

NOVASTAR VENTURES’ USE OF IMPACT DATA

IMPACT MEASUREMENT & MANAGEMENT CASE



Novastar Ventures (“Novastar”) is a venture catalyst firm that invests in early- and growth-stage businesses in East Africa that are led by entrepreneurs with the character, capacity, and ambition to profitably serve East Africa’s growing low-income, high-potential consumer base.

Novastar’s investees address proven demand for basic goods and services with innovative business models that widen access, improve quality, and lower costs for the largest group of end consumers – which in East Africa is low-income households. Novastar, which was the first investee of the DFID Impact Fund managed by the CDC Group plc (CDC), is an equity investor that takes a minority stake in its portfolio companies and actively contributes to their success beyond the provision of capital projects that directly benefit the poor and underserved communities.

THE CHALLENGE



Despite recent economic growth, all East African countries are well below global averages for the Human Development Indicators (HDI) Index as defined by the United Nations—a composite statistic of metrics including health, education, and income indices. For example, across the region, nearly 50% of the population lives on less than USD 1.25 per day, well above the global average of roughly 25%.

See the GIIN’s [The Landscape for Impact Investing in East Africa](#) report, “Demand and Need for Impact Investing Capital” section, for further information.

Novastar’s thesis is that large-scale social impact will naturally result from a commercial venture strategy targeting the biggest problems in the largest markets in East Africa.

NOVASTAR’S APPROACH



NOVASTAR VENTURES: THE FUNDAMENTALS

Asset Class of Investments	Venture capital
Stage of Investments	Angel stage, seed stage, early stage, and growth stage
Target Returns	Risk-adjusted market rate
Headquarters Location	Nairobi, Kenya
Target Geography	East Africa
Year Founded	2014
Sectors of Focus	Education, energy, food & agriculture, healthcare, information, and sanitation

This case highlights Novastar’s impact measurement approach and explains how the firm derives business value from it (see box for definition of ‘business value’). For Novastar, measuring and actively analyzing impact data is important not only for improving impact performance (a central purpose of impact measurement), but also for achieving financial success. Novastar’s measurement approach generates impact data that inform investment decisions, help mitigate risks, drive revenue growth, and help market to both existing and prospective investors. While some impact investors have historically considered impact measurement to be costly and overly burdensome, many have found that it provides both tangible and intangible benefits for them and their investee companies. This case focuses on the benefits, that is, how investors’ decisions and actions drive business value. Understanding these benefits is vital to the practice of impact investing, an investment approach that integrates commercial considerations with social and environmental factors to achieve both financial returns and positive social and environmental impact.

Business value is defined as factors that are advantageous to the overall strength of an investor’s or investee’s organization, including both direct economic value (whether from improved sales or operations) and strategic benefits that indirectly influence an organization’s long-term viability.

Source: *The Business Value of Impact Measurement*, Global Impact Investing Network (GIIN), August 16, 2016, <https://theqiin.org/knowledge/publication/businessst-value-im>

BACKGROUND ON NOVASTAR VENTURES’ IMPACT MEASUREMENT PROCESS

IMPACT-EMBEDDED INVESTMENT STRATEGY

In addition to making impactful investments, Novastar has two key objectives: 1) to promote a venture capital asset class in East Africa in order to catalyze and support ambitious, high-capacity entrepreneurs; and 2) to demonstrate that a commercial venture strategy in this region naturally generates sustainable social benefits for low-income households at scale, proving that investors need not sacrifice commercial venture returns in order to generate impact.

For Novastar, good investment opportunities are those for which the commercial and impact performance is positively correlated and inextricably linked—there is a fundamental alignment between the commercial growth and success of the company and scaled benefits for low-income individuals. **Novastar believes that impact is generated when low-income individuals or households benefit through their engagement in the value chain of a business as consumers, employees, suppliers, or distributors.** Because low-income individuals make up the biggest market in Novastar’s investment region, Novastar posits that companies that serve these markets also have the greatest opportunity to scale. As such, Novastar sees a positive relationship between impact and commercial goals. Novastar has agreed to this qualitative definition of impact potential with its investors as a method by which to screen investments. An independent member of the investment committee signs off on this qualitative impact screen for each approved investment. Conversely, Novastar will avoid investments that require sacrificing returns to achieve social impact.

Because financial and impact performance are inextricably linked for Novastar’s investments, the firm assesses the following criteria in order to ensure strong overall (impact and financial) performance:

- **Market potential:** Novastar seeks portfolio companies with business models that address a big problem in a big market. Venture funds take a lot of early stage risk and will inevitably experience failures in the portfolio. Thus, the ‘winners’ need to succeed at a very large scale to achieve the overall return objectives for the fund. This constrains Novastar to prioritizing investment opportunities according to the size of the market they are addressing.
- **Innovation:** Novastar seeks portfolio companies with business models that service market demands in an innovative way, enabling new market access, cheaper and/or better-quality products or services.

BACKGROUND ON NOVASTAR VENTURES' IMPACT MEASUREMENT PROCESS

- **Focused and simple strategy:** Novastar seeks portfolio companies with business models that are very clear about how the business will serve market needs.
- **Character, capacity, and ambition of the entrepreneurial team:** Novastar looks for a team's demonstrated ability to build businesses that can transform markets and grow rapidly to scale. Characteristics assessed include integrity, audacity, resilience, and humility. Capacities assessed include experience, vision, and energy, amongst others. Finally, ambition is assessed as the desire to tackle challenging problems at scale and grow large businesses. Additional details about what Novastar looks for in entrepreneurs are available [online](#).
- **Entrepreneurs whose values are aligned to Novastar's:** Novastar searches for companies with leaders who are building businesses with a purpose beyond short-term profit maximization.

IMPACT MEASUREMENT STAFFING STRUCTURE

As of 2016, Novastar has one staff member managing investor relations and reporting. Working with the relevant investment manager, this individual is responsible for setting baseline impact measures and collecting, validating, and reporting both non-financial and financial information to investors. In addition, each investment manager who serves as the point-of-contact for a portfolio company is responsible for reviewing and approving the impact data reported to Novastar.

FUNDING FOR IMPACT MEASUREMENT

Novastar funds its impact measurement practices with its internal operational budget, as it is integrated with the investment process. In some cases, technical assistance money from the DFID Impact Fund has been used to enhance the portfolio company's understanding of consumer behavior, which has a bearing on impact results as explained further below.

BACKGROUND ON NOVASTAR VENTURES' IMPACT MEASUREMENT PROCESS

SAMPLE OF METRICS TRACKED

View Novastar Ventures' IRIS User Registry Page ▶ [Browse the IRIS metrics online](#) ▶



Novastar is a registered IRIS user. Novastar prioritizes IRIS metrics as a useful tool to enable integrated reporting of both financial and social performance. Where a Novastar metric below aligns with an IRIS metric, the relevant IRIS metric has been listed.

METRIC	RATIONALE	SAMPLE IRIS METRICS
Number of Low-Income Consumers (defined as individuals living below USD 2 per day, per capita)	Used as proxy for scale, which is integral to Novastar's investment thesis <i>Analyzed for the impact screen at the time of the investment decision. Sourced directly from the business when data is available (e.g., businesses that provide credit to customers and collect this information for commercial needs); otherwise, estimated based on demographics of the market served.</i>	Client Individuals: Very Poor (PI9835)
Number of, and Income Levels of, Beneficiaries (as consumers, employees, suppliers, or distributors)	Used to improve understanding of company stakeholders in order to ensure a strong value proposition to each, while also checking that impact is being achieved <i>For example, through Novastar's investment in Soko (ethically sourced fashion jewelry from low-income Kenyan artists), Novastar tracks not only the number of artisan workshops but also the number of employees at the artisan workshops (i.e., suppliers to the company).</i>	Client Individuals: Total (PI4060), <i>see submetrics for poor, very poor, and low income.</i> Client Households: Total (PI7954), <i>see submetrics for poor, very poor, and low income.</i> Permanent Employees: Total (OI8869), <i>see submetric for Low Income Areas.</i> Supplier Individuals: Total (PI5350), <i>see submetrics for poor, very poor, and low income.</i> Distributor Individuals (PI2758), <i>see submetrics for poor, very poor, and low income.</i>
Number of Employees of Investees, by Gender	Tracked primarily due to select investors' interest	Permanent Employees: Total (OI8869) Permanent Employees: Female (OI2444)
Amount of taxes paid	Helps Novastar gauge the indirect positive influence that its portfolio companies have on their communities of operation, and is also a compliance check	Payments to Government (FP5261)
Results of the Product/Service Delivered	To approximate breadth of outreach These outputs are typically specific to each investment, and relate to the investee's theory of change. Several include: <ul style="list-style-type: none"> • Increases in household income. • Differential learning outcomes shown through test scores vs. a control (<i>Bridge International Academies</i>). • Metric tons of CO2 emissions offset (<i>SolarNow, Paradigm</i>). • Metric tons of waste removed from informal urban settlements (<i>Sanergy</i>). • Number of hectares under cultivation (<i>Komaza</i>). <p>Visit Novastar's website for more information on its portfolio companies.</p>	Greenhouse Gas Reductions due to Products Sold (PI5376) Waste Reductions from Products Sold (PI5926) Waste Reductions from Services Sold (PI5678) Land Directly Controlled: Cultivated (OI1674)

BACKGROUND ON NOVASTAR VENTURES' IMPACT MEASUREMENT PROCESS

FREQUENCY OF DATA COLLECTION

Financial data is collected monthly; impact data is collected and reported quarterly.

DATA MANAGEMENT SYSTEM

At present, Novastar provides each portfolio company with a pre-filled Excel spreadsheet, showing the agreed-upon metrics (financial, impact, and ESG), past quarters' reported performance, and blanks for the current quarter. The portfolio company's management completes and returns this information to Novastar.

IMPACT REPORTING PRACTICES

Novastar provides quarterly reports and a summary annual report to its investors. These reports integrate both financial and operational performance, as well as an impact summary that includes data on metrics such as those listed above, for each portfolio company. The annual report expands upon the social benefit achieved by the investments through additional qualitative descriptions.

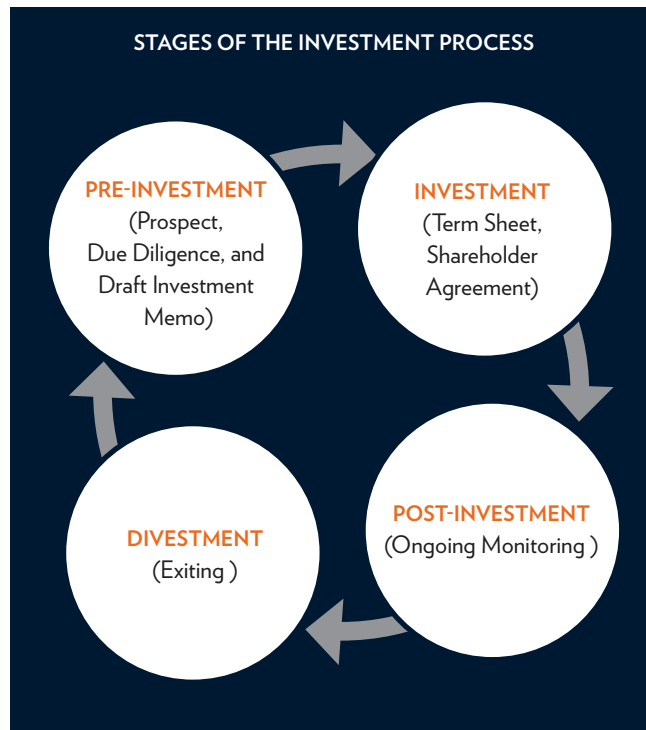
"We spend a little more time in our annual report [than in our quarterly reports] on the impact side, and provide a pictorial essay for each of our portfolio companies that tries to bring the social benefit to life for the investors. It's also motivational for us as a team, seeing as it was a part of our motivation for doing this [work] in the first place."
—Steve Beck, *Novastar Ventures Co-Founder and Managing Director*

EVOLUTION IN IMPACT MEASUREMENT APPROACH

Since its inception, Novastar has made an important adjustment to its impact measurement practices. When Novastar began investing, the team conducted baseline studies to learn about investees' target beneficiaries (scale, income levels, and other relevant information). Notably, however, Novastar did not involve their investees in this process, out of fear of interrupting their commercial progress and busy schedules. Novastar quickly shifted its impact measurement approach to engage its investees in a conversation at the onset about what information the investee *already* collects and *would find helpful* to collect. This early engagement with the portfolio companies has led to the collection of more informative data, and along the way has helped ensure alignment with investees on the importance of impact measurement. It has also helped Novastar to better assess the motivations of the founding team—Novastar finds that if the founding team is motivated by impact, they typically already collect some information on it. Novastar wants all impact measurement reporting to be beneficial to the portfolio company, as well as the Fund.

DERIVING BUSINESS VALUE FROM IMPACT MEASUREMENT: THE NOVASTAR VENTURES EXAMPLE

In addition to using social and environmental data to improve *impact* performance, which is of course integral to the practice of impact investing, many investors also apply this data in other ways. As described in the full [The Business Value of Impact Measurement](#) report, impact investors frequently use social performance and impact data to make decisions and take actions that drive business value. Building on findings from the GIIN's [Annual Impact Investor Survey 2016](#) and based on interviews with 30 practitioners, *The Business Value of Impact Measurement* outlines five drivers of business value that impact investors can gain along various stages of the impact measurement and management process. These drivers are: revenue growth, operational effectiveness and efficiency, investment decisions, marketing and reputation building, and strategic alignment and risk mitigation. The examples below, which are unique to Novastar Ventures, are categorized along these same drivers. They are also arranged by stage of the investment process to demonstrate how impact data can be utilized throughout the cycle.¹



Pre-Investment (Prospect, Due Diligence, and Draft Investment Memo)

Driver: Investment Decisions. Novastar finds value in using impact data to determine which investment opportunities have high potential for impact and returns. For Novastar, the impact metric on the number of low-income individuals that are likely to be reached plays an important role at the diligence phase (see earlier section to learn about Novastar's impact screen). To better understand the scalability of a potential investee's business model—which is key to Novastar's success as a market-rate return venture fund—Novastar collects information on the number of low-income individuals that are likely to be reached. This social performance metric has helped Novastar assess which investment opportunities are most likely to meet its commercial mandate, thereby improving its efficiency in making investment decisions.

Investment (Term Sheet, Shareholder Agreement)

Driver: Strategic Alignment and Risk Mitigation. Novastar sees risk mitigation value from much of the environmental, social, and governance (ESG) factors on which it demands compliance from investees. Managing these factors helps ensure that Novastar's portfolio companies are operating responsibly in their communities, while building long-term value in the company. For example, Novastar requests information on payments to governments and requires its investees to sign their compliance with the Foreign Corrupt Practices Act and the UK Anti-Bribery Act. Additionally, as part of the investment agreement, Novastar and the investee agree to an "ESG Action Plan" tailored to the company's stage of maturity and ESG risk profile. The plan includes items such as the implementation of improved occupational health and safety practices, environmental protection measures, and others. Tracking and managing this

¹ Note that investors vary in their descriptions of the stages of an investment process, as described further in Rockefeller Philanthropy Advisors' *Solutions for Impact Investors: From Strategy to Implementation*, November 2009. This terminology is adapted from the Bamboo Finance 2015 Impact Report, available online at <http://www.bamboofinance.com/wp-content/uploads/bamboo-finance-impact-report-2015.pdf>.

information helps Novastar mitigate risks related to failure of achieving its desired impact and provides accountability. See page six of the full *The Business Value of Impact Measurement* brief, “A Note on ESG and Impact Investing” section, for more information on the relationship between ESG and impact data.

Post-Investment (Ongoing Monitoring)

Driver: Revenue Growth. Novastar has found that by better understanding its investees’ customers, it can help drive revenue growth. A core element of Novastar’s investment model is selecting businesses for which benefitting low-income households is clearly connected to the commercial success of the business. Novastar engages in conversations about scale early on with its investees, and the scale calculation requires an understanding of how many low-income individuals can be served in the market. By segmenting the market by socioeconomic status, Novastar can have a strategic conversation with its investees about the potential to access new market segments (often in a lower income bracket). With this aim in mind, Novastar has in the past deployed technical assistance to help portfolio companies, such as Sanergy, with customer-lens market research on an opportunistic basis (more information on Novastar’s investment into Sanergy is available in the next section).

Driver: Strategic Alignment and Risk Mitigation. The impact data that Novastar collects help course correct investment performance when necessary, to mitigate both impact and financial risks. After collecting quarterly impact data from its portfolio companies, Novastar reviews the data and investigates any results that vary from expectations. In the past, these variations have raised issues that were further explored. For example, as part of the impact measurement process, Novastar noticed that the marketing materials of one of its portfolio companies was potentially misleading regarding the gender of low-income suppliers, a metric of importance to Novastar and its investees. Novastar suggested that marketing materials be changed to reflect the reality about the gender of low-income suppliers to increase transparency.

Driver: Marketing to Investors. The social performance information that Novastar collects during the post-investment, ongoing-monitoring stage helps the firm build a positive brand. Novastar uses impact data to communicate to its existing investors (limited partners), some of whom aggregate this information across other fund investments. Several of Novastar’s investors target specific impact goals; as such, it is important for Novastar to accurately and reliably report this information upwards. Demonstrating the benefits delivered to beneficiaries is an important differentiator for Novastar to continue to attract impact investors into its funds.

Divestment (Exiting)

Driver: Marketing to Investors. Data on investments’ ESG performance not only help Novastar mitigate risk, but also drive the potential valuation of the portfolio company at the point of divestment. At exit, Novastar expects that many prospective investors will find the ESG practices of Novastar’s portfolio companies attractive. Examples of these ESG practices are described above (see example under ‘Investment’ phase above). Novastar believes that these practices will open exit opportunities to a wider array of buyers, thereby increasing the companies’ value at the time of sale.

CASE WITHIN A CASE

INVESTOR

NOVASTAR VENTURES

- Novastar has led two investment rounds into Sanergy over the past three years.
- Novastar selected Sanergy for investment in large part because the social benefits that Sanergy produces (access to dignified, hygienic sanitation, business ownership and increased income, public health improvements) are correlated with the commercial logic of the business.

INVESTEES

SANERGY

About Sanergy

- Sanergy is a franchisor of small-scale sanitation centers.
- Its mission is to develop a sustainable, scalable, and financially viable sanitation infrastructure within informal urban settlements where the density of population is very high and the availability of sanitation infrastructure and services is extremely low.
- Waste is collected daily, and converted (at a centralized facility) into by-products such as fertilizer and other agricultural inputs. Those by-products are then sold to Kenyan farms.

Sanergy's Impact Measurement

- Impact measurement is integrated into every staff member's responsibilities; managers' performance is tied to impact all along the value chain.
- Funding for impact measurement comes out of Sanergy's operational budget. For longer-term evaluations, Sanergy has worked with grant-funded third-party evaluators.
- Metrics tracked include: # toilets sold in informal settlements, # daily uses from community members who now have access to affordable hygienic sanitation, tons of waste safely removed and treated, and # jobs created.

"Our impact targets are our operational targets" —David Auerbach, *Sanergy Co-Founder*

END BENEFITS

As Sanergy's toilet network expands, it:

- Addresses a basic need amongst individuals living in the informal urban settlements.
- Improves general public health and minimizes environmental damage through the uptake of toilets.
- Expands asset ownership, employment, and income among its franchisees.
- Offers farmers a yield-enhancing organic fertilizer.

Acknowledgements

The study was produced with support from the U.K. Government through the Department for International Development's Impact Programme.

This case was created by the Global Impact Investing Network (GIIN). Members of the GIIN team who contributed to this report include: Ariela Cohen (lead author), Rachel Bass, Laura Gustafson, Rebecca Kurland, Kelly McCarthy, Pete Murphy, and Hannah Schiff. The development of this report was supported by the GIIN's work on Impact Measurement & Management.

The GIIN would like to thank Steve Beck, Managing Director at Novastar Ventures, who contributed perspectives and experience on impact measurement for the creation of this case.



The Global Impact Investing Network (GIIN®) is a nonprofit organization dedicated to increasing the scale and effectiveness of impact investing around the world. IRIS is an initiative of the GIIN. It is the catalog of generally accepted performance metrics used to measure and manage the social, environmental, and financial performance of impact investments. While investors' impact measurement practices typically consist of multiple components, the IRIS catalog can help investors at a key phase in the process—the metric selection phase. For more information, please visit www.thegiin.org and www.iris.thegiin.org.

This case is part of a series that highlights the impact measurement practices of select fund managers, focusing in particular on the business value that they derive from these practices. The information found in these use cases is principally sourced from the investors' participation in the full *The Business Value of Impact Measurement* study, available on the GIIN's website: <https://thegiin.org/knowledge/publication/business-value-im>.