



The Intersection Between Accessibility, Technology, and Sociopreneurship



Jessi Febria

Co-Founder at PetaNetra
Software Engineer at Traveloka



1 out of **4**

people have a disability

Types of Disability

Undang-undang (UU) No. 8 Tahun 2016

1

Physical Disability

Limited mobility or physical stamina which disrupts the muscular, respiratory or nervous system and disrupts movement function.

2

Sensory Disabilities

Limitations in the function of the sensory organs such as vision (visual impairment) and hearing (deaf or hard of hearing disabilities)

3

Mental Disability

Experience disturbances in their thinking, emotional and behavioral functions, resulting in limitations in carrying out daily activities.

4

Intellectual Disability

Reduced ability to understand new information, learn and apply new skills.

**With wide range of disabilities,
It's important for products and services to be accessible.**

Accessibility involves removing barriers and providing solutions that make information and technology accessible to everyone, regardless of their abilities or disabilities.

Accessibility is a key component of inclusivity.

When products and services are designed to be accessible, they contribute to a more inclusive environment by ensuring that individuals with disabilities can participate fully in various activities.

The majority of people with disabilities use smartphone

70% of them are smartphone users

50% of them are tablet users

Types of Assistive Technology

1

Screen Readers

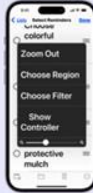
Read the content of the computer screen.

- Voice Over (Apple OS)
- Talk Back (Android)

2

Screen Magnification Software

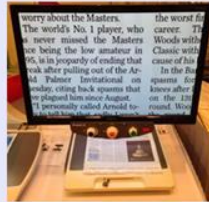
Allows users to control the size of text and/or graphics on the screen.



3

Text Readers

Reads text with a synthesized voice and may highlight the words being spoken.



4

Speech Input Software

Users can give the system commands to perform mouse actions

5

Alternative Input Devices



Head pointers



Motion Tracking
or Eye Tracking



Single Switch
Entry Devices

Empowered by assistive technology,
I envision the possibility of creating something meaningful
with my expertise.

In PetaNetra, we believe that there is an intersection between Accessibility, Technology, and Sociopreneurship.

We are using innovative technology to improve the quality of life for the visually impaired people.

The majority of **public spaces are still not disability-friendly**

14.3mio Visually impaired people in **Indonesia**
The **1st largest disability category**

While the blinds are always active **travel outside** and moving independently,

70% Blind people who **travel outside** have experienced at
least **1x accident in the past year**
(Based on our sample research in **Indonesia**, 2022)

Access to public transportation is considered **not fully inclusive** for people with disabilities. In fact, easy access to transportation is related to the **productivity and independence** of disabled people.

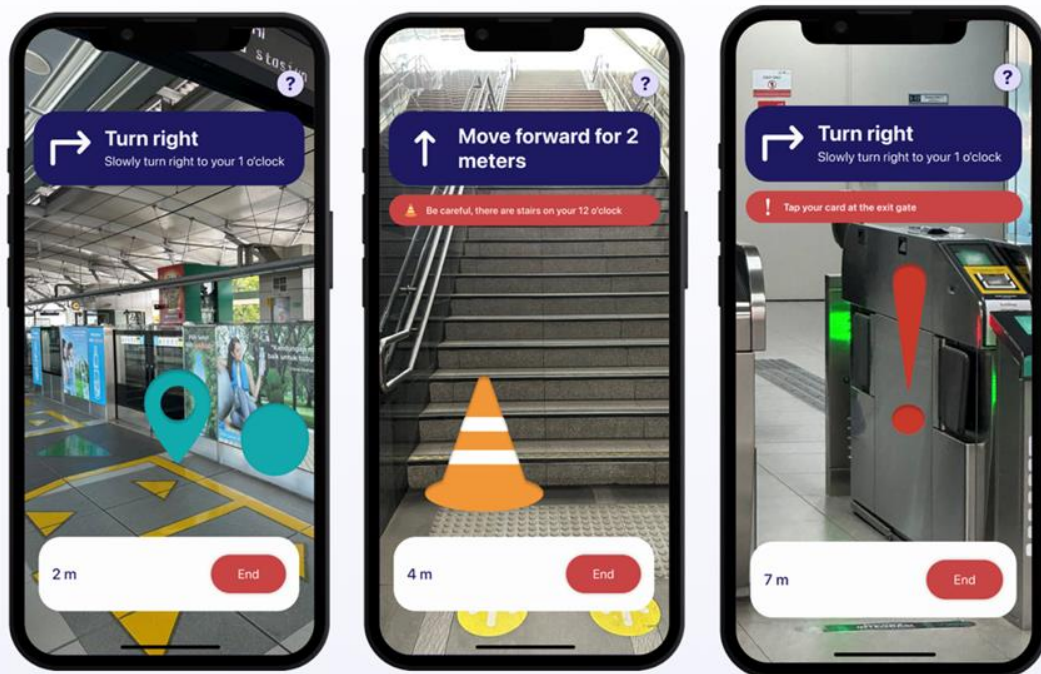
(Improve Public Transportation Accessibility for People with Disabilities, 2023)



PetaNetra is an app designed for the **visually impaired** to help them **navigate independently** in indoor public spaces safely.



Independent and safe navigation



Led by **female founders** who are passionate about bringing **social impacts** with an aim to **improve the quality of life for disabilities**



Graciela Gabrielle Angeline

CEO & Co-Founder

- Bachelor's Degree in Computer Science at BINUS University
- Pursuing Master's Degree in Business Administration at NCKUniversity
- Apple Developer Academy @BINUS 2021 Alumni



Yafonia Hutabarat

COO & Co-Founder

- Bachelor's Degree in Computer Science at University of Indonesia
- Software Engineer (iOS) at Tiket.com
- Apple Developer Academy @BINUS 2021 Alumni



Jessi Febria

CTO & Co-Founder

- Bachelor's Degree in Computer Science at Satya Wacana Christian University
- Software Engineer (iOS) at Traveloka
- Founder of Coders Muda, a non-profit organization

Sociopreneurship is driven by a desire to make a positive impact, and navigating challenges are always crucial

Innovative and Sustainable Solutions

Balancing Social and Economic Goals

Beyond Conventional Methods

Long-term Sustainability

Social Impact as Core Mission

Scaling Impact

Regulatory and Legal Complexities

Measuring Impact

**We forge a path to inclusive development at the intersection
of accessibility, technology, and sociopreneurship.**

Innovation becomes a catalyst for breaking barriers,
creating opportunities, and building a world that leaves no one behind.



Independent navigation for everyone



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