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## **Accessible Mobility: Why improved accessibility for sight impaired sustains universal functionality**

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# The evolution of accessibility and accessible mobility

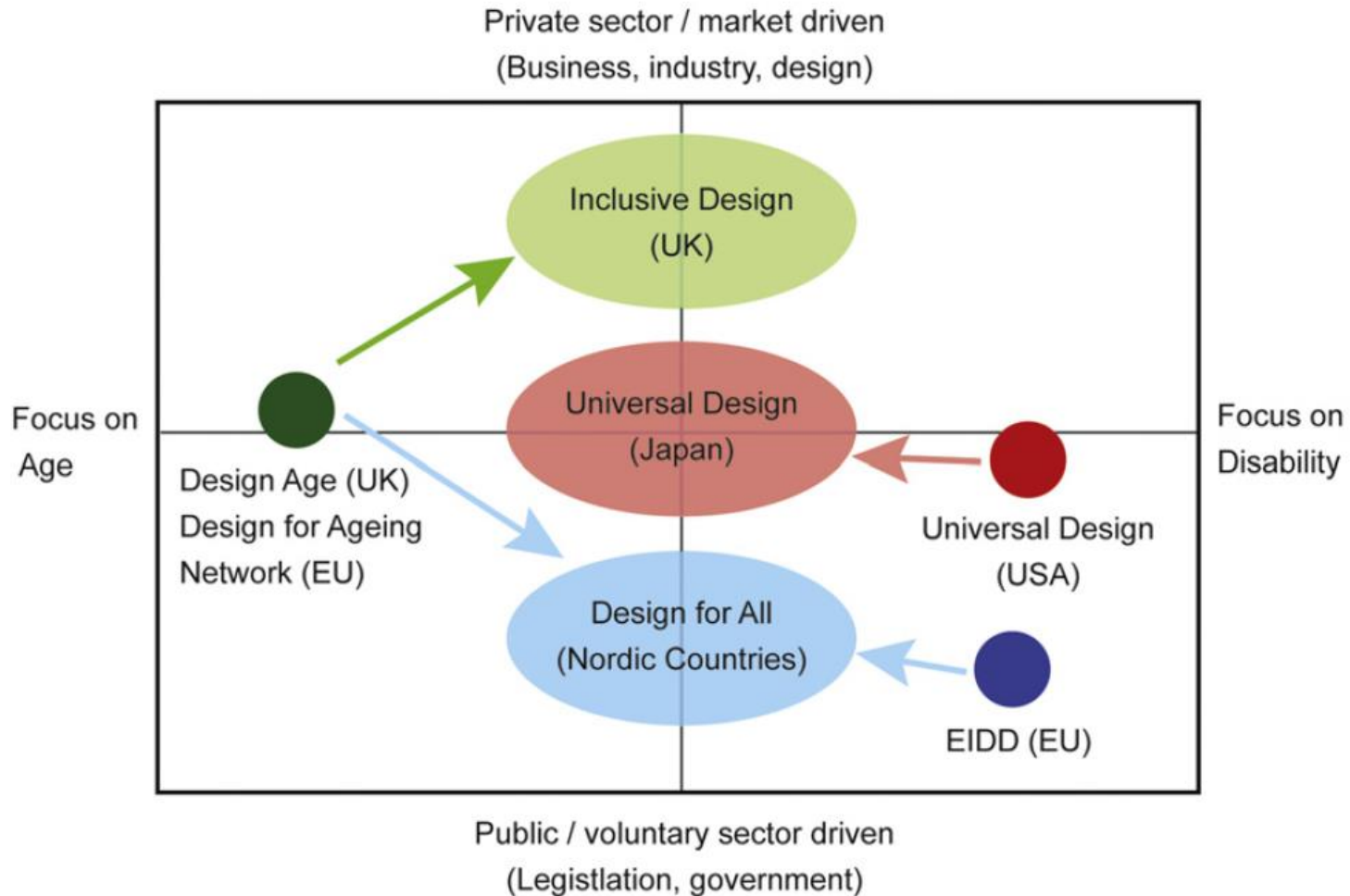
**Universal  
functionality**

**Accessible  
for all**

**Barrier-free**

**Wheelchair-  
accessible**

# Design for All



# Accessibility starts with awareness

**Universal functionality is the consequence of awareness and respective training.**

**Thus, designers, architects and planners need to be aware about the needs and requirements as well as the benefits of accessibility.**

**People in charge of operations also need to know about needs and requirements!**

# Enforcement vs. Benefits

- Legal Framework
  - UN Convention on the Rights of Persons with Disabilities → “universal design”
  - EU Disability Act (forthcoming)
  - National laws → Different enforcement policies (compensation, indemnity, prevention, solution)
  
- Voluntary action
  - Persons with disabilities and reduced mobility as a target group
  - Benefits for all

# Proposition 1: Blind ≠ sight impaired!

- Blind people have no or no relevant visual perception. In terms of mobility, their eyesight must be **replaced** by other senses or aid.
  - Guide dogs
  - Accompanying persons
  - Tactile or audible information
  - Canes etc.
- Sight impaired people, however, rely on visual information, mainly. Their eyesight must be **supported**.
  - Evenly and preferably indirect lighting
  - Avoiding of glare, reflections
  - Good contrasts
  - **Approachability** (information on eye-level)

**Completely different requirements!**

# Proposition 2: Awareness and consideration of needs before building saves costs

- Legal basis, regulations, guidelines and standards are sometimes scarce and incomplete or even contradictory.
- Lack of reliable basis for architects, designers, planners
- Accessibility is often seen as “barrier for creativity” instead as a “chance for optimal usability” and a means to avoid “error-design”.
- “Experts” often do not have sufficient knowledge, so it is recommended to consult persons concerned and to respect the variety of needs and requirements: “Nothing about us without us”.
- Regularly, inquiries of impaired persons are not taken into account in the planning phase of projects, they are often simply ignored. This leads to significant cost increases as changing a plan is easier than changing a building.
- Additional costs for accessible construction in the public sector BEFORE starting the construction: 0,15% for projects > 12 mill. EUR (Grundner 2013)

**Safe costs by taking accessibility seriously!**

# Proposition 3: Accessibility sustains universal functionality

- Sufficiently taking care about the needs and requirements of people with disabilities leads to higher usability and functionality.
- If a sight impaired person is better able to read a particular signpost, monitor or display all other people will also be better able to read it.
- → **Advantages for all**
- **Accessibility is ...**
  - ... crucial for **10%** of the population
  - ... necessary for **40%** of the population
  - ... comfortable for **100%** of the population.

**Accessibility increases usability and  
functionality for all!**



- The three central propositions:
  - Blind ≠ sight impaired!
  - Awareness and consideration of needs before building saves costs!
  - Accessibility (for sight impaired but also in general) sustains universal functionality with benefits for all!

# Thank you!



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