

# **BUSINESS PLAN**

**Talker**

**Muriel Green, Owner**

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# **1. EXECUTIVE SUMMARY**

## **1.1 Product**

Augmentative and Alternative Communication (AAC) devices that generate spoken words from picture icons and text-to-speech software. We aim to provide affordable, open source, high-tech assistive devices that autistic individuals and their families can build, repair and customize themselves.

## **1.2 Customers**

Autistic individuals and their families. Individuals with language and speech disabilities. Language learners. Speech therapists.

## **1.3 What Drives Us**

Language is a fundamental tool and we want individuals with language disability to have as many options as possible for communication. Augmentative and Alternative Communication (AAC) devices are very expensive and we want to provide a more affordable, open product.

## **2. COMPANY DESCRIPTION**

### **2.1 Mission Statement**

To empower people with the tools to make and customize their own high-tech Augmentative and Alternative Communication (AAC) devices.

### **2.2 Principal Members**

Muriel Green - Founder

### **2.3 Legal Structure**

I am seeking a knowledgeable VC firm experienced in taking open source hardware products to market to provide guidance on the path to incorporation.

# **3. MARKET RESEARCH**

## **3.1 Industry**

Families of children who have language delays are willing to do anything to help their children learn to use language. This vulnerable position has made our customers a target for many overpriced products. I seek to provide affordable open source alternatives to the high priced AACs, tablets, and mobile apps that are currently available.

## **3.2 Customers**

Our customers are the approximately 25% of people with autism who have a language delay. Many people who have autism are very capable and even have exceptional talents. However, getting by day-to-day with a language disability makes life difficult.

The families of an individual with a language delay are often the ones to seek out a high-tech communication device for their autistic relative. Therefore, the families of autistic individuals are also our customers.

Speech therapists may also be interested in this product because many speech therapists have AAC devices on hand for their clients to try before buying.

Language learners may be interested in this product for practicing pronunciation or building confidence starting conversations in their new language.

## **3.3 Competitors**

There are many companies that make high tech AAC devices. There are also many companies who make communication or speech therapy apps for mobile devices. I have tried most of these devices and apps and I can provide a detailed list of competitors to investors upon request. Another option on the market is a low-tech system such as picture exchange or sign language.

## **3.4 Competitive Advantage**

The main advantage we have is price. My prototype cost \$150 to build, and I aim to bring that cost

down significantly before going to mass market. I have a goal to make this device available for a retail price of under \$100. Compare this price point to the \$6,000 device that our competitors sell and the advantage is obvious.

Another advantage is our commitment to open-source hardware and software. The devices I build are based on Raspberry Pi and Arduino technology. The software I write is based on Django MVC web framework. This transparency with the product will give us an advantage because our customers can build, customize and repair their own devices. Our competitors' locked-down products do not allow users to build and repair their own devices, and customization is limited.

### **3.5 Regulation**

My company needs to comply with Intellectual Property Law and Patent Law. I have an appointment with a librarian in Wichita who specializes in advising inventors in these areas. My company will be selling products to consumers directly. Since we will not be accepting insurance reimbursement or selling to medical providers, we will not be subject to medical regulations. My company will research the general safety standards for similar hobbyist electronics companies and abide by those regulations.

## **4. PRODUCT/SERVICE LINE**

### **4.1 Product or Service**

The product we provide is a web interface that allows users to press an icon and hear a spoken word. This product can be delivered via the web, mobile apps, pre-built hardware devices, and hardware kits for users to build themselves.

### **4.2 Pricing Structure**

Web application - Free version with only the default icon and voice set. Paid version with a username login that allows the user to upload their own icons and voices. Price will include: cost of time programming and cost of hosting.

Mobile app - Free version with only the default icon and voice set. Paid version that allows the user to create custom icons and record custom voices. Price will include: cost of time spent programming and cost of deployment.

Pre-Built Devices - These will be built with open source hardware and programmed with open source software and shipped with instructions for use as well as: links to code repositories, a detailed parts list, and tips for customization. The price of these will include: cost of materials with markup, cost of research and development, cost of time for writing the instructional materials, and cost of time for example code programming.

Kits - These will consist of the same parts that are in the Pre-Built devices, but ship unassembled. Kits will ship with the same instructions as the Pre-Built Devices. Price will include: cost of materials including markup, cost of writing the instructional materials, and cost of processing and packaging.

### **4.3 Product/Service Lifecycle**

Web App - Free version complete. Paid version in development.

Pre-Built Devices - Prototype complete. Need funding to hire an EE to optimize hardware selection.

Kits - Research and Development stage in process for both software engineering and supporting writing (instructions, tips, and component list.) Waiting on the same engineering input as the Pre-Built Devices.

## **4.4 Intellectual Property Rights**

Intellectual property of the system-on-a-chip. Standard open source licenses for using these types of components in a commercial product.

Intellectual property of the h files for the supporting libraries. We will confirm licensing restrictions with each author.

The default icon set in my Web App is currently made up of drawings that I drew by hand and recordings of my own voice. The concept of using these particular images with these particular words is a well-established convention in speech therapy. I plan to ask the Patent Law Librarian about the implications of replicating these images and phrases in my products.

## **4.5 Research & Development**

Appointment with a Librarian who specializes in patent law and intellectual property law for inventors.

Filing an application for a patent, if allowed.

Quality assurance testing on the Web App already in process to ensure compatibility with a wide range of operating systems and devices.

Usability testing with individuals who have language delays.

# 5. MARKETING & SALES

## 5.1 Growth Strategy

In the first year (2018) we will:

Hire a graphic designer for a three-month contract to create tabling signage, a website, and packaging.

Hire an electrical engineer for a three-month contract to deliver specs for a market-ready version of the prototype.

Hand pick individuals who are already active in the open source accessibility community to receive free development kits.

Launch a kickstarter campaign to pay illustrators to create expanded sets of icons.

Hire voice actors to record expanded sets of voices.

Explore contracting with vendors to write enhancements that will be pushed back into the open source repositories.

Produce a limited number of devices.

Present at open source conferences about the importance of accessibility in open source.

Assess whether we have met our first-year goals and if we should alter our second-year goals.

In our second year (2019) we will:

Double our production.

Hire a full-time marketer to develop the online community, table at conferences, and serve on the steering committee to develop a three-year strategic plan for the brand.

Hire a full-time software engineer to work with developers, community members, and vendors to prioritize and develop enhancements, as well as tracking and fixing bugs.

Shift from presenting at conferences as researchers to tabling at conferences as a vendor. Double the number of staff who attend conferences.

Assess whether we have met our second-year goals and if we should alter our third-year goals.

In our third year (2020) we will:



Double our production.

Give raises to our existing staff.

Hire support staff.

Continue to attend conferences as a vendor.

Assess whether we are on track to meet our strategic plan goals and make adjustments as necessary.

## **5.2 Communication**

We will communicate with customers via multiple channels: development forum, discussion board, website, email and mailing lists.

We will establish:

- An online development forum for bug tracking and pull requests. This channel will be for those customers who want to be part of the open source development process.
- A discussion board. This channel will target customers who want to be part of a community without the nitty-gritty programming tasks.
- A website for passive communication, email for two-way private communication with customers, as well as a mailing list to communicate updates via one-way communication.

## **5.3 Prospects**

Online sales via established outlets such as Tindie.

In-person sales via tabling at conferences and conventions.

I am open to other distribution models, especially from a VC firm experienced in taking a prototype to mass market.



## 6.2 Cash Flow ( to )

	Pre-Startup EST	Year 1	Year 2	Year 3	Total Item EST
Cash on Hand					
<b>CASH RECEIPTS</b>					
Cash Sales					
Collections from CR Accounts					
Loan/Cash Injection					
<b>TOTAL CASH RECEIPTS</b>					
<b>TOTAL CASH AVAILABLE</b>					
<b>CASH PAID OUT</b>					
Purchases					
Gross Wages					
Outside Services					
Supplies					
Repairs & Maintenance					
Advertising					
Car, Delivery & Travel					
Accounting & Legal					
Rent					
Telephone					
Utilities					
Insurance					
Taxes (Real Estate, etc.)					
Interest					
Other Expenses					
<b>SUBTOTAL</b>					
Loan Principal Payment					
Capital Purchase					

Other Startup Costs					
Reserve and/or Escrow					
Others Withdrawal					
<b>TOTAL CASH PAID OUT</b>					
<b>CASH POSITION</b>					

## 6.3 Balance Sheet

### Assets

Start Date:

End Date:

#### **CURRENT ASSETS**

Cash in Bank		
Accounts Receivable		
Inventory		
Prepaid Expenses		
Other Current Assets		
<b>TOTAL CURRENT ASSETS</b>		

#### **FIXED ASSETS**

Machinery & Equipment		
Furniture & Fixtures		
Leaseholder Improvements		
Land & Buildings		
Other Fixed Assets		
<b>TOTAL FIXED ASSETS</b> (net of depreciation)		

#### **OTHER ASSETS**

Intangibles		
Deposits		
Other		
<b>TOTAL OTHER ASSETS</b>		
<b>TOTAL ASSETS</b>		

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## **Liabilities & Equity**

### **CURRENT LIABILITIES**

Accounts Payable		
Interest Payable		
Taxes Payable		
Notes, Short Term (due in 12 months)		
Current Part, Long-Term Debt		
<b>TOTAL CURRENT LIABILITIES</b>		

### **LONG TERM DEBT**

Bank Loans Payable		
Notes Payable to Stockholders		
LESS: Short-Term Portion		
Other Long-Term Debt		
<b>TOTAL LONG-TERM DEBT</b>		

### **TOTAL LIABILITIES**

### **OWNER'S EQUITY**

Invested Capital		
Retained Earnings		
<b>TOTAL OWNERS EQUITY</b>		

<b>TOTAL LIABILITIES &amp; EQUITY</b>		
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## 6.4 Break-Even Analysis

<b>DIRECT COSTS</b>	<b>Fixed Costs (\$)</b>	<b>Variable Costs (%)</b>
Cost of Goods Sold		
Inventory		
Raw Materials		
Direct Labor		
<b>INDIRECT COSTS</b>		
Salaries		
Supplies		
Repairs & Maintenance		
Advertising		
Car, Delivery & Travel		
Rent		
Telephone		
Utilities		
Insurance		
Taxes		
Interest		
Depreciation		
Other Costs		
<b>Total Fixed Costs</b>		
<b>Total Variable Costs</b>		
<b>BREAKEVEN SALES LEVEL:</b>		

## **6.5 Financial Assumptions**

### **6.5.1 Assumptions for Profit and Loss Projections**

We assume that:

- The cost of materials stays the same as it is now.
- We are able to hire a marketer and an electrical engineer for the price we want.
- The marketer and electrical engineer meet the goals for development stages according to the projected timeline.

### **6.5.2 Assumptions for Cash Flow Analysis**

### **6.5.3 Assumptions for Balance Sheet**

### **6.5.4 Assumptions for Break-Even Analysis**