SOLVE INNOVATION FUTURE
ANNUAL REPORT

2021
Dear all,

In 2020, I wrote about our efforts to actualize an idea: the launch of Solve Innovation Future to direct catalytic investments to early-stage social entrepreneurs via a Donor Advised Fund. Just 12 months later, we have doubled our investee portfolio, tripled our capital deployed, and quadrupled the capital catalyzed toward our investees.

What follows in our annual report includes financial and impact reporting on Solve Innovation Future, but more importantly spotlights on our innovators. While we are proud of our 2021 successes, we are humbled by the work of our Solver team investees. In 2021, these innovators raised more than $30M, generated nearly $10M in revenue, and won a myriad of recognition, including awards from the World Bank, Fortune, and the US Environmental Protection Agency. I am excited to introduce, or re-introduce, you to these entrepreneurs. I hope you enjoy reading about their solutions, and about how Solve Innovation Future is supporting their work, as much as we enjoy working together.

After two years of investing, we believe more strongly than ever that risk-tolerant, impact-focused capital can help innovators scale, while supporting a continued strategic focus on impact. We know that the demand for investment in solutions to our most pressing challenges had never been more urgent, in the wake of the COVID-19 pandemic, widespread need for social justice, and threats to the natural world.

As we look forward: the pipeline of impactful, sustainable solutions challenging the status quo is strong and in need of support. Solve Innovation Future is doubling down, we will continue to fund early-stage innovators, catalyze additional financial and social impact, and use philanthropic capital effectively. We hope you will join us on this journey.

Best,
Casey

Casey van der Stricht
Principal, Solve Innovation Future
casey.vanderstricht@solve.mit.edu
Solver teams are best-in-class innovators. They are driving real, measurable impact against the world’s most pressing problems.

These innovators benefit from risk-tolerant investment capital. This capital is used to scale impact-focused solutions.

Solve Innovation Future is a philanthropic venture fund. Organized as a Donor Advised Fund (DAF), Solve Innovation Future directs catalytic seed and series A investments to Solver teams.

Proceeds from investments are re-invested in future Solver teams, creating a pay-it-forward mechanism, and demonstrating effective philanthropy.
DAFs continue to be a promising, underutilized vehicle to make impact investments. Access to early-stage capital remains a major growth constraint for for-profit, impact-focused entrepreneurs. More than $160 billion in risk-tolerant DAF capital can change the growth trajectory for these innovators, their solutions, and their impact on the world’s most pressing problems.

Catalytic capital helps founders to increase impact. Cash is important for innovators, but deploying impact-aligned capital early in company growth helps founders to build impact into core business operations.

Donations to investment vehicles make philanthropy more effective. Solve Innovation Future began to return investment within 12 months of executing our first investment, demonstrating a renewable philanthropic model.
Investment Spotlight:

**CAPITAL TO DRIVE IMPACT**

When Garry Cooper, founder and CEO of Rheaply, was a student at Northwestern University studying Parkinson’s disease, he didn’t realize that a simple observation of the opportunity for the reduction in carbon footprint for universities, government agencies, and corporations alike. Instead, he simply saw an opportunity to better track assets and keep them in use by buying, selling, trading, donating, or renting them. Garry founded Rheaply as an asset exchange platform, to help teams better utilize hard assets within their communities. What started as a self-proclaimed “cart,” eventually turned into a business as demand for the service grew.

Similarly, Stephanie Benedetto, founder and CEO of Queen of Raw, did not set out to educate consumers on the hidden costs of their clothing when she founded Queen of Raw—instead, she hoped to find a better way to manage the deadstock prevalent across textile production systems. Stephanie launched Queen of Raw as a marketplace and supply chain optimization software for unused textiles: to use blockchain to track fabrics through systems, and eventually to drive down the use of water, carbon emissions, and chemicals to make fabrics that are eventually incinerated.

After successfully raising seed rounds, both Garry and Stephanie recognized the increasing need for transparency in their respective efforts, and the power of sharing the quantitative impact of their platforms with future customers.

The Rheaply team turned to Solve Innovation Future and the Microsoft Climate Innovation Fund to fund the creation of an estimated embodied carbon avoided reporting capability as a part of their award-winning reuse technology. Queen of Raw leveraged in-kind support from Solve Innovation Future to release the world’s first no-code mobile fabric footprint reporting tool. The new reporting technology allows both corporate partners and individuals to know the impact of their reuse and empowers them to change their behavior accordingly.

Engaging with Solve Innovation Future and other impact investors helped both innovators to measurably increase their impact toward a more sustainable world.

What will you do, now that you know one t-shirt takes an average of 700 gallons of water to produce enough clean water for one person to drink for three years? Or that the simple act of reusing a desk or office chair can measurably offset your carbon footprint?

Getting involved with Solve Innovation Future is a great first step. For more information about funding or donating to Solve Innovation Future, please contact Frances Robinson at Frances.Robinson@solve.mit.edu.
Investment Spotlight:

EFFECTIVE PHILANTHROPY

EarlyBird Education founder Carla Small understands the power of a diverse investor group. Developed and scientifically validated at Boston Children’s Hospital in partnership with faculty at the Florida Center for Reading Research, EarlyBird helps educators identify and support children at risk for dyslexia and other reading difficulties through a cloud-based technology platform that incorporates a comprehensive screening assessment, customized action plans, and evidence-based intervention resources for teachers. Initially funded at Boston Children’s Hospital by philanthropists focused on education solutions, Carla and her team built a compelling, evidence-based tool and platform for better serving children and families—even before children learn to read.

When it came time to raise $1.5M in investment capital in 2020 on the heels of their research success, Carla turned to a diverse group of funders that would help her develop a resilient go-to-market strategy. The strategy needed to leverage expertise from education, health, and technology investors who are keenly interested in transforming the way educators, parents, and physicians identify and support children at risk for reading difficulties.

Solve Innovation Future’s investment in EarlyBird Education was catalytic: nearly 50% of the funding Carla raised was a result of introductions made by Solve. With seed funding in hand, the EarlyBird team was able to test the model in schools. In the closing days of 2021, with the success metrics from pilots, coupled with the philanthropically funded efficacy studies, Carla went on to close a $3.5M funding round—a conversion event for Solve Innovation Future’s investment.

The story demonstrates the power of shared incentives: early funding from Solve Innovation Future allowed EarlyBird to focus on the important work of helping educators, clinicians, and parents identify and support children at risk for reading difficulties, in the window when intervention can rewire the brain for reading success. Moreover, gifts to MIT Solve deployed via Solve Innovation Future to the EarlyBird team catalyzed 10 times the invested amount toward the company in 2020, and may likely be recycled should Carla and her team continue to scale effectively.

Investing philanthropic capital via donor-advised funds and Solve Innovation Future is a disruptive, effective form of philanthropy and a novel way to support game-changing innovators.
MEET THE INVESTEES
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<td>Blockchain and machine learning-powered enterprise supply chain waste management and online marketplace for deadstock fabric</td>
<td>USA</td>
<td>Seed; Equity Investment</td>
<td>1+ billion gallons of water saved</td>
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<td>Tailored, developmentally appropriate content for children under five supporting caregivers, educators, and schools</td>
<td>Mexico</td>
<td>Series; RSA Investment</td>
<td>3+ million families impacted</td>
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<td>Modern healthcare solutions for emerging economies—asset-light clinics, mobile healthcare delivery, data-driven analytics</td>
<td>Kenya</td>
<td>Post-Seed Bridge; SAFE Investment</td>
<td>200k+ people served</td>
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<td>Gamified early detection for dyslexia from ages four to eight, developed with Boston Children's, with analytics and guidance for student success</td>
<td>USA</td>
<td>Oversubscribed Seed; Convertible Note</td>
<td>Pilot; improve learning outcomes</td>
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<td>Non-invasive CRISPR-based technology to edit chicken genes enabling a biomarker of the sex of eggs before they hatch</td>
<td>Israel</td>
<td>Seed; SAFE Investment</td>
<td>Pre-launch; save up to 1 billion chicks per year</td>
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<td>Circular economy technology to drive visibility, utilization, and management of physical assets for companies, universities, and government entities</td>
<td>USA</td>
<td>Post-Series; Convertible Note</td>
<td>Preventing up to 60 million tons of waste from landfills</td>
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<td>Vending machines that dispense staple products such as household cleaners &quot;by the gram&quot; rather than via packaged units</td>
<td>Chile</td>
<td>Series A; Equity Investment</td>
<td>Introduces an alternative to packaging</td>
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<td>Learning and teaching platform that makes individualized recommendations to support personalized learning for students</td>
<td>UK</td>
<td>Post-Series A; Equity Investment</td>
<td>Average 30% in learning outcomes</td>
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ACCESS AFYA

Company Overview
Access Afya offers a highly standardized, digitized, and asset-lite affordable solution for high-quality health care offered to under-resourced communities, starting in Kenya. In addition to running a chain of cost-effective clinics and pharmacies, they’ve licensed their model to franchisees to expand their impact. In response to the COVID-19 crisis, Access Afya launched a telemedicine service, multiplying the ways in which they can reach residents with affordable and accessible healthcare solutions.

Impact
More than 375k patients served; 97% recovery rate

EARLYBIRD

Company Overview
EarlyBird is a breakthrough assessment tool that empowers educators, parents, and clinicians to replace the old “wait to fail” paradigm, with a proactive, preventive tool to identify and support children. An easy-to-administer solution that is game-based and combines proven predictors of reading, EarlyBird was developed and scientifically validated at Boston Children’s Hospital in partnership with faculty at the Florida Center for Reading Research. The EarlyBird solution integrates the most predictive literacy milestones with powerful analytics to identify reading struggles, even before children formally learn to read. In addition to recommending the tools best suited to address a student’s particular challenge, EarlyBird is self-administered and auto-scored, helping teachers make the most of time.

Impact
More than 10k students served
**Company Overview**
eggXYt is a biotech company focused on leveraging cutting-edge techniques in molecular biology to forge a more sustainable food system. eggXYt's flagship product is a chicken sexing solution for the egg industry, which aims to prevent the unnecessary culling of four billion male chicks every year, by providing a non-invasive, pre-incubation method for sex detection of chick embryos to be deployed in hatcheries worldwide. This solution is built off of an established platform for disruption in the livestock space. eggXYt has recently also expanded into the field of animal health with its new product: long-lasting and inheritable Avian Influenza Resistance in poultry.

**Impact**
Potential to save four billion chicks every year and add four billion additional eggs to the global supply.

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**Company Overview**
Rheaply is a software company that empowers enterprise companies, governments, and universities to reduce waste by identifying, tracking and exchanging physical resources across operations, internal departments, or surrounding communities. Rheaply's software helps clients — including Northwestern University, Google, and the City of San Francisco — to track assets and keep them in use by buying, selling, trading, donating, or renting them. This unique focus on sustainability is leading a movement to transform the way we approach asset management.

**Impact**
Preventing up to 60 million tons of waste from landfills.
**INVESTEE**

**ALGRAMO**

**Company Overview**
Algramo is a smart dispensing platform intended to reduce wastage of packets. The company's platform solves the poverty tax with a reusable packaging distribution system to work towards catalyzing reusable packaging on a globally significant scale to keep the packaging, enabling customers to buy the exact quantity of products they need at bulk prices.

**Impact**
9 tons avoided CO2; 1.7 million gallons of water saved; 35k tons saved plastic

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**INVESTEE**

**CENTURY**

**Company Overview**
As a developer of a personalized learning platform, Century provides real-time insights to educators. The company's platform creates constantly adapting pathways that provide real-time data insights with access to top-tier education, thus providing students with an education that empowers, inspires, and supports evidence-based teaching.

**Impact**
1 million questions answered daily
Solve Innovation Future has worked with others in the field to drive more capital to innovators globally.

Casey van der Stricht, Principal of MIT’s Solve Innovation Future talks with Your Money host Kent Smetters on Business Radio, SiriusXM 132 about using DAFs for catalytic investment.

Casey and Narges Baniasadi, Health Technology Entrepreneur and Investor, talk about how entrepreneurs can fully integrate purpose into their organizations.

Casey van der Stricht joined legal counsel to discuss the need for entrepreneur-friendly investment structures to help scale impact-oriented entities.
For more information contact

Frances Robinson  
Partnerships Manager, Solve Innovation Future  
frances.robinson@solve.mit.edu

Or visit solve.mit.edu/drive-investments-to-solver-teams