

# Exploring a Trustworthy Tech System

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Findings from Phase 1 of the Trustworthy Tech Partners Prototyping Programme - April 2018

## Where we started:

For the past year Doteveryone has been interested in developing tools to help technical products and services demonstrate their trustworthiness. In late 2017, we worked with 7 technology start-ups with a social purpose to explore and prototype the practicalities of a Trustworthy Tech System - a 'Trust Mark' for responsible technology.

We wanted to test the viability of a trustworthy tech system and whether, if information about business tech practices was published, it would help tech companies to demonstrate their trustworthiness to external audiences.

## What we did:

Based on initial research and input from different technology stakeholders, we identified 10 key features of responsible technology business practice. Over eight weeks we tested these elements through a series of 10 exercises, with an average of 12 questions each, and nine interactive activities.

Overall, 76% of core programme elements were completed by all companies. This provided us with over 300 points of relevant information related to ethics, obstacles to trustworthy practice, evidence of pioneering practice and opportunities to create something new.

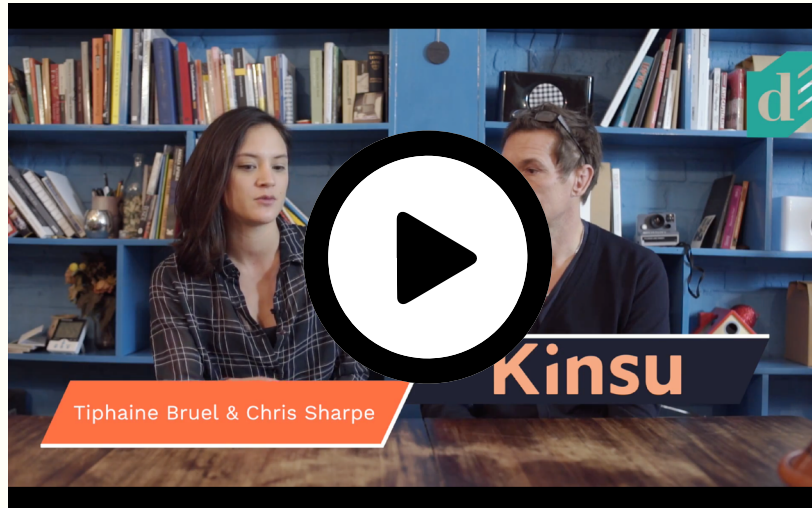
## Highlights:

- 4 out of 7 changed or will change something after our prototype
- An average of 2.4 companies learned something new each week
- 91% thought performing well in an identified aspect was important to their business
- 70% thought the information they were asked to think about or provide would accurately show their companies trustworthiness

*"This is a really good set of considerations to think about when just starting up a company or when you're building your start-up at an early stage." (Gary Todd, Famio)*

*"It forced 10 or 15 people across the company to look at something, a bit like in a rubix cube, in a different way." (Julie Dawson, Yoti)*

## Hear from our partners:



## What we found:

- We're not yet at the tipping point where consumer concern around tech trustworthiness and ethics translates to action. Purchasing pressure is a very limited lever for change at present.
- Many label projects (especially around privacy) have failed or had little to no impact.
- Developing a full 'trustmark' system is a multi-year investment. It includes building a trustable brand with consumers, setting standards and creating a sustainable way to audit and check them.
- While some of our content overlaps with other responsible business programmes that already exist (such as B Corp or Responsible100), many of our technology focused questions and resources are challenging, new and unique.

*"Going through the ten different areas within responsible tech, I actually think that did influence our principles. I think that there are a lot of things in there around usability and accessibility that have shone through perhaps more than they would have done had we not gone through this exercise." (Jessica Stacey, Bethnal Green Ventures).*

## Where we're going now - responsible technology as the new normal

Having explored ideas around a trustworthy tech system for external stakeholders, we're now directing our attention towards working within businesses to motivate and support them to build technology that is responsible, fair, and good for society.

We want to see the development of responsible technology - technologies that consider the social impact they create and the unintended consequences they might cause.

We understand this is an innovative concept, one that may differ depending on digital context, sector, geography and public opinion and will undoubtedly be defined and redefined in the coming years.

We believe the exercises and thinking we produced for the prototype will have more value in helping businesses think about new areas of responsibility and check their thinking and practices. Our questions and exercises challenge the tech industry to step back and think about the bigger picture and wider contexts in which they operate.

*“The one I particularly liked was the one about unforeseen consequences because that wasn’t one I’d seen in quite the same way from other bodies that had looked at this.” (Julie Dawson, Yoti)*

### Next steps:

- Using the results from a survey we conducted in February 2018, we’ll use the insights given to us by tech SMEs and startups on responsible technology to help determine what interventions will be most effective
- Continuing to explore and evaluate examples of things that have in the past, and are currently, changing business practices
- Carrying out an ongoing change assessment - mapping and analysing the stakeholders within the technology industry to inform our approach and assess change levers
- Undertaking an exploration of corporate concerns to ensure what we come up with includes their perspectives.

Over the next few months we will be conducting further user research to explore possibilities for shifting industry behaviour. We will be producing practical tools and highlighting examples of best practice for **making responsible technology the new normal**.

*“If people start buying from companies and operations that have a more holistic definition of success, and a more rounded view of the world, and that are trying to be a force for good, then that will drive other businesses to behave in a more positive way.” (Chris Sharpe, Kinsu)*

*“We’re hoping that through this there will be more scrutiny, and more dialogue, and this will just become how you do good business.” (Julie Dawson, Yoti)*

## Our Trustworthy Tech Partners:

A big thank you to our first partners in helping us to define responsible technology and prototype what elements make trustworthy technology - Yoti, Kinsu, Tickets for Good, Club Soda, Bethnal Green Ventures, Famiio (with special mention to FireSouls and Fluid IT). Also thank you to our network partners, Civic Hall, Bethnal Green Ventures and BCorps UK.

Given that running a small and growing business is challenging, and this was an additional voluntary programme, participants were encouraged to answer the best they could and indicate where they didn't have time to complete. Here is a write-up of each participant and our general assessment of the trustworthiness of their business:



Tickets for Good is an online ticketing platform with a social purpose, creating charity donations through event ticketing. They are a for-profit company with Pending B Corp status, and a percentage of revenues locked as a charitable donation, with an asset-locked nonprofit alongside to manage donations and special projects. This is a great fit for their mission.

They are an early stage business and so in many areas of trustworthiness they either have little evidence to show how they perform (because they have not yet reached that stage of work, or have not formalised or documented it), or have stated good intentions for the future. Some of the Tickets for Good team's thinking for the future is good, for instance considering the carbon footprint of event travel as an area they could explore for improvement, and considering venue accessibility. The team are working with a partner to try to find ways to make events more accessible and to help ticket purchasers find out about accessibility in a useful way upfront.

Tickets for Good use an outsourced contract for their software development and it's not clear how they were selected, or what confidence the team have that the technology does what it should. Finding ways to build confidence in this outsourcing might be an area for future improvement. They are following best practice and standards where it exists and strive to blog their work to share it with others.

They have crafted a site-specific privacy policy which is clear and details how a user may change permissions or correct their information, and only share with non-processing third parties with consent.

Overall, Tickets for Good are pioneering in areas where they have the ability to make a difference (related to the heart of their mission), and are performing reasonably well considering the early stage of the business.

Kinsu is an insurance app that lets you cover your gadgets, home contents, and bicycles, and makes charitable donations for each coverage bought.

They are an early stage business, with the co-founding CEO not drawing a salary but owning part of the business. Another individual, and a business, Impossible, co-founded the business, which is presently delivered as a trading style of Advent solutions management (Companies House / FCA) whilst setting up formally as an appointed representative. Being in insurance places certain requirements on the organisation - the website shows badges from Lloyds, BIBA, MGAA. There is limited information available to us through the programme or online about these organisations.

As part of being a new kind of insurer with a mission, Kinsu is working on B Corp certification. Kinsu acknowledges that they're an early stage business and are committed to bettering their practices and learning how to do this.

The use of Impossible to provide contract services is interesting - this organisation, about which we know little (we have no information on where it is incorporated or how, and its qualifications to deliver technology of this type are unclear), also owns a fraction of Kinsu. The quality of software and data practice is dependent on this relationship.

As a small early stage business, Kinsu offers limited employee benefits and policies.

Kinsu say they have planned for GDPR and many of their online FAQs emphasise their wish to look after customer data. It is to be expected that some customer data would need to be shared with, for example, their insurance underwriters, and Kinsu are currently updating their privacy policy to ensure the text aligns with the intent and practice of the business - a positive step forward.

In other areas, such as security practices, there has been thought and consideration in the business, although there are still improvements to be made as the business grows. Whilst it's reasonable that early stage businesses do not have everything in place across the board (thinking of our 10 aspects of responsible tech business), thinking about risks at a higher level than software functionality is good practice and can be done even at an early stage.

Mitigation or avoidance measures may not be needed or implemented yet, but an awareness of the wider context and potential challenges can help ensure a thoughtful trustworthy product/service design even from early on, avoiding the need for more fundamental or architectural changes later.

The way that the insurance offering itself uses the available information, in the decisions to provide cover and the pricing of cover, have not been examined (and we have no information to review for this). This is a deeply specialist topic and determining whether or not unintended bias in outcomes was present would be the subject for a different type of audit.



Famiio is developing an online marketplace for parents to search, discover and access impartial information on available family services, including childcare.

Famiio has a small team and the service is pre-launch, with the founding CEO owning most of the company. Famiio uses a multi-sided business model: local authorities pay for use of the platform to help deliver their Family Information Service and meet a number of statutory duties; families benefit from free access to a wide range of information; childcare and other service providers pay to enhance their listings with additional types of information such as video. Famiio has been designed to match the local authority requirements and model, whilst ensuring impartial information access – for instance, there are no priority listings for service providers who pay. The multi-sided model is important to provide value to all stakeholders, with a comprehensive balance of information, and choice for parents.

Famiio operate in a complex area - with varied networks and partnership structures across regions, often requiring compliance with regulations relating to childcare, education, safeguarding and social care - all within a financially-constrained public sector.

As an early stage business Famiio offer limited HR employee benefits and support, but have good clarity and transparency on pay. One potential area for improvement could be in recruitment - whilst a full HR function may not be required at this stage, thoughtful recruitment, respectful of diversity, is still possible.

The business specifically intends to have a positive social impact by enabling families to access the right information to make the best choices to meet their own needs. They have thought about social impact already and once launched intend to have an independent social impact assessment carried out by an expert group. Famiio also aspire to support community initiatives and 'fair tech' with a percentage of profits in the future.

Risks have been thought through, including questions of what might happen if the business was acquired, and there is a plan to use a golden share held by an independent, values-aligned organisation to lock in the social purpose aspect.

Famiio intend to use our template to support greater risk analysis of their product once they reach that stage. Securing external support to help with cyber security at this early stage is heartening to see. Famiio have engaged with Digital Catapult to help ensure GDPR compliance. Data standards and open data are part of the core platform (although this has not launched yet so we could not verify this). Design thinking is evident throughout.

Famiio's plans are driven by frontline research and direct experience of working with families, service providers and local authorities, and this informs the platform design. The support and maintenance planned is good. We note that the use of video for guidance is engaging and effective, but may not suit all users - written alternatives may be valuable. Thought should also be given in the future to post-launch user interface changes which may be hard for users to adapt to.

Bethnal Green Ventures (BGV) is an early stage investor in tech for good organisations. They use digital technology to engage with potential investees and others; their core digital services are how they work with those organisations and related stakeholders.

Their business model and structure are designed for the investment business, rather than for a digital product or service, and so use several entities to deliver their work. The digital interactions are harder to evaluate or check against, as they are not open to the general public but instead target organisations seeking investment.

Evidence of trustworthy practice is clear in areas such as employment (including contracts, wages and staff engagement), and user experience of the investment process, where accessibility is well considered and the design is subject to regular feedback and iteration. A number of practices, around risk for instance, are mostly covered by references to the B Corp process, which is hard to find out about if you are not a BCorp organisation.

We have seen limited evidence of the social impact of the work overall, although we are told this is monitored via BGV's ventures' data and beneficiary metrics.

Overall, digital products and services are incidental for BGV. In this regard they are like other businesses in sectors such as manufacturing or retail, where mature technologies (websites, online engagement, etc) are used in support of the core business function. The trustworthiness of the technology is linked with the trustworthiness of the business as a whole, and the risks and good practices that apply are somewhat different to a business creating novel tech itself.

This means that good practices are generally already established for the technology (although ethical practices more specifically may not be widely considered - an example here would be the use of fair and clear privacy policies), and some of our framework for the trustworthy tech system is less relevant (such as business model, which is particularly of interest for digital product businesses). The ideas, tools, resources and practices from this programme may be of benefit to BGV's ventures.



Club Soda supports people who want to reduce their alcohol consumption, and work with a wide range of partners and products to make this happen. The multi-stakeholder model is also evident in their varied revenue streams, which continue to evolve as the business gets established.

The limited company are working to become a B Corp and to set up a mission lock to formalise their social mission. The heart of Club Soda's work is not about technology, but they use technology as part of their activities, for instance providing online platform functionality.

As an early stage business, many things are still a work in progress and limited evidence of trustworthy practice is available, especially around digital. As with many very early stage ventures, there is a mixed picture. Whilst paid workers receive at least London living wage, there's also a lot of volunteer activities including moderating the online community, organising local social events, and some joint charity projects.

It is good to see an independent evaluation is forthcoming on the impact of the various products, since this is at the core of Club Soda's mission. Safeguarding has been given consideration, as have risks for users of the products and unintended consequences. There is less clarity around consideration of specific risks relating to potentially vulnerable adults in a technical context.

The technology work is outsourced, and many of the questions we would think of relating to trustworthiness of the technical design and implementation are dependent on the technical partner (who was selected based on personal connections and confidence). The use of off-the-shelf technology where possible should allow fair accessibility/usability.

The privacy policy is clear and fair; the online terms and conditions are rather longer and less clear (in an attempt to address a global user base with differing expectations). These are supplemented with shorter "Club Rules".

Overall, Club Soda seek to deliver a social mission and are currently in a business model exploration phase. Looking at the digital aspects of any emergent models in more depth around trustworthiness and responsible business practice will be worthwhile.





Yoti are a young, medium-sized enterprise with a mission to provide an important digital infrastructure piece - usable proof of identity. This goal requires a good level of business and consumer trust, and as well as robust engineering. Yoti have set out from the start to be transparent, accountable, accessible and to support the rights and privacy of users. Their "Principles" set this out at a high level and have been in place.

The product itself is designed to enhance personal privacy and agency, and does not monetise the individuals using the platform. Whilst there is good documentation around many areas of the service, including pricing, there are some areas, in particular in security, where Yoti cannot be transparent because of the risk of attackers gaining an advantage. Yoti have thought about misuse of the service, and have a policy for this; and are aware that this will need attention as they expand to new geographies with different practices and cultures.

They have considered good trustworthy tech practice outside their core service offering too. The organisational structure is appropriate for the business, and supports additional social responsibility. Furthermore, B Corp certification demonstrates a desire to offer a positive vision of a better way to do business by voluntarily meeting higher standards of transparency, accountability and performance. Yoti have secured appropriate ISO certifications, use open APIs and SDKs, do accessibility testing and strive to maintain FAQs and other documentation which work for a diverse range of users in a challenging-to-understand field. They also pay a living wage, monitor and improve diversity and employee conditions, and engage with wider debate and development of best practice around identity.

There is a charitable foundation which could help Yoti deliver an inclusive and accessible service, and to protect against digital exclusion. The forward thinking here, and consideration of long term impact of the service, is good. A Council of Guardians (independent perspectives on product, mission and handling breaches) is one tool to help support independent accountability, and the details of this such as terms of reference may be a useful template for other businesses. The rich set of checks made on subcontractors is also a very useful tool for responsible technology. If these tools were to be made available for reuse under an open licence they could benefit many other startups and SMEs who may not have the resource to develop them themselves.

The level of policy development, in HR and other areas, is robust for a young medium-sized enterprise. All of this work has been possible because of backing from co-founders/ investors, who have believed in the importance of responsible business practice from the start.

Whilst Yoti are well prepared to maintain their responsible technology and business practices into the future, this remains an area of potential uncertainty. Options around social investment are encouraging to keep the business in line with current principles. The founders' determination to ensure any potential business sale would be to an acquirer prepared to respect the core principles around data protection is good, but we are not aware of any concrete protections against an acquisition substantially changing the practices of the business.