Case Study: Wearable Technology

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- Jonathan Meister, VP Strategic Partnerships at hereO

Connected family start-up scales production of the world’s first GPS Watch designed specifically for small children.

Breaking new ground across IoT technologies, telecommunications and child safety, the hereO GPS Watch is the world’s smallest real-time cellular-connected GPS tracking device. After a successful launch and funding campaign, hereO partnered with Flex to simplify, streamline and scale production in preparation for a 2017 global launch.

Business challenge

From development to production

Inspiration can strike anywhere, at any time. For Daniel Ivesha, co-founder of hereO, a connected family start-up, it was at San Diego Zoo in 2011. Alarmed by losing sight of his nephew for just a few moments, then shocked to see a solution other parents deployed—a leash on their children—Daniel knew there was a better way to ensure families stay connected.

Together with two childhood friends, now also parents, the trio formed a company to develop a wearable location-sharing device for children, which would connect the family and give parents peace of mind in knowing where their children are.

Existing solutions on the market were constructed from basic off-the-shelf components repackaged into a pseudo-format for children. This mismatch was the perfect opportunity for the fledgling company to capture a market in need of a product designed from the ground up for small children.

As parents and aspiring entrepreneurs, the team was highly motivated to address several challenges. The device had to be small and appeal to both children and parents. It also had to have a battery life longer than the standard eight hours, and ownership costs for subscriptions had to be accessible for the average consumer. Most importantly, the team had to figure out a way to overcome reliability and connectivity issues that compromise existing solutions.

After four years of research and development, hereO had grown to a 20-employee team, raised over six million dollars, had received 700 requests from distributors and launched the long-awaited hereO GPS Watch for kids. The device was up to 50% smaller than any other solution on the market, had an unprecedented battery life of two to three days and offered affordable subscription rates around the world.

Most exciting, hereO had developed a proprietary machine-learning location engine which enabled its wearables to dynamically adjust to their environment in real-time, ultimately providing for a highly efficient, accurate and consistent user experience. hereO had successfully developed a unique product with a sticky market fit.

In that same year, hereO took orders for over 2,000 devices from customers in 60 countries. The media loved the idea and wrote more than 1,000 praiseworthy articles. Inquiries about partnerships from distributors and retailers came flooding in and several global telecommunications, technology and marketing companies wanted to talk about the future.

“We needed to scale up and fast” says Jonathan Meister, VP Strategic Partnerships at hereO. “Not only was our existing manufacturer not capable of handling the type of scale we needed, but we were also just too involved with the day to day production processes which demanded scarce resources and detracted from what we did best: design, development and deployment of a world class connected-family IoT ecosystem.”
**Innovation**

**Partner with experience**

A chance introduction led the team to a conversation with Flex.

“Flex captivated us from the get go” says Meister, “they were very confident about what they could do for us. At our first meeting, Flex had already identified a team to work with us, prepared a preliminary plan which described what we needed to do and how it needed to be done, and tied it altogether into an executable timetable. Flex operated at such velocity, like a start-up, like us, and we felt there was no reason to hesitate.”

hereO created a one-of-a-kind device in the market, but scaling production from 1,000 to 100,000 units required a redesign to support manufacturing at scale, a service called “Design for Manufacturing.” By partnering with Flex, hereO leveraged Sketch-to-Scale™ solutions to support the design and development of an entire family of hereO products, which are optimized for rapid high-volume production.

As part of its Sketch-to-Scale solutions, Flex offers access to new qualified technologies such as Liquid Silicone Rubber Overmolding. This process has significant cost, design, and quality benefits over other methods, including superior water, shock and vibration resistance. In the case of hereO, Flex’s initiative to mold silicone directly onto the electronics saved the expense and time required to assemble several individual parts manually. The result was a dramatic reduction in both manufacturing costs and precious turnaround time for the company.

“hereO falls squarely under Flex’s Sketch-to-Scale solutions model,” says Meister. “We have teams from Flex supporting us with design, mechanical engineering and production, as well as supply chain and procurement. It’s really an impressive spectrum of services, and we feel very fortunate to have partnered with Flex. We have an amazing team there.”

Meister explains that any start-up is challenging, but when you add the element of hardware, it adds a layer of complexity that you might not otherwise have had. If hardware goes wrong, it can be expensive to correct, so having the right support network in place is critical. An experienced partner can help you overcome issues or avoid them altogether.

“Flex gave us scale, but more than that, they gave us peace of mind because we knew we were passing the ball onto someone who was as committed to our success as we were. The approach from day one has really been that of a partnership rather than a supplier/vendor type relationship. That is where we started, and this is where we are today,” says Meister.

**Results**

**Time to grow**

By working with Flex to build a sustainable high-volume production line for their wearables, hereO was able to free up resources to focus on other important areas of their business.

“As a growing start up, the more you can focus on your core activity, the better your chances are of success,” says Meister. “And this is exactly what Flex has allowed us to do. We have made many design and functionality improvements over the last version of the device and application, deepened our collaborations with telecommunication and technology partners around the globe, and expanded our brand footprint by partnering with leading distributors and retailers throughout Europe and the US.”

With a solid foundation from which to launch their business, hereO is ambitiously charging forward to secure its pole position at the forefront of the fast growing IoT industry. In fact, hereO and Flex are already working on the design of wearable IoT solutions, tailored not just for children, but for the entire connected-family. Pipeline products include a Pet Tracker, a Tracker of Things, and hereO Senior, a device for the elderly members of the family.

HereO have also developed an app-to-app service which provides location sharing functionality similar to that of their wearable line up, but on an app. This is an ideal solution for teenagers who already own a smartphone as it allows them to join the family circle.

The wearable IoT devices and location sharing app follow hereO’s vision to offer a family hub where all family members, pets and valuables are accessible under one app, service and brand.

“Flex has worked hard for us, very hard. We have a close relationship and could not be happier with our partnership. It has been key to bringing us to where we are today, and I have no doubt that it will continue to play an essential part in our continued growth and success,” concludes Meister.

**About hereO**

Founded in 2012, hereO is the creator of the world’s first end-to-end connected family ecosystem driven by an app to app location based service and complemented with a range of state of the art location sharing devices. With an app for smartphone users, GPS Watch for Kids, and soon to be launched Pet Tracker, Tracker of Things, and GPS Watch for Seniors, the hereO ecosystem covers the family’s every need with a comprehensive, holistic, and personalized approach.

Learn more about hereO family (consumer wearables) at www.hereofamily.com and hereO Core (plug & play IoT for businesses looking to smarten up their product offering) at www.hereocore.com. Connect with hereO via social media on: Facebook, Twitter and Instagram.

**About Flex**

Flex is the Sketch-to-Scale™ solutions provider that designs and builds Intelligent Products for a Connected World™. With approximately 200,000 professionals across 30 countries, Flex provides innovative design, engineering, manufacturing, real-time supply chain insight and logistics services to companies of all sizes in various industries and end-markets.