Hochschule Bremen
City University of Applied Sciences
Institut für Digitale Teilhabe

Inclusive Research

„Digital Accessibility in the Workspace Through Participatory Evaluation” – Bringing developers and target group together

Content

The IDT – How it came to be

The Institute – Goals

Digital Accessibility in the Workspace Through Participatory Evaluation

1 The IDT – How it came to be

It all started with one question:

What do you do in 2020 when you are a young professor, whose vision it is to scientifically research and further digital accessibility?

You find a partner for the same cause and found a brand new institute. Thus in 2021

The IDT – The Institute for Digital Participation

was founded by:

Prof. Dr.
Benjamin Tannert

Prof. Dr.
Henning Lühr

1 The IDT – How it came to be

Heads of Department

Prof. Dr. Benjamin Tannert
(Computer Science)

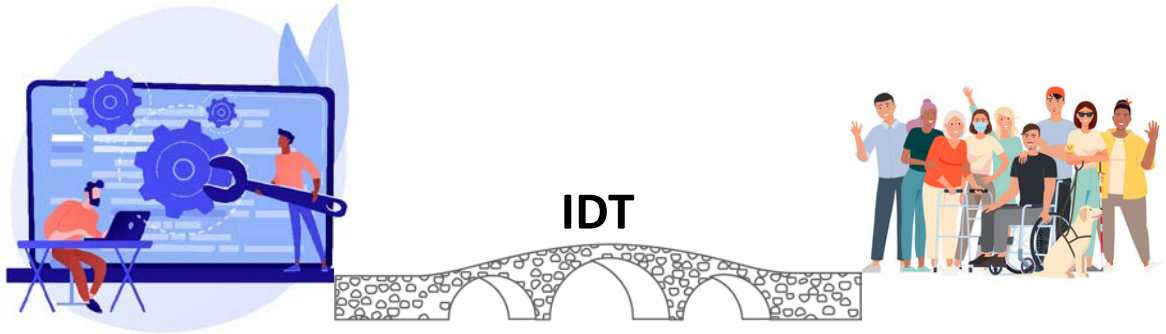
Prof. Dr. Henning Lühr
(Economics and Administrative Science)

Dr. Irmhild Rogalla
(Social Science)

2 The Institute

Our mission:

- Promote equal digital participation, particularly in the workplace
- Ensure accessibility of IT systems and digital applications
- Develop digital assistance systems
- Bridging the gap between users, developers and key players in government, science and communities
- Enhancing digital accessibility in communication, technology and in organization



2 The Institute

Our goal:

- Empowerment of differently abled people, putting this into practice as a team of multiple abilities
- We strive for equal participation of all persons in the digital realm, but especially the workplace
- All our processes are inclusive

Bad examples without Participatory Design:

2 The Institute

Our approach:

- Inclusive, participatory process
- Multidisciplinary, multi-abled team crafting accessible software, systems, and media
- Involving differently abled individuals at every development stage
- Prioritizing user needs in all product creation
- Designing modern digital technologies with accessibility and usability as primary considerations from the start

3 Digital Accessibility in the Workspace Through Participatory Evaluation

Project summary

- January 2022 – December 2026
- 7 scientific employees
- Interdisciplinary team (engineering sciences, social science, …)
  - In two ways
- 3 place of work relocations

3 Digital Accessibility in the Workspace Through Participatory Evaluation

The Challenge

Digital accessibility is frequently overlooked in technology design, with developers often lacking awareness of special needs considerations

The Solution

Incorporate feedback from diverse users, particularly individuals with disabilities, at all stages of digital technology development

The Goal

Establishing a comprehensive model for developing digitally accessible technologies through participatory evaluation feedback

3 Digital Accessibility in the Workspace Through Participatory Evaluation

Approaches

Open Accessibility in Open-Source Communities

- Collaborating with specific OS communities
- Shifting focus towards addressing accessibility issues
- Gathering and providing user stories from individuals with special needs
- Sharing best practice examples

Participation and Empowerment

- Everybody should be enabled to use a modern workplace
- Conducting fundamental research and data collection on barriers faced by people with disabilities
- Using data to optimize digital workspaces for inclusivity
- Collaborating with diverse users, developers, testers, and team members

3 Digital Accessibility in the Workspace Through Participatory Evaluation

Approaches

[1]

Fundamental Improvements instead of individual workarounds

- Users with special needs usually have to find individual workarounds instead of being offered accessible solutions
- Software updates often eradicate those individual solutions
- It is frustrating, time intensive, expensive and exhausting

Creating change through

- Developing and testing evaluation processes to test software in regards to accessibility
- Including testers with special needs in all parts of the process
- Evaluate existing processes in software development from start to finish
- Offering solutions

3 Digital Accessibility in the Workspace Through Participatory Evaluation

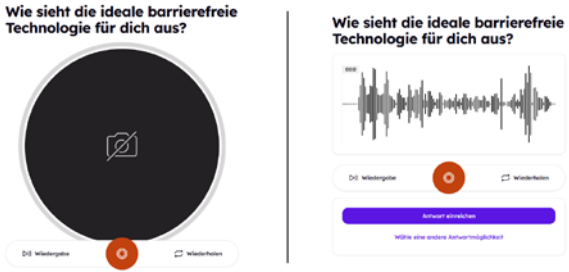
First findings and solution approaches

Interviews/Feedback

- Developer have less knowledge about digital accessibility (WCAG or BITV)
- Consideration of accessibility
  - OpenSource: interested individuals
  - Proprietary Software: Only on explicit customer request
- Missing link to target group (different reasons)
- User have difficulties formulating their requirements

Accessible Digital Cultural Probes Platform (in development)

- Way to communicate requirements/give feedback in your own way
- Can be used in different contexts
- Not just for people with disabilities



High-ranking visitor at the IDT

Visit of Jürgen Dusel

The Federal Government Commissioner for Matters relating to Persons with Disabilities

In pictures there is always one person who is out of line

Do you recognise which person?

Someone always doesn't look at the camera :-)

"10 % of all people cannot work without digital accessibility,
40 % need aspects of it, but it is beneficial for 100 % of all users“

Lars Müller, State Disability Commissioner, Bremerhaven, 2019

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Thank you!

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List of sources

[1] Horia Varlan from Bucharest, Romania - Telephone booth in the way of bicycle tracks, CC BY 2.0

[2] A. Doppler, „Strategieentwicklung mittels „Cultural Probes“, Bibliothek Forschung und Praxis, Bd. 47, Nr. 2, S. 286–296, Juni 2023, doi: 10.1515/bfp-2023-0009.