Measuring the Growth of Your Social Tech Business

Kieron Kirkland
September 2014
Introduction

As the saying goes, "What gets measured, gets managed". Measurement is an important part of developing any business and a social business is no different. However, this can be challenging for the social sector which has to balance competing demands from different stakeholders.

Social impact measures (if measured at all) are often isolated from overall business metrics. Equally social projects can sometimes underestimate the importance of an engaging user experience. Lastly, financial sustainability is often left off the agenda or not planned for as effectively as it could be.

Social change, business development and product uptake or service participation are all key to making sure a venture is on route to delivering its objectives and realising its returns; social and financial. However, there are not many integrated models that set out how to measure these different areas. For example, while business model canvasses can help set out value propositions, they don’t focus directly on building a measurement framework for early stage social businesses.

This paper presents a model that tries to address this.

Based on applied research and experience working with hundreds of social ventures, this paper outlines Nominet Trust’s ‘triple helix’ approach to the development of social tech ventures and gives guidance on how to practically measure using the model. This paper is intended for those starting or developing social technology ventures and looking for possible ways to understand and track their development.

Three underpinning areas are presented before working through measures for different stages of a social venture’s development. Firstly, a brief overview of the triple helix model; secondly, taking a ‘lean measurement’ approach; and lastly, the different stages of development through which social tech ventures progress.

Given that measurement can sometimes seem a bit abstract, a case study of an existing social tech venture; Task Squad, is used throughout to demonstrate the approach at different stages of development.
The ‘Triple Helix’ overview

At Nominet Trust, we use the ‘triple helix’ model for measuring social ventures. It describes the three types of value that social tech ventures need to articulate, develop and evidence in order to grow into successful, sustainable social ventures operating at scale. The ‘helix’ describes the way in which the three values interrelate at different stages of the venture’s development and also hints at the dynamic, changing nature of the ways these values are articulated and demonstrated over time.

The three strands of interconnected value are:

- Social
- User
- Financial

By failing to focus on one of these values, the venture becomes either unsustainable, ineffective or does not create the social return required.

\[\text{Diagram showing the triple helix model of value interrelation.}\]

\[\text{1 Its name is also in keeping with the fashion of ‘ecosystem’ analogies for the social sector (1).}\]
Social Value
This refers to the potential social change the venture intends to create - the positive impact on the health, resilience and sustainability of communities and society. Social value is the extent to which this potential is realised.

User value
In order to realise any of the potential social value, a social tech venture needs to make a product or service that people want to pick up and use because it meets their individual needs. The extent to which this is achieved is labelled ‘user value’. The user value may be different from the broader social value because individuals are not always motivated by broader social needs, for example, the user value of a product may be someone saving money on their heating bill, but the social value may be a nationwide reduction in the use of fossil fuels.

Financial Value
There has to be a market for the venture to be sustainable and the venture has to be active in it. The generation of sustainable income is understood as financial value. Financial value comes as the result of realising user or social value. For example, high social value might help a venture access charitable grant funding or corporate sponsorship. High user value could translate into paying customers or further investment from angels and venture capitalists where they see the potential for growth. The combination of user and social value can be translated into service contracts, for example with local authorities or through social investment.

These three areas are important in their own right. However, depending on the organisational or team background, a venture may start off stronger in any one of the areas. For example, a charity developing a social tech venture may be very strong on its social value because of its experience in social issues, whereas a digital agency may be stronger on user value due to its experience developing consumer products. In growing a social tech venture these values interrelate and bolster each other. For example, a poorly designed service may be forgiven if it is offering significant changes to people’s lives. Conversely a very well designed digital user experience may keep users engaged, even if the organisation is still refining how they best deliver social benefits. However, it’s only when all three areas are strong that a social venture can have sustainable significant social impact.

The ‘triple helix’ also incorporates two other key areas of development that underpin and enable any social tech venture; organisational and technological growth. While they are not measurable areas explored in depth here, they are important for the development of a successful social tech venture.

Organisational development is the organisation that is developing and delivering a product or service: the supporting team and infrastructure. There’s no set formula for this but it is likely to involve having the right skills in the team, the right working environment, strong project management systems and so on.
Technological development is the extent to which the technology behind the social tech venture is robust and functional. It could be the best online mental health intervention in the world, but if the site crashes whenever more than three people log on, it’s not very useful.
Lean measurement

It is vital that any measurement is integrated into the development and delivery of the product or service and provides data that helps the team to make decisions - an ‘actionable’ metric².

A useful model to incorporate this into a venture’s development, particularly for early-stage organisations, is to follow the ‘lean startup’ methodology and particularly the cycle of ‘build, measure, learn’. That is, build something, test to see if it meets your goals, then adapt or change it. Then you begin the cycle again.

The lean startup movement has become very good at applying ‘lean analytics’ - creating iterative cycles of measurement where metrics change over time, depending on the specific goals a business has at its different stages of development.³ For example, at an earlier stage it may test demand for a specific feature of a product or service, but at a later stage may be focussed on getting people to pay a fee for using the service. So at an early stage they may measure how many people move from viewing their website to creating an account, but at a later stage they measure how many account holders are choosing to set up an ongoing payment for premium features of the service.

The key here is that they are not measuring everything up front and keeping those measures static, but prioritising areas of business development, and using metrics to track those areas of priority. One of the problems for social ventures, for a range of reasons (including funder requirements), is having the flexibility to develop these iterative cycles of development based on their current priorities.

² Post by start up expert Eric Ries on ‘Actionable’ versus ‘Vanity’ metrics
http://fourhourworkweek.com/2009/05/19/vanity-metrics-vs-actionable-metrics/

³ Lean Analytics is a stand out resource for using measurement in a startup context:
(blog) http://leananalyticsbook.com/category/blog/
(book) http://leananalyticsbook.com/
The spirit of using the triple helix is to apply this process of ‘lean measurement’. Any venture should have a broad sense of the change it is trying to make, but the steps to do this will alter and shift over time. It may start with a certain set of metrics, but move to a more detailed or different set of metrics as the venture matures.

This paper sets out the different stages of a social tech venture’s development and identifies different metrics that can be appropriate at different stages. Of course these are just suggestions, not every metric will be valuable or appropriate, and whether a venture is best placed to use these or others will depend on the specifics of their approach.

**Stages of Development**

The triple helix outlines the different areas in which it’s important to measure value. But before delving into specific metrics, it’s useful to outline a likely path to growth for a burgeoning social tech venture.

We’ve seen a pattern of how social ventures progress through different stages of development at Nominet Trust. These can be separated into:

- **Build** - going from concept to minimum viable product (MVP)
- **Demonstrate** - early pilot testing and proving the value of the product or service
- **Develop** - building the operational team and partnerships to support growth, creating a sustainable business model
- **Readiness** - preparing to scale up delivery
- **Scaling** - increasing access to the product or service
We’ve seen that ventures have different objectives and needs at these progressive stages of development. Consequently they need different ways to measure progress. What’s important at build stage will not be at scaling and so on. In the following pages each stage is broken down with suggested metrics and approaches that could account for value at each stage. Of course no model is perfect, and reality never progresses in a neat, linear fashion. For example a venture may cycle between demonstrate and develop as it tests, refines or even changes its ideas.

**Case Study - Task Squad**

Task Squad is a micro employment platform to support young people to find meaningful work opportunities. It emerged from national youth volunteering charity vInspired as part of their participation in ‘Sidekick School’ – an initiative to develop innovative new ventures run by Sidekick Studios and funded by Nominet Trust⁴. Task Squad has moved from being an early-stage idea through to winning the Google Global Impact Challenge⁵.

---

Measurement with the Triple Helix

Build Stage

Summary - This is the first stage of development, taking a social venture from concept through to a ‘Minimum Viable Product’ (MVP) - that is, the basic version of the digital product or service that can be used to test how useful it is at addressing the social challenge and meeting users’ needs.⁶

Start of this stage - An idea or concept to develop, time, resource and a team to do it.

End of this stage - A MVP Product which has undergone some early testing with the intended users for the product and is beginning to engage with potential customers or routes to market.

Success at this stage - Establishing a clear social and user need. Creating a functioning prototype product or service that could address these needs and testing this with the intended users. Early investigation of possible business models, partnerships and routes to market.

Possible Measurements:

User Value – Focusing on problem and solution testing
- Qualitative interviews with key users of the product or service to test need and demand for the approach. What specific problems do users have that the product or service would solve? What would they need to address these needs? (Measures could include the number of potential users reached, or insight sessions held)
- Observation; observing potential users to see if the product would work in their context
- Quantitative responses to the idea, for example survey potential users to test whether needs established within qualitative interviews apply to a larger user group
- Online responses to the proposed service from potential users, for example putting up a version of the site and using analytics to test demand through: number of visits, time visitors spent on site, if users view more than one page, if users sign up for more information (for example to a newsletter or to create an account)

Social Value - Understanding the best way to address the need
- Qualitative responses to the idea - interviews or meetings/consultation with key stakeholders, such as domain experts and possible purchasers of the service to establish what social challenges need to be addressed and how the product or service could address them
- Quantitative analysis of the idea, for example using surveys to test the idea with key parties, or analysing existing data sets to understand the extent of the social issue
- Online responses to the proposed service from partners or potential customers using the approach described above

⁶ The ‘Discovery’ and ‘Alpha’ phase guides from GDS are useful source material at this stage
⁶ (intro) https://www.gov.uk/service-manual/phases
⁶ (alpha) https://www.gov.uk/service-manual/phases/alpha.html
Financial Value - Focusing on establishing who has responsibility and accountability for the social issue

- Establishing an agency or provider who has the responsibility or interest in addressing the social need the product or service is attempting to address
- Gathering financial indicators of the negative impacts of the established social need the product or service is looking to address
- Establishing that there is a market for this, for example, has the policy context shifted to make this an area that is likely to be outsourced from public services?
- Establishing potential routes to market, particularly if it is a consumer facing product or service

Case Study – Task Squad

At the early ‘build’ stage of development, the key goal of measurement was to understand how young people and employers wanted to use, and eventually were using, the Task Squad platform. As the platform was barely more than a web page the measurement occurred through interviews with potential users, and then as the platform developed, through user testing side by side with potential users.

The focus was on working with a smaller number of individuals to really understand the journeys and requirements of both the young people who were looking for work opportunities and the employers who were looking for staff. As part of the lean development approach employed, this went hand in hand with software development. Nothing was built until it was tested with the user groups. The back end systems were still very much manually operated at this time as it was more important to understand how people wanted to use the platform before technically automating it.
Demonstrate Stage

**Summary** - This stage is concerned with taking a MVP and using it on a larger scale to demonstrate the potential of the product or service to address a social challenge.

**Start** - A MVP Product which has undergone some early testing with the intended users for the product and is beginning to engage with potential customers or routes to market.

**End** - The product or service is demonstrating the potential of new approach and realising some of the social and user value. It will also have indications of financial value.

**Success** - The product or service is live with a growth in new users while retaining some existing ones. There is a basic communications and PR strategy in place. There is a social impact assessment framework in place and early indications that social outcomes are being met. There are early partnerships in place to support the growth of the venture and strong indicators of possible routes to market - this may be through further investment or delivery partners. There is a business plan in place with early stage financial projections.

**Possible Measures**

**User Value - Activation, ensuring people are using the product or service**
- Activation on beta invite
- Account sign up
- User sign up rates to emails / RSS / newsletter updates - as an indicator of a desired future visit
- User opening emails/messages from the service provider (a indicator of interest)
- User click throughs from message / emails from the service provider (a demonstration of interest)
- Using the site or service for an action that leads to value
- Retention - repeat visitors engaging in action on the site or using the service
- Positive response to ‘net promoter score’ or ‘one question that matters’

**Social Value - Establishing the social effect**
Due to the bespoke nature of social impact measurement, these are more measurement ‘gates’ that should be moved through at this stage
- Development of a theory of change with priority outcome areas identified
- Using social value metrics to test leading indicators of theory of change
- Pilot study undertaken with user group, measuring early outcome areas, this is likely to involve qualitative interviews to understand if and how the product or service is impacting on them. It may also include pre and post measurement of movement against social outcomes that have been identified on the theory of change
- Setting up basic monitoring data about service users

---

7 The GDS ‘Beta’ and ‘Live’ phase guides are useful at this stage: [https://www.gov.uk/service-manual/phases/beta.html](https://www.gov.uk/service-manual/phases/beta.html)


Financial Value - Generating interest from partners and purchasers

- Pilot in place with potential purchasers of the service
- Meetings with potential purchasers of the service or funders/investors
- Securing letters of intent from potential purchasers of the service
- Viable business plan in place e.g. supported by advisory group or board
- Growth in revenue, e.g. from grants, early stage investment, or through use of the service

Case Study – Task Squad

At this ‘demonstrate’ stage the platform was slightly more stable as a functional MVP (minimum viable product)\(^\text{11}\). But the service was still essentially unknown outside of a small group of users and interested stakeholders.

Service Delivery Metrics

At this stage of funding – funders suggested aims and key impact measures were around the generation of hours worked through the platform and number of tasks. However, these weren’t the most important things to measure to develop the platform. While they were important, there were two problems:

- These numbers would make the platform look small in comparison to other programmes vInspired was running
- More pertinently, the number of hours and tasks weren’t key metrics in understanding how effectively the team were growing a scalable business

Rather, the team focused on two key service delivery measures that would ensure the platform was scalable - getting them right would lead to a more sustainable use of the platform over time.

- Firstly, the amount of Task Squad team resource taken to fill a task. This was crucial as if staff time taken to fill tasks remained high, it would not be a scalable model - more tasks would require more staff. Rather the team wanted to be able to automate this as much as possible in order to keep costs low
- Secondly tasks that were successfully filled. This was obviously as key priority for employers. The measurement of this relied on two other pieces of captured data; number of applicants applying and the length of time before the task was filled.

Measuring these service delivery metrics allowed the Task Squad team to identify that they had lots of applicants for positions, but tasks were taking longer to get filled. In analysing the applications they could see that because applicants were so keen for work, and were applying too quickly, the actual applications were poor quality. This had a knock on effect on increasing staff time to fill the application as

\(^{11}\) [http://en.wikipedia.org/wiki/Minimum_viable_product]
they’d have to work with the young people directly to improve the applications.

Also in continuing to conduct interviews with applicants the team could see that it was as bad to have too many applicants as it was to have too few. If applicants rarely got the position, they would become demoralised and not see the platform as valuable.

So these measures, while not directly ‘output’ related funder preferred measures, were far more useful to the team and helped them to prioritise areas of work such as:

- Deciding to build up a specific list of people to mail jobs to, based on their suitability, rather than mailing jobs out to every person who had signed up (this meant a smaller number of more suited applicants for each job).
- Finding ways the team could support young people to be more successful in applications and so reduce the staff time that was spent getting applications filled. One area that emerged from this was staff assessing the quality of each candidate’s CV when they made an application. By doing this manually Task Squad staff could get a good sense of the common improvements that applicants could make.

At this stage Task Squad developed an initial theory of change and used standardised questionnaires from NPC’s Journey to Employment Framework12. However, as the theory of change revolved around a fairly established argument of employment generating positive outcomes for young people, it meant the team could focus on increasing the user value and actually getting the platform used. Without this, there was no possibility of social value as there would be no activity.

12 http://www.thinknpc.org/publications/the-journey-to-employment/
Develop Stage

**Summary** - This stage focuses on further developing the product or service, but also developing the organisation and supporting technology, for example through growing the team and redeveloping the software platform to make it more robust and scalable\(^{13}\).

**Start of this stage** - The product or service is demonstrating the potential of the new approach and realising some of the social and user value. There are strong indications of possible routes to market.

**End of this stage** - Core features of the product or service are stable and ready for use. There is a growing user base and the product or service is demonstrating its viability as an alternative to current provision.

**Success** - This level involves a growing user base with a stable technology platform. Other areas of the business are also being developed. For example, a communications and PR strategy are being followed and core social outcomes are being consistently measured through outcomes evaluation. There are partnerships in place to support the growth of the venture and routes to market - this may be through further investment, or delivery partners. There is a business plan in place with feasible financial projections and a board or formalised advisory group will have been formed. The venture will be developing sales and supplier lists, partnerships, routes to market and evidencing demand.

**Possible Measures**

**User Value - Focussing on retention of service users**
- Churn rate\(^{14}\)
- Retention – measuring repeat users of the product or service, for example using analytics to measure repeated website visits
- Email open / click through rates which drive return visitors
- Word of mouth sharing by existing users, for example this could be tracked by surveying new site users and finding out where they heard about the product or service
- New referrals to the product or service who become users. This could include using specific ‘virality’ measures like the ‘Viral Coefficient’\(^{15}\) if appropriate/desired
- Shares / Likes / +1s on social media
- Positive response to the ‘net promoter score’ or ‘one question that matters’

**Social Value - Testing effect**
- Pre and post testing of specific social outcomes with a sample user group
- Outcomes measured using established instruments where possible and shared measurement frameworks if appropriate\(^{16}\)
- Test and update theory of change
- Possible use of cohort groups / segmenting to understand how outcomes vary between different users of the product or service

---

\(^{13}\) The ‘Live’ stage from GDS is a useful resource at this stage [https://www.gov.uk/service-manual/phases/live.html](https://www.gov.uk/service-manual/phases/live.html)


\(^{15}\) Viral coefficient [http://www.startupdefinition.com/viral-coefficient](http://www.startupdefinition.com/viral-coefficient)


● Alternative methods to analysing data could be developed and employed, such as data mining on qualitative information or online analytics
● External evaluator, or substantial in-house expertise, being used

Financial Value - Building revenue
● Referrals from existing clients / invitations to present
● Increase in revenue, through grants, investment, or contracts
● Becoming part of established supplier lists
● Monthly profit / loss
● Early indications/calculations of service user acquisition cost\(^{17}\)
● Early indications/calculations of service user lifetime value\(^{18}\)
● Early indications/calculations of time to breakeven\(^{19}\)

Case Study – Task Squad

Given that Task Squad had reached develop stage, the team were now able to focus on more nuances of the model.

Context
As is frequently the case with any digital product, as usage grew people started using the platform in unexpected ways. The use of the platform was growing but employers were posting longer term tasks, rather than the ‘micro work’ the platform was originally built for. Given longer term tasks continued to support the social goal of enabling young people to access paid work opportunities, the team pivoted their operations to accommodate this. Alongside this, as part of the plan to decrease time spent by the Task Squad team on filling positions, potential candidates went from being 100% selected for the role by the Task Squad team, to being 70% picked by the employer.

Improving quality of uploads
One of the team’s key metrics was reducing the amount of time it took for a task to be filled. The team’s previous work at ‘demonstrate’ stage had identified that the quality of young people’s applications was impacting on this. Poor quality applications meant that otherwise suitable candidates were being rejected by employers. This, in turn, had a knock on effect on their second key metric, the amount of staff resource spent on filling tasks, as staff had to spend more time working with the young people to improve their applications. Ironically a significant amount of the information young people could use for creating their applications was on the main vInspired platform, but technically it could not be directed copied across. As a result, the team focused on improving vInspired’s API so that young people’s volunteering information could be more effectively pulled from the

vInspired platform into Task Squad’s sign up process. This was not something that would have been predicted without the measurement.

**Improving sign up rate**

A second challenge identified through measurement was the drop off rate for young people signing up. Through their use of Mixpanel analytics the team was able to see that a lot of young people were visiting the Task Squad site, but then leaving during sign up. The sign up page required a vInspired ID to be used (in order that the young person’s volunteering experience could be used as part of creating a Task Squad account). If young people signing up to Task Squad didn’t have a vInspired ID, they had to leave the Task Squad site and visit the vInspired site to get one. As such, many young people were hitting a barrier, at best going to vInspired to create a vInspired ID, but then rarely returning. Realising this, the team was able to prioritise embedding the vInspired sign up form directly into the Task Squad site, removing this barrier.

The other main point of drop off was during the sign up process. It started with asking young people to create their CV, then add personal bank details, then upload legal information and post their identification to the team. By engaging in direct user testing the team identified that young people were put off by having to put their CV and bank details in first. The users found the CV a struggle and the request for bank details first invasive. As a result the team moved the order of sign up by requesting personal information first. They also improved the structure of support on the CV builder. This included improving the importing of volunteering information from vInspired and creating visual prompts to help young people fill out their CV.

These developments reduced staff time spent on applications and improved young people’s sign up rates. Again the work prioritisation and its success were rooted in key metrics developed by the team.

**Cost per acquisition**

As the platform developed and more tasks were posted, the team was able to begin working on assessing their financial assumptions and models.

At this stage the team was able to begin to calculate cost per acquisition of employers through the platform. Again, using Mixpanel, they could measure the click-through rate from Task Squad’s Google Ad words account, measuring those that completed an Expression of Interest form, and those form completers who converted into placing tasks on the site. They also kept a log of physical meetings and communications to understand which method was most successful in growing the number of tasks on the site.
Having worked on creating significant support for young people to sign up, and minimising staff time required to do this, the team could make more stable calculations on how much it cost to get tasks filled by young people. They could then refine their overall business model; this meant moving from a £10 an hour charge, to a £12 an hour charge for employers to employ a young person. Crucially though, this increase in charges was based on a solid understanding of the costs involved.
Readiness

**Summary** - This stage is moving into larger business growth and beyond ‘startup’.

**Start of this stage** - There are stable core features of the product or service which are already in use with a growing user base. The product or service is demonstrating its viability as an alternative to current provision through evidence of social value. There are established and confirmed partnerships and routes to market which support the growth of the business. There is likely to be weakness in one or two areas needed to scale that can be addressed as part of the growth at this stage.

**End of this stage** - The product or service is extending its reach through a growing user base, has a sustainable revenue stream and is delivering social value at scale.

**Success at this stage** - A stable technology platform, strong partnerships or paying clients, sustainable revenue streams, a strong core team including senior appointments, robust evaluation measures in place, active board/advisory group and evidence of a sustainable business model.

**Possible Measures**

**User Value** - Focussing on growth
These will be similar to those in develop stage

**Social Value** - Robust measurement
- Ongoing evaluation of longer term outcomes using comparison group studies
- Evaluation validated through the involvement of an external evaluator
- Ongoing insight gained from feedback loops with service users, e.g. qualitative analysis of feedback gained online or in person or analytics tracking online activity
- Specific measurement approaches appropriate to the venture are being employed, such as Cost Benefit Analysis, Cost Effectiveness Analysis

**Financial** - Repeatable metrics
At this stage the social venture should be stable enough in its operations to track regular business metrics. There are a huge range of possible effective financial metrics to understand business growth and appropriate measures will depend on the business model. However they may include:
- Revenue per customer
- Ratio of customer acquisition cost to customer lifetime value
- Time to breakeven
- Quarterly recurring revenue
- Size of gross margin

**Case Study – Task Squad**

Task Squad is beginning to enter this phase. Having developed solid metrics to account for young peoples’ and employers’ journeys through the process, as well as the associated costs, they are building on their existing measurement base. As the service delivery becomes more digital, they are continuing to refine their quality
assurance processes to ensure the experiences for the young person and employer are positive.

**Scale**
At this stage the venture will be looking to substantially scale up its operations; beyond the scope of ‘startup’ measures. Nominet Trust does not fund projects at this level. As a result it is not covered here as there are many other guides dedicated to supporting growing established businesses.
Nominet Trust is the UK’s leading Tech for Good funder. The Trust believes in harnessing the power of digital technology to improve lives and communities.

A UK registered charity, Nominet Trust brings together, invests in and supports people committed to using digital technology to create social and financial value.

Nominet Trust has invested in hundreds of projects since its inception, providing business support as well as financial investment, seeking to connect projects to prospective partners who can help increase their reach and impact.

Nominet Trust is the charitable foundation of Nominet, the company responsible for running the .UK internet infrastructure. Nominet believes in the positive power of the internet, and with the money generated from the registration of web addresses ending in .uk, .org.uk, and .co.uk, Nominet is proud to be able to fund Nominet Trust’s work.

To find out more about our work or how you can apply for funding, please visit:

www.nominettrust.org.uk

Follow us on Twitter: @nominettrust

Nominet Trust
Minerva House
Edmund Halley Road
Oxford Science Park
Oxford OX4 4DQ

t +44 (0)1865 334 000
f +44 (0)1865 332 314
enquiries@nominettrust.org.uk
www.nominettrust.org.uk