

Completion Assessment Executive Summary

Simpa

February 2022

Investee	Simpa Networks (investee entity now dissolved)
Main implementation country	India
Additional implementation countries	N/A
Funding amount agreed	US\$2.3 million
Funding amount disbursed	US\$2.3 million
Co-funding	Undisclosed
Investment Date	23 March 2016
Actual implementation period	Until 30 May 2019
Expected Person Years of Income-equivalent generated by year 10 (ex-ante)	50k PYI (range: 15k-130k)

Innovation

Simpa operated in rural India by selling solar-as-a-service to households and micro-enterprises normally unable to afford access to off-grid solar power. Customers made an initial payment to have a solar home system (SHS) installed and then make ongoing cash or mobile money payments that count towards both the solar energy service and also the device's eventual ownership. The model, known as Pay-As-You-Go or PAYG, depended on local village level entrepreneurs (VLEs) who engage in localized sales and distribution of Simpa products. Core components of the Simpa value proposition, therefore, are – in addition to the health, safety, environmental and financial benefits of adopting of clean energy – consumer affordability, cost-effective last-mile distribution, and a smooth customer experience facilitated by technology.

Simpa's innovation depended on the combination of mobile data technology and long-term financing for the lowest income customers, those at, or near, the Base of the Pyramid (BOP)¹. This technology and finance combination enabled Simpa to serve and impact a market segment that generally has limited access to credit. Without this innovation, Simpa's customers would be excluded from the significant benefits of electrification.

Key elements of the model, especially PAYG, and VLEs, were already being proven out by several actors in other regions such as East Africa at the time of the GIF investment in 2016. While Simpa was still pioneering this business model in the Indian context, the success of Simpa's peer companies in other markets was a clear sign of the innovation's promise. That notwithstanding, executing on all elements of the PAYG model, known as vertical integration, is very complex and requires bundling multiple 'businesses within a business' including hardware design and manufacturing, software development, supply chain management, decentralized retail customer acquisition, after sales service, and consumer credit. When GIF invested in Simpa, research and experience indicated vertical integration was the appropriate and necessary

¹ From due diligence documents, BOP was defined as people living under \$2.5PPP/day

approach to delivering on the model, but the complexity and problems associated with vertical integration in this context, became clearer to the industry in the years that followed. Despite serious shortcomings that impacted GIF's investment and the company's financial success, Simpa's impact and operations continues to this day with the company claiming 373,855 beneficiaries as at the end of 2020.

Goal of investment

The primary goal of GIF's investment in Simpa was to positively impact the lives of low-income Indians by scaling up deployment of off-grid solar (OGS) systems. Evidence suggests that solar provides health, safety, environmental, educational, and economic benefits. Therefore, the more households Simpa reaches, the greater the impact.

GIF had additional goals of helping Simpa target customers that were living on under \$2.5 purchasing power parity (PPP) per day and to further test the VLE sales model. To help make this impact sustainable, GIF intended to help Simpa access commercial capital in the form of Series D equity and off-balance sheet debt financing for solar equipment.

Type of investment

GIF invested \$2.3 million in equity into Simpa Networks as part of a series C round that included impact-oriented investors.

Original investment rationale

Simpa sold a high-quality product that was both affordable and highly beneficial for people living at or near the Base of the Pyramid. The company was well-positioned to lead the market in India and GIF believed strongly in Simpa's management team.

As a growth-company, Simpa had not yet achieved profitability and required new equity to continue financing growth, product improvements, and operational refinements. GIF's investment would help keep Simpa moving forward, increase the odds of accessing commercial capital, and help keep the company focused on impact.

Expected impact

In making this investment, GIF expected that Simpa would reach far more customers by growing their geographic footprint, expanding their VLE sales/distribution network whilst proving its viability, and accessing off-balance sheet debt for solar equipment sales.

While the ultimate intention was the realization of significant environmental, social, health, and educational impacts, these outcomes are difficult to measure and were assumed, based on other evidence of OGS impact. The tangible results that GIF expected were exponentially growing sales and a shift to profitability within a few years.

Implementation

The Simpa transaction, one of GIF's first investments, utilised to a significant extent the due diligence performed by other Series C investors. GIF's due diligence identified key risks, including those related to regulations, competition, VLE scalability and access to off-balance-sheet financing.

Results

GIF’s impact and financial projections assumed rapid expansion of Simpa’s customer base. Both Simpa’s sales growth and overall path to profitability faced challenges during the period of the investment. Rapid extension of the Indian electricity grid shrunk the total addressable market, the VLE sales/distribution model proved difficult and expensive to scale up, and Simpa’s PAYG business model was constrained by low adoption of mobile money.

Simpa closed an innovative off-balance sheet debt facility with a local bank during the investment period, which helped improve the targeted use of equity from GIF and other investors. GIF’s intent was to help Simpa service customers further down the economic ladder, however Simpa’s products were still too expensive for the lowest income households. The company’s best market segment was the one just above the lowest,² which is still broadly within GIF’s target population. Simpa’s performance against objectives set at time of investment are presented in the table below.

Objectives	Outcome
Scale up SHS sales for maximum impact	Sales grew, although short of stated goals.
Help Simpa service customers further down the Base of the Pyramid	Simpa found that lower-income households could not afford their products and their largest market segment had somewhat higher income.
Test whether the VLE sales/distribution model offered a sustainable path to address last-mile challenges for OGS	The VLE model faced challenges. Costs, attrition, and inactivity were high. Active agents often pushed lower-cost and lower-margin items for easy sales with implications on the financial viability of the model.
Provide bridge-capital needed to help Simpa to attract commercial investors	This goal was realized when Engie acquired Simpa Networks. As a division of Engie, Simpa now has the backing it needs to achieve long-term impact.
Provide Simpa with the strengthened balance sheet needed to access off-balance sheet debt finance for solar equipment	Simpa was able to access off-balance sheet debt finance through a local financial institution.

Financial performance

In 2018, GIF completed an exit from Simpa at the time of its acquisition by Engie and realized a financial loss on the investment. Financial projections were optimistic at the time of appraisal of the company’s growth rate and, as was typical in the early days of PAYG solar sector, funding came with ambitious valuations.

Impact performance

The table below illustrates the number of new customers acquired by the company during its operations:

Year	New customers
2013	311
2014	5,302
2015	9,564

² Living between \$6PPP/day to \$2.5PPP/day

2016	11,267
2017	12,881
2018	17,592
2019	11,061
2020	7,268
2021	118

Source: Engie (2022)

Since GIF's investment in 2016 Simpa acquired over 60,000 additional customers, thereby providing an estimated 300,000 beneficiaries with clean energy.

The entity in which GIF invested was dissolved following Engie's purchase of Simpa's operational Indian subsidiary. GIF understands that the company has now ceased its activities and that Engie is currently assessing local solutions in order to maintain warranty support to the customers.

Key learnings

- Due to a number of factors, the off-grid market opportunity was overestimated at the time of the investment decision. The Indian government's [Saubhagya](#) initiative to connect all households to the electricity grid significantly shrank Simpa's addressable market. Approximately 5 percent of Indian households (roughly 24 million households in total) gained a grid connection in the 2016-2018 period, yielding a total household electrification rate that exceeded 95 percent.
- The Village Level Entrepreneur model deployed by Simpa faced challenges in scaling. Recruitment was slow, training was expensive, turnover was high, and many VLEs focused on making easier sales of low-cost and low-margin items. While a similar approach to scaling rural sales and distribution through commission-based agents remains the prevailing customer acquisition model across the PAYG industry, it was a more challenging approach in India than elsewhere. A reliance on cumbersome cash (rather than mobile) payments could be one reason for this.
- Simpa's vertically integrated business model, adopted as a new strategy in 2013, magnified the complexity of Simpa's business which required that a young company execute on sales, distribution, and service along with the technology and financing. Simpa was not alone in facing these challenges in the industry as no other PAYG company has emerged as a clear market leader in India.
- In a company's growth phase, having a mixed customer base may be essential to serving the low income market whilst achieving the required profitability.
- GIF created meaningful additionality through its Series C investment. These funds helped to enable Simpa further experimentation with the VLE model and to continue learning. The acquisition by a strategic corporate, Engie, was a first for the industry and at the time was widely regarded as a success story.