

Ensuring Social Impact - Codeathon Guidelines

The following are guidelines adapted from Effective Altruism's Cause Prioritisation Tool to help participating teams of the Codeathon ensure their applications achieve significant and sustainable social impact. These guidelines are mostly for mentors' reference, though they may adapt it as they see fit.

PROBLEM

Generally, the vast majority of groups at the Codeathon centred on one key area: Female employment opportunities. Individual groups each identified one of four aspects of the problem.

- Lack of career skills education due to lack of infrastructure
 - Women and girls in developing countries are not allowed access to education due to education policies or lack of infrastructure (limited resources might cause families to invest everything in their male children's education).
- Lack of career skills education due to societal expectations
 - Gender roles keep women away from entering STEM fields or learning high-paying job skills. These expectations can come from their community, their society, their family or even self-internalised expectations that they would not be suited for STEM.
- Lack of career opportunities due to costs of childrearing
 - The economic costs of raising a child, the time investment required to raise a child and society's expectations that the mother sacrifice career opportunities to raise children all hinder a woman's ability to advance in their careers
- Lack of career opportunities due to active employer bias
 - Employers might be implicitly or explicitly biased against hiring women in certain fields, due to either a direct bias against women or a perception that women would be less competent.

However, a handful of groups have identified other problems related to gender inequality:

- Domestic violence
 - Domestic violence against both genders occurs mainly behind closed doors, and is perpetuated by social pressure to remain submissive and keep such abuse secret. Again, this pressure encompasses the communal, societal, familial and individual level. In many cases, not even authorities can be relied upon to address domestic abuse cases.

To form an effective solution, groups working on this issue must take into account all these sources of social pressure in order to effectively address the issue. Do also note that the groups in question focused mainly on women, and might want to explore the possibility of expanding their focus to domestic violence on men.

- Insufficient public support for nonprofit organisations

- Some groups also identified the need to increase public support for nonprofit organisations (although the specific organisations were not stated).

There are several ways to approach these issues, and participants need not limit themselves to any particular approach. In fact, an approach which can overcome one or more causes can increase chances of effectiveness. The next few parts will give details on rough guidelines as well as examples of previous solutions.

SOLUTION

Below is an outline of the criteria that would make potential solutions sustainable and effective. The overall idea is to work towards gender empowerment by providing women, or in some cases men, with more access to technological resources otherwise unavailable to them.

Framework:

IMPORTANCE

If efforts in this area were completely successful, how much better would the world be?

- Scope of impact: If more progress is made, will there be large immediate benefits to lots of people?
- Sustainability: Will the intended effects of the app solve problems in the long term?

FEASIBILITY

How easy or hard is it to address these problems with current technology?

- Feasibility of solving problem: Is there an easy way to solve the core problem?
- Cost effectiveness: Will the app require high costs or a lot of infrastructure to operate?
- Scaleability: Will the app continue to work as intended as more people use it?
- Agreeability of stakeholders: Is the app likely to be accepted by not only those it intends to benefit, but also the wider community?

NEGLECTEDNESS

Does society severely undervalue and devote less resources to this cause, leaving opportunities for progress?

PREVIOUS SOLUTIONS

Micro cash transfers (Most effective by EA standards)

Mobile cash transfer organisations such as M-Pesa and GiveDirectly (a top ranked charity by EA standards) takes the simple idea of providing loans or donations (around a few hundred dollars) to people living in impoverished communities, where the money's purchasing power is greatly increased. In the case of GiveDirectly, money is unconditionally transferred based on needs-basis assessment. Other systems focus on promoting female entrepreneurs with some expect returns on investment, which is essentially investing. While the latter is a safer source of profit and scalability, in terms of social impact, however, such conditional investing proves less effective in its impacts.

These systems help break the cycle of poverty by allowing initial long-term investments such as in children's education as the benefactors see fit. It also plays a large part in empowering women, as these funds are usually allocated to the women of the household, who are often the ones managing daily household investments in such communities. This directly empowers women financially and socially.

Importance: Promoting these investments greatly and consistently improves the quality of life of women and their communities. The way which GiveDirectly does this also promotes social progress by giving women a say in financial matters and communities at large.

Feasibility: As the infrastructure itself is relatively simple (although financial security must be ensured), and the idea is generally well-received by communities, this solution is quite tractable.

Neglectedness: Most donations go through many physical middlemen who take large chunks of proceeds and spend the remainder without advising locals, while Givedirectly sends over 90% of proceeds directly to recipients.

Directly providing education

Due to many countries adopting cell phones while lacking traditional infrastructure such as schools, promoting online education could potentially be a viable solution to solve the current gap in female education in STEM fields or programming. In the content of gender equality, promoting education in countries with education gaps can help address these educational inequalities.

Importance: Online skills and career education can encompass a broad range of potentially useful knowledge, and provide women with useful lifelong skills in an accessible way.

Feasibility: Feasibility here is quite suspect, but again depends on the content. Generally, dispersing one-way information is somewhat scalable and simple. However, overcoming social disapproval and providing interactive content may pose challenges.

Neglectedness: Many educational technology companies have invested in methods to provide online instruction, focusing mainly on STEM fields, making the market rather saturated. However, these companies usually neglect putting resources into developing countries, where the problem is most rampant.

Anonymous support networks

In countries with cultures not supportive of gender equality, there might be a need to provide a means for certain groups (abuse victims, minorities, women etc) to communicate. These solutions can provide both men and women with ways to communicate and find a support group freely.

Importance: Such anonymous means of communication could allow communication of sensitive information (such as reporting domestic abuse) or providing a network of social support

Feasibility: Relatively difficult. For anonymous messaging platforms, it may be difficult to provide assurance of anonymity and ensure that users reliably interact with each other as intended (i.e. preventing malicious messages, maintaining trust).

For large social networks, it may be difficult to reach a sufficient number of users at first, and larger number of users may prove difficult to manage both in terms of infrastructure and community moderation.

As a whole, these communication channels may also be viewed as suspicious by the wider community.

Neglectedness: Many concerted attempts have been made at creating anonymous messaging/social media platforms, but these vary in effectiveness.

SMS medical notifications

In some remote areas, it can be difficult to relay information between healthcare professionals and patients, and physical travel can take days. Women are often expected in many places to nurse the ill, and could greatly make use of such apps to better seek professional advice.

Importance: Ensuring health by allowing on-demand medical contact is important in communities with no such avenues.

Feasibility: Relatively tractable, as one person could act as point of contact for entire community. Some issues may arise with getting medical professionals to consistently monitor and respond to queries.

Neglectedness: Some resources have been invested in the area, but a well-crafted and targeted solution could still be useful.

Safety apps

Many apps have been developed to promote safety, with an emphasis on promoting safety for women. These range from emergency alarm apps to apps which map and inform the user of potentially risky areas.

Importance: Safety is important, especially in areas with higher crime rates.

Feasibility: Depends. An alarm app can be much simpler than a map app with advanced functions.

Neglectedness: A lot of varied solutions exist, but a new solution could still have an impact.

Summary

Overall, many attempts have been made to solve the problems identified by participants. To really make an impactful product, it is best to constantly and rigorously ensure that the app will serve its primary function as intended, with as little redundancy as possible.

Ultimately, participants of the Codeathon should not be overly occupied with having solid ideas as much as focusing on the process of building simple, lean apps and learning along the way.