CASE STUDY
Solve

All the following quotes in this study case are from Alexander Dale, Community Relations Senior Officer at Solve, interviewed on August 1, 2017.

Solve defines itself as a marketplace connecting innovators with resources with the aim of solving global challenges. Each year, Solve defines new challenges and seeks solutions to address the most important issues that society faces today. Launched by MIT in 2015, the Solve initiative demonstrates why and how a big academic institution can invest in responsible research and innovation.

SOCIAL IMPACT

Launched in 2015, Solve aims to tackle the most important issues the world faces today. This initiative was informed by a broader context: in 2015 the Millennium Development Goals (MDGs) came to an end and the United Nations defined 17 new Sustainable Development Goals (SDGs) for the post-2015 agenda (2015-2030). The SDGs address the most important economic, social, environmental and governance challenges of our time. Solve’s areas of action were chosen in alignment with the SDGs’ objectives and targets by defining four pillars upon which to take action:

- **LEARNING**: Making affordable education accessible to all and managing shifting skillsets for future employment opportunities;
• **HEALTH**: Leveraging innovation to improve health outcomes and bring greater productivity to the health-care system;
• **SUSTAINABILITY**: Fueling a planet and its people through providing water, food, energy; responding to climate change; and seeking sustainable production methods;
• **ECONOMIC PROSPERITY**: Providing meaningful work, economic opportunity, and financial inclusion and equity in a rapidly changing global economy.

Each year, new Challenges based upon the four pillars are defined by the Solve team whose objective is to impact a maximum amount of people. **Major social impact is indeed fundamental and leads the program**: “The goal is always to find a challenge that is socially meaningful so that it impacts tens of millions of lives.”

Solve was initiated by MIT President Rafael L. Reif. As an academic and research institution, MIT is responsible for taking technological knowledge further by developing it and making their findings available for use to serve society as best it can. However, even though MIT has a broad community (20,000 people on campus and more connected to its networks), there was a recognition that some of the complex

Graphic representation of the Solve 4 pillars © Solve
problems of today are less about fundamental research or novel technology and may instead require work on the application and affordability of technology for marginalized populations and different contexts, along with the need to engage a wide array of actors across industry, sector and geography. Solve is part of the answer to this gap in tackling global challenges.

"Solve started as a way to use MIT’s convening power, reputation and technical expertise to bring people together to work on big world issues, with a particular eye toward social impact rather than simply for-profit entrepreneurship."

PRACTICES

THE CHALLENGE: FINDING NEW SOLVERS

The first edition of Solve on October 2015 was a launch event. The objective was to gather international actors and raise issues based on the four pillars.

In June 2016, Solve launched a first cycle of challenges based on the four pillars. The 2016 Global Challenges were:

- **Carbon Contributions** (SUSTAINABILITY): How can individuals and corporations manage and reduce their carbon contributions?
- **Chronic Diseases** (HEALTH): How can we help people prevent, detect and manage chronic diseases, especially in resources-limited settings?
- **Inclusive Innovation** (ECONOMIC PROSPERITY): How do we create a more inclusive, productive, and sustainable economic future for all?
- **Refugee Education** (LEARNING): How can we improve learning outcomes for refugees and displaced people under 24?

A first cohort of 29 Solvers was selected in March 2017 at a pitch event held at the United Nations in partnership with UN Academic Impact. The Solve team designed a formal cycle for finding and supporting Solvers, to be repeated each year. An example using the dates for the 2017 Challenges is as follows:

- Challenges preparation in Winter 2017
- Challenges opened on May 8, 2017
- Submissions deadline on August 1, 2017
- Finalists announced on August 22, 2017
- Solve Challenge Finals in NYC on September 17, 2017
- Partnership Development for selected Solvers in Fall/Winter 2018
- Partnerships and Solvers featured at Solve at MIT in May 2018
This process encompasses four different steps:

1. **Defining Challenges with Solve members**

   Each year, new Challenges are announced by the Solve team. Challenges are chosen by the Solve team after engaging with the Solve member community: 700 to 1000 people were solicited through workshops to define the 2017 Challenges. The Solve members are corporations, foundations, individuals, big investment firms, governments, who provide insights on actionable challenges the world of today is facing. Based on these insights, the Solve team finds questions that encompass a variety of stakeholders’ interests in selecting each challenge, while also being relevant to millions of lives and addressable using technology.

   The 2017 Global Challenges are:

   - **Brain Health** (HEALTH) : How can every person improve their brain health and mental resilience?
   - **Sustainable Urban Communities** (SUSTAINABILITY) : How can urban communities increase their access to sustainable and resilient food and water sources?
   - **Women and Technology** (ECONOMIC PROSPERITY): How can women and girls of all socioeconomic backgrounds use technology to fully participate and prosper in the economy?
   - **Youth, Skills, the Workforce of the Future** (LEARNING) : How can disadvantaged youth learn the skills they need to prepare them for the workforce of the future and thrive in the 21st century?

2. **Open applications on the Solve platform**

   When Challenges are launched, anyone can participate and submit a solution: the whole application is available online for everyone to see, comment or enrich. In order to gather applications, the Solve team gets in touch with organizations which could apply and organizations with large networks to spread the Challenges. From May-August 2017, the Solve team contacted about 1200 organizations. Applicants can be innovators and entrepreneurs from very different backgrounds : academic, social entrepreneurship, associative or philanthropic sector, business, etc. Diversity is promoted by the Solve team in order to cover all aspects of the Challenges: “Diversity is beneficial, partly because different approaches to the same problem make sense in different areas, different contexts or different aspects of the problem, partly because there are members who are interested in different stages and have different resources that are applicable to different parts of that process.”
There is no request concerning the stage of development whether at the research, pilot or growth phase. Solve’s partnerships and support can adapt to each Solver’s needs. As a result, selection is based on applicability to impacting the challenge and driving social impact, rather than a specific technology, organizational structure, or stage. Applicants are asked to describe what specific problem they are trying to solve, the population and regions they are focused on, their outcomes, how they are going to measure their impact, how technology is used, and how their solution is unique and human-centered. Applications can include multimedia. We might think that applicants would be reluctant to share details on their technology given potential intellectual property issues, however, for the organizers: “It has been impressive how much people are willing to share.”

On August 1, when the applications for the 2017 Challenges closed, 953 solutions from 103 different countries had been submitted (a higher number compared to the first cycle with ~450 submitted from 53 countries).

3. Selecting finalists

To select finalists, the submitted solutions are first screened by Solve staff and external partners to remove solutions that are incomplete, or do not address the challenge at hand. The remaining applications are then scored by judging panels (15 to 25 people) to determine 15-20 finalists. Judging panels are a mix of 3 to 4 people from MIT faculty (Sloan School of Management, Engineering, Architecture, Economics schools etc.), leaders and experts from the Solve member community who bring their corporate/entrepreneurial vision such as Indra Nooyi, Chairman & CEO of PepsiCo, Co-Chair of the Women and Technology Challenge or representatives from Apple, Accenture, BNP Paribas, etc. Judges also come from other non-governmental organizations whose perspective, expertise and in-depth understanding are critical on the Challenges topics. Judging panels also include governmental and national leaders such as Queen Rania Al Abdullah of Jordan, Co-chair of the 2017 Learning Challenge or Yannick Glemarec,
Deputy Executive Director of UN Women. Judging panels are thus not only scientific and technological researchers but include leaders across sectors, industry and geography.

The judges have about 10 days to go through and score the application from 1 to 4 based on 5 criteria (total score of 20):

- **Alignment**: Does the solution address the challenge that has been set forth?
- **Scalability**: Can the solution be grown and scaled to affect the lives of more people?
- **Potential for Impact**: Does the planned implementation of the solution have the potential to impact lives, and does the theory behind how it will work make logical sense? Does the team have a robust plan for monitoring and evaluating the effectiveness of the solution?
- **Novelty**: Is this a new technology, new application of an existing technology, or new process for solving the challenge?
- **Feasibility**: Is it feasible to implement the solution, and does the team have a plan for the solution to sustain itself financially?

After aggregating scores for all solutions, the Solve team has a deliberation call with the judging panel after the evaluation to come to agreement on finalist selection.

4. **Selecting Solvers (7 to 9 for each challenge)**

Each finalist is invited to pitch before the challenge judges and a live audience at an event held. For the cycle just past, this was held on Sunday September 17, 2017 in New York City, during the U.N. General Assembly Week. The finalists have about 3 minutes to pitch and they will have 3 minutes of questions from judges. The judges will determine which solutions are the most promising and choose an average of 8 Solvers in each pillar. There is no strict limit: if the jury consider only 7 promising solutions, there will be only 7 Solvers; on the contrary, if they think 11 should be supported, there will be 11 Solvers.

Each year, the new Solvers receive support and partnership from the Solve community in order to develop their solution. For this cycle just past, 38 Solvers were selected from 68 finalists.

**BEHIND AND BEYOND THE CHALLENGE: COLLABORATION IS KEY**

Collaboration has been at the core of the Solve program from the very beginning of the process.

After applicants have submitted their solution on the online Solve platform, anyone from anywhere in the world can comment to bring new insights, to offer help in making the solutions better or even request to join the team.
• Partnerships between Solvers & the Solve community members fund, pilot, and scale each solution

Solvers may receive cash prizes (see example under Sponsorship), although this is not guaranteed, and the core purpose of Solve is to make connections between Solvers and members to broker partnerships based on Solvers’ expressed needs. The Challenge modality is just an introduction to a broader collaboration between Solve community members.

The Solve team (Community Directors & Officers, two for each pillar) is dedicated to making these partnerships happen. The Community Directors and Relations Officers are not only supporting the Solvers to determine their financial and non-financial needs, but also of identifying members who will be able to help meet those needs. This “very high-touch relationship” among Solvers and the Solve Team will last for approximately a year. Nevertheless, after the first year, the Solve team will stay in touch with the Solvers, helping them build partnerships if needed, and to stay updated on the output, outcomes and impact of these partnerships.

“We hope that our Solvers come back to mentor new Solvers, and in time become Solve members themselves”

• Building Solve as a worldwide community

Solve is thus not just a challenge or a large event: it is a community helping Solvers to develop their solution throughout the year and through partnerships between Solvers and members of the Solve community. To build the community, the Solve team decided to develop a membership model starting in late 2016.

Membership costs $5,000 and is valid for 12 months. Being a member means being part of the community: members get invited to the events and workshops, provide input on Challenge selection, and get connected with Solvers. For Solve, membership provides a clear set of engaged individuals or organizations that Solvers can work with to create real long-term impacts. Members are invited to mentor Solvers, share best practices, facilitate introductions, and promote challenges.

Solve also seeks and works with sponsors who want to make a larger contribution to the Solve community. Sponsors have a customized package for participation in the Solve community that might include Solve-hosted workshops or discussions within their organization or with their stakeholders, brand recognition around large events, or even acting as host to a Solve event within the annual cycle, such as an instance of the Challenge Finals. Current representative sponsors include the Inter-American Development Bank (IDB), X (part of Alphabet), the Atlassian Foundation, and the Australian DFAT.
One benefit of sponsorship is the opportunity to list prizes under Challenges as a form of precommitted resources. One key example is through the 2017 Learning Challenge around Youth, Skills, and the Workforce of the Future. Both the Australian Department of Foreign Affairs and Trade (DFAT) and the Atlassian Foundation (a global software company based in Australia) committed up to $1M USD to support selected Solvers. DFAT’s Innovation Xchange supports workforce development efforts in the Indo-Pacific region, while the Atlassian Foundation has a mission to prepare 10M disadvantaged youth, anywhere in the world, for the workforce of the future within 10 years. Both organizations benefitted from working with Solve to identify promising solutions within their specific area of interest in the challenge. For organizations who want to drive innovation but lack capacity or interest to run their own challenges, Solve can provide a way to find promising innovators for partnership or investment.

**PERSPECTIVES**

The Solve team has a bold ambition for its program: making Solve one of the major places for social impact innovation and cooperation. This ambition requires “having a global community, Solvers, members and sponsors that are really actively engaged in working on big challenges and who look at Solve as a key network to support them in doing that.”

“In the longer term, the vision is that Solve become one of the preeminent global spaces to connect around actionable social impact."

Membership and sponsorship are the main sources of Solve’s revenue. Membership is currently $5,000 and sponsorship is customized but at a higher amount.

To reach this goal, Solve needs:

- to show that the Solve model can create impact

To carry on their work the key to success for the Solve initiative is to assess social impact of the program in order to show that the Solve model has an impact.

To assess its program, the Solve team focuses on inputs, outputs and outcomes. For the past months, the Solve team has been looking at inputs, such as the number of applications, the number of people reached in general or at events. In the next months, it will begin also assessing outputs, such as the relevance of selected solutions, the number of partnerships happening and the number of partnerships followed through. At Solve at MIT in May 2017, the team gathered more than 300 pledges (financing or expertise) made by different people and organizations to Solvers, and will be building partnerships from these pledges and other member conversations. Outcomes of the Solvers also must be assessed: “it has
to be very tangible, are we having an impact on the social problems that we are setting up to do?” The Solve team expects measurable impacts to take several years to emerge.

- to build and diversify the Solve community

Another key to success is to expand the community of both applicants and members. More diverse applicants – based on geography, gender, and solution stage – will require outreach to an increasing number of organizations, and potentially addressing barriers from language or lack of exposure to formal entrepreneurship.

The Solve team is currently working at defining new ways to engage Solvers and members throughout the year, beyond the two key events (Solve at MIT and the Solve Challenge Finals). This includes challenge design workshops, which solicit input on each year’s upcoming challenges based on members’ experiences and context, Solve-a-thons for generating and refining solutions once challenges are open for submission, and opportunities to directly engage Solvers. These opportunities can include ‘brain trust’ sessions where members work with specific Solvers as a temporary Advisory Board, or investor days focused on helping Solvers looking to raise capital meet relevant individuals or organizations. Either of these activities could take place in many different cities or countries depending on availability of funding and/or local partners. A partnership with organizations in France, as an example, might bring together both French Solvers and those interested in expanding to French markets to meet with governmental and private actors interested in furthering those solutions’ impacts.

The Solve team also focuses on building a more diverse community, focusing on geography and sector. This includes academic institutions (see below), innovation or entrepreneurship hubs, multilateral organizations, corporations, investors, government partners and nonprofits.

As an example of this diversity, Solve is looking at having more academic members. Universities in the US and Brazil are already part of the Solve member community and the Solve team is currently talking to different universities in Europe, the US, and Africa about membership.

For universities, being a member of the Solve community can be beneficial: they can bring their expertise on challenges subjects, connect to a broader community, and increase their visibility. For Solve, having academic members is adding value to the community: "We know that MIT does not know everything and there is really good expertise around the world." Academic members can also directly assists Solvers who are considering specific research questions.

Such collaboration between universities would be quite uncommon but beneficial according to the Solve team. An initiative like Solve requires a significant amount of resources to be developed: replicating Solve at each university would be too expensive and less effective.
“It makes more sense to tie multiple universities into one organization rather than have similar organizations in multiple universities.”

As such, universities could also be potential sponsors and hosts for Solve events. One of Solve’s objectives is indeed to organize events including the final pitch session in all the different continents to gain visibility.

This is in line with Solve’s objective to gather all actors who wish to take part in responsible innovation, and become a hub for social impact.