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## 2022

# SOLVE INNOVATION FUTURE ANNUAL REPORT



## WHAT IS SOLVE INNOVATION FUTURE

**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 with cutting-edge early-stage tech solutions.

#### Solver teams are best-in-class global innovators and

**social enterprises.** 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.

**Proceeds from our investments are re-invested in future Solver teams**, creating a pay-it-forward mechanism, demonstrating effective philanthropy, accelerating entrepreneurship, and driving impact toward solving the world's most pressing problems.

**Harnessing the power of philanthropy,** Solve Innovation Future directs recyclable, catalytic investments to cutting-edge early-stage tech founders. These investments accelerate entrepreneurship and drive measurable impact toward solving the world's most pressing problems.

"Solve Innovation Future adds fuel to Solve's mission by driving innovative, entrepreneur-friendly capital to our Solver teams. As our innovators harness technology to create social change, we are here to help them grow and amplify their impact. Together with our donors to Solve Innovation Future, we can prove that impact and financial returns can go hand in hand and drive lasting, ripplescreating progress worldwide."

Hala Hanna Executive Director, MIT Solve



**Solve is an initiative of the Massachusetts Institute of Technology** (MIT) with a mission to drive innovation to solve world challenges. Join Solve on this journey at <u>solve.mit.edu</u>.

#### Dear all,

It is with great pleasure that I share the Solve Innovation Future 2022 Annual Report. 2022 was a big year! We saw the actualization of impact driving financial returns for our portfolio teams who continue to scale and raise followon funding, we measured our own catalytic impact for the first time, and we revised our vision for 2030. I am grateful for this annual report as a moment to celebrate these successes.

Our Solve Innovation Future investees are thriving despite fluctuating macroeconomic trends, proving every day that the economic case for impact is strong. In our 2022 Annual Report, you'll read about our remarkable Solver team investees, including a spotlight on a team that collected spatial data to help save lives, and a team that showcased how successfully managing inventory and supply chains can reduce toxic chemical waste and carbon emissions, and also save money.

As a philanthropic venture investment vehicle, Solve Innovation Future continues to demonstrate that philanthropy, deployed in the form of investment toward early-stage innovators, has outsized potential to catalyze impact and financial returns. Leveraging an intermediary like Solve Innovation Future is a disruptive choice for a philanthropist. Every dollar that we deployed in service to our teams unlocked more than four dollars in additional funding to our investees; as we return capital on our early investments, that return on investment only increases.

Finally, we are delighted to share with you our 2030 vision.

I am proud of the work that we are doing, and humbled by the extraordinary impact of our investees. We are thrilled to share the successes of our portfolio and look forward to working with you soon.

Best, Casey

Casey van der Stricht

Casey van der Stricht Principal, Solve Innovation Future casey.vanderstricht@solve.mit.edu



# SOLVE INNOVATION FUTURE'S **2030 TARGETS**

**Invest in 50+ Solver teams** to support and scale gamechanging solutions, innovators, and early-stage companies.

**Expand our global portfolio** to focus on women, minorityled solutions, and first-time founders.

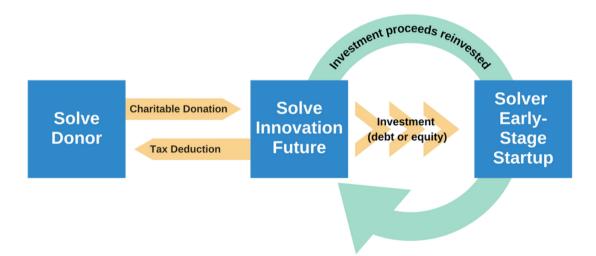
**Disburse at least 25% of invested capital via alternative instruments** to accelerate cash flow and reinvest proceeds within five years.

**Recycle donated capital** to increase investments in Solver teams by 1x.

**Support Solver teams in their efforts** to impact more than 100 million lives and address the UN Sustainable Development Goals.

## OUR METHODOLOGY PHILANTHROPY FOR IMPACT

Solve Innovation Future raises philanthropic funding from visionary philanthropists, and directs investments in cuttingedge impactful solutions. Using entrepreneur-friendly strategies, Solve Innovation Future recycles proceeds from investments back into future Solver teams, creating a pay-it-forward model, and demonstrating effective, renewable philanthropy.



Investing philanthropic capital via **donor-advised funds** and Solve Innovation Future is a **disruptive form of philanthropy** and a novel way to support game-changing innovators.

## **OUR PORTFOLIO** AT A GLANCE

## **Portfolio Outcomes**

- 4x impact on invested capital. For every \$1 that we have invested, we have unlocked \$4 toward our investees.
- Nearly 35 million lives are affected across our 13 portfolio companies, with specific impact on UN Sustainable **Development Goals** (SDGs).
- Solve Innovation Future has disbursed \$1.3 million across 13 different investments in 9 different countries.



#### HEALTH



Lives affected in SDG 3: Good Health and Well-being

#### LEARNING



individuals with improved learning growth

#### **CLIMATE + SUSTAINABILITY**



in CO2 emission



gallons of water preserved



"Historically, we've been taught that philanthropy is a linear capital tool: you give money away for good and do not see it again. Solve Innovation Future demonstrates an innovative and circular venture philanthropy opportunity where charitable dollars are reinvested over and over again, in both for-profit and non-profit organizations increasing overall public benefit."

from landfills

#### Aarti Chandna

Partner, Silicon Valley Social Venture Fund Solve Innovation Future Leadership Circle Member

		FOCUS AREA	COUNTRY	INVESTMENT STAGE & TYP	RESULTS & OUTCOMES
		•			
dondoctor		Health	Colombia	Post-Seed Bridge; SAFE investment	350,000+ visits per month from more than 7 countries
	2022 INVESTEES	Climate + Sustainability	Sweden	Seed; Equity Investment	6,228 drone operators across 130 countries + a reduced risk of water pollution for 23M people
		Health	Kenya	Post-Series A debt issuance	147 Butterfly ultrasound devices deployed across Kenya and South Africa
Pendu\um		Health	USA	Seed; Equity Investment (preferred stock)	1,000+ sites spanning six countries + a private sector network of 2M+ customers
Smart FishAC Rescate de valor de la pesca responsable		Climate + Sustainability	Mexico	Follow on debt issuance	894 people trained in fishing communities + 121 tons of whole fish products sold in preferential markets
Access Afya	2020-2021 INVESTEES	Health	Kenya	Post-Seed Bridge; SAFE Investment	200k+ people served with modern healthcare solutions for emerging economies
Algramo		Sustainability	Chile	Series A; Equity Investment	23k kilogram net reduction in CO2 emissions using alternative to packaging for staple products
CENTURY		Learning	UK	Post-Series A; Equity Investment	30% average increase in learning outcomes for students through platform to support personalized learning
EarlyBird		Learning	USA	Oversubscribed Seed; Convertible Note	26k people improved learning outcomes with gamified early detection for dyslexia from ages four to eight
eggXYt		Sustainability	Israel	Seed; SAFE Investment	1B chicks saved per year with non- invasive CRISPR-based technology to edit chicken genes
kinedu		Learning	Sweden	Seed; Equity Investment	2.3M people have reduced risk for water pollution, utilizing crowd sourcing from 6,228 drone operators in 117 countries.
QUEEN of RAW		Sustainability	USA	Seed; Equity Investment	1B gallons of water saved using blockchain and machine learning- powered supply chain waste management
<b>Rheaply</b>		Sustainability	USA	Post-Series; Convertible Note	60M tons of waste diverted from landfills utilizing circular economy technology

## WHO ARE **OUR INVESTEES OF 2022**

## INVESTEE DONDOCTOR **Global Challenge**



Nicolas Acosta Founder and CEO, Dondoctor

## **INVESTEE GLOBHE**

## **Global Challenge**

Health Security & Pandemics Challenge, Climate + Sustainability

## **Company Overview**

Crowddroning, by GLOBHE, utilizes a vast network of local drone operators to gather high-resolution Earth observation data. This data is invaluable for businesses and governments, empowering them to swiftly respond, anticipate future trends, manage risks, and optimize their operations. With a crowd consisting of over 6,500 skilled drone operators across 130 countries, Globhe spearheads a collective movement aimed at facilitating progress and enabling organizations to make informed decisions through the power of drone data. By providing high-quality and timely information, Crowddroning simplifies decision-making, enhances future predictability, reduces risk, and streamlines operational planning.

## Results

6,228 drone operators across 130 countries. Reduce risk of water pollution for 2.3M people.

Helena Samsioe. Founder and CEO Globhe

DonDoctor provides an omni-channel solution for healthcare providers,

Frontlines of Health. Health

**Company Overview** 

replacing appointment management via call centers and ensuring a consistent authorization and billing process. DonDoctor is digitizing access to healthcare in Colombia and Latin America by enabling medical centers and hospitals to offer their services online. Patients can now conveniently book appointments with their existing healthcare providers online, reducing the friction associated with the traditional booking process. DonDoctor allows people to explore a wide range of providers that meet their specific requirements, view detailed provider profiles, and make informed decisions to schedule appointments instantly.

A comprehensive healthcare ecosystem for Latin America's patients,

## **Results**

Sexperto.co receives 350,000+ visits per month from more than 7 countries

# INVESTEE



Emilian Popa CEO, Ilara Health

## **Global Challenge**

Maternal & Newborn Health, Health

## **Company Overview**

Ilara Health aims to address the challenge faced by the 500 million people in Africa who currently lack access to basic diagnostic tests. They achieve this by scaling portable, telemedicine-enabled ultrasound devices, making common diagnostics more affordable and accessible. One of the key obstacles faced by clinics is the limited availability of traditional financing options that small and medium-sized enterprises (SMEs) typically rely on for growth. Ilara Health's diagnostic equipment empowers clinics to expand, deliver quality healthcare, overcome financial barriers, and develop sustainable healthcare solutions.

## Results

147 Butterfly ultrasound devices deployed across Kenya and South Africa

## INVESTEE PENDULUM

## **Global Challenge**

Health Security & Pandemics Challenge, Health

## **Company Overview**

Pendulum (formerly MACRO-EYES) deploys their product, STRIATA, utilizing AI for healthcare and pharma supply chains in emerging and developed markets. STRIATA offers three predictive analytics components: behavior, forecasting, and visibility. With a vision of eliminating waste and maximizing resource impact, Pendulum operates in data-scarce environments, even those devoid of conventional data, catering to highly tech-savvy consumers. Their AI-driven technology benefits corporations and governments across 10+ countries, amplifying resource impact for a more efficient and impactful future.

## Results

Deployed across a private sector network of 2M+ customers and more than 1,000 sites spanning six countries.



Benjamin Fels CEO, Pendulum

## INVESTEE SMART FISH AC



Sustainable Food Systems, Climate + Sustainability

## **Company Overview**

SmartFish's Value Rescue Model tackles the inefficiencies and misaligned incentives within the intricate small-scale seafood system. By addressing the entire value chain, starting with internationally recognized standards to enhance the management of wild fish stocks, SmartFish ensures highquality products with guaranteed traceability and food safety. Not only do customers benefit from competitive prices, but individuals who fish also earn 30 to 60 percent more through this innovative model.

#### Results

894 people trained in fishing communities 121 tons of whole fish product sold in preferential markets.

## **Investing for Financial and Societal Returns**

Solve Innovation Future's founding belief is that mission driven organizations can yield financial and societal returns. Solve Innovation Future finds innovators who work to disrupt habits, establish new technologies, and course-correct systems. In this way:

- **Impact becomes a business opportunity**—our financing provides flexible, founderfriendly capital to impact companies while they take the time to build sustainable profitable models that drive real change.
- Solve Innovation Future's **investees leverage impact** as a business opportunity addressing some of the world's most pressing social and environmental problems while working within traditional market-based systems.
- Our portfolio is able to **positively disrupt** systems through a holistic and diversified investment approach that is inclusive of partners with varying objectives.



Cecilia Blasco Executive Director, SmartFish Group

## Investment Spotlight: GLOBHE

When Solve Innovation Future investee, Globhe, was founded in 2015, founder Helena Samsioe knew she was building a tech platform that had the potential to capture a world's worth of data. By ingesting and aggregating crowdsourced spatial drone data, known as 'crowd-droning', Globhe's platform allows clients—businesses, governments, organizations, and researchers—to obtain worldwide high-resolution maps and visuals to prevent, respond, and recover from acute or systemic social and environmental emergencies. Through this collective effort that engages, pays, and leverages local knowledge from individual drone pilots, Globhe's aggregate data is able to inform decisions at national and global levels. While Globhe's usage potential is vast, it is selective about servicing clients whose projects Globhe deems as societally and environmentally beneficial, including projects focused on reforestation, flood prevention, malaria prevention, wildfire sequestration, and earthquake response.

#### In Action:

In 2017, UNICEF Malawi and the Government of Malawi began working with Globhe in an effort to address increasingly catastrophic flooding, exacerbated by climate change. Now under a long-term contract using Globhe's subscription model, Malawi's government continues to receive updated high-precision digital surface and terrain maps for flood modeling, exposing key flood areas to prepare for flood disaster relief and mitigate damage. By forgoing alternative methods of capturing flood data, which historically have included ground personnel and airplanes, contributing to the country's carbon footprint, Globhe has gathered vital information at 20% of the cost while producing significantly fewer carbon emissions, all while protecting personnel from entering dangerous environments. With a long-term contract and action plan now in place, Malawi's has used the information most recently in the aftermath of Cyclone Freddie in March 2023. By shifting to a contract with Globhe, benefits have been felt across Malawi's 19.9 million people in preventing, preparing, and responding to recent typhoons and floods, and it's a partnership that will only continue to improve as it develops over time.



"For Globhe to be part of MIT Solve and receive investment through SIF has meant increased exposure, increased credibility, and increased access to key actors. Fundamental components when we are growing rapidly—geographically, financially and impact wise."

Helena Samsioe Founder and CEO, Globhe

## Investment Spotlight: QUEEN OF RA

Sometimes industry must be changed from the inside out. The fashion industry, particularly the fast fashion sector, has a fossil fuel dependency and waste problem, the combination of which is expensive: for the bottom line and for our health. Fashion companies account for 10% of the world's carbon emissions, and waste a staggering \$288 billion worth of inventory each year, the vast majority of which is textile deadstock that ends up in landfills, incinerators, or storage warehouses.

As the daughter of a textile merchant, Stephanie Benedetto, Queen of Raw founder and SIF investee, saw an opportunity to rewrite the inefficient system and create a platform that turns "pollution into profit." Supported by Solve's program and then a pre-seed investment from SIF, Benedetto built Queen of Raw, an online SaaS marketplace that is using AI-powered supply chain tools for companies to buy and sell deadstock and textile waste. The global platform allows companies and consumers to visualize the lifecycle of materials and exchange surplus, from creation to recycling and reuse, fostering transparency and accountability among groups that are often at odds. Queen of Raw is demonstrating that sustainability doesn't have to come at a financial loss. Benedetto seeks to leverage the platform to partner with the biggest material waste culprits in the fashion industry, whether they are looking to save money, build a positive public image, or create a climateconscious supply chain. Queen of Raw has a proven ability to build roadmaps for companies looking to demonstrate fidelity to the environment and profit.

#### In Action:

Today, this platform is used by Fortune 500 brands that have reported various impacts from partnership and use of the platform, including:

- Millions of dollars saved with over 95% of excess inventory diverted from landfills and incineration globally.
- \$3 million in revenue unearthed through centralization of excess inventory across business units.
- Customer conversion rates tripled by offering traceable data on circular products backed by validated records.
- \$10 million in otherwise unsellable inventory saved plus \$4 million in holding costs through resale and recycling initiatives.

Embracing the realities of the market, Queen of Raw is committed to working with clients at various points on their impact journey. Most recently, SHEIN, the fast fashion global online retailer, announced a partnership with Queen of Raw to support its commitment to full circularity by 2050. As Benedetto sees it, "Queen of Raw is about being able to accelerate the sustainability efforts of one of the world's largest fashion retailers. SHEIN gets access to deadstock, and we're able to help them measure and report on their good work." Previously unimaginable partnerships like this demonstrate how social impact and financial outcomes can have a multiplier effect.

## Engage With and Support Solve Innovation Future

Make your impact exponential by donating to Solve Innovation Future and support a disruptive and powerful form of philanthropy and a novel way to catalyze game-changing innovators.

Donors of Solve Innovation Future join the MIT Solve network and the Solve Innovation Future Leadership Circle, a group of donors and experts that access and engage with best-in-class investment-ready innovators helping shape a better world. The Leadership Circle meets throughout the year and provides ad-hoc strategic and pipeline support to Solve Innovation Future investees.

#### **Direct donations**

Individuals, corporations, and foundations can provide necessary charitable donations to Solve Innovation Future to grow the fund and advance the lifechanging work of Solver teams across the globe. Your charitable donations to Solve Innovation Future are invested and recycled into future impact investments.

#### **DAF-DAF** transfers

Charitable, tax-deductible gifts are made to Solve Innovation Future and then invested in Solver early-stage startups. Investment proceeds are then recycled into the fund and future investments in Solver teams through an evergreen structure. Solve Innovation Future is a Donor-Advised Fund with MIT Solve as the sole Donor Advisor. Our innovators benefit from risktolerant investment capital, DAF capital, to help scale their impact-focused solutions. Put your Donor-Advised Fund to work in an impactful and innovative way by investing in Solve Innovation Future.

#### **Become an Ally Partner**

In response to field interest in the Solve Innovation Future model and impact, Solve Innovation Future now has the ability to work with your organization as you explore unlocking philanthropic capital for impact investing.

To learn more, contact: **Frances Robinson,** Partnerships Manager M frances.robinson@solve.mit.edu

## THOUGHT LEADERSHIP FROM SOLVE INNOVATION FUTURE

# Inside Philanthropy

Casey van der Stricht, Principal of MIT's Solve Innovation Future wrote a thought leadership piece "The Answer To Smarter Philanthropy Can Be Found In A DAF Intermediary"

"As environmental and social challenges around the world continue to evolve, there has never been a greater time for investors, donors and institutions to be more purposeful with their investment strategies."

### **Read the Full Article**

Learn more about Solve's Impact with our <u>2022 At-a-Glance Report</u>

## Solve Innovation Future is grateful to the ongoing support of our advisors and partners, including:

Noubar Afeyan Rajan Anandan Narges Baniasadi Jida Helle Bittner Aarti Chandna Geoff Davis FARM fund Frank Ho Illusian Family Office LionTree The Lorenzini Family Foundation Lara Metcalf Ray Rothrock

# **SOCAP**

Casey van der Stricht, Principal of Solve Innovation Future, spoke on a panel about innovative venture philanthropy to support impactcentered early-stage entrepreneurs.

Read the Recap



## For more information contact

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Or visit solve.mit.edu/solve-innovation-future