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Business Research Unit



The Eighth International Conference on Universal Accessibility in the Internet of Things and Smart Environments, SMART ACCESSIBILITY 2023,
Special track: Digital Accessibility (Chair: Prof. Dr. Monika Maria Möhring)



Digital Accessibility in Multinational Enterprises: a Meta Study

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April 2023

Resume of the presenter

Andreas Deitmer

Work experience

Sep 2016 - Present: Vice director at BliZ - Study Centre for Blind and Visually Impaired Students | THM - University of Applied Sciences, Gießen (Germany)

Sep 2010 - Present: Research assistant at BliZ

Sep 2016 - Present: Director at TransMIT project division for digital accessibility and rehabilitation technology, Gießen (Germany)

Education and Qualifications

Jun 2022 - Present: Ph.D. Candidate, Iscte Business School, Lisboa (Portugal),
Specialization field: Strategy and Entrepreneurship

Master of Science, Degree course at THM: Computer Science

Bachelor of Science, Degree course at THM: Business Informatics

Other activities

- Voluntary work in the self-help association (Association of Blind and Visually Impaired, Germany)
- S. Voß-Nakkour, L. Rustemeier, M. M. Möhring, A. Deitmer, and S. Grimminger, Digitale Barrierefreiheit in der Bildung weiter denken : Innovative Impulse aus Praxis, Technik und Didaktik, Translation: Thinking ahead to digital accessibility in education : Innovative impulses from practice, technology and didactics, 1st ed., Universitätsbibliothek Johann Christian Senckenberg, Frankfurt, 2023, DOI: <https://doi.org/10.21248/gups.62773>.



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Agenda

- Introduction
- Relevance of the problematic
- State of the art and research gap
- Possibilities for further research
- Discussion and Conclusions
- References

Introduction

Digital accessibility

Definition

- **extent to which digital products, resources and services and their content are available for people with disabilities**
- **Four principles of digital accessibility (“POUR”) [1] [2]:**
 1. **Perceivable**
 2. **Operable**
 3. **Understandable**
 4. **Robust**

Introduction

Main objective and Research hypotheses

Main objective:

Investigating the state of the art of digital accessibility in multinational enterprises

H1:

Companies need to integrate digital accessibility into their processes to meet their social, economic and legal responsibilities.

H2:

The integration of digital accessibility into administrative and management processes in companies has not yet been sufficiently researched.

Relevance of the problematic

Political and legal relevance of the problematic I/II

Since ratification of United Nations Convention on the Rights of Persons with Disabilities (UNCRPD):

- **gaining importance of digital accessibility for economy, public administrations and businesses [3]**
- **many activities regarding digital accessibility performed by the European Union [4]**

Relevance of the problematic

Political and legal relevance of the problematic II/II

- **increasing accessibility requirements for digital products and services due to new legal regulations:**
 - **Directive (EU) 2016/2102 of the European Parliament and of the Council (Web Accessibility Directive) [5]**
 - **Directive (EU) 2019/882 of the European Parliament and of the Council (European Accessibility Act) [6]**

Relevance of the problematic

Social relevance of the problematic

- **Increasing importance of concepts like Corporate Social Responsibility (CSR)**
[7] [8] [9]
- **Advantages of Digital Accessibility as one aspect of CSR:**
driving innovations or enhancing company's brand [10]

State of the art I/II

Many sources:

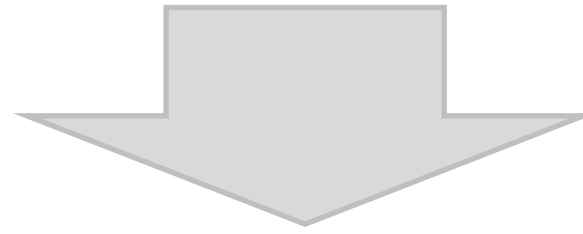
- **discuss the political, social, and economic importance of digital accessibility and the problems in achieving the accessibility goals, e.g. [11] [12]**
- **a number of guidelines for developers and disability advocates is set out, e.g. [2] [13] [14]**
- **many research exists about technical requirements for digital accessibility of products, e.g. [2] [15]**
- **only few guidelines for companies exist on how digital accessibility can be integrated into a company's processes on the organisational level, e.g. [7]**

State of the art II/II

- **Maturity Models for digital accessibility**
 - **W3C Accessibility Maturity Model [16]**
 - **Digital Accessibility Maturity Model (DAMM) [17]**
- **Assessing Digital Accessibility along different dimensions**
- **Proof points including measures to determine the maturity of digital accessibility**
- **Maturity stages: can be reached by completing the proof points**

Research gap

Literature-based findings demonstrate a research gap



Research gap

- **how to identify, assimilate and apply the skills needed to achieve the proof points.**
- **political, organisational, and technical framework conditions for companies in designing accessible digital products and services.**

Possibilities for further research

Suggested approach:

- **Soft Systems Methodology as methodological umbrella [18]**
- **Absorptive Capacity to identify, assimilate and apply necessary capabilities [19]**
- **Other concepts to investigate social and cultural aspects:**
 - **Corporate Social Responsibility, e.g. [20]**
 - **Society 5.0, e.g. [21]**
 - **Stakeholders Theory, e.g. [22]**
 - ...

Discussion and conclusions I/II

- **Many activities worldwide and within the European Union to increase (digital) accessibility caused by the ratification of UNCRPD**
- **Increasing number of companies that have to comply with digital accessibility criteria due to new legal regulations**
- **Change of mind in society about topics such as inclusion and accessibility, and the role of companies within that process**
- **Few research and regulations about technical criteria for creating accessibility**

Discussion and conclusions II/II

- **Research gap regarding the integration of digital accessibility into the management practices and processes of companies**
→ **confirms the two hypotheses H1 and H2**
- **Proposed approach:**
 - **Soft Systems Methodology as guidance**
 - **Absorptive Capacity to identify and apply the knowledge required, to implement digital accessibility within the companies' processes.**
 - **Adaption and supplementation of existing accessibility models with perspectives from different target groups and concepts, e. g. Corporate Social Responsibility and Society 5.0.**

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Thank you for your attention!



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