



the calming operating system

## Start-Up Business Plan

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April 6, 2023





# Table of Contents

Executive Summary.....	1
Problems.....	2
Customer Segments .....	3
Unique Value Proposition.....	4
Solutions .....	5
Channels.....	6
Revenue Streams.....	7
Cost Structure.....	8
Key Metrics .....	9
Competitive Advantage .....	10
Conclusion .....	10
Bibliography .....	10

# EXECUTIVE SUMMARY



A-Spec Technologies simplifies smart devices, making them less apt to overstimulate people on the autism spectrum. With fewer app options and a caretaker control app, the A-Spec operating system (OS) is making technology more serviceable to people with autism.

## CUSTOMER SEGMENTS

### Primary Market

Parents of children on the autism spectrum  
Wish to build their child's emotional and intellectual skills

### Secondary Market

Low functioning adults on the autism spectrum  
Desire more independence through technology

## PROBLEM

Smart devices are overstimulating for many people on the autism spectrum.

There are few apps or software for people on the autism spectrum focusing on counseling or cognitive development.

Communication apps have few features and are not affordable.

## SOLUTIONS

A-Spec has a simple interface with calming colors, controllable sounds, and streamlined app options.

A-Spec OS' tools help develop cognitive skills and promote independence.

A-Spec OS offers a variety of features, is fully customizable, and is a better value than competitors.

## UNIQUE VALUE PROPOSITION

A-Spec OS is **affordable, fully customizable** and tailored for children and adults on the **autism spectrum** and others with significant sensory issues to be able to use electronic devices **comfortably, effectively, and enjoyably**, without fear of being overstimulated.

## COMPETITIVE ADVANTAGE

CUSTOMER RELATIONSHIPS

DEVELOPMENTAL TOOLS

GRANT POTENTIAL

## CHANNELS Marketing



Social Media



Schools



Website



SEO

## Distribution



Purchasing



Fulfillment

## KEY METRICS



ROI  
210%



SALES  
\$6.8 MILLION



BREAK EVEN  
POINT  
17,056 SALES



YEAR ONE  
COSTS  
\$4.2 MILLION



WEBSITE  
ACTIVITY  
65,800  
CLICKS MONTHLY



SYSTEM  
RELIABILITY  
96%

## REVENUE STREAMS

PRICE- \$249

COST- \$117

REVENUE- \$6,878,625

PROFIT- \$2,631,480

## COST STRUCTURE

OS DEVELOPMENT COSTS- \$1,500,000

OPERATING COSTS- \$691,020

## CONCLUSION

A-Spec is asking for a capital investment of \$1.25 million for 20% stake equity in our company. Over the course of one year, the investor will gain \$2.6 million dollars and a 210% return on investment.

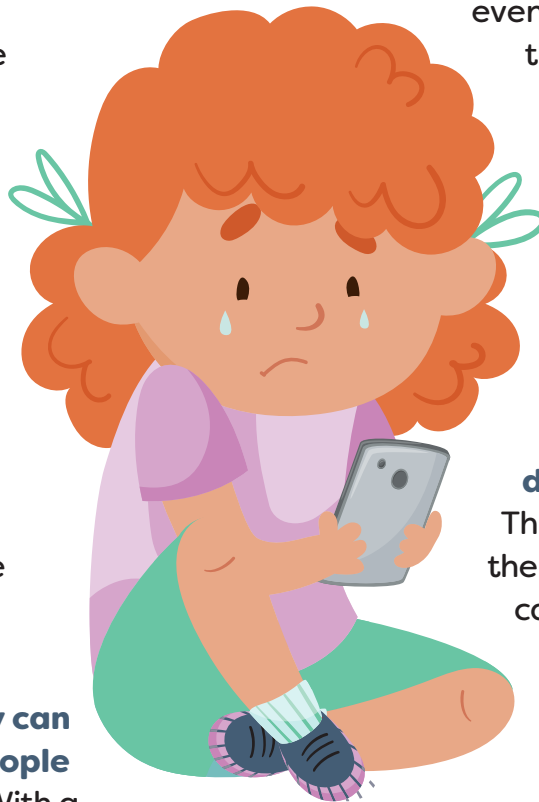


## PROBLEMS

One million children and 6.7 million adults in the US have been identified with autism spectrum disorder (ASD), yet no smart devices are designed for them.

As smart devices become increasingly indispensable in society, it's more important than ever to understand how they affect human cognition, including the effect they have on people with ASD. Current smart devices and their operating systems can inflame the nervous system of people with ASD, shorten their attention spans, and cause social and interpersonal deficits.

**Smart device technology can be overstimulating to people on the autism spectrum\*.** With a constant barrage of bright colors, nonstop pop-up ads, loud and often unexpected sounds — plus an overwhelming number of app options — using these modern conveniences that most of us take for granted can be not only inaccessible for people with sensory sensitivities, but a source of great anxiety. For a segment of the population who may already feel as though the world isn't built for them, not feeling comfortable using smart devices can leave them feeling



even more disadvantaged than they already do. In a world where smart devices are increasingly necessary for interpersonal connection, people who struggle using them can be left feeling isolated.

**Few apps focusing on autism-specific counseling services and cognitive development are available.**

This market gap leaves those on the autism spectrum and/or their caregivers forced to find these resources on their own.

**Apps geared toward people on the autism spectrum are typically cost-prohibitive and often have few features with limited benefits.** For example, current communication apps for nonverbal individuals simply allow the user to communicate by tapping on pictures and do not offer ways to advance linguistic skills.

\*For the sake of succinctness, throughout this business plan, we refer to “people with autism spectrum disorder (ASD),” or “people on the autism spectrum,” but A-Spec OS is intended for anyone with significant sensory issues, whether they have been identified as having ASD or not.



## CUSTOMER SEGMENTS

### Primary Market

#### Demographic

- Parents with children aged 6-17 on the autism spectrum
- Children are any level of functionality on the autism spectrum
- Parents are middle to high income

#### Psychographic

- Wants their child to have access to technology as a tool to center themselves and in order to connect with others
- Believes their child would benefit from a digital program that enhances their social, language, and cognitive skills

#### Product Focus

For this market, customers are attracted to the features of the OS that promote development in social, intellectual, and emotional areas. When promoting A-Spec in ways catered toward parents with children who may benefit from using A-Spec such as flyers in special education classrooms, we highlight these features to best meet parents' needs for their children.

### Secondary Market

#### Demographic

- Low functioning adults with ASD
- On government financial assistance
- Partially to fully dependent on a caretaker

#### Psychographic

- Looking for independence in their life
- Wants to connect with friends and family in a popular way
- Is overwhelmed by the scope of the Internet and the decision making that comes with owning a smart device

#### Product Focus

With this market, the features that need to be highlighted are the ones that mirror modern technology, but have sensory accommodations. These features, such as **QuickContact** and the **ToDo** app, meet the primary need of this market, a less stimulating way to access technology.



QuickContact



ToDo



## Potential New Market

Through market research, we have found that an issue with technology use by children on the autism spectrum is in classrooms. When children with ASD need technology, often tablets, to learn and communicate, there is sometimes an issue of other children wanting access to technology as well. If the tablets are running on the A-Spec operating system, the use of technology will appear more equitable. To advertise to schools and districts, we would market by emailing and calling schools, presenting at school board meetings, then by word of mouth between administrations.



## UNIQUE VALUE PROPOSITION

A-Spec operating system is **affordable, fully customizable** and tailored for children and adults on the **autism spectrum** and others with significant sensory issues to be able to use electronic devices **comfortably, effectively, and enjoyably**, without fear of being overstimulated.



**accessibility**

**customization**



**inclusivity**



## SOLUTIONS

**A-Spec has a less stimulating interface.** A-Spec software has a simpler interface with fewer colors and options to not overwhelm the user with sensory input and lots of decision making. By default, the OS does not make any noises when alerts come through, until the user input that notification sounds are permitted. The caretaker control app allows caretakers to customize the interface of the device to best suit the user's needs. This allows for use of modern technology, while still accommodating people on the autism spectrum.

**A-Spec software has tools to help develop cognitive skills and promote independence.** A-Spec software includes multiple educational activities to improve cognitive and social skills in areas the user and their caretakers may want to build on. A-Spec software includes counseling resources to consolidate where users find assistance.










**A-Spec software is affordable and has many features.** A-Spec is an affordable alternative to unrealistically expensive communication apps currently on the market. A-Spec software has a variety of apps that can be added to or taken off of the device home page from the caretaker control app. A-Spec software is an operating system that can be installed on any device. This ensures that the user will not be able to accidentally exit an app and be faced with a regular operating system which can overwhelm them.



**For a description of each of the apps, see page 6.**





 <b>Quick Contact.</b> An app with contact pictures to quickly identify and call contacts	 <b>Text.</b> Like the Quick Contact app, pictures are utilized so the user can easily identify and message saved contacts	 <b>ToDo.</b> Keeps user organized with to-do lists and custom step-by-step instructions for routines like getting ready for the day
 <b>Photos.</b> An app that allows the user to take and store photos on their A-Spec device	 <b>Calendar.</b> An app that clearly lays out any events added to the user's personal calendar	 <b>Library.</b> A collection of texts and stories to be read and enjoyed, selected from the caretaker app
 <b>Videos.</b> An app that allows the user to take and store videos on their A-Spec device	 <b>Text to Speech.</b> Designed for nonverbal and verbal users to communicate audibly and grow linguistic skills	 <b>Counseling.</b> Matches user with a therapist or counselor specializing in treating people identified with autism spectrum disorder

## CHANNELS

### Sales

A-Spec sales will be generated primarily through our sales and marketing representative, who will initiate leads from and sell to autism advocacy groups and schools (public and private). Large autism appreciation groups—such as Autistic Self Advocacy Network and Autism Network International—provide A-Spec with a direct path to targeted customers, as well as strong credibility and trust within the autism community. The sales representative will also sell to public schools seeking to integrate A-Spec into classrooms to accommodate their students with ASD. Lastly, our representative will sell to private schools, especially those designed for children with sensory issues and other conditions that may affect their learning with typical technology.

### Marketing

A-Spec software will utilize four advertising tactics: social media, special education programs and daycares, Google, and our proprietary website.



Our social media presence allows us to reach both our primary and secondary markets without geographic boundaries.

Many parents with children on the autism spectrum are in support groups on Facebook, some of these groups with over 100,000 members. Information about our product, posted by both our company and customers who want to help in these groups, helps us reach many of parents who fit in our primary market.

As for our secondary market, adults on the autism spectrum, many of them also use Facebook

### Reaching New Market

Our potential new market can also be reached in Facebook groups for Educators working in Special Education and those on the autism spectrum and with sensory issues. This market also can be reached through other organizations and resources to build interest in educators working with children with ASD.

groups for support, despite the anxiety it frequently causes, but this market is more likely to use personal Facebook, Instagram, and Tiktok accounts where paid advertisements can reach them.

As previously mentioned, school districts are potential customers of A-Spec, but also a channel of marketing for us. Many classrooms and daycare centers have bulletin boards and newsletters for parents. Running advertisements in these formats allows us to reach our primary market with minimal time spent looking for ways to reach these parents.

A-Spec's website serves several purposes for prospective and existing customers. The total cost of our website development was \$4,250 upfront and a monthly \$85 upkeep cost. The website contains a live chat to answer customer questions, information about our product, as well as our company, story, and values.

We use Google's search engine optimization (SEO) service to boost A-Spec's website visibility while customers are searching for something new to supplement other resources they may have been utilizing.







## Distribution

Distribution to the customers is entirely digital. Our software is developed by a team of software developers, which costs us about \$750,000 a year. The operating system is projected to be done in about two years; after two years of initial development, we expect maintenance to cost us \$350,000 each year. Customers will purchase the operating system on our website, which will also include information about our operating

system and who we are. The OS will then be sent to the customer's email address as a digital download, instead of on a CD or flash drive. We suggest that customers install our operating system on an unlocked, unused android phone or tablet. If their device has photos or contacts on it, we recommend backing it up to the cloud, as it will be erased when the A-Spec OS is installed. Installation instructions can be found on our website or with the OS purchase.

## REVENUE STREAMS

Our company's revenue comes exclusively from sales of the A-Spec OS. Each unit is sold for \$249 and costs approximately \$117, with a \$54 production cost and a \$63 customer acquisition cost. In the first year we will have a 38% profit margin.

We plan to take 2.5% of our primary market and 1.5% of our secondary in the first year of operation. As children begin to get exposed to technology younger and younger, there is more opportunity for our company to expand. Our operating system is a great way to introduce smart devices to children, so as this trend continues, we expect to become more popular.

Our first year revenue is projected to be \$86,878,625 and our first year profit \$2,631,480.

Profit will be reinvested into the company to add new features that specifically work to



grow social, emotional, and intellectual skills in people with autism. The current apps on the market are sufficient in short term needs like communicating, but are fruitless in long term development, which is a priority of A-Spec.

REVENUE	COST OF GOODS	OPERATING COSTS	PROFIT
\$6,878,625	\$3,556,125	\$691,020	\$2,631,480



## REVENUE MODEL

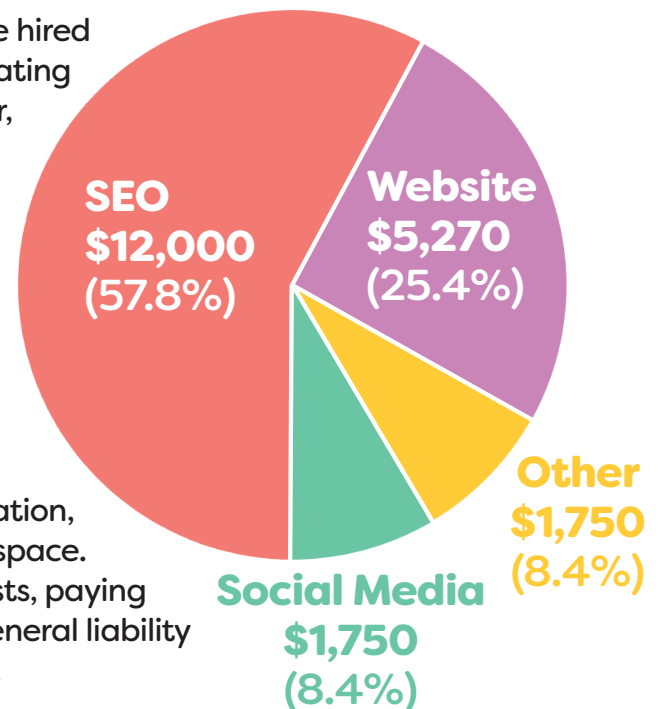
**Who:**  
A-Spec customers  
are the main  
supply of revenue

**Sales Channels:**  
Payments  
are always through  
E-Commerce

**Customer lifetime  
value: \$249**

## COST STRUCTURE

Software development is projected to take two years. We hired five experienced software developers to create the operating system, paying each \$72 dollars an hour, \$150,000 a year, in line with industry standards for top developers; the software development totals \$1.5 million. In the first year, we expect to spend \$20,770 on advertising and marketing: \$5,270 on our website, \$12,000 on Google SEO, and \$3,500 on social media and other advertising tactics. For our ongoing costs, we have allocated \$350,000 for maintenance of the operating system and its apps. We have also hired a customer service representative for \$45,000 dollars a year and a sales/marketing director for \$60,000. For the first year of operation, we do not have the expense of a headquarters or office space. For the counseling services, we plan to hire three therapists, paying each a \$70,000 salary, plus \$1,750 for each therapist's general liability and malpractice insurance, costing us \$215,250 annually.



### Operating Costs



**Software maintenance \$350,000**

**Employee salaries: \$325,000**

**Miscellaneous costs: \$35,250**

**Total Operating Costs: \$691,020**



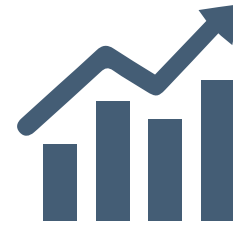
## KEY METRICS



### YEAR ONE COSTS

Year one expenses, including everything stated above, come to a total of **\$4,102,500**.

This number allows us to sufficiently set the business up for a fruitful future.



### RETURN ON INVESTMENT

An initial investment of \$1.25 million dollars would yield an **ROI of 210%**.



### SALES

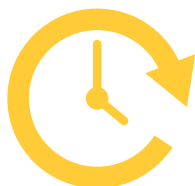
A-Spec technologies is expected to sell **27,625 units** in the first year, and make **\$6,878,625**. Sales are an incredibly important metric to our company, as it clearly indicates how our company is performing, but also builds trust with our customers, an invaluable and irreplaceable element of our operations.



### SYSTEM RELIABILITY

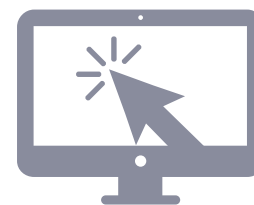
Our customers rely on A-Spec OS to help them learn, connect with the world, and function in life. It's crucial that a product so vital to someone's communication and functionality reliably perform as promised.

In our tests, the OS and each of its apps performed as expected **96% of the time**.



### BREAK EVEN POINT

A-Spec technologies will break even after selling **17,056 units** at \$249 per unit. This is projected to happen within the first year of operations. Once we break even, we and our investors start to recoup our investments.



**65,800 website clicks** monthly with a **3.5% online conversion rate** allows us to reach our monthly sales goals, as well as maximize the power of the SEO that we are purchasing.



## COMPETITIVE ADVANTAGE

Every decision we make as designers, software developers, and business people, we make with our company values in mind: accessibility, customization, and inclusivity. We know our customers' needs, include them in our product, and leave out anything else.

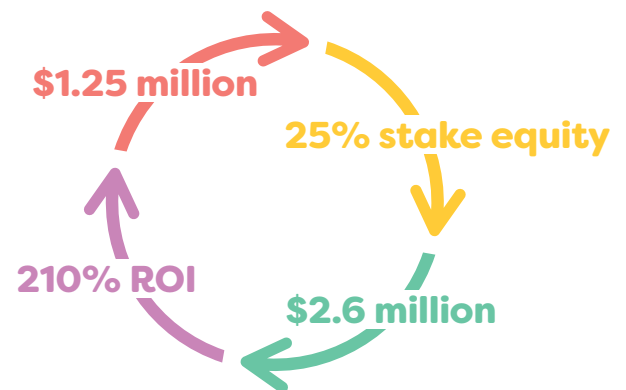
There are no operating systems designed for people with sensory issues. A-Spec is the only comprehensive OS for people on the autism spectrum. This allows customers to pair the OS with almost any device, and eliminates the worry of exiting an app to be faced with an overstimulating OS.

Additionally, other apps and online programs provide solutions to communication and other problems people with autism may have in the moment, but have no features to promote independence or long term brain development, a priority of our operating system and its apps.

Because we provide access to counseling for those on the autism spectrum, customers who need financial assistance might receive some from a government assistance program, which is unavailable for most other apps for people with ASD.

## CONCLUSION

A-Spec is asking for a capital investment of \$1.25 million for 25% stake equity in our company. Over the course of one year, the investor will gain \$2.6 million dollars. With a passionate and genuine team, necessary and beneficial product, and a 210% ROI, investing in us is worth it.



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