

GLOBAL
INNOVATION
FUND

Impact Report 2016

Foreword from the Chief Executive

This year, we did what we said we'd do: build a portfolio of development innovations with the potential to scale to help millions of the world's poor.

Over the coming years, we'll see the successes – and yes, the failures – of our portfolio. That's what a venture capital-inspired funding model is about. But as we support our partners on their path to scale, and as we look towards future investments, we continue to define ourselves by a commitment not solely to financial success, but to seeking out and supporting innovations with the potential for transformative social impact. Being a 'social first' investor means being the best in class at measuring impact. As my colleague Ken writes in this report, rigorous evidence of impact is our lodestar and this commitment is our key value proposition.

For the team at GIF, 2016 has been a year of growth. We are supporting exciting innovations across the world to stand on their own feet and realize their potential – from applying behavioural approaches to development challenges in South America and Southeast Asia, to empowering women and young people in Uganda and Rwanda through education. We also grew in number as a team, welcoming several new faces into the GIF family across our legal, financial, analytics, portfolio management, and communications functions.

2016 has also been a year of outreach. We have continued to connect with like-minded organizations across the development community, sharing ideas, learning from others and celebrating the work of the inspiring innovations that we fund. We attended and spoke at a range of conferences and events around the world, including the World Economic Forum Young Global Leaders' Summit in Tokyo, Sankalp in Jakarta and the Grand Challenges conference here in London, telling the GIF story along the way.

Looking back on the past twelve months, I feel both immensely grateful for the progress we have made and optimistic about our future. As we move into 2017, now is the time to reflect on the things we have done well, to talk about the lessons we have learnt and to think about how we intend to use these to inform our work going forward.

I am delighted to introduce the Global Innovation Fund's 2016 Impact Report.

- **Alix Peterson Zwane, CEO**

About The Global Innovation Fund

The Global Innovation Fund is a non-profit innovation fund headquartered in London that invests in the development, rigorous testing, and scaling of innovations targeted at improving the lives of the world's poorest people.

At GIF, we believe that the best ideas for solving some of the world's most critical problems can come from anyone, anywhere. Through our grants and risk capital, we help breakthrough solutions to global development challenges from social enterprises, for-profit firms, non-profit organizations, researchers, and government agencies to maximize their impact and affect meaningful change.

Through grants, loans (including convertible debt) and equity investments ranging from £30,000 to £10 million, we back innovations with the potential for social impact at a large scale, whether they are new business models, policy practices, technologies, behavioral insights, or new ways of delivering products and services that benefit the poor in developing countries.

We support innovators at all stages of development, from start-up and pilot-testing through to larger scale implementation. The innovations we fund can be located in any developing country and can focus on any sector relevant to international development, provided they are committed improving the lives of those living on less than \$5 a day.

We are currently supported by the Department of International Development in the UK, the United States Agency for International Development, the Omidyar Network, the Swedish International Development Cooperation Agency, the Department for Foreign Affairs and Trade in Australia and the Department of Science and Technology in South Africa.



An Evidence-Powered Approach

GIF's mission is to improve lives and opportunities of millions of people in the developing world.

Evidence is central to this mission. It underpins GIF's ability to act like a venture capitalist for the public good, empowering us to take informed risks in pursuit of large payoffs – better health, better nourishment, more education, and more income for the world's poor.

Evidence underlies our project cycle:

Evidence in: The evidence supporting proposed projects – helps us to decide which of them offer the highest expected social benefits at scale. It helps us also to identify assumptions and issues in need of further testing. As projects progress beyond proof-of-concept in scope and funding ambitions, the requirements for pre-existing evidence become more stringent. A constant, though, is that the GIF model is most appealing to, and most beneficial for, innovators who care about using and generating evidence.

Evidence within: Feedback generated during project execution – helps projects rapidly to learn and adapt. The pioneering innovations supported by GIF don't come with blueprints. Rapid, cost-effective feedback can help our investees to test their assumptions, figure out what is working and what is not, and continuously improve their processes and impact. GIF is positioning itself to be part of this revolution in development practice, a departure from the traditional emphasis on rigid log frames. We will help investees take advantage of emerging technologies for monitoring and decision-making, including use of mobile phones, remote sensing, and big data analytics.

Evidence out: Evidence generated by the project – helps us, the innovators, and other investors decide whether the innovation should be scaled up, and if so, how. The power of GIF's approach is in using cheap, informative experiments to identify good bets among a stable of long-shot, high-payoff prospects. So GIF supports not only rigorous measurement of impact and cost-effectiveness, but also evaluation of the factors that can promote or impede the innovation as it moves to larger scale or scope.

GIF's use of evidence goes beyond the project cycle. *Evidence out* from GIF's projects can provide valuable guidance to investors, donors, governments, and

social entrepreneurs on what works, what doesn't, and why. Indeed, some GIF's most important contributions to the development community may come from demonstrating that what seemed like a plausible intervention is in fact ineffective. GIF also hopes to use evidence to show that GIF's overall approach is effective and worthy of take-up by other development finance organizations.

Finally, GIF's evidence-based focus on impact sets the right organizational incentives, emphasizing the quality of investment choices and providing clear metrics for tracking success. Our success, when it comes, will be clearly demonstrable.

Ken Chomitz, Chief Analytics Officer

Who we fund

In looking to find and support innovations with the potential to improve the lives of millions of the world's poorest people, we understand that not only can the most inspirational ideas come from anywhere, they can also be at any stage of development. Too often, this deters investors at the first hurdle.

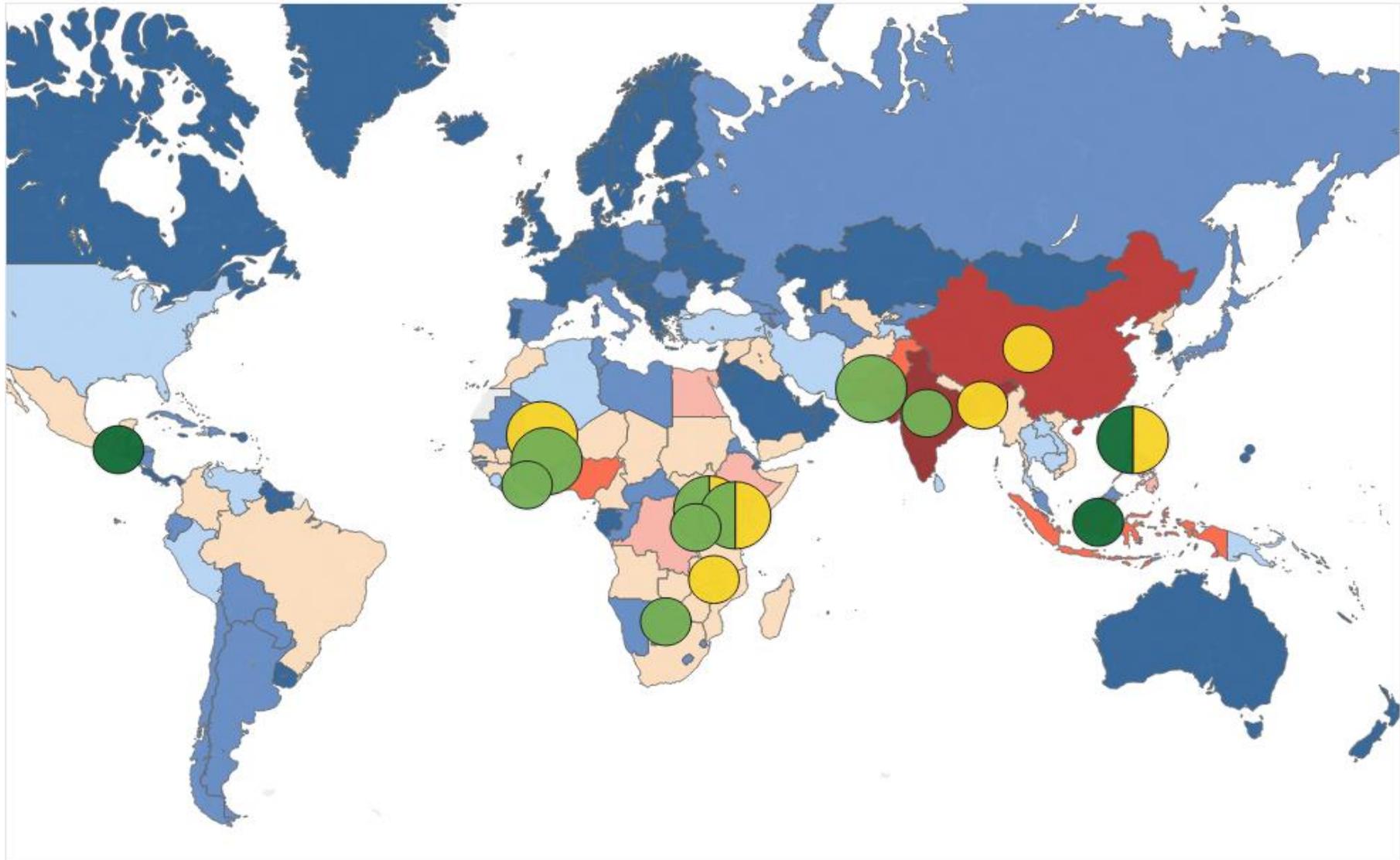
At GIF, we take smart risks by finding promising entrepreneurs and becoming their early partners as they test, adapt and improve their business model, before they are big enough to work with development finance institutions. We can also support experimentation and evidence gathering in domestic resource mobilization, such as in increasing tax compliance in developing countries or supporting remittance flows.

Our approach to funding reflects this. We want to deliver value for money in everything we do, at the same time as providing the best and most appropriate support to exciting innovations, no matter where they are on their journey to scale. Like a venture fund, we provide staged financing to ensure that we can support the most promising initiatives we come across:

- **We offer early stage financing in the form of seed capital to support entrepreneurs during start up and field testing.** The goal of this stage is to refine the basic concept or business model and establish the viability of an innovation at a small scale through testing in real world contexts.
- **We provide funding for innovations that have already demonstrated success at a small scale but require support for continued growth.** This stage is for innovators who require support for continued growth and for assessing the likelihood that the innovation can achieve social impact and/or market viability at a larger scale.
- **We fund expanding innovations that have already demonstrated viability and impact and are looking to go to scale.** This category of funding helps innovators transition successful approaches to a large scale, usually with the goal of eventually achieving widespread adoption throughout one or more developing countries.

By meeting the financing needs of innovators from the seed stage right through to scale funding, we aim to transform high potential ideas into innovations that deliver real social impact. We also provide our investees with technical assistance and access to our global network of innovators, experts and funders.

World Poverty (under \$5 per day) and GIF's project locations



Our Development Portfolio



Stage: Pilot

Amount: \$230,000 debt investment

Impact: Using pay-as-you-go technology to enable affordability and access to clean liquified petroleum gas, thereby reducing reliance on dirty cooking fuels.

Implementation country: Kenya

Key funding objective: To finalize the technology supporting this innovation and test it across 200 households, reaching around 900 customers

SafeBoda

Stage: Pilot

Amount: \$230,000 convertible debt

Impact: Aims to improve road safety in Kampala through the creation of a network of trained, helmet-wearing motorbike drivers. Safe Boda currently delivers 20,000 safer rides a day through their network of 1,100 drivers. The aspiration is to reach 30,000 drivers by 2020.

Implementation country: Uganda

Key funding objective: To help SafeBoda to test the commercial viability of its business model.



Stage: Pilot

Amount: €216,980 convertible debt

Impact: Aims to provide off-grid communities with affordable clean energy using an innovative 'pay-as-you-go energy utility' model.

Implementation country: Kenya

Key funding objective: To test the commercial viability of the business model and installing their software in around 500 households, reaching around 2,500 people.

Stage: Test and transition

Amount: \$600,000 loan

Impact: Using smart metering technology to enable real-time monitoring of grid systems, pay-as-you-go electricity usage and load control to prevent grid outages

Implementation country: India, Colombia, Kenya, Nigeria, Tanzania

Key funding objective: To establish a full suite of certified meters that can scale to both microgrids and central grid utilities. By 2020, SparkMeter could potentially improve energy access for 1 million central utility customers, and 500,000 mini-grid customers, enabling more efficient energy infrastructure investment and improving power reliability for households and SMEs

SPARKMETER ⚡

Stage: Pilot

Amount: £120,000 grant

Impact: Aims to combat malnutrition by manufacturing an affordable, ready-to-use

food supplement paste, disrupting a monopoly market and channeling the economic benefits back to local manufacturers and farmers.

Implementation country: Malawi

Key funding objective: To test Valid Nutrition's new recipe through a field



trial of more than 1,000 children, which has the potential to be cheaper than existing products, whilst still being safe and effective



Stage: Pilot

Amount: £150,000 grant

Impact: To enable the one billion people who lack official identity documentation to be formally 'identified' via an open-source biometric identity system, unlocking the financial and health rights that go with formal identification.

Implementation country: Bangladesh and Nepal

Key funding objective: To support the sustainable deployment of Simprints' biometric identity hardware and software products with frontline community workers, with an ambition to reach hundreds of thousands of people by 2020



Stage: Pilot

Amount: \$224,600 grant

Impact: To test whether neonatal mortality can be cost-effectively reduced by screening all newborns for their blood oxygen level, allowing for earlier diagnosis of easily treatable infections

Implementation country: China, Philippines

Key funding objective: To pilot the pulse oximetry technology by screening 50,000 newborns and, if proven to be a cost effective way to save lives at birth, the ambition is to promote adoption in national level screening programs.



Stage: Pilot

Amount: \$225,000 grant

Impact: Improve farmers' incomes by enabling them to layaway money for improved seeds and fertilizer, as well as training farmers in improved agronomic practices. Pilot with 1,500 farmers. MyAgro as a whole reached 17,000 farmers this year.

Implementation country: Mali

Key funding objective: To test whether offering myAgro products to Village Saving and Loan Associations is a more cost effective path to scale for myAgro than their core model of directly recruiting farmers



Stage: Test and Transition

Amount: \$750,000 equity investment

Impact: To radically improve the efficiency of aid by making it faster, cheaper, and more secure to transfer funds directly to vulnerable populations.

Implementation country: Kenya, Uganda, Pakistan and other countries with cash transfer programs

Key funding objective: To test the efficacy of Segovia's software in reducing operations costs, fraud, leakage and mis-targeting of funds, and to roll out cash transfer implementation across a number of clients with an ambition to reach hundreds of thousands of people.

Stage: Test and Transition

Amount: \$2.3m equity investment



Impact: An off-grid pay-as-you-go model that combines both financial inclusion and clean energy access, giving choice to rural families in India.

Implementation country: India

Key funding objective: To expand geographically into thousands more villages and towards its goal of 10 million solar rooftops sold by 2020, reaching over 1 million households.



Stage: Test and Transition

Amount: €2m preferred equity investment

Impact: Afrimarket tackles the high costs and trust issues associated with remittances by providing a low-cost, no-middleman cash-to-goods remittance service to West Africa. As of 2017 Afrimarket serves 17,000 customers.

Implementation country: Cote d'Ivoire, Senegal, Benin, Togo and Cameroon

Key funding objective: To build out their distribution operations, raise their profile and acquire new customers



Stage: Test and transition

Amount: \$2m equity investment

Impact: Utilizing big data to increase the availability and affordability of essential medicines in South East Asia and subsequent adherence to regimens

Implementation country: The Philippines, Malaysia, Vietnam, Thailand

Key funding objective: To expand mClinica's digital network of pharmacies, reduce the cost of essential medicines

and improve health outcomes for the poor in South East Asia



Stage: Test and Transition

Amount: \$300,000 grant

Impact: To tackle the issue of unemployment in sub-Saharan Africa head-on by providing young people with leadership, entrepreneurship and workforce readiness skills training.

Implementation country: Uganda

Key funding objective: To support the testing, expansion and government adoption of the Educate! skills-based education program.



Stage: Test and Transition

Amount: £1.5m grant

Impact: To use a radio-based mass media campaign to encourage the use of modern contraceptives by taking on the cognitive barriers and social norms that prevent uptake.

Implementation country: Burkina Faso

Key funding objective: To rigorously test the impact of a low-cost, high frequency, radio-based family planning campaign, with ambition for approximately 100,000 couples to begin using contraceptive methods



Stage: Test and Transition

Amount: \$856,215 grant

Impact: To find the most cost-effective way to ensure parents complete all required immunization vaccines for children under 2 years old. In Pakistan

alone, an estimated 9-13 million children under the age of 2 have not received age-appropriate immunization coverage.

Implementation country: Pakistan

Key funding objective: To support a three-year randomized control trial designed to find the optimal incentive amount, schedule, and design, to achieve a higher immunization rate in the most cost-effective way. A total of 6,400 children age 0 - 23 months visiting an immunizations center or contacted during outreach activities for any one of the routine immunizations will be helped.

Young 1ove

Stage: Test and Transition

Amount: \$327,813 grant (Young1ove), \$362,425 grant (Evidence Action)

Impact: Aims to promote healthier sexual behaviors by alerting young people to the greater risks of sexual relations with older partners.

Evidence
Action

Implementation country: Botswana, with outreach and pilot activities in other southern African countries

Key funding objective: To test, prove and strengthen an innovative model to prevent HIV infection. Young 1ove reached 16,324 youth during the randomized control trial, the results of which are pending.

Stage: Scale

Amount: Up to \$15m

Impact: Helping to drive the adoption of income-generating farming practices and

ONE ACRE FUND

THE
BEHAVIORAL
INSIGHTS TEAM 

Nesta 

technologies across six developing countries, building on One Acre Fund's track record of improving the incomes of 400,000 smallholder farmers.

Implementation country: Burundi, Kenya, Malawi, Rwanda, Tanzania and Uganda

Key funding objective: To improve its technologies and approaches to scaling through its own system and partners.

Stage: Scale

Amount: £3m grant

Impact: To take behavioral approaches and apply them to development challenges in four lower-middle income countries, initially focusing on tax compliance.

Implementation country: Guatemala, Bangladesh, Indonesia and the Philippines

Key funding objective: To grow revenue for essential public services – over time, the ambition is that these approaches will then be applied to more complex poverty and sustainability problems, with potential to reach millions of people, deliver billions of savings to governments, and make public services work better for the poor.

Stage: Test and Transition

Amount: £239,230 grant

Impact: To find innovative ways of reaching the 281 million undernourished children and adults in South Asia by boosting the production of fish in poor farming communities in Bangladesh and

India, supporting livelihoods and ecosystems in the process.

Implementation country: Bangladesh and India

Key funding objective: To support the design phase of a Challenge Prize in Aquaculture for Global Development.



Stage: Test and Transition

Amount: \$2,500,000 debt

Impact: To improve net incomes for smallholder farmers by providing end to end agricultural services

Implementation country: Nigeria

Key funding objective: To expand the number of farmers reached to 190,000 by 2021



Stage: Test and Transition

Amount: £1,042,936 to Lively Minds
£601,843 to IFS

Impact: To improve cognitive and developmental outcomes of children, the psycho-emotional well-being of mothers, and the accountability of kindergarten teachers by setting up community -based play schemes

Implementation country: Ghana

Key funding objective: To set up and ensure the operation of 250 new community-run play schemes (as well as the 43 existing schemes), with the aim of reaching approximately 54,000 people. In addition, GIF is funding the Institute of Fiscal Studies to carry out an RCT to evaluate the model's impact

Case studies

Segovia

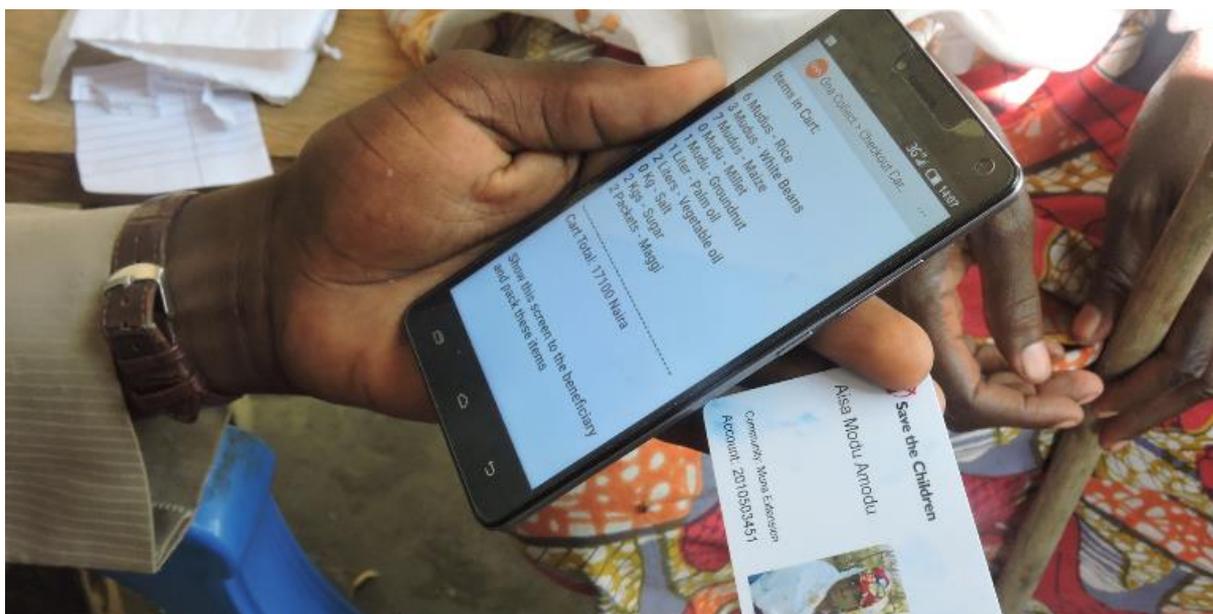
Despite the development community spending billions of dollars each year on programs to tackle the causes of poverty around the world, the benefits are often not felt in the places where they are most needed.

At the heart of this problem is the inadequate and often insecure payment systems through which this money passes. The World Economic Forum estimates that the potential savings of migrating government cash transfer payments onto a digital platform could be as high as \$100 billion.

Last year we made a \$750,000 equity investment in Segovia, an organization that seeks to tackle this problem head-on by making it faster, safer and easier to pay anyone, anywhere in emerging markets.

Segovia have built a payments gateway and technology for managing beneficiary and payment data which enable both NGOs and businesses to make payments to the extreme poor around the world, with the aim of increasing the money received by poor beneficiaries by 20-30% by reducing diversions, transfer costs and inefficiencies. Segovia's platform is already being used to deliver critical payments in challenging environments around the world.

Save the Children partnership



Take Nigeria, where Segovia is partnering with Save the Children and a local telecommunications company, Cellulant, to create a cashless 'digital wallet' which gives people displaced by conflict the freedom to use their cash payments to purchase goods and services through a secure and reliable mobile app.

The program was initially piloted with 450 internally displaced people, but it has quickly scaled and the digital wallet tool is now used by over 12,000 people across Nigeria.

Having logged into the Cellulant mobile app, users are able to access their funds instantly, as well as to move between vendors and choose from a wide range of goods. The app also enables customers to transfer cash from their phones to their bank accounts directly and securely, to pay bills and to transfer money between friends and family. Users don't need to worry about the security risks often associated with defective cash transfer systems such as their account being compromised – the online control aspect of the tool means that accounts can be blocked immediately and money can be safeguarded.



Cash transfers, when safe and secure, are a hugely cost-effective and proven way to help people to meet their basic needs and invest in improving their lives, whatever their personal circumstances and wherever in the world they find themselves.

Segovia's ambition is to bridge the poverty gap once and for all by empowering people to make their own financial decisions, without fear of risk, using smart and innovative technology.

SafeBoda

Boda motorcycle taxis are a popular and convenient way to navigate busy cities across East Africa, but they carry a significant and often deadly risk.

According to the World Health Organization (WHO), by 2030 road accidents will likely outstrip HIV/AIDS as the biggest killer in low income countries. In Kampala, the capital city of Uganda, there are 80,000 motorbike drivers, only 1% of whom currently wear helmets. More than 60% of the surgical budget at the main Kampala hospital is spent on treating motorbike crash injuries.

Last year, we invested £160,000 in the piloting of an initiative which has the potential to dramatically reduce the risk that is associated with boda journeys.



Think of SafeBoda as a Ugandan Uber – a community of professional motorcycle taxi drivers carrying helmets both for the driver and the passenger, who are fully trained and who can be booked via a mobile app. SafeBoda is a game-changer – it means a primary school girl gets safely to school every day. It means a mother

doesn't need to worry. It means valuable surgical resources can be redeployed to focus on treating the sick, not just the injured.

SafeBoda's key safety intervention is the use of helmets and the provision of driver training. According to recent data, 85% of SafeBoda drivers have helmets that are properly secured (strapped and fastened) compared to 29% for other boda drivers, reducing the likelihood of severe injury or death by up to 70%.

Empowering women

SafeBoda's reputation for safety and practicality has transformed lives across Kampala – but particularly striking is the way in which the innovation is helping to empower women.

51% of SafeBoda users in Kampala are female compared to just 39% of boda users across Uganda more broadly.

SafeBoda bikes are not only safer because customers are provided with a helmet and can be assured of the fact that their driver is trained. The traceability of SafeBoda bikes is an important development and has contributed to Ugandan women embracing the scheme.



Laura Muhumuza, a 25-year-old client service manager living in Kampala, heard about SafeBoda through a friend. She values the safety of the innovation and finds that “the app is very reliable and swift.” She also likes supporting a good cause: “I have spoken to the riders while on a journey, and they have told me about the medical insurance, the first aid lessons, basically how the company has helped them.”

SafeBoda has huge potential to reduce road traffic accidents and mortality rates across Kampala and, hopefully in time, the whole of East Africa.

It is also highly empowering for the drivers who decide to come on board – drivers receive safety equipment, training, insurance, and a mobile phone to run the app through as soon as they join SafeBoda. Drivers have also reported an increase in revenues of up to 50% since joining the scheme.



“Since I joined SafeBoda I made new friends: drivers and also customers! In the street we wave at each other and now I look smart and I get more customers” – Fred, SafeBoda driver since 2015

“I had a phone but SafeBoda got me another one when I joined. The app changed the way I work. It brings me many more customers, good customers” – Harunah, SafeBoda driver since 2015

lasting change, we need to use behavioural insights to enhance the effectiveness of these traditional policy levers so that they incorporate a realistic understanding of human behavior.

Research has shown that people are strongly influenced by small and subtle cues in their choice environment.

Whether it is demonstrating to someone what they stand to gain or lose from a particular course of action, or even to make them aware of what other people are doing, actively incorporating these cues into the design and implementation of public policy to encourage behavior change can increase the effectiveness and efficiency of government expenditure.

This has been proven highly effective in wealthy countries. Our new partnership with the Behavioural Insights Team seeks to take this model and apply it in developing contexts. Early trial work undertaken by BIT in Guatemala, where the phrasing of reminder letters was modified to encourage tax compliance, for example, is promising – one-year outcome measurements showed that small changes to wording increased the average amount paid per letter sent by up to around 300%.

Over time, the ambition is that these approaches will then be applied to more complex poverty and sustainability problems.

The Team

- **As at December 2016**

Executive Team

- Alix Peterson Zwane – Chief Executive
- Amelie Baudot – General Counsel and Company Secretary
- Eric Berkowitz – Senior Investment Partner
- Garreth Spillane – Chief of Staff/VP Policy and Communications
- Gulzar Natarajan – Senior Investment Partner
- Ken Chomitz – Chief Analytics Officer
- Nishant Lalwani – Chief Operating Officer
- Raymond Guthrie – Senior Investment Partner
- Veena Sharma – Chief Financial Officer

Team members

- Caitlin House – Operations Associate
- Chris Maggs – Senior Project Accountant
- Gideon Sher – Group Financial Controller
- Ginny Reyes Llamzon – Senior Legal Counsel
- Gloria Taplin – Executive Assistant
- Gurdip Virdee – HR Manager
- Isabella Horrocks – Investment Associate
- Jocelyn Cheng – Investment Director
- Katie Carrasco – Portfolio Associate
- Michael Eddy – VP Analytics
- Natalia Gavrilita – Investment Partner
- Nicki Goh – Investment Director
- Rachel Ryding – Group Financial Controller
- Rakesh Apte – Investment Director
- Simeon Bridgewater – Investment Director
- Tat-Seng Chiam – Investment Director
- Theodora Frisk – Analyst
- Victoria Sotto – Accounts Assistant
- Zach Johnstone – Communications and Policy Associate

What's next?

2016 was the year we became active investors, developing a varied portfolio of exciting investments across the world. In 2017, our ambitions are even greater.

Underpinning everything we do is an unwavering commitment to our central mission: to accelerate evidence-based innovations with the potential to transform the lives of tens of millions of people in developing countries.

We are already beginning to see emerging success across our investments, but if we are to truly maximize the social impact of the innovations that we fund, and to make sure we are delivering value for money as we do so, then we need to position ourselves as a learning organization – always striving to improve our ways of working.

We have identified four values which we hope to embody throughout 2017:

1. **Focus:** This year we will do fewer new deals than we did in 2016. We will work closely with our investees, providing targeted venture support and helping them to realize their full potential. Where we do make new investments, our focus will be on identifying exceptional quality.
2. **Rigor:** We are in the business of finding what works, and working with entrepreneurs to find the best route to scale. With our talented analytics team now fully in place, we want 2017 to be a year in which we take the quality of our economic and impact analysis to new heights. Building on our work to date, we will deepen our focus on evidence-based decision-making to inform who we work with and how we make decisions.
3. **Stewardship:** We owe it to ourselves, and more importantly to the taxpayer, to make sure that our funds are spent wisely, on things that are effective and impactful. We will take advantage of our increased finance functions to continue to act as excellent stewards of public money, ensuring value for money in everything we do. We are a social first innovator precisely because we know that when an innovator delivers evidence-based social impact, the economic impact is also greater.
4. **Engagement:** Over the last 12 months we have attended and spoken at inspiring events all over the world, and building connections with like-minded organizations along the way. We want to build on this progress

over the next year by deepening our relationships with existing donors and bringing in new stakeholders, but also by raising our profile within the development community. 2017 is the year we tell the story of the truly inspiring innovations that we support.