Angel Investing 203 - Assessing impact in early-stage companies

A Discussion of Approaches & Metrics
• We invest in:
  – Companies whose mission is to help reduce social disparities, including addressing inequalities in health, educational and economic achievement, and treatment by the criminal justice system.
  – Companies whose mission is to help mitigate environmental damage and promote clean energy

• We recognize that each person in our diverse society has unique and valuable skills and insights.

• Some stats:
  – First investments in 2016
  – 52 angel investors
  – To date, have invested $5.8M in 24 companies
How SWAN defines impact

- Companies whose primary business mission is to address serious societal or environmental challenges
  - Typically in the areas of clean tech, health care, education, wealth inequality, social justice
- Highly supportive of under-represented founding teams
  - 50% of investments have gone to these teams

Other networks define impact as supporting diversity or promoting regional economic development.
Agenda

• Challenges in Measuring the Impact of Early Stage Startups
• Helpful Industry Tools and Frameworks
• Examples: SWAN impact assessments
Challenges in Measuring the Impact of Early Stage Startups
Company Bottom Lines

1\textsuperscript{st} - Financial return to shareholders

2\textsuperscript{nd} - Impact created by company’s primary business mission

3\textsuperscript{rd} - ESG (Environmental, Social, Governance). Socially responsible internal operations
Impact Measurements

• Can be challenging when addressing fundamental social challenges
  – Poor health
  – Depression / anxiety
  – Income inequality
  – Racial injustice

• Environmental measurements are often easier
  – Energy or water saved
  – Greenhouse gases reduced
  – Decreased environmental pollution
Most start-ups aren’t able to demonstrate high levels of causality

Source: https://ecotone-partners.com/
Pragmatically, how can early stage investors and companies measure impact?
Our Network

1. Require companies to propose an impact measurement in the funding application
2. Require pitch decks to clearly explain their impact and their impact measurement
3. Get agreement with the network on the metrics before funding
4. Require companies to agree to report quarterly on impact metrics along with financial results
Our most basic Impact Metric

• Does the company’s **primary business mission** clearly speak of impact?
• Does the company’s home page clearly communicate that impact mission?

That said – “Impact is in the eye of the Investor”
Our 2nd Major Metric - Efficacy

• What evidence is there that the company will effectively deliver significant impact?
Early-stage efficacy “data”

Pre launch

• Write a Theory of Change
• Cite evidence complied by other sources  
  – Proxy data
• Publish pre-release test results

Post launch

• Compare pre-use and post-use outcomes
• Compare outcomes relative to competitive impact solutions
• Compare outcomes relative to a control group
We recognize that there can be no impact without business success
Helpful Industry Tools and Frameworks
Theory of Change Framework

Intent
• Mission
• Impact goals

Activity
• Concrete actions. e.g., development

Output
• Number of interactions with beneficiaries

Outcome/Social Impact
• Changes, benefits, learnings, effects resulting from outputs
• Difference in situation between what would have happened without the intervention of your company
• Both positive and negative changes
UN Sustainable Development Goals

1. No Poverty
2. Zero Hunger
3. Good Health and Well-being
4. Quality Education
5. Gender Equality
6. Clean Water and Sanitation
7. Affordable and Clean Energy
8. Decent Work and Economic Growth
9. Industry, Innovation and Infrastructure
10. Reduced Inequalities
11. Sustainable Cities and Communities
12. Responsible Consumption and Production
13. Climate Action
14. Life Below Water
15. Life on Land
16. Peace and Justice, Strong Institutions
17. Partnerships for the Goals
A Catalog of Metrics

Finding metrics using 3 selection steps

Q1: UN Sustainable Development Goal?
A: 3-Good Health & Well Being

Q2: Impact Theme?
A: Access to Quality Health Care

Q3: Strategic Goal?
A: Increasing Consistent Supply of Essential Services & Products

Suggested metrics

- Number and percent of patients with decreased health spending
- Percent change in median client spending on healthcare
- Potential sub-metrics:
  - Patient groups served
  - Communities served
  - Healthcare facilities served
  - Treatment completion rate
  - Patient retention rate
  - (and 10 more)
**The Five Dimensions of Impact**

<table>
<thead>
<tr>
<th>IMPACT DIMENSION</th>
<th>IMPACT QUESTIONS EACH DIMENSION SEeks TO ANSWER</th>
</tr>
</thead>
</table>
| **WHAT**         | • What outcome occurs in period?  
                  | • How important is the outcome to the people (or planet) experiencing it? |
| **WHO**          | • Who experiences the outcome?  
                  | • How underserved are the affected stakeholders in relation to the outcome? |
| **HOW MUCH**     | • How much of the outcome occurs - across scale, depth and duration? |
| **CONTRIBUTION** | • What is the enterprise’s contribution to the outcome, accounting for what would have happened anyway? |
| **RISK**         | • What is the risk to people and planet that impact does not occur as expected? |
Impact measurement consultants supporting Start-ups

https://svtgroup.net/

https://socialimpactprojection.org/

https://factorimpact.com/
References

• GIIN (Global Impact Investing Network)
  – Including “Best Company Measurement and Reporting Practices”
  – https://thegiin.org/

• IRIS
  – https://iris.thegiin.org/metrics/

• Impact Management Project
  – https://impactmanagementproject.com/

• UN Sustainable Development Goals

• Theory of Change
  – https://www.theoryofchange.org/what-is-theory-of-change/
Examples: SWAN impact assessments
Funded: Flow Below

Adding aerodynamic fairing around drive wheels of long-haul tractor trailer cabs to improve fuel efficiency and decrease CO2 footprint

• Impact metric
  – 1.2% improvement in a truck’s fuel efficiency, with a similar decrease in carbon footprint
  – Total impact can be estimated using the number of trucks employing the fairings and average miles driven per year per truck
  – Metrics are often straight-forward for environmental companies
Funded: OneSeventeen Media

Mobile app focused on improving social-emotional well-being of students in a classroom, especially those who are upset or disruptive

- Impact metrics
  - Harder metrics to measure
    - Decrease in number of disruptive incidents in the classroom (who would be able and motivated to measure and report on that?)
    - Increase in students’ social-emotional well-being and life skills
  - Easier metrics to measure
    - Decrease in absentee rate
    - Increase in graduation rates
    - Decrease in negative emotions as self-reported by students on the app
Not funded: company “x”

Mobile dating app where first date is a volunteer activity at an event hosted by a non-profit

• Impact metric
  – Increased volunteer hours (hours is a Theory of Change “output” and not an “outcome”)

• Concerns
  – Impact is not the company’s primary business mission
  – Difficultly in demonstrating the significant societal benefit resulting from dating volunteer hours (the “outcome”)
Scriptly Rx

Offers prescription drug discounts with a primary focus on serving disadvantaged groups.

- Impact metrics
  - The percentage of Scriptly Rx users who are disadvantaged
    - “Who” is served is important to distinguish the company from non-impact prescription discount providers
  - Number of disadvantaged users served
  - Average savings by a disadvantaged user
Not funded – company “b”

High-protein food powder supplement derived from beetles

• Impact metrics
  – Low-environmental footprint (e.g., compared to beef protein)
  – A healthy food

• Concern
  – Will market demand be high enough to deliver meaningfully large environmental and health impacts?
  – There is no way to measure if use of this product causes better health outcomes
  – Yet another “healthy” food. Which food choice results in best health?
College Consortium

Allowing small colleges to cross list online classes with other small colleges

• Impact metrics
  – Higher graduation rates
  – Shorter time needed to earn a degree
  – Increased viability of smaller colleges
Not funded – company “y”

Innovative technology allowing the windows in existing high-rise commercial buildings to be relatively easily upgraded to double pane

• Impact metric
  – Marked increase in insulation efficiency of windows, with corresponding decrease in fuel usage and carbon footprint

• Concern
  – Risk of low adoption => limiting the scale of impact: Hard to get first high-rise building owner to commit to upgrade an entire building. Who is willing to go first?
Binary Bridge

A robust, easy to use portable electronic records systems optimized for use in developing countries by medical missions and by local clinics

• Impact metrics
  – Direct impact: Improved longitudinal care for patients
  – Ability to scale the long-term impact: Enhanced ability of medical mission NGOs to report their impact to donors, thereby increasing the NGOs’ ability to scale their operations
Not funded – company “t”

Developing cutting-edge manufacturing techniques in combination with a patient’s own living cells to treat loss of skin color caused by disease and scarring.

• Impact metric
  – Mechanization of the cell-preparation process greatly expands the number of dermatologists who can offer this life-changing treatment

• Concern
  – Small number of people being helped. Treatment is currently available only to patients who can self-pay $5,000. Not covered by Medicare, Medicaid or insurance.
On the Dot

Daily podcast spotlighting women who are being successful in the world of business. Working to address income inequality and to support women as they work to break through glass ceilings

• Impact metrics
  – Hard to measure
    • The resultant change in the economic status of business women
  – Easier to measure
    • Women’s self-reported change in attitude
  – A gender-lens investment provides sufficient impact for some investors
Not funded – company “z”

Platform that allows senior public school administrators to more easily comply with state laws which, if the district is found to be in non-compliance, can cause the schools to be designated as under-performing

• Impact metric
  – Decrease in hours spent by administrators on reporting, giving them more time to focus on initiatives that improve educational outcomes

• Concerns
  – Impact: Hard to measure impact on educational outcomes
  – Business: relatively small market
Additional Webinars

• Angel Investing 201
  – The Big Picture: Basics of building an Investment Portfolio, and an introduction to how to do Due Diligence in order to increase the financial return from that portfolio

• Angel Investing 202
  – The Mechanics of Investments: Investment instruments, company valuations, dilution across rounds, post-investment activities, and tax considerations
Good Resources
Angel 203 Feedback

What was most helpful?

What was less interesting?

What would you like to learn more about?