

Rethinking Mathematics and STEM education for people with blindness.

Penrose 1

Agenda

- About us
- Background
- Demo
- Database

Vision: Our dream is that barriers for blind people in **education, mobility, on the job and taking part in society** are removed.

Mission: Facilitate the access to information for blind people by developing **break-through innovations**.



Awards

- **Bavarian Government:**
Winner BayStart-Up Business Plan Competition



- **German President Frank-Walter Steinmeier**
Initiative „Land of Ideas“



- **European Commission: EIC Accelerator**
Horizon 2020 EIC Accelerator Project 968187 - Tactonom (2021)



- **President & Prime Minister of Portugal**
- **Forbes Accessibility 100**



Portfolio

new



tactonom®
reader flex

new

tactonom®
magic math tools

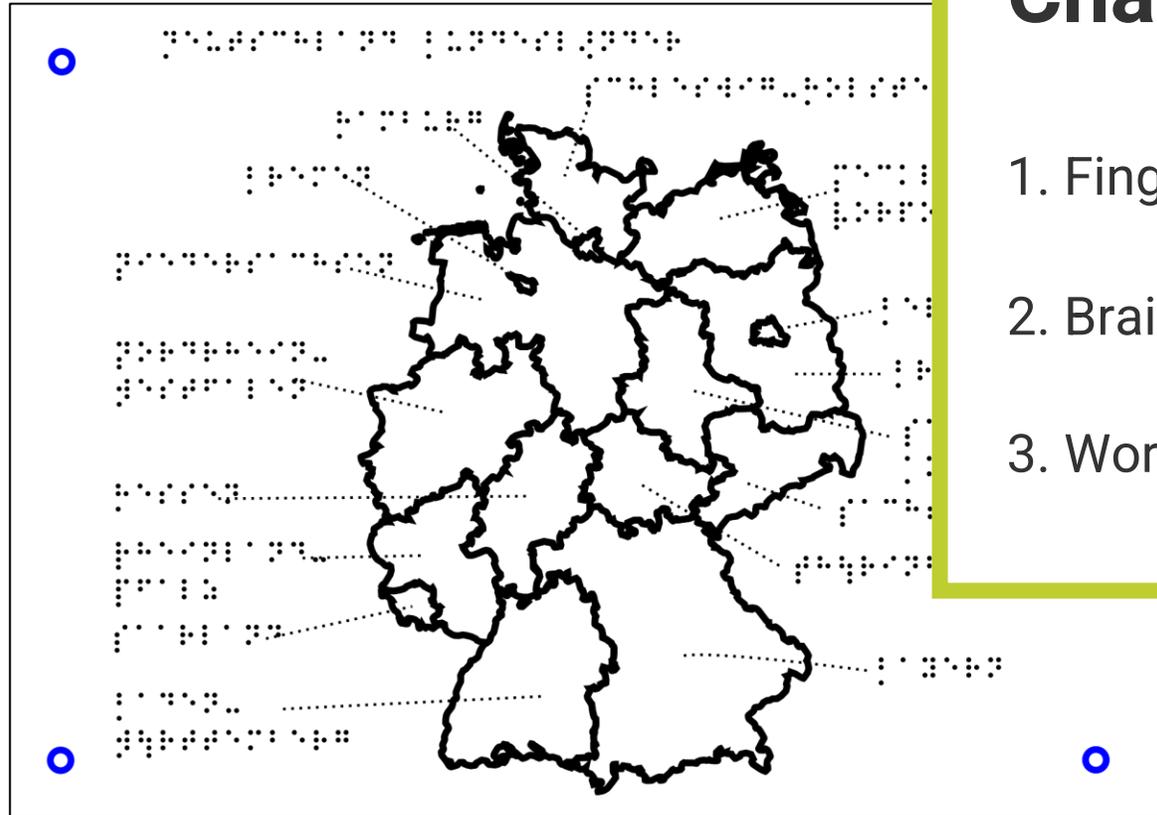


tactonom®
magic braille numbers



tactonom®
transformer

Tactile Graphics today



Challenges:

1. Finger has to move away from to read Braille information.
2. Braille needs a lot of space. Informations are limited.
3. Working with graphics is hard.

Requirements for Graphics

**Context &
Overview**

**Structure &
Entry**

**Pinpointed
information**

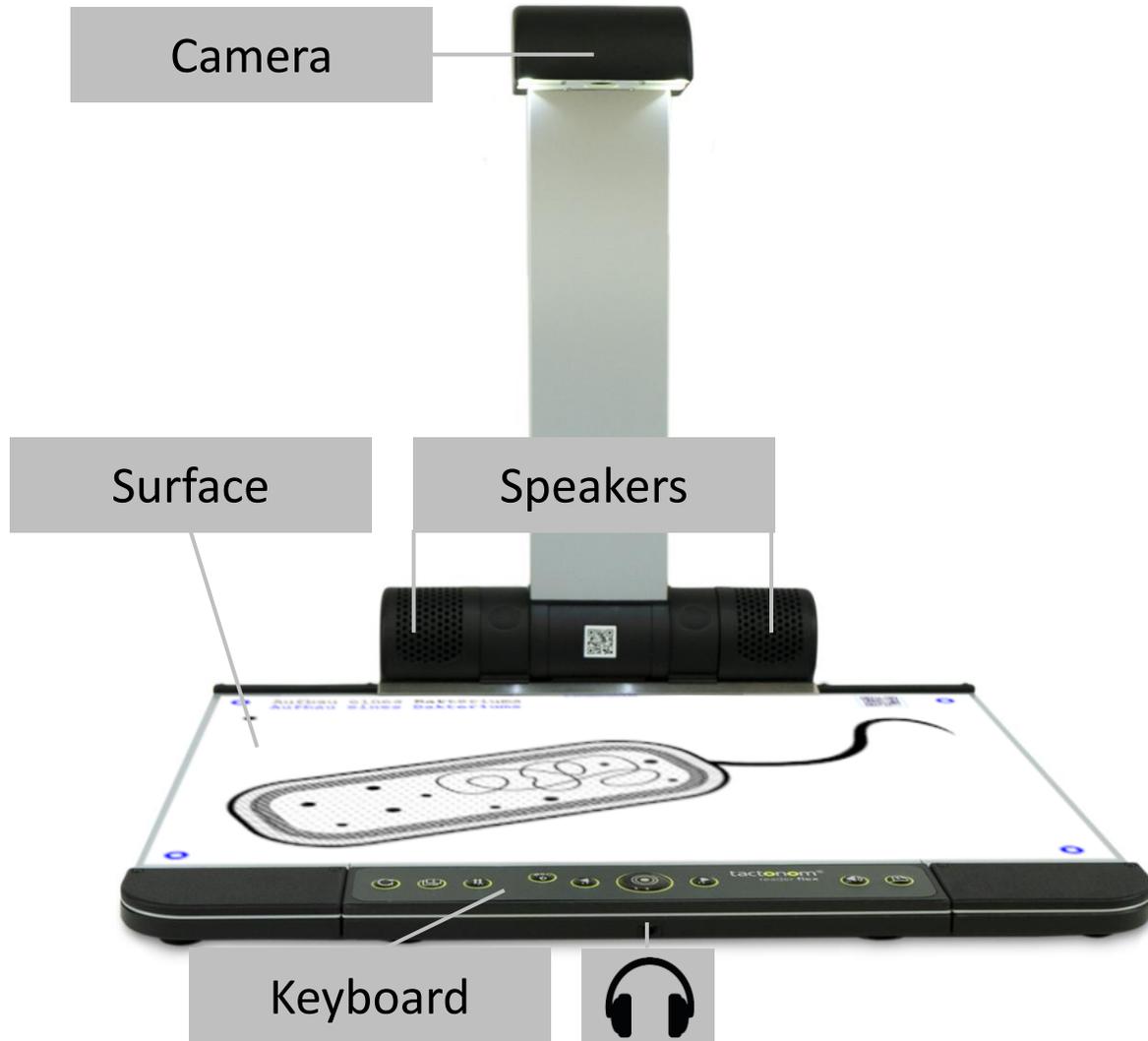
**Depth of
Informations**

**Intuitive &
easy to use**



tactonom[®]

reader flex



Recognition of Finger
+
Digital Twin (Cloud)
=
Precise Explanation

New Opportunities

- **Education**
- **Mobility**
- **Job**
- **Participation**
- **Leisure**

Education

- **Pre-school**
- **Kindergarten**
- **Primary school**
- **Secondary school**
- **Vocational training**
- **University**

Tactile abilities

- **Tactile sense**
- **Tactile strategies**
- **Spatial thinking**
- **Abstraction**
- **Fun!!!**

Content

- **Maths**
- **Biology**
- **Geography**
- **Chemistry**
- **& all subjects**
- **O&M**
- **Picture books**
- **Learning games**
- **Info graphics**
- **...**

All grades, all subjects, all graphics

Demo

**Independent
Learning**

**Interactive
Learning**

**Smart
Learning
Tools**

**Intelligent
Learning
Apps**

**Free
Learning
Content**

Independent Learning

- Automatic download
- Acoustic overview
- Detailed explanation
- Navigation
- Explore Lines

Interactive Learning

- Interact
- Rehearse

Smart Learning Tools

- Tactonom
Magic Math Tools



- 3D Models



Intelligent Learning Apps

- Tactonom
Magic Numbers



Free Learning Content

- Thousands of FREE audio-tactile graphics
- Add your own
- Clone and copy
- Automatic translation
- Online Designer

Requirements met?

**Context &
Overview**

**Structure &
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**Pinpointed
information**

**Depth of
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**Intuitive &
easy to use**

Fun

Questions and Discussion



More information: www.tactonom.com

Feel free to contact us for an online presentation of Tactonom Reader Flex at: info@inventivio.com



inventivio
home of tactonom