Pixel Speak

The Savior of The Visually Impaired

Team Members

ZION:

I live in Marietta, GA
I am in 5th Grade
I am Interested in Inventing, and Business making.
I have a Fairly High experience level with Blockley and AI

MANISH:

I reside near Seattle, Washington. I am going to 6th grade in the fall. I am interested in business, AI, coding, engineering, and basketball. I have a moderate level of experience with coding and robotics. I have done some HTML and Python.

ALEXANDER:

I am a resident of Great Falls, VA. I will be going to 7th grade at Cooper MS next year. I am interested in engineering, business, AI, and cars. I have experience in coding, and have done HTML, robotics, and Python.
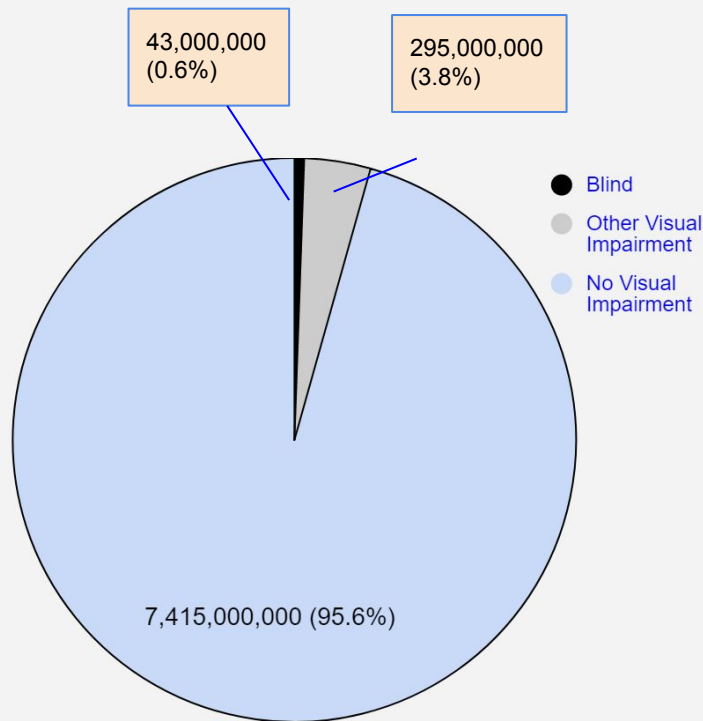
REBECCA:

Medina, WA
6th Grade
Interested in visual arts, coding.
Have done python and a bit of HTML.

Why Is Our Device Needed?

- 43 million people blind worldwide

- 295 million people with moderate - severe visual impairment

People who have a hard time or are unable to see can use Pixel Speak to "see" artwork and learn about it.

Pixel Speak will help people suffering from blindness, deafness and blindness combined, or any type of visual impairment with their daily lives and looking at art galleries. We just want to make life easier for all of them!

43,000,000 (0.6%)

295,000,000 (3.8%)

Blind

Other Visual Impairment

No Visual Impairment

7,415,000,000 (95.6%)

About The Pixel Speak

Trigger for braille mode

Our device, or the Pixel Speak will help the visually impaired with their daily lives. It takes pictures of things for people who have vision problems and tells them about it.
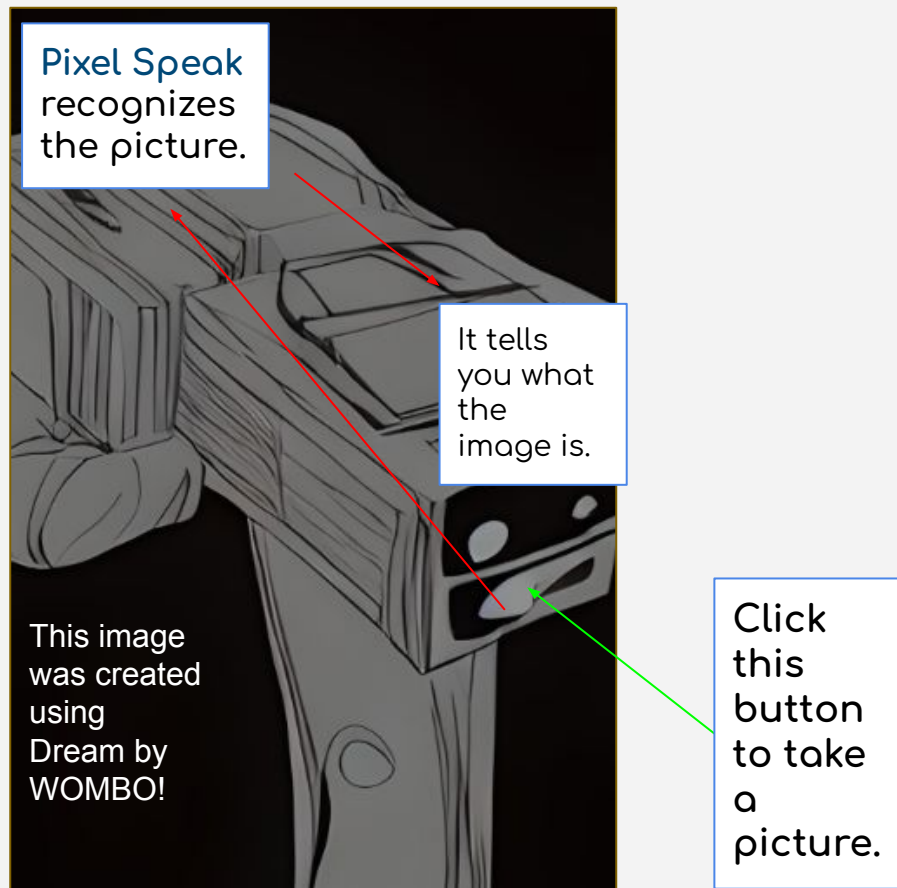
The Pixel Speak!

Braille Mechanism to write in braille in case someone is both deaf and blind

One trigger on the device toggles the modes. One mode is for blind people who can hear. The other mode is for blind people who are also deaf.

Pixel Speak Design

Pixel Speak uses AI to analyze specific images, colors, and more!

1. The Pixel Speak analyzes the specific object by taking a picture when you click the trigger.
2. It then runs the picture through a convolution neural network to determine what it is! It can also read subtitles and signatures.
3. It then says what the object is through a speaker.

Pixel Speak recognizes the picture.

It tells you what the image is.

This image was created using Dream by WOMBO!
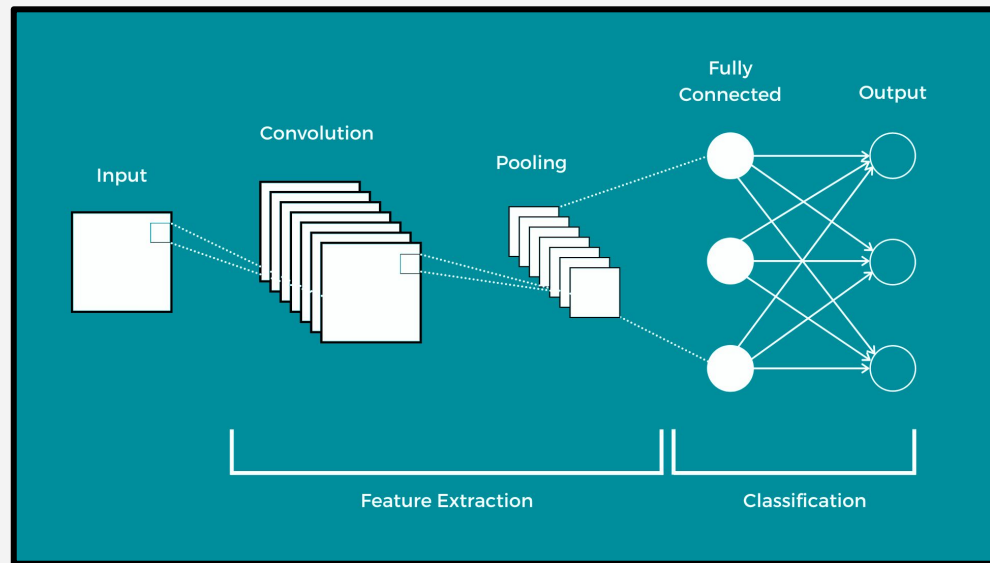
Click this button to take a picture.

The Impact

Visually impaired person

If a visually impaired person goes to an art museum, how will they enjoy the beauty of it? With our device, a visually impaired person can use a button. Once they press it, the image will be described to them. Our device can also do the same thing for things other than artwork.

Our AI Model

What is a Convolutional Neural Network, and how does it apply to the **Pixel Speak?**

A Convolutional Neural Network is a network with three channels. The earlier layers of the Network recognize major details of an image while the later layers reduce dimensionality.
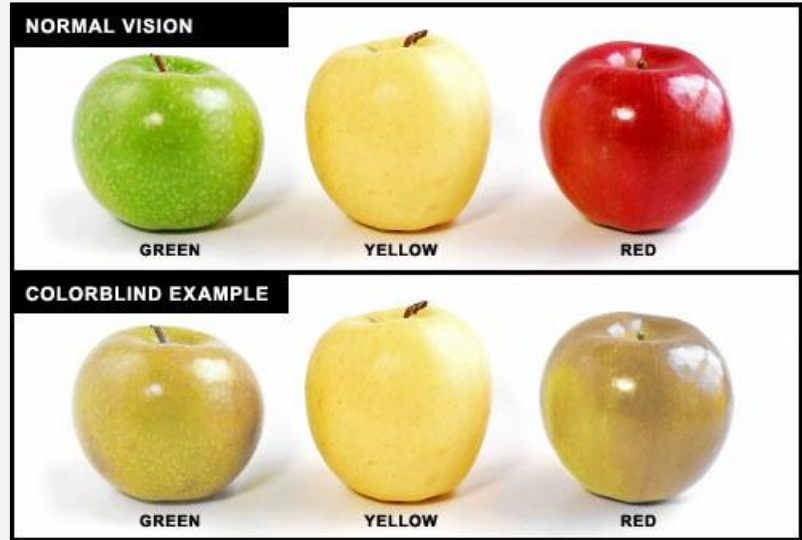
The **Pixel Speak** uses a Convolutional Neural Network to determine what the object in the picture is.

Competition

There are many other companies that have devices that help visually impaired people to know what things are.

However, Pixel Speak also has the ability to help people who are
- color-blind
- deaf and blind

NORMAL VISION

GREEN   YELLOW   RED

COLORBLIND EXAMPLE

GREEN   YELLOW   RED

Profits

The price of Pixel Speak is $1,750.

- Our device will be a one time purchase.
- If a customer wants insurance, they will have to pay ten dollars a month.
- The insurance only covers fees if the system fails.
- If the customer breaks it, they have to pay to buy a new device, *unless* they previously agreed to pay 25 dollars instead of 10.

Expenses

Profit and Expenses:

- 4,500,000 devices needed for production
- Needed over span of 2 years
- 5,625 employees needed
- $215,000 per year for 2 years provided for each employee
- Will spend $2,418,750,000 paying employees for first two years combined
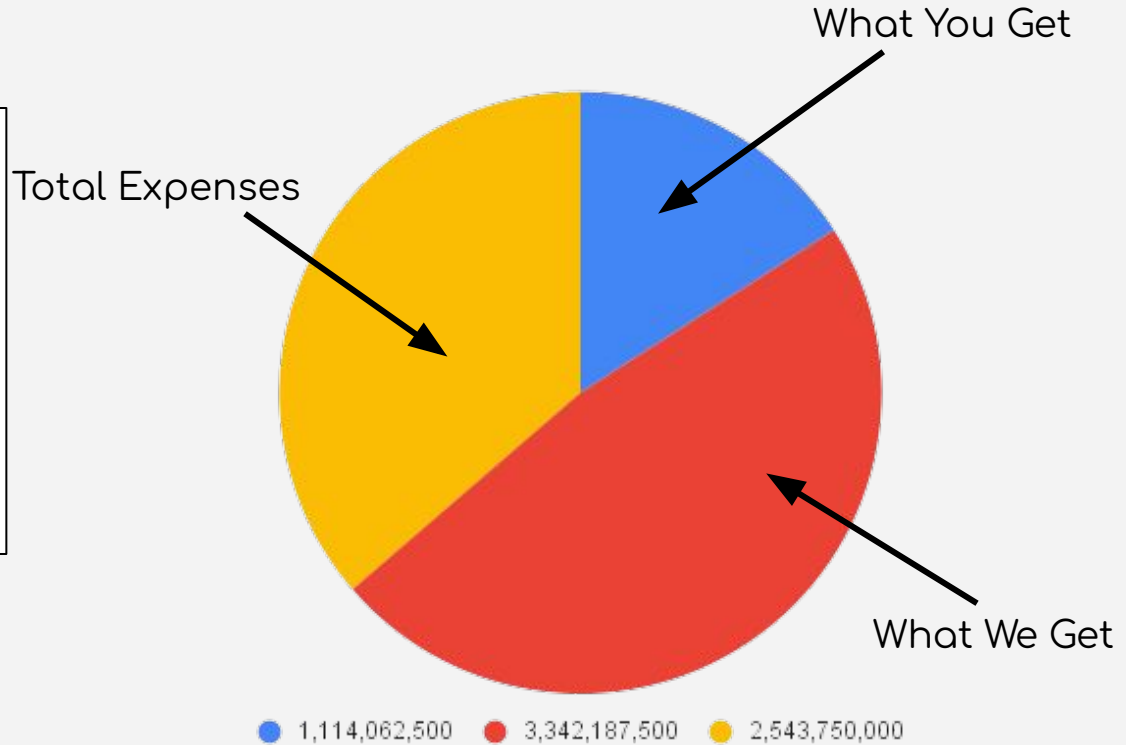- Other expenses will cost around $25,000,000 per year

Purpose For Funding

You should fund the 100,000 dollars of MEHTA+ money to us because we expect to have about 4 million people paying $1750 for our product.

This would give us around 7 billion dollars. Also, most people will pay at least 10 dollars each month for insurance. That would give us 40 million dollars each month. If they choose to pay 25 dollars for extra insurance, that would mean 100 million dollars each month.

What Will You Get Back If You Choose Us?

Pixel Speak is the most profitable company for you to invest in. If you choose to fund the **Pixel Speak,** we will you give you a stake of 25% in our company! With our calculated profits, you will get approximately 1.11 billion dollars.

What You Get

Total Expenses

What We Get

- 🔵 1,114,062,500
- 🔴 3,342,187,500
- 🟡 2,543,750,000

ESTIMATED REVENUE

Thank you for listening to our presentation. We hope you choose to fund our startup, so you can get the best deal and profit!