, 2021)

The Board is responsible, among other things, for the development of the institute strategy in collaboration with the Directorate and the other committees of the Weizenbaum Institute, support and implementation of the concept to consolidate the institute together with the Directorate and the committees of the Weizenbaum Institute, outside representation of the Weizenbaum Institute, leading coordination of the collaboration in the Weizenbaum research consortium and communication and reporting to the members and the Board of Trustees of the Weizenbaum-Institut e. V.

Organigramm Weizenbaum-Institut e.V.

Academic Directors

Prof. Dr. Christoph Neuberger
Prof. Dr. Martin Krzywdzinski
Prof. Dr. Sascha Friesike

Administrative Director

Dr. Karin-Irene Eiermann

Assistant Administrative Director
Maite Vöhl

Assistant to the Board
Travis Penner

HR Officer
Sabine Zimmermann

Research Management and Association Coordination	Communication	Transfer and Events	Finance	IT administration
Head Claudia Oellers	**Head** Filip Stiglmayer	**Head** Johanna Hampf	**Head** Gabriela Baumann	**Head** **Thoralf Schulze**
Association Coordination Assistant Dr. Julian Vuorimäki	**Head** Dr. Mikiya Heise	**Political Communications and Public Affairs Assistant** Robert Peter	**Grants and External Funding Officer** Xiao Zhu	**IT System Administrator** Andreas Hahn
Internationalization Assistant Kiyan Farmand	**Publications Assistant** Roland Toth, M.A.	**Graphic Designer** Karen Fischäder	**Commercial Officer, Procurement** Tuna Güleser	**IT System Administrator** Aghil Mostofi
Research Information and Evaluation Assistant Percy Scheller	**Media and PR Officer** Katharina Stefes, M.A.	**Student Assistant** Fee Weißbeck	**Financial Accountant** Manuela Perleberg	**Student Assistant** Saad Malik
Student Assistant Claudia Lapin	**Student Assistan** Michael Sader			
Student Assistant Lilly-Marie Untner				


Karin-Irene Eiermann


Gabriela Baumann


Kiyan Farmand


Karen Fischäder


Zeynep Tuna Güleser


Andreas Hahn


Johanna Hampf


Mikiya Heise


Claudia Lapin


Saad Malik


Aghil Mostofi


Claudia Oellers


Travis Penner


Manuela Perleberg


Robert Peter


Michael Sader


Percy Scheller


Thoralf Schulze


Katharina Stefes


Filip Stiglmayer


Roland Toth


Lilly-Marie Untner


Maite Vöhl


Julian Vuorimäki


Fee Weißbeck


Xiao Zhu


Sabine Zimmermann

ADMINISTRATIVE DIRECTOR AND MANAGEMENT OF THE BUSINESS OFFICE

Dr. Karin-Irene Eiermann was ex officio Administrative Board Member of the Weizenbaum-Institut e. V. and Head of the Business Office of the Weizenbaum Institute during the reporting period. The Administrative Board Member is responsible for management of the Weizenbaum Institute in all administrative and technical matters in consultation with the Academic Board Members, the administrative and commercial management of the Weizenbaum-Institut e. V., and the development of sustainable administrative structures, HR planning, recruitment, and management of the administrative personnel, responsible organization of the infrastructure and operations on the institute's premises at Hardenbergstraße 32, coordination of organization of the occupational health and safety on the institute site, and coordination of issues relating to statutory co-determination on the side of the institute's management.

Administrative Director, Head of the Business Office
Dr. Karin-Irene Eiermann

Assistant to the Administrative Director
Maite Vöhl

Assistant to the Board
Travis Penner

HR Officer
Sabine Zimmermann

RESEARCH MANAGEMENT AND CONSORTIUM COORDINATION

The following areas of activity are the responsibility of the Research Management and Consortium Coordination: Quality management, coordination of the development of the research agenda and interdisciplinarity, internationalization, networking in the academic system, career development, research data management, open science, and committee work.

Head of Research Management / Association Coordination
Claudia Oellers

Association Coordination Assistant
Dr. Julian Vuorimäki

Internationalization Assistant
Kiyan Farmand

Research Information System and Evaluation Assistant
Percy Scheller

Student Assistant
Claudia Lapin

Student Assistant
Lilly-Marie Untner

COMMUNICATION

The Communication team is responsible for internal and external communication. It develops the communications strategy and designs new formats for academic communication and press and PR work. In addition to managing the website and social media channels, it is responsible for the corporate design and the institute's own publications and publication series.

Head of Communication
Filip Stiglmayer (up to February 28, 2022)
Dr. Mikiya Heise (since September 1, 2022)

Publications Assistant
Roland Toth, M.A.

Media and PR Officer
Katharina Stefes, M.A.

Student Assistant
Michael Sader

TRANSFER AND EVENTS

The Transfer and Events department is responsible for all inter-association events, transfer activities and political communication. It designs and organizes the corresponding measures as part of the transfer strategy. It also advises individual research groups on their event and transfer projects and offers support for their organization and completion. Finally, it looks after the network partners of the institute and develops cooperations across the association.

Head of Transfer and Events
Johanna Hampf

Political Communication and Public Affairs Assistant
Robert Peter

Graphic Designer
Karen Fischäder

Student Assistant
Fee Weißbeck

FINANCE

The Finance department is responsible for ongoing bookkeeping, management accounting, purchasing, procurement and commercial processing, and for managing grants and financial reporting.

Head of Finance
Gabriela Baumann

Grants and External Funding Assistant
Xiao Zhu

Commercial Officer, Procurement
Tuna Güleser

Financial Accountant
Manuela Perleberg

IT ADMINISTRATION

The IT department provides the employees of the Weizenbaum Institute and its academics with a secure and efficient IT infrastructure with prompt services and the necessary support. Some external services were also taken on or redesigned by IT in the reporting period. These include, for example, a project planning software package, website hosting, independent operation of mailing lists, video conferencing systems, a Nextcloud platform, and other collaboration platforms.

Head of IT
Thoralf Schulze

IT System Administrator
Andreas Hahn

IT System Administrator
Aghil Mostofi

IT System Administrator
Saad Malik

5.5 Committees

Three committees support the work of the Weizenbaum Institute at various levels. Their composition and remit are set out in the institute's rules of procedure.

BOARD OF TRUSTEES

The Board of Trustees of the research association project advises the Directorate on the strategic direction of the institute and its organization. It comprises two representatives of the Federal Republic of Germany, one representative of the State of Berlin and the presidents of the association partners. The Chair and Deputy Chair of the Board of Trustees are appointed by the BMBF. Meetings of the Board of Trustees were held in the reporting period on December 12, 2021 and February 14, 2022.

MEMBERS:

MinDir Matthias Graf von Kielmansegg, Head of Department 1: "Fundamental Questions and Strategies; Coordination", Federal Ministry for Education and Research (Chair up to December 2021)

MinDir Dr. Roland Philippi, Head of Department 1: "Fundamental Questions and Strategies; Coordination", Federal Ministry for Education and Research (Chair since January 2022)

MinR'in Esther Seng, Head of Office 400 "Fundamental Questions, Digitalization and Transfer" in Department 4 "University and Academic System; Funding of Education, Federal Ministry for Education and Research (Deputy Chair)

Steffen Krach, State Secretary for Research for the Governing Mayor of Berlin, Senate Chancellery (up to October 2021)

Armaghan Naghipour, State Secretary for Science, Research and Equality, Berlin Senate Department for Science, Health, Care and Equality (since December 2021)

Prof. Reimund Neugebauer, President, Fraunhofer Society for the Promotion of Applied Research

Prof. Günter M. Ziegler, President, Free University of Berlin

Prof. Sabine Kunst, President, Humboldt University of Berlin (up to December 2021)

Prof. Peter Frensch, President (acting), Humboldt University of Berlin (since January 2022)

Prof. Christian Thomsen, President, Berlin Institute of Technology (up to March 2022)

Prof. Geraldine Rauch, President, Berlin Institute of Technology (since April 2022)

Prof. Norbert Palz, President, Berlin University of the Arts

Prof. Oliver Günther, Ph.D., President, University of Potsdam

Prof. Jutta Allmendinger, Ph.D., President, Social Science Center Berlin

ADVISORY BOARD

The Advisory Board advises the Directorate and the Business Office on the development and implementation of the strategic direction of the institute, its knowledge transfer formats, its work with its network partners, its external image, and evaluations. The Advisory Board comprises academic members and other representatives of society, politics, the economy and the media. Meetings of the Advisory Board were held in the reporting period on October 8, 2021, February 24, 2022 and July 4, 2022. With the start of the establishment phase of the Weizenbaum Institute on September 15, 2022, the size and composition of the Advisory Board changed.

MEMBERS:

Prof. Christiane Eilders, Chair of Communication and Media Studies, Heinrich Heine University of Düsseldorf (Chair)

Prof. Christoph Bieber, Institute for Political Science, University of Duisburg-Essen/Academic Coordinator, Center for Advanced Internet Studies (CAIS)

Prof. Johannes Buchmann, formerly of the Department of Computer Science, Head of CDC – Theoretical Computer Science – Cryptography and Computer Algebra, Technical University of Darmstadt

Prof. Peter Buxmann, Department of Legal and Business Studies, Chair of Business Informatics/Software & Digital Business, Technical University of Darmstadt

Prof. Konrad Förstner, Head of the "Provision of Information Services" Program at ZB MED – Information Center for Life Sciences, Cologne University of Applied Sciences

Prof. em. Martin Grötschel, former President of the Berlin-Brandenburg Academy of Sciences

Elvan Korkmaz-Emre, Member of the Federal Parliament (up to October 2021)

Prof. Sabine Pfeiffer, Chair of Sociology (Technology – Labor – Society), Friedrich Alexander University of Erlangen-Nuremberg

Stefan Sauer, Member of the Federal Parliament (up to October 2021)

Joanna Schmölz, Digital Strategist, Senate Chancellery of the Free and Hanseatic City of Hamburg

Prof. Indra Spiecker, called Döhmann, LL.M. (Georgetown), Chair of Public Law, Information Law, Environmental Law and Legal Theory, Goethe University of Frankfurt am Main

Harald Summa, Chief Executive, eco-Verband der Internetwirtschaft e.V.

Dr. Stephan Weichert, Hamburg Media School gGmbH

Prof. Thomas Wiegand, Head of the Fraunhofer Heinrich Hertz Institute

ACADEMIC BOARD

The Academic Board essentially advises the Directorate and Business Office on the affairs of the institute, in particular questions of strategic and academic focus, organization of the formats of academic work, and knowledge transfer formats. The Academic Board is composed of one PI per consortium partner and two representatives each of the research group leaders, academic assistants, student assistants, and administrative-technical staff. Chief Executive Director Prof. Christoph Neuberger, Deputy Executive Directors Prof. Martin Krzywdzinski and Prof. Sascha Friesike and the Head of the Business Office Dr. Karin-Irene Eiermann take part in the meetings in an advisory capacity. The Academic Board held meetings in the reporting period on February 10, 2022 and June 16, 2022.

MEMBERS:

Principal Investigators (PIs)

Prof. Anja Feldmann, Ph.D. (TU Berlin)

Prof. Manfred Hauswirth (Fraunhofer FOKUS)

Prof. Jeanette Hofmann (WZB)

Prof. Hanna Krasnova (Uni Potsdam)

Prof. Barbara Pfetsch (FU Berlin)

Prof. Niels Pinkwart (HU Berlin)

Prof. Thomas Schildhauer (UdK Berlin)

Research Group Leaders

Dr. Annett Heft (up to February 10, 2022, FU Berlin)

Dr. Gergana Vladova (up to February 10, 2022, Uni Potsdam)

Susanne Reinhardt (Chair since February 10, 2022, FU Berlin)

Katharina Berr (Deputy Chair since February 10, 2022, UdK)

Jakob Ohme (Deputy Chair since February 10, 2022, FU Berlin)

Doctoral Students

Susanne Reinhardt (FU Berlin)

Katharina Berr (UdK)

Jennifer Haase (Uni Potsdam)

Prisca von Hagen (HU Berlin)

Student Assistants

N.N.

Administrative-Technical Staff

Annika Schütz (FU Berlin)

Sonata Cepik (WZB)

VI. Facts and figures

6.1 Publications, papers and teaching courses

THE PUBLICATIONS AND PAPERS FROM THE REPORTING PERIOD CAN BE ACCESSED UNDER THE LINK BELOW:

HTTPS://WWW.WEIZENBAUM-INSTITUT.DE/JB2022/

THE TEACHING COURSES ARE ALSO AVAILABLE ON THE WEBSITE UNDER THE FOLLOWING LINK:

HTTPS://WWW.WEIZENBAUM-INSTITUT.DE/JB2022/LEHRVERANSTALTUNGEN/

6.2 Memberships, offices and functions

PROF. BETTINA BERENDT

Professor and Head of the Department of Internet and Society in Faculty IV Electrical Engineering and Computer Science at the Berlin Institute of Technology, Member of the Institute for Telecommunications Systems

Guest Professor of the Declarative Languages and Artificial Intelligence Group of the Department of Computer Science of KU Leuven, Belgium

Deputization for professors on the Women's Board of Faculty IV of the TU Berlin

PROF. MARTIN EMMER

Professor of the Free University of Berlin, Department of Communication, Department of Politics and Social Sciences

Principal Investigator at the Einstein Center Digital Future

Chair of the Doctoral Committee in Journalism and Communication Science in the Politics and Social Sciences Department of the Free University of Berlin

Managing Editor "Weizenbaum Journal for the Digital Society"

Editor of the open access book series "Digital Communication Research"

Coordinator of the interdisciplinary and interuniversity courses "Media Informatics" (BSc, MSc) at the Free University of Berlin

Member of the IT Advisory Board of the Free University of Berlin

Member of various scientific societies (ICA, ECREA, DGPuK)

Member of the Standing Commission of the Dahlem Research School at the Free University of Berlin

PROF. ANJA FELDMANN, PH.D.

Director of the Max Planck Institute for Informatics

Member of the German National Academy of Sciences Leopoldina

Member of the German Academy of Technical Sciences (acatech)

Member of the Berlin-Brandenburg Academy of Sciences

Member of the Academia Europaea

Member of the Supervisory Board of the Karlsruhe Institute of Technology (KIT)

Member of the interdisciplinary working group "Responsibility in the digital age"

Member of the Specialist Committee on Communication and Information of the German UNESCO Commission

Member of the Academic Board, Leibniz Center for Informatics of the Leibniz Community

Member of Präsidium eco – Verband der Internetwirtschaft e.V. (Association of the Internet Industry)

Member of the Board of Trustees of the Gemeinnützige Gesellschaft zur Förderung des Forschungstransfers e.V. (Non-profit Society for the Promotion of Research Transfer e. V.)

Principal Investigator at the Berlin Big Data Center

Member of the "Operational, Communications, Database and Distributed Systems" review board of the German Research Foundation

Member of the Excellence Board of the University of Hamburg

Member of the Board of the S20 Commission (board of the G20 states)

Member of the Academia Europaea

Member of the Perspectives Commission and the IT Commission, Max Planck Society

Spokesperson and Deputy Chair of the IMPRS Trust, Max Planck Society

Member of the Dioscuri – Centre of Excellence, Max Planck Society

Part of the selection committee for "Breakthroughs in AI" at the Carl Zeiss Foundation

Member of the Scientific Advisory Board of Schloss Dagstuhl – Leibniz Center for Informatics (until 31 December 2025)

Part of the President's Commission on "Governance" at the Max Planck Institute

Commission Member on AI and Data Science at the University of Hamburg, November 2021

Part of the Excellence Cluster of the University of Saarland

Member of the Board of Trustees of the Horst Görtz Institute for IT Security at the Ruhr University Bochum

Member of the Advisory Board on Digitalization of the Max Planck Society

PROF. SASCHA FRIESIKE

Deputy Executive Director of the Weizenbaum Institute

Professor of Designing Digital Innovation at the Berlin University of the Arts

Member of the Board of the Weizenbaum-Institut e.V.

Member of the Taskforce Governance, Taskforce Sustainability and Taskforce Transfer at the Weizenbaum Institute

Course leader of "Leadership in Digital Innovation" at the Berlin University of the Arts

Associate researcher at the KIN Center for Digital Innovation at the Vrije Universiteit Amsterdam

Associate researcher at the Alexander von Humboldt Institute for the Internet and Society

Member of the "Scientific Practice" Working Group for the DFG, Alliance of Science Organizations

Member of the Board of CityLAB Berlin

Member of the Board for Digital Strategy / Smart City Strategy of the City of Berlin

Delegated Representative of the German Research Foundation in the Scientific Practice working group of the Allianz-Initiative Digitale Information

UNIV.-PROF. LARS GERHOLD

"Science and emergency response practice in dialog" Specialist Board of the Federal Office for Civil Protection and Disaster Assistance

Commission for Ethics in Security-Related Research (KEF) of the FU Berlin and the Charité

Principal Investigator Einstein Center Digital Future

Founder and spokesperson of the "Society" focus area of the Dahlem Center for Interdisciplinary Privacy and Security Research (DIPS) at the Free University of Berlin

Member of the Advisory Board of the Zukunftsforum Öffentliche Sicherheit e.V.

Member of the WORLD FUTURES STUDIES FEDERATION

Member of the Deutsche Komitee Katastrophenvorsorge DKKV e.V.

Member of the Berlin Center for Interdisciplinary Peace and Conflict Research of the Free University of Berlin

Member of the IEEE Society on Social Implications of Technology (SSIT)

Member of the DFG Network Dewiss

Member of the Academic Advisory Board of the Masters Course in Future Research

Member of the European Sociological Association (ESA)

Member of the Steering Committee of the Civil Security Innovation Forum of the Federal Ministry of Education and Research (BMBF)

Founder and co-editor of the Security series of the Public Security Research Forum

Member of the interdisciplinary working group "Internal Security" (AKIS)

Member of the working group "Empirical Methods of Political Science" of the German Political Science Association

Member of the German Node of the Millennium Project

Member of the Katastrophennetz e.V.

PROF. NORBERT GRONAU

Professor of the University of Potsdam, Chair of Business Informatics, Processes and Systems

Professor Extraordinary, Faculty of Arts and Social Sciences/Data Science Center/Stellenbosch University in South Africa

Member of the Board of the Academic Society for Work and Industrial Organization

Chair of the Board of the Institut für Wirtschaftsinformatik und Digitale Gesellschaft (Institute of Business Informatics and Digital Society)

Member of the German Academy of Technical Sciences (acatech)

Member of the Board of Trustees of the Heinz Nixdorf Institute

PROF. MANFRED HAUSWIRTH

Head of the Fraunhofer Institute for Open Communication Systems (FOKUS)

Professor of the Berlin Institute of Technology, Department of Distributed Open Systems

Director and Principal Investigator at the Weizenbaum Institute

Member of the Directorate of the Fraunhofer Academy

Spokesperson for the Fraunhofer Society Competence Network for Quantum Computing

Co-spokesperson of the Strategic Research Field of Quantum Technologies at the Fraunhofer Society

Spokesperson of the Fraunhofer Center for the Security of Socio-technical Systems (SIRIOS)

Principal Investigator at the Berlin Big Data Center

Principal Investigator at the Berlin Institute for the Foundations of Learning and Data (BIFOLD)

Principal Investigator at the Einstein Center Digital Future

Member of the Scientific Steering Group of the Daimler Center for Automotive Information Technology Innovations

Member of the Academic Board of CONNECT, Ireland's National Research Centre for Future Networks and Communications

Senior Member of the Association for Computing Machinery

Member of the German Informatics Society

Senior Member of the Institute of Electrical and Electronics Engineers (IEEE)

Member of the IEEE Computer Society Conference Advisory Committee

Principal Investigator at the Helmholtz Einstein International Berlin Research School in Data Science (HEIBRiDS)

Member of the Industry Committee for the Digital Economy of Berlin Chamber of Trade and Industry

Salzburg Research Advisory Board

Managing Committee of the Institute of Computer Science at the University of St. Gallen

Advisory Board of the Center for Advanced Internet Studies

Member of the Scientific Advisory Board (SAB) of the Care Research & Technology Centre (CR&T) at Imperial College in London

Member of the Scientific Advisory Board of the Center for Sensor Web Technologies (CLARITY)

Member of the Excellence Initiative of the Berlin University Alliance, Steering Board

Member of the Digital Transformation High-Performance Center

Advisory board of the ProcessNet Production-Integrated Water/Waste Water Technology Subject Division (FGr-PWA)

Managing Committee of the Institute of Computer Science at the University of St. Gallen

PROF. JEANETTE HOFMANN

Professor of Internet Policy of the Free University of Berlin

Honorary Professor of Internet Policy at the Berlin Career Center at the Berlin University of the Arts

Leader of the "Politics of digitalization" research group at the Social Science Center Berlin (WZB)

Director and founding member of the Alexander von Humboldt Institute for the Internet and Society (HIIG)

Associate Academic at the London School of Economics and Social Sciences (LSE)

Technical Chair of the Dutch Research Council (NWO), Human-Centered AI

Member of the Advisory Board of the Center for Interdisciplinary Risk and Innovation Analysis (ZIRIUS), University of Stuttgart

Member of the Advisory Board of the Internet Interdisciplinary Institute (IN3)

Member of the Heinrich Böll Foundation, Green Academy

Member of the "Digitalized Society" Scientific Commission of the German National Academy of Sciences Leopoldina

Member of the German Steering Committee Internet Governance Forum

Member of the Managing Board, Internet Policy Review (Journal)

Member of the Editorial Board, Information, Communication & Society (Journal)

Member of the Editorial Board, Critical Policy Studies (Journal)

Member of the Editorial Board, Big Data & Society (Journal)

Member of the Advisory Board of the Stiftung Neue Verantwortung

Founder member of the Global Internet Governance Academic Networks (GigaNet)

PROF. GESCHE JOOST

Professor at the Berlin University of the Arts

Member of the Board of the Einstein Center Digital Future

Academic Director for Interactive Textiles, German Research Center for Artificial Intelligence (DFKI) Berlin

Member of the ING Supervisory Board

Member of the Ottobock Supervisory Board

Member of the SAP Supervisory Board

Board member of the German Academic Scholarship Foundation

Member of the Goethe Institute

Member of the Zukunftsrat Mecklenburg-Vorpommern

Member of the Selection Committee "AI in Higher Education" (BMBF)

Member of the Selection Committee "Invite – Digital Training" (BMBF)

PROF. HANNA KRASNOVA

Professor of the University of Potsdam, Chair of Business Informatics, specialism in Social Media and Society

Member of the Directorate of the Weizenbaum Institute

Member of the Board of the Data-Centric Sciences Research Focus

Jury Member for the IdeenLauf as part of the Wissenschaftsjahr 2022 – Nachgefragt!

Member of the Association for Information Systems

Member of the Directorate of the Institut für Wirtschaftsinformatik und Digitale Gesellschaft (Institute of Business Informatics and Digital Society)

Member of the Board of AIS Region 2

Jury Member of the Roadmaps Digitaler Humanismus 2022, Vienna Science and Technology Fund (WWTF)

Member of the High-Tech Forum, Advisory Committee to the Federal Government for the Implementation of the High-Tech Strategy 2025 (BMBF)

PROF. MARTIN KRZYWDZINSKI

Leader of the "Globalization, labor and production" research group at the Social Science Center Berlin (WZB)

Professor of International Labor Relations at the Helmut Schmidt University of Hamburg

Member of the Program Committee for the Focus Program "Digitalization of the worlds of work" of the German Research Foundation

Member of the Scientific Advisory Board of the "Future of Work" program of the Massachusetts Institute of Technology

Member of the International Steering Committee of the GERPISA Automobile Research Network

Member of the "Future of Work" Advisory Board to the Board of IG Metall

Member of the "Future of Work after the Coronavirus" Working Group of the Berlin-Brandenburg Academy of Sciences

Topic Area Leader in the Doctoral College "Good Work in a Transformative World" funded by the Hans Böckler Foundation at the Social Science Center Berlin (WZB)

PROF. JAN MENDLING

GI-Specialist Group "Development Methods for Information Systems and their Application" (EMISA), Spokesperson

Business Process Management Association (formerly Steering Committee of the Int. Conf. on Business Process Management), Steering Committee Member

Gesellschaft für Prozessmanagement, Board Member

Business & Informations Systems Engineering (BISE), Department Editor

Software and Systems Modeling (SoSyM), Editorial Board Member

Business Process Management Journal (BPMJ), Editorial Board Member

Enterprise Modelling and Information Systems Architectures – An International Electronic Journal (EMISAJ), Editorial Board Member.

EPiC Series in Computer Science (EPiC), Editorial Board Member

PROF. CHRISTOPH NEUBERGER

Professor of the Free University of Berlin, Institute of Journalism and Communication Science, Department of Politics and Social Sciences

Member of the Bavarian Academy of Sciences (BAdW)

Member of the ad-hoc working group "Future values" of the Bavarian Academy of Sciences

Member of the German Academy of Technical Sciences (acatech)

Member of the Interdisciplinary Working Group "Quality of Communication of Science under the Conditions of Digitalization" of the Berlin-Brandenburg Academy of Sciences and the German Academy of Technical Sciences

Member of the Excellence Board of the Free University of Berlin

Member of the Advisory Board of the NRW "Digital Society" Research Association

Member of the Academic Board of Mainz Media Institute

Member of the Selection Committee for the State Research Prize, Ministry of Science, Research and the Arts Baden-Württemberg

Member of the Academic Advisory Board of the Federal Agency for Civic Education (bpb)

Social Scientific Advisory Team for Fighting the Coronavirus Pandemic in the State of Berlin, Senate Department for Science, Health, Care and Equality

Platform Learning Systems, Law and Ethics Sub-Working Group

Zukunft Politik 2030plus Expert Group of the Hanns Seidel Foundation

Editor of the journal UFITA, Archiv für Medienrecht und Medienwissenschaft, Nomos, Baden-Baden

Editor of the journal MedienWirtschaft, New Business Verlag, Hamburg

Editor of the book series "Aktuell. Studien zum Journalismus", Nomos, Baden-Baden

Editor of the book series "Forschungsfeld Kommunikation", Halem, Cologne

PROF. AXEL METZGER

Professor of the Humboldt University of Berlin, Civil Law and Intellectual Property Law, specialism in Industrial Property Rights

Member of the German Association for the Protection of Intellectual Property (GRUR), Specialist Committee for Copyright and Publishing Law, Software Working Group

Member of the Arbitration Body of the Deutsche Gesellschaft für Recht und Informatik e.V.

Co-Rapporteur (Co-Leadership) of the "Intellectual Property and Private International Law" Commission of the International Law Association

Founder Member of the Institut für Rechtsfragen der Freien und Open Source Software (Institute for Legal Questions of Free and Open Source Software)

Member of the German Association for the Protection of Intellectual Property, Specialist Committee for Copyright and Publishing Law

Member of the Deutsche Gesellschaft für Recht und Informatik (German Society for Law and Computer Science)

Member of the European Copyright Society

Member of the European Law Institute

Arbitrator at the Deutsche Institution für Schiedsgerichtsbarkeit e.V. (German Institute of Arbitration)

PROF. BARBARA PFETSCH

Professor of the Free University of Berlin, Department of Politics and Social Sciences

Member of the International Communication Association (ICA)

Member of the European Communication Research and Education Association (ECREA)

Member of the European Consortium for Political Research (ECPR)

Member of the International Political Science Association (IPSA)

Member of the Deutsche Gesellschaft für Publizistik- und Kommunikationswissenschaft (DGPuK)

Board member of the Center for Advanced Internet Studies (CAIS)

Board member of the Düsseldorf Institute for Internet and Democracy, Heinrich Heine University Düsseldorf

Member of the Academic Board and Ombudsperson for Good Academic practice at the Leibniz Institute for Media Research / Hans Bredow Institute, Hamburg

Member of the "Digitalization and democracy" Working Group of the German National Academy of Sciences Leopoldina

Contact person at the Weizenbaum Institute for the Networked Society

Joint editor of the book series "Politische Kommunikation und Demokratische Öffentlichkeit", Nomos-Verlag, Baden-Baden

Member of the editorial board of the Journal of Quantitative Description: Digital Media

Member of the Editorial Board of Communication Theory

Member of the Editorial Board of the International Journal of Press / Politics

Member of the Editorial Board of the Central European Journal of Communication

Member of the Editorial Board of the Journal of Global Mass Communication

Member of the Selection Committee and Referee for Projects, BMBF funding line "Zusammenhalt in Europa" (Cohesion in Europe)

PROF. NIELS PINKWART

Professor of the Institute of Computer Science at the Humboldt University of Berlin

Vice-President of Learning and Teaching at the Humboldt University of Berlin

Head of the Center for Technology-Assisted Learning at the Professional School of Education at the Humboldt University of Berlin

Principal Investigator at the Einstein Center Digital Future

Head of the "Educational Technology Lab" Research Area at the German Research Center for Artificial Intelligence

Member of the German Informatics Society

Member of the Management Committee of the Education Technologies Group of the German Informatics Society

Member of the Management Committee of the Learning Analytics Working Group of the German Informatics Society

PROF. BJÖRN SCHEUERMANN

Professor of the Humboldt University of Berlin, Chair of Technical Informatics

Professor of the Technical University of Darmstadt, Communication Networks

Liaison Professor of the German Academic Scholarship Foundation

Research Director of the Alexander von Humboldt Institute for the Internet and Society (HIIG)

Principal Investigator at the Einstein Center Digital Future

Member of the German Informatics Society

Member of the jury for the dissertation prize of the German Informatics Society

Principal Investigator at the Einstein Center Digital Future

Principal Investigator at the Berlin Centre for Consumer Policies, WP3: Algorithms, Privacy, and Security

Principal Investigator at the Helmholtz Einstein International Berlin Research School in Data Science (HEIBRiDS)

Member of the Advisory Board of the Düsseldorf Institute for Internet and Democracy

Member of the Extended Management Committee of the "Communication and Distributed Systems" Group of the German Informatics Society

Member of the Advisory Board of the Blockchain & Society Policy Research Lab, University of Amsterdam

PROF. DR. THOMAS SCHILDHAUER

Professor at the Berlin University of the Arts, Department of Electronic Business, specialism in Marketing

Executive Director of the Berlin Career Center at the Berlin University of the Arts

Director of the Institute of Electronic Business at the Berlin University of the Arts

Research Director at the Alexander von Humboldt Institute for the Internet and Society

Board of the Foundation for Internet and Society

Member of the Advisory Board of Skubch&Company GmbH

Member of the Supervisory Board of cbe AG

Member of the Supervisory Board of Stone One AG

6.3 Prizes and awards

Member of the Supervisory Board of Bluechip Computer AG, Berlin

Chair of the "Rat der Internetweisen" (scientific advisory committee of the IEB)

Member of the Advisory Board of the WIR! project MR4B funded by the BMBF

Member of the Advisory Board of the WIR! project Health.AI funded by the BMBF

Deputy Chair of the Academic Advisory Board of the Sustainable Building Innovation Foundation

Founder and Head of the Initiative Digital Urban Center for Aging & Health (DUCAH)

Member of the Berlin-Brandenburg Academy of Sciences

Member of the Research Advisory Board for Industry 4.0 of the Federal Ministry for Education and Research (BMBF)

PROF. THOMAS SCHMID

Editor-in-Chief of the Bulletin of the European Association of Theoretical Computer Science (BEATCS), since 2021

Editor IEEE/ACM Transactions on Networking (ToN), since 2019

Member of the Steering Committee of the International Colloquium on Structural Information and Communication Complexity (SIROCCO)

Management Committee of the GI/ITG Communication and Distributed Systems (KuVS)

Member of the Advisory Board of the EU project AI@EDGE: A Secure and Reusable Artificial Intelligence Platform for Edge Computing in Beyond 5G Networks, H2020-ICT-52

Member of the Advisory Board of the EU project SPATIAL on Trustworthy AI

Member of the Steering Committee of the IEEE Global Internet Symposium (GISC)

INRIA Evaluation Committee (on Networks and Telecommunications)

PROF. THOMAS ZECH

Professor of the Humboldt University of Berlin, Chair of Civil Law, Technology and IT Law

Member of the Center for Intellectual Property Law, Information & Technology (CIPLITEC)

Board Member of the Deutsche Gesellschaft für Recht und Informatik e.V. (DGRI)

Member of the German-Italian Association of Jurists (DIJV)

Chair of the Specialist Committee of the German Association for the Protection of Intellectual Property (GRUR), Chair of the "Data Law" Specialist Committee

Member of the Association of German Jurists

Member of the European Intellectual Property Teachers' Network (EIPTN)

Member of the European Law Institute (ELI)

Member of the Society of Comparative Law

Co-editor of Heymanns Schriften zum Patentrecht (HSP)

Member of the Institute for Commercial Property Rights (INGRES)

Member of the Interdisciplinary Center for Intellectual Property of the University of Mannheim (IZG)

Member of the International Association for the Advancement of Teaching and Research in Intellectual Property (ATRIP)

Member of the Swiss Society for Liability and Insurance Law (SGHVR)

Member and lecturer of the cross -university graduate college Law of the Information Society

Co-editor of the Zeitschrift für Geistiges Eigentum (ZGE)

Member of the Zivilrechtslehrervereinigung e.V. (ZLV)

Benedict Bender: Gabriele & Roland Wagner Best Paper Award, International Conference on Electronic Government and the Information Systems Perspective (EGOVIS2021), September 2021

Bettina Berendt, Milagros Miceli, Kristen Scott, Sonja Mei Wang, Pieter Delobelle, Karolina Sztandar-Sztanderska: Best Paper Award, Fairness, Accountability and Transparency (FAccT) Conference, June 2022

Franziska Cooiman: Eliteforsk travel grant 2022, Danish Ministry of Higher Education, February 2022

Manfred Hauswirth: Honorable Mention (2nd), SWSA Ten-Year Award, October 2021

Maximilian Heimstädt: "Das junge ZiF" Fellowship, Center for Interdisciplinary Research, Bielefeld, October 2021

Antonia Köster: Associate Editor Award, Association for Information Systems (AIS), June 2022

Martin Krzywdzinski: Ralph Gomory Best Industry Studies Paper Award 2022, Industry Studies Association, June 2022

Imprint

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