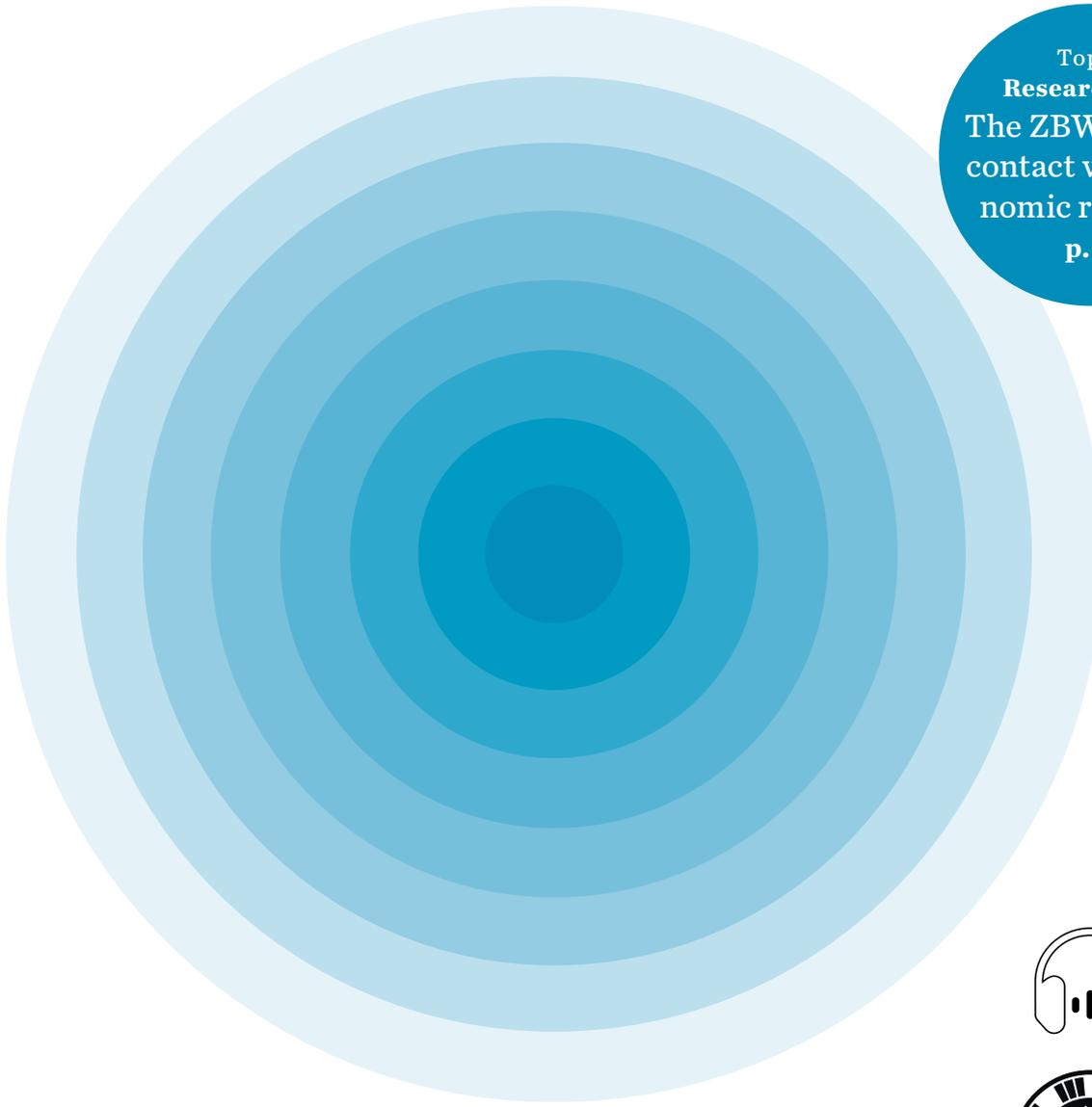


# *open*

*ZBW Highlights from 2020*

Topic:  
**Research data**  
The ZBW in close  
contact with eco-  
nomic research  
p. 14



Leibniz-Informationszentrum  
Wirtschaft  
Leibniz Information Centre  
for Economics

**ZBW**



**The ZBW in 2020:**

**Flexible organisation:** Lockdown? Login!, **page 18**

**Organised knowledge:** Optimising library workflows with Artificial Intelligence, **page 30**

**Contact**

ZBW – Leibniz Information Centre for Economics  
Düsternbrooker Weg 120, 24105 Kiel  
T: + 49[0]431.88 14 – 380

**Hamburg branch**

Neuer Jungfernstieg 21, 20354 Hamburg  
T: + 49[0]40.428 34 – 0

**Editors**

Dr. Doreen Siegfried, Birgit Gummersbach

**Layout**

Stefan Werner

**Translation**

Birgit Gummersbach

**Photos**

Sven Wied: p. 4, 6, 12, 16, 20, 22, 31  
Andreas Heller Architects & Designers: p. 12  
ZBW: p. 13

**Illustrations**

Anne Vagt: p. 26-29  
Stefan Werner: p.18

**Videos**

Sven Wied: p. 6,31  
Stefan Werner: Title animation

**Music**

Title animation: LFMusic/motionarray.com;  
p. 31: www.bensound.com

**Printer**

Hansadruck und Verlag GmbH & Co. KG, Kiel,  
www.hansadruck.de

This brochure is an abridged version of the ZBW Annual Report. The full report in German can be downloaded at [www.zbw.eu/de/ueber-uns/](http://www.zbw.eu/de/ueber-uns/)

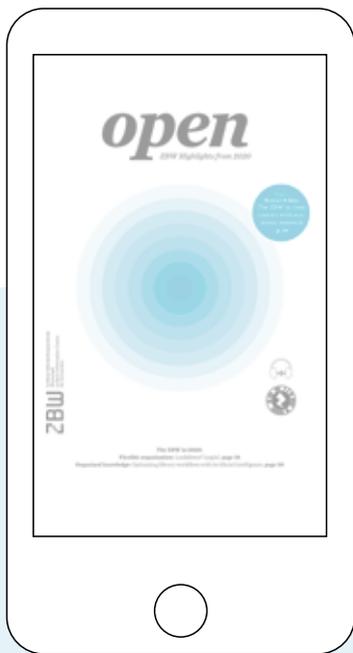
**Funded by:**



Bundesministerium  
für Wirtschaft  
und Energie



open – ZBW Highlights from 2020 was printed  
**climate-neutrally** on FSC-certified **paper**  
**recycled** 100 per cent from used paper.



#### **AR instructions**

The ZBW highlights 2020 contain elements of Augmented Reality. You can retrieve digital content with your smartphone – without installing an app – at the following URL:

**[web.zappar.com](http://web.zappar.com)**

**How does it work?** Take the report and open the URL stated above in your browser. Once you press the button “launch” (allow camera and motion), a view will open automatically which is generated by the front camera of your device. Hold your device over any of the black circles (with the lightning motif) in the report, as shown in the lefthand image. As soon as the camera recognises the circle, the digital content will be displayed. Enjoy!



Klaus  
Tochtermann



Thorsten Meyer



Axinia Braunisch

# Dear readers,

---

in this preface we want to honour the commitment of ZBW staff during this peculiar year of 2020. We express our gratitude to all for bringing the ZBW through the year so well. The general willingness of all to transform the digitisation push into concrete action has been and remains a particular pleasure. All staff members had to adapt again and again to changing conditions in 2020, be it new formats for professional training, new communication channels or changed working environments and practices. The directors are well aware that all these changes at the ZBW happened in a time of considerable restrictions and challenges in private life which resulted in additional stresses for many.

The ZBW has been driving the digitisation in its area of activity for many years. In 2020, the Covid-19 pandemic gave an additional push to digitisation which has disclosed the large potentials of employees for dealing with quickly changing circumstances, but also much solidarity within the ZBW. Staff members initiated numerous virtual meetings for professional exchange and also for offering help. Inhouse knowledge management environments have been expanded accordingly. These virtual contact points have provided a much-needed anchor for working routines in these times without physical encounters.

The year 2020 has shown the importance of digitality for the ZBW as an organisation, but also the importance of digital skills among staff. This confirms the ZBW in its decision to concentrate the new strategy exclusively on digitisation. The relaunch of the strategy has been started in 2020 and will be finalised in 2021 with the involvement of staff, the Foundation Council and the Advisory Council.

We are grateful to both councils for their continuous guidance throughout the further development of the ZBW. The constructive and critical advice from the Advisory Council and the Foundation Council always allow us a quality-assuring outside view on the activities of the ZBW.

The following report presents the big and future-oriented themes which the ZBW has promoted throughout this year 2020, so much dominated by the Covid-19 pandemic.

Enjoy the read! ■■

*Klaus Tochtermann, Thorsten Meyer,  
Axinia Braunisch*

*Kiel/Hamburg, May 2020*



*“What I have learned from Covid-19...”*

**Birca Buddrus**  
Library Assistant



# Content

---

Vision & Mission  
*page 8–9*

ZBW 2020 in figures  
*page 10*

ZBW news in brief  
*page 12*

## **RESEARCH DATA MANAGEMENT**

The ZBW in close contact with  
economic research  
*page 14*

## **FLEXIBLE ORGANISATION**

Lockdown? Login!  
*page 18*

Takeaway: 5 learnings from digital  
Covid-19 routines  
*page 22*

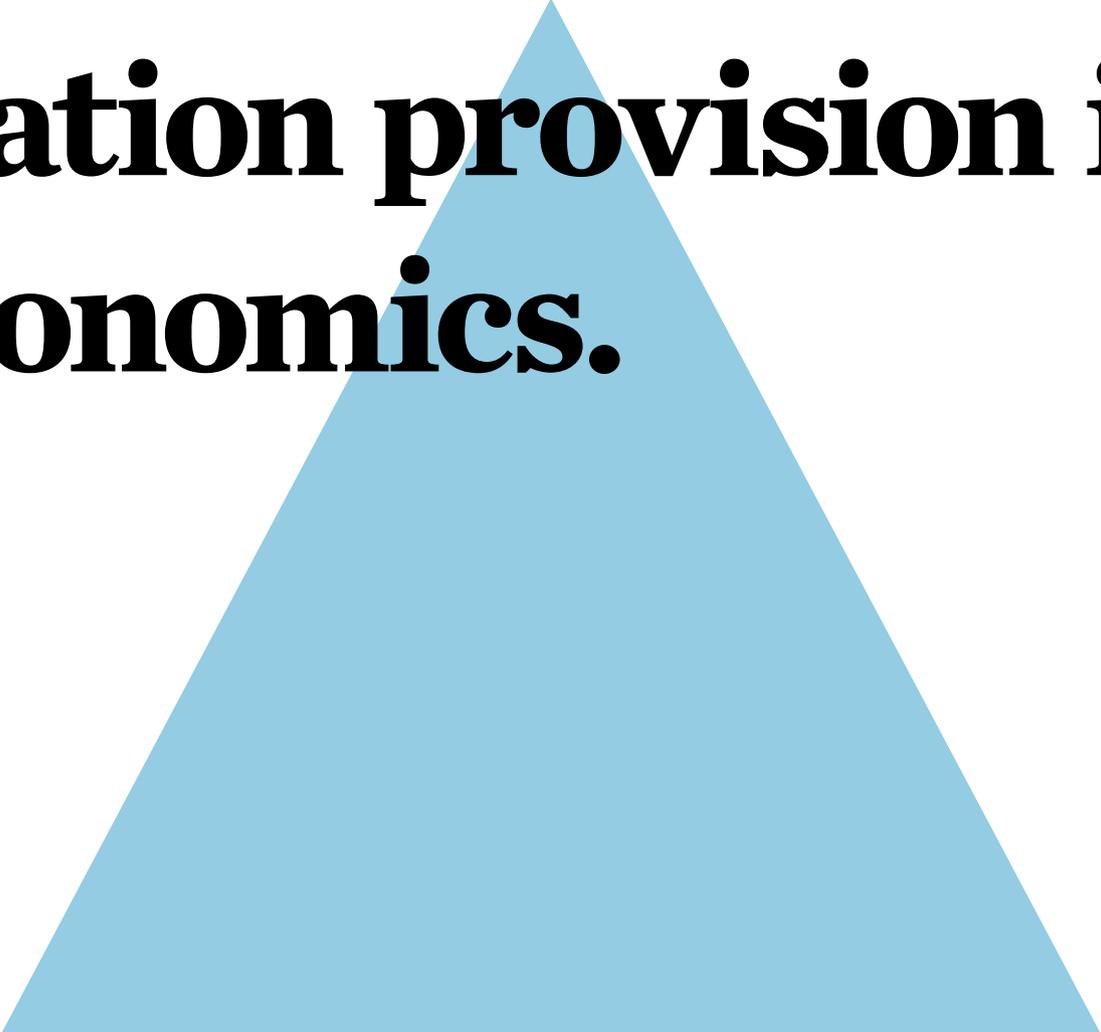
## **OPEN SCIENCE**

Done anything for Open  
Science today?  
*page 26*

## **ORGANISED KNOWLEDGE**

Optimising library workflows with  
Artificial Intelligence  
*page 30*

**The ZBW sets national and international benchmarks for modern information provision in economics.**



## MISSION

---

**The ZBW collects and indexes economic literature from all over the world. It offers comprehensive services that enable efficient, effective and sustainable use of economic information. It is a service-oriented scientific information infrastructure institution committed to modern and innovative requirements of information provision.**

**268** employees from 15  
**downloaded digital fu**  
**digitally preserved me**  
**11,461** retrodigitised v  
**cooperations with nat**  
**nal universities and re**  
**63** presentations at na  
**tional conferences 17** c  
**funded projects 30** sup  
**928,731** social media v

**1 nations** 12,309,248

**all-texts** 226,052

**media items (in total)**

**volumes** 2,741

**ional and internatio-**

**research institutions**

**tional and interna-**

**ngoing third-party**

**pervised final theses**

**views**

### Trustworthy digital preservation at the ZBW:

In January 2020, the digital long-term archive of the ZBW received the CoreTrustSeal. It has now been certified by three different examination methods. This ensures that economic literature will be reliably available in the future. Digital files are curated sustainably and maintained legible with state-of-the-art technology.



### Wirtschaftsdienst and Intereconomics now available in Gold Open Access:

A new, open era began for the two journals edited by the ZBW in 2020. Since 1 January, all articles with a CC-BY licence have been freely accessible for sharing from the day of publishing. Readers have gained a direct access, free of charge, to the economic expertise of the leading institutions in economic research in Germany and Europe.

### YES! – Young Economic Summit receives the Meritum award:

Deutsches Aktieninstitut (a lobby group for shareholding) has awarded its Meritum prize to Germany's largest school competition, honouring an admirable concept that helps enthuse young people for economics and shows how closely business, politics, society and environment are interconnected. The prize money of 25,000 Euro will go to expanding the virtual learning environment.



## A new, modern location in historic walls for the ZBW Hamburg:



The listed former telephone exchange building on Schlüterstrasse will be converted into a campus. At the end of 2024, the ZBW, the GIGA and Hamburg University will move in. Researchers and students will use this place of learning; and the collaboration between the ZBW and Hamburg University will intensify with a joint professorship.

### Pilot project for digital literature provision funded for four years:

The German national and state governments are funding a ZBW project for Open Access transformation in economics. It will study the developments in publishing behaviour and markets in order to develop licensing and business models. The project will be scientifically guided by a newly established chair at Hamburg University of Applied Sciences.

### The ZBW is a pilot library for FOLIO:

The GBV Common Library Network, together with other libraries all over the world, is developing an Open Source system for electronic resource management that can be adapted to different needs. The ZBW is actively involved in the project and the first library to enter the pilot phase of the new system "The Future of Libraries is Open".



### Publication of a study of Open Science practices among economists:

The ZBW has studied the role of Open Science in economics with an online survey. It finds that the principles are generally welcomed, but that many scientists desire more practical support for the implementation of transparency and sustainability in their daily research routines.

### EconStor reaches new all-time high: 200,000 full-texts:

Within five years the stock of economic full-texts in the ZBW repository has doubled. And it is used actively: 9,432,313 texts have been downloaded in 2020, almost a third more than in the previous year. Many universities and research institutions disseminate their research findings with EconStor.

### First digital SWIB conference is successful:

The SWIB20 was held online and attracted 450 participants from 57

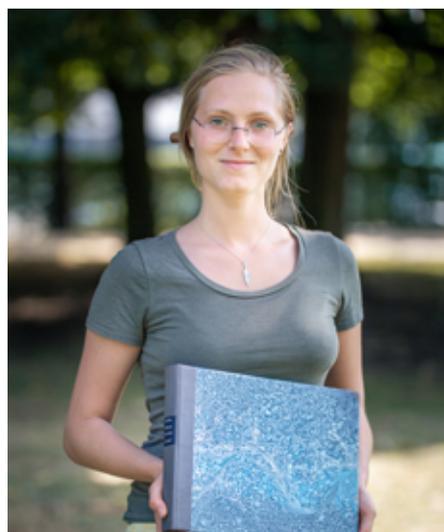
countries (including Germany), more than ever before. During five days they watched presentations and sessions which were often followed by intense discussions in the chat channels. Topics included automated indexing, the data model BIBFRAME for bibliographic data, authority files and persistent identifiers.



**Professor Klaus Tochtermann elected to the board of the European Open Science Cloud Association:**

The Association was funded in 2020 with the goal of providing the stakeholders of the EOSC community with a united voice and thus promoting Open Science in Europe. As one of eight members of the board, the ZBW director represents the German science community at the top of European science policy.

**Bookbinder Lisa Rechlin receives the apprentice award of the Leibniz Association:**



Lisa Rechlin not only finished her apprenticeship as a bookbinder successfully and with perfect grades, she also showed exemplary social engagement. She learned sign language to support her fellow apprentice. Her engagement was honoured by the Leibniz Association with the Apprentice Award which is conferred every year.

**The ZBW is the first German member of Open Knowledge Map:**

The non-profit organisation aims to develop novel visual interfaces that enable the better finding of known knowledge and the better discovery of new knowledge. The tool of choice is Open Source software. As a supporting member, the ZBW can influence decisions about the future development of the organisation.

**The ZBW hosts InnoCamp 2020:**

Every year, the workshop offers opportunities for informal exchange to all who are involved in innovations at libraries, showing ways how to find them and implement them. It took place on 4 through 6 November and had to find a new format suitable for virtual communication. It was hosted by the ZBW which presented its ongoing projects on the first day, on the second day the focus was on Artificial Intelligence, and the third day was used for discussions.

**Wirtschaftsdienst conference looks back on 30 years of German Reunification:**

The annual Wirtschaftsdienst conference in 2020 was organised in cooperation with the Halle Institute for Economic Research and was held digitally. It looked back at reunification and the lessons learned from it and then analysed the current challenges.

**YES! Bridge receives encouragement award:**

Germany’s largest school competition in economics aims to go abroad and applied for the “Raising the Profile of

Education and Science Diplomacy” prize awarded by the Federal Ministry of Education and Research. The YES! team was successful with its YES! BRIDGE concept and received 60,000 Euros in prize money.

**The STW Standard Thesaurus for Economics in the Encyclopedia of ISKO:**

The International Society for Knowledge Organization maintains an encyclopedia which presents and explains the concepts, disciplines, organisations, standards, systems and theories of knowledge organisation. It now also contains an article about the Standard Thesaurus for Economics which is developed and curated at the ZBW. It is used to index economic literature and used by many other organisations.

**YES! Bridge receives encouragement award:**

Germany’s largest school competition in economics aims to go abroad and applied for the “Raising the Profile of Education and Science Diplomacy” prize awarded by the Federal Ministry of Education and Research. The YES! team was successful with its YES! BRIDGE concept and received 60,000 Euros in prize money.



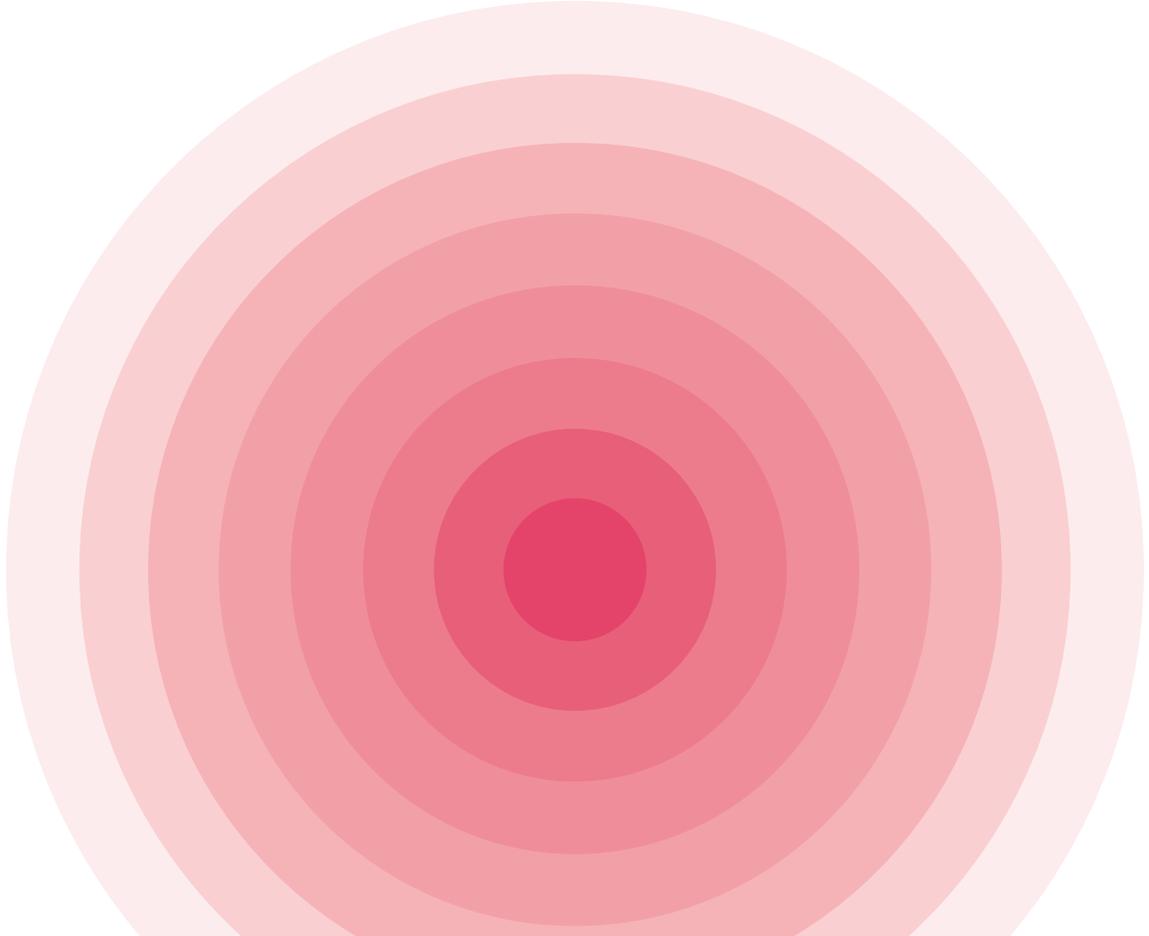
**Dagstuhl manifest published:**

In 2019, the ZBW had been invited to host a workshop at Schloss Dagstuhl where computer scientists and experts for digital infrastructures from various disciplines met. They discussed the most important challenges and technical solutions for building research data infrastructures that conform to the FAIR principles. The results from this workshop have now been published as a Dagstuhl manifest.

# The ZBW in *close contact* with economic research

---

*ZBW advocates linked open science – focus on management of FAIR research data*



The ZBW has established itself in Germany as a competent partner for economic research data and their corresponding technologies and infrastructures. In 2020, important milestones have been reached, for instance in building discipline-specific infrastructures for integrated research data management in the NFDI, or in linking international research data initiatives in the GO FAIR context.

## DATA-DRIVEN ECONOMIC RESEARCH BECOMES MAINSTREAM

The importance of data-driven research in economics is increasing steadily. During the last decades there has been a massive rise in the number of empirical contributions in top journals where authors used their own or other researchers' datasets, experimental designs or real data for simulating theoretical models. This is also evident in the market for journals.

### Facts & figures of the market for economics journals:

The share of empirically-oriented economics journals amounted to 81 per cent in 2011 (Vlaeminck/Podkrajac, 2017). Among the journals listed in the Journal Citation Report Economics, an extremely large share (92.6 per cent) publish empirical studies at irregular intervals.

In step with the number of empirical studies, the recognition of empirical economics is rising compared to purely theoretical and model-oriented economics. Whereas economists working empirically were still a minority a few years ago, they have been enjoying much more recognition since the "credibility revolution", both within their discipline and as policy consultants. This new generation has seen its reputation enhanced especially by the growing transparency of datasets.

## THE "CREDIBILITY REVOLUTION" BECOMES PART OF TRUSTWORTHY RESEARCH IN ECONOMICS

The "credibility revolution" plays a large role in economics. Besides the economists themselves, renowned journals or professional associations, such as the German Economic Association (VfS) and the German Academic Association for Business Research (VHB), promote more trustworthiness in economic research. They establish

basic ethical principles and demand that "Research must be transparent and reproducible" or "Empirical papers [...] must make the datasets and programmes employed available for replicating the findings."

## THE ZBW SUPPORTS RESEARCH TRANSPARENCY IN ECONOMIC RESEARCH

As one of the first Open Science advocates in Germany, the ZBW wants to reinforce these efforts. The ZBW aims to improve support services for Open Science practices and to align them with the needs of economists in Germany. Several projects at the ZBW are working towards fostering the sharing of research data and the reproducibility of research findings.

Regarding research data management, the ZBW aims to be a competent partner for economic research data and the corresponding technologies and infrastructures. One central aspect of research data management is the documentation of data and research processes. The reuse of data or the verification of robustness are only possible, however, if suitable infrastructures exist.

### ZBW PROJECTS IN THE CONTEXT OF RESEARCH DATA MANAGEMENT REST ON THREE PILLARS:

1. building infrastructures for integrated research data management,
2. discipline-specific research data services and
3. collaboration in international research data initiatives.

## INCREASING LINKS TO THE ECONOMICS COMMUNITY WITHIN NFDI

The ZBW demonstrates responsibility and engagement within the context of the National Research Data Infrastructure (NFDI). The goal of the planned NFDI is the best possible accessibility and indexation of research

data as a valuable resource for science. In 2020, the ZBW started its collaboration in the consortium for social, educational, behavioural and economic sciences (KonsortSWD).

Still under review is the application of the BERD@NFDI consortium headed by the University of Mannheim which is tailored to the needs of business studies. The ZBW is engaged in the development of modern infrastructures to support the management of non-structured data, e.g. data from social media.

By engaging in the development and building of the consortia within the NFDI, the ZBW will intensify its ties with the economics community and make them more sustainable.

### You can find more information about ZBW involvement in the National Research Data Infrastructure (NFDI) at:

<https://zbw.to/NRDI>

### **NFDI, EOSC and GAIA-X – which is the infrastructure of choice for economists?**

The national efforts for building research data infrastructures are complemented by European efforts. The European Open Science Cloud (EOSC), initiated by the European Commission in 2017 and launched in 2018, and GAIA-X, newly-established by the Federal Ministry for Economic Affairs and Energy, represent two research data infrastructures of interest for economists.

We have asked Professor Klaus Tochtermann, member of the Board of Directors of the EOSC Association, how common standards and policies will be established.

### **THREE INFRASTRUCTURES, THREE QUESTIONS**

#### **What is the difference between NFDI and GAIA-X?**

**KT:** The basic difference is that the National Research Data Infrastructure (NFDI) addresses the German science system. In contrast, GAIA-X is a data service offered by companies to companies. This results in another difference regarding data. NFDI offers data that are as open as possible and as closed as necessary. In GAIA-X data sovereignty is paramount, i.e. it aims for the closest possible control over proprietary data.

#### **Is there any collaboration between GAIA-X and the European Open Science Cloud?**

**KT:** In March 2021, a first workshop was held in which members of the Board of Directors of the EOSC and members of the GAIA-X project participated. The workshop aimed to identify areas in which cooperation could be possible. The following three areas have been identified. First, **data sharing:** both companies and researchers often need data from the other “world”. Hence there will be studies

to see if and how the data spaces can be made mutually accessible. Second, **governance and compliance:** for both GAIA-X and the European Open Science Cloud non-profit associations have been founded to steer the projects. It will be further explored in this context what the participation rules, the statutes etc. look like to enable learning from each other. And third there are **technical aspects:** GAIA-X and the European Open Science Cloud constitute a federated infrastructure, and both projects include one level in their architecture for the provision of services, for instance for storage, for analysis of data etc. It’s obvious to study which services can be made mutually accessible. It is planned to follow up this first workshop with others, perhaps even in a larger setting.

#### **What can the ZBW recommend to economists? Where should they make their data available and linkable?**

**KT:** Wherever possible, data should be stored in repositories either directly linked to the European Open Science Cloud or the NFDI in Germany. This ensures their visibility in Europe and also their connectivity to other data. Within the National Research Data Infrastructure there is the project KonsortSWD which organises research data management for economics and can be a good entry point.

**Thank you!**

### **PROFESSOR KLAUS TOCHTERMANN**



Klaus Tochtermann is a nationally and internationally active framer of the Open Science movement and focuses on research data management. In 2020, the members of the European Open Science Cloud Association elected him to the Board of Directors for a term of three years. For seven years now he has been a member of the German Council for Scientific Information Infrastructures (RfII). The Council initiated the National Research Data Infrastructure (NFDI) for Germany, where the ZBW is an active member of several consortia. Klaus Tochtermann served as a member of the High Level Expert Group of the EOSC between 2015 and 2018, and during the last two years as a member of the EOSC working group “Sustainability” which addressed the framework and the sustainability of the EOSC in the coming years. Beyond the EOSC, Klaus Tochtermann is a member of the German Delegation of the G7 Advisory Group on Open Science, and of the DataTogether Group which unites representatives from the leading international organisations in the field of research data management. As a driving force of the Open Science movement, Klaus Tochtermann initiated the Leibniz Research Alliance Open Science in 2012 and the annual international Open Science Conference in 2014.

## **GO FAIR – CONNECTING INTERNATIONAL RESEARCH DATA INITIATIVES**

FAIR research data management (RDM) as a prerequisite for good research is ever more in demand. The GO FAIR Initiative unites numerous actors collaborating on joint efforts to promote solutions for the findability, accessibility and reusability of research data.

The “covidification” of science and research in 2020 has shown clearly the need for globally connected research data infrastructures. The past year has also shown that the scientific ecosystem is able to act globally if the sharing of research data can save lives.

The GO FAIR Initiative, whose German support and coordinating office is located at the ZBW (two more offices are in Leiden (NL) and Paris (F)), coordinates an international network of scientific communities and research infrastructures. In 2020, GO FAIR supported 24 implementation networks promoting the acceptance and implementation of the FAIR principles. Implementation networks are often created around disciplinary communities such as Chemistry IN, EcoSoc (Economics and Social Sciences IN) or Nomad (material sciences). They can also address cross-sectional topics such as FAIR metrics or discovery.

## **CONVERGENCE IS THE LEADING ISSUE OF INTERNATIONAL GO FAIR EVENTS**

In January 2020, 84 representatives from 11 countries (Austria, Czech Republic, Denmark, France, Germany, Italy, Netherlands, Poland, Switzerland, United Kingdom, USA) met at the 2nd Annual GO FAIR Implementation Network Meeting 2020 with the intention of building bridges and learning from each other. The focus was on identifying key developments, mostly domain-specific approaches to data and infrastructures or experiences in continued education and training. The goal was to enable the adoption and expansion of existing practices and

solutions to other application cases, in short to create convergence.

Convergence also dominated the International FAIR Convergence Symposium. This conference took place from 27 November til 4 December 2020 in cooperation with CODATA and constituted an important milestone after almost three years of engagement. Almost 1,100 participants from around the world discussed the future of FAIR research data management. The topics ranged from best practices to the presentation of technically advanced solutions or the development of concepts for the training of so-called data stewards in research data management.

## **DATA TOGETHER – A STATEMENT FOR JOINT ENGAGEMENT TOWARDS CONVERGENCE**

The four big international research data initiatives strive to harmonise their activities in the global research data ecosystem through coordination and transparent collaboration. In a joint statement, the Committee on Data (CODATA), the Research Data Alliance (RDA), World Data Systems (WDS) and the GO FAIR Initiative have outlined their complementary engagement for data-driven science. The first concrete commitment was outlined in its Covid-19 statement. These activities will be enhanced in the near future and aim to address needs in research data management related to the UN Sustainable Development Goal 3 – Good Health and Well-being. ■

### **Link tip: Statement “Data Together”:**

<https://www.go-fair.org/go-fair-initiative/data-together/>

# LOCK-DOWN? LOGIN!

*That's how digital we are*



#### A few numerical impressions:

- Ad hoc rollout for 22 Zoom licences in management
- Rollout of Cisco Webex Cloud communication tools for all employees
- Provision of additional VPN access: 200 (compared to 100 in 2019)
- Rollout of additional Citrix licences: 100 (compared to 50 in 2019)

Digital transformation at the ZBW has gone into overdrive in 2020. A primary factor in this has been the Covid-19 pandemic and along with it the high sense of responsibility which the ZBW crisis team feels for the health of ZBW staff.

Previously established digital routines have made it easier for the ZBW to maintain workflows and productivity while working from home in 2020. Thanks to a high degree of digitisation before the lockdown, the ZBW has been able to switch to remote working within a few days. The digitisation “blitz” focused on internal and external communication, internal workflows and human resources management.

#### Digitising communication

The ZBW has been using different videoconferencing systems for communication inside and outside the organisation for many years. Hybrid videoconferences for internal team meetings or virtual meetings with international partners have been well established. Instant messaging services have also been in use for quite some time. But until March 2020, many communication tools were run in parallel and conversations were usually held in person. The lockdown required not only the opening up of new communication channels, but also a reorientation for all ZBW employees.

Within a few days, the ZBW supplied all employees with the hard- and software necessary for working from home so that the ZBW remained in business during and after the lockdown imposed by the Covid-19 pandemic. All clerical workplaces had sufficient basic equipment to be re-dedicated to remote working.

Most in demand were digital tools for collaborating and increasing the efficiency of the workflows which has given a large boost to digitisation. Conferences and meetings with cooperation partners were held virtually. To enable all this, the ZBW invested in communication and collaboration tools at short notice.

The directors' department organised internal communication about the lockdown rules in a new exchange platform on the intranet (wiki). A new format, "future café", has been created where operative and strategic topics can be discussed with the entire staff on a regular basis.

**Internal communication 100% digitally**

- Blogposts Covid-19 exchange platform: 54
- Visitors at the directors' future café: 91 participants on average per meeting

The digitisation of communication does not mean that analogue patterns are simply transferred to digital; the framework conditions must be reconsidered. The ZBW has made working hours and working spaces as flexible as possible to enable staff to organise and combine working from home, home schooling, childminding and elder care during lockdown. Working hours for staff were extended from 6a.m. to 10p.m. to improve flexibility. Many ZBW employees have discovered teleworking as an option for themselves after having been "ordered" to do it, and many now favour this kind of "new work" even beyond the lockdown.

**A few numbers from 2020 demonstrate the trend for teleworking after its imposition during the pandemic**

- 20 initial applications for official teleworking (compared to 13 in 2019)
- 62 teleworkers with a share of 16 hours or less (compared to 53 in 2019)
- 29 teleworkers with a share of 24 hours or less (compared to 16 in 2019)
- 11 teleworkers with a share of more than 25 hours (compared to 8 in 2019)
- 129 teleworkers in 2020 (not counting those ordered to work from home)

**Digitising workflows**

When the pandemic broke out, the ZBW had to reorganise its workflows within a very short time. Local services for instance, which are geared to people using the library on site, had to find new ways of delivery. Previously established online seminars and a digital service desk for information and support have been extended. All conferences, workshops, symposiums and even the national school competition YES! – Young Economic Summit have been transformed into virtual events. These are only a few examples of how the ZBW has prepared itself to meet future challenges with digital solutions.

**Digitising human resources management and management**

Covid-19 presented all human resources officers with new challenges. Recruiting and onboarding, internal offers for trainings, coachings, exchange and information formats, professional training and supervising interns – all these tasks had to be reorganised. Workflows, responsibilities and contact options while working from home had to be redefined and organised. For long periods all management took place virtually and thus at a distance. The staff section for human resources development supported those in managing positions with virtual formats during the lockdown. Virtual leadership requires a different focus and much more communication, organisation, motivation, appreciation, trust and understanding. Selected virtual offerings and exchange formats were also provided for staff.

**Digital Human Resources Management in figures**

- 24 digital staffing procedures
- 85 invitations to digital job interviews
- 16 virtual or hybrid onboardings
- 8 short impulse talks for managers with 86 participants in all
- 9 virtual coachings for managers
- 11 virtual short impulse talks for all employees
- 5 virtual "future cafés" with the directors and 91 participants on average
- 8 "meetings at 11", 6 of them virtual
- 6 "meetings with Tochtermann", 4 of them virtual
- 306 further education courses (2019: 178) with 1,778 participants
- 1 virtual team workshop
- 4 apprentices trained virtually or hybridly
- 1 completely virtual internship (two persons at the same time)

The pandemic has demonstrated clearly the vulnerability and the protective needs of staff as well as the importance of health and well-being. Corporate health management at the ZBW was faced with many challenges and has been very active at several levels. A working group for health safety was involved actively in the crisis team during the first lockdown. One of the main tasks was the designing of a hygiene concept to protect staff, but there were also the adaption of the risk assessments to the Covid-19 situation or the procurement of equipment and signage, as well as the individual risk assessments carried out by the company physician.

Working from home, lack of personal contacts and private crises, all this contributed to exceptional mental stress. The ZBW's health managers put their focus on alerting staff to these topics, and on creating options for virtual exchange and a sense of community in decentralised working. External service providers were engaged to offer relaxation and physical activities. ■

# Virtual onboarding needs lots of time for communication

---

*Interview with **Sandra Behner**, Head of Human Resources Development at the ZBW, talks about virtual onboarding at the ZBW*



**What is good virtual onboarding?**

**SB:** Onboarding is a general term for the welcoming culture of an organisation. Good onboarding – whether virtual or not – starts a long time before the first working day and doesn't end with the second.

**Can you explain this?**

**SB:** Before a new employee signs a contract, he or she has already had many points of contact with the ZBW. It starts with the job advertisement, the invitation to the job interview follows and it ends with the follow-up phone calls. If I can create a cordial and trusting atmosphere in this, it's an absolutely positive experience for the candidates. After the advertisement it's the first phone calls and the interview that present the ZBW as an employer.

**Can you give tips for virtual job interviews?**

**SB:** The ZBW has held many virtual job interviews in 2020 and our colleagues have gained a lot of experience. Such virtual interviews must be prepared and conducted very differently from interviews on site, especially to find about soft skills. Here case studies can help which can be worked on in breakout sessions, or more situative questions. Technical tests before the actual session or a few minutes for technical preps make all parties feel safe and can relieve the tension of a situation that is very stressful for the candidates.

**And what happens after a successful job interview?**

**SB:** Once the decision is made, the process continues. Good onboarding is all about good organisation and communication. Have I arranged everything my new co-worker needs – notebook, software, telephone, digital induction documents, buddies etc.? Have I made arrangements to have equipment picked up in person or sent to the new co-worker? Communication is the second pillar.

**What does that mean?**

**SB:** With digital onboarding, managers must invest a lot of time into communication with a new team member. A lot of information that is passed on casually in an office, for instance if you have lunch with your colleagues or walk by a desk with family photos, must be communicated now explicitly. The manager and the whole team must offer a cordial welcome to the new colleague. You can't meet the people from the office next door if you're at home and you're missing out on picking up the inhouse culture of the ZBW over coffee.

**What are the ZBW standard operating procedures for this?**

**SB:** Many years ago we developed a standardised onboarding plan and checklist. That's our basis because everyone involved knows what to do, what is generally important and whom to ask about routine matters. Even for such routine matters it is useful to take a closer look and to differentiate according to functions. The major part of the plan addresses the specific questions related to the job. Depending on the job, there are of course limits to what can be done virtually.

**What makes an onboarding plan a good plan?**

**SB:** I think it is a good plan if it doesn't fill weeks with job-related assignments only. The first working day is decisive, no matter if it's virtual or not. It means a manager takes time for welcoming the new team member. Regular slots for exchange and feedback with the manager and the assigned buddy or the team are even more essential during virtual onboarding, and this also includes planning breaks after meetings. Creating an emotional bond and a sense of togetherness is something that must be actively worked on.

**Can you cite successful cases?**

**SB:** Yes, I have heard of quite a few creative ideas. Flower bouquets or welcoming boxes of chocolate have been sent to private homes, there has been an online guided tour through the ZBW office of a new team member, or just photos of the new office, team videoconferences with a special welcoming background image, and a virtual visit to the Christmas market with the whole team. Regular informal team meetings have proven their worth. During the meetings, co-workers have explicitly asked their new team member how they feel and have made time to tell a few ZBW anecdotes. Buddies play an important role in this, they are an easily accessible information source. Communication is key.

**What developments do you see in the future?**

**SB:** I think the ZBW won't return to the old ways after the experience of 2020. A new era has begun and we are already working in totally different ways. I also see a new respect in daily intercourse. The ability to adapt quickly to new and constantly changing circumstances is more valuable than before. There's eagerness to be creative, to reinvent yourself, to experiment and to find out what works and what doesn't. We have learned that many things, from conversations to brief trainings or events, work well or better than we expected in virtual form. Some things will become accepted in the long term, but not everything. Virtual formats have limits. Personal contacts and nuances are missing everywhere, not only in onboarding. I will be happy to meet people in person again!

**Thanks! —**

# Takeaway:

## *5 learnings from digital Covid-19 routines*

---

*Partners from the international EconBiz Partner Network share their experience*



**Around the world children are singing “Happy birthday” while washing their hands. People everywhere have learned to smile with their eyes because their faces are masked. From Australia to Zimbabwe people mail photos of their nature trips to each other. Covid-19 connects people of the whole world in their worries and challenges and turns the globe into a vast common laboratory / Covid-19 has also been the number one topic of 2020 within the EconBiz Partner Network. Taking “Never waste a good crisis” as their motto, the partners of the EconBiz Network shared their best practices during the crisis and which learnings they want to preserve in the post-pandemic days. / Here are their five learnings →**

## 1.

**VIRTUAL COLLABORATION FACILITATES COOPERATION ACROSS DEPARTMENTS**

Digital communication technologies have fundamentally changed teamwork in academic libraries. New behavioural patterns have emerged. Virtual meetings, breakout sessions, debates with polite pauses, chats and working at a distance have been learned and become standard operating procedure for collaboration in libraries.

The Aarhus University Library / Royal Danish Library, which has 900 employees spread across several branches in Denmark, has minimised the social distance between its branches with digital tools. Working virtually through videoconferencing has brought co-workers closer together and they won't give up the new tools. Susanne Dalsgaard Krag, Library Manager, writes:

“The pandemic has taught us to work together across departments and across the country in a way we would never have imagined. You can mention a lot of different things we have learned during the pandemic, but I guess this is one of the biggest advantages, and something we will carry into the post pandemic world, which we all look forward to welcome.”

## 2.

**INVESTMENTS IN HUMAN RESOURCES DEVELOPMENT PAY OFF**

All EconBiz partners across the globe have realised one thing: we are living in a new era. There will be no going back to pre-Covid times. Working with prefabricated workflows was yesterday. Libraries move forward thanks to creative staff members with the ability to adapt quickly to constantly changing circumstances who can live with uncertainty. This awareness of working and living in a VUCA world, i.e. a world defined

by volatility, uncertainty, complexity and ambiguity, will determine human resources management in academic libraries even after the pandemic is past.

Rajen Munoo, Head of Learning and Engagement at Singapore Management University Libraries, says: “Our biggest “life hack” was upskilling – to ensure that all staff were “vaccinated” with digital skills to be resilient and agile by providing them with opportunities to learn, unlearn and relearn through continuing professional development opportunities in this VUCA world.”

Corey Seeman, USA, University of Michigan, sums up: “Libraries will have a choice on the other end of this pandemic to keep the changes that have been implemented or revert back to their previous normal ways. The path forward will likely be a combination of these both, but it is important to embrace these changes as a way to a more modern library.”

## 3.

**GOOD NETWORKS ARE CRUCIAL FOR QUICK AND ROBUST SOLUTIONS**

When the pandemic broke out, institutions constantly had to find new solutions to comply with hygiene, health and safety rules. They entered into dialogue not only with public authorities, but also with other institutions on campus or in the world.

Good networkers could easily and simply find common solutions.

Rajen Munoo of Singapore Management University Libraries states: “With the onset of the COVID-19 pandemic and the ever-changing directives from various agencies, our priority was collaborating with campus partners in order to comply with the health and safety protocols.”

## 4.

**EMPATHY FOR USERS BREEDS CREATIVITY**

Dealing emphatically with the needs and wishes of customers or users leads to creative solutions. This at least is suggested by a study from Cambridge University (see: <https://zbw.to/cambridge>).

The experiences of the EconBiz partners also show that creative solutions can be found wherever libraries take a compassionate interest in the worries and uncertainties of students, whether they are in their first or last years. In Singapore for instance libraries installed “Peer Advisors” who used a peer-to-peer learning programme for dissolving the fears of new students faced with online courses for the first time.

Christine Okret-Manville of Université Dauphine-PSL in France writes: “To help our readers make the most of all these resources, we put a series of tutorials for self-training online (bilingual). We quickly put up virtual training sessions. [...] In this difficult period, we had to show an especially supportive behaviour towards one another to manage adapting quickly to unusual work conditions. Yet it gave us an opportunity to increase and diversify our services, introducing virtuality where we didn't use it enough or at all yet, and giving us new leads to expand our activity.”

Corey Seeman from Michigan, too, can see something positive in new digital solutions beyond the current lockdown: “Library instruction and consultations via Zoom will likely continue. One of the challenges we would have is finding a space that could work for meetings. By using Zoom, the need for space mostly goes away.” Koç University organised an international online poster session that presented many ideas on how to stay in contact with employees and also with students. These ideas ranged from motivational emails to online pet therapy.

# 5.

## DIGITAL FIRST HAS MEASURABLE SUCCESS

Many libraries in the EconBiz Partner Network provided access to a large number of electronic resources even before the lockdown. Driven by Covid-19 they improved their digital services and found new solutions for access to digital media. Christine Okret-Manville from Paris: “Our priority has been to extend the size and availability of our electronic collection: we offered remote access to the financial databases which were only available on site, tested new textbook databases and other sources. We dedicated a section of our website to resources publishers could open freely during that time.”

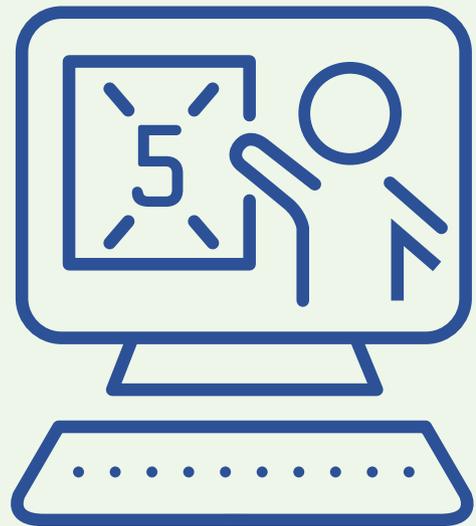
Vasiliki Mole from Koç University in Turkey also reports considerable efforts to give students access to electronic media and to enthuse them for new opportunities. “Sometimes, the comfort zone of years’ old practices is hard to overcome, as it creates a somewhat stiff acceptance of a new perspective. A rather difficult issue we have finally come to a point to change, has been the traditional print textbooks and their replacement with online publications.”

Deborah Wallace of Harvard Business School’s Baker Library (USA) points out that the efforts pay off in hard numbers: “As a result, almost every one of our services and information product use volumes have increased. For example, Baker Library website use by MBA students +73% and alumni +43%, database use +76%, Working Knowledge, readership +51%, and Books@Baker participants +90%.”

*\*Detailed reports can be found on the blog ZBW-Mediatalk:  
<https://zbw.to/corona-boost>*

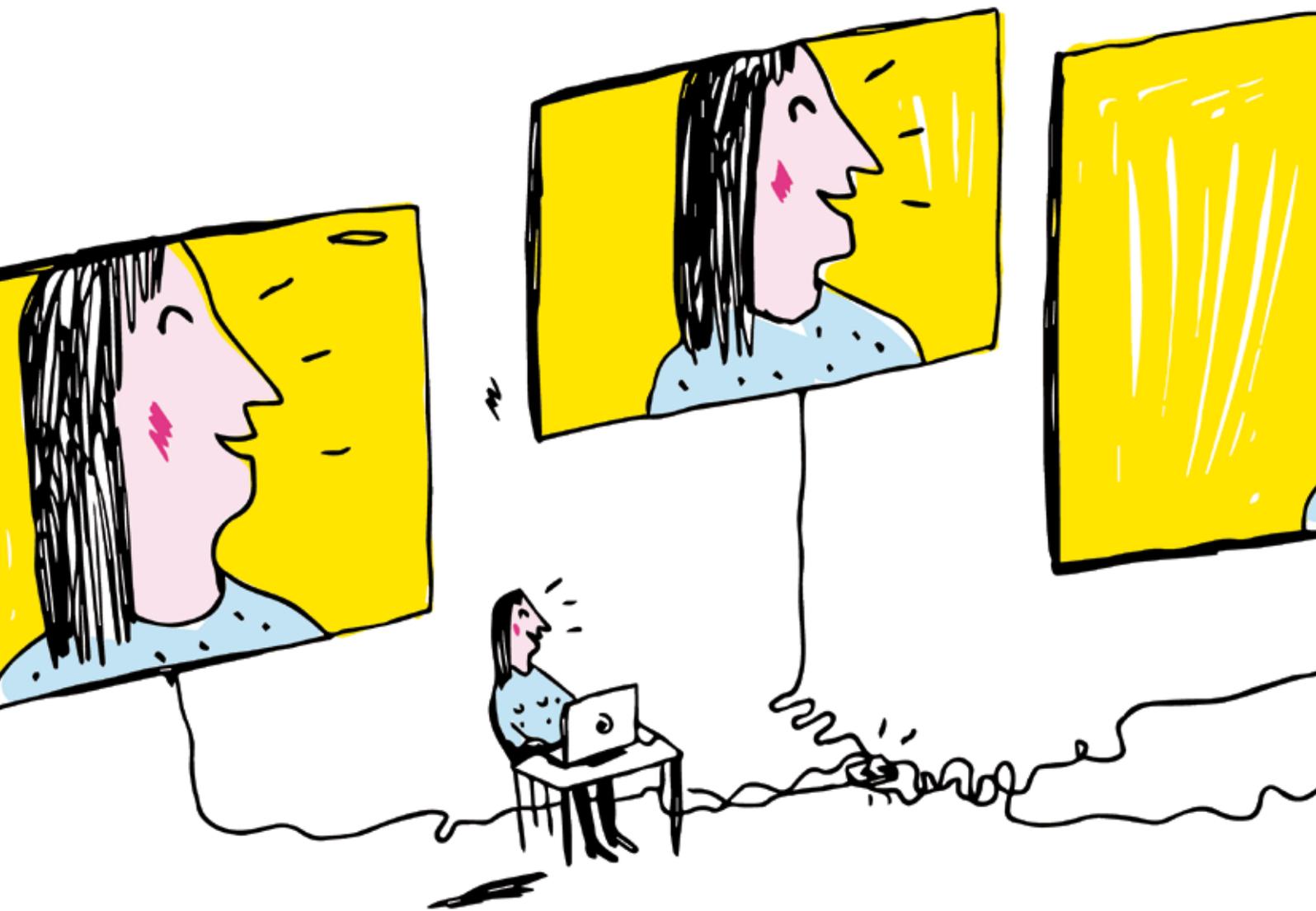
**About the EconBiz Partner Network:**  
The EconBiz Partner Network is an international network of economics libraries and research institutes. It aims to support students and researchers worldwide in their search for economic information. The network fosters knowledge transfer and collaboration between its members.

Its mission is to enable excellent research in economics by giving access to high quality information in combination with modern search functions. The network helps to promote service at the international level and to increase the visibility of research findings and conferences in all partner countries. It also offers a forum for discussing matters of relevance to the partners. The network helps to find answers to questions as well as partners for joint projects. —



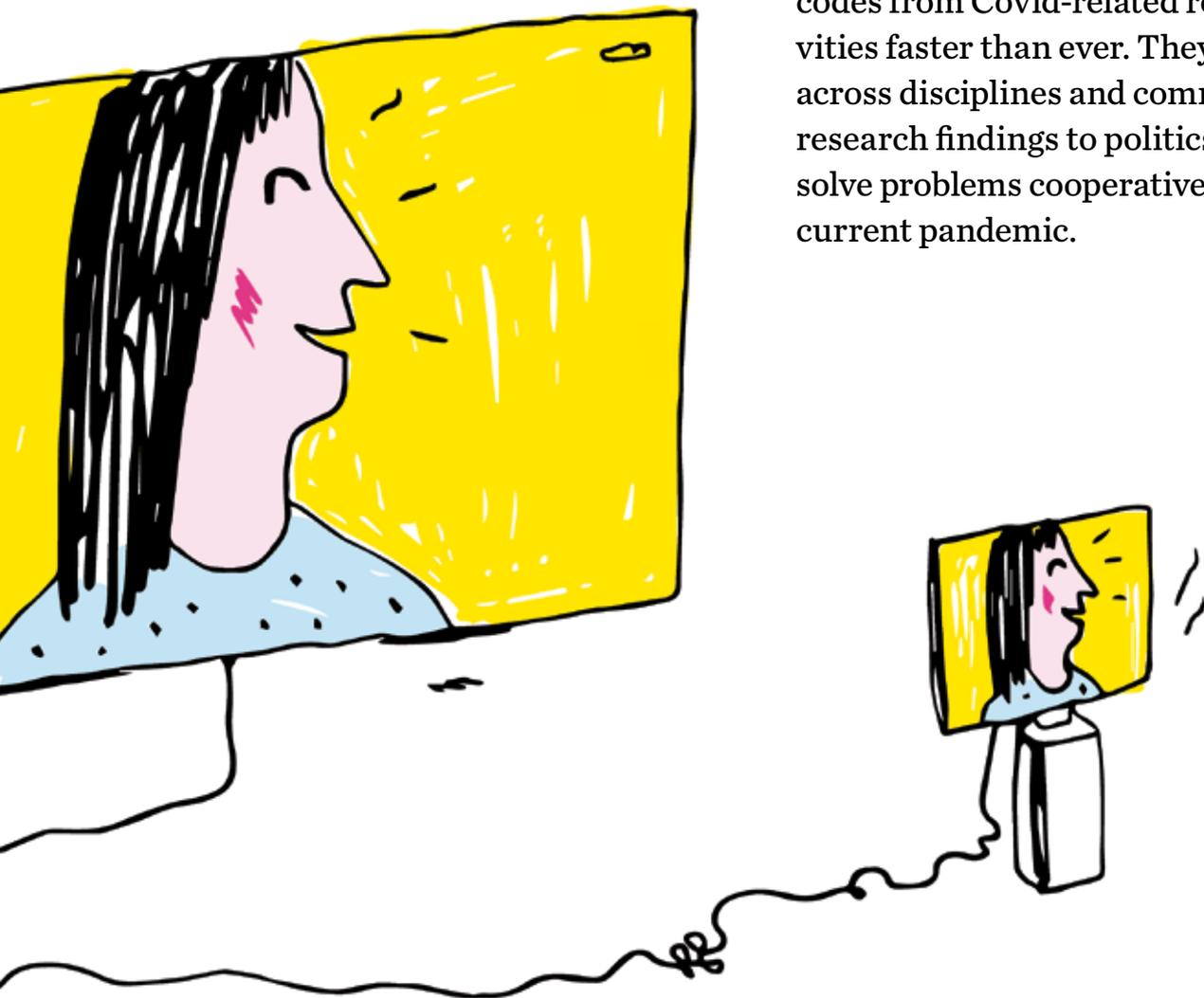
# Done anything for *Open Science* today?

*How the ZBW creates awareness for Open Science and supports cultural change towards Open Science in economic research*



**The initial situation**

The Covid-19 pandemic is changing our scientific communication immensely. We can see economists and social scientists sharing publications, pre-prints, data and codes from Covid-related research activities faster than ever. They collaborate across disciplines and communicate their research findings to politics and society to solve problems cooperatively, such as the current pandemic.



Society values this openness enormously, as shown by “[Wissenschaftsbarometer Corona-Spezial](#)” in April 2020. According to this survey, the trust of the German population in science and research increased noticeably during the first months of the pandemic. Whereas in 2019 only 46 per cent of the population said they trusted in science, in April 2020 73 per cent said so. After one year of Covid-19, the enthusiasm has diminished and disillusion set in. The survey on 10 December 2020 showed a descent in trust to a share of 60 per cent who say they trust fully or rather in science and research. On the other hand, the survey shows an increase of 16 percentage points, so something positive has happened.

As one of the first Open Science advocates in Germany, the ZBW wants to support this change towards openness and transparency. The ZBW aims to improve support services for Open Science practices and to tailor them to the needs of economists in Germany.

In this context, the ZBW undertook a national survey in 2019 to find out the role of Open Science and Open Science practices in the work routines of economists. One finding of the study was that economists agree with the general principles of Open Science, but they also register a high need for support regarding Open Science.

#### Task

The ZBW is an active driver of the international Open Science movement. Positioning the ZBW as an Open Science partner and an innovative information infrastructure for economic research in Germany and to engage in dialogue is the task for the communication team.

#### Strategy

A purely informational campaign with cogent factual arguments from the ZBW’s point of view would have little effect. That is why the ZBW consistently puts the focus on the perspective of economists. The strategy is “benefit-oriented communication”. The ZBW uses content marketing to generate attention and thus to make contact with the Open Science-related brand ZBW and its services.

The strategy addresses the following aspects:

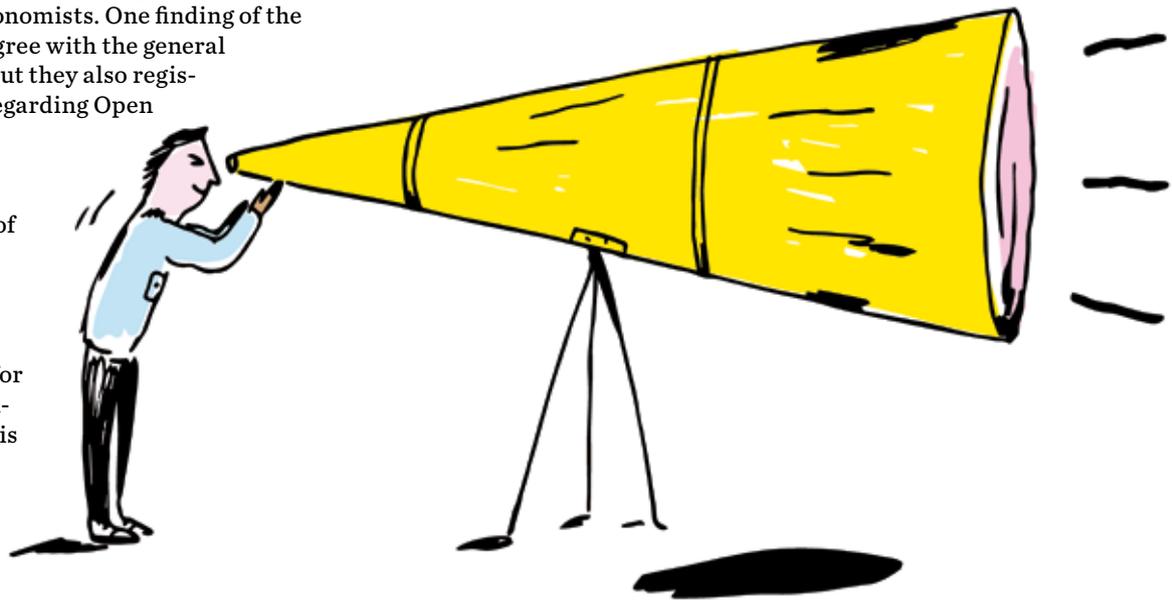
1. Positioning the ZBW as an institution with comprehensive expertise on Open Science and a focus on economics
2. Presenting the infrastructure offers of the ZBW and positioning the ZBW as an Open Science partner for economic research
3. Initiating dialogue about Open Science in economic research
4. Offering concrete support and relevant content

#### Implementation

Because of the Covid-19 pandemic, the rollout in May 2020 was communicated completely via digital channels. An expansion to 360 degree communication, especially the embedding of analogue live formats, has been prepared and can be launched as soon as conditions permit and universities are places for analogue encounters again.

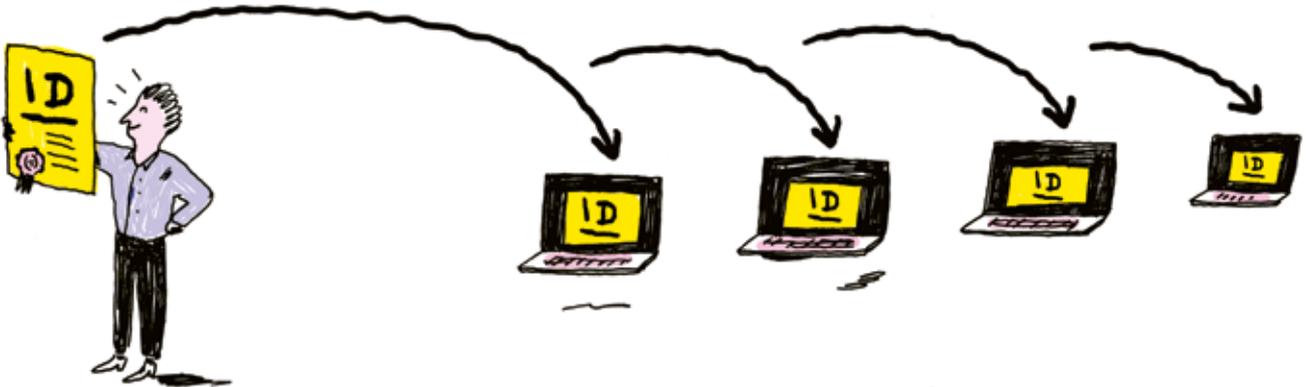
The central medium of information is the landing page <https://open-science-future.zbw.eu/en/home-english> and its content hub [Open Science Magazine](#).

The Open Science Magazine invites economists to discover science in the digital age and to learn about the Open Science experiences of their peers in individual stories. They get best practice reports from other economists, work sheets with practical tips, background information about recent Open Science developments in a podcast series “The future is Open Science”, and interviews with inspiring ideas for transformation.

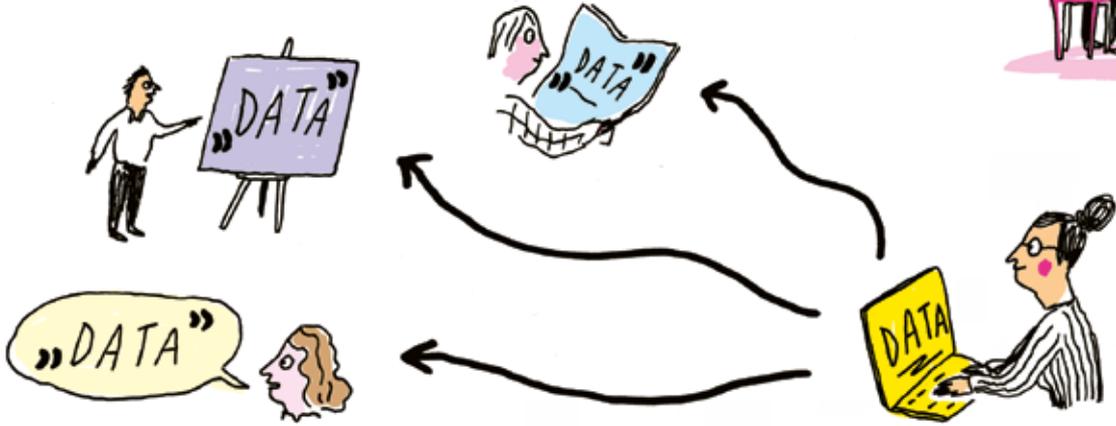


Distribution took place mostly as direct communication with an emailed newsletter and social media (Twitter, LinkedIn). The ZBW also distributed its content through cooperating multipliers such as economic associations, libraries, graduate colleges, faculties, student unions or press officers in economic research institutes. These are supplemented by contributions to economists’ blogs and journals that address individual aspects.

An essential part of the communication effort was and still is the involvement of renowned economists who engage as active advocates FOR Open Science. Their statements can be found on the landing page and are also used for communication via social media. ■



**Prospects**  
The strategy of content marketing will be continued in 2021 and new content types will be created. Digital live events, online seminars and a further activation of the economic community are also in planning.



# Optimising library workflows with Artificial Intelligence

## *Research and development in automated indexing – ZBW sets standards*

In 2020, Dr Anna Kasprzik and her team working on automated indexing (AutoSE) have reached a milestone. All requirements needed to assign keywords automatically in live operation have been fulfilled – from software to hardware to technical skills. The automated generation of metadata for subject indexing can now go live in regular operation.

“With our latest data release we have taken a quantum leap regarding quality,” says Dr Anna Kasprzik. “We could improve the methods so much that many more datasets pass the quality filters we set. Our results have also achieved much better evaluations during random samples taken by our experts. And with our new hardware we now have the resources at hand to develop our procedures and to try out approaches from Deep Learning which require much more processing power than statistical algorithms,” explains the computer scientist.

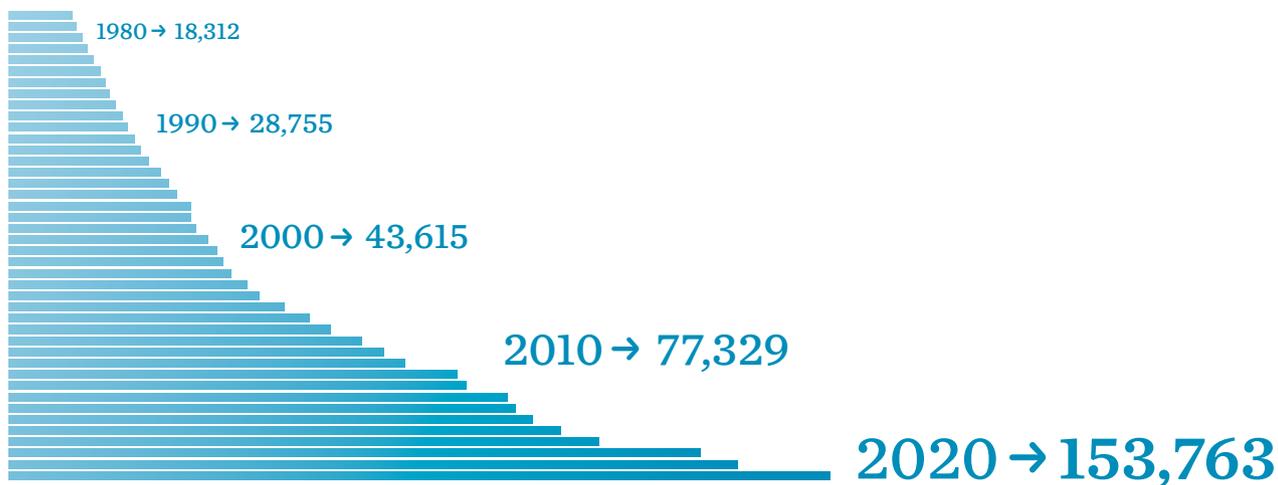
The ZBW is the only institution in Germany carrying out its own research on automated indexing in libraries.

The team uses the open source toolkit Annif and embeds it in its own developments. Annif offers a combination of proven tools from textual analysis and novel machine-learning

procedures. The toolkit has been provided by the Finnish National Library. The AutoSE team has tested the suitability of Annif for its own purposes and contributes to its further development in close exchange with the Finnish National Library, for example through the provision of its own algorithms for integration in Annif. The application of Annif is supplemented by surrounding processes for data processing and optimisation of learning procedures.

There are other institutions in Germany who work with Annif prototypes and discuss questions regarding its use, for instance the German National Library (DNB) or the TIB – Leibniz Information Centre for Science and Technology.

The ZBW and the Finnish National Library have developed tutorials in German and English. These tutorials have been presented in 2020 at the SWIB – Semantic Web in Libraries Conference and the Dublin Core Metadata Initiative Annual Conference. ■



## Publications (total)

*Growth of publications in economics (worldwide)*

Source [www.dimensions.ai](http://www.dimensions.ai)

*“What I have learned from Covid-19...”*

**Ekaterina Sprenger**  
Deputy Editor-in-Chief Intereconomics

