Inspiring the Everyday Tech Heroes of tomorrow

Putting digital tech to work to solve the social challenges in our everyday lives
Introduction

Since its inception in 2013, Nominet Trust has developed NT100 into a powerful platform that celebrates the people using digital technology to change lives and communities around the world. Nominet Trust now showcases more than 1,700 social tech innovations from across the globe in our Social Tech Guide. It has become a valuable stepping stone for life-changing ventures to raise their profile, secure further investment and take their businesses to the next stage.

Digital technology has the power to transform lives, but it takes passionate people to make it happen. Marking our fourth year of NT100, this storybook presents some of the inspirational stories of our 2016 NT100 Everyday Tech Heroes. These are the people who, without influence or a big budget, have harnessed the power of technology to overcome the social challenges they have faced personally. This means that others now have the means to overcome the same challenges in their own lives.

By celebrating these Everyday Tech Heroes, we hope this NT100 storybook will encourage more social tech entrepreneurs to share their knowledge and experiences and motivate others to get their ideas off the ground.

It would be fantastic if this NT100 storybook also inspires those with technical and entrepreneurial expertise to think about how you can apply your skills to help turn great ideas into reality, not forgetting the important role of those with the influence and resources to accelerate the adoption of technology for social change.

NT100 creates a unique platform for all these communities to come together, amplifying the power of tech for good and collaborative working to make positive changes to people’s lives around the world.

I’d like to thank our judging partners — Big Lottery Fund, Cancer Research UK, Comic Relief, Nominet, Oxfam, Telefonica O2, Skoll Centre for Social Entrepreneurship and Society Guardian — for helping us to make our 2016 NT100 such a success.

Vicki Hearn
Director, Nominet Trust

Special thanks to our NT100 Partners, Telefonica O2 and Skoll Centre for Social Entrepreneurship, for joining us for our Everyday Tech Heroes webinar. Telefonica O2’s ‘Think Big’ programme helps young people to get their great ideas off the ground to improve their communities. Skoll Centre’s ‘Apprentice with a Problem’ Global Challenge programme supports entrepreneurs with personal experience of the problem they are trying to solve — and helps those who don’t have that experience to gain deep understanding of it.

We’d like to open this storybook with an inspirational tip from Skoll Scholar Nikhil Nair:

“Always strive for progress over perfection. Focus too much on perfection and you’ll never make a start.”
Inspiring the Everyday Tech Heroes of tomorrow: Putting digital tech to work to solve the social challenges in our everyday lives

Walk With Path

Lise Pape’s father was diagnosed with Parkinson’s disease 10 years ago and began experiencing the condition-related ‘freezing of gait’ – a sudden inability to move, which leads to falls. While studying for a Master’s in Innovation Design Engineering, Pape learnt that visual cues can trigger movement by focusing the person’s attention. This led to the creation of Path Finder – a device that emits a laser beam as a visual cue, helping people to start moving again and ultimately preventing dangerous falls.

**Lise’s advice**

“I gained a lot of insight from spending time with my father and that led me to explore mobility issues on a wider scale with people with Parkinson’s and those with multiple sclerosis. Once I understood the issues these people face, I was able to develop the right concepts and solutions.

Accessing funding is an ongoing challenge, but starting over, I would consider it at an earlier stage. It would have enabled us to move a lot faster and make the transition from product development to marketing and product launch. That is a key step for a small company like ours. Nevertheless, it’s not just about the money, the right investor will add value. For us, it’s also important to speak to people that have their own healthcare ventures with established sales relationships with healthcare providers. It’s crucial to have as many coffees as it takes to get to know people properly.”

@walkwithpath
www.walkwithpath.com
www.socialtech.org.uk/projects/walk-with-path/

“Working on a social challenge is very rewarding but as with any venture, it takes a huge amount of effort and it is easy to underestimate the work involved. I would recommend seeking out as much information as you can beforehand, but also remain flexible so you can tackle problems as they arise.”

Lise Pape, Founder
Follow The Money

Due to bureaucracy and corruption, public aid money does not always reach the communities that need it. Follow The Money was set up in 2012 by Hamzat Lawal and Oludotun Babayemi to campaign for the Nigerian government to deliver funds to tackle lead poisoning in Bagega. The story reached more than one million people and drove the government to release the $5.3 million promised to address the problem. Follow The Money, now a fast-growing pan-African movement, now has more than 200 citizen journalists who have campaigned to get funds released to tackle other local challenges, such as deaths caused by smoke inhalation, by investing funds into clean burning stoves and portable cookers. The venture has directly impacted over 115,000 lives.

Hamzat’s advice

"In the beginning, we used our own phones and other technology tools we were familiar with, as it was the passion to make a difference that was driving us. The Indigo Trust in London reached out to us and after this meeting they gave us our first grant of £9,648 to fund tech, travel, etc. It was motivational as we didn’t think we would get funding at the start. We still need more financial resources to get to the next phase and continue getting better internet and mobile connectivity in rural, hard-to-reach communities. These funding opportunities enable us to give these communities a voice and allow them to connect to the rest of the world. Other than funding, we are in need of more capacity for us, the founders, and our colleagues to use tools effectively and reach as many people as possible."

Hamzat Lawal, Co-founder

"The great thing about ‘tech for good’ is the fact that we are collaborators rather than competitors and can cover one another’s weaknesses, fill gaps and share knowledge. There are local open data workshops where people can share ideas and discuss important topics as we now collaborate via www.ifollowthemoney.org."

@4lowlthemoney
www.followthemoneyng.org
www.socialtech.org.uk/projects/follow-the-money/
Better Reykjavik

When the 2008 international banking crisis hit Iceland, many of the country's major banks went bankrupt and there was a loss of trust between citizens and social systems. Robert Bjarnason and his friends came together to find a way to help people have more influence and rebuild trust between citizens and representatives. Robert and his friends launched Better Reykjavik — a city-wide consultation initiative involving an open-source community platform where residents can upload proposals on how to improve the city. All ideas are considered during neighbourhood meetings and local councils have the final say on which ones are included in the shortlist.

Robert's advice

"The biggest challenge is dealing with democratic processes and getting changes made at an official level. The governing systems are quite well established in Iceland so making changes takes time. Originally they thought it would take a couple of years to get things underway but it has taken a lot longer than that, which has been frustrating. There is a will to improve and make the systems more open but the practicalities are like swimming in syrup. If we were starting over, we would be more realistic about how long things take."

“Create experiments that are manageable in size and can be launched quickly. This way, you don’t waste valuable money, but you can develop it and learn from them. This is the ‘lean methodology’ — you don’t waste resources. Start with a small part of the concept then build on it and make sure it works.”

Robert Bjarnason, CEO

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Disrupt Disability

Rachael was just 18 when an injury left her with impaired mobility. Fortunately, a grant from the Snowdon Trust enabled her to access a lightweight customised wheelchair. However, Rachael quickly realised that traditional manufacturing techniques made customised wheelchairs unaffordable for the majority. Inspired by organisations such as e-NABLE, which uses 3D printing to produce low-cost, open-source prosthetics, but having little knowledge herself of technology, Rachael organised a series of hackathons to apply the same principle to wheelchairs to create a library of bespoke 3D-printed wheelchair designs and instructions.

Rachael’s advice

“Whenever we’ve encountered problems or wasted time, it’s been because designers and makers have tried to solve the problems that they think wheelchair users have. By involving wheelchair users from the outset, we’ve managed to identify real problems and co-design the solutions. User innovation and user-led design has been the key to our success.

There aren’t many funds that pay the costs of developing a minimum viable product. Where there are, the amounts were too small. They would have been appropriate for covering the costs of developing software (e.g. apps) but were not sufficient for developing hardware. We want to remain true to our not-for-profit mission and open-source ethos, which limits the investment opportunities open to us.”

“Don’t simply accept a problem or expect other people to solve it. Go out there and change it. Social tech innovation isn’t an individual sport and you don’t need to know everything. Your role is to identify a problem, call people to action, build a team with a breadth of expertise, and inspire them. That’s when the magic happens!”

Rachael Wallach, Founder
Open Voice Factory

Joe Reddington’s younger brother has communication disabilities, which means that he has never been able to speak. When he was 19, his family managed to get him a Voice Communication Aid (VOCA) and the device changed their lives. However, many others facing similar challenges cannot afford a VOCA, which costs around £2,000. Working with an AAC speech and language therapy technician, Joe developed the Open Voice Factory — the first open-source assistive communication software that is free at the point of delivery. The Open Voice Factory also allows care staff to adapt VOCA content, which means the software can be easily customised with personal vocabulary and stories.

Joe’s advice

“If I had to start again, I’d have asked for more help, sooner. It’s really important to tell people what you’re doing so you get a constant stream of feedback and can adapt your approach as necessary.

From the outset, work out what you’re willing to pay or give up to achieve your goal. Having a good idea of your run rate, e.g. “I have nine months to do this”, really makes a difference and helps focus. As soon as you put it into that context everything else starts to make sense.

The passion must come from you and it should come across to everyone you speak to.”

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“Finding other people helping to change the world for the better is really inspiring. It was at places like Mozfest and Newspeak House, as well as meetups arranged by Full Fact and MySociety that we met these people and began to understand more about the type of individuals that make changes.”

Joe Reddington, Co-founder
Misha Esipov, Nicky Goulimis and Loek Janssen experienced their families’ years of financial struggle after emigrating to the USA. One of the biggest challenges legal immigrants to the USA face is zero credit, which prevents them from renting an apartment, leasing a car or getting a mobile phone contract, irrespective of their credit history abroad. In response, they created Nova Credit — the world’s first international credit reporting agency — helping immigrants to access essential funds to get established as new arrivals. They now proudly support financial inclusion for refugees by building data partnerships in their country of origin and connecting them with capital in the USA.

Loek’s advice

“One of the biggest challenges in our space is data science. We’re using totally disparate datasets and consolidating them into a single format for consistent decisions. We’ve been fortunate to have former chief risk officers and World Bank members as our advisors, but if we were to do this again we’d probably invest in some simpler short-term products.

We’ve been delighted to have support from an incredible set of investors: Index Ventures, First Round Capital, Core Innovation Capital, and NYCA. And a while back, Y Combinator and Pear VC gave us our big start. Our investors have given us great support from strategy to execution. Building a solution in fintech takes a village, and we’re so glad to have a village!”

“We’re building a critical piece of infrastructure that brings the world one step closer together, especially during a period of isolationism. Nova helps integrate disparate financial systems into one cohesive system to help people land on their feet wherever they go. It’s a big and ambitious dream, but with the support of an incredible team we’re turning it into a reality.”

Nicky Goulimis, Co-founder & COO
Kenyan childhood friends Brian Bett and Taita Ng’etich set up a tomato farm to earn money while studying at university. They learned the hard way about the myriad of challenges facing the Kenyan farming sector (which employs over 80% of the population) when their farm flooded, destroying their young crop. Motivated by this experience they set up Illuminum Greenhouses using smart technology to improve farming. Each greenhouse is fitted with sensors that monitor temperature, humidity and soil moisture, alerting farmers to alter the settings via text messages. To date, more than 750 Kenyan farmers have taken to using Illuminum’s technology and the pair aspire to scale the innovation so it can be deployed all over Africa and Latin America.

**Taita’s advice**

“Access to technology is a real challenge in our part of the world. Building hardware in Kenya is really difficult because you only have a small pool of skilled developers. We found that entering international competitions that focus on hardware and social innovation (e.g. the American Society for Mechanical Engineers’ ISHOW) really helped to fast track our development and give us access to skilled developers to scale our innovation.”

Taita Ng’etich, Co-founder

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[illuminumgreenhouses.com](http://illuminumgreenhouses.com)

On Our Radar

On Our Radar trains citizen reporters in some of the world’s most isolated and excluded communities to use mobile phones to share news and influence policy. After the Ebola outbreak in Sierra Leone, On Our Radar teamed up with New Internationalist magazine to launch #AfterEbola, a project to continue reporting the outbreak’s aftermath. Local people were trained and verified as reporters to file stories using only the basic mobile technology available to them, sharing the news through recorded phone interviews, WhatsApp and SMS. It’s these citizen reporters who have been recognised as Everyday Tech Heroes.

Paul’s advice

“While developing On Our Radar, we found out that 48% of people around the world only use their mobile phone for SMS and audio. As such, a key learning for us has been to use the tools that are already available to the people you are trying to engage and reach. Complex systems often exclude marginalised groups and therefore it’s been crucial for us to use the technologies that allow people to tell their stories in their own words, in their own time and from their own perspective to make sure their voices are heard.”

“Local communities are experts by experience but they face three main barriers: confidence, connectivity and capacity. On Our Radar works closely with those on the ground to help them overcome these obstacles by providing technical training and support to enable the most credible sources to report on local issues. As one of our reporters in Sierra Leone, Mohamed Kamara, explains: ‘For me, On Our Radar is power to the unheard.’”

Paul Myles, Editorial manager
Michael Brennan was seriously bullied as a child and, as a result, was forced to move schools. After settling in to a new school, he worked hard and managed to rebuild his confidence. Michael wanted to go further by helping to protect all young people facing bullying. This led him to develop tootoot — a cloud-hosted safeguarding app accessible by students and teachers from anywhere in the world. tootoot allows students to report bullying incidents anonymously and provides teachers with immediate access and analysis, so problems can be addressed at the earliest stage.

Michael's advice

"Do your homework, but most importantly of all, believe in what you’re doing. Good ideas need long hours to make them a reality.

It’s estimated that 3.2 million children and young people are bullied every year in the UK, often while attending school, college, or university. Every day, 16,000 young people skip school because of bullying and cyberbullying. Before tootoot was developed, there was no easy way for young people to capture and evidence cyberbullying, let alone report it. We’ve learnt that it’s crucial to listen to users when developing new features and to gain constant feedback at every possible opportunity."

“
A key barrier to entry for us was changing people’s perceptions but I really believe it was by doing our homework, maintaining a belief in our goal and putting the hours in that we managed to make this a success and give children a voice through technology.”

Michael Brennan, Founder
Inspired?

We hope our 2016 NT100 Everyday Tech Heroes have inspired you. As Rachael Wallach from Disrupt Disability suggests, we don’t have to accept the problems in our communities or wait for other people to solve them. Anyone with the right motivation can make change happen — either as a founder of their own social enterprise or by putting their skills to good use to complement an existing venture.

If you have experienced a social problem and are passionate about solving it, or if you have technical or entrepreneurial expertise to put to work, perhaps you could become an Everyday Tech Hero of tomorrow.

If you know of an inspiring project using technology for social change, tell us about it here: www.socialtech.org.uk/nominate/

Turning initial ideas or inspiration into tangible actions or real impact can be intimidating but these seven top tips from our Everyday Tech Heroes will go a long way to putting you on the right path:

1. Truly believe in what you’re doing. If you’re not inspired by your own idea, why should anyone else be?

2. Do your homework. It’s crucial to speak to the people who have first-hand experience of the issue you are trying to solve and understand where their pain points are so you can co-design the solution together.

3. Have a plan, but stay flexible. Many ideas will change or pivot as they develop so it’s important to remain agile with an iterative design process, and test multiple prototypes.

4. Be open to collaboration and talking to people. Always ask for help and feedback — nobody expects you to know everything.

5. Seek early stage funding. Research your funding options at an early-stage — but look for the added value, not just the money.

6. Think sustainability. Remember your venture will have the most impact if it is sustainable. Fostering good partnerships with established and influential institutions (e.g. government, NGOs, and financial institutions) can be an effective way to reach as many people as possible and keep your venture going.

7. Build a strong team. A motivated team with a diverse range of expertise is the driving force behind any successful venture. Be creative in recruiting your team — and remember point one: your team should believe in the idea too!
The NT100 and Social Tech Guide are brought to you by Nominet Trust.

Nominet Trust is the UK’s leading social tech funder. We provide full grant funding, mentoring and business support to organisations using the internet and digital technology to address significant social challenges including health and wellbeing, economic empowerment and sustainability. Since 2009, Nominet Trust has invested over £25m in projects harnessing technology to deliver real social change. Through partnerships and campaigns, such as the inspirational NT100, Nominet Trust mobilises new approaches that will influence and accelerate the use of tech for social good.

Nominet Trust was founded in 2008 by Nominet. Nominet is a public benefit company with 20 years’ experience of running the .UK internet infrastructure. Building on that expertise, Nominet is actively involved in connecting devices as well as people, helping people be safe and networks stay secure, and supporting the next generation of ideas and talent. With the proceeds of its successful registry business, Nominet set up and funds Nominet Trust, its charitable foundation.