Short Paper

City of the future 2030: building sustainability digitally. Social participation in the digital world

Cidade do futuro 2030: construindo a sustentabilidade digitalmente. Participação social no mundo digital

Theresa Kocher[1✉], Markus Marquard[2]

Abstract

The city of Ulm was selected as one of eight "Cities of the Future" throughout Germany in a nationwide competition organised by the Federal Ministry of Education and Research (BMBF). After an ideas and planning phase, the visions of the first two phases are implemented on site in the third phase. The goal is to develop digital and innovative solutions for a sustainable and liveable city together with the citizens. The Centre for General Scientific Continuing Education (ZAWiW) of the University of Ulm, as a partner for the thematic field of education, focuses on social sustainability and develops various educational and participation formats together with other actors as well as citizens in and around Ulm. Digitalisation now reaches almost all areas of life. At the same time, older people in particular are often excluded from participation opportunities due to a lack of access or skills (digital divide). The aim of the project is to build bridges and enable people to use digital technologies in a self-determined way – because social participation increasingly requires digital participation. Approaches were tested together on how "digitisation from below" can succeed in the city. The "Virtual Neighbourhoods" and the "Digital Mentors" are presented here as examples of programmes that have been sustainably anchored and established in the city thanks to the cooperation of various actors. These projects show that it is above all human encounters that reduce fears, give courage and offer support. Digitalisation is not only a technical, but also a social issue. It is therefore all the more important that everyone has the opportunity to help shape digitalisation.

Keywords: Participation. Digital Divide. Age. Smart City. Sustainability.

[1,2]ZAWiW (Center for General Scientific Continuing Education) of Ulm University, Ulm, Germany. ✉theresa.kocher@uni-ulm.de

Introduction

In the "Future City Ulm" project, digital and innovative solutions for a sustainable and liveable city were developed in four so-called "real-world laboratories" (WBGU 2016: 512) together with citizens (Stadt Ulm 2019). The focus in the area of education was particularly on social sustainability. In view of the increasing influence of digitalisation in all areas of life, this is not only about opportunities for participation, but also about questions of equal opportunities, generational and gender justice.

The goal of the education area was to create awareness of the advantages and disadvantages of digitalisation, to teach digital literacy and to enable participation for all people so that no one is left behind. With the "Virtual Neighbourhoods" and "Digital Mentors", two projects were created in Ulm to enable social participation in the digital age.

Materials and methods

Nowadays, social participation increasingly requires digital participation (DIVSI 2016: 76, Dettling 2019; BAGSO 2021). In addition to technical equipment, this also needs the financial resources for internet access as well as the competence to operate the corresponding devices and applications.

The number of so-called "onliners" (i.e. people with internet access) has continued to rise in Germany in recent years. According to a study by Initiative D21 (2022), around 91 percent of the German population used the internet in 2021 – compared to 72 percent in 2010 and 37 percent in 2001.

However, the so-called digital divide (van Dijk 2020) is not only between people with and without internet access (first-level digital divide), but on a second level between different user types with diverse competences (Brandtzæg et al. 2011: 123; DIVSI 2016). This results in different participation opportunities (third-level divide). For example, there are more women than men among the offliners ("digital gender gap"), more older than younger people ("grey gap") and more people with low than high education (Initiative D21: 2022; BMFSFJ 2020: 9–10). This is also confirmed by the SIM study ("Seniors, Information, Media") with a survey of people over 60 in Germany, among whom the proportion of offline users is not only 9, but 19 percent (mpfs 2022).

On the one hand, digitalisation opens up many opportunities and possibilities; at the same time, it can also cause or reinforce inequalities if it is not possible or successful to use the technology (Pelizäus-Hoffmeister 2013: 154).

Virtual Neighbourhoods

The project "Virtual Neighbourhoods" was founded in April 2020 during the first Corona Lockdown by an initiative with different actors in Ulm, when the meeting places in the districts were closed and there were also contact restrictions in the private environment. On one side, existing offers in the quarters could be continued. At the same time, new digital event formats were created – for example, game afternoons, lectures or information evenings for families.

By shifting the meetings into the virtual space, people could participate in the social life in their neighbourhoods from home. This offers advantages not only during the Corona pandemic, but also, for example, for people with limited mobility or for parents who can attend events together in the evening without a babysitter.

Each of the five districts in Ulm was provided with a Zoom account. The use of the accounts and the design of the offers is largely up to the professionals (e.g. resource and neighbourhood managers or social workers) in the quarter and is oriented towards the different starting conditions, resources and target groups on site. ZAWiW qualifies the experts with several training courses and the possibility to contact the institute at any time with questions.

Digital Mentors

Participation in virtual neighbourhoods requires access to the digital world. To ensure that people without the necessary technical skills are not excluded, the Digital Mentors project was initiated in 2021 as a joint project with many stakeholders in Ulm.

The digital mentors offer free consultation hours in the districts and thus create a local contact point where people can drop by with their questions about technical devices and applications. The aim is to provide people with low-threshold access to digital services. This not only opens a door to the digital world, but also creates sustainable new opportunities for participation. ZAWiW trains the volunteer digital mentors and supports them with regular courses and exchange meetings.

Results and discussion

After one year, guideline-based interviews were conducted to find out about the experiences of the staff in the Virtual Neighbourhoods and the volunteers of the Digital Mentors.

Virtual Neighbourhoods

Overall, the participants reported increased self-efficacy and that both the main employees in the districts and the participants in the events had learned a lot.

The professionals in the districts were mediators in many cases: Through their contacts to the local people, they were trusted persons and answered questions about the technology with a lot of patience, understanding and empathy. Often, they first acquired the necessary knowledge and skills themselves, which they could then pass on to the citizens. Thus, the number of participants in the formats increased; for the people, the virtual events became more familiar and the use of the technology more natural. At the same time, it became clear that participation in the virtuais meetings was still a hurdle for some people.

The virtual neighbourhoods did not take place detached from the reality in the districts, but brought about changes on the ground. For example, at the virtuais meetings for families, ideas were developed together that were then put into practice in the neighbourhood.

Digital Mentors

While the offer of the digital consultation hours had to get around at first and sometimes no one or only a few people came to the meeting, the consultation hours at the four locations in Ulm are now very well received. Most people come with a mobile device (smartphone, tablet). Some of them

already know how to use it; others are using it for the first time at the digital consultation hour and have the mentors help them set it up.

The volunteers report consistently positive experiences and that they can help people who are very grateful for the support with their individual questions. In addition to technical skills, the digital mentors also mention patience and empathy as important qualities for their work. The mostly elderly people trust them and experience not only technical support but also encouragement to try out their own devices. Many people now come regularly to the consultation hours, practise at home, bring more questions the next time, become more confident and make progress every week.

Conclusion

There are different approaches to bridging the digital divide – even if it can never be completely closed. The practical examples in the real-world laboratory of education show that it is above all human encounters that reduce fears, encourage and provide support when using digital technologies. After all, digitalisation is not only a technical issue, but above all a social issue that affects society as a whole. Therefore, not only technology, but human interaction should be in the foreground in order to create a sustainable and liveable future together.

Acknowledgments

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