A Guide to Investment Optimization

Impact Modeling for Social Impact Funders

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CAMBER
COLLECTIVE

Impact Modeling: Purpose and Use

Businesses and social impact funders both confront a common challenge: how to allocate capital to maximize return.

For profit-maximizing businesses, the returns are financial. Over time, the corporate world has developed sophisticated tools to deal with this dilemma of resource allocation. Managers monitor data on sales, customer demand, competitors, and expenses at a granular level, often in near real-time. Businesses have mature processes to evaluate and compare potential projects based on common metrics such as return on investment (ROI). The "rules of the game" for corporate investment decisions are relatively clear, and tools exist to inform those decisions.

For social impact funders, the "returns" are more complex. For one, defining them is not always clear – Should a funder evaluate the number of families served? Number of lives improved? Number of policies changed? Secondly, decision-makers allocating resources cannot objectively compare returns across projects or investment opportunities, in part because the definition of "returns" varies from project to project. Finally, in the social impact sector it is especially difficult to attribute a "return" to an investment since most measures of impact involve a societal change that is at least one, often several, steps external to the social investor. Investors may ask: is a life saved fully attributable to the investment? Partially attributable? Not at all? For these reasons, social impact investment

decisions are often driven by more subjective forces, such as personal interest, relationships, expert opinion, or "gut feel", as much as by objective, data-based analysis.

Social impact analyses, or "impact models" could dramatically improve investment decisions in the social impact sector. Impact models are structured tools that estimate the socioeconomic, health, or environmental impact of different strategies and/or investment projects through the logical arrangement of qualitative and quantitative data and assumptions. While these tools will never produce perfect estimates of impact, they are one arrow in the quiver of a social impact funder. They ground decisions in data and consistent, logical reasoning, helping ensure scarce resources are allocated in a way that maximizes social impact.

At this time, impact modeling isn't regularly employed in the social impact sector. Typically, when used, impact models are done late in the game when there's little opportunity or interest in refining or revisiting strategy. We generally see impact models constructed and used after investments have been made, sometimes as an attempt at monitoring or evaluation comparing one or more grants. Though useful when paired with the M&E efforts, impact models offer greater benefit earlier in the decision-making process when funders are developing their initial theory of change, broad strategy, or highest level funding priorities.
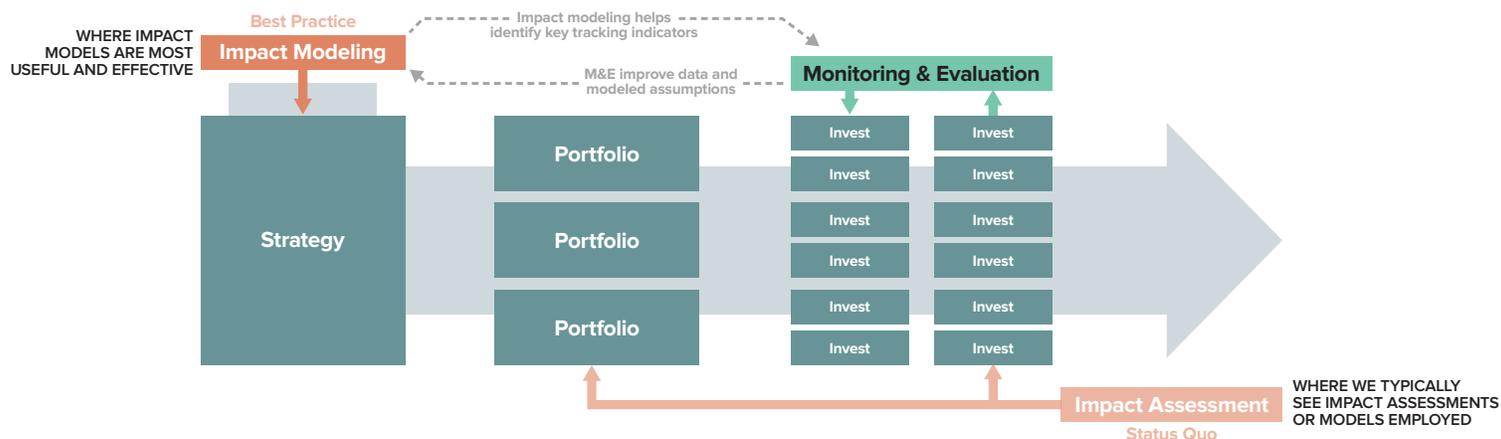
To be effective, impact models require two primary features: impact-related performance data and clear goals that help determine what sort of performance data are to be collected. Social impact funders often succeed in setting clear goals – lifting millions of smallholder farmers out of poverty through agricultural development, for example – but commonly lack the conceptual frameworks necessary to translate those goals into a portfolio of actionable, measurable investments driven by reliable estimations of future impact.

Although the number of social impact funders using impact modeling remains low, the trend-line is positive. Camber has worked alongside some of the world's most prominent social impact funders to estimate the number of pneumonia deaths that could be averted through preventative measures, such as vaccination, in comparison to treatment interventions. When the global health community broadly believed the burden of the pathogen cryptosporidium to be relatively low, Camber built an impact model revealing that cryptosporidium contributes to nearly 25% of diarrheal cases in sub-Saharan Africa, a discovery that's pushed key stakeholders to allocate additional diagnostic and treatment resources to what they now know is a major

driver of under-5 mortality. We've created a now widely used tool to estimate the potential lives saved from 20+ maternal and newborn health interventions in Nigeria, Ethiopia, and India, as well as developed models assessing the global burden of indoor air pollution and the cost and health impact of cleaner burning cook stoves relative to other interventions. Outside of health, Camber has built a Revenue and Income Impact Model (RIIM) showing the future income effects of different agricultural investment strategies in Sub-Saharan Africa and South Asia for smallholder farmers, a case that's further described in our Learn More about RIIM Guide.

In each case, funders shared a desire to better estimate the impacts of their strategies and investments _before_ making difficult funding tradeoff decisions.

For funders, determining how to start using impact modeling can be daunting. The first step requires that an organization specify the level of the question it seeks to answer. High-level strategy questions, for example, warrant different analytical approaches than do specific individual investment decisions. An organization's resource and time availability further influence what level and type of impact modeling make sense.

There is no one-size-fits-all solution in impact modeling. When used, impact modeling should be right-sized to the level of question an organization seeks to answer, the organization's resources and time, and leadership's appetite for more data-based decision-making. In combination with other decision-making tools and processes, impact modeling can empower almost any organization to make better, more evidence-supported decisions.

Camber specializes in guiding social impact funders through this decision-making process. We bring rigorous, data-based analysis to social impact work and are equally comfortable turning to experts and qualitative frameworks when appropriate. We are not afraid of math, and we have a strong ability to make even clients who are unfamiliar with this type of decision-making comfortable with the inner workings of the analysis and, most importantly, its implications for their strategy and funding decisions.

The work described in the pages of our Learn More about RIIM Guide serves as just one example of when and how we applied data and quantitative impact modeling to a client's specific strategy questions and decisions.

Figure 1. Conceptual Framework: Choosing the best-suited impact model approach

Level of Question/Answer

| STRATEGY | | PORTFOLIO | | INVESTMENT |

| Light-lift decision framework | Light-lift model design | Streamlined Excel model | In-depth quantitative review | Complex, boutique analysis |

Impact Model Approach