Technology Leaving No One Behind

Why do Universal Design?

DTU Skylab
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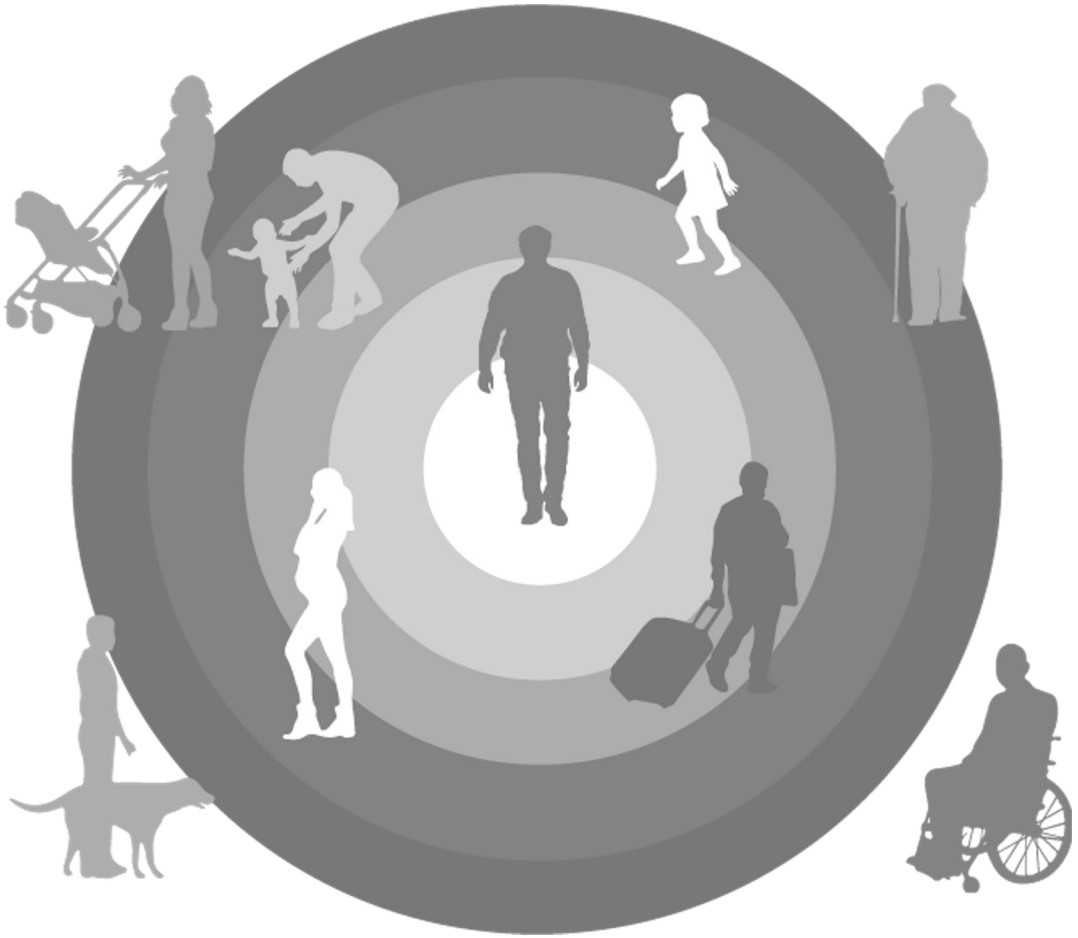
We can all be excluded



Source: Professor Jeremy Myerson, RCA Helen Hamlyn Centre for Design

Who is being left behind?

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People with disabilities

1.85 billion have some form of disability

People living in extreme poverty

1 billion live on less than $1.25 a day (**children** make up 30% of extreme poor)

LGBTQ+ persons

+17 million adults in OECD countries

LEAVE NO ONE BEHIND

Seniors

962 million aged 60+

Ethnic and religious minorities

+618 million adults identify as Afro-descendants, Roma or Indigenous

Sources: The World Bank, Ourworldindata.org

Global Disability numbers

1.85 billion

people globally have a disability

70-80%

disabilities are invisible

Sources: www.who.int, post.parliament.uk/

The Seniors

1 billion

people over
60 years globally

+46%

Of people over 60
have disabilities

DKK 54 trillion

estimated spending power
per year for people over 65
(54.370.000.000.000 kr.)

Sources: www.who.int, www.post.parliament.uk, www.un.org, www.straitstimes.com

The Seniors market is expected to

double in 2050

Source: www.who.int

Potential Support Ratio

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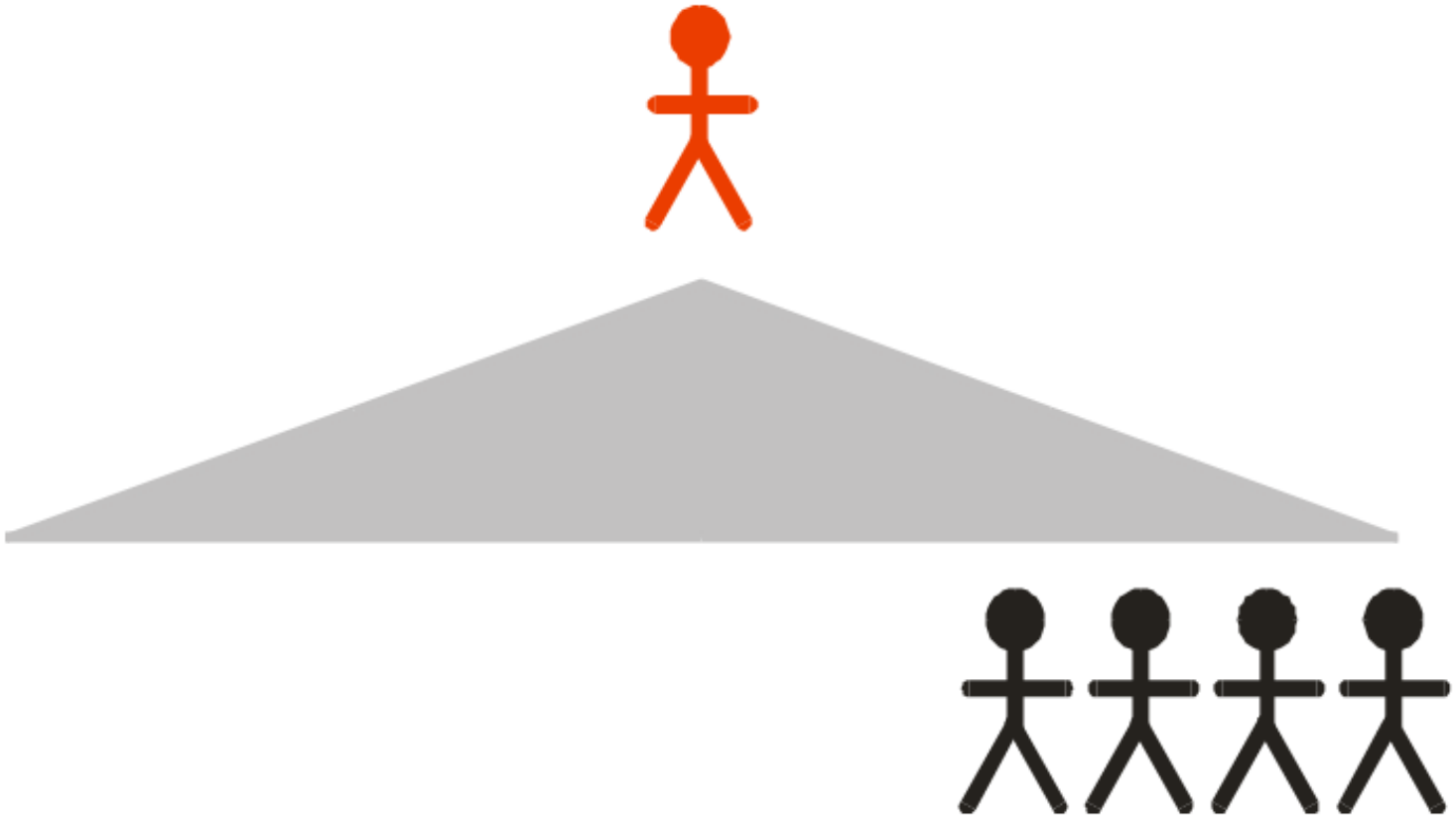
2050



Source: Cambridge Inclusive Design, Ourworldindata.org

EU Regulations

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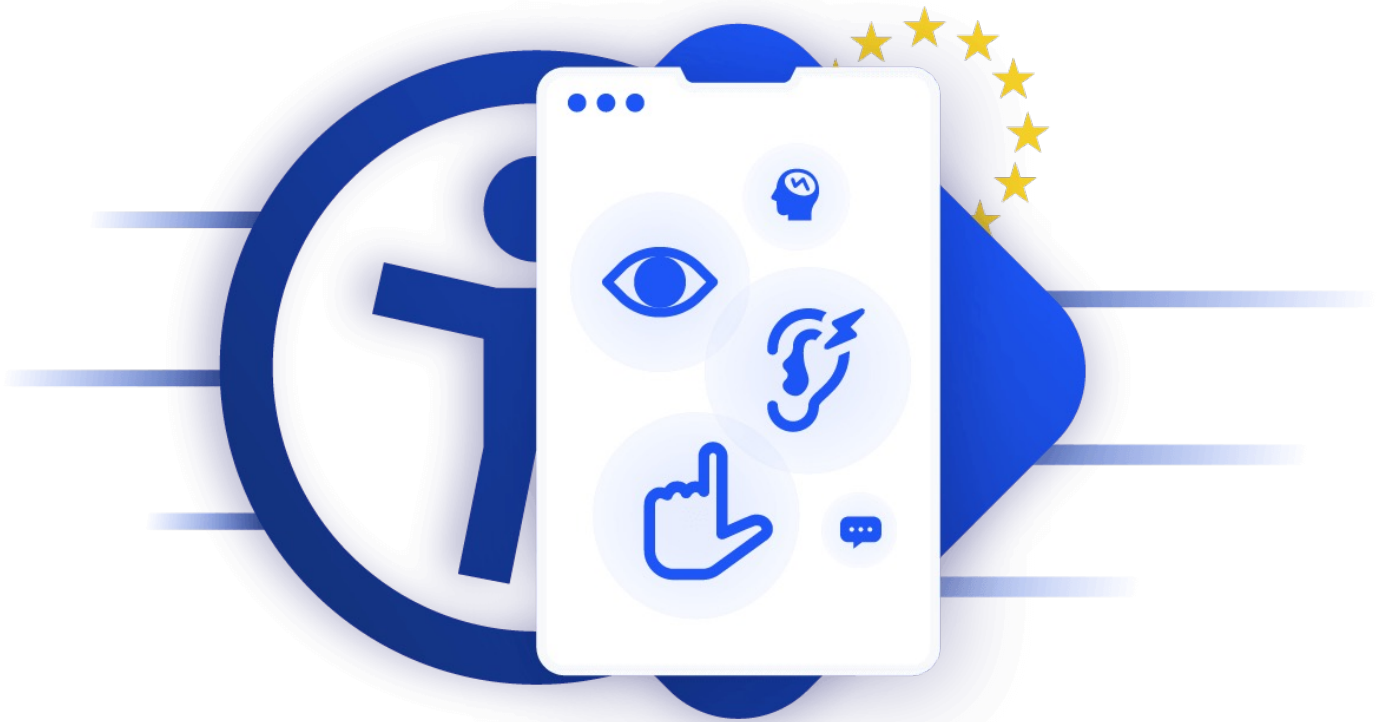


Sources: EU Accessibility Act and EU Web Accessibility Directive

2016

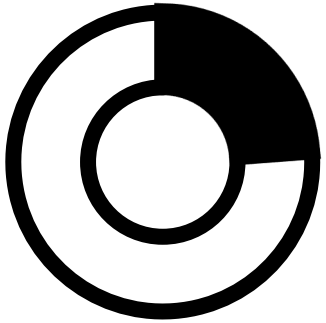
EU Web Accessibility Directive

2019

EU Accessibility Act

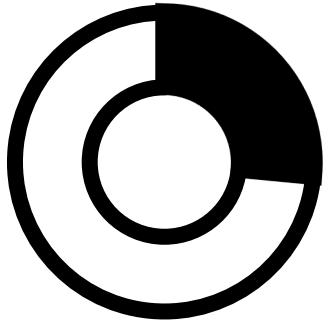
Assistive technology

- Hearing aids
- Wheelchairs
- Communication aids
- Glasses
- Prostheses
- Pill organizers
- Screen reading software
- And many more...



2.5 billion

people globally need assistive technology (disabled+elderly)



3.5 billion

Estimated by 2050

Global Disability Innovation Hub

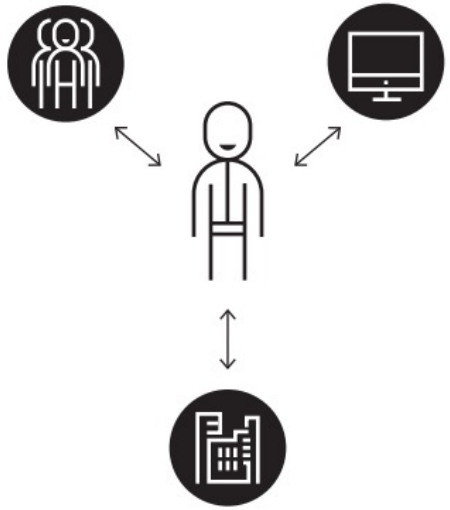
90% will not have access to it

Source: www.who.int Global Disability Innovation Hub

Disability

≠

Personal health condition



Disability

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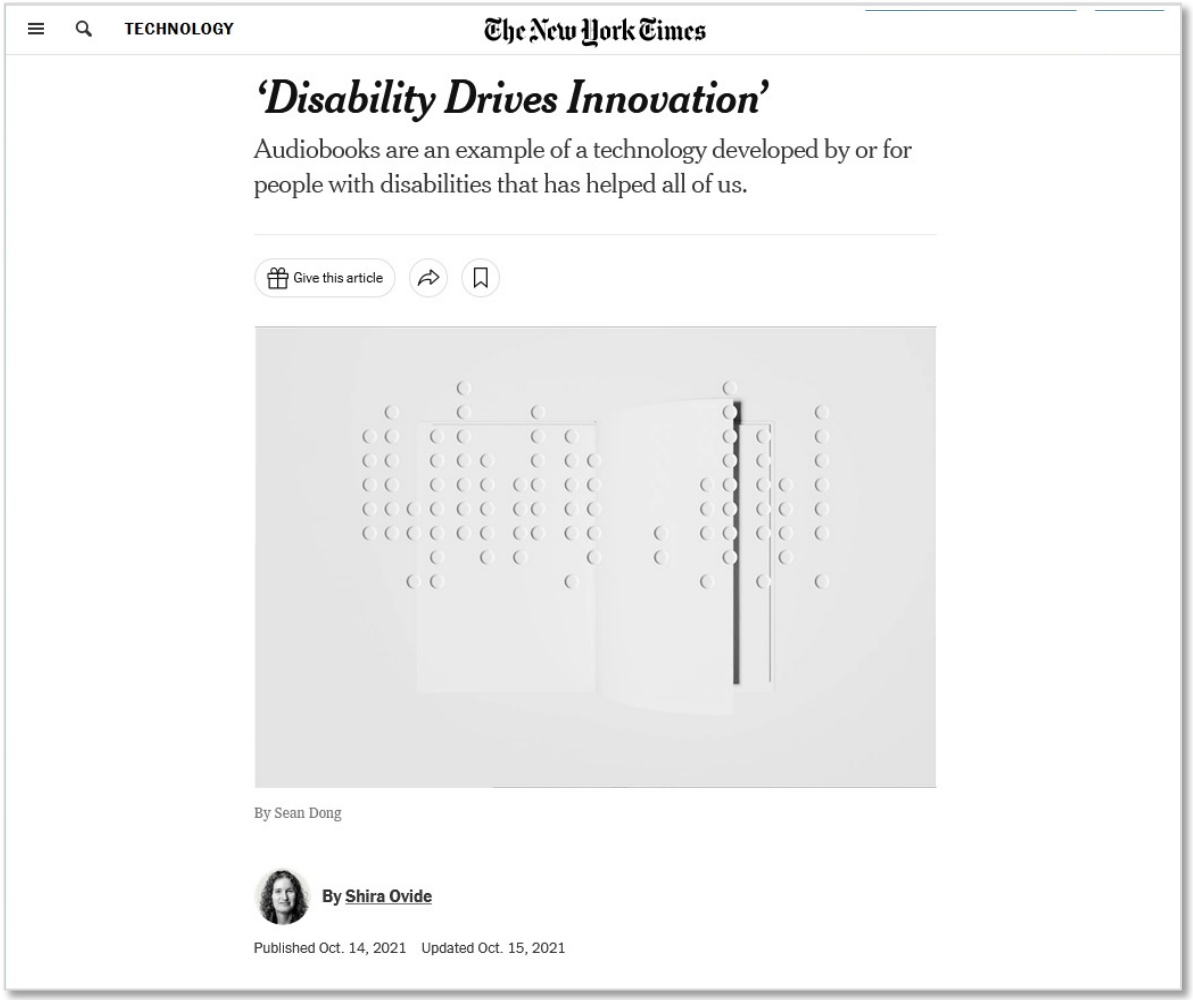
Mismatched human interaction

www.who.int/health-topics/disability & Microsoft Inclusive Design

Disability drives innovation



TECHNOLOGY

The New York Times

'Disability Drives Innovation'

Audiobooks are an example of a technology developed by or for people with disabilities that has helped all of us.

Give this article

By Sean Dong

By Shira Ovide

Published Oct. 14, 2021 Updated Oct. 15, 2021

"Disability drives innovation. It's undeniable. Almost always when you find something that is really cool for people with disabilities, it will find its way into the mainstream in a way that is wonderful and makes life better."

Johua Miele, Adaptive technology designer
Amazon Lab126 (creators of Kindle, Echo etc.)

Source: nytimes.com

DTU Skylab

an interdisciplinary hub for technology-based innovation & entrepreneurship at the Technical University of Denmark.

Learning environment for innovation & entrepreneurship at DTU since 2014

Website

LinkedIn

Technology Leaving No One Behind

TLN1B is a program providing opportunities and support to making inclusion and accessibility a natural part of engineering new sustainable technological solutions at DTU. This is done through research, developing teaching material, concrete tools and providing inputs to three different sectors:

- **EDUCATION**: Inclusion and accessibility introduced and integrated in education across engineering disciplines
- **ENTREPRENEURSHIP**: Strengthen current and driving new offers supporting and accelerating entrepreneurship and start-ups
- **STRATEGY**: Build strategic ecosystems and partnerships externally and internally at the Technical University of Denmark

Universal Design Guide

Website

DTU