

#gutlebensdigit@l

Quality of Life in the Digital Age

Final results of the dialogue process, May 2019

Zentrum für
gesellschaftlichen
Fortschritt

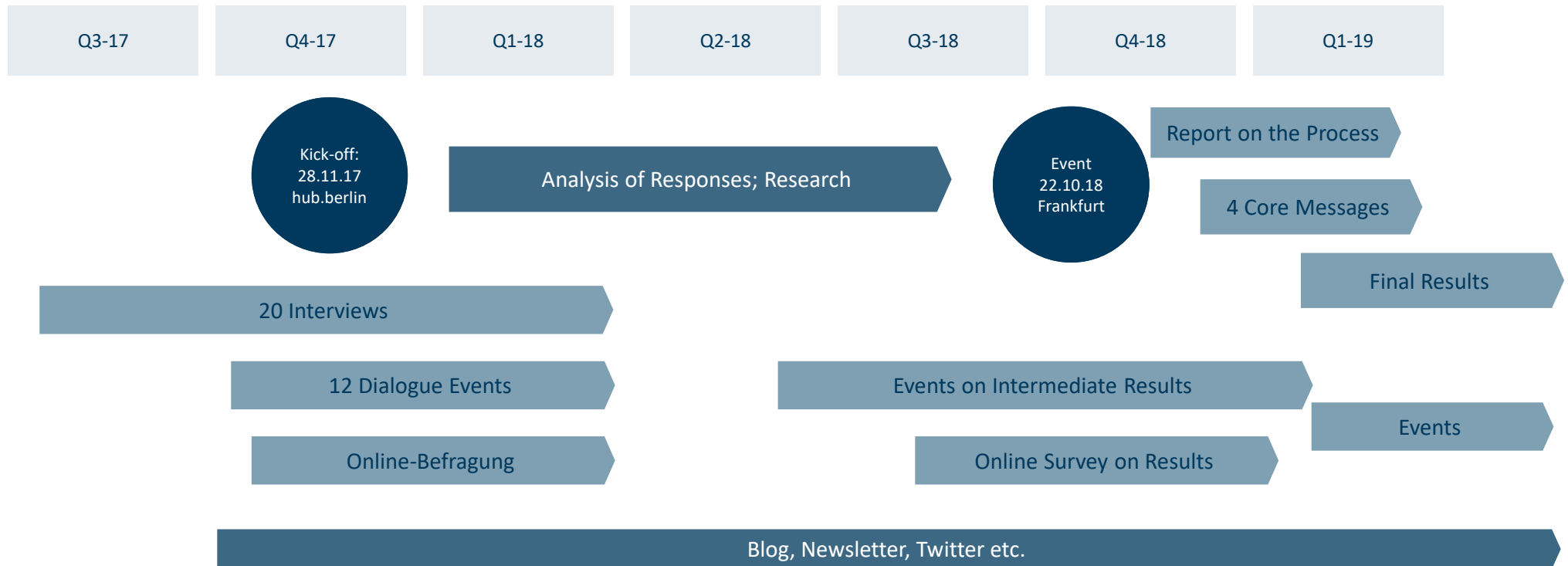




Guiding question: How can we shape digitalization to improve people's quality of life as much as possible?

The process

#gutlebensdigit@l



4 Questions in Phase 1

1. In which areas does digitalization already contribute positively to people's quality of life today?
2. In which areas does digitalization not yet have the hoped-for influence on quality of life or even negative consequences?
3. Please describe an ideal future from your point of view: where and how does digitalization have a positive effect on the quality of life?
4. Who would have to do what to move us towards this ideal future?

4 Questions in Phase 2

1. Is the description of the desirable future coherent in this way, or are important aspects missing?
2. Do the proposed indicators make sense and are they already being collected?
3. Do the recommendations for action fit the vision of the future or are important points missing?
4. Are there any other concrete projects that fit the vision of the future?

Result for 11 Topics

#gutlebensdigital@l

1. I: The Individual
2. Fundamentals
3. Work & Economy
4. Leisure, Arts & Culture
5. Education
6. Health
7. Environment
8. Transport & Mobility
9. *Housing (not enough material)*
10. Community
11. Security
12. Politics & Administration

each

Visions

Indicators

Recommendations

Projects

More information on methods, interviewees, analysis etc. on www.gutlebensdigital.de/?lang=en

1. I: The Individual

#gutlebensdigital

Desirable Future



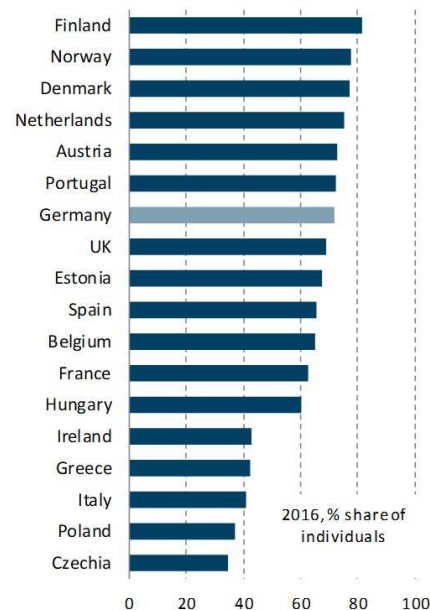
Human beings with their needs and abilities are central for the shaping of digitalization. Their participation in and contribution to the common good are important. Digital technologies are used to strengthen people's freedom, personal responsibility and self-determination. They support active participation in social and professional life. And they enable people to pursue their diverse individual needs, which can include recognition by others and entertainment as well as peace and privacy.

Moreover, digital technology promotes awareness of nature, and of one's own as well as other people's analog and digital identity. This contributes to more authenticity on the one hand and to more openness and respect for

other lifestyles on the other hand. People use digital communication in a self-determined and context-dependent manner and are aware of its effects on themselves and on others. Support services encouraging the training of skills for dealing with technology and its conscientious use in accordance with human needs are universally accessible and deployed. People are able to embrace digital opportunities without fear and in a disciplined manner.

[References to: 5. Education, 6. Health, 10. Community]

Manage access to personal information



Source: OECD

Recommendations for Action

- Companies/Organizations: Review to which extent your own activities align with this desirable future.
- Politics: Generate a checklist for regulatory projects from this vision.
- All: Promote impartial guides for the digital era.
- Individuals: Develop mindfulness and diverse competencies.

Suitable Indicators

- Digital technologies lead to [scale] 0 heteronomy to 10 self-determination in society.
- Digital technologies lead to [scale] 0 low sense of responsibility up to 10 high sense of responsibility in society.

Both indicators are currently being surveyed.

Indicator here on the left is from topic 11. Security

Specific Projects



Internet ABC

A playful and safe way to interact with the World Wide Web.

internet-abc.de



SCHAU HIN!

Informs parents and educators on how children grow up well with media.

schau-hin.info



Digitale Helden

Helps schools and families to use digital communication consciously and competently.

digitale-helden.de



Stiftung Digitale Chancen

Commits to equal opportunities for all people to access the internet and promotes their media literacy.

digitale-chancen.de



Verbraucherzentrale

Gives advice and information on current or recurring topics related to the internet.

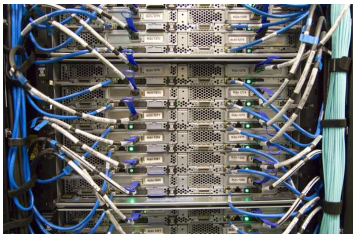
verbraucherzentrale.de/wissen



2. Fundamentals

#gutlebensdigit@

Desirable Future



In the future, the technical, human and legal prerequisites are sufficiently strengthened so that digitalization can promote the development and maturity of the individuals as well as their fruitful coexistence. The technical basis for this is reliable, fast, and low-threshold access to digitalization.

Digital technologies are used by individuals, companies, and policy makers to facilitate full participation and inclusion. A healthy balance is found between data protection and the added value of combining data. In order to keep the digital divide as small as possible, the needs of the disadvantaged are given special attention. All stakeholders are open to new ideas and experiments. Products, processes, and algorithms are as open as

possible so that users can understand them and monopolies can be avoided.

Successful digitalization enables a high degree of diversity, thereby strengthening innovation and resilience. To this end, decentralized structures are in place, which increases the reliability of the overall system. Agreement on common rules, norms and standards facilitates communication and cooperation between different actors.

[References to: 1. I: The Individual, 5. Education, 12. Politics & Administration]

Households with broadband access



Source: OECD

Recommendations for Action

- Policy: Expand infrastructure.
- All: Promote diversity and alternatives.
- All: Prefer open solutions.
- All: Consider decentralized solutions more

Suitable Indicators

- Percentage of households using broadband access: DE 90.3% (2018; NL 97.3%)
- Digital technologies lead to [scale] 0 adaptation to 10 diversity in society. (Currently being surveyed)

Specific Projects



Prototype Fund for Open-Source

Funds open source projects for an open and free internet with BMBF grants.

prototypefund.de



HOLO

Builds a decentralized cloud that belongs to and is operated by users.

holo.host



JUUUPORT e.V.

Together against cyberbullying and for more respect on the net: Young people help young people.

juuuport.de



Open Access

Scientific publications are freely available to the public.

bmbf.de/pub/Open_Access



Your Project Suggestion

Which projects with potentially broad Impact fit the vision?

Send us your suggestions.



3. Work & Economy

#gutlebensdigital@

Desirable Future



In the future, digital technologies are used more and more to facilitate communication, to connect people and machines, and to automate existing processes. Many companies, including small and medium-sized enterprises and start-ups, work well together online and offline with a well-developed infrastructure and a high level of data security. In this way, the same results can be produced with less time and natural resources. New, higher-quality products and services become possible.

Employees thrive as they are well prepared for dealing with new technologies and because a trust-promoting organization of work continues to give them an important professional role, regardless of whether they work on site, on the road or from home. The additional time and financial leeway brought about by automation, allow more creative and social activities as well as more leisure time. The expanding possibilities are also used to limit the negative personal and societal effects of change, such as job insecurity, by informing and training as many people as possible.

[References to: 5. Education, 6. Health, 8. Transport & Mobility]

Specific Projects



Claas Landmaschinen

Digital technologies used sensibly in many places.

claas.de



Konzernbetriebsvereinbarung Bosch

Result orientation instead of presence culture.

bosch-presse.de



GASAG Betriebsvereinbarung

Living company agreement for platform-based internal crowdsourcing.



Tauschbörse Arbeit

Exchange work for work in the neighbourhood without money.

xn--tauschbrsearbeit-swb.de



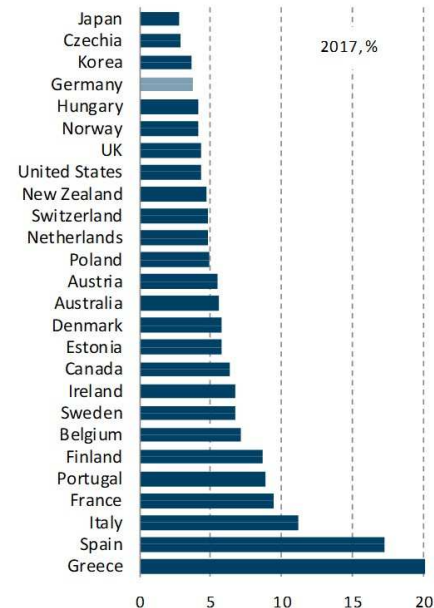
Time Banks

Software solution for local time-based currency to strengthen volunteering and cohesion.

timebanks.de



Unemployment rate



Source: OECD

Recommendations for Action

- Companies/Organizations: Move forward proactively and responsibly. Stay as open as possible to other organizations and perspectives.
- Politics: Enable infrastructure and diversity; support (further) education.
- Trade unions: Actively shape digitalisation.
- Individuals: Inform, experiment, train.

Suitable Indicators

- Unemployment rate: DE 3.7% (2017; JP 2.8%)
- *Has your company/employer initiated a forward-looking approach to digitisation or not? Scale] -5 does far too little, 0 ideal, up to +5 too fast.*
- *In the last 6 months, have you trained for at least 10 hours on work-related digitisation topics (in the company or privately)? Yes/No.*

4. Leisure, Arts & Culture

#gutlebensdigit@

Desirable Future



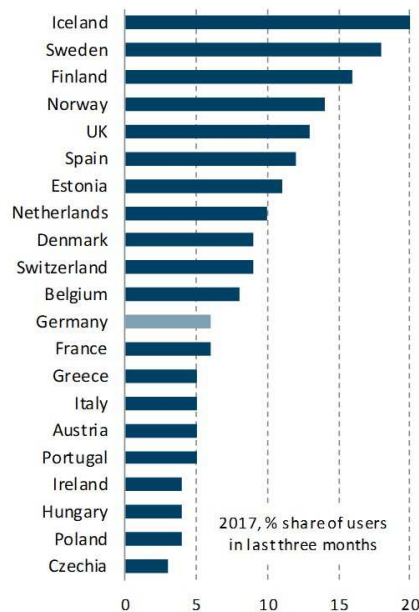
Digital technologies offer easier and more diverse access to other people, networks, cultures and leisure activities. In this way, cultural and artistic exchange and active engagement with culture become broader and more intensive.

For niche hobbyists and special interests, this opens up more opportunities and better interconnectedness. It will be easier for everyone to become creative and make & create. People can deal with the many possibilities in a self-determined way and remain in relationship with others.

They consciously choose between digital and analogue encounters, offers and times - and combine them wherever it makes sense. The providers use the possibilities of digital technologies for the co-creation and visualization of art.

[References to: 1. I: The Individual, 3. Work & Economy, 10. Community]

Individuals doing online courses



Source: Eurostat

Recommendations for Action

- Individuals: Dealing with online vs. offline possibilities. Become active.
- Provider: Use digital possibilities.
- Politics: Look at the breadth of offers (long tail).

Suitable Indicators

- *In your spare time, have you found a good balance between the use of digital offers and offline possibilities? Good balance - quite a lot online - not enough online*
- *Do you use digital applications to design your offline leisure time? Daily - once a week - sometimes - never.*

Specific Projects



Open Culture

Provides high quality cultural and educational media for lifelong learners.

openculture.com



Digital Städel

Digital exhibitions with multimedia digital art.

staedelmuseum.de



Maker Community

Making things together instead of just consuming.

maker-faire.de



Hackathons

Collaborative software and hardware development events.

hackathon.com



Companion2Go

Companions with and without disabilities benefit as a team from discounted tickets for events and travel.

companion2go.de



5. Education

#gutlebensdigital@

Desirable Future

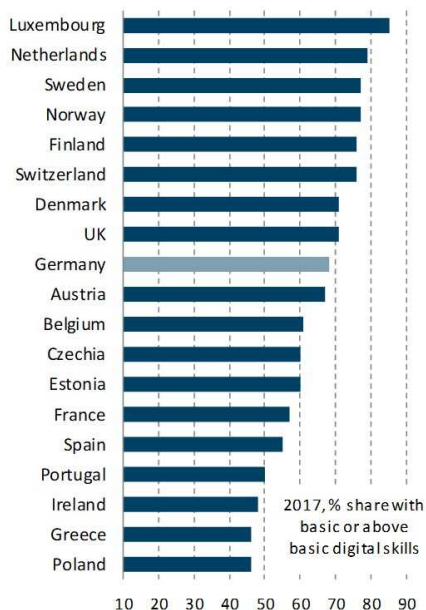


Digital technologies provide people of all ages and income groups with simple, affordable and individual access to reliable data and information. Digital and analogue possibilities are sensibly combined. The technologies create free capacities among educators, which are used for more individual, human support.

Low-threshold educational offers from kindergarten via family life to old age teach – in addition to classical and technical content – the conscious, mindful use of digital media. This increases people's competence in the use of different devices and applications. At the same time, people are able to critically assess the quality of various sources and their significance for their own lives and for living together with their fellow humans.

They can use data and information to derive the knowledge and wisdom that will make it easier for them to lead a self-determined, successful life without losing their orientation due to information overload. Personal goals can be interpreted more and more individually with the help of digitalization. The educational activities help people to collaborate and communicate with other people in order to be able to pursue these goals Collaboratively. The results show positive effects on people's life satisfaction, the competence level of employees in research and companies, but also on living together and democracy. [References: 1. I: The Individual, 3. Work & Economy, 10. Community]

Digital skills of individuals



Source: Eurostat

Recommendations for Action

- Individuals: devote time and attention to the topic. Critically question what one reads and hears.
- Schools & Teachers: Strengthen offers on digital topics. With independent external experts?
- Countries: continuing education for teachers.
- Business: Train employees.
- Public institutions and adult education centres: Teach digital skills at low thresholds.

Suitable Indicators

- Share of people with basic or above basic digital skills: DE 68% (2017; NL 79%)
- Share of people aged 16 to 74 who have taken an online course in the last 3 months: DE 6% (2017; SE/FI 17%)
- *Do you have the impression that digital education helps people in Germany to develop into independent personalities? Scale 0 not to 10 yes completely.*

Specific Projects



Irmgard App for Illiterates

The app enables young people and adults to train their literacy skills.

appirmgard.de



Open Educational Resources

Free learning and teaching materials with an open license.

oerworldmap.org



German Digital Library

The internet should provide free access to Germany's cultural and scientific heritage for everyone.

deutsche-digitale-bibliothek.de



Digital Salons

Supports in dealing with digital media and new technologies.

erlangen.de



Coursera

Provides universal access to the world's best education through online courses.

coursera.org



6. Health

#gutlebensdigital

Desirable Future



Digital technologies allow people to gain a deep and holistic understanding of their body and their mind. At the same time, the collection of large-scale health data, the use of artificial intelligence, and the controlled exchange of information between patients, practitioners and health insurers facilitates disease prevention and therapy.

On this basis, conventional therapy can transform into a personalized, comprehensive, and precautionary approach. This enables personal, individual and fast medical treatment at any time and in any location.

The availability of health data also accelerates medical research, leading to more efficient and reliable cures. There are clear rules on who can use health data, why, how and when. The right to informational self-determination regarding one's own health data is safeguarded.

[References to: 6. Education, 11. Security]

Specific Projects



Electronic Patient Record

Patient data is stored uniformly and can be easily retrieved with consent.



Healthbank

Global, citizen-owned platform for securely storing health data.

healthbank.coop



Vesta

The ventral inter-operability library of the German health care system.

vesta-gematik.de



HealthOn

Info- & rating platform for health apps.

healthon.de



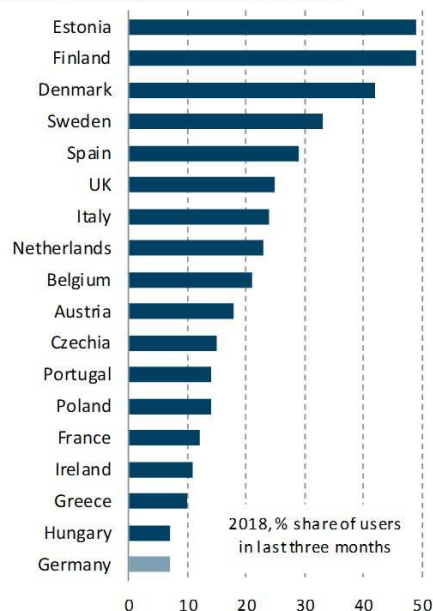
Selfapy

Support during psychological stress – anonymous, flexible and without delay.

selfapy.de



Online health and care services



Source: Eurostat

Recommendations for Action

- Policy: relaxation of the ban on remote treatment.
- Health insurance: More health apps in standard care.
- All: Standards for data protection & data exchange.

Suitable Indicators

- Percentage of people using health or care services online: DE 7% (2018; FI 49%)
- Digital technologies lead to [scale] 0 burden to 10 relief in society. (Currently being surveyed)
- *Do you use an app at least once a week to improve your health (sports, nutrition, sleep)?*
Yes/No



7. Environment

#gutlebensdigital@

Desirable Future



In the future, digital technologies will be intensively used to protect the planet's resources and improve human's natural environment. Software, sensors, open data and other means allow more transparency on issues that are important for people and the planet: from CO2 imprints, noise emissions and waste, to production chains, information on ingredients and the recycling of products.

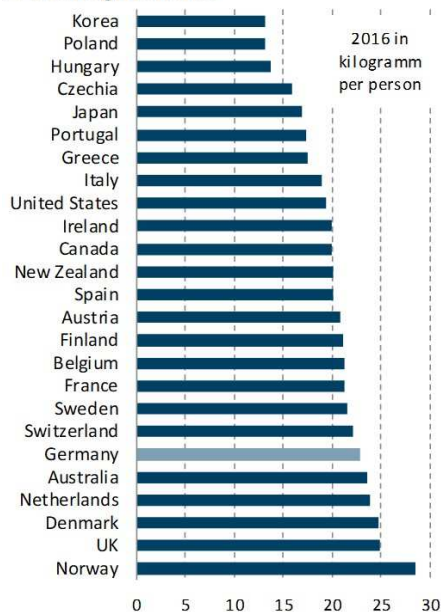
Digitalization is used to save as many natural resources as possible. This happens in consumption through the shift to dematerialized products (e.g. streaming instead of using CDs), more local production, increased sharing and the reuse of items all the way to transparency about energy consumption. People have found an

environmentally friendly way of dealing with easily available consumption, transport, and travel options. In that way, digitalization reinforces the impact of higher prices for non-renewable resources.

In all areas of production, care is taken to use as few non-renewable resources as possible and to do as little environmental damage as possible – including in the manufacture of mobile phones and computers.

[References: 3. Work & Economy, 5. Education, 8. Transport & Mobility]

E-Waste generated



Source: ITU

Recommendations for Action

- Companies: Consider environmental aspects in digitalization projects.
- Policies/NGOs: Demand or create transparency on resource use.
- Policy: Take environmental aspects into account in all digitalization projects to be funded.
- Individuals: Use information possibilities, know resource consumption.

Suitable Indicators

- CO2 emissions per person and year: DE 9.5t (2016; SE 4.5t)
- Electronic waste per person and year: DE 23kg (2016; KR 13kg)
- Did you use online information on environmental topics last month? Yes/No

Specific Projects



CO2-Calculator

Calculates my CO2 footprint and shows ways to reduce it.

uba.co2-rechner.de



Sharing-Platforms

Pumpipumpe promotes sharing and neighborhood.

pumpipumpe.ch



Next Farming

Digital tools for agriculture – less fertilizer, less cost.

nextfarming.de



Dreckpetze

Notifications on city cleanliness (e.g. Dortmund).

edg.de



SonnenCommunity

Generate, store and feed decentralized power.

sonnen.de



8. Transport & Mobility

#gutlebensdigit@

Desirable Future



Digitalization enables simpler, safer, faster, more environmentally friendly, more individual and interconnected mobility for people and goods. Mobility relevant data is permanently collected, evaluated and made available in various forms for individual and governmental mobility planning. Travel time, costs and environmental impact become more comparable. In order to reduce air and noise pollution, pedestrians, cyclists, public transport and rental systems receive special attention. To protect the data, providers and users work together in a spirit of trust.

The forward-looking use of digital technologies facilitates and requires diverse interconnection: The transitions between different forms of mobility are simplified – among other things through the expansion of the physical infrastructure necessary for this. Intelligent driver assistance systems increase energy efficiency, road safety and the performance of the overall system. Supra-regional urban development integrates mobility, living and working in an overall concept and accelerates the planning and implementation of infrastructures by linking data. This is supported by continuous citizen participation both online and offline. Digital possibilities such as teleworking, teleeducation and telemedicine are slowing down the growth of overall traffic. Electronic tickets for all modes of transport facilitate and accelerate payments. More and more people are in a position to use all these services competently and concentrated, regardless of location. [References to: 3. Work & Economy, 7. Environment, 9. Housing]

Recommendations for Action

- Policy/administration: Keep access barriers low for all forms of mobility. Consider resources/space consumption by forms of mobility.
- Companies/Organizations: Take account of access, environmental and spatial aspects in mobility projects (in addition to safety, economic efficiency etc.).
- Individuals: Consider resource consumption of mobility.

Suitable Indicators

- *Do you use sharing services for mobility?*

Specific Projects



Openstreetmap

Openstreetmap is an open navigation service.

openstreetmap.org



Mobility App

app that connects all forms of transport, including information on CO2 and noise pollution.



door2door

Creates an on-demand transport system that is efficient & economical and personal & fast.

door2door.io



Electro Scooters

Sharing of electro scooters like emmy or unu.

emmy-sharing.de



Volocopter

Electrical vertical take-offs should help cities to solve their growing mobility problems.

volocopter.com



10. Community

#gutlebensdigit@

Desirable Future



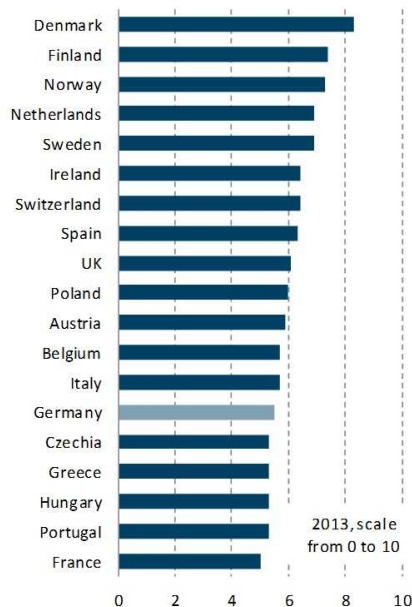
The increasing possibilities of communication and interconnection through digitalization allow people of all ages and income groups to access and participate in the community. Digital forums and projects are used in addition to analog meeting places to strengthen interpersonal trust and cohesion and to promote the common good.

Digital means of communication enable sharing and shaping, mutual help and exchange. They facilitate cooperation. People participate in target-oriented social discourses via digital and analog platforms. Diversity in society is supported by digital opportunities, as are equal opportunities, respect, tolerance, inclusion and the

integration of people. Despite the always existing filter bubbles and social comparisons, a peaceful, respectful and understanding communication is dominant in the digital space.

[References to: 1. I: The Individual, 2. Fundamentals, 12. Politics & Administration]

Trust in others



Source: EU-SILC

Recommendations for Action

- Individuals: Use options (see specific projects).
- State: Support meeting platforms.

Suitable Indicators

- Trust in fellow human beings [scale from 0 to 10]: DE 5.5 (2013; DK: 8.3)
- Digital technologies lead to [scale] 0 division to 10 cohesion in society. (Currently being surveyed)

Specific Projects



Stadt.IP

Open, free software as operating system or the city society: curated and little commerce (model: Stud.IP).

studip.de



helpmebro

A social app that quickly brings people in the area together to help each other.

helpmebro.world



Keiner bleibt allein

Targets the topic of loneliness and wants to bring people closer together again.

keinerbleibtallein.net



Magic Leap

Where digital respects the physical. And they work together to make life better.

magicleap.com



Openbook

Alternative social network.

openbook.social



11. Security

#gutlebensdigital@

Desirable Future



The digital space will be made as secure as possible through joint action by business, government and citizens. There are few violations of existing law, as the infrastructure is technically and legally up-to-date and misconduct is effectively prosecuted. The informational self-determination of citizens is the guiding principle for the handling of data.

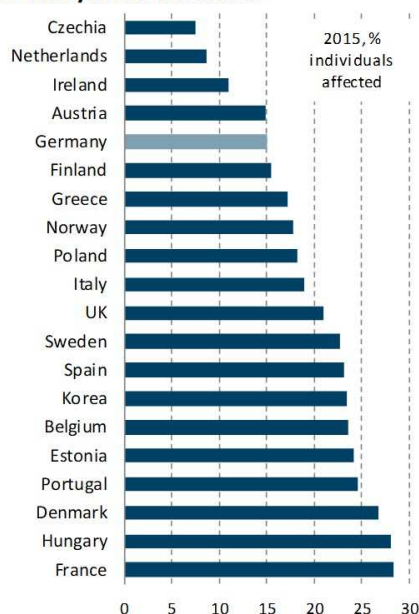
Users know who has collected which data about them and can have them released or deleted as required. This data sovereignty is supported, monitored and made accessible by government agencies, companies, consumer protection groups, educational institutions and civil society. Children and adolescents are – as in the analog

space – under special protection.

There is clarity as to who may invade the privacy of other people under what conditions: security authorities by court order, companies only with full transparency as to the conditions and with the consent of the users.

[References: 1. Work & Economy, 6. Health, 12. Politics & Administration]

Security incidents online



Source: Eurostat

Recommendations for Action

- Policy: Setting and enforcing rules in line with the current requirements. Promoting transparency and competence.
- Companies: Secure data protection and data sovereignty.
- Individuals: Increase digital security competencies.

Suitable Indicators

- Percentage of people who have experienced security incidents online in the last 3 months: DE 15% (2015; NL 9%)
- Share of internet users managing online access to their personal information: DE 72% (2016; FI 82%) – Chart in 1. I: The Individual.
- *Do you feel that you have control over your data in digital space, or that someone else has control? 0 someone else has control, 10 I have full control.*

Specific Projects



Bundesamt für Sicherheit in der Informationstechnik

The central IT security service provider of the federal government of Germany.

bsi.bund.de



Digitalcourage

Committed to fundamental rights, privacy, and a liveable world in the digital era.

digitalcourage.de



Medien Sicher

Provides digital life insight for students, parents, and teachers.

medien-sicher.de



Mobilsicher

The info portal for more security on smartphones and tablets.

mobilsicher.de



mimikama

Point of contact for information on internet fraud, fake news and computer security.

mimikama.at



12. Politics & Administration

#gutlebensdigit@

Desirable Future

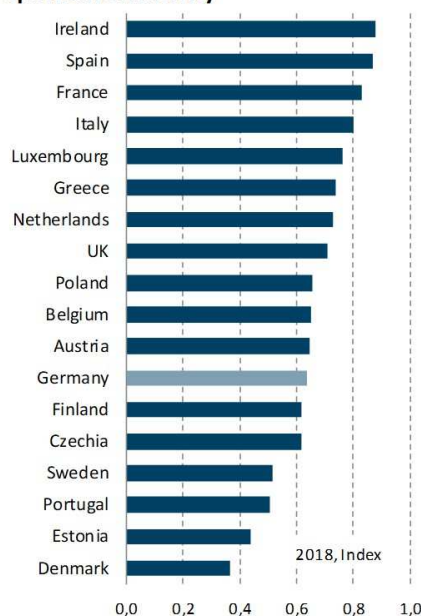


Digitalization is used to strengthen democracy, improve social decision-making processes and promote mutual trust. Well-informed and politically educated citizens, a free press and open politicians are engaged in fruitful dialogue offline and online at all levels, thus strengthening the collective intelligence of society. This makes the diversity of human needs, preferences and lifestyles visible so that these can be taken into account in decisions. New or adapted laws and regulations react in a timely fashion to the opportunities and risks arising from technological progress, e.g. in the education and health sectors.

Taking data protection and accessibility serious, digital technologies are used in as many places as possible: Citizens have online access to government services and information. With digitalization, the administration is simplifying its internal processes; it is linking and using more and more data to simulate future developments, prepare decisions transparently and measure their impact. Local diversity and experimental spaces are valued and promoted – and at the same time fruitful cooperation between the various levels of government – from local to global – is lived.

[References to all other topics]

Open Data Maturity



Source: European Commission

Recommendations for Action

- Individual: Inform yourself, take an interest, contribute.
- Politicians/administration: Strengthen digital literacy, utilize participation.
- Press: Free and critical reporting.
- Companies: Transparent commitment to the common good
Companies/Organizations: Review your own activities along this vision of the future.

Suitable Indicators

- Percentage of people aged 16 to 74 who have used the internet in the last 3 months to participate in consultations or votes on citizens' affairs or policy issues:
DE 12% (2016; IS 26%)
- Country maturity index for open data [scale 0 to 1]: DE 0.64 (2018; IE 0.88)
- *How satisfied are you with the digital offers of your city administration?* -5 to +5

Specific Projects



Open Government

Makes the work of politics,

opengovpartnership.de



Open Petition

Free and non-profit platform on which citizens can make a common concern public.

openpetition.de



Frag den Staat (Ask the State)

Portal for freedom of information.

fragdenstaat.de



Liquid Democracy

For a democratic culture, in which participation is a matter of course for everyone.

liqd.net



Ethical Digital Standards

Digital policy for cities that focus on people and want more open, transparent and collaborative governance.

barcelona.cat/digitalstandards



Zentrum für gesellschaftlichen Fortschritt e. V.
Dr. Stefan Bergheim
Eschersheimer Landstr. 55
D-60322 Frankfurt am Main

Tel: +49 69 788 098 291
Twitter: @gutlebindigital
Project: www.gutlebindigital.de
Host: www.fortschrittszentrum.de
E-Mail: stefan.bergheim@fortschrittszentrum.de



This material by the Center for Societal Progress (Zentrum für gesellschaftlichen Fortschritt) is licensed under a „Creative Commons Attribution Non-Commercial 3.0 Unported License“. The material may be shared and adapted for non-commercial purposes, but appropriate credit must be given. Credit: „Zentrum für gesellschaftlichen Fortschritt (2019): Final Results of the Dialogue Process #gutlebindigital, Frankfurt am Main“.

The study was carried out to the best of our knowledge and belief. But no responsibility is accepted for the accuracy or completeness of the information or assessments. Source of pictures: Page 1 © Shutterstock, all others free Pixabay