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PROFIT AND SOCIAL VALUE: AN ANALYSIS OF STRATEGIES AND SUSTAINABILITY AT THE BASE OF THE PYRAMID

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The last decade has seen a growing interest in market-based approaches to poverty reduction. Since the publication of Prahalad's Fortune at the Bottom of the Pyramid in 2004, businesses, entrepreneurs, and researchers have investigated ways to tap into this fortune. Many researchers have suggested that companies could both do well financially and contribute to social good by serving the bottom two-thirds of the global economic pyramid and effectively raising members of this rapidly growing base of this pyramid (BOP) out of poverty (Agnihotri, 2013; Hammond et al., 2007; London, 2007; Prahalad & Hart, 1999). Although there have been many debates concerning the efficacy of BOP ventures in alleviating poverty (Arora & Romijn, 2012; Karnani, 2007; Warnholz, 2007), companies, entrepreneurs, and practitioners have found ways to profitably navigate the challenging market of the world's poor and ultra-poor while simultaneously providing products and services that address their unique and localized social and economic needs. However, previously, no theoretical constructs guided the research or practice of market-based approaches to poverty. In 2008, the United Nations Development Program published a database of 50 case studies of ventures that demonstrated positive social impacts at the BOP and developed a conceptual framework of using BOP-centric strategies to overcome common constraints. Three years later, additional cases were published. This paper conducted a systematic review of 60 case studies to test this model, resulting in a holistic model synthesizing the various approaches. A comparative analysis provided insight into the importance of each component depending on various factors. The research suggested that role of the poor, the industry, BOP-appropriate business models and the partnerships influence the development and the success of the BOP businesses.

Keywords: Bottom/Base of the Pyramid (BoP), emerging markets, social entrepreneurship, poverty, business model innovation, inclusive markets

INTRODUCTION: CHALLENGES AT THE BASE OF THE PYRAMID

Historically, the global poor and ultra-poor that comprise the base of the global economic pyramid—living on less than \$2/day and \$1.25/day respectively—have not been served well by the marketplace (Prahalad, 2004). Regarded as fundamentally unprofitable because of miniscule purchasing power (Prahalad, 2004), this market has been ignored by businesses who have focused on the more lucrative and accessible middle and upper income levels, leaving the poor's needs to be addressed by the non-profit and aid communities (Easterly, 2006).

In addition, market barriers at the base (or bottom) of the pyramid (BOP) have been considerable and intertwined (Ahmed, 2013; Karnani, 2007; Prahalad, 2004). Low purchasing power resulted in high price sensitivity which could exclude a product or service in this market because of a few cents. The poor have few assets and lack access to credit. Even with the popularity of micro-credit, access to financing precludes the ability to make large purchases. The poor often reside in rural or isolated areas lacking basic infrastructure such as roads, electricity, and mass communication channels, a serious impediment to distribution and marketing. Illiteracy and lack of education can also impede marketing efforts. Plus, the fluctuating income streams of people working in the informal market or with seasonal jobs have kept non-survival products—food, clothing, and fuel—out of reach of many (Ahmed, 2013; Karnani, 2007).

Macro factors such as government policies and regulations also contribute to businesses avoiding the BOP market (Ahmed, 2013). Property and patents have not been adequately or consistently enforced. The markets in developing countries have tended to be highly unorganized (Karnani, 2007; London, 2007). From a marketing perspective, consumer research has been neglected, leaving the BOP a mystery in the eyes of most businesses, especially multi-national corporations (MNCs) (Blocker et al., 2013).

Traditional ways of running businesses and common business models have also not served the BOP well (Ahmed, 2013). Simply reaching the poor entails persistence and patience, requiring more of a long-term perspective than the pursuit of short-term gains for shareholders (Prahalad & Hart, 1999). Utilization of economies of scale has proven ineffective with dispersed populations, which is also hampered by poor infrastructure. However, the most significant barrier to reaching the BOP market is a lack of integration of social impact along with financial expectations. Simply put, the BOP market cannot be sustainable unless other poverty-related issues are simultaneously addressed (Karnani, 2007; ver Loren van Themaat, Schutte, Lutters, & Kennon, 2013).

The lack of infrastructure is one such issue. The national governments of developing countries have tended to focus on urban populations first. Their infrastructure priorities have often been driven by international banks or international aid programs (Easterly, 2006). Even more relevant to the BOP market, however, is poverty itself. If the poor had more money, then they could spend more and businesses could make more profit. Yet, business leaders and business models have not been equipped to address poverty directly. Poverty alleviation is not a simple goal. Even the aid community which has focused on poverty reduction for decades has no real idea about what works to pull people out of poverty permanently (Easterly, 2006). Business cannot be expected to easily resolve this challenge.

Two other issues have confounded progress with serving the BOP market: culture and partnering. Although national and cultural differences that have impacted international businesses have been researched at length, culture at the BOP is closely linked with issues of status, power, poverty, gender roles, health, and a lack of education (Ahmed, 2013; Blocker et al., 2013; Prahalad & Hart, 1999; Ramani, SadreGhazi, & Duysters, 2012). Culture is not homogenous and a successful product in one location cannot reliably resonate elsewhere, even if that new market is in the same country, region, or even village in caste-conscious societies (Ahmed, 2013). Market research needs to become highly localized and sensitive to context

(Blocker et al., 2013; Dos Santos, Krämer, & Vezzoli, 2009; Foster & Heeks, 2013; Karnani, 2007; Prahalad & Hart, 1999). One way to do this is through a partnership with BOP consumers, including them not only in market research but also in the product development process. This can mitigate some of the issues associated with cultural heterogeneity. For example, the adoption of toilets has been slow in many parts of India with many latrines built but unused. A pour-flush two pit toilet achieved widespread acceptance in many urban areas (Jha, 2003) but was not adopted in many rural areas because of necessity of significant behavior change related to religious hygienic practices (Ramani, SadreGhazi, & Duysters, 2012). Through a culturally appropriate needs assessment that included income, assets, and religion data, the non-profit organization (NPO) SCOPE designed toilets that were adapted to local ecological and cultural and household differences, increasing adoption and improving communal health and sanitation (Ramani et al., 2012).

Thus, researchers and practitioners have been investigating ways that the for-profit sector can become more involved in serving the poor. In part, this has been a reaction to official aid programs. International development aid has been criticized as ineffective in sustainably pulling people out of poverty (Abrahams, 2008; Easterly, 2002; Eyben, 2008; Mitlin, Hickey, & Bebbington, 2007; Nagao, 2006). Aid projects have skewed incentive structures in which those paying for the services, such as governments from the wealthiest nations, are not the same as those receiving the services (Hirschmann, 2002). Thus, those implementing the services, typically non-governmental organizations or recipient governments from the developing world, are accountable to the donors instead of the recipients of the services they provide (Eyben, 2010).

This relationship between donors, intermediaries, and recipients has resulted in several unintended consequences. The projects have primarily been conceived in wealthier countries and have not been uniformly successful in implementation (Easterly, 2002; Mitlin, Hickey, & Bebbington, 2007). Implementation generally has taken a linear, top-down approach, excluding those they are serving from the planning, design, and execution process. In addition, most international development projects require adherence to the project's logical framework, which inhibits the ability to spontaneously respond to changing circumstances, political situations, or social needs (Gasper, 2000). Many critics of international aid have advocated for a free market approach to enable creative approaches and solutions to the challenges faced by the global poor (Easterly, 2006). At the same time, the free market has been associated with environmental harm in many instances. Thus, a sustainable approach to poverty alleviation must also concern itself with environmental impact.

LITERATURE REVIEW

The book *The Fortune at the Bottom of the Pyramid* by C. K. Prahalad (2004) ushered in a new perspective, challenging the long-held assumptions that multinational enterprises (MNEs) could ignore the four billion people living at the bottom of the global economic pyramid and stay competitive. Prahalad presented several strong points encouraging MNEs to include the base of the pyramid (BOP) in their target markets. Market barriers could be overcome with some innovative strategies and the poor could be intensely brand-conscious, resulting in long-term loyal customers. Obviously, some ingrained ways of doing business had to change. The “4Ps”

(price, product, place, and promotion) needed transformation to the “4As” (awareness, access, affordability, and availability) (Anderson & Markides, 2007). The most significant proposition, however, was that it was in MNC’s best interest to develop products and services that would help better the lives of the poor and support poverty alleviation efforts, not just because it was the noble thing to do but because the products and services available to the BOP could directly or indirectly generate income, resulting in additional purchasing power and consumption of loyal customers. Thus, social innovations, products, and services could be both humanitarian and profitable.

Although Prahalad estimated the “fortune” to be \$13 trillion, more widely accepted estimates range from \$0.3 trillion (Karnani, 2007) to \$5 trillion (Hammond et al., 2007). Engaging that market, however, takes more than creative thinking. Traditional strategies to make a profit and some long-held assumptions about best business practices must be completely re-conceptualized. This has not stopped some companies, large and small, from successfully entering into the BOP market, and the strategies that have proved profitable can provide guidance for others wanting to make a difference in the lives of the poor through a market-based solution.

A. Gap in the Literature and Definitions

The lack of a conceptual framework to provide guidance and sense-making to researchers and practitioners alike has impeded the development of this field. Although there has been a plethora of data gained from case studies, they have not been synthesized in a way that can explain how and why a business succeeded on both a financial and social level. Market-based approaches have been narrowly defined by business type, the role of the poor, or a specific mechanism. The BOP approach initially focused on MNCs selling to poor-as-consumers (Prahalad, 2004). Other researchers later expanded the role of the poor into production and the enterprises focused on mutual value creation—profits for the venture and increased well-being for the poor (London, Anupindi, & Sheth, 2010). Social enterprises, on the other hand, saw that the poor could play several roles in the same enterprise and that the focus of the venture was on social value creation, not profit (Yunus, Moingeon, & Lehmann-Ortega, 2010). Another approach focused on the collaboration between MNEs and non-profits to create a socially beneficial business plan (Dahan, Doh, Oetzel, & Yaziji, 2010). Microfinance supported a conceptualization of the poor as entrepreneurs where small loans to individuals would enable the creation of microenterprises that could pull families out of poverty (Yunus, 2003). The Fair Trade movement sought to minimize the harmful impacts of international trade on small producers from developing countries through a system of transparency, market access, and improved trading conditions (Moore, 2004).

Although all of these approaches had their success stories, none of them alone had the potential to reduce poverty significantly or build inclusive markets. Selling to the poor generally was insufficient to reduce poverty. The lack of infrastructure could frustrate attempts to integrate poor producers into the international markets. Not every poor person could be a successful entrepreneur. Taken together, however, these approaches could guide enterprises to find strategies and business models to address the numerous challenges facing market-based approaches for addressing poverty.

Poverty. The concept of poverty must first be considered since the definition of the BOP is concerned with global poverty. Although poverty has been defined primarily by economic terms of income and consumption levels, poverty is much more than that. “Impoverished people face a constellation of factors that shape the quality of their lives, including physical deprivation and pain (hunger, deficient healthcare, and abuse), exclusion (relationships and community), marginalization, anxiety, and fears about the future” (Blocker et al., 2013, p. 1195).

Economics Nobel Laureate, Amartya Sen, also defined poverty as something more complex than income level and consumer spending. “[P]overty must be seen as the deprivation of basic capabilities rather than merely as lowness of incomes, which is the standard criterion of identification of poverty. The perspective of capability-poverty does not involve any denial of the sensible view that low income is clearly one of the major causes of poverty, since lack of income can be a principal reason for a person’s capability deprivation” (Sen, 1999, p. 87). Low income is an aspect of poverty, Sen argued, but not the only aspect. Thus poverty alleviation should also include reducing the obstacles to obtaining the capabilities necessary for individuals and households to pull themselves out of poverty. Other aspects of poverty include lack of (subjective) well-being, inequality, marginalization, cultural limitations such as gender expectations, and community or national impoverishment.

As Sen noted, however, low income levels can be the principal contributor to poverty, thus a quantitative indicator can be useful in defining poverty. However, measuring poverty quantitatively has come with its own challenges. The World Bank favors measurements of poverty in terms of consumption rather than income, the justification being that income may not be an adequate indicator of the ability to meet one’s needs since other factors such as a lack of access or availability may inhibit well-being (World Bank, 2011). However, expenditure data may not always be collected in household surveys and income data, or a combination of income and expenditures, have been generally used to create poverty lines.

In this paper, a multidimensional view of poverty has been utilized. Poverty is defined as *the lack of income, assets, equality such as gender equality, power, education, and access to resources such as health care or economic opportunity that leave individuals and households with the inability to provide basic needs*. Poverty can be measured quantitatively through income and/or consumption data along with qualitative data such as subjective well-being, equality, and marginalization measures (Ravallion, 1998).

Base/Bottom of the Pyramid¹. The above discussion on poverty serves to point out the complexity and ambiguity surrounding the concept of the BOP and estimating its size. Some researchers like London (2007) have side-stepped this issue altogether by using a more descriptive rather than numeric definition: “The base of the pyramid is a term that represents the poor at the base of the global socio-economic ladder, who primarily transact in an informal market economy” (London, 2007, p. 11). This description of the BOP is based on the work of

¹ Semantically, the terms “bottom of the pyramid” and “base of the pyramid” have been used interchangeably and both reference the same population. The phrase “base of the pyramid” is used in this paper because it has a slightly less pejorative connotation.

economist Hernando de Soto, who noted that the global poor often lived outside of a “Western” market with property rights, legally enforceable contracts, and officially sanctioned boundaries. This definition recognizes the concept of global economic pyramid while acknowledging that there are circumstances other than income that differentiate the BOP. In addition, this definition includes the barriers to marketing to the BOP. Without formal market mechanisms familiar to the MNCs, the BOP has been an unattractive place to conduct business.

In addition to the above definition of the BOP, this paper includes the concepts of financial self-sufficiency and social value creation to business transactions. In other words, to be considered for this research, businesses, organizations, and institutions that serve the BOP must have the dual goals of profitability and the provision of social goods.

Social Value Creation. Entrepreneurs who focus on social value creation “play the role of change agents by developing a mission to create and sustain social and not just private value” (Hall, Matos, Sheehan, & Silvestre, 2012, p. 1). BOP enterprises thus “address the traditional objectives of sustainable development and poverty alleviation through wealth creation, but they also create value in other forms as members may define value in different ways” (Reficco & Márquez, 2009, p. 517).

This subjectivity poses difficulties in determining whether a business provided social value or not. One common standard used by researchers was the Millennium Development Goals (MDGs) developed by the UN that 193 countries eventually signed. This broad agreement enabled the MDGs to be a touchstone for poverty eradication and well-being for developing countries and undergirds how social value creation was used in this research. These goals were: 1) Eradicate extreme poverty and hunger; 2) Achieve universal primary education; 3) Promote gender equality; 4) Reduce child mortality; 5) Improve maternal health; 6) Combat HIV/AIDS, malaria and other diseases; 7) Ensure environmental sustainability; and 8) Develop a global partnership for development including the international financial sector, donors, developing nations, and the private sector.

B. Research Questions

This paper explores best practices by companies and organizations that have responded to the opportunities and challenges at the BOP, as determined by profit and social value creation. Although social value creation can be difficult to measure and uneven across population segments, this analysis considers changes in economic, social, and individual well-being of impoverished communities, as well as unexpected results and externalities to determine social value creation. The focus is to develop a comprehensive framework describing how businesses can create social value at the BOP and to provide information on the following questions:

- What are the best practices for business model development aimed at serving the BOP?
- Which factors contribute to profitability for businesses serving the BOP?
- Which factors contribute to increased well-being for the BOP population being served?

DESCRIPTIONS OF BUSINESS FACTORS

“Serving the BOP” refers to the business processes of manufacturing, production, design, improvements, and sales that have been implemented with the dual goals of company profit and social value creation for the global poor. Although this excludes many businesses that may be contributing to the well-being of the BOP through selling necessities or useful consumer items, these criteria focus the research on companies intentionally serving the BOP with a long term goal of sustainable improvements in their quality of life.

A. Adapting Products and Processes

The first strategy used in successful BOP enterprises was to adapt proven products and business processes to respond to the needs and circumstances at the BOP. Although the needs may have been self-evident, the solution often was not. If the adoption of a new product required significant behavioral changes, the product did not succeed. Thus, adapting products needed to move beyond reducing costs to a responsiveness to the entire context. Behaviors, cultural preferences, and local differences all needed to be thoroughly researched (Ramani, SadreGhazi, & Duysters, 2012). For example, fuel efficient stoves have faced adoption challenges because the cooking styles, typical foods cooked, and cooking areas weren’t integrated into the design. New stove design adoption increased when cultural and behavioral characteristics were incorporated (Prahalad, 2012).

Likewise, business processes have needed to respond and adapt to localized situations. The processes that Tetra Pak used in school feeding programs in Indonesia and South Africa did not work in Nigeria (David-West, 2011). Social value creation often required extensive collaboration with government entities, which in turn required flexible internal organization, policies, and procedures. For example, Nigerian politics influenced the strategies Tetra Pak employed to incentivize farmers, schools, and port authorities to participate. This flexibility was based on an in-depth understanding of local culture, politics, and demographics.

The psychology of poverty has also been important to understand (Blocker et al., 2013; Khavul & Bruton, 2013). If the poor were uncomfortable entering places like well-guarded banks or middle-class stores, then distribution through those locations was unlikely to succeed (Dos Santos, Krämer, & Vezzoli, 2009; Loren van Themaat, Schutte, Lutters, & Kennon, 2013). A consideration of the aspirations of the poor can also enhance product adjustments (Blocker et al., 2013). Products that are affordable yet convey status have a greater potential for uptake (Prahalad, 2012). Although this is similar to aspirational desires in all income segments that have led to product innovations, what conveys status in poor communities varies among cultures and market segments and may be counter-intuitive. In this vein, businesses have considered the various segments of the market. For example, if education is important to one market segment that doesn’t have electricity, then a solar-powered light that allows children to study in the evenings would be a product supporting that aspiration. The BOP is an exceedingly heterogeneous market with various needs, obstacles, and enablers, and research into the various segments can profitably inform the adaptation process (Ahmed, 2013).

Both end-users and distributors are often innovative with new products and services. For example, in China, consumers found that washing machines could wash vegetables as well as clothes (Anderson & Markides, 2007). In Kenya, distribution agents of M-Pesa, a mobile money transfer application, found innovative ways to mitigate risk by floating money to each other when demand was uneven (Foster & Heeks, 2013). These types of innovations could aid the diffusion process, but the lack of understanding of the market segments may keep products from even gaining a foothold. “After repeated attempts to impose technological solutions on the bottom of the pyramid from Washington or New York, it is becoming increasingly clear that knowledge and practices rooted in local conditions are critical to sustainable development at the bottom of the pyramid... To be effective, strategies for the bottom must originate from the bottom of the pyramid” (Prahalad & Hart, 1999, p. 19).

B. Partnerships to Combine Resources and Capabilities

Another strategy has been to develop strategic and non-traditional partnerships to address gaps in resources and capabilities. Although partnerships have been common throughout all markets, they have carried a deeper significance with BOP businesses. For one thing, “[t]he poor care deeply about relational dynamics in the marketplace” (Blocker et al., 2013, p. 1199). Relationships with shopkeepers and social service providers provided options and strategies when cash flow was limited. BOP businesses have leveraged relationships not only to build trust in the marketplace, but to tap into local experts, informal distribution networks, government resources, and insight found in local NGOs and community leaders. Partnerships with NGOs, government agencies, and higher education entities have led to valuable market research (Ahmed, 2013; Hall, Matos, & Martin, 2014), product development expertise (Prahalad, 2012), education and outreach (Linna, 2012), start-up funding (Foster & Heeks, 2013), producers and suppliers (Dos Santos, Krämer, & Vezzoli, 2009), and distribution channels (van Loren van Themaat, Schutte, Lutters, & Kennon, 2013).

C. Policy Dialogues with Government Agencies

Similarly, a third strategy of engaging in policy dialogues with government agencies has enhanced the regulatory environments and social service provisions, improving both the business environment and quality of life for the poor. Policy dialogues have led to changes in banking and financing regulations (Allali, 2011b; Arora & Swamy, 2010), improved access to energy services (Allali, 2011a; El Garah, 2011), and improvements in low income housing (Nader, 2011).

D. Investing in Removing Market Constraints

Although some constraints like national policies and regulations have been out of the control of individual companies and entrepreneurs, some have been overcome through a fourth strategy of targeted investments. Providing training, capital, or resources to BOP producers or suppliers increased quality and reliability for businesses while providing opportunities for increased income to the producers and suppliers (Ghoddusi, 2011; Yoshida & Rampisela, 2011). Some of the products, services, and business models directly addressed lapses in infrastructure, financing, or market information. Thus, the process of investment to remove market constraints

has been both the core competency of the enterprise or an enabling mechanism, but the ramifications have the potential to ripple out throughout the targeted communities.

E. Leveraging the Strengths of the Poor

The final strategy commonly used has been to capitalize on the resources found at the BOP. Poor communities have developed strategies and capabilities that have been leveraged to support new and existing ventures. Informal jobs, such as trash-pickers in India, have been formalized, providing a known entity with more opportunities and building on local knowledge and networks (Zurbrugg, Drescher, Rytz, Sinha, & Enayetullah, 2005). Cultural attributes and local processes of production have been utilized as assets rather than as obstacles to overcome. The strengths of the poor have not been obvious to many enterprises, but strong social connections; ingenuity; deep knowledge of plants, topology, and weather patterns; an understanding of local needs and obstacles; and a sense of collectivism have all served BOP businesses. The knowledge of these strengths and how they can be leveraged could continue to bolster businesses aiming to serve the poor.

F. Enterprise Characteristics

In addition to the four strategies above, the literature also revealed certain characteristics common to companies serving the BOP. The first characteristic was a strong motivation to provide products and services to the BOP (Ahmed, 2013; Karnani, 2007; Prahalad & Hart, 1999). Although Prahalad and Hart (1999) made a strong case for a profit incentive, the changes and innovations that a company would have to make to its business model, production, and distribution systems precluded the majority of business from embracing this market. Some MNEs made this leap quite profitably, but a focus on providing social goods, the second characteristic, incentivized some companies to find creative solutions to the hurdles. Although related, the attributes of motivation to work at the BOP level and a focus on social value creation appeared to be both independent characteristics and foundational for successful ventures.

METHODOLOGY: FRAMEWORK SYNTHESIS

The methodology used here, framework synthesis, embodied a conceptual framework found in the literature to organize the data and search for patterns illuminating the necessary mechanisms of BOP best strategies. A framework synthesis provided a deductive approach (Carroll, Booth, & Cooper, 2011) that allowed for a more in-depth analysis of the mechanisms and contexts so that managers could make better decisions when designing appropriate business models for introducing their products and services into the BOP market. Since much of the case studies have been used to build theory, a general framework has been used to describe BOP best practices (Hammond, Kramer, Katz, Tran, & Walker, 2007; London, 2007; Prahalad, 2004). Testing that framework against BOP case studies could validate the framework, add to the theory, or provide a more accurate understanding of BOP best practices.

A framework synthesis is a recently developed methodology that analyzes and organizes large amounts of textual data (Barnett-Page & Thomas, 2009) to provide information to policy- and decision-makers concerning a specific research question (Dixon-Woods, 2011). Both the

research question(s) and the literature inform the framework, which is then turned into a coding schema applied to the qualitative research data. This methodology allows the large number of case studies to be coded and analyzed according to the major constructs found in BOP literature (see Figure 1).

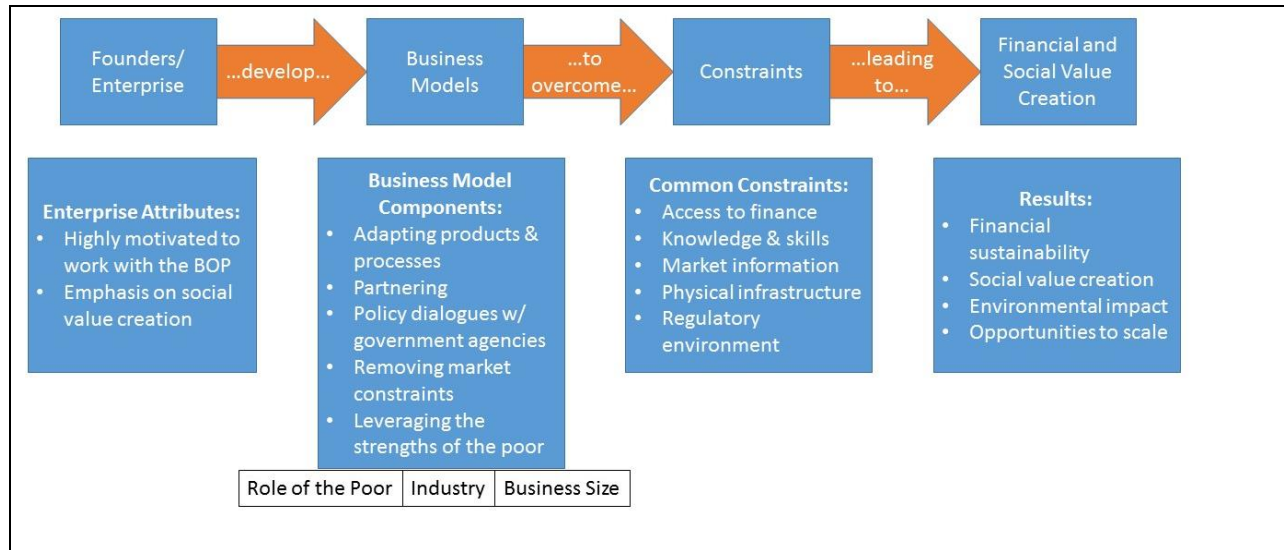


Figure 1. Conceptual framework of BOP best practices. Source, author.

This framework describes the necessary antecedents (enterprise characteristics) and the business model components necessary to overcome common constraints leading to profit, social value creation and positive environmental impact at the BOP. The literature suggested that success at the BOP, as wrought as it is with challenges, requires a commitment and dedication from the enterprise to provide value to the poor. A strong desire to make a profit is not enough. A commitment to social impact prevents the poor from being exploited. Business models differed depending on the role of the poor as consumers, entrepreneurs, producers, or suppliers; the industry; and the size and type of business. The type of constraints also varied depending on local governmental, economic, and educational circumstances. Case studies were used to test this model to see if they accurately depicted best practices at the BOP.

All of the case studies were selected from the UNDP's Growing Inclusive Markets (GIM) database. The GIM database contained two sets of case studies with similar research questions and methodology. The first set, conducted in 2008, contained 51 cases studies, all in English. The results of this set was then used to focus the methodology to dive deeper into the enabling aspects of successful enterprises. The second set, conducted in 2010, contained 72 case studies, 60 in English. The second set of English language case studies were analyzed based on the above framework.

DEVELOPMENT OF CONCEPTUAL FRAMEWORK

The conceptual framework (Figure 1) was an expansion of themes found in the UNDP's first set of 50 cases and was informed by BOP literature. The Growing Inclusive Markets Initiative (2008) described the general approaches used by BOP ventures in their first set of case

studies: adapt processes and products; invest to remove market constraints; leverage the strengths of the poor; combine resources and capabilities with others; and engage in policy dialogs with governments (pp. 7-10). Common constraints were also revealed: limited market information; ineffective regulatory environments; inadequate physical infrastructure; missing knowledge and skills; and restructured access to financial products and services (Growing Inclusive Markets Initiative, 2008, pp. 29-31). Yet, an exclusive focus on the strategies and constraints left the actor out of the model, the organization that was forming business strategies and overcoming constraints. Other researchers suggested that successful BOP ventures were undertaken by organizations with certain characteristics such as motivation to work in and with BOP communities and a drive for social value creation (Agnihotri, 2013; Ahmed, 2013; Arora & Romijn, 2012).

ASSESSMENT OF METHODOLOGICAL RIGOR

The UNDP GIM database of case studies was compiled through purposeful sampling. The UNDP researchers put out a call to their contacts, colleagues, and networks to submit potential case studies for inclusion. Over 950 case studies were received and reviewed for goodness-of-fit. The researchers sought a diverse set of case studies from equal numbers of for-profit and non-profit enterprises with demonstrated positive social or economic impact on the poor. Because enterprises at the BOP are affected by many external factors, many of the 950 case studies were no longer in operation by the time the research study started. The final cases were selected from the remaining enterprises by a committee of researchers based on the availability of adequate data to answer their research questions. The case studies themselves were conducted by local academic researchers, supervised by external reviewers. Research questions, document analysis, and interview templates guided the research and helped to ensure similarity across cases. The methodological rigor was deemed to be comparable to case studies published in academic journals due to the quality of researchers conducting the case studies, the supervision each case study received, and the standardized methodology use (K. McKague, personal communication, October 17, 2014). In 2008, the first 50 case studies were published. A thematic analysis revealed common strategies and constraints that comprise the conceptual framework (Figure 1). This study analyzed 60 cases published in 2011, the most recent set in the database, to further test the conceptual framework. In addition, the research methodology changed slightly between the first and second set. The authors agreed that analyzing just the final set of case studies that used a consistent methodology would increase reliability and validity than using both sets.

DATA EXTRACTION

Each case was coded to assess the validity of the conceptual framework (Figure 1). The type of business, role of the poor, industry, enterprise characteristics, constraints, and results were coded numerically to allow for statistical analysis. Table 1 provides the numeric codes used for data analysis. Most categories were coded “0” or “1” to reflect the absence or presence of a certain quality. Financial and social impact, however, were coded on a scale, “0,” “1,” or “2” to test the predictive value of certain categories to the ability to scale up services or impact 1,000+ households. The codes below reflected the categories in conceptual framework: EC for *Enterprise Characteristics*; BMC for *Business Model Components*; and CC for *Common*

Constraint. The coding was carried out by two coders to assess inter-rater reliability ($\kappa=0.781$, $p<0.001$).

In addition, the cases were coded thematically to distinguish the antecedents, processes, and mechanisms of serving the BOP using a grounded theory approach (Martin & Turner, 1986). After the initial coding, the themes were individually revisited to check for consistency and accuracy. The purpose of the two different coding methods was first to gather data on the relevance of the conceptual model and second to assess what was deemed important by the authors of each case that might have implications for revisions to the framework.

Table 1
Initial Code Structure

<u>Code</u>	<u>Score</u>		
	0	1	2
EC-MOTIVATION	The organization did not intentionally target the BOP.	The organization intentionally chose to target the BOP.	
EC-SOCIAL FOCUS	The organization was NOT primarily focused on positive social outcomes.	The organization's primary interest was in positive social outcomes.	
BMC-ADAPTING	The organization did not adapt products and services for BOP conditions.	The organization demonstrated adaptation to BOP conditions.	
BMC-PARTNERING	The organization did not develop partnerships with BOP-focused institutions.	The organization developed partnerships with BOP-focused institutions.	
BMC-POLICY	The organization did not engage in policy dialogues with government entities.	The organization engaged in policy dialogues with government entities.	
BMC-REMOVING CONSTRAINTS	The organization did not invest in removing market restraints	The organization made investments in removing market restraints	
BMC-STRENGTHS	The organization made no effort to leverage the strengths of the poor.	The organization made effort to leverage the strengths of the poor.	

CC-FINANCE	The organization faced no constraints concerning access to finance.	The organization faced constraints concerning access to finance.	
CC-K/S	The organization was not constrained by a lack of knowledge or skills.	The organization was constrained by a lack of knowledge or skills.	
CC-MARKET INFO	The organization was not constrained by a lack of access to market information.	The organization was constrained by a lack of access to market information.	
CC-INFRASTRUCTURE	The organization was not constrained by a lack of infrastructure.	The organization was constrained by a lack of infrastructure.	
CC-REGULATIONS	The organization was not constrained by a lack of an enabling regulatory environment.	The organization was constrained by a lack of an enabling regulatory environment.	
FINANCIAL OUTCOMES	The organization operated primarily at a loss or no data were available.	The organization was financially self-sufficient.	The organization was profitable enough to scale-up services.
SOCIAL OUTCOMES	Social benefits were limited to fewer than 100 households.	Social benefits were reported for between 100 and 999 households.	Significant social benefits were present in over 1,000 households.
ENVIRONMENTAL OUTCOMES	No environmental impacts were reported.	Positive environmental impacts were reported.	

This initial code structure was based on the conceptual framework depicted in Figure 1.

DATA ANALYSIS: USE OF FRAMEWORK SYNTHESIS METHODOLOGY

Data were analyzed to assess if they supported or contradicted the conceptual model (Figure 1), in part or in whole. For each case study, the components of the conceptual framework were scored depending on their confirmation or refutation of the model. In addition, other themes that were coded during the systematic review were analyzed for common trends or patterns and possible changes to the conceptual framework.

The UNDP projects include an impressive, expansive list of cases in industries ranging from agriculture to energy to tourism and including examples such as employing foster children in a grocery store in Macedonia, training the rural poor to produce virgin coconut oil in Indonesia, public-private partnerships for banking in Egypt, constructing earthquake-safe buildings in Iran, and composting household waste in Bangladesh. Each of the 60 cases was analyzed and coded. A sample of the output from this process is included in the Appendix A.

RESULTS AND DISCUSSION

Out of 60 cases, 11 different industries were represented: agriculture, consumer products, education, energy, financial services, health, housing, ICT, manufacturing, sanitation/waste, and tourism. As for business type, 37% were micro, small, or medium enterprises (MSME), 27% were large domestic companies, 17% were multinational enterprises (MNE), 12% were NGOs, eight percent were government initiatives, and three percent were cooperatives. The poor were consumers in 60% of the cases, employees or laborer in 57%, producers or suppliers in 37%, and entrepreneurs in 27%. Since the poor often played multiple roles, the percentages add up to over 100%.

Frequency counts were used to determine the number of cases that supported the framework on Figure 1. If over 50% of the cases used a business strategy or faced a certain constraint, then we concluded that evidence supported that component of the framework. We recognized that the diversity of industries and business types may have distorted the findings so we also analyzed the data by type as well.

A. General Findings

Enterprise characteristics. Overall, 77% of the cases demonstrated an intentional targeting of the BOP, either as consumers or as a part of the enterprise. Seventy-three percent demonstrated a primary intention to create positive social value. Two other characteristics emerged—connectedness and high risk tolerance—but they only appeared in three and 13 percent of the cases respectively (for a complete summary of additional themes, see Appendix B).

Business model components. Ninety-seven percent of the cases adapted processes or products to the context at the BOP and fully 100% developed partnerships to combine resources or capabilities in working with the BOP. Sixty percent made investments to remove market constraints, and another 60% leveraged the strengths of the poor. However, only 45% of the cases conducted policy dialogs with government, deeming that component not as strongly supported or meeting the 50% threshold. Two other components were demonstrated in over 50% of the cases however: employing skill-building/awareness-raising strategies at 83% and developing a financial model appropriate to the context at 58%. In addition, 12 other components were noted in fewer than 50% of the cases (see Appendix B).

Common constraints. Sixty-two percent of the cases struggled with access to finance, 85% with a lack of knowledge and skills, 78% with infrastructure, and 63% with regulations. Only 22% of the cases were impacted by a lack of access to market information. In addition, 14 other constraints were mentioned in fewer than 50% of the cases.

Results. Of all 60 cases, 27% either provided no financial data or failed to break even, 48% were able to cover costs, and 25% were profitable enough to expand products or services. As for social value creation, seven percent of the cases only reached fewer than 100 households, 28% reached between 100 and 999 households, and 65% reached over 1,000 households. Seventy-two percent made positive environment impacts. In addition, 92% of the cases were either expanding at the time of the report or had the plans and capacity to scale.

Thus, these 60 cases supported a majority of the components from the framework in Figure 1. The enterprise characteristics held, as did four out of five business model components and common constraints. Thematic analysis revealed two additional business model components. A modified version of the framework is indicated by the evidence (Figure 2). The evidence from the case studies also indicated that the components varied depending on the context. This variation is represented by the dotted lines in each box. Thus the successful BOP venture would generally demonstrate the enterprise characteristics found in the model, use some or all of the business model components to address the constraints that they faced.

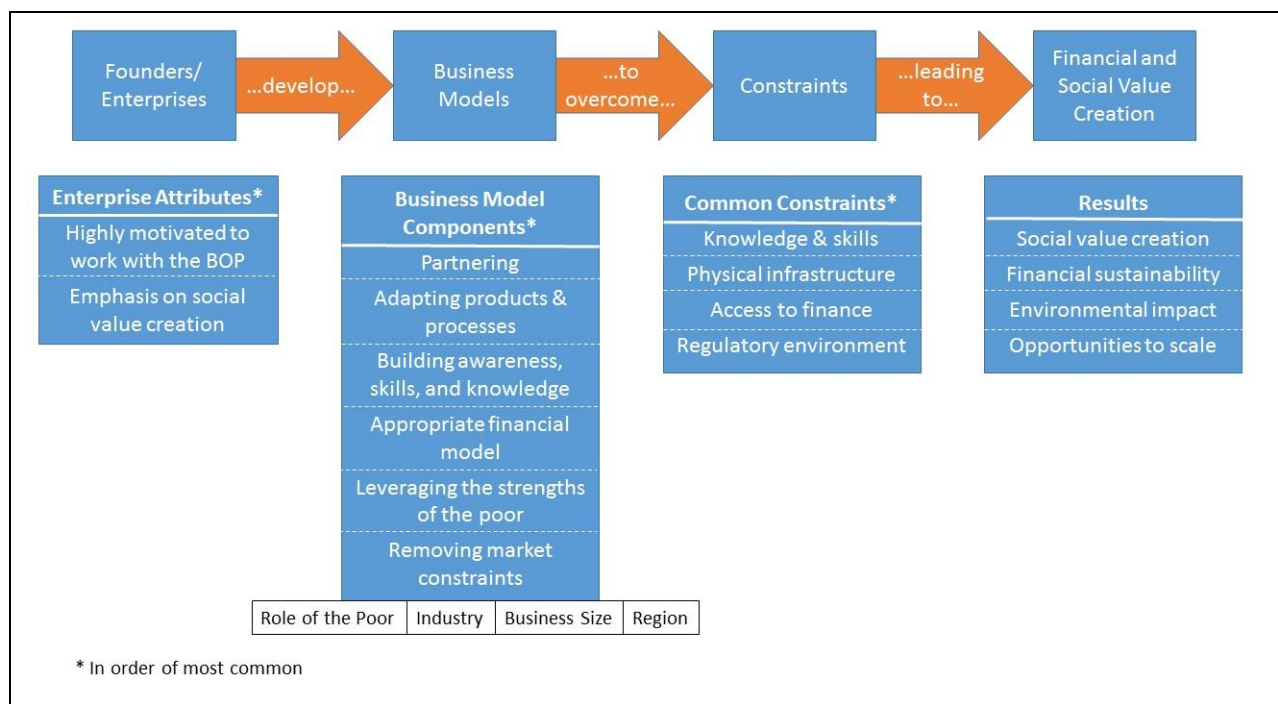


Figure 2. Revised conceptual framework of BOP best practices. Source, author.

Most of the cases, 87%, contributed social value creation through poverty reduction (MDG 1). Two percent contributed to universal primary education (MDG 2), 7% to gender equality (MDG 3), 3% to child mortality reduction (MDG 4), 2% to improvements in maternal health (MDG 5), 7% to combating diseases (MDG 6), 70% to environmental sustainability (MDG 7), and 15% to global partnerships for development (MDG 8). These results suggest that business have the most potential to contribute to poverty alleviation and environmental sustainability. For-profit healthcare services would obviously contribute to MDGs 4, 5, and 6, but few healthcare project were included in the database.

Industry differences. Although the overall framework gives a general idea of the strategies and constraints found at the BOP, different industries faced slightly different constraints and used different combinations of business model components. Out of 11 industries found in the 60 case studies, two industries only had one case (education and manufacturing) and two industries had two cases (health and tourism), too few to make any generalizations. Although the remaining industries also had low numbers, the differences were suggestive and indicate potential for further research. The housing industry had the strongest financial performance and the second strongest contribution to social value creation; ICT had the widest reach for social outcomes, although it scored lowest in financial outcomes.

Agriculture enterprises (n=8), for example, included: the poor as producers and employees; targeted the BOP and focused on social value creation; and used adapting, partnering, policy dialogues, leveraging strengths of the poor, and building skills strategies. The most common challenges were knowledge and skills, infrastructure and regulations. The average score for financial results was 0.75 out of 2, with three enterprises operating at a loss, four covering costs, and one with enough profits to expand. Social impact was 1.5 out of 2, and environmental impact was 0.75 on a scale of 0 to 1.

The consumer products industry had similar roles for the poor and enterprise characteristics, but tended to rely on fewer strategies: adapting, partnering, and skill-building. Knowledge and skills and infrastructure were the most common constraints, and the financial outcome averaged out at 1.2. Social outcomes averaged 1.47 and positive environment impact was 0.53, or just over 50% of the cases making a contribution.

Energy (n=8) primarily served the poor as consumers with the same enterprise characteristics as above. Adapting, partnering, and leveraging the strengths of the poor were the most common strategies, and financing, knowledge/skills, and infrastructure were the most common constraints. The financial average was 0.75, social outcomes averaged 1.5, and the environmental average was 1.

Financial services (n=8) also served the poor as consumers and had the same enterprise characteristics. The most common strategies were adapting, partnering, investing in removing constraints, creating an appropriate financial model, and leveraging technology. The constraints were financing, knowledge/skills, and infrastructure. The financial average was 0.75, social outcomes averaged 1.75, and the environmental average was 0.5.

Housing (n=5) served the poor as consumers and labor and had the same enterprise characteristics. The most common strategies were the same as in Figure 2: adapting, partnering, removing constraints, leveraging strengths, using appropriate financial model, and building skills. Common constraints were access to finance, knowledge/skills, infrastructure, regulations, and resistance to change. The financial average was 1.4, the social average was 1.8, and the environmental average was 1.

ICT (n=4) focused on poor as consumers with the same enterprise characteristics. The ventures used all the strategies from Figure 2 but also included intensive market research and leveraging technology. The most common constraints were access to finance, knowledge/skills,

lack of market information, and infrastructure. The financial average was 0.5, the social average was 2, and the environmental average was 0.5.

The final industry, sanitation (n=6), primarily served the poor through employment. This industry did not choose to target the BOP, but was focused on social value creation. The common strategies were adapting, partnering, policy dialogues, and removing constraints, while the common constraints were access to finance, knowledge/skills, infrastructure, and regulations. The financial average was 1.17, the social average was 1.67, and the environmental average was 1.

Results by business type. The most profitable business type was the large domestic companies with a financial average of 1.63. All other businesses averaged below a “1,” indicating that the businesses were not primarily sustainable, although every business type had some cases that covered their costs. MSMEs were 0.95, MNCs were 0.70, non-profits and cooperatives were 0.5, and government initiatives were 0.4. The most social value creation came from MNCs with an average of 1.8, followed by large domestic companies (1.63), MSMEs (1.57), NPOs (1.5), government initiatives (1.4), and cooperatives (0.5). It should be noted, however, that there were only two cooperatives in the sample. Most of the business types averaged out to reflect the framework in Figure 2, with a couple of interesting exceptions. Only 40% of the MNCs were focused on creating social value as an enterprise characteristic. As to business model components, government initiatives and MSMEs conducted policy discussions as well as the other strategies, and large domestic companies were not as focused on developing appropriate financial models; NPOs primarily focused on one strategy, building skills. For common constraints, these were fairly universal, although large domestic companies did not appear to struggle as much with access to finance or regulations.

B. Other Findings

The overall findings held when examining the data by the highest financial outcomes (scores of 2), highest social outcomes (scores of 2), highest social outcomes (scores of 2) combined with viable and profitable ventures (scores of 1 and 2), and positive environmental impact (scores of 1). The only notable difference occurred with the very highest scoring cases (scores of 2 in both financial and social outcomes) and the lowest scoring cases (scores of 0 in financial outcomes and 0 or 1 in social outcomes). For the highest scoring cases (n=11), there were two differences. Only 45% of the cases leveraged the strengths of the poor and only 45% of the cases faced infrastructure as a constraint. There were three differences in the lowest scoring cases (n=5): 60% held policy dialogs with the government, only 40% developed appropriate financial models, and regulations were constraints in only 40% of the cases.

There also did not appear to be any trade-offs between the outcomes. The financial outcomes for all 60 cases were 0.98, social outcomes were averaged at 1.58, and environmental impact average was 0.73. For the cases which scored two in financial outcomes, the social outcomes were 1.67—slightly higher than the overall average—and the environmental impact was 0.67—slightly lower. For the cases that scored a 2 in social outcomes, financial outcomes averaged to a 1, which was also slightly higher than overall, and 0.72 for environmental impact. For the cases with environmental impact of 1, the financial outcomes were 1.05 and the social outcomes were 1.57 (see Table 2). These slight differences were not statistically significant and

the overall picture that the data draw is that profitable ventures can provide social value to large numbers of people, ventures with large social impact can be financially viable, and ventures with environmental impact can be both.

Discussion. This framework provides an overview of the strategies that can be used to address some of the common constraints facing enterprises that work with the global poor, which can guide practitioners in making strategic business decisions and can give researchers an empirical framework for investigating businesses at the BOP. Business practitioners and managers have often discovered useful strategies through trial-and-error, but this framework can offer options that have been used previously in successful BOP ventures. The industry-specific strategies could refine the business models even further, although the number of cases are too few to make general assumptions.

For academics, this model could be further tested with additional cases, which would also develop a more refined understanding of the differences between industries. Research has been conducted on individual strategies (Anderson & Markides, 2007; Blocker et al., 2013; Dahan, Doh, Oetzel, & Yaziji, 2010; Weidner, Rosa, & Viswanathan, 2010), but there is still much to understand of the interplay between strategies, the best strategies for specific constraints, and contextualizing the model for specific cultures, environments, or political situations.

The fact that the most profitable business types were domestic companies, small and large, raises some interesting questions. Prahalad (2004) indicated that MNCs would be best poised to create profitable ventures, but the evidence here does not support that supposition. This may be data that suggests the important role of cultural understanding. Domestic companies may be able to better navigate through the intricacies of language, values, taboos, and social status in ways that foreign companies cannot.

In addition, close to 100% of all ventures included adaptive strategies and all cases demonstrated partnerships with BOP-focused organizations. Perhaps these strategies could better be described as enterprise characteristics: the ability to adapt processes and products and the ability to partner. Whether characteristics or strategies, they may be necessary. Adaptation seems to act as a counterpoint to the typical NGO/NPO approach of a rigid, linear logical framework. Partnering with these same organizations, however, can provide the knowledge of and linkages to BOP communities that most businesses lack. The two together may be the cornerstone of successful BOP ventures.

Careful reading of the case studies also indicated another important strategy or characteristic. A long-term strategy was mentioned in 20% of the case studies (see Appendix B), yet none of the cases demonstrated the opposite: a short-term focus on financial gain. Even in the 27% of the companies where profit was more important or equal to social value creation demonstrated a long-term perspective. If further study confirms this characteristic, then the qualities of successful BOP ventures comes clearer into focus: motivated to serve the BOP, focused on social value creation, adaptable, collaborative, and patient.

Although there have been critiques of the idea of poor-as-consumers (Arora & Romijn, 2012; Karnani, 2007), 60% of the cases sold products and/or services to the poor. In this dataset,

poor-as-consumers was the largest role for the poor and in the cases where the poor were solely consumers, the average social value creation (1.64) was larger than solely employees (0.88), entrepreneur (1.5), or producer/supplier (1.33). Although there were not enough cases in each category to establish statistical significance, the data indicate that there are products and services that create social value at the BOP. When the poor are consumers of the products and services, then the companies must pay attention to their needs and price points, which addresses another issue for NPOs of skewed incentive structures.

This research has also examined one of the basic premises of the BOP proposition, that businesses could be profitable while serving the poor, although the analysis was not detailed. The cases did not present financial data in a consistent format and the data that were provided rarely included capital costs along with operational costs. Thus, whether BOP ventures can be profitable still lacks substantial quantitative support. Yet, the evidence suggests fairly strongly that these ventures could be and were, by and large, financial sustainable and also able to create social value.

The results also demonstrated the capacity of BOP ventures to attain positive triple bottom lines. Profitable businesses also had positive social and environmental impact. Some of the most far-reaching organizations in terms of social value creation also made substantial environmental contributions. These cases demonstrated creative thinking that could address growing challenges such as urban waste, energy consumption, food insecurity, and disease. Both high and low tech solutions contributed to successful ventures, as did both unique innovations and subtle tweaks of widely used processes. The study and synthesis of case studies can add utility to this important and rapidly growing field.

Further research. Since BOP enterprises is still a fairly nascent area of research, many questions remain concerning best practices. Many case studies have focused on “successes,” thus comparative research with similar enterprises that “failed” would be instructive and further refine the factors most indicative of financial sustainability and social value creation.

Further exploration of the results would also yield new knowledge. For example, does a wider sample comparing domestic enterprises with MNCs confirm that domestic companies are more likely to succeed? If so, why?

This evidence-based framework could also inform research concerning new businesses at the BOP to test if addressing the different aspects increased chances for profitability and social value creation. Would an understanding of these different aspects help a new business owner plan better and anticipate common obstacles? Could this framework help businesses to scale to serve even more impoverished communities?

Finally, a more rigorous examination of the profitability and social value creation is needed. These case studies along with many other published cases primarily relied on self-reporting on profitability. The ways of determining social value creation were high-level and context-dependent. Research that develops a more rigorous tool, especially one that is specific to BOP enterprises, would clarify exactly how poor communities are served and how businesses became profitable.

Conclusion. Businesses have generally not focused on poverty reduction or social value, leaving these goals to the public and non-profit sectors. However, there has been a growing emphasis on decreasing poverty, promoting equality, and enhancing the health and well-being of those in developing countries. Organizations like the UN have been encouraging the private sector to contribute and think beyond profits. This is in part because of the resources at their disposal, but also because businesses offer tools that the public and non-profit sectors don't have. Financial sustainability, accountability to customers through market mechanisms, and models to scale address many of the limitations inherent in aid and government interventions. The concept of inclusive markets at the BOP to create social value and pull people out of poverty is an attractive one, one that addresses the shortcomings of both business-as-usual and development-as-usual.

The original premise of a fortune at the BOP has not stood the scrutiny of research. The financial gains have been much more modest than originally estimated. However, Prahalad and Hart created interest from businesses to work with populations that were previously overlooked and marginalized. These BOP ventures have demonstrated that financial sustainability and social value creation can co-exist, giving the world has another tool to reduce poverty, suffering, and powerlessness for millions, if not billions, of people. Sharper clarity into the mechanisms of how businesses can create social value for the poor will make this tool more effective. Both traditional businesses and socially-minded entrepreneurs have new opportunities to make a difference.

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Appendix A

Sample Analysis and Coding

Case 1. Refrigerator for the poor in Northern Nigeria. The lack of refrigeration in rural desert areas impacts the poor in several ways. The lack of electricity limits their options and without food storage systems, farmers sell their produce at a loss, the food spoils, or girls, responsible for selling the produce, miss school to sell the produce before it rots. Mohammed Bah Abba, founder of Mobah Rural Horizons, designed and sold locally-produced “pot-in-pot” ceramic food storage units which extended the life of perishables from a few hours to a few weeks. A smaller clay pot sits inside a larger clay pot surrounded by wet sand. The process of evaporation cools the inner pot which contains the perishable food (Oluwasola, 2011, p. 7).

Business size and type. Mobah Rural Horizons, established in 2000, was a small business in Nigeria. Abba and seven assistants travel from village to village, demonstrating the product, commissioning local potters to produce the dual pot containers (Oluwasola, 2011, p. 11).

Role of the poor. The role were consumers and producers of the product.

Enterprise motivation to work with the BOP. Abba established Mobah Rural Horizons specifically to address the needs of the rural poor in northern Nigeria.

Emphasis on social value creation. The sole purpose of the pot-in-pot system was to improve the lives and income of the poor, to increase income, and keep girls in school.

Other enterprise characteristics. Abba demonstrated his willingness to invest his finances and time by commissioning 12,000 pots and freely distributing them to demonstrate their utility (Oluwasola, 2011, p. 2).

Business models or strategies used. Mobah Rural Horizons was a part of the informal sector and relied on “intuition and knowledge of the people and their activities” (Oluwasola, 2011, p. 9).

Adapting products and processes. Both the product and the distribution methods were highly adapted to the environment and culture. Abba and his assistants traveled from village to village with a screen, portable generator, and a film of a demonstration of the pots. After securing permission from the village head, Abba commissions production from local potters, then calls on the village drummers to call farmers to the village square in the evening, after work on the farm has been completely. This methods built on the daily rhythm of village life, where days were spent on the farms but with little to do at night (Oluwasola, 2011, pp. 9-10).

Partnering to combine resources and capabilities. Mobah Rural Horizons was initially supported by the United Nations Development Program (UNDP), the Ministry of Women’s Affairs, and the Jigawa State Polytechnic by providing vehicles, gas, and income to distribute the pots (Oluwasola, 2011, p. 11). They also partners with local potters to make the products (p. 9).

Leveraging the strengths of the poor. Abba credited his ability to distribute his pots on the generosity of rural poor he was serving as they provided food, accommodation and occasionally transportation when visiting villages and demonstrating his products (Oluwasola, 2011, p. 10). Local potters were also used as they had their own space, tools, and knowledge to make the pots (p. 9).

Other strategies. Where many businesses and agencies saw the rural areas of northern Nigeria as to remote and lacking the infrastructure to address produce spoilage, Mobah Rural Horizons saw the lack of electricity as a challenge and opportunity (Oluwasola, 2011, p. 3). Abba started this enterprise with a product that was appropriate for the culture and environment. Clay and farm waste were free and ubiquitous raw materials, the construction was simple, and the products were easy to use and inexpensive to buy and replace (p. 9). The products were designed based on an in-depth understanding of the needs, resources, and culture of the target market (p. 6). Abba created an innovative design and continued experimenting and refining it between 1995 and 1997 (p. 2). Lastly, Mobah Rural Horizons educated their consumers on how to use the products and benefit from cold food storage (p. 9).

Constraints encountered by the venture. Mobah Rural Horizons struggled with a lack of finance, lack of awareness of the products, and lack of infrastructure such as electricity and roads.

Financial results. As a small, informal business, Mobah Rural Horizons did not keep business records so the amount of profit, number of pots sold, or number of partners could not be confirmed. Abba indicated that the enterprise was self-sustaining and growing. His assistants had also been producing and selling pots in southern Niger (Oluwasola, 2011, p. 3).

Social value results. Again, no records indicated how many pots had been sold, but thousands of households have used the product and the benefits have been numerous (Oluwasola, 2011, p. 12). Food security increased because of longer food storage (p. 14). Potters were able to increase their income by producing the pots (p. 13). Farmers were able to increase their income by storing food and selling when the prices were higher (p. 13). Women were able to sell food from their homes, providing them with an independent income and girls were better able to attend school (p. 14). Mobah Rural Horizons contributed to MDG 1 (poverty reduction).

Environmental impact. None recorded.

Opportunities to scale. Mobah Rural Horizons intends to produce and sell his products across the desert areas in northern Africa, including Cameroon, Chad, and Eritrea. Abba had also been invited to introduce the product in countries such as Haiti, Honduras, and India (Oluwasola, 2011, p. 14)

Case study coding.

Enterprise Characteristics		Business Model Components		Common Constraints		Results	
Motivation	1	Adapting	1	Finance	0	Financial	1
Social Focus	1	Partnering	1	K/S	1	Social	2
		Policy	0	Market Info	0	Environmental	0
		Removing Constraints	0	Infrastructure	1		
		Strengths	1	Regulations	0		

Appendix B

Additional Components

The table below contains the complete list of additional components found during the thematic coding process. The number and percentage of cases with the theme are also indicated.

Table 2

Theme	# of Cases	% of Cases
Enterprise Characteristic: High Risk Tolerance	8	13%
Enterprise Characteristic: Connectedness	2	3%
Business Model Component: Product Developed for Localized Environment	10	17%
Business Model Component: Skill-Building/Awareness-Raising Activities	50	83%
Business Model Component: Appropriate Financial Model	35	58%
Business Model Component: Experimentation and Innovation	18	30%
Business Model Component: Leveraging Technology	16	27%
Business Model Component: Building Trust	15	25%
Business Model Component: Intensive Market Research	13	22%
Business Model Component: Long-Term Strategies	12	20%
Business Model Component: Multiple Purpose Products/Services	8	13%
Business Model Component: Emphasis on High Quality	6	10%
Business Model Component: Planned Incremental Change	3	5%
Business Model Component: Moving Up the Value Chain	2	3%
Business Model Component: Product Diversification	2	3%
Constraint: Lack of Access to Resources	20	33%
Constraint: Resistance/Skepticism	15	25%
Constraint: Low Productivity	7	12%
Constraint: Global Economic Recession	5	8%
Constraint: Product Poor Fit for Environmental Context	4	7%
Constraint: Lack of Partner Coordination	4	7%
Constraint: Corruption	3	5%
Constraint: High Competition	3	5%
Constraint: Lack of Power (Political and Economic)	2	3%
Constraint: Poor Internal Management Processes	2	3%
Constraint: National and Local Politics	2	3%
Constraint: Multiple Interconnected Challenges	2	3%