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# SIGN-2-ME


## Innovation Plan

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01

# EXECUTIVE SUMMARY



Imagine a parent hearing the words 'I love you' from their deaf child for the first time. Imagine a speech-disabled patient having private conversations with his doctor without a translator in the room. Sign2Me is an intelligent wristband that interprets sign language and transmits it out loud. Using advanced sensors and wrist motion analysis, it accurately interprets signs and 'speaks'. By addressing the overarching issue of accessibility and inclusion, we aim to ease communication between individuals who are unable to speak or hear.

## Problems:

## Solutions:

### Communication Barriers:

For people who cannot hear, being able to communicate is extremely difficult and often leads to isolation, alienation and reduced opportunities and benefits.

### Customizable and Comfortable:

Note-Able charges a set rate of 17.5\$ per hour per teacher, approximately half the price of a normal online music lesson.

### Pricey Interpreters:

Interpreters are very expensive, and are very necessary for day to day life and attaining jobs and a normal day. Socioeconomic gap is a problem

### Sign2Me App Customisability:

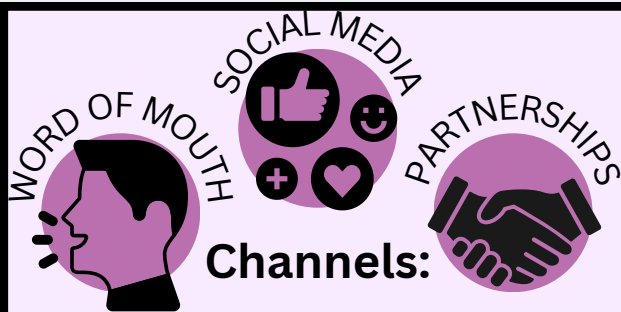
App contains many different languages. Allows for user to customize their voice to their delight

### Expensive Gadgets:

Gadgets such as hearing aids, alarm services and other aids are expensive and out of reach for many people.

### Consideration to our Customers:

Add on wristband helps people who are both blind and deaf communicate and quickly comprehend conversation. Other features...



### Secondary

- Individuals who have hearing disability
- Income: \$30,000-80,00
- are interested in accessible and new way to communicate
- Values customizability

### Customer Segments:

### Primary

- Parents 25-65
- Interested in buying gadget to help their kid
- Empathetic, Outspoken, Considerate

## Projected Revenue (3 years):

Profit without Tax	4,545,000	9,475,000	14,185,000
Profit (taxed 21%)	3,592,550	7,483,250	11,207,150
Gross Profit Margin	82.5%	85.4%	85.0%

## Unique Value Proposition:

Sign2Me is a lightweight wristband that interprets sign language through advanced sensors and AI, translating it into voice and text. With customizable features, language options, and smartwatch capabilities, it empowers Deaf users to communicate independently. Waterproof, child-friendly, and offline-capable, Sign2Me redefines accessibility and personalization for global communication.



## Investment:

Sign2Me merges advanced engineering with a human voice, offering accessible communication for people with hearing loss. Seeking \$1M with 15% interest (repaid in under 4 years) and a \$2M crowdfunding campaign for 10% equity, funds will support payroll, development, advertising, and manufacturing to drive momentum and innovation..

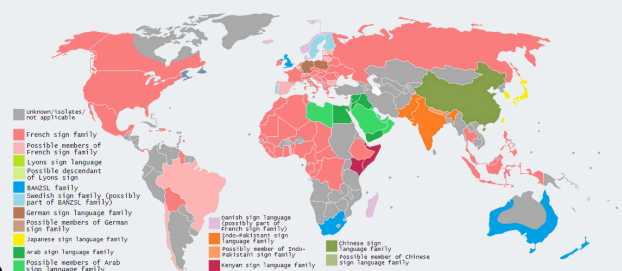
# 02 PROBLEMS

## Problem #1: Barriers

Most individuals who are deaf or hard-of-hearing rely on sign language, yet a significant portion of the population does not understand it. It's a significant barrier between living every day life, communicating in workplaces, public spaces, or even emergencies. Approximately 6% of the worlds population suffers from are disabled with hearing loss; that's **466 million people**. Around 72 million people have reported using a sign language. This impedes individuals ability to go to school, make friends, or get jobs, because they simply cannot keep up with human vocal speech. Often people who use sign language communicate through pulling up their phone and writing out sentences they want to be read aloud. This is very inconvenient and dampers conversation. The difficulty in having normal conversation severely demotivates people suffering with deafness to interact. People who are deaf and use sign language, most commonly American Sign Language (ASL), often face barriers to clear and effective communication within the healthcare system. This lack of access deprives them of essential health information and adequate care. Research indicates that Deaf patients visit their primary care providers less frequently and rely more heavily on emergency room visits compared to hearing patients, likely due to communication challenges.

## Problem #2: Interpreters

Hiring a certified interpreter is a privilege that many do not have access to. Interpreters can help with job interviews or important meetings with health professionals but they're pricey. On average interpreters charge between **75\$ an hour, often with a 2-hour minimum**. People in rural and low-income areas are often unable to pay the fee and have to ration their assistance. They are further disparaged from attaining a good job and being self-sufficient. Not only that, but in cases the lack of communication **can be life-threatening**. Critical health information may not be effectively communicated without an interpreter and if the deaf individual is incapacitated this poses a serious problem. In addition, there are over 130 confirmed different sign languages, while in american ASL is standardized, in other areas of the world, a traveling or residing dependent on ASL may encounter serious trouble either finding an interpreter or communicating with the local deaf community.



## Problem #3: Expensive Gadgets!

Many assistive communication devices for Deaf and hard-of-hearing individuals, such as video relay systems and speech-generating devices, remain inaccessible due to high costs and practical limitations. These devices often require significant financial investment, placing them out of reach for low- and middle-income individuals or families. Some examples are speech captioning systems, which provide real-time text display of spoken words; Speech-Generating Devices, which tend to cost around 500\$ or more; or Alerting systems, which notify individuals of important sounds (e.g., doorbells, alarms) through visual or tactile signals. understanding audio content. Additionally, many of these technologies are bulky, making them inconvenient for everyday use or mobility. Dependency on internet connectivity further restricts their functionality, particularly in rural or underserved areas where reliable internet access is limited. These challenges create barriers to effective communication, leaving many individuals without the tools they need to navigate daily interactions or emergencies.



# CUSTOMER SEGMENTS

To be able to maximize profits and blossom as a business, we need to connect with the right audience. Our customers are people with disabilities or some form of caretaker.

Primary: <b>Parents of Deaf Children</b>	Secondary: <b>Deaf Adults</b>
<p>The customers of Sign2Me are parents of deaf children who want to improve their childrens lives. They are interested in something affordable, durable and customizable. They are usually tech savvy and have a college education. They're used to researching solutions and products and often partipate in forums online in the deaf community. There are an estimated 365,000 parents of deaf children in the United States.</p>	<p>Individuals who are Deaf or hard of hearing prioritize empowerment, independence, and inclusivity, seeking tools that help them navigate the hearing world while fostering meaningful connections with both Deaf and hearing communities. They actively adopt innovative assistive technologies, such as hearing aids and sign language apps, but value brands that demonstrate genuine understanding of their needs. Many engage deeply with Deaf culture and prefer visually based communication tools like text and video calls. Driven by hope and trust, they embrace solutions that empower them, while frustration with barriers motivates their interest in products that bridge communication gaps.</p>
<p><b><u>Demographics:</u></b></p> <p>Parents age 25-65. of lower/ middle class (income \$ 30,000 -80,000)</p>	<p><b><u>Demographics:</u></b></p> <p>Individual with hearing disability 18-80</p>
<p><b><u>Geographics:</u></b></p> <p>Residents of the U.S.A. Most likely in suburban or urban household.</p>	<p><b><u>Geographics:</u></b></p> <p>Residents of the U.S.A. Most likely in suburban or urban household</p>
<p><b><u>Psychographics:</u></b></p> <p>Sign2Me's customers are people looking to improve communication and opportunities for their child. They are often very empathetic and are used to taking care of their childs special needs. They're always looking for any new technology or breakthrough and are very involved in their childs life in all respects.</p>	<p><b><u>Psychographics:</u></b></p> <p>Customer has likely struggled with communication and interactions. Further has felt alienated and isolated. Value a company which shows understanding and loyalty to their customers. Wants company to have true understanding of unique needs and no superficial solutions.</p>
<p><b><u>Behavioral:</u></b></p> <p>Parent customer is extremely involved in childs life, is avid partipater in support groups, online forums, and advocates for better access and consideration. Invests signifigant time researching reviews and product quality before making a purchase yet is an early adopter.</p>	<p><b><u>Behavioral:</u></b></p> <p>HLikely favors technology and prefers communication through text, email or video calls. Strong preference for mobile compatible solutions and is very interested in ways to make life more accessible. Likely is active on visually engaging platforms like TikTok or instagram.</p>

# UNIQUE VALUE PROPOSITION

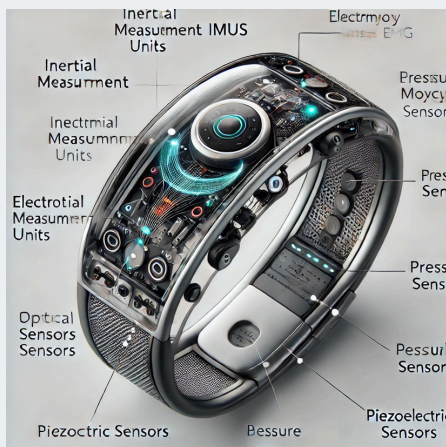
Imagine a deaf person walking into a coffee shop and being able to order their own coffee without needing help from a friend. Sign2me is a lightweight effortless wristband that interprets hand signals through advanced intelligent sensors and AI technology. It translates the signals into a voice so users can 'speak' with their hands. The wristband has a small screen which writes out the message so that the deaf person can catch any errors or inconsistencies through just a tap. Like the way you would backspace on an incorrect autocorrect edit.

Furthermore the wristband serves as a smartwatch, with various SOS and emergency systems. Our users can customize their experience with the band through the Sign2me app, where they can change their voice (man, woman, accent), download languages from a library of 100 different sign languages, and add shortcuts to their signing library. Our app tracks signing data to further personalize our customers style and slang. Don't worry about different languages, just set the band to a different language and it will translate out loud into Spanish, German, Dutch, French, or wherever you are. Want to get it for your kid? The wristband is extremely child and explorer friendly as it works both online and offline and is completely waterproof up to 20 feet.

## SOLUTIONS

### Solution #1: Customizable

The Sign2Me wristband is extremely lightweight, customizable, and durable. Featuring 10 different color options and 5 different wristbands. You can choose between a stainless steel or matte finish on your band. The overall weight is around 50 grams, close to the largest size of apple watch you can buy. Don't worry about shattering the glass, our new Ion-x plexiglass can withstand pressure up to 100 pounds per square inch, making it resistant to everyday wear and tear, accidental drops, or impacts. You can swim, shower, and dive with the band up to 20 ft underground. The band contains a water ejection system through buzzing. Our SOS and emergency services call the local emergency service number and your emergency contacts with a press of 2 buttons or extreme heart rate differences.



#### Small Speaker, big voice:

for clear and natural voice output. Utilizing advanced piezoelectric transducer technology, the speaker delivers crisp audio with minimal distortion, ensuring that translations are easily understood in various environments. Whether in a quiet classroom or a bustling café, the speaker automatically adjusts its volume to suit ambient noise levels using built-in noise-cancellation microphones. Its capability to emulate different speech tones adds a personal touch, making the wristband not only functional but also relatable. Despite its small size, the speaker can project sound up to 85 decibels, comparable to a smartphone speaker, ensuring effective communication without compromising portability.

#### Top-notch sensory recognition:

The Sign2Me wristband utilizes advanced sensors, including inertial measurement units (IMUs), electromyography (EMG) sensors, pressure sensors, optical sensors, and piezoelectric sensors, to interpret sign language with exceptional accuracy. By detecting wrist movements, muscle activity, and tendon shifts, the wristband maps these signals to specific gestures in real time. Its AI-driven system processes this data seamlessly, translating muscle contractions and tendon motions into text or speech. This precise tracking ensures reliable communication, adapting to various signing styles and hand structures.





## Solution #2: The App

The Sign2me app allows users to download languages and customize their voice. They can download different sign-languages from a list of 100 most popular options. Then they can set which language they'd like to translate out-loud in. The sign2me app comes with a pre-downloaded set of 23 of the most commonly spoken languages but users can download more languages on their own demand. Furthermore users can customize their voice based on gender, age, accent, and timbre. We have over 50 different options in that department.

If users want to create a shortcut they can do so on the app and invent their own sign signals! A little bit like face ID, the watch will require the user to go through the sign motion 10 -20 different times so it can learn the pattern. Additionally, every day the app downloads the signing data from the day and uses it to teach the technology to be more compatible to the users personal signing style and flair! It helps with cadence and tone, once the system gets comfortable it may start to add in emotions like sarcasm or humor into the voice.

## Solution #3: Xtra Features

For people who are blind and deaf, or may need some other way of communication, add ons like a separate 'feel' wristband may be added. The feel wristband incorporates listening technology and uses a braille keyboard to gently push into the users skin. The user will be able to 'read' what is being said aloud that may not hear or fully understand. While this band is not as intelligent as the Sign2me original band we are currently working on adding more features.

The Sign2me app also has various apps, like an apple-watch it has bluetooth capabilities and an app store. Some of the standardized apps include the phone, messaging, voice recording, alarm clock, settings, and mindfulness app. The mindfulness app is designed to promote relaxation and mental well-being through guided breathing exercises, calming visualizations, and personalized reminders. Users can set meditation goals, access soothing audio tracks, or practice daily affirmations, all tailored to their preferences. Integrated haptic feedback provides gentle vibrations during exercises, helping users stay focused and grounded. Whether it's a quick three-minute breathing session or a longer meditation, the mindfulness app ensures that users can prioritize their mental health seamlessly alongside the wristband's core communication features.





# 5.1 CHANNELS

## Social Media:

- Will be active on platforms such as **Instagram, Tik Tok, Facebook and NextDoor** where we will reach out through personalized informational posts, interactive polls, and ads
- We will incorporate **AI** into our social media marketing campaigns for our ads placement and targeting. AI will analyze data and analytics of our posts/ads and will adjust in *real time*, while relaying the results back to our team.
- 

## Word of Mouth

- we will mass email schools, parents, disability forums, newspapers etc.
- will reward people who bring in new customers
- 
- Occasionally a pop up will ask how users experience with Sign2Me went
- Incentivize users to share by offering 2 *coupons* for anyone who they get to sign up and buy product, in return they will receive bonus features as well.

## Partnerships

- 
- We will also partner with healthcares and clinics, they will be able to buy bulk for more reduced prices

## Distribution Channels:

To make itself available to the public, Sign2Me uses direct business to consumer channels by directly publishing onto several app stores such as the **Apple store, Google Play store, and Microsoft Store**. Additionally Sign2Me will be available on the **web** for broader accessibility, but users will be recommended to use the app for technical reasons. You will be able to buy the band on Amazon, in stores like Best Buy, or straight on the website.

## Customer Life Cycle:



Visit Sign2Me app or website

Download app for free through:



Purchase wristband:



Rate and review

Spread word to new customer and repeat process.



5.2

# COST STRUCTURE

Sign2Me will use Wix in its first few years in order to focus in on developing its voice software. The Sign2Me app will be directly available through the Apple, Microsoft, and Google app store.

App store: 125\$  
Google: 25\$  
Wix: 312\$  
Microsoft: 100\$

Distribution Type:	Distribution Cost:
Travel	5000
Insurance	2500
Incorporation Fees	300
Website/App fees	500
Automatic Payment Program	1080
Google SEO	32,000
Total:	41,380

The wristband will cost 350\$ and 250\$ to produce

## Human Resource Chart:

Position	Salary	Year 1	Year 2	Year 3
Software Engineer	\$100,000	3	5	8
Hardware Engineer	\$95,000	2	3	5
UI/UX Designer	\$85,000	1	2	3
Project Manager	\$90,000	1	1	2
Quality Assurance Specialist	\$70,000	1	2	3
Customer Support Specialist	\$50,000	1	2	3
Marketing Specialist	\$65,000	1	2	3
Total Costs		850000	1415000	2265000

## Human Resources

Our Human resource team will be the foundation of our company so we will seek to grow and reward our team every year. First, Sign2me will hire a team of computer specialists who will develop our app and software. They will work on making the platform run efficiently, so it will take up less internet for our users who may come from more disadvantaged communities. They will be working alongside the engineers who will make sure that the technology is functioning the most efficiently and continue making improvements in the wristband models.

Second, in our advertising team we will have the social media manager who will work alongside the content creators to produce hooking content and ads. The social media manager will be in charge in collecting statistics from our key metrics, seo, and advertisements. As we grow our team will increase and we will be able to further pursue more channels and advertisement opportunities. We will also have a marketing rep who will reach out to various business for our partnerships and good relations. They will attend conferences throughout the year.

Our customer service reps will be in charge of making sure everything runs smoothly with customers and deal with any immediate concerns. They will also be in charge in collecting numbers of general platform feedback.

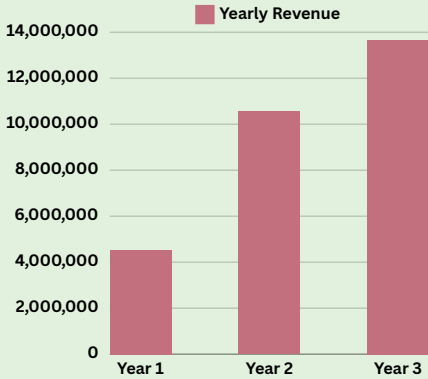
The customer aquisition cost is

80,000 / 15,000

=

5.33\$

## Projected Profits



Category	Year 1 (in \$)	Year 2 (in \$)	Year 3 (in \$)
Sales Revenue	1,750,000 (5000 units)	4,200,000 (12000 units)	6,300,000 (18000 units)
Partnership Revenue	400,000	800,000	1,200,000
Net Revenue	5,450,000	11,100,000	16,650,000
Expenses:			
Human Resources (HR)	750,000	1,400,000	2,150,000
Distribution Costs	60,000	80,000	100,000
Additional Marketing Costs	80,000	120,000	180,000
Event Costs	15,000	25,000	35,000
Total Expenses	905,000	1,625,000	2,465,000
Profit without Tax	4,545,000	9,475,000	14,185,000
Profit (taxed 21%)	3,592,550	7,483,250	11,207,150
Gross Profit Margin	82.5%	85.4%	85.0%

# KEY METRICS



## Quality Control

By tracking quality control, we will be able to monitor the interest and involvement of our users. If they engage more with certain features it shows that they are more successful or interesting to our users, while shorter times show that the lesson may be too easy or less engaging. This will help us see which features and content is more popular so we can optimize those areas and better the struggling ones. Additionally, this data can show us peak usage times and help us tailor the user experience.



## Consumer Retention Rate

We will analyze the number of purchased subscription plans, as well as which type in order to get a grasp on customer satisfaction rate. If there is a sudden increase in cancelations, we will have an opportunity to review any possible issues and solve them fast, rather than waiting for statistics to surprise us. In addition we will have occasional pop up icons that ask users about their experience with Sign2Me so we can get immediate feedback data.

This approach helps ensure that Sign2Me evolves to meet customer needs, ultimately building stronger user relationships.



## Adaptive Learning Effectiveness

Note-Able will track the effectiveness of our AI tools and features, this involves assessing how well our AI algorithms personalize language. This is done through analyzing the alignment of the speaking data with the user's signs, Tracking # of corrections made on screen. We will occasionally have pop ups asking the user how difficult the app is to understand, and what areas they feel weaker on. A high level of effectiveness can reveal that the user faces healthy communication, is content with software, and gained more accessibility in their day to day life. A low level shows that the software is making too many mistakes and might have some unresolved flaws. This will help us continuously develop our AI tools based on the effectiveness that we see, and stay true to our mission: to make communication accessible.

# COMPETITIVE ADVANTAGE

## Glove

- Pros:
  - more accurate
  - \* also has some similar flexible features (3000)
- Cons:
  - more expensive: 3000
  - has less features
- Examples:
  - brightsign glove



## Sign2Me

- Pros:
  - Affordable: 350\$ one time purchase**
  - Can be bought on amazon**
  - Flexible features: different languages, personalized voice**
- Provides extra apps and emergency services
- Tracks heartrate
- Cons:
  - my make errors occassionaly
  - may not understand all slang

## Phones

- Pros:
  - technology is very accurate
- Cons:
  - still can make mistakes
  - very annoying to use
  - have to type out everything
- Examples:
  - Ava, otter.ai, captioning (android)

Sign2Me takes a step above its competitors and makes speaking as effortless as signing to someone who already knows the language. Phone captioning apps are often clunky and make mistakes, and to communicate usually people who are deaf or non-verbal must type a message and then have it read which is very inconvenient and a significant damper on a conversation. Meanwhile the glove is the first evolution where sign language is easily understood. It has remarkable accuracy, yet it doesn't provide any confirmation to what the person is signing is correctly understood. The Sign2Me wristband takes this into consideration with its screen and is ultimately more lightweight and technologically advanced compared to our competitors.

**"Your voice is the most powerful weapon which you can use to change the world." – Nelson Mandela**

The Sign2Me wristband stands out from its competitors by combining advanced motion and tendon-sensing technology with a sleek, lightweight design that ensures accuracy and comfort. Unlike bulky or stationary assistive devices, it's portable, customizable, and doesn't rely on constant internet connectivity, making it ideal for diverse settings. Its real-time sign language interpretation and clear voice output bridge communication gaps seamlessly, while the integrated mindfulness and productivity apps add value beyond basic functionality. With affordability, durability, and accessibility at its core, the wristband redefines how assistive communication devices empower users.

## 6 CONCLUSION

All in all, Sign2Me combines the pros of new advanced engineering and software with a human voice, providing the people with hearing loss with more flexible, accessible, and affordable ways to communicate. We will be seeking an investment of 1,000,000\$ with an interest of 15% that will be repaid by taking 50 cents out of every customer subscription. The loan (with interest) will be paid off in less than 4 years' time. In addition to a 300,000\$ personal investment, Sign2Me will also conduct a crowdfunding campaign for 2,000,000\$ for 10% equity that will help us gain initial momentum. The money we raise will be used for our payroll, website costs, advertising, app development, manufacturing costs and technology development .

**To us, success is a never-ending pursuit. We hope that eventually, Sign2Me's reach will increase to the point of where every kid in America knows that they are guaranteed the opportunity to communicate. We hope to reduce feelings of alienation and isolation disability barriers may cause**

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