



STANFORD SV-NJ CASE STUDY SERIES:
JAPANESE FIRMS IN SILICON VALLEY (STARTUPS)



Company Name: Spectrum Visions Global, Inc.

Arrival to Silicon Valley: 2010

Business Location: 5043 Graves Avenue, Suite H, San Jose CA 95129

Interviewee: Yumi Kubo, Sei Higuchi, Ph.D.

Interview Date: 6/22/2017

Website: <http://voice4uaac.com>

US Entity Type: California Corporation

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Company Overview:¹ What is the company's business purpose?

Spectrum Visions Global develops a variety of communication applications for individuals with special needs (mainly autism), on top of the SPHERE platform. The company's flagship product Voice4u AAC, is an Augmentative and Alternative Communication (AAC) application for the iPhone, iPod Touch, iPad and Android. It helps individuals to express their feelings, thoughts, actions, and needs, and it is both a tool for communication and for learning. Voice4u TTS, a text-to-speech app that supports more than 40 languages, was released in 2013. Voice4u has been downloaded over 110,000 times, in 100 countries.² Spectrum Visions also offers data analytics services, and develops Voice4u application training workshops and training materials to assist educators, professionals and assistive technology specialists.

Spectrum Visions Global is currently developing artificial intelligence technology, which enables their customers to use the products without physically touching their mobile devices. Furthermore, although Voice4u was developed primarily for individuals with autism, recently

¹ Company overview information is collected from the company's website and marketing materials. Any merits of the company's abilities and technologies expressed herein do not reflect the opinions of Stanford nor SV-NJ.

² At the time of this interview (6/22/2017)

they discovered that it has expanded into a market they did not expect – elderly care. Senior care services and facilities in both the U.S. and Japan have been using Voice4u for patients with dementia. Although senior care is a field that neither founder is familiar with, especially in Japan, the market is rapidly expanding. As of now the company is searching for marketable features specifically tailored for use by individuals with dementia.

Company Story: What are the company’s origins and connections to Silicon Valley?

Yumi Kubo and Sei Higuchi founded Spectrum Visions Global in 2010, a few months after the first version of Voice4u was released on the app store.

Although conventional communication devices for autistic individuals did exist prior to Voice4u, existing solutions cost around \$10,000 per device (compared to Voice4u’s \$59.99 download fee³), and were difficult to use. Kubo had personal experience with the difficulties in obtaining and using these existing products.

At age 2, Kubo’s son was diagnosed with autism. When her son was diagnosed, Kubo was told that the chances of him ever being able to speak were slim to none. She bought a conventional communication device with medical insurance. Between applying for insurance, obtaining therapist and specialist evaluations, and hiring an attorney to negotiate with the insurance company, the whole process took over half a year and thousands of dollars. When the equipment arrived, it was not suitable to her son’s needs, and subsequent devices that she tried were all extremely hard to set up and use. Furthermore, it became evident to Kubo that most of these existing products were simply meant to direct autistic users on what to say – there was nothing that really allowed them to have their own voice. There was a desperate need for a product that was easily accessible, and had a simple user interface that was intuitive and could allow autistic individuals to express themselves easily and as effortlessly as possible. It was the advent of the iPhone that enabled the development of this vision.

In August 2009, Kubo and Higuchi had created a prototype. By November of the same year, the first version of Voice4u was released on the App Store. They founded Spectrum Visions Global, Inc. a few months later in February 2010.

Human Capital: Who are the key leaders and employees of the company, and what plans exist for personnel expansion?

CEO Yumi Kubo first arrived in Silicon Valley in 1989 when her husband’s work moved them to the U.S. When she first arrived in Silicon Valley, she was unable to work on her visa. Kubo’s two children were both born in the Bay Area, and especially after her son was diagnosed with autism, she had little time to think of anything other than her children. In 1999, Kubo became eligible for a respite care program provided by Santa Clara County, which allows caregivers of autistic individuals occasional respite from their daily responsibilities. Kubo used this allotted time to volunteer at several organizations. One of the places that she volunteered at was an NPO called the Japan Technology Professional Association (JTPA). Kubo and Higuchi met through JTPA in 2004.

³The produce also offers the premium features through a subscription of, \$4.99/month or \$49.99/year.

CTO Sei Higuchi arrived in Silicon Valley in 2002 as a graduate student at Stanford University. When he graduated in 2009 with a Ph.D. in Aeronautics & Astronautics, he turned down offers to work in academic research institutes and software companies. Higuchi had participated in numerous activities to support the autism community during his time at Stanford, and by the time of his graduation, he hoped to use his years of education and technical expertise to assist people and make a social impact. He felt that despite the immense amount of innovation and cutting-edge technology, technology was not available for those who desperately needed it. He asked Kubo if she would introduce him to the organizations that she volunteered with, in hopes of spreading his expertise in an impactful way. Together, the founders went to look for areas in which technology had a potential to make the most difference. Through their aligned interests and goals, they developed Voice4u and began a partnership.

Kubo and Higuchi specialize in mutually exclusive disciplines, and have very distinct roles within the company. Both Kubo and Higuchi believe that trust between founders matters a lot for sustainable business. Apart from product-market-fit failures, many young companies fold because of disagreements between founders on various matters such as business strategies, product development, or funding. The key to alleviate this kind of conflict is to partner with people who have different strengths and skill sets.

The company has now grown to a team of approximately ten. Most of Spectrum Visions' workers are young professionals who either reach out to the company directly, or are introduced to the founders via personal networks. The team's small size means that the company is able to make decisions very quickly, and there is a strong sense of trust. The two founders have striven to create a transparent working environment. By setting an example themselves, they encourage their younger workers to discuss issues candidly, and to not be afraid to admit it when they don't know something.

Funding: What are the sources of funding for the company?

Spectrum Visions Global is completely self-funded. The company was launched with capital invested by the two founders, and although the company has been approached by multiple, primarily Japanese, investors throughout the years, Spectrum Visions' has yet to accept capital from any external sources. Although Kubo and Higuchi did consider fundraising and met with a few venture capitalists in the beginning, they quickly realized that the VCs had very different goals for the company than they themselves had. A key factor that VCs look for in startups is scalability. In the world of venture capital, returns are important, and the goal of a VC funded startup is usually to exit. Although Kubo and Higuchi hope to increase usage of their product, this stems from the hope that their product will make a difference in more peoples' lives, rather than growing their company solely for the sake of profit. When revenue started rolling in, Kubo and Higuchi assessed their profitability, and decided to continue to self-fund their company.

Business Challenges: What challenges does the company face?

Although Spectrum Visions Global has grown with relatively few challenges or setbacks, costs in Silicon Valley are very high, and especially for a self-funded company like Spectrum Visions,

these costs require some maneuvering. Apart from the mostly unavoidable living costs here in Silicon Valley, for businesses, hiring professionals and hiring employees can be challenging. Spectrum Visions has been able to get around a lot of the highest costs with strong personal networks, and technology.

Because Kubo volunteered at multiple organizations for many years, she became entrenched in the Silicon Valley community, and has established a very supportive and loyal network. When she first announced that she was establishing a company, many friends immediately ran to her aid. Higuchi too, has built connections and trust in this community by helping to install, fix and educate organizations on different kinds of technology. As a result, the two founders have built a network of people from all different walks of life, who advise them, introduce them to various networks, and help them in various other ways. Organizations such as Parents Helping Parents (PHP), a support and resource center for families of children with special needs where Kubo used to volunteer, lists Spectrum Visions Global as a resource, and promotes usage of Voice4u. Kubo comments that it is costlier to establish a business when you are an outsider, because you rely on professional help to set up networks and obtain insider knowledge.

Although the cost of labor is expensive in Silicon Valley, Kubo and Higuchi work with many bright, young people – occasionally as young as high school – who volunteer their time on a project-to-project basis. Internship positions at Spectrum Visions are highly sought out and prestigious, as Kubo and Higuchi take care to only accept highly-qualified interns. Spectrum Visions primarily uses crowdsourcing for certain tasks and projects.

Technology has enabled a lot of Spectrum Visions' projects to be done cost efficiently. Voice4u is software, therefore most of the software development can be done on computers, and does not require specialized equipment or facilities (e.g. a factory, laboratory etc). Furthermore, Spectrum Visions uses cloud servers rather than renting or purchasing its own, thus eliminating most external costs. Today, many mobile apps and online services (SaaS) have replaced traditional professional services, making them more affordable and accessible. Spectrum Visions utilizes an assortment of online tools, including, Slack, Dropbox, Google Cloud Platform, Amazon Web Services (AWS), Rackspace Cloud, Heroku, Bitbucket, Evernote, Wunderlist, MailChimp, Square, Expensify and numerous open-source software.

Advice for Japanese Entrepreneurs:

Kubo and Higuchi have seen many Japanese companies come to Silicon Valley over the years. The two founders advise many new companies and aspiring Japanese entrepreneurs, and have found several common challenges that Japanese entrepreneurs often face when coming to Silicon Valley.

A common challenge that Kubo and Higuchi see is aspiring Japanese entrepreneurs who are ill-informed. To a degree, when an entrepreneur first sets out to establish a business, a lack of information at the beginning is inevitable – knowledge is learnt, and the startup world is notoriously unpredictable. The bigger issue is entrepreneurs who don't thoroughly do their research, and end up overlooking critical details. For example, immigration laws in the U.S. are quite challenging and make it difficult for companies with foreign founder to fundraise. Many

aspiring Japanese entrepreneurs who come to Silicon Valley do not have an adequate understanding of these complex laws, which hinders them from being able to fully evaluate their options and risks in the long run. Business contracts as well are often complex and unintuitive, and without a lack of understanding of the specific details in the contracts, entrepreneurs can end up inadvertently agreeing to terms that may hurt them. It is important for the CEO of a company to comprehend all of the terms of a business contract rather than delegate interpretation to specialists. Therefore, it is important for aspiring entrepreneurs to strive to gather as much intelligence as possible.

Those who succeed in Silicon Valley are the entrepreneurs who have invented solutions that bring about huge social impacts. While making a fortune or becoming the next Facebook or Google can be attractive, these might not be the most ideal motives for starting a company. Identifying pain points in society and inventing solutions to them that can then be dispensed in exchange for payment by a customer is a strong business model. Embracing this kind of proactive attitude of going out and finding a problem can be difficult, and might be especially counterintuitive for many Japanese people in large part due to the structure of the Japanese education system. The Japanese education system has traditionally been based on passive learning, and in this model, students are usually given problems and solutions, rather than challenged to question and identify problems themselves. This teaching style is diametrically opposed to the U.S. style in which students are told to question and think critically. In Silicon Valley, where “thinking out of the box” is the truth that businesses live by, it is important for aspiring entrepreneurs to be constantly questioning, assessing and trying to improve society in innovative new ways.

Finally, Kubo and Higuchi emphasize the importance of trust. Building trust is important for any kind of work, in any industry. While the right technology and the right technical skills are important to a certain extent, in fact, subtler, interpersonal relationship building is just as important in Silicon Valley. The values that we learnt in the playground as toddlers – trust, honesty, and non-discrimination – in fact apply very much to business as well. For Kubo and Higuchi, the networks they have built based on trust, have hugely aided their business.



About the SV-NJ Case Studies Series: Japanese Silicon Valley Firms (Start-Ups)

The Stanford Silicon Valley – New Japan Project case study series investigates Japanese firms in Silicon Valley. The purpose is to understand each firm’s business purpose, its journey from Japan to Silicon Valley, human capital issues, business challenges and best practices, funding, and resources utilized. Information was compiled by interviewing leaders of start-ups based in Silicon Valley with one or more Japanese nationals as founders. The subject companies range from bootstrapped to fully funded companies with or without a presence in Japan, but all of which contain a technology element such that they are scalable enterprises. For more information or to refer a case study interviewee, please email us at: stanford.svnj@gmail.com