



Reaching deep in low-income markets

Enterprises achieving impact, sustainability, and scale at the base of the pyramid

Supported by

MacArthur
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FOUNDATION

I. Preface

Enterprises seeking to achieve both impact and financial returns—and the investors that back them—have been working hard over the past dozen or more years to deliver critical goods and services to those living at the Bottom of the Pyramid (BOP). While these collective efforts have clearly had tremendous impact helping large numbers of very poor people, it still remains unclear how deeply down into the BOP we as a field are reaching. Are these enterprises consistently reaching people living on \$8 a day? How about \$4, or \$2, or less? Given the lack of good data, we really do not know.

And yet we need to. In order to understand how to reach deeply down the pyramid, we need to understand who is successfully reaching customers in the lower-income ranges. In order to know when we should subsidize for-profit enterprises to get them to reach deeper into the BOP, we need a better understanding of the “natural” limits to their current reach.

This report is intended to help provide greater transparency and guidance to advance the broader field of funding for businesses serving the deep BOP. It builds off the recent report by Omidyar Network, Frontier Capital¹, in which a number of variables and hypotheses were proposed about how best to reach the BOP and other low-income populations.

This report synthesizes the ideas and contributions of numerous individuals and organizations; we are extremely grateful for their time, energy, and insights.

We would like to acknowledge our funding contributors in the research, Omidyar Network, the Rockefeller Foundation, and the MacArthur Foundation, who have contributed their time, insights, and networks to the project. In particular, we would like to recognize Mike Kubzansky (Omidyar Network), Claudia Juech (Rockefeller Foundation), and Urmi Sengupta (MacArthur Foundation). Furthermore, we would like to thank the report’s Advisory Committee for their continuous support and guidance: Louis Boorstin (Osprey Foundation); Tom Adams and Sasha Dichter (Acumen); Richard Gomes (Shell Foundation); Chris Jurgens (US Agency for International Development (USAID)); Vaughan Lindsay (Leapfrog Investments); and Graham MacMillan (Ford Foundation).

Finally, we would like to thank our project team—Michelle Larivee, Kristen Dobson, and Allie O’Shea—for their outstanding work.

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II. Executive summary

Over the past 10-15 years, entrepreneurs, impact investors, incubators and accelerators, foundations, development banks, major donors, and even some large-scale corporations have been working hard to reach those living at the BOP by building, investing in, and supporting for-profit businesses that reach BOP customers. Unlike traditional development projects that often rely heavily on government or philanthropic grant funding (which often suffer from finite funding streams), for-profit enterprises can both sustain themselves and grow over time as long as the product offered elicits sufficient demand and revenues from its buyers. While important roles certainly remain for governments, philanthropic actors, and mission-driven non-profits in providing critical goods and services to the poor, the potential scalability and sustainability of for-profit enterprises serving the BOP as customers also holds significant promise for long-term development impact.

That said, there are going to be limits to whom for-profits can reach. At some point, a potential customer will simply not have enough money to buy the good or service. This begs the question of how deeply down into the BOP for-profit enterprises can reach while still achieving profitability, financial sustainability, and scale? As a field, we do not have a good idea as to how deeply we are reaching. The data on customer income is hard to come by and most of these organizations are hard pressed to spare the resources to gather it. And yet, if we are to better understand how to reach deeply into the BOP, we need to understand which enterprises are doing so; in order to specify best practices for reaching deeply, we need to know what a best practice is. Moreover, an enterprise operating in BOP markets will naturally seek to reach an underserved population that also has sufficient income that it can pay enough for the good or service to enable the enterprise to profit, sustain itself financially, and hopefully pay for scaling to a broader group of customers as well. But customers at the BOP often do not have the financial means to be a predictable customer base,

leaving enterprises with the appealing and often survival-focused option of moving up the pyramid to more stable customer segments. Governments and donors then face the decision of when to subsidize for-profit enterprises to reach customers that may be “slightly-too-poor” to buy the good or service. But to know if and when it is appropriate for a development actor to subsidize a for-profit enterprise, we first need to know how deeply an enterprise can “naturally” reach into the BOP without that help. And again, to know this, we need the data on the income level of the customers of various for-profit enterprises reaching BOP customers.

Our research makes an early effort to gather some of this data and to begin to assess what it takes to reach down deeply into the BOP. It is by no means a definitive statement on the depth of that reach or on how to do it. The data is simply too scarce and spotty at this stage to be able to do so. That said, we are confident this document presents the most comprehensive assembly of relevant data available today.

How deeply down into the BOP can for-profit enterprises reach while still achieving profitability, financial sustainability, and scale? As a field, we do not have a good idea as to how deeply we are reaching

Reaching the BOP—Key report concepts and variables:

Ability to reach deeply may be influenced by a few general conditions. One hypothesis is that enterprises, which are able to function effectively with an “asset light” business model, will be better able to serve poorer customers.¹ At a high level, asset light businesses have low marginal costs and up-front capital requirements (e.g., a mobile phone app). In contrast, “asset-heavy” businesses carry a higher cost structure due to the need for physical presence, complex distribution channels, and a skilled labor force (e.g., a manufactured product). The more asset light a business, the lower its infrastructure, overhead, and distribution costs, and the more it ought to be able to offer a low price for its products and thus, reach customers with limited purchasing power. A second hypothesized condition is that enterprises selling “pull” products will be able to reach more deeply than those selling “push” products. Highly valued products for which there is ready demand and that can be used immediately with little risk are pull products (e.g., food and electricity). These are in contrast to “push” products, which are goods and services with less obvious value or that provide uncertain benefits in the future (e.g., insurance, clean drinking water, and mosquito nets). Organizations selling pull products tend to have lower marketing and sales costs and thus, ought to be able to offer lower price points, again enabling deeper reach.

While it is important to consider and test whether or not asset light businesses or those selling pull products reach more deeply into the BOP, the reality is that much, if not most, critical development work necessarily entails asset-heavy operations, often delivering push products. Most of what we as a development field want to do involves efforts such as providing access to health, education, clean drinking water, basic sanitation, life-saving vaccines and medicines, safer cooking methods, and so forth. These are all goods and services that must typically be manufactured or carried long distances, distributed through real property, delivered by skilled and expensive workers, sold via lengthy educational campaigns, and the like. It stands to reason then that enterprises with asset-heavy or push products face quite challenging conditions to reach deeply into the BOP. The question then becomes whether there are conditions or variables that might mitigate these challenges.

Here we looked at whether or not having some customers at higher-income levels (e.g., \$8/day and \$10/day) might help companies also reach lower-income customers (e.g., \$2/day, \$4/day). On the one hand, accessing higher-income customers, in addition to the targeted lower-income groups, might confer a number of benefits, such as providing a larger number of prospective buyers, buyers who are able to purchase more consistently and reliably over time, less risk averse buyers, and so forth.

On the other hand, serving multiple income segments—segments with potentially different tastes, product preferences, desired price points, and modes of payment—could complicate business operations, driving up costs or detracting from an enterprise’s ability to reach lower down the pyramid through products and services tailored to the specific needs of the deep BOP.

Methodology: To assess the extent to which these three conditions help or hinder an enterprise’s ability to reach more deeply down the income pyramid, we opted for a case study approach. Through secondary research and interviews, we narrowed down a list of 100+ potential case studies to a set of 20. We recognize there are several limitations to using a relatively small sample size for case studies, including overrepresentation of enterprises that have lasted long enough to be studied (e.g., survivor bias), have volunteered to participate in the study (e.g., self-selection bias), and have made some effort to collect data on customers (potentially reflecting the maturity of the enterprise). Our view has also taken in a dynamic market environment, where many of these enterprises live on the thin edge of profitability on a year-to-year basis. Despite these issues, we are confident that at this stage, given the paucity of available data, our case study approach is the most effective one available.

Please see the main report for details on selection criteria. The table below provides a summary of the cases.

Sector	Enterprise	Est.	Geography	Description
Agriculture	Aldeia Nova	2012	Angola	Provides farmers with agriculture production inputs, and buys and distributes poultry and dairy farming outputs
	eKutir	2009	India, Cambodia, and Bangladesh	Operates a network of microentrepreneurs/kiosks that use technology to deliver inputs and sanitation solutions
Education	FINAE	2006	Mexico	Provides loans to low-income college students through risk- and cost-sharing agreements with university partners
	Urban Planet Mobile	2007	45 countries	Provides affordable, basic English language instruction via mobile phones
Energy (cookstoves)	Burn	2011	Kenya/East Africa	Designs, manufactures, and distributes fuel-efficient cookstoves for urban and peri-urban customers
	Envirofit	2003	45 counties (Asia, Africa, Latin America)	Develops and sells fuel-efficient cookstoves (charcoal, wood, and LPG), stove accessories, and lighting products
Energy (electricity)	Husk Power	2008	India and Tanzania	Designs, manufactures, and installs 25-250 kW “mini” power plants in villages and sells energy on a pay-per-use basis
	M-KOPA	2011	Kenya, Tanzania, and Uganda	Manufactures, sells, and provides financing for solar home systems that provide electricity to rural households
	Off-Grid Electric	2011	Tanzania and Rwanda	Manufactures, sells, and services solar electricity systems to rural and commercial customers
Financial services	IFMR/KGFS	2008	India	Provides financial products and services in rural areas through an adviser-driven wealth management approach
	Zoona	2009	Zambia, Malawi, and Mozambique	Provides domestic and international money transfer via an agent network of 1,500+ mobile money transfer outlets
Health	Aakar Innovation	2011	India and Bangladesh	Produces and sells compostable low-cost sanitary pads to low-income women via a female-led microenterprise model
	Livewell Clinics	2009	Kenya	Operates a network of health clinics, focused on quality and efficiency, that serve as a “one-stop-shop” for primary care
	Swasth Foundation	2008	Mumbai, India	Operates nonprofit health centers that provide high-quality primary health care services at half current market rates
Housing	Echale	1997	Mexico	Offers an affordable and sustainable “self-build” housing solution and provides low-cost financing solutions
	Patrimonio Hoy (unit of Cemex)	1998	Latin America	Provides market-based, do-it-yourself housing solutions to low-income families
Insurance	ACRE Africa	2009	Kenya, Rwanda, and Tanzania	Provides farmers microinsurance products that lower risk of investing in quality inputs, productivity, and access to loans
	BIMA	2011	15 countries	Provides low-cost insurance and m-Health services via mobile network operators and financial service providers
	MicroEnsure	2002	15 countries in Africa and Asia	Designs and delivers affordable microinsurance with insurance companies, mobile network operators, and microfinance institutions (MFIs)
Sanitation	Sanergy	2010	Kenya	Purchases, operates, and maintains a network of hygienic toilets; converts waste to agricultural inputs (fertilizer)

Ultimately, we wanted to understand how deeply enterprises can reach into the BOP, selling their goods and services while also achieving some level of profitability and scale; we wanted to know if enterprises are reaching a large number of very poor people in a financially sustainable way. Measurement was difficult due to scarce data, concerns about confidentiality, and the subjective nature of concepts like “sustainable” and “at scale.” What we were able to gather in a fairly consistent way was:

- **Total enterprise profitability and continuing to scale:** Reached profitability on a consolidated enterprise basis and continued ability to grow.

- **Financially sustainable² and investing in scale:** Demonstrated financial viability and focused on growing the business before achieving total enterprise profitability.
- **Not yet financially sustainable and moderate growth:** Moderate progress toward breakeven and scale.
- **Declared non-profit status:** Converted from for-profit to non-profit status.







As with business performance, assessing depth of reach into the BOP is easier said than done. As there is not yet a standardized and widely used method for measuring income levels of customers, we report the raw customer income data that our case study enterprises were able to provide. In

order from most rigorous to least precise, these include:

- **Rigorous external measure:** Grameen's Progress Out of Poverty Index survey or third-party funded measurement and evaluation studies.
- **Rigorous internal methodology:** Proprietary enterprise income or financial health tracking methodology, income verification through sales or enrollment process.
- **Impressionistic internal estimate:** Basic customer surveys or focus groups, proxy metrics to estimate income (e.g., ARPU, monthly rent, geographic level income data, and occupations).



Finally, we hypothesized that a few conditions affect enterprises' ability to reach deeply into the BOP while achieving sustainability and scale. The table below outlines the critical indicators used to classify enterprises along these variables (see the main report for a fuller explanation).

Asset intensity		Product preference		Customer base	
Heavy	Light	Push	Pull	Narrow	Wide
					
Physical product; requires manufacturing	Digital/mobile products	Not easily exchangeable	Provides fungible purchasing power	Revenue from one income segment	Different income segments with varying revenue contribution
Large sales and distribution network	Shifted risk of sales and distribution	Nice-to-have amenities	Necessary economic inputs	Relevant to only a particular customer segment	Undifferentiated products
Highly skilled labor	Paraskilled labor	Expensive non-replaceable good	Cheaper substitute	Single product, single price	Multiple products, different prices
Physical facilities	No/limited physical presence	Difficult-to-demonstrate or long-term benefits	Obvious or immediate benefits	Limited business model risk	Need to distribute risk across income levels

Findings: Despite the limitations of the data, as well as of the case study approach, there are several findings from the synthesis of our 20 case studies that we believe are worth calling out for various stakeholders actively seeking to reach the BOP. These findings include:

- First, most of the enterprises we studied are able to reach BOP populations with critical goods and services and some are able to reach surprisingly deep down (e.g., those living on less than \$2.50/day and even \$1.25 in some cases).
- Second, many of the enterprises reaching the BOP and deep BOP are operating fairly successfully, at least when we assessed them, both in terms of financial viability and growth.
- Third, being asset-heavy and selling a push product does not necessarily prevent companies from reaching the BOP in a financially sustainable way; several have done it. Moreover, selling to customers across a broader range of incomes is clearly possible, since the vast majority of our cases did so, and given its prevalence, may be critical to financial viability and growth.
- Fourth, regardless of sector or products sold, enterprises can improve their chances for success by using a number of common business model design tactics to get more asset light, make products more preferential, or serve customers across a broader range of incomes.
- Fifth, most enterprises in our study did receive some form of subsidized capital, which was often very helpful in mitigating start-up risks as well as navigating the challenges inherent in BOP markets. It was often received at an early stage and then replaced by more market-rate capital, suggesting subsidy does not preclude businesses from eventually becoming self-sustaining.
- Sixth, while all our enterprises had an obvious social impact from the goods or services sold to BOP customers (e.g., access to finance, and greater food security), these enterprises also yielded a number of less obvious development benefits (e.g., job and entrepreneurship opportunities, provision of public goods, and improved resiliency of individuals and communities).

Implications for the field: An obvious implication is that supporting for-profit enterprises that provide needed goods and services to the poor is a viable way to drive a development agenda. Our going-in expectation was that it would prove very difficult for asset-heavy businesses selling push products to reach deeply down the income ladder to those living around \$2-\$4 per day. Our subsequent research, however, tended not to support that expectation. Our research found that asset-heavy businesses selling push products could indeed reach BOP customers in a financially sustainable way, at scale.

This having been said, a second implication of the research is that many of these enterprises still seem to benefit greatly from, perhaps even require, some form of subsidy. With the exception of the asset light business selling pull products, virtually every organization received a subsidy of some type, indicating such financial support may be critical. Similarly, a third implication is that grant makers and impact investors ought not to insist that all or most of an enterprise's customers be at a certain level of poverty for that enterprise to be eligible for funding. Serving populations at somewhat higher-income levels does not

seem to prevent organizations from also reaching much lower-income levels; given its prevalence, this also may be a near necessity.

A fourth implication is that for-profit enterprises can be used to help deliver public goods and other services typically provided by government. Organizations provided power, sanitation, health care, housing, and education. For governments and donors, these enterprises could be a useful supplement or substitute to government services.

Finally, a fifth implication is that governments and donors might consider investing in public education campaigns to promote certain product categories or services that benefit society overall. Any spending to get customers to buy one brand of a product category (or service) over another should of course be shouldered by individual businesses. But educating customers about the value of a product category (e.g., preventive health care, insurance, and improved agricultural inputs) is a public good and can legitimately be taken on by government and other development organizations.

Conclusion and next steps: The report underscores several areas where there is an opportunity for further research, analysis, and support of enterprises serving the BOP. These opportunities span a wide range of topics, from data availability to better understanding how for-profit enterprises go to market within the context of other development programs. Based on our interviews and research with the enterprises, as well as feedback we received from leading experts in the field, three specific areas are particularly important for advancing our understanding of how to effectively serve the BOP: 1) improved information on BOP customers, including their needs and behaviors and the customer segments they form in the market; 2) advancing and standardizing how data is collected, analyzed, and shared for enterprises reaching BOP customers; 3) further analysis of when and how subsidies can play an appropriate role in the launch and growth of enterprises, in particular for asset-heavy enterprises providing push products. These three areas have implications for future research and technical assistance that is needed from governments, foundations, and BOP investors.





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