Boston's Top Social Innovators: Marie Duggan of Technology for Autism Now

David Brown - Executive Director
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Note: This interview is part of a collection of articles about social innovation changing the face of Boston and is a build up to Tech Gives Back 2012. *Join us* on 9/21 from 5-10pm at the Estate to meet *Technology for Autism Now* and vote for them using *TUGG's open source philanthropy model*.

Tell me the story of why Technology for Autism came to be:

When I was told that my child would never learn, speak, be potty trained or even perform the most mundane tasks… I felt like I got kicked in the stomach and couldn't breathe. However, I started tapping into my son's visual channel, as he loved pictures. We started customizing visuals for absolutely everything and in this way I found a way to reach my child. I created Technology for Autism Now (TAN) to enable parents, caregivers, teachers and other professionals to utilize the tools and methods I used with my son that proved effective in helping him cope with autism.

When Michael was diagnosed, the prevalence of autism was 1 in 10,000. When TAN was created the prevalence had grown to 1 in 110. By 2012, the prevalence has grown to 1 in 88. Autism now is a worldwide epidemic and yet, at the same time, there have been huge improvements in technology, mobile devices and tablet computers that have incredible memory and functionality. When Michael

was diagnosed, there were no resources for me. I did everything on my own. Today that doesn't have to be the case and I am determined to make sure that newly diagnosed families have all the resources available to them.

After almost two decades of presenting nationally on the subject, with reputable professionals telling me I should start a nonprofit to spread my learning to help other families facing the same dilemma, I realized I could and I should. We live in the 21st century with a world of technology surrounding us daily; I realized I could help parents help their children using this technology so they did not have to go through all the tedious, laborious work I did to connect with my children. We could make an amazing impact on the families of children with autism and we could do it now!

What is the objective for TAN?

My vision is to create a suite of mobile applications that will support the specific deficits that children with autism experience. I want to create tools for parents/caregivers, teachers or other professionals that are easy to use and customize so that they can be uniquely used for each individual child in a simple intuitive way. In addition, by using new mobile devices we can provide a platform that is colorful, engaging, and rewarding for the individual with autism, that is instantly customizable with camera and video capabilities, and that can provide data feedback and much more. From there, TAN's vision includes having a community to share all kinds of needed information and best practices, as well as numerous kinds of practical supports.

What have been your core findings from your work?

The majority of children with autism are highly visual and prefer computers, TV's, video game players and other types of devices to human interaction. It would only make sense to tap into their visual channel. Auditory information goes in and goes out -it becomes transient- whereas visuals are there for as long as it takes a child to process the information. When we use visuals and auditory together it is like a light bulb goes off and these children suddenly get it.

Autistic children need to process information one step at a time. TAN's apps, vision and design capitalizes on these needs while at the same time making the process of customizing for each child simple. By combining what historically has been in multiple apps, our app keeps the child's attention by eliminating a lot of "waiting" time in a very sophisticated way.

In what ways has the technology sector helped you grow?

It was the continued improvement in technology that provided the tools that helped Michael and many others. My only regret is that if I knew what I know now when Michael was a child, I wonder where Michael may be today and what advances he would have made. The reality is that the technology we have today did not exist 20 years ago and there is no going back. What I can do is take what I have learned from years of hands on experience and help children reach their maximum potential. I believe I can accomplish this with the amazing technology experts available to believe in me and make my vision a reality. I never want another parent to experience what I did. Technology can make this possible.

Where is Technology for Autism heading and why?

With the combined strengths of FableVision, a children's media company and Getfused, a digital marketing agency, TAN is currently in the process of pilot testing our first app in the Boston Public Schools, as well as at a few other leading health and academic institutions. Our larger vision is to create a robust suite of apps along with a community platform that can be used by people all over the world that are dealing with issues related to autism or other learning needs where these apps would be beneficial. We plan to have a support community to learn from and share with, in many different languages and with many different cultures. We are thrilled to have FableVision and Getfused believe in TAN's vision. We look forward to continuing to expand our range of service offerings and usability in future versions of our products.

What are your biggest challenges that need support today?

Our vision is comprehensive and large because of the need and positive responses that we have gotten from everyone. This is exciting and we want to get it all done and delivered to the community as quickly as possible because we know how great their need is. However, until we get things developed and tested by outside experts, we can't place ourselves effectively in the marketplace, meaning we can hire the appropriate staff to move quicker and do all that we ultimately need to do. Consequently, our biggest challenge currently is mobilizing enough funds to complete our product development and get our product to market so that we can begin providing these apps to the community that needs them most.

What are you most looking forward to about Tech Gives Back's Social Innovation Bash on 9/21?

TAN is very excited to share our story, mission, enthusiasm and passion; these apps will be life changing for the millions of people dealing with autism and the people that support them. We are eager to meet people who share in our vision

and mission. We also look forward to meeting all the attendees and the other non-profits and exploring the ways that we can work together to harness the power of technology to create innovative solutions that improve the lives of those with autism globally.