SENSORTECH

New technologies for people with visual and hearing impairments

Laboratory Sensor-Tech

Sk Resident

Two Products in Serial Production

Robin

Smart assistant for the blind

Charley

Speech recognition device for the deaf and the deaf-blind

Robin

Robin – Description

Smart assistant Robin is designed to help people with visual impairments, blind and deaf-blind to better navigate on the street and indoors, as well as better understand what is happening around.

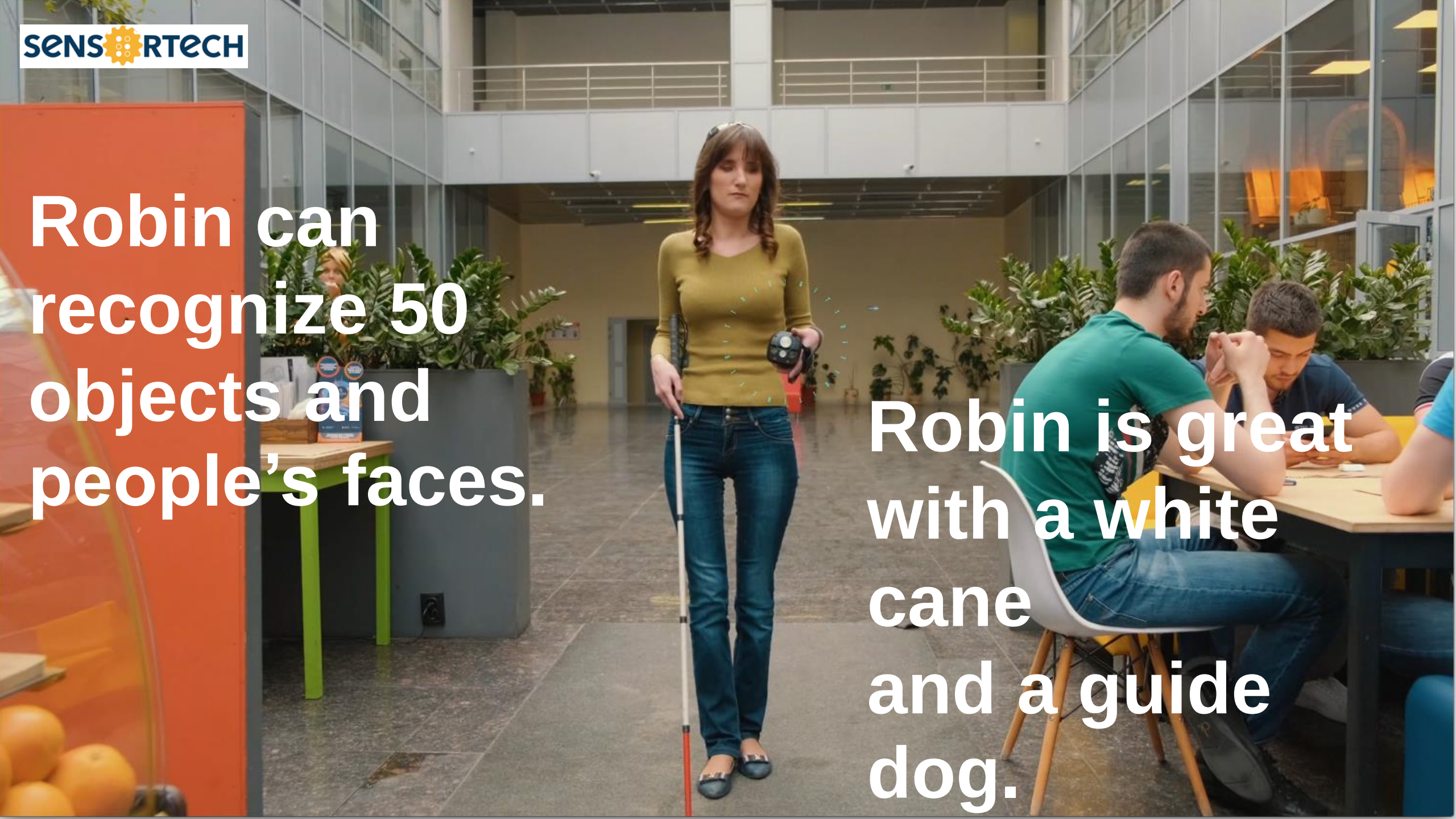
Robin is an assistive device that can be used together with the White cane, familiar to blind people. Robin does not require long training and has an intuitive and ergonomic design.

Key Functions

- Measures distance to objects
- Recognizes objects and faces of people
- Detects and warns about obstacles
- Plays information through headphones (mini-Jack or Bluetooth)
- Up to 5 hours of battery life
- Comfortable design especially for people with reduced mobility

Dimensions: 480 gr.; 14 x 7 x 7 cm

Price – $2500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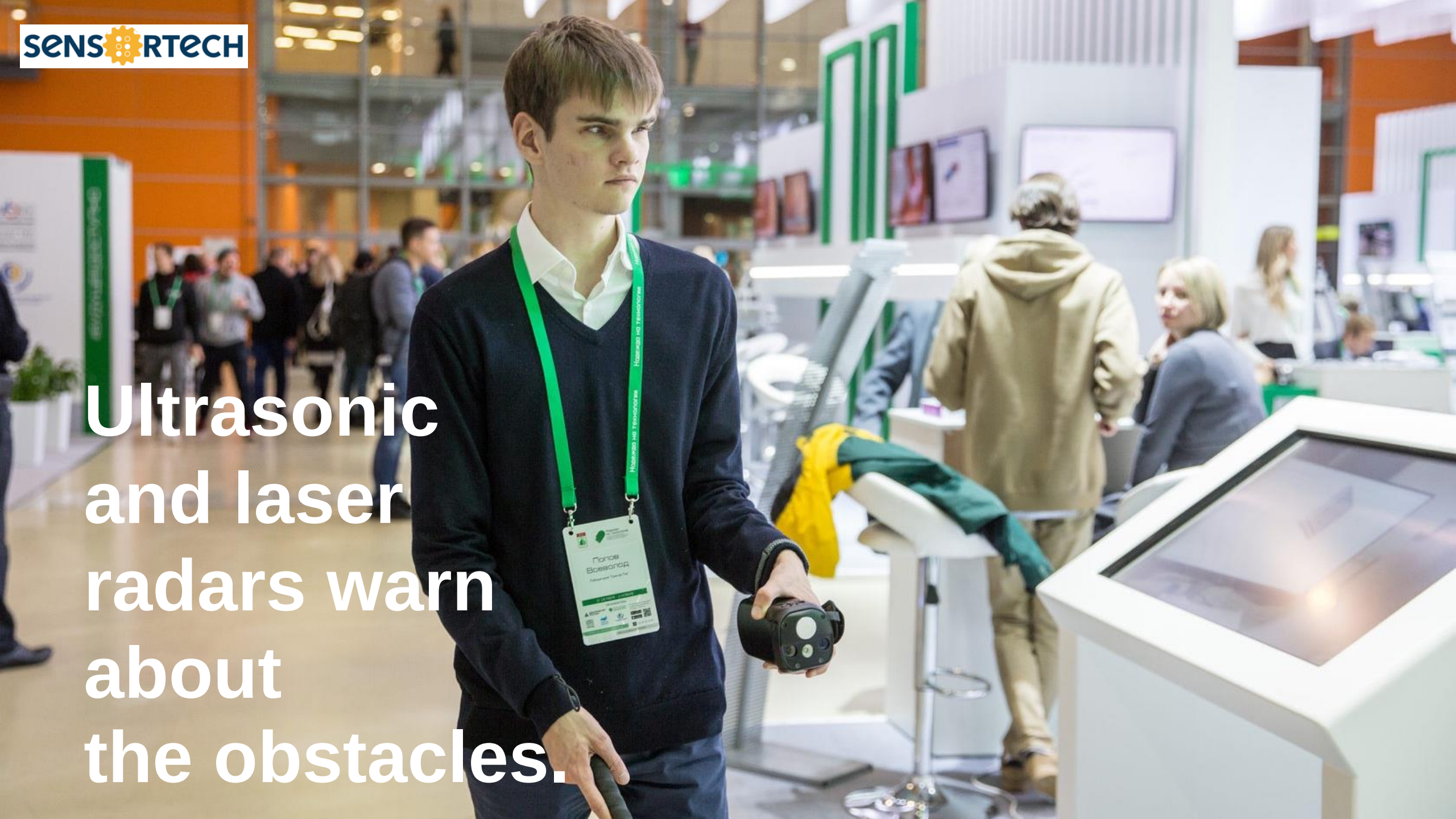
Robin can recognize 50 objects and people’s faces.
Robin is great with a white cane and a guide dog.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Ultrasonic and laser radars warn about the obstacles.

Competitive Landscape: Robin vs Other Devices

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	Object identification	Distance measurement	Face recognition	Vibration alerts	Obstacle placement	Text-reading	Identification of road-signs	Step-by-step navigation	Mobile App integrations	Mobile phone control	Braille display integration	Color identification	QR-codes scanning	Price, $
Robin														2500
I-Cane Mobio														1850
UltraCane														825
Ultrasonic Blind Walking Stick														138-174
BAWA Cane														699
SmartCane Phoenix														90
WeWalk														449
OrCam MyEye2														4500
Oriense OrNavi														600

Legend: available features; feature is planned to be launched; product does not cover the problem

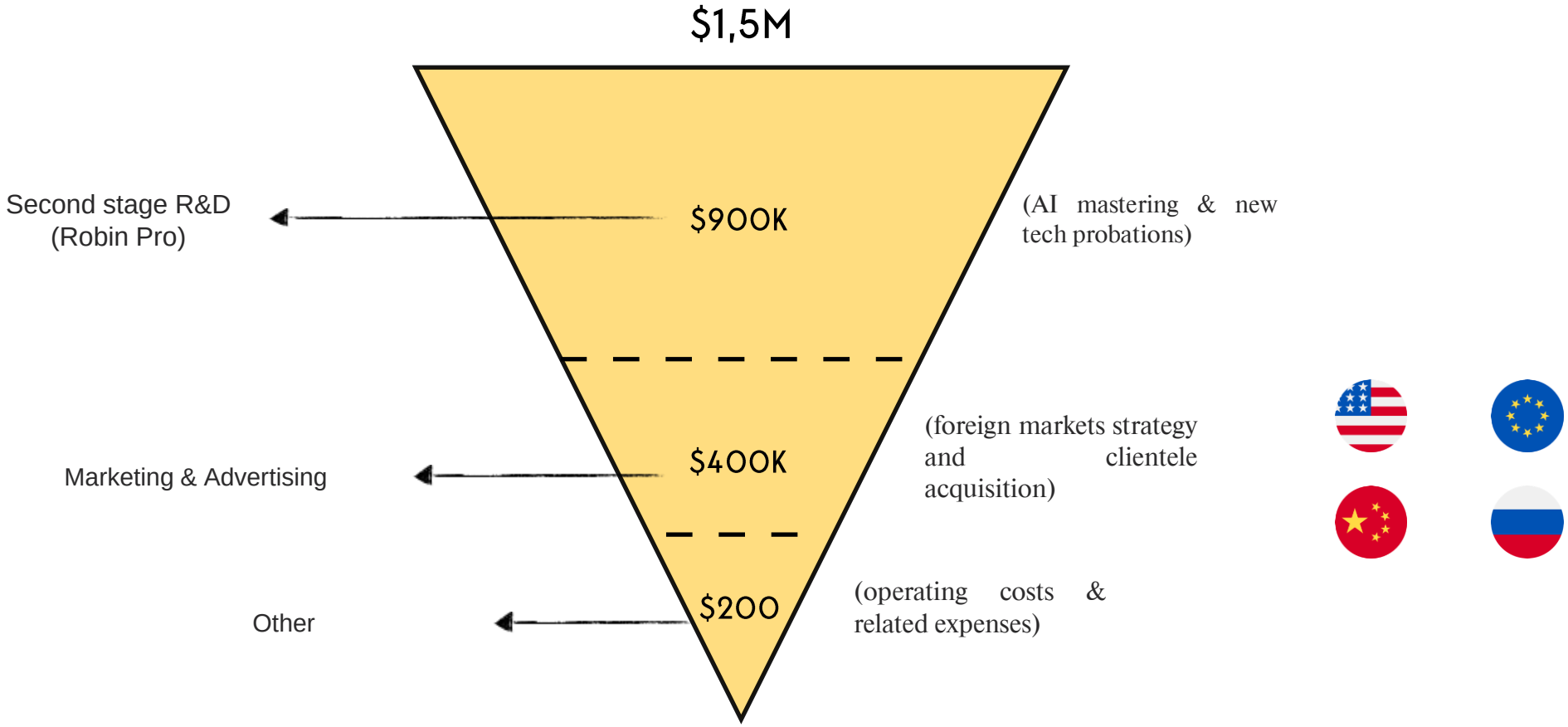
The Support:
Projected Expense Structure

Attracted: 35 mln RUB

Production start: September 2019

We fundraise

to create Smart Assistant «Robin Pro» with 1) the size smaller by 30%, 2) text recognition feature, 3) improved street signs' and objects' recognition.



Robin Pro – Concept

Charley


Ваш диалог с Неизвестно
Добрый день меня зовут Денис.
Место для ввода текста

Information about Charley

Charley helps to communicate with deaf and deaf-blind people.

The device recognizes speech and translates it into text.

*Allows to work and study remotely

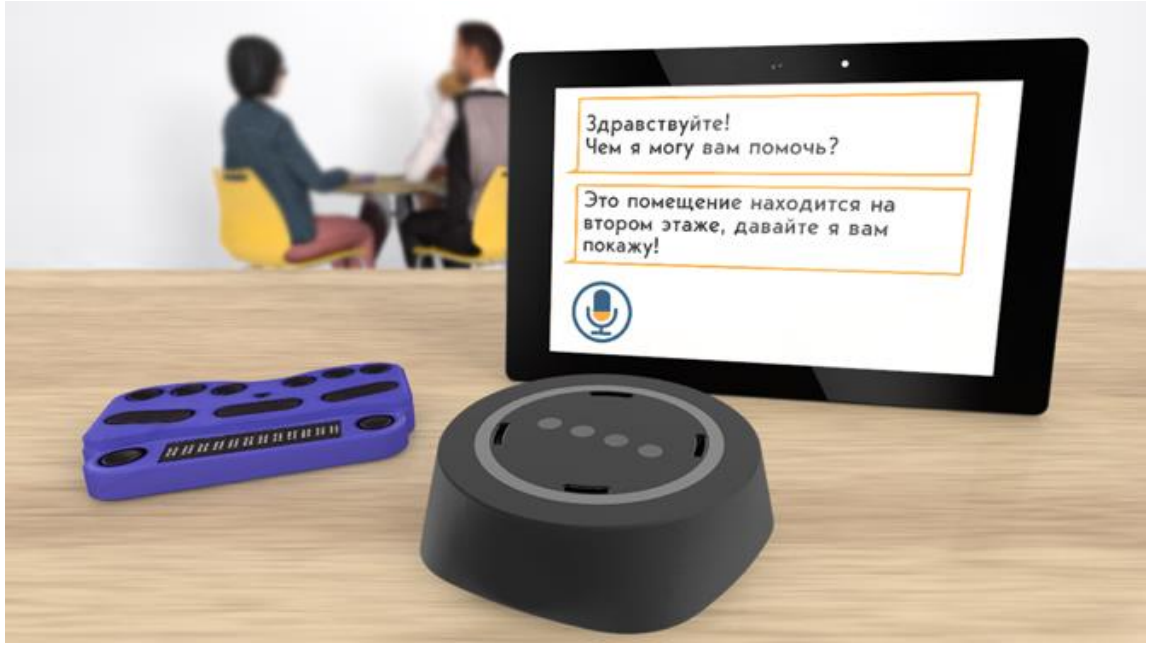
Supported languages

The functions of Charley

- Speech recognition in real time
- 4 microphones to capture voice in 360-mode
- Text output to TV using HDMI and to tablets
- Mobile app connection option
- Up to 3 hours of battery life

Where to Use Charley

- Social service centers
- Educational institutions
- Hospitals and clinics
- Other places



Competitive Landscape: Charley vs Other Devices

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	Russian language recognition	Work in offline mode	Braille displays integration	Text output on external devices (TV, laptop, smartphone, etc.)	Induction loop support	Mobility	Active noise reduction	Price, thousand RUB
Solutions for organizations:								
Charley								195 – 265
«Исток-Синхро»								80
Solutions for individuals (currently unavailable in Russia):								
SpeakSee								17 – 49
Q System								No information

Legend: available feature; information unavailable; product does not cover the problem

The Support:
Projected Expense Structure

Attracted: 29 mln RUB

Production start: October 2019

Sales model: B2G (80 %), B2B (20 %)

We fundraise for R&D, including:

- Special version «Charley R» with external microphone connection
- Developing software to create a web-server for transmitting the text of subtitles to a remote user
- Developing a client software – a mobile app «Charley R» as well as software for Windows, Linux and Mac
- Developing speech recognition models in the subject areas of medicine and education (all levels)
- Developing functions to displaying the text of subtitles in the form of a running line over the image from the camera (will allow to use all types of video conference systems and video chats)

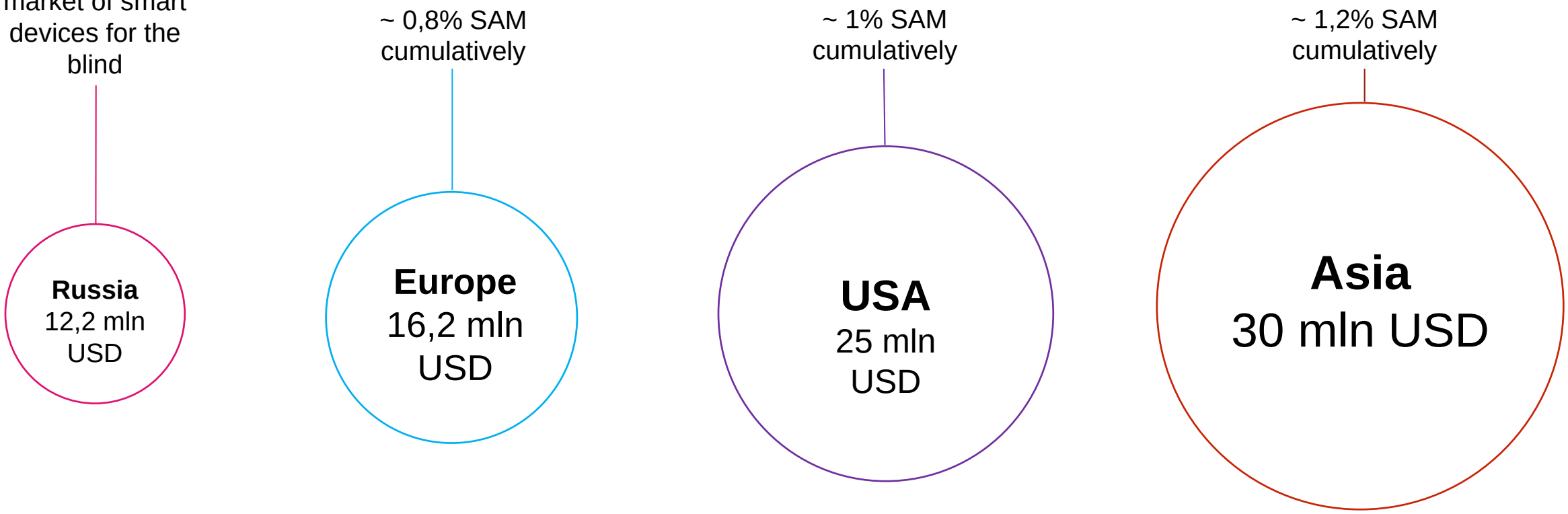
Main markets:

~ $0,5 M

Market Evaluation – Smart assistant Robin

Projected revenue for 2020 – 2025

Total expected market volume of accessible technologies for people with visual impairments by 2025 – 7,1 bln USD



Market size of products for the blind ~ 124 mln USD (2015)

The biggest market, Expected volume by 2025 – 2,4 bln USD

The fastest growing market, CAGR 9.5%

Market Evaluation and Configurations – Speech recognition device Charley

Market volume of products for people with hearing disabilities (2015, Russia)	5,8 bln RUB
Volume of government procurement of products for the deaf and hard-of-hearing (2015)	1163 govt contracts
Sum of government procurement of products for the deaf and hard-of-hearing (2015)	1,4 bln RUB
Projected revenue (2020 – 2025)	406 mln RUB (7% TAM)

«Charley 1.0 WiFi»

Recognizes speech through the Internet
Price – 195 000 RUB


«Charley» device


USB-adapter


Charger


Documentation

«Charley 1.0 Server»

Recognizes speech offline
Price – 265 000 RUB


«Charley» device

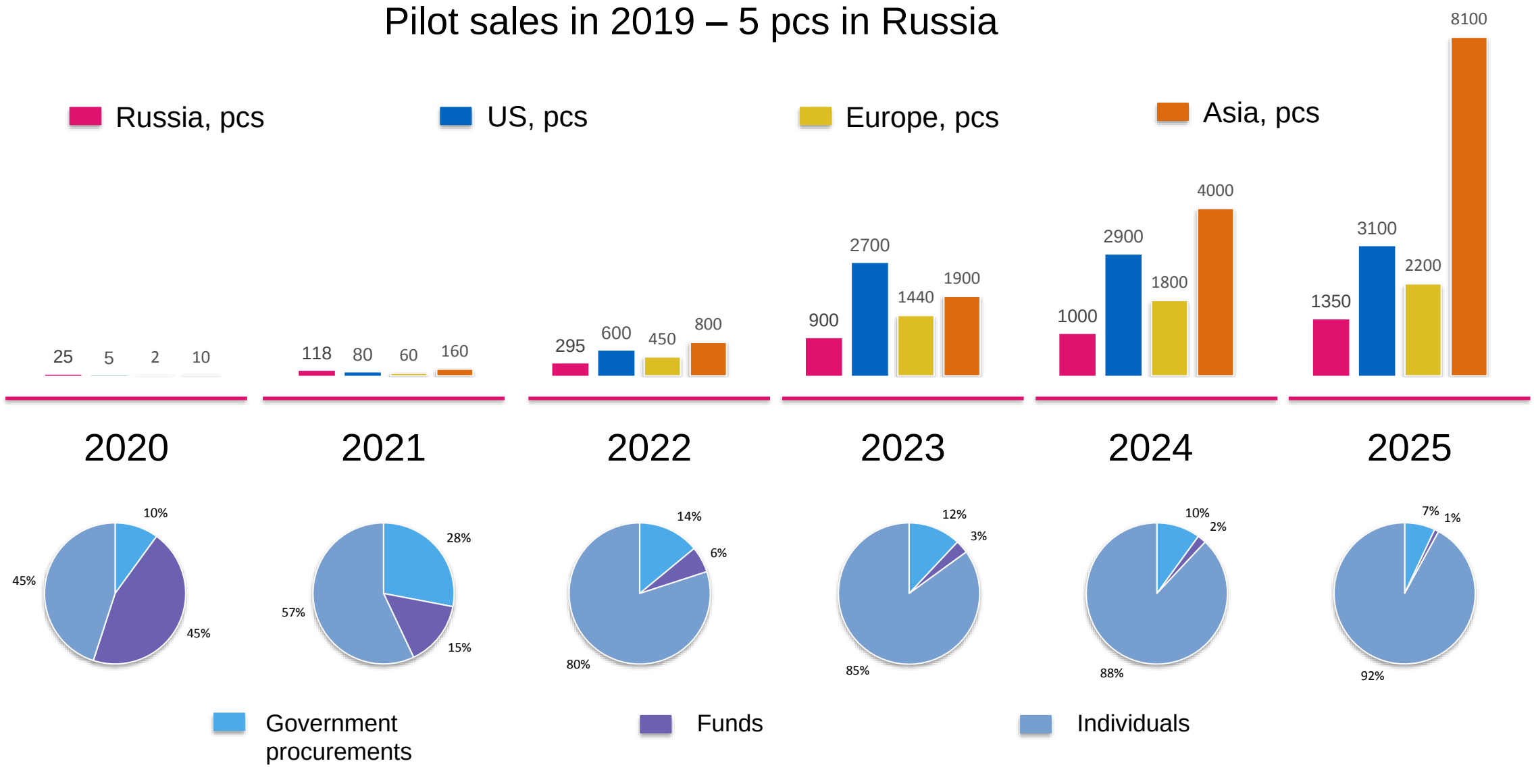

Compact «Server»


USB-adapter


Charger

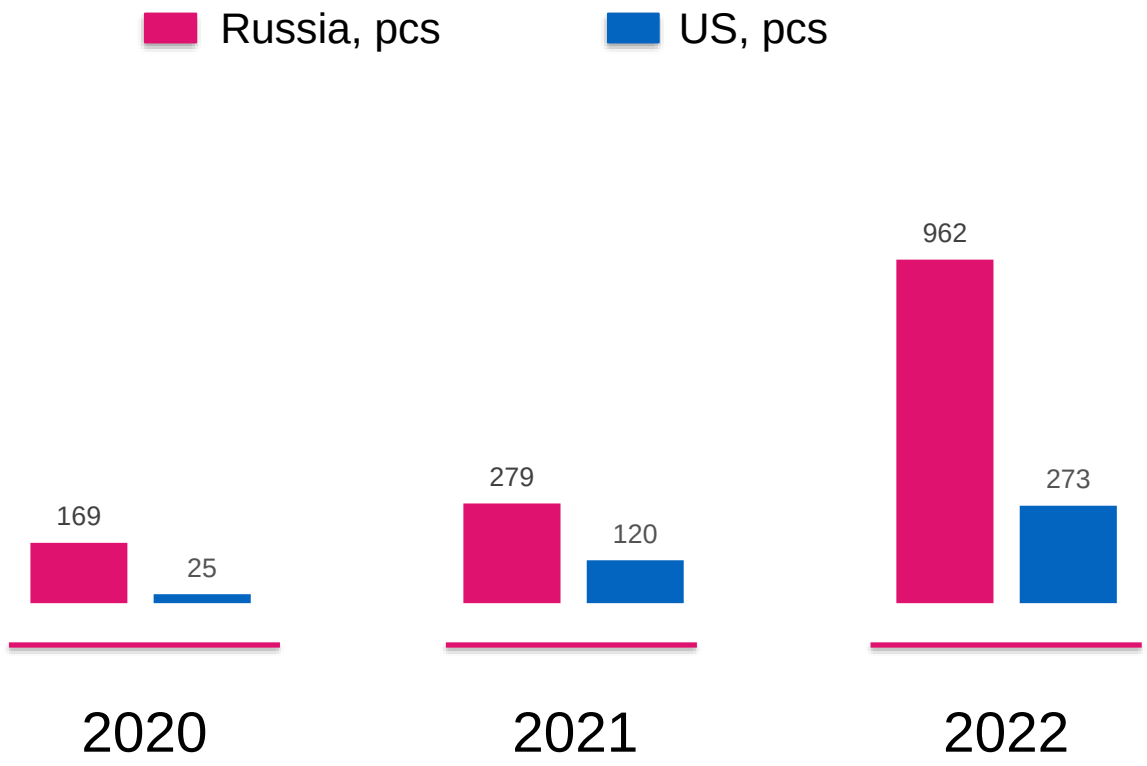

Documentation

Commercialization Model – Robin

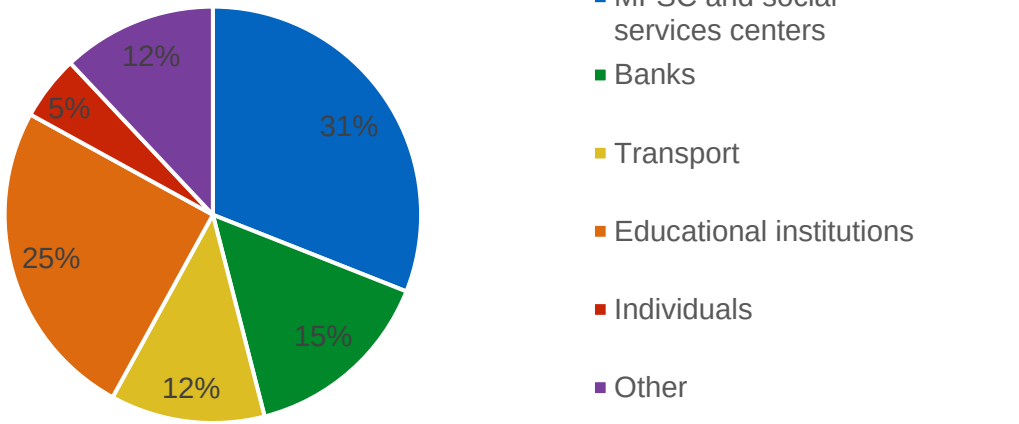


Commercialization Model – Charley

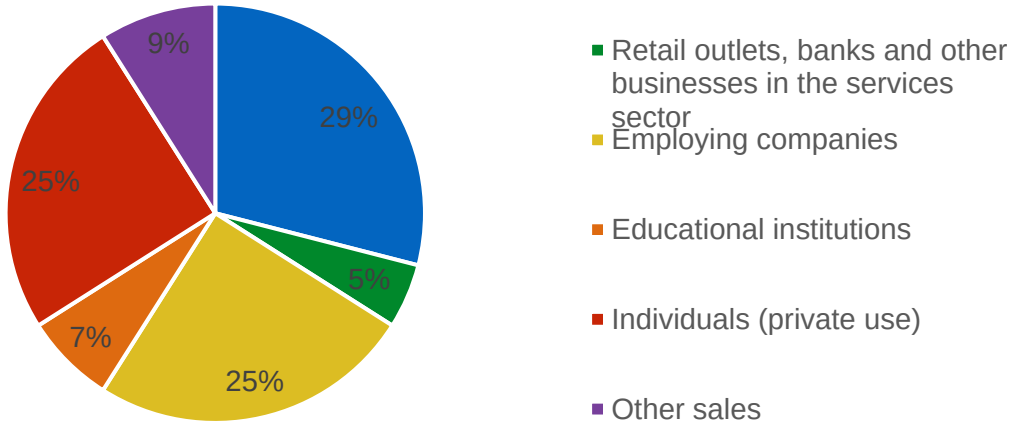
Pilot sales in 2019 – 7 pcs in Russia



Demand structure – Russian market



Demand structure – US market




See My World

See My World

Ophthalmic VR-Simulator See My World allows to imitate various eye diseases and bionic vision.

SMW VR

VR-helmet + PC + Software «SMW VR»

SMW PRO

Mobile app for «Android» & «iOS»

ФОНД ПРЕЗИДЕНТСКИХ ГРАНТОВ

СОЕДИНЕНИЕ ФОНД ПОДДЕРЖКИ СЛЕПОГЛУХИХ

Examples of simulations

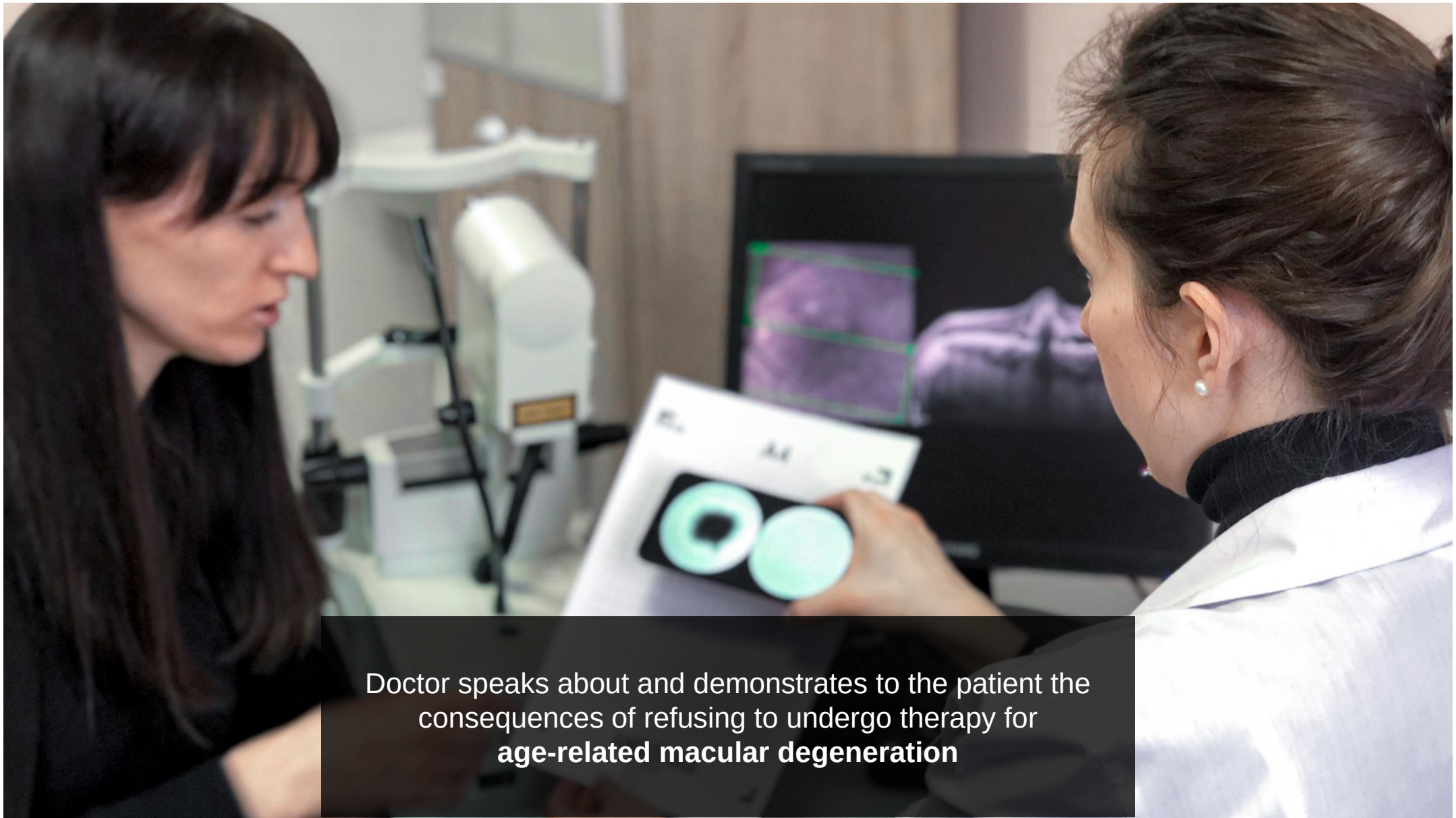
Age-related macular degeneration

Keratokonus

Cataract

Retinitis pigmentosa

See My World



Doctor speaks about and demonstrates to the patient the consequences of refusing to undergo therapy for **age-related macular degeneration**

Public Attention

We have been marked by:

Finalists 2019

Winners 2019

Writing and speaking about us:

телеканал

Partners

Have already believed in us:

Соединение
ФОНД ПОДДЕРЖКИ СЛЕПОГЛУХИХ

РВК

Sk Участник

МегаФон

ИСКУССТВО
НАУКА И СПОРТ

ФОНД
ПРЕЗИДЕНТСКИХ
ГРАНТОВ

КОМИТЕТ
ОБЩЕСТВЕННЫХ СВЯЗЕЙ
И МОЛОДЁЖНОЙ ПОЛИТИКИ
ГОРОДА МОСКВЫ

Helping us:

НЕЙРОНЕТ

AYPA-Tex

МИНПРОМТОРГ
РОССИИ

Team

Every day we invent something new!

SENSORTECH

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