Published on *Changemakers* (https://www.changemakers.com)

Home > GiveVision

GiveVision : Assistive Tech for visually impaired people

Londond, United Kingdom

GiveVision Team

Year Founded:
2014
Organization type:
for profit
Project Stage:
Start-Up
Budget:
$50,000 - $100,000
Website:
http://www.givevision.net
Twitter:
https://twitter.com/givevision_net
Facebook:
https://www.facebook.com/givevision/

[SHARE]

- Technology
- Disability

┌─ Project Summary ─────────────────────────────────
│ ┌─ Elevator Pitch ────────────────────────────────
│ │
│ │ **Concise Summary: Help us pitch this solution! Provide an explanation within 3-4 short sentences.**
│ │
│ │ GiveVision is a software that powers any smart glasses to act as a guide for blind and partially sighted people. It translates visual information into audio in real time and also enhances people's remaining vision to recognise text, signs, objects and faces.
│ │
│ │ **WHAT IF - Inspiration: Write one sentence that describes a way that your project dares to ask, "WHAT IF?"**
│ │
│ │ WHAT IF sight impairment was no longer a barrier to independent living
│ │
│ ┌─ About Project ─────────────────────────────────
│ │
│ │ **Problem: What problem is this project trying to address?**
│ │
│ │ We want to address the problem of independence and mobility affecting 300 millions of Blind and Visually impaired people worldwide. The vision aid tools and assistive technology for them have not evolved much in the last 20 years. None of the solutions offer an inclusive way of accessing visual information anywhere. As a result, 70% are unemployed with 1/3 living below the poverty line.
│ │
│ │ **Solution: What is the proposed solution? Please be specific!**
│ │
│ │ We have developed 2 types of low vision aids and combined them in one software package using text to speech (for low and no vision) and vision enhancement (for partially impairment). The camera and other sensors in the glasses are used to capture data around the user, process it, recognise objects, text, signs, and provide audio description in real time. Smart glasses with heads up displays will act as wearable, hands- free vision enhancement tool improving the access of visual information for partially sighted. Our solution has been flooded with excited responses from testers. Been tested by 200 visually impaired people across the UK, we work closely with Charities and blind Centres and aim to launch early next year.
│ │
│ │ **Awards**
│ │
│ │ The Technology Awards for the most innovative use of Augmented Reality ; finalist of Verizon Powerful Answers competition ; winner of Cambridge Wireless startups competition

<hr>

Impact: How does it Work

Example: Walk us through a specific example(s) of how this solution makes a difference; include its primary activities.

Observing our testers using their magnifiers was a revelation and the start of our interest for vision enhancement. Simone, for whom reading meant hunching an inch away from text, highlighted a simple fact: many people that are partially sighted stop reading because it is too tiring. They are looking for having a natural and simple way of reading. In this case, reading is quite broad but reading text or signs represent a large part of what we do everyday in a working environment. In addition, according to some sight conditions, vision enhancement will enable people to easily navigate as they will be able to see across a room, to discern faces so recognise and interact with people around them and to recognise objects such as bus stop.

Impact: What is the impact of the work to date? Also describe the projected future impact for the coming years.

So far, we work closely with a dozen of charities and blind centres across the UK. Approximately 180 visually impaired people have tested the prototypes. And the number of interest keep growing. We want to offer solutions that tackle their main challenges: - Navigation (outdoor and indoor) - Reading and writing - Shopping (offline and online) - Socialising (face recognition and social media) The features that have been developed already cover some of the challenges. However, we want to explore an improved indoor and outdoor navigation system that would assist users to use public transport, commute and guide them especially when users find themselves in unfamiliar environments. Economic and Social benefits are the most evident outcomes of this project. Wearable Computer vision technology is a next logical step in evolution of accessibility tech for Visually impaired people!

Spread Strategies: Moving forward, what are the main strategies for scaling impact?

We will be able to leverage our tech solutions through our partnerships with trusted and established organisations supporting or advising visually impaired people (charities and blind centres, eye care professionals and IT centres). Being hardware agnostic, in touch with various manufacturers, we will facilitate the spread and use of accessible applications on different devices and assist more beneficiaries. "Do not let your disability define what you can or can not do or who you are" is our main motive and will take us to develop more solutions for people who need it the most!

Sustainability

Financial Sustainability Plan: What is this solution's plan to ensure financial sustainability?

Our product comes free of charge for young and working age people benefiting from access to work and education grants. For those who can't access those grants, the package (glasses + software) will be available on a monthly subscription and on different devices. We will also license our technology to Hardware manufacturers. On a longer term, our software will be adjusted to respond to other disabilities needs.

Marketplace: Who else is addressing the problem outlined here? How does the proposed project differ from these approaches?

Visual aid market is dominated by Humanware Inc and Optelec Ltd offering expensive desktop scanners and hand-held magnifiers with basic functionality, which have not changed for 25 years! While being more expensive than our product, it is not portable and offers a very basic magnification or text reading features. None of the devices are internet enabled. The mobile world is for sure more accessible but only 1/10 applications are accessible today. A few projects build smart glasses to tackle this problem but have less functionalities to offer a complete experience of independence.

Team

Founding Story

In 2013, Stan and Peter met while working on a project together, building a financial market simulator engine and training tool for investment bankers. When the Google Glass was released they decided to develop the face recognition feature and shared it open source. A few blind people got in touch with them highlighting the potential of their work for visually impaired people. In June 2014, the GiveVision project was born. Then two blind programmers joined forces. Later on Elodie started the adventure in 2015 after working for MakeSense, a community supporting social entrepreneurs. In August 2015 the team doubled, when experts in computer vision and software development joined the team.

Team

Our team is formed of 4 software engineers (one of whom is blind himself and has a first hand experience of living with sight loss) experts in computer vision, android systems and wearables, and 2 business development and marketing executives with extensive experience of 3rd sector and Govt partnerships, led by a founder with previous exit in B2B software start-up. The team also counts a few volunteers helping on fundraising and user trials ; researchers specialised in image processing techniques and ophthalmologists facilitating the comprehension of the problem and liaising with professionals in the field. We aim to hire a bid writer and be supported by more consultants on product design and development. We are lucky enough to be advised by: Mike Short - Vice President of Telefonica, Chris Mairs - Blind Investor and successful entrepreneur, Willemijn Geldrop - head of business development Luxotica executive, Elena Tereshonok - Virgin Unite portfolio manager. Part of Wayra, Telefonica accelerator, MassChallenge accelerator and Founder.org program, our startup grows in a very supportive environment.

Source URL: https://www.changemakers.com/changemakers-open-pipeline/entries/givevision