Gathering and Using Evidence for Innovative Business Models Serving the Base of the Pyramid

Approaches for collecting and using data to measure performance and impact

HIGHLIGHTS

- Collect evidencing on performance can be costly, however there are multiple sources, business uses and drivers to do so.
- This paper examines considerations for measuring impacts and outcomes, such as the social performance value chain, narrow versus wider outcomes, and standards and spectrums of evidence.

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Introduction

This paper summarizes the approaches to gathering and using data that are applied by innovative businesses providing education, energy, finance, health, and water and sanitation services at the Base of the Pyramid (BoP).

Innovative businesses serving the BoP seek to find new solutions to social challenges in markets that are tough, dynamic and often highly informal. These businesses usually face urgent operational questions to get business models right, with limited resources or time for gathering data themselves. Businesses face the challenge - *how can they get the information they need to meet customer needs, track social performance and secure necessary partnerships to scale, with minimal business burden?* While investors and donors face a similar challenge - *how can an evidence base be supported, interpreted and used to make good, impactful investment decisions?*

The following factors underpin this challenge:

- **Limited resources:** Businesses must keep operating costs low in order to deliver value and viability in low-income markets. Data collection must therefore be lean and low cost. Major evaluations typically require grant funding.
- **Rapidly changing data needs:** Businesses serving the BoP operate in nascent, informal and dynamic markets. In such contexts business models are frequently required to evolve and change. Data needs may change, and existing social performance information become outdated as businesses pivot.
- **Lack of conventional data management and analysis skills in small and growing businesses:** Early stage businesses often lack in-house experience of management information systems, designing research and interpreting data.
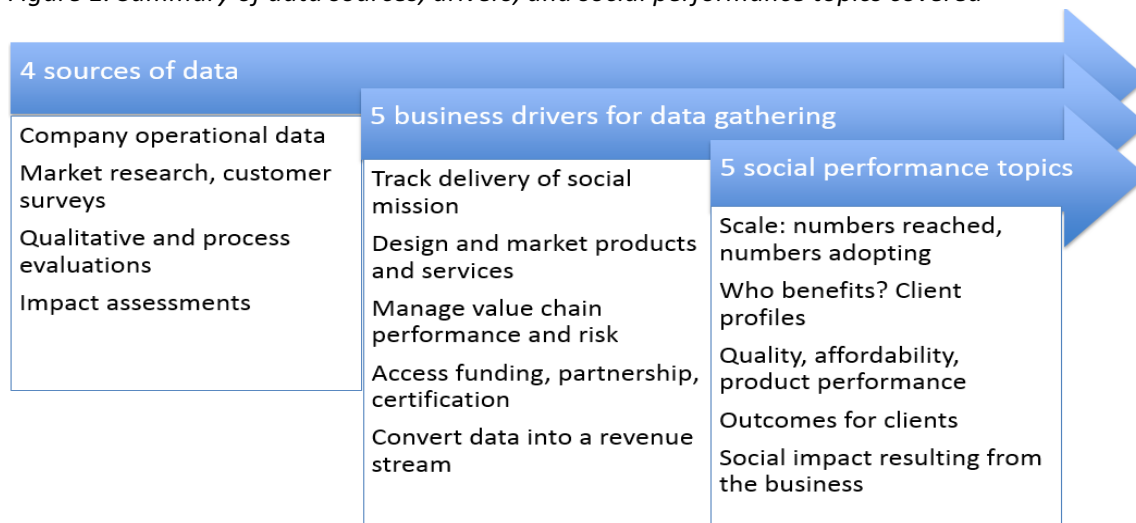
- **Lack of publically available market information:** Informal markets are typified by a paucity of publically available data on demographics, consumer spending habits, and employment trends.
- **Ensuring data collection is 'client centered' and sensitive to local communities:** Businesses targeting social impact may operate in communities that have already been researched extensively by donors, NGOs and others. Ensuring ethical standards of research, and avoiding survey fatigue, disruption to local communities, or unethical control groups are major issues.[1]
- **Different needs of businesses and donors:** While companies may have business reasons to track their own social performance, they generally do not need the same rigor that donors require. That they contribute to positive outcome is good to know, whereas donors may want quantification, causality and the counterfactual. Doing this in a reliable way is expensive, requires extensive business and community engagement, and may generate tensions between businesses and funders.

Data Collection and Use

Innovative businesses, by their nature, operate in areas where evidence of results and impact are currently patchy. However, data can be central to improving business operations and to securing socially focused finance or support. Drawing on experience across all sectors covered in the series of papers on inclusive innovations, this paper maps (Figure 1):

- Four main sources of data relating to business performance and impact.
- Five main drivers for businesses to gather and use data on social performance.
- Five broad areas relating to social performance and impact that can be addressed by such data, with comments on *relevance and limitations* of available data.

Figure 1. Summary of data sources, drivers, and social performance topics covered[2]

4 sources of data

Company operational data

Market research, customer surveys

Qualitative and process evaluations

Impact assessments

5 business drivers for data gathering

Track delivery of social mission

Design and market products and services

Manage value chain performance and risk

Access funding, partnership, certification

Convert data into a revenue stream

5 social performance topics

Scale: numbers reached, numbers adopting

Who benefits? Client profiles

Quality, affordability, product performance

Outcomes for clients

Social impact resulting from the business

Four main sources of data

The four main sources of evidence about social performance of businesses serving low-income clients are:

1. **Company operational data**—typically on company inputs, processes and outputs such as volume of sales and quality and affordability measures.
2. **Company market research**—use of tailored customer surveys and mechanisms for gathering customer feedback while delivering after-sales care, and standardized tools such as the Progress out of Poverty Index (PPI) and the USAID's Poverty Assessment Tools.
3. **Qualitative and process evaluations**—evaluations often done with or by partners/donors usually as a lesson-learning exercise. Qualitative evaluations may shed light on causal links between a business and observed social outcomes, albeit without quantification.

4. **Impact assessments**—to quantify the actual impact that may be attributed to an intervention by assessing against the "counterfactual"—what would have happened without the intervention. Impact assessments may be Randomized Control Trials (RCTs), or other quasi-experimental models, usually conducted by external, independent researchers.

The first two of these are largely generated by businesses themselves, if the business case warrants it, whereas the latter two are more frequently driven by external agents. The level and nature of data that the business itself can generate depends on the business model – whether it needs data on social performance data (see next section on drivers), and also whether it has the customer engagement mechanism that can readily generate data.[3]

> **Direct or indirect engagement between the business and end beneficiaries? Implications for the practice of measurement.**
> Companies with direct and/or multiple channels of engagement (e.g. sales, financing and aftercare; subscription services) with end beneficiaries are better positioned to gather insight on company reach and measures related to improving access to goods and services. They are more likely to have a system for unique client identification, which is a core building block of social performance data.
>
> They are also better positioned to capture many other types of client information or feedback. Companies that reach end-users through intermediaries, or provide inputs to an end product or service (e.g., telemedicine through hospital networks; solar energy provision to schools and hospitals) often lack line of sight to the end user and may not even know how many served. However, they may be able to access more extensive data on wider outcomes (e.g. education and health), and a clearer picture of the other contributors to these outcomes.

Five main drivers of data gathering

There are five main drivers for businesses to collect information relating to social performance. It is important for social investors, donors or researchers to understand these drivers, as they indicate what might be collected routinely as part of good business, what might be tolerable to a business, and what extra social impact assessment is a burden on a business. Often data collected by a business for one purpose, such as risk management, can also be used for an element of social performance assessment. However, drivers will vary considerably by type of business and cannot be applied to all.

1. Delivering mission

Measuring progress towards social goals is critical in and of itself for mission driven enterprises. Businesses will have different views on the extent to which social mission is self-evident because of the service they provide (e.g. health products) or the target group (e.g. smallholder farmers in low-income regions).

2. Designing and marketing products and services

Creating demand: Health, sanitation, education and energy enterprises offer new products or services in markets where the alternative may be lower cost or free, or where populations may not recognize the value or need for such products. Providing clear, relevant and tangible value propositions for local markets is key. This is often done through client testimonials, or by providing evidence of return on investment (RoI) for customers.

> **RoI for student finance**—projecting future earnings for marketing and credit risk analysis
> Employment outcomes and projected future earnings following higher education are important metrics for student finance providers, both for marketing to prospective students, and for screening loan applicants. Lumni, FINAE and other providers promote their services by projections of increased earning potential for subscribers after graduation, based either on public or university data on incomes following course completion, or on company records of previous clients. Loan eligibility is also often based on future earnings potential rather than a family's existing assets, in order to open up services to those from lower-income backgrounds.

Market research and development (R&D): Consultation with local communities, small scale trials of products or strategies in new markets, and client feedback are important mechanisms for companies developing new and tailored products for low-income markets. Such exercises can be used to baseline local communities, establish evidence bases for specific needs that a business may address, and test and prove models on a small scale. Market research is also valuable for customer retention. Businesses often seek to recover the initial costs of establishing distribution channels by making the most of their networks to provide ongoing services and make follow-on sales of new products and services. Data collection plays an important role in identifying and responding to consumer demands.

Replacing free with better—marketing potable water based on community feedback

Providers of safe, hygienic sanitation and potable water in slums compete against a free but unsafe alternative. This places real pressure on businesses to tailor products and services to local conditions and consumer habits, and make a compelling sales pitch based on existing consumer priorities and perceptions. Sanitation providers have noted a wide range of customer priorities, indicating that a focus solely on pitching a product as having higher safety standards is not enough to secure high levels of adoption. Successful models have built services around local community consultations that gather ideas on convenience, branding, and integration of complimentary products and services.

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3. Quality, performance and risk management

Managing operations and value chains: Companies use data to manage both internal operations and ensure quality of intermediaries, franchisees or networks for product distribution and service delivery. Data gathered on quality and quantity of production of services is essential to efficient management, but also provides the basic foundations for measuring social performance. More in-depth assessment of social performance can also be leveraged to identify opportunities to improve operational efficiencies.

Risk management: Consumer finance is a common mechanism for selling to low-income markets. Companies providing finance employ credit risk assessments of varying levels of sophistication in order to ensure clients do not become over-indebted and to minimize payment defaults. Credit checks typically involve an assessment of client household income, assets, and current spending habits. Depending on the level of rigor associated with credit assessments, data can also be used to assess company reach into low-income market segments, and contribution towards financial inclusion.

4. Access to funding and public partnerships, compliance with regulation

Innovative businesses at the BoP are frequently dependent on public, donor or philanthropic capital, or are delivered through public private partnerships. They may also need to comply with regulation related to their sector (e.g. health product licenses) or certifications (e.g. organic certification, or food safety certifications in agriculture). Gathering evidence on social reach and performance may enable them to:

- Secure and retain a license to operate, or qualify for public programs, such as state subsidization of tuition fees through school vouchers, or access to national health insurance.
- Make a compelling case to grant funders or impact investors that they tackle social or environmental issues.
- Access results-based finance, such as carbon credits, which requires robust data.

5. Data as a revenue stream

In areas where there is a paucity of market information, good data can be a valuable commodity. While examples of businesses selling proprietary data generated through their core activities are currently scarce, access to new market information is noted as an important incentive for attracting larger corporates to partner on social enterprise initiatives. Water and sanitation initiatives, for example, often partner utility companies with community based organizations to deliver potable water in areas where traditional utility services such as piped water supply to households is commercially unfeasible or unproven. In such 'hybrid' models, community based organizations

provide last mile distribution, while utility companies provide water and gain an opportunity to build insights into new and untapped markets.

Measuring Social Performance

1. Scale—Numbers reached and numbers adopting

Scale of social results is most commonly reported in terms of the number of beneficiaries[4] reached. Number of beneficiaries may be based on unique records, or calculated using volume of transactions, average transactions, and/or rate of usage and adoption per beneficiary.

There can be considerable inconsistencies in how 'reach' is reported.[5] Some companies multiply by household size to calculate the total reached, while others do not. Some count indirect beneficiaries, for example energy companies counting customers of customers (such as patients of clinics or pupils at schools that have purchased solar energy systems). Some count all those purchasing or acquiring a product, whereas others may have data to assess actual usage.

In order to compare the scale reported by different social enterprises, methods for calculating numbers of beneficiaries must be transparent.

Usage, uptake and adoption

It is unlikely that every product sold by a company is always put to full use—fortified infant food may expire, or technology may break and be left unrepaired. Small and growing businesses are unlikely to commit major resources to measuring usage levels, and may base calculations of usage on secondary research or on a very small sample of customers. Where products are subsidized or given away for free, a higher number may be distributed, but usage rates could be much lower.[6]

Use of smart products that can track usage is particularly widespread for energy enterprises.[7] Products may track usage based on output rate, for example recording Kilo watts per hour generated by a domestic solar energy system; or through motion sensor technology, tracking the number of times a product is turned on and off.

Where clients receive a service, for example a vaccination or eye operation, measurements of usage are less of an issue. Information based services are one potential exception. While companies will know what information was provided, they may need to draw on other sources in order to judge subscriber *use* of information—was healthcare advice acted upon by recipients, was crop price information and advice acted on by farmers to guide their selling strategies, etc.

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2. Reach and Inclusion—who benefits?

For businesses with social impact goals related to inclusion and poverty reduction, understanding who is reached, and how many are poor, low-income, underserved, or female are critical measures of social performance.

Most enterprises are able to describe broadly who they reach—e.g., smallholder farmers, slum dwellers, rural residents. If the business conducts direct transactions with end beneficiaries, provides finance or ongoing services then they may have considerably more data on their client profiles. Internal analysis of company data can provide rich insight on who is using what service and how much.

Other methods to assess reach and inclusion include:
- **Use of secondary evidence—poverty mapping, national and sub-national data sets and literature.** Products targeting smallholder farmers, for example, may reliably be benchmarked against regional data on average smallholder farmer incomes.
- **Customer or community surveys:** Customer surveys incorporating standardized tools for measuring poverty rates have been widely adopted by microfinance institutions and basic services providers, and may be used on samples of populations served by companies to

segment by income level with a high degree of confidence. The Progress out of Poverty Index[8] and the USAID Poverty Assessment Tools[9] are two of the most frequently cited methods in use. Data gathered through these tools may be compared to data from credit assessments to check and improve assessment accuracy.

3. Measuring Quality

Quality is an important indicator of relevance to BoP clients. They often compare the product or service to competitors or to standard metrics. Quality measures vary widely by sector and specific business model, as Table 1 shows. Measures can be split into three broad categories:

- **Inputs and process measures as proxies for quality**—gathered through documentation and review of standard operational data. Standard proxies include numbers of trained service providers; presence of community consultation processes; product warranties and guarantees and compliance with industrial standards.
- **Customer/stakeholder satisfaction**—gathered through surveys of direct customers and/or local communities, customer complaints, after-sales touch-points with customers (such as advice and help lines), unique customer records to identify retention rates.
- **Outcomes & product performance**—may be measured through product field-testing, after-sales monitoring, peer or expert review (e.g., healthcare quality reviews by professionals) and test scores.

Table 1. Examples of quality indicators by sector

Sector	Inputs and processes	Customer and stakeholder satisfaction	Outcomes and performance metrics
Education	Average class sizes, teacher absenteeism, availability of safe facilities	Student, family and teacher surveys. Student enrollment and drop out rates.	Educational attainment – test scores compared to peers and national averages. Industry standard diagnostics, e.g., International Reading Association Diagnostic Teaching Model.[10] Peer review.
Energy	Numbers of trained sales staff and technicians. Compliance with industry standards. Product guarantees.	Customer surveys. Rate of follow-on sales to customers.	Product lifetime. Product energy generation and consumption rates. Air quality in households/ workplaces using products. Number of defective appliances, defaults and accidents.
Health	Numbers of trained staff. Availability of medicines in stock. Availability of safe facilities.	Customer and provider surveys. e.g., Jacaranda maternal health clinics issue customer feedback surveys via text message alongside appointment reminders and mobile payment mechanism.[11]	Number of successful diagnoses. Operation success rates. Post operation infection rates. Peer review.
Finance	Numbers of trained financial advisors. Availability of advice and guidance. Client credit assessments.	Rate of follow-on sales to customers. Customer feedback through surveys	Payment default and delinquency rates, Portfolio at Risk (PAR) Write-off ratios. Insurance payout processing times.
Water and Sanitation	Consultations with local communities. Numbers of trained sales and	Community surveys.	Water potability and safety standards.

| | | | Waste-based product safety and |
| maintenance staff or franchisees. Compliance with industry standards. Product guarantees. | | | efficacy standards (e.g. Sanergy in Kenya's conversion of waste to organic fertilizer). |

4. Measuring Affordability

Affordability measures are more consistent across sectors, and may be based on:

- Assessment of pricing for alternative products and existing consumer habits (e.g., monthly expenditure on kerosene as a benchmark for solar energy monthly fees).
- Assessment of consumer purchasing power and/or consumer incomes to inform either general or sliding scale pricing. For example, subsidization of insurance services (e.g., CADENA in Mexico) is often tiered based on the level of marginalization of a given area. Other basic services, including energy, water and sanitation may be priced at a percentage of total household income consistent with existing spending patterns in target markets or in more mature markets, e.g. water utilities as 0.8 percent of total consumption for low-income households globally.[12] In such circumstances public data sources may be used to inform funding and pricing arrangements.
- Assessment of increase in consumer incomes over repayment lifespan, e.g. projected earnings for students post graduation to inform loan term and limits.

5. Measuring Impacts and Outcomes for BoP populations

i. The overlaps and distinctions between outcomes and impact

Many business track their outputs (e.g. liters of water sold in slums) and their quality (cleanliness standards) and have no reason to focus effort on understanding what happens beyond that, in terms of 'outcomes' (any changes in sickness rates that may be associated with their activities and a host of other variables) or 'impact' (the level of change that can be directly attributed to sales of potable water, given a counterfactual). They may use such terms interchangeably. Some businesses are now looking at outcomes in order to verify the performance of their business model in order to scale.

Most donors and public sector funders, and some impact investors, want to have some evidence of impact. They are more likely to distinguish between outcomes that a business may have *contributed to,* and changes for clients that can be *attributed to* a business, i.e., impact. Here we consider separately how outcomes and impact can be assessed, but recognize that definitions vary for different players, depending on where they are in the value chain and what type of player they are.

Figure 2. From inputs to impact: The social performance value chain[13]
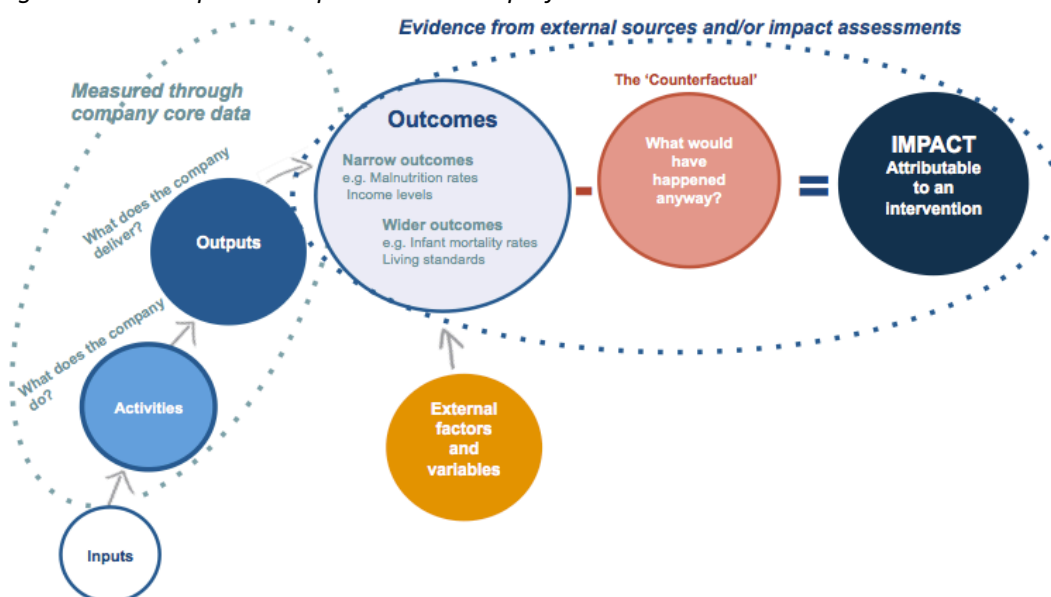
ii.   Tracking outcomes: what changes for clients and communities served by a business?

The diagram above describes narrow outcomes and wider outcomes. Narrow outcomes may be more closely linked to a business' activities—for example lower malnutrition rates amongst customers of a fortified infant food business, or improved crop income amongst farmers receiving financial services. Wider outcomes may be one or two steps further along the chain, for example rates of infant mortality in the communities served by a fortified infant food business, or improvements in overall household income and welfare for smallholder clients of a finance or insurance provider.

Table 2. Examples of narrow and wider outcomes by sector

Sector	Narrow outcomes for clients	Wider outcomes associated with the intervention
Education	Client educational attainment Client progression into further education and employment.	Wider education system performance (e.g. state schools) Client income levels Client health and living standards
Energy	Access to clean energy Rates of kerosene related accidents and respiratory problems Client time and financial savings	Client Income levels Client health and living standards Educational attainment for clients, and indirect beneficiaries
Finance	Access to financial services Client investment and spending trends.	Client income levels[14] Living standards – family, nutrition, health, education
Health	Rates of infection or disease Rates of malnutrition	Mortality and morbidity rates in client base / local communities Income levels in client base / local communities
Water and sanitation	Access to clean water Rates of water-borne diseases.	Mortality and morbidity rates. Income levels in client base / local communities

Narrow outcomes targeted by social enterprises can, in some cases, be tracked through a combination of operational data (what does the company do?) plus market research (what are the local conditions, who does the company reach?). Micro-insurance companies, for example, may track "improved financial inclusion" as an outcome through a combination of metrics on insurance scheme provision to unbanked customers in low-income areas. However, in most cases, even fairly narrow assessment of outcomes requires additional work to track clients and communities after engagement.

Wider outcomes and changes in the areas targeted by an intervention are typically tracked through external data either from partners or from public research. Innovations that feed into established, broad services, for example, may be able to access data on broader outcomes (educational attainment, or mortality and morbidity rates) fairly easily, although this may depend on agreements to share data with partner organizations.

iii. How is change measured or attributed to the innovative business?

Innovators or their partners seek to understand (and in some cases quantify) the actual, attributable impact of interventions in the following ways:

Using secondary evidence to identify links between outputs, narrow outcomes and wider outcomes, and to infer impact. Existing research on the links between outputs, immediate outcomes, and longer-term outcomes, for example studies on the links between child malnutrition and infant mortality, or between improved farmers' incomes from cash crops and improved household welfare, may be used to establish and support an intervention's theory of change. Companies are also increasingly using a small but rapidly growing body of existing Randomized Control Trial (RCT) studies on similar business models to infer similar impacts.[15]

Building insight and understanding causality through qualitative evaluations, including field observation, client and delivery agent surveys to identify links between business activities and immediate outcomes.

> **Qualitative studies on impact: Tracking change and building insight on causal links**
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> Solar energy system company BBOXX installed 51 solar systems in 8 schools in Northern Uganda with funding from War Child UK. War Child conducted an evaluation[16] to assess the impact of solar energy provision on education. The evaluation included:
> - Comparison of test scores and enrolment rates and student and teacher retention, pre and post installation
> - In-school observation
> - Focus groups with school pupils and interviews with teachers and school management.
>
> The study noted significant improvements in student enrolment and educational attainment. Focus groups, interviews and observation also identified extended study hours, greater feelings of safety at night, and improved teacher morale linked to a more reliable energy supply that could be used to power laptops and provide lighting to grade papers at night.
>
> This assessment provides evidence of change, and qualitative evidence linking the intervention to this change. But it does not quantify the change that can be attributed directly to the installation of solar energy systems. The schools may have been on a trajectory of improvement already, and changes may also be driven by external factors, such as changes in school practice, or local school policy.

Proving and quantifying impact through RCTs or quasi-experimental methods. Given the high cost and specific skill set required for randomized evaluations, RCTs are by default delivered in partnership with grant funders and research institutions. Quantitative impact assessments focus predominantly on business models that meet the following criteria:
- Compatibility—innovations where engagement on multiple sites, including control sites, is achievable and ethical.
- Research gap—where there are current gaps in evidence that cannot be filled through secondary evidence (e.g., RCTs already conducted for similar business model innovations).
- Broader applicability of research questions—where research findings may be of use more broadly to policymakers, businesses, NGOs and other stakeholders.

> **IPA and J-Pal's Six Randomized Evaluations of Microcredit**
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> The IPA and J-Pal led program of studies covering microcredit interventions in six countries, published in January 2015, is perhaps one of the largest and most high profile recent examples of RCT evaluation in development. The six studies in Bosnia & Herzegovina, Ethiopia, India, Mexico, Mongolia and Morocco covered interventions that differed in loan terms, target borrowers, and lender characteristics. By comparing and interpreting results across these six studies, the researchers were able to draw out overarching implications on the effects of microcredit. All studies found some evidence that micro entrepreneurs were able to expand their business activity having accessed microcredit. However, small, short term loans were generally not found to lead to increased income, women's empowerment, or other measures of poverty alleviation such as child schooling. At a very simplified level, these findings suggest that standard microcredit on its own is not transformative for poor and low-income people, and therefore more innovative, flexible and multi-pronged credit and savings services should be explored by researchers, policymakers and businesses.[17]

Interpreting impact assessments

Randomized evaluations can be highly complex studies, and findings are rarely simple and straightforward. A 'zero effect' measured through an RCT could mean the theory of change of an intervention is disproved, that there was an implementation flaw in the intervention, or that the impact occurs in an unexpected area that has not been studied.

While some impact assessment findings may be transferable (e.g. providing affordable insurance to smallholder farmers leads to greater tolerance of risk and influences farmer investment decisions[18]),

many are often highly context specific (e.g., the influence on farmer investment decisions leads to improved incomes but only when combined with several other variables, such as farmer demographic profile, availability of reliable market information for farmers, agricultural extension, financial education).

> **Assessing impacts on direct beneficiaries vs. wider knock-on effects**
>
> While it may be in business interests to track longer-term outcomes and impact for customers, wider assessments of systemic impact (e.g., a chain school impact on state education provision;[19] a women's health clinic franchise impact on public health services and competitors) are likely to be of greater interest to policymakers and funders. Some may be relatively easy to track, such as wider adoptions of technologies and practices pioneered through an intervention. But wider systemic impacts, for example healthcare quality in competitors and state institutions, are subject to a wider range of variables, making inferences from existing research a greater challenge.
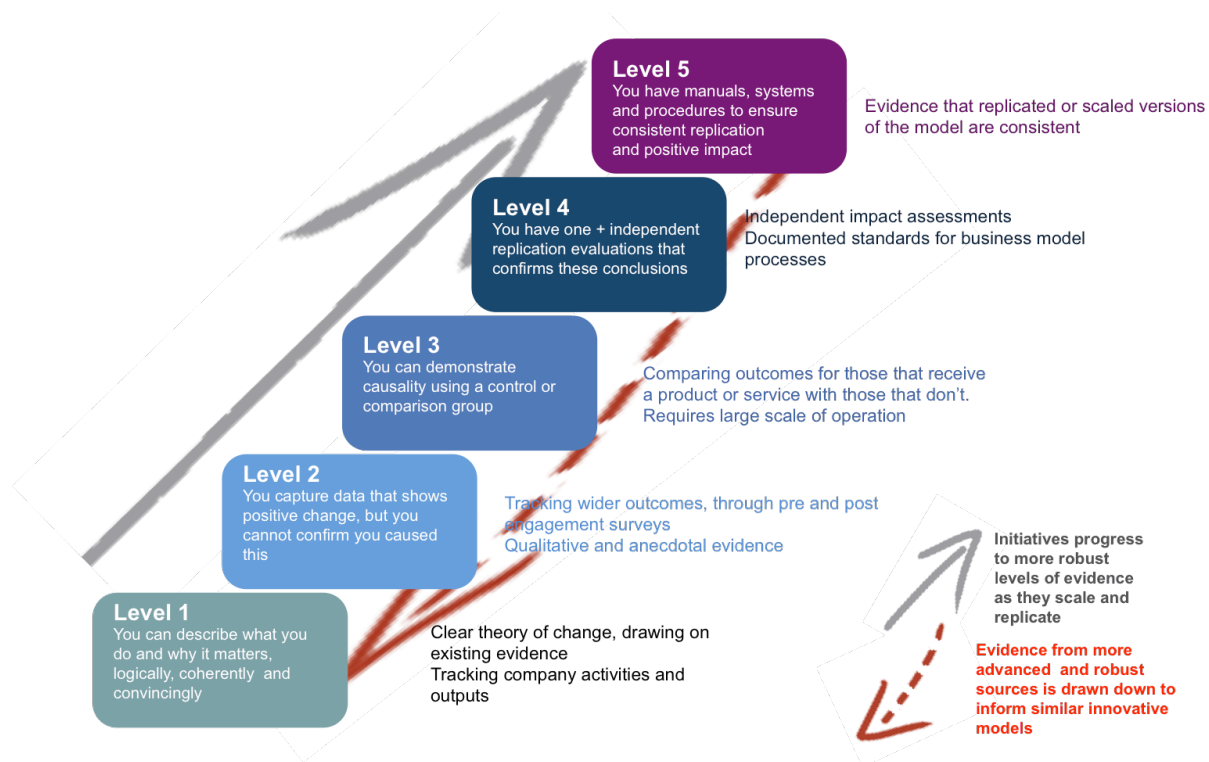>
> A randomized evaluation on school voucher programs in Andhra Pradesh by Karthik & Sundararaman (2014) assessed the spillover effects of financing students to attend private schools on local state systems. The study found little or no evidence of negative impacts. This study may be of interest to funders considering supporting chain schools and seeking assurance that the initiative will 'do no harm'. However, the absence of negative impact relates to affordable private schools operating *within a lottery based school voucher system*. In other policy conditions, impacts may be significantly different.

Standards and Spectrums for Measurement and Use of Evidence

There are several widely referenced standards for evidence relating to business models that target innovations for positive social change, including Nesta's standards of evidence for Impact Investing;[20] the ISEAL alliance impacts code;[21] the DCED standards for results measurement;[22] plus several sector specific frameworks. They are targeted at different audiences amongst donors, researchers and businesses. Most provide guidance on ensuring ethical, robust and consistent collection of evidence, and, importantly, guidance on making good use of this evidence for management and investment decisions.

These standards also provide gradations of rigor. While 'good' or 'best' practice is typically associated with the most robust methods—such as evidence from randomized evaluations and from multiple sources—the appropriate level of evidence will depend on the type and stage of business model.

Figure 3. Nesta standards of evidence[23]

Level 5
You have manuals, systems and procedures to ensure consistent replication and positive impact

Evidence that replicated or scaled versions of the model are consistent

Level 4
You have one + independent replication evaluations that confirms these conclusions

Independent impact assessments
Documented standards for business model processes

Level 3
You can demonstrate causality using a control or comparison group

Comparing outcomes for those that receive a product or service with those that don't. Requires large scale of operation

Level 2
You capture data that shows positive change, but you cannot confirm you caused this

Tracking wider outcomes, through pre and post engagement surveys
Qualitative and anecdotal evidence

Level 1
You can describe what you do and why it matters, logically, coherently and convincingly

Clear theory of change, drawing on existing evidence
Tracking company activities and outputs

Initiatives progress to more robust levels of evidence as they scale and replicate

Evidence from more advanced and robust sources is drawn down to inform similar innovative models

Getting social performance measurement 'just right'[24]**.** The Innovations for Poverty Action (IPA) research network conducts a large number of impact assessments for BoP focused business models. Acknowledging that resource intensive randomized evaluations are not for everyone, the IPA launched the Goldilocks Project in 2014, setting out guidance for organizations to identify 'right-fit' approaches to measurement, and stressing two main cases where RCTs should not be conducted: i) when evidence already exists, and ii) when generating evidence on impact is simply impossible to do well.

Gugerty and Karlan also identify four "CART" principles to help organizations find the right fit in monitoring & evaluation.
- **Credible:** Only collect data that accurately reflects what you are intending to measure.
- **Actionable**: Only collect data that your organization is going to use. To make data actionable, ask if you can use the information to change the course of action at your organization—if not, do not collect it.
- **Responsible**: Match data collection with the systems and resources your organization has to collect it. Think about the resources you have. Don't overreach, as doing so could compromise data quality.
- **Transportable:** Apply what you learn to other programs and contexts—either your own program in future years or in other locations, or those of other organizations working on similar problems.

Implications for government and public financers of innovative businesses

When considering the evidence base for any specific innovative business model, there is a set of key questions to consider.
- Does the business model have a clear theory of change with supporting evidence from other sources? If not, identifying the relevant evidence will be difficult.
- Is the model for gathering evidence compatible with the business? Is data collection likely to inhibit the performance and competitiveness of the business?

- Is the system for collecting and using data efficient? Is existing company data sufficiently well utilized for drawing out proxies of social performance? Does the system make the most of opportunities for data collection from regular touch-points with communities and partners? Is all data collected analyzed and shared back with business operations? Are data or assumptions from similar businesses used?
- Are assumptions and methods for measurement transparent? Are the assumptions, proxies and calculations clear and rational?
- Are the implications and limitations of evidence clear? Is the data addressing attribution? When using evidence from other sources, are additional variables and differences acknowledged?
- Does research and performance measurement take account of all stakeholders? Have participants been considered and consulted in research or measurement design? Do studies balance informational needs of business and policymakers?
- Is evidence used by stakeholders? If evidence is not used, it is effectively useless. What changes as a result of measurement? What, and who is the evidence for?

When considering actions that can be taken to support development of a strong evidence base on innovative business models, three priorities emerge:
1. **Understand the different data needs of businesses themselves and those allocating public or philanthropic resources.** Much evidence of outcome and impact goes beyond what a competitive business can be expected to deliver; so public funds need to take the burden.
2. **There is considerable innovation happening in the field.** Support to speed up exchange of innovation and adoption of good practice can be useful. The Kopernick Impact Tracker Tech Catalog is one such useful example, providing an online resource that maps out and compares innovative technologies for social performance measurement.[25]
3. **Scope for efficiencies needs to be explored.** Data can serve multiple uses, both within a business and across businesses. Data from government programs can provide proxy data for businesses if it is made available. However, care needs to be taken when applying evidence from one business to another with an apparently similar model.

Endnotes

[1] McCreless, M. 2015. *A Client Centric Approach: Impact Evaluation that creates value for participants*. Cambridge: Root Capital http://rootcapital.org/our-approach/publications

[2] Ashley, C. Shamash, J. Forthcoming, 2015. *Department for International Development Impact Programme Briefing*.

[3] Ashley, C. Shamash, J. Forthcoming, 2015. *Department for International Development Impact Programme working paper*

[4] IRIS. 2014. *Data Brief: Focus on beneficiaries*. New York: Global Impact Investing Network https://iris.thegiin.org/research/iris-data-brief-focus-on-beneficiaries/summary

[5] Ashley, C. Shamash, J. Forthcoming, 2015. *Department for International Development Impact Programme Briefing*.

[6] Clean cookstove usage rates, for example, were found to be fairly low in projects that gave cookstoves away for free and covered costs through grant and carbon credit finance, rather than through sales revenue. By comparison companies that sell clean cookstoves through low-cost finance report high usage rates.

[7] See use of smart meters in World Bank. 2015. *Home solar systems.* Washington, DC: World Bank; World Bank. 2015. *Off-grid appliances for productive use.* Washington, DC: World Bank; D-Lab "D-Lab Research Groups and Resources" D-Lab https://d-lab.mit.edu/research-about

[8] Progress out of Poverty "Progress out of Poverty" http://www.progressoutofpoverty.org/

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