Workshop Report
“to be debated THE DIGITIZED CITY”

Funded by
Ministerium für Familie, Kinder, Jugend, Kultur und Sport des Landes Nordrhein-Westfalen

Workshop Agenda

Day 1 // Thursday 17 Nov 2016

11.00 am -1.00 pm	Session 1
11.00 am	Welcome
11.05 am	Information about ecce and its work
11.25 am	Information on the agenda and the expected output of the workshop
11.40 am	Introduction of the workshop participants (& how each subject area of studies is related to urban digitization)
12.00 pm	Introduction of Charles Landry and 'to be debated THE DIGITIZED CITY'
12.30 pm	Discussion: General introduction to urban digitization
1.00-1.40 pm	**Break**
1.40-5.00 pm	**Session 2**
1.40 pm	Reintroduction
2.00 pm	Group work: each group is assigned to a flipchart with one of the key topics on it
2.45 pm	Presentation of the group work results
4.00 pm	Further discussion & finding examples of digitized cities
4.45 pm	Outlook on next day's agenda and goodbyes

Day 2 // Friday 18 Nov 2016

10.00 am -1.30 pm	Session 1
10.00 am	Welcome & short revision of the results of day 1
10.15 am	Examples of digitized cities (between expectations and reality) – Current situations of urban digitization worldwide and in the Ruhr region
10.45 am	Collecting examples of digital innovation in Ruhr region cities
11.45 am	Discussion: Comparison of the development in the Ruhr region and other cities – what does the ideal world of digitization in urban areas look like?
12.30-1.30 pm	**Break**
1.30-5.00 pm	**Session 2**
1.30 pm	Reintroduction
1.35 pm	Discussion: How can we change cities by using digitization?
2.15 pm	Group work: Developing concrete ideas on how to change the urban life especially in Ruhr region cities
3.15 pm	Presentation of the group work results and discussion
4.00 pm	Drafting the manifesto
4.45 pm	Workshop evaluation
4.55 pm	Reminder: workshop output and goodbyes

Workshop Participants

Name	First Name	University	Field of Study
Dvorak	Clara	Witten/Herdecke University	Philosophy, Cultural Reflexion & Cultural Practice
Harder	Anita	Witten/Herdecke University	Philosophy, Cultural Reflexion & Cultural Practice
Huber	Jan	University of Duisburg-Essen	Cultural Management
Kory	David	TU Dortmund University	Spatial Planning
Kozlov	Anton	University of Duisburg-Essen	Urban Culture, Society and Space
Küsters	Rouven	University of Duisburg-Essen	Urban Culture, Society and Space
Lambertz	Stefanie	Heinrich Heine University Düsseldorf	Philosophy
Marcinek-Winski	Katharina	University of Vienna	Sociology
Obsiadly	Alexandra	University of Duisburg-Essen	Cultural Management
Schürmanns	Josefin	University of Duisburg-Essen	Urban Culture, Society and Space
Soto Salas	Marisela	University of Duisburg-Essen	Sustainable Urban Technologies
Stichmann	Rico	TU Dortmund University	Spatial Planning
Thein	Hannah	Stockholm University	Open eGovernment

The workshop was moderated by Charles Landry and ecce.

If you have any further questions, please do not hesitate to contact Hanemann@e-c-c-e.com!

Introduction

The workshop “to be debated – THE DIGITIZED CITY” organised by ecce took place on the 17th and 18th of November in the u-Raum in Dortmund. The aim of this workshop was to discuss different, positive and negative, aspects of digitization in urban space and to develop concepts and ideas how to act and make use of digitization in cities. ecce, founded in 2011 after RUHR.2010, is committed to directly supporting the actors from the creative economy as well as the development of creative locations and spaces. It furthermore promotes the transformation of the Ruhr region into a creative location of the future and makes it visible nationwide and all over Europe.

Day 1 – Chances and Risks of Digitization

On the first day, Nadine Hanemann from ecce welcomed the participants and introduced them to the agenda of the workshop and the requirements for the output they should hand in after the workshop. Before she gave the floor to the moderator of the workshop and author of the eponymous publication, Charles Landry, she presented ecce and its field of work.

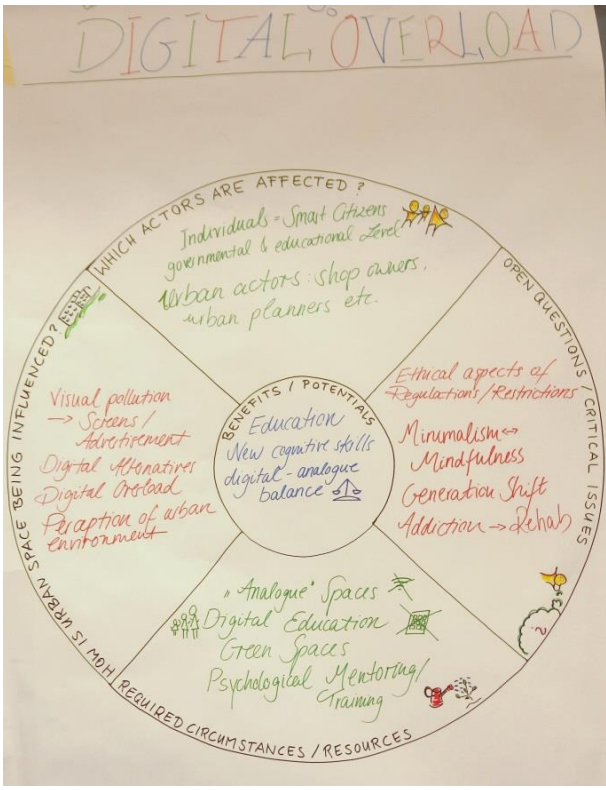
Charles Landry held an introducing speech on digitization he accompanied with a presentation of slides and which is summarized in the following. The impact of digitization is comparable to that of the Industrial Revolution. It is characterized by the possibility of producing products and services without (physical) resources. Together with the increasing movement of goods, people and money in the “nomadic world”, digitization of culture has led to a paradigm shift that affects how the human mind works. In digitization, the virtual exceeds the verbal and becomes increasingly powerful. At the same time, the visual can be irritating and the access to information can lead to an information overload. Digitization also changes institutions such as law, economy or politics. The question at hand is whether these changes are driven by technology or humans.

In his career, Charles Landry found five constants that humans yearn for: anchorage, possibility, connection, inspiration, and distraction. The constants that are addressed by cities and culture differed within the least 35 years with the stages of their development. Whereas the city 1.0 was a hardware-driven city that was accompanied by the culture 1.0 which relied largely on the repertoire, the city and culture 2.0 that emerged in the late 1980s were more dynamic and subtle. Urban engineering was challenged by soft place-making while art and commerce merged together. Now, in the city 3.0 the virtual and the real are blending, culture 3.0 is following the idea of co-creation, and the economy 3.0 has become a creative zone. These developments require a physical and organisational structure that differs from the previous one. To accomplish that, a flip of perspective on the city is helpful: the city can be seen as software with hardware attached to it. In this perspective, there is a need of cities to be open and innovative. This is why the city lab concept emerged, but it is difficult to get them to operate at scale. Effective examples of such city labs are located in Helsinki, Ghent, Amsterdam or Antwerp.

Group Work in the Afternoon

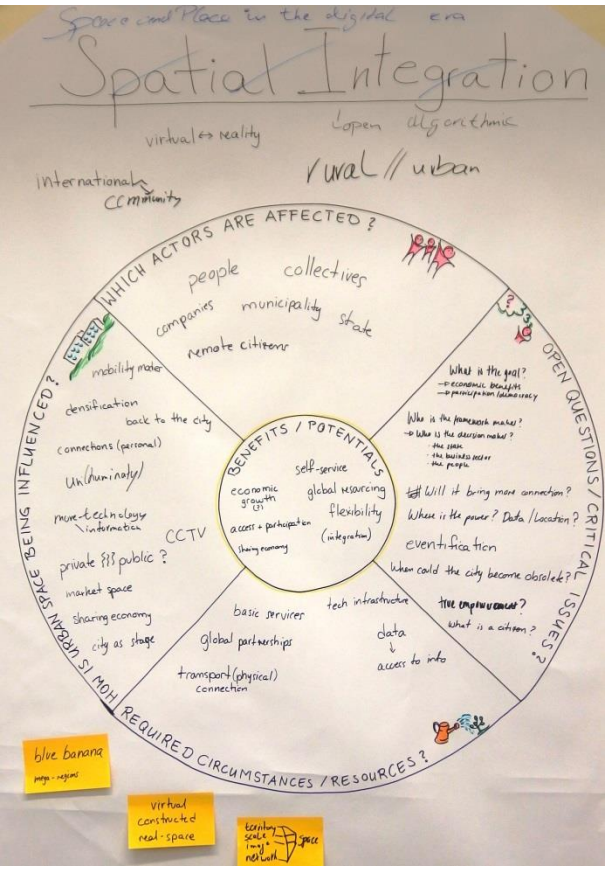
In the subsequent discussion, many topics were connected to digitization such as democratic participation, the power of data and information, cognitive overload, change of work life, space, and

legal issues. The moderator and the ecce team documented the statements, pinned them on a bulletin board and rearranged them during lunch break in four categories. These categories resemble the key topics that were defined by ecce member Nadine Hanemann in preparation for the workshop. From that overview of the discussion, the participants picked topics that they covered in poster presentations in the afternoon. These topics were slightly varying from the suggested structure and gave the participants space to follow their interests. The task was to identify benefits, critical issues, conditions, impacts and stakeholders of and for that subtopic of digitization.



1) Digital Overload

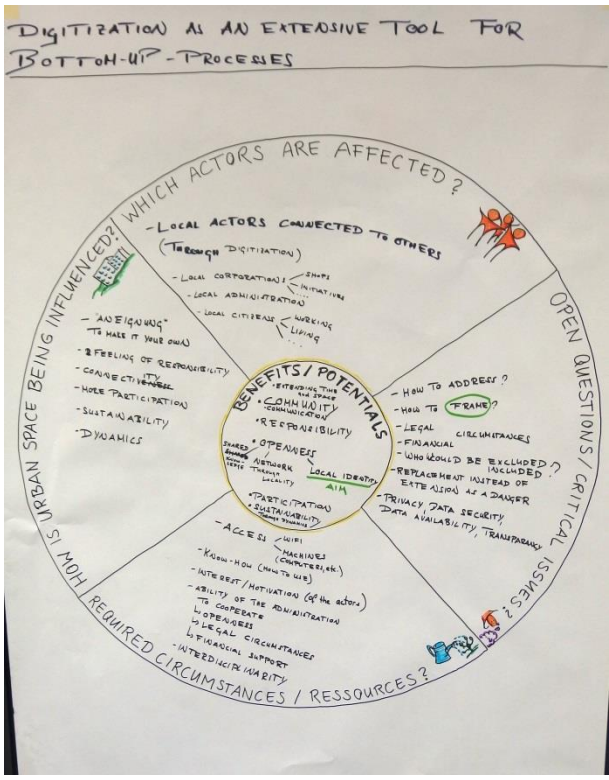
Digitization in the city can lead to a "digital overload" of its (smart) citizens through visual pollution, e.g. screens and advertisements or the increase in use of smart devices. Partly, this change is due to a shift of generations. Along with it, the perception of the urban environment has changed. It is at question whether citizens become more mindful and open or mindless and limited. Regulations of digitization have to be discussed from an ethical point of view, since it is a massive intervention into the everyday life of citizens. Other actors that are affected and responsible for the overload are shop owners and urban planners. Solutions to the overload can be the creation of "analogue" and green spaces, education in the field of handling digital technology or psychological mentoring. Thus, governmental and educational actors are involved in this process and can design alternatives to an increasingly digitized city.



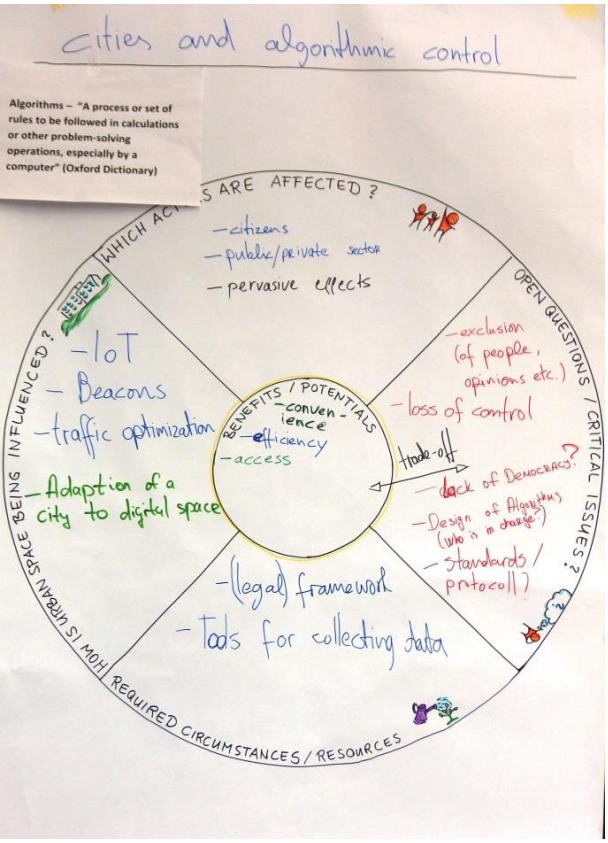
2) Space and Place in the Digital Era

More broadly, digitization changes not only places but also the concept of space, since physical distance becomes partially less important and virtual spaces rise. Global resourcing, the sharing economy and self-service emerge more strongly fostering economic growth, flexibility, participation and integration. To enable this, technical and informational as well as traffic infrastructure is needed. Moreover, partnerships across large distances have to exist beforehand to form a base for this spatial change. In the city, this development leads to a densification of connections, while the boundaries of private and public space become less clear. Technology and information are more prominent in these spaces. It is unclear how digitization might change the relationship between urban and rural regions and what it means for processes of internationalisation or isolation of smaller entities.

3) Digitization as an Extensive Tool for Bottom-Up Processes



The active use of digitization for bottom-up processes might help to achieve a greater sense of community, participation, responsibility and openness between the addressed local actors. Basically, there must be an interest or motivation in the idea to cooperate with other actors. Only if actors with different abilities work together, can they truly collaborate with each other, use synergies and first and foremost co-create. It is the willingness of the public administration to cooperate, open up and provide financial support that plays a crucial role within this dynamic. Moreover, adequate legal circumstances that enable such cooperation are needed. The urban environment can then be changed by the participating actors owning their evolving spaces. Yet, some actors might remain excluded even by this participatory approach.



4) Cities and Algorithmic Control

Considering exclusion, algorithms that shape and define what people can do seem to be a much greater threat for participation when they predetermine people's actions and perceptions and limit the exchange of ideas. This can be a loss of control and question the basis of our democracy: the ability to exchange ideas and opinions. On the other hand, they promise convenience, efficiency and access for those that use them. The urban environment is already shaped by algorithms such as traffic light systems and might be affected even more when the Internet of Things will be applied to the city. Apart from a coding framework, such interventions need also a legal framework. So far the uses and threats of algorithms depend to a large extent on the people who design them and how transparent their operation is made. Nevertheless, to make algorithms work, the right methods and tools for data collection are needed.

Every presentation of a group was followed by a lively panel discussion. Again, the statements were collected and made visible for everyone on the bulletin board.

Dilemmas of Digitization

Summarising the issues dealt with, Charles Landry identified different dilemmas concerning digitization:

- relative freedom ↔ control
- my data ↔ their data
- bottom up ↔ top down
- a seemingly vast network ↔ the restrictive echo chamber
- passive receipt of information ↔ active participant-maker, shaper & co-creator
- the digital wave ↔ 'digital detox' - psychological resilience
- constantly alert, the uncontrolled information dynamic ↔ restfulness
- digital natives ↔ digital immigrants
- Can we exist without the smart-phone?
- trade offs ↔ participatory adaptions ↔ standardized protocols

Day 2 – Digitization in the Ruhr Region

On the next day, Charles Landry gave a short reintroduction that led over to the presentation of digitization around the world, Europe, Germany and finally the Ruhr region by the ecce representatives Nadine Hanemann and Claudius Garten. Examples included the implementation of games in political decision-making, sensors for efficient road lighting systems or measurement of environment indicators, and apps for user-driven inventory of objects in public space. Further

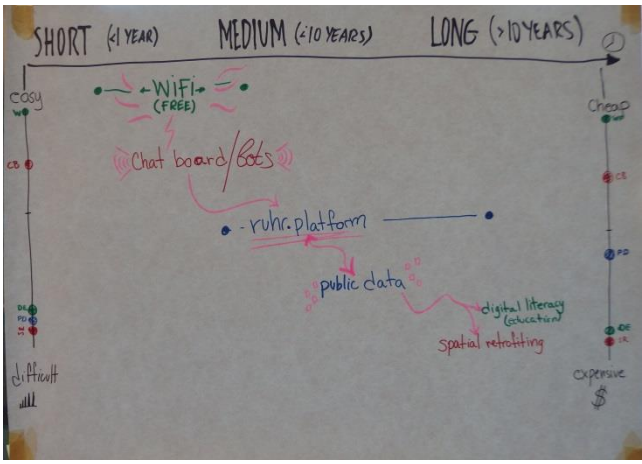
examples were presented by participants of the workshop. It was shown that digitization is mentioned in many cities in policy papers, yet the implementation remains unclear. It appears that there are great differences in the use of digital technologies within a city: to use smart technologies in the meaning of the word, analogue structures have to be smart, too.

After the presentation, the group discussed the state of digitization in the Ruhr region. The first point that was seen as a basic need for digitization was a widespread, seamless and free connectivity, provided that people have devices to make use of it. Secondly, the possibility of learning how to act in and use the digital world is essential to the group. Both of these demands require the acceptance of citizens, which is at the bottom of digitization. Therefore, legal issues need to be clarified, especially that of privacy. On the other hand is the necessity of open data to identify problems and to offer solutions to the population. Only if actors, such as the political administration, adopt digital technologies and transfer analogue actions into the digital world can it be called digitization.

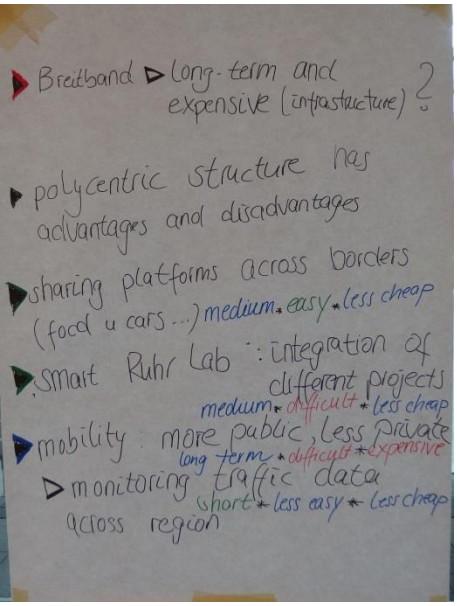
"metropolradruhr", "RUHRAUTOe", both concepts of shared mobility that can be used across cities of the Ruhr region were the first examples that were called a "highlight". "freifunk", a nation-wide community that sets up routers for free Wi-Fi was another example of how digitization works in the region. "kumpelkrefeld" (which was developed in Dortmund) was shown as an example of the existing knowledge and its potential for administration. Although it was not directly addressing digitization, the project "InnovationCityRuhr" in Bottrop was thought of as a good example of a technology-driven city lab. Finally, "BORISplus", an app to look up the latest standard ground values was seen as an effort towards digitization in North-Rhine Westphalia.

Building on these results, groups of participants developed strategies to attack some of the mentioned problems and at the same time had to evaluate their own ideas regarding their feasibility across three different dimensions: costs, duration and difficulty.

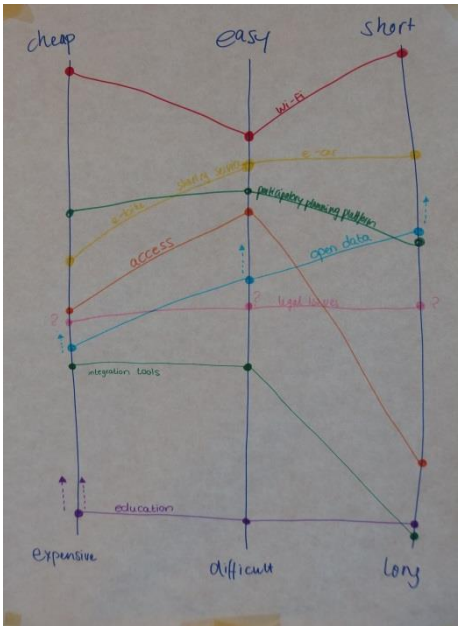
Ideas from the group work on Digitization in the Ruhr Region



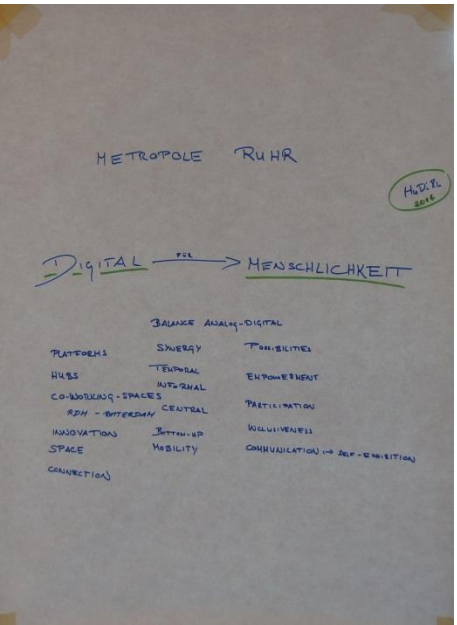
The installation of free Wi-Fi seemed to be very feasible in general and compared with the option of broadband connectivity. Platforms for interaction, the spread of information and sharing resources were thought of as rather cheap, but take more time and efforts to build, since they depend on the involvement and activity of people. Less digital and more feasible were the suggestions of co-working spaces in vacant places that could serve as creative hubs and have a pioneering role. Platforms could also be used to enable participatory planning.



The idea of a "smart Ruhr Lab" was proposed that first of all bundles and integrates the knowledge and experiences of different actors with the implementation of innovations, but also serves as a coordinating mechanism for further trials. Actors could be scientists as well as activists or citizens. In contrast to that, the pure open data approach was perceived as less expensive, yet difficult, since it needs skills in and technology for data collection.



One group formulated the concept of a "humane digitized Ruhr" in which digital technology should be a support for humans and not something that they have to adapt to. However, the great challenge of digitization remains education, since it takes time and needs money and ability. Whereas most of these ideas addressed the present, the retrofitting of space or the adaption of traffic infrastructure to digitization were seen as possible outcomes of a distant future.



After dealing with the topic of digitization for two days, Charles Landry picked up the presented ideas and encouraged the group a first draft of a manifesto. This and other workshop outputs by students will be made available. When the workshop agenda finished, many participants stayed and kept on discussing. The atmosphere during the whole workshop was very positive and constructive as well as the feedback from participants. For the future, ecce is planning to organise similar events for students at which they can use their analytic skills and develop new ideas in other subject areas that ecce is working on.

Impressions of the Workshop

"The Digitized City" Manifesto

The participants of the "to be debated THE DIGITIZED CITY" workshop organized by ecce in Dortmund on the 17th and 18th November 2016 in Dortmund have concluded that:

Digitization is a powerful force that exerts a gravitational pull on how places and our cities will evolve. There is light and shade in these developments. Much of this has immense benefits in terms of convenience, connectivity, collaborative possibilities and the ability to build communities afresh. Yet at the same time there are dangers, such as invasion of our privacy, information overload, social exclusion or technological dependency. This requires cities, regions and states to guide its evolution so that digitization can become the best it can be for the social, economic and cultural life of our cities.

There is a series of claims of which we believe that they maximise the potential of digitization by solving the dilemmas (expressed in the workshop report). They include:

- Our main message to the decision makers of the Ruhr region is to focus on a **Human Digital Ruhr**. The region should take a human centred perspective to its digital development.
- The ability to fully participate in the digital world is a human right. Fostering digital literacy and addressing the digital divide is a priority.
- People have rights but also the responsibility to engage with the digital world.
- Work, jobs and working environments are changing as the digital world evolves with speed. There is a need to create the new skills for new times. This will require a strong digital literacy strategy and programme.
- Creative and positive relationships and projects should be instigated between digital natives and digital immigrants in order to develop more balanced communities.
- Promoting policies of transparency and understanding of the algorithms and codes that lie behind the digital world is crucial.
- The Ruhr region should advocate the movement towards a 'My Data' approach whereby we move from **corporate control of personal data to shift to individual data control so we become 'the CEO of our own data'.**
- The region should encourage people and communities to become shapers, makers and co-creators of their environment so moving them from being passive recipients or being controlled by data to becoming more active participants.
- The Ruhr region needs a coherent digital strategy embracing all sectors and all disciplines and all parts of the region in order to fulfil potential. There is great room for improvement in terms of making the most of digitization in the Ruhr region. It is lagging behind many other areas.
- City making will be shaped by the digital era. This requires the Ruhr region both to retrofit existing infrastructures as well as to explore the new forms of city that take into consideration future needs and generations.

- There should be an aim to create a dynamic, adaptive, organic urban eco-system that engages both with the human made and natural environment.
- There is a need to balance the cascading waves of digital information with the ability to switch off and to create spaces and places where we can experience a digital detox. This involves providing opportunities to build psychological resilience.
- The digital infrastructure in the Ruhr region should as a principle be de-centralized for it to be more resilient against possible shock.
- The current legal and regulations regime do not allow the region to make the most of the digital era.
- To harness the full potential of the digital era requires a more citizen focused and collaborative administration.
- The blending of the virtual, augmented reality and the real increasingly shapes our sense of identity and belonging. The Ruhr region needs to prepare for how locality is shifting towards a more global sense of commonality and citizenship.