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# Needs, Needs Everywhere, But Not a BoP Market to Tap

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*Market creation, argues author Erik Simanis, is fundamentally different from market entry. And although the BoP is a "basket of compelling needs," it is not yet a "market" in the traditional sense of that term. As a result, entrepreneurs in the BoP context have to think in terms of market creation—and understand how to achieve that end in a uniquely challenging context. The wise venturer in the BoP space, Simanis writes, learns how to frame the value proposition and manage the innovation process (through seeding, base-building, and growth and consolidation) in ways that align business strategy with BoP opportunity. Through a sustained case study involving a soy-protein product, Simanis illustrates how to stay on track while building markets with the BoP.*

Numbers, as they say, don't lie. But they can definitely send you down the wrong path. Consider the following: Something like 2 billion people worldwide suffer from vitamin and mineral deficiencies. Perhaps 1 billion people globally are without clean water. More than 2.6 billion people are without access to basic sanitation. Another 1.6 billion live without electricity.

Over the past decade, such daunting statistics have been used to make the case for the existence of an untapped, multi-trillion dollar market in the base of the pyramid (BoP). The world's most technologically adept and marketing-savvy corporations have aimed to address the seemingly pressing basic needs of this demographic, from Procter & Gamble and Coca-Cola to Johnson & Johnson and Phillips.

But time and time again, there has been a strange disconnect: Low-income consumers have shown little interest in companies' basic-needs products. This happens even when companies send anthropologists and R&D teams into slums and villages to create products and business models tailored to local conditions. Take clean water, for example, an area that has attracted enormous attention. One of the most rigorous efforts involved consumer products giant Procter & Gamble (P&G).[1,2,3]

P&G, in partnership with the Centers for Disease Control and Prevention (CDC), developed and marketed a revolutionary chemical treatment called PUR that converts murky, pathogen-contaminated water into pure drinking water. A skunk-works style product development team committed to getting close to the customer drove this $10 million initiative. The team sought input from thousands of low-income consumers, visiting the homes of slum dwellers and villagers to understand their needs. Key design variables identified during the research phase included 1) visible signs that the water was clean, 2) affordability, and 3) at-home convenience.

Based on the findings, a product and a business model were developed. PUR's powder-based technology was packaged in single-use sachets, a packaging format to which low-income consumers in many developing countries were accustomed. One sachet, which could purify 10 liters of water, retailed for $0.10—a price point that was thought to fall within the means of those in the BoP. The product was "shelf stable"—an important factor, given the anticipated challenges of distributing to rural villages. The purification process demanded little more than stirring in the packet's contents and waiting five minutes before filtering the water through a clean cloth.

The business model included a social marketing campaign conducted with local health ministries, village health workers, and the CDC's field research stations, with the goal of educating consumers about the negative health impacts of dirty water. Local manufacturing was also investigated. P&G identified and pursued test markets in Guatemala, the Philippines, Morocco, and Pakistan to gain additional insights and to adapt the business model.

In short, P&G's effort was a textbook example of deep consumer listening, disruptive technology development, and holistic business model innovation. Yet despite hitting on all of the innovation buzzwords that are supposed to deliver success at the BoP, P&G's PUR was a resounding commercial failure: Three years of test marketing in the four countries produced consumer adoption rates mostly below 5 percent.[4] Even a large-scale coordinated marketing push in Pakistan involving government health officials—the one test market where P&G initially achieved a 25 percent penetration rate—soon saw consumer adoption fall back down to 5 percent. Recognizing the potential social benefits of PUR, P&G shifted its efforts into a philanthropic arm of the company. Since 2004, the P&G-supported Children's Safe Drinking Water Initiative has donated or provided at cost hundreds of millions of packets of PUR to relief efforts and nonprofits.[5]

P&G's experience is not unique. Few "clean water businesses" have profitably tapped into the supposed wellspring of BoP demand, despite the philanthropic capital and media hype bestowed on water-purifying technologies such as the LifeStraw.[6] The same pattern can be seen in other "needs-based initiatives" in sectors ranging from nutrition to energy to healthcare. To date, most such initiatives have quietly fizzled out, migrated up the economic pyramid to serve higher-income consumers, or—like PUR—shifted into a nonprofit mode.

Why have global corporations had such a hard time building lucrative businesses to serve the needs of billions of people—needs that are considered basic to human life? I believe that this seeming paradox can be resolved. The answer I point to, however, fundamentally recasts the business-innovation challenge presented by the BoP.

## From Needs to Markets

I don't dispute the statistics regarding global poverty and need. I *do*, however, disagree with what they have been assumed to represent. Why? Because the BoP, even with its basket of compelling needs, *is not actually a market*.

What do I mean by this? A consumer market, in the simplest terms, is a lifestyle built around a product. Members of a consumer market—be they at the very top or very bottom of the economic pyramid—have two defining characteristics.

First, the idea and practice of paying money for a value proposition is second nature to them. There exists a reflexive, intuitive understanding that a value proposition is, in fact, a value worth purchasing. In many Indian villages today, the idea of handing over money for clean water is as unthinkable an idea as buying bottled water was to the majority of Americans in the 1970s. It is worth recalling that almost two decades elapsed after the introduction of Perrier and Evian into the U.S. (in 1974 and 1978, respectively) before a large number of American consumers accepted the idea of buying a product you could get for free out of a faucet.

The second defining characteristic of a consumer market is that its members have "embedded" a product and its value proposition into the fabric of their lives—lives that are shaped by limited budgets and hours in a day. Consumers embed products by adapting behaviors and habits of thinking, reprioritizing routines and budgets, and adjusting relationships to other products and objects that make up their environment. It may even require creating and learning altogether new habits and routines. A working parent embedding something as simple as a morning Starbucks coffee into her life may have to set the alarm clock back an additional fifteen minutes, shepherd the kids down to breakfast earlier, learn a new commute route to work, and ultimately purchase a vehicle with a suitable coffee cup holder. The lives of low-income people are just as structured and just as full of priorities and boundaries that must be renegotiated to adopt a new product.

This distinction between needs and markets is more than semantic. It underpins the BoP paradox reflected in experiences like P&G's and PUR's. For a business to serve a need—be it clean water or high quality coffee—*a company must first create a new consumer market, a new lifestyle*. It must transform that need into a value proposition worth valuing, and it must embed the product into people's lives. But here's the catch: My research indicates that *innovation strategies effective in serving or entering existing consumer markets are ineffective in creating new consumer markets.* Market creation, it turns out, poses an entirely different kind of innovation challenge from that of market entry.

## Market Entry Versus Market Creation

Take market entry. When a corporation or solo entrepreneur looks to enter an existing market in which they do not presently operate—be it the Chinese cell phone market or the carry-out pizza market in my home town of Ithaca, New York—they face an *information deficiency*: gaps in knowledge about the local environment, the local competition, and the preferences and particularities of the targeted customers.

Those information gaps, however, can be effectively overcome through partnerships and joint ventures; industry analysis and competitor benchmarking; and various "get close to your customer" innovation strategies and marketing tools, such as human-centered design, ethnography, and the traditional focus group. All of that market research can be translated into localized business models and tailored products that outperform the competition and deliver greater value to the consumer. With market entry, managers know the questions that need to be asked and can get the answers. As entrepreneurship researchers have argued, there is literally a market code just waiting to be cracked.[7,8]

What managers and researchers often overlook is that the same situation exists on the consumer end of the equation. Once consumers have embedded a product and value proposition into their lives, they too have mental schemas and benchmarks that let them assess the oftentimes subtle changes in value that a new product presents. As anthropologists who study the role of consumption have observed, we live our lives *through* the products and objects that surround us.[9,10] Why we buy what we buy is, therefore, a complex, frequently subconscious calculation that cuts across economic, psychological, and social factors. So in one case, the monetary savings of a less-expensive shampoo may not offset the fact that the bottle's taupe color reminds one of the sterile office cubicle where he or she works. In another case, the opportunity to chat and swap stories with a long-time friend and owner of the local electronics store may trump the better picture quality of a television brand sold exclusively through a retail chain. The central point is that once a market exists and a particular product/service has been embedded in their lives, consumers have an internal value compass that allows them to intuitively map any change in value derived from switching to a newer or competing product.

Now let's look at a very different activity: market creation.[11] When there is no market and product nonconsumption is the issue, companies confront an information condition of *ambiguity*. There are no competitor products against which to benchmark; there are no customers to observe. Without any frames of reference, any and all data companies gather about the local context and consumer needs and wants—regardless of whether the data comes from a World Bank survey, from grass-roots marketing teams using empathy-based methods, or from participatory poverty assessments with villagers—are random predictions about an *unknowable* future. As *The Tipping Point* author Malcolm Gladwell poetically points out, "A prediction, in a field where prediction is not possible, is no more than a prejudice."[12]

This same conundrum is found on the consumer side. Outside of a consumer market, there is no *a priori* price point or product design that makes a product inherently appropriate to any class of consumer, be they in Kansas City or Kibera (Nairobi). Lacking the reference points that anchor products in daily lives, consumers have no basis for predicting the changes and shifts in their existing routines, ways of thinking, and sense of self that may come with embedding a new product into their lives. BoP consumers can no more reliably say whether and how much they would pay for a liter of clean water than American consumers can say whether they would pay for the mobility value of a $5,000 Segway (which to date, they have not).

My conviction on this matter comes from a personal experience much like P&G's PUR. In 2005, while working at Cornell University, I led a field team in Kenya on behalf of the global consumer-product company S.C. Johnson with the goal of developing a BoP business serving the slums of Nairobi.[13] Our novel innovation approach was built on the belief that by understanding deeply the true needs of the community, we would be able to create a business that delivered appropriate and desired products and services.

Yet despite an intensive process aimed at understanding local needs and building local insights and knowledge into the business concept—including a several-week immersion in the community, the use of various participatory development tools such as community transects and participatory workshops, multiple ideation sessions together with community members, and months of extensive consumer surveying (more than 1,000 across three slums) and product/service testing—our business launch was met with almost no consumer demand. Neither grass-roots marketing techniques, such as community theater, nor intensive awareness building efforts within the slums' various neighborhoods succeeded in moving the needle.

Yet the business, which was a direct-to-home cleaning service called Community Cleaning Services (CCS) that offered to rid homes of insect pests such as cockroaches, mosquitoes, and bedbugs; clean and sanitize carpets (many of the Muslim families in the slum had carpets), furniture, hard surfaces, and latrines; and freshen the air, certainly seemed to address salient, even pressing, needs. The slums' residents, people who took enormous pride and care in their homes and dress, had confirmed it verbally and through their actions. In one test application of S.C. Johnson's Raid in a Kibera home, some 40 cockroaches emptied out of the one mud wall on which it was applied; mattresses were often seen positioned out in the direct sun on the tin-roofs of Kibera homes in an effort to get rid of bed bugs that afflicted many residents; mosquitoes were very active at night, interrupted sleep, and were potential carriers of malaria (my home stay host in Kibera left a kerosene lantern burning on low to keep them away); and the odor of the open-pit latrines wafted around and into the houses, particularly those living along the streams into which the latrines emptied.

The fact was, residents of Kibera, Nairobi, and the other slums where we launched the project had never before been presented with a direct-to-home home cleaning service. They simply didn't know what to make of CCS. It was as odd and out of their range of experience as the Segway was to U.S. consumers when it was launched, despite the unprecedented media hype and awareness generated around it.[14] Our innovation approach, as was the case with most others, was geared to understanding local needs, translating them into an offering, and then communicating out those benefits. It was classic *market entry*. What was needed, however, was a *market-creation* approach—one built for instilling the slum residents with the new consumer mindsets, routines, and habits that would make the CCS offering a valued part of their lives.

Were it not for S.C. Johnson's steadfast commitment to the communities where the project was launched and its willingness to invest in the project as a means of building the company's capabilities for serving the BoP, it is very likely that CCS would have come to an ignominious end at that point. Instead, the business—which has been repositioned to focus exclusively on cleaning communal latrines and public toilets in the slums—now has some 40 entrepreneurs working in more than a half-dozen slums in Nairobi. As of this writing, S.C. Johnson continues in its efforts to transform CCS into a profitable business model.

## Market Creation: Why Bother?

A business leader reviewing the CCS saga recounted here might well be discouraged. Maybe "market creation" seems to be just too far outside of the company's experience. He or she might well decide to stick with the more traditional practice of market entry and to simply target company R&D and business development efforts at existing BoP markets.

That is certainly one option, and it is has borne fruit for some companies. Hindustan Lever's (HLL) often-cited success developing its Wheel brand detergent for India's BoP demographic illustrates this point.[15] Responding to a competitive threat from an Indian competitor, HLL used ethnographic methods to redesign its detergent to better match the unique needs of low-income purchasers, who in most cases were washing clothes by hand. The company reengineered its supply chain to reduce costs and reach the prevailing market price. With Wheel, HLL innovated against an existing customer value proposition and for an established BoP market. Wheel was a commercial success.

So yes—sometimes existing BoP consumer markets can be tapped without turning upside-down the company's existing routines and business models. Arla, a $9 billion global dairy company operating in more than 100 countries, is a case in point. The company's Nigerian sales and marketing team sensed an opportunity in the very low-end segment of the milk powder market. Arla conducted extensive consumer research over several months, identifying color (bright white) and solubility (lump-free) as key product attributes for this low-income segment. Milk-fat was replaced with vegetable fat to hit the target price of 10 naira (approximately seven cents) per packet. Arla's Dano "Power Cow" milk powder was launched into the Nigerian market and proved an immediate hit with BoP consumers.

Unfortunately, focusing solely on the kinds of mature BoP markets that HLL and Arla successfully penetrated may not be enough, because it effectively seals corporations off from the majority of the estimated trillions of dollars of economic value that circulates within the BoP demographic. Why is this so? As development economists have noted, developing-country economies are far from homogeneous landscapes. Instead, they consist of small islands of mature consumer markets within a vast sea of informal and nonmonetized economic activity.[16] In other words, despite the economic *potential* that exists within the BoP demographic, only a small portion of it sits in existing BoP markets that can be tapped using standard market-entry strategies.

Let's remind ourselves at this point that *nonconsumption of products and services is the defining condition of the BoP*.[17] Some companies may not even find a single existing market. For this reason, turning that economic potential into bankable returns—the elusive fortune at the bottom of the pyramid—requires the creation of new consumer markets.

This is far from a new challenge to would-be entrepreneurs. In fact, it's a challenge as old as business itself. At the end of the day, the core business challenge of selling clean water in the urban slums and rural villages of developing countries is essentially the same one faced by Silicon Valley entrepreneurs aiming to commercialize radical new technologies in the developed world. So taking the leap to serve BoP consumers lands companies in a business development challenge that—although *appearing* to be very different—actually sits very close to home.

## Making Sense of Consumer Market Creation

To understand what's different about managing an innovation process effective in creating a new consumer market, we first need to step into the shoes of the consumer and consider the process of market creation from their point of view—what cultural anthropologists call an "emic understanding."

The definition I use for a "consumer market" is drawn from such an anthropological viewpoint: It is a community of people for whom the idea and practice of paying money for a value proposition is second nature and who have embedded a product into the fabric of their lives. Embedded products, much like stage props to an actor, become part of the tapestry of objects through which we live out and perform the diverse roles and identities we take on every day—from parent, spouse, and brand manager on the weekdays, to junior-league soccer coach and amateur cyclist on the weekends. Viewed from this angle, a consumer market is the end result of a successful collective sense-making effort that has infused a product with personal meaning and significance.

As economic anthropologist Stephen Gudeman points out, markets derive their meaning and significance from a "community base."[18] The community base consists of norms and traditions held by friends and family; people's daily routines and habits; close relationships as well as transactional interactions with people; images on television and programs on the radio; man-made things, from roads and art-work to durable goods and daily consumables; and even experiences with the natural environment, including rivers, forests, and wildlife. The community base provides the raw material that gives shape to new markets and enables consumers to breathe life into an otherwise sterile, abstract product.

A great example of the birth of a consumer market through the interplay of a sense-making process and a community base is captured in the 2001 Sundance documentary, *Dogtown and Z-Boys*. The documentary provides a retrospective account of the rise to skateboarding stardom in the 1970s of a group of mostly poor, borderline-delinquent teenage surfers living in the South Los Angeles "beach slum" of Dogtown. The Z-Boys—so named because they surfed and skated for the local Zephyr surf shop team—gave rise to a global skateboard market that still today reflects the unique community base of Dogtown.

When the Z-Boys picked up the skateboard, they brought with them the aggressive, risky surfing techniques cultivated at their locals-only surf cove located under the piers of the abandoned, half-collapsed Pacific Ocean Amusement Park. The Z-Boys skated like they surfed, speeding down South LA's asphalt roads in deep crouching positions, and making daring turns while touching the pavement with their hands, much like surfers touching a wave.

This sense-making process took an interesting turn when a severe drought led to the draining of swimming pools throughout LA's suburbs. The Z-Boys sneaked into backyards to skate the emptied pools, developing radical "vertical" techniques that heralded the half-pipe skate parks of today. Thanks in part to a series of magazine articles that contained edgy photos of the Z-Boys in action, along with accounts of skateboarding tournaments frequented by the Z-Boys, consumers across the U.S. and beyond were motivated to try out this new lifestyle and to initiate their own sense-making process.

As the Z-Boys example suggests, the sense-making process behind consumer market creation doesn't follow a linear pattern. Rather, as with other complex systems comprised of many interdependent and moving parts, a consumer market is what complexity scientists refer to as an "emergent property." Emergent properties are novel properties that cannot be reduced to the component pieces that gave rise to it. There's something *more* there than what you began with.

The trouble with managing emergent properties, as complexity scientist Kevin Kelley has written, is that they present a "causality problem." When and why a collective sense-making process gains critical mass and crystallizes into a mass consumer market is unknowable. Consider, for example, some of the potential changes that might be required to persuade one village woman to embed PUR in her daily life. It may require her to reassess age-old "folk knowledge" and home remedies in order to assimilate new knowledge regarding microscopic bacteria. It may require her to jettison long-held beliefs about what clean water looks and tastes like. It may create conflict with her husband or children when money spent for PUR sachets can no longer go toward a weekly Coke or other treat. And the time taken to purchase the sachets and filter water may interrupt an informal weekly chat with friends.

The list goes on, but you take my point. What's more, this is only one (hypothetical) woman's list. The relevant personal factors will most likely vary for the other 250 women living in that one Indian village, as well as for those living in India's 600,000 other villages.[19]

Once we recognize the individual-level contingencies that come with embedding a new product and value proposition, it becomes clear why creating new consumer markets—whether in the suburbs of the U.S. or South African shantytowns—will not happen simply by delving more deeply into people's needs or by searching for so-called holistic solutions to those needs. Market creation requires a different innovation logic and approach.

In the remainder of this chapter, I discuss the different treatment under a market creation scenario of two key components involved in any new business development effort: first, *framing the value proposition*, and second, *defining the strategic innovation process*.

## Framing the Market-Creating Value Proposition

Let's begin with the value proposition. The objective from a market-creation perspective is to create an offering that encourages people to "try it on" and thereby initiate the sense-making process. For this to happen, the value proposition must have a special kind of "stickiness," as Malcolm Gladwell would have it, and as Chip and Dan Heath explore further in their book, *Made to Stick*.[20,21] The kind of stickiness that helps spread a message and generate awareness, however, isn't what we're looking for. Rather, what's needed is a kind of stickiness that gets consumers open to learning new mindsets and new behaviors. For market creation, an initial value proposition should be what I call "value open."

*Value open* means that a value proposition is open-ended and does not define specifically a product's value. Instead, value-open propositions focus on the wide range of applications in which a product can be used. Think of those late-night infomercials that show the dozens of exciting and different things you can do with a new gadget for the home. Martha Stewart, the guru of homemaking, amusingly demonstrates this concept as well. Stewart's trademark approach to showcasing creative alternative uses for products—a talent of hers spoofed in a celebrated American Express commercial that depicted Stewart using discarded credit cards to tile her swimming pool—unleashes her viewers' own zest for experimentation with novel product applications.

Value-open propositions have the effect of enlisting the consumer in "filling out" a value proposition, as it encourages him to work out in practice, and on his own terms, how a product fits in his life.[22] The idea has its roots in the work of pioneering community organizers like Myles Horton and Paolo Freire. Horton and Freire have long held that traditional educational methods that are designed to simply transfer information to people are ineffective in bringing about social change, as the ideas remain abstract. The popular education techniques they champion—techniques that get people to learn about an issue through the lens of their own personal experiences and connect it to their particular life situations—ensure that people take ownership of the social meaning around that issue. That ownership brings with it a personal commitment, and personal commitment is the key to sustained mindset and behavior change.[23]

Conventional marketing wisdom leads managers toward *value-closed* messaging. Explicitly defining and communicating a product's value is believed to remove customers' uncertainty, thereby enabling them to make informed choices. But until a product is embedded in the community base, precise messaging of a product's value combined with efforts to educate the consumer about that value counterproductively "lock in" the product's social meaning and create a "take-it-or-leave-it" decision framework that blocks sense-making.

Starting with a value-open proposition has even more positive potential in low-income markets. Why? Because it prevents the product offering from becoming boxed into a single consumer budget category, such as "health care" or "food," which necessarily puts an artificial ceiling on the size of the target market and on consumers' willingness to pay. Straddling numerous consumer budget categories—health, entertainment, socializing, personal care, and so on—expands the range of people that would find relevance in the offering, as well as the proportion of the pocketbook that consumers will direct toward the sale.

Work I conducted in India with the Solae Company helps make the point. Solae, a DuPont subsidiary headquartered in St Louis, Missouri, is a $1 billion global manufacturer of soy protein isolate for the food and nutrition industry. In 2006, Solae launched business-development initiatives in three sites across India to reach low-income consumers. While there was coordination among the sites, the two-person field teams at each of the sites were given a lot of independence and room to experiment, including setting the local sales price for the soy protein. The highest-priced site offered their soy protein at a price point almost *50 percent higher* than that set in the lowest-priced site. They used, however, a value-open positioning, creating a wide range of food-based events and socializing opportunities for women that blended fun, food, camaraderie, women empowerment, family unity, and health. In sharp contrast, the team in one of the lower-priced sites fell into a value-closed framing, focusing their communications and sales pitch almost exclusively on the health benefits of the soy protein.

The result? Despite their significantly higher price point, the site using value-open framing had *higher* demand for their soy protein, as well as a higher customer-retention rate.

I return to the Solae story in subsequent pages. For now, I submit that Solae illustrates the strategic implications of a value-open framing; such a framing can boost gross margins and, by extension, reduce the geographic reach needed for a business model to have a sufficient population base to sustain operations. One only need spend a few days traveling between the villages of almost any developing country to understand how critical both of these factors are to the viability of a business aiming to serve the rural poor, who constitute the bulk of the BoP demographic. The low-margin, high-volume logic that has taken root in BoP strategic thinking may make sense in urban slums and shantytowns where hundreds of thousands of people (or even a million, as in the case of the largest slums such as Dharavi, Kibera, and Soweto) live in close quarters and can be accessed by simply walking door-to-door. It's no coincidence that a main case study used as proof-positive of a low-margin, high-volume strategy—HLL's successful market entry with Wheel detergent—was serving largely urban Indian populations through the dense networks of mom-and-pop shops that predominate in these areas.

But in the rural areas, where an equivalent population size might be spread across a 30-mile radius in dozens of villages connected by poor roads, with no lighting, and with only sporadic bus and rickshaw service, the same business's cost structures are inherently higher. (Among other things, it takes more people at a greater travel cost to serve the same number of people.) Using value-open positioning to boost gross margins and customer conversion rates—that is, the percentage of a target population that actually becomes customers—is vital under these circumstances.

## Defining the Market-Creating Innovation Strategy

Value-open positioning increases initial traction with individual consumers and gets the ball rolling. Keeping that ball rolling to ensure the emergence of a market requires an innovation strategy built around the contingent nature of the consumer sense-making process.

Embedded innovation is one such approach.[24] *Embedded innovation* is built on a simple observation about human behavior: When people feel that they have themselves defined a want and the way to satisfy that want, they are likely to make the necessary changes and sacrifices in their lives to get it. The implication for market creation is that the most effective way to get someone to desire a value proposition and consumer offering and to then invest the time and effort to learn new routines and behaviors is to have him or her feel a sense of ownership for it.

Embedded innovation creates that sense of ownership—and by extension, consumer demand—by marrying business development with community organizing and the popular education methods noted earlier. In other words, the business-development process itself is structured to generate demand, rather than relying on marketing and awareness-building campaigns carried out at the point of commercialization or at the "go-to-market" stage. The latter often come across to consumers as efforts to convince them of a need the company believes they have, and for which the company—no surprise!—has a solution. It is a sequence that is bound to generate skepticism.

How does it work, in practical terms? Embedded innovation creates a sense of ownership by vesting an initial target community with varying levels of responsibility and ownership for imagining, piloting, and evolving a new value proposition and business, making sure that the company's own products and technologies play a central role in that business offering. As in the case of Z-Boys and Dogtown, getting the business offering embedded into an initial community base is the key, as it establishes a concrete reference point and benchmark that kick-starts the sense-making process for other consumers.

Like good community organizing, embedded innovation can be pictured as a snowballing process that continually grows the scope of community engagement and sense of ownership, thereby building the proverbial "base." Based on my experiences as a project field lead on both the S.C. Johnson and Solae initiatives mentioned earlier, and also as a consultant to additional corporate ventures in Mexico and the U.S., I recommend breaking the process into three main phases to make it manageable:

- Seeding
- Base-building
- Growth and consolidation[25]

The *seeding phase* involves building an initial buzz and base of trust in the community and then developing a strategically grounded business concept together with a community business team using the company's products and the skills of the community team. The goal is to integrate the company's products into a broader business idea that excites the community team, tapping into their visions and aspirations of running a successful business. The company's products ride the wave of emotional commitment and enthusiasm the community team has for the broader business concept.

One important point: creating this concept does not require the kind of in-depth needs assessment that typically comes with consumer research for market entry. In fact, that kind of exhaustive survey can be counterproductive. Needs assessments, because they tend toward cataloging problems, often lead to "negative" business concepts—that is, businesses aspiring to rid the community of an alleged "problem." Ironically, this can make the new business (and the company by extension) appear opportunistic, even exploitive. And from the standpoint of market creation, the elimination of something bad—whether it is carbon-dioxide emissions or cases of water-born illnesses—has a narrower and less sustained emotional appeal than that of growing the impact of good things, a message framing that McDonough and Braungart call "eco-effective" in the case of the environment.[26]

In the *base-building phase*, an initial product/service offering and basic management systems are co-developed by the company and community team through events conducted with close friends and family of the community team—what sociologists call a person's "strong-tie networks." This isn't a prototyping exercise, where consumers are engaged for their feedback on a test product. Rather, friends and family are brought together to engage in "make-and-model" workshops that turn the high-level business vision into a practical, grounded consumer offering.

Make-and-model workshops are structured as fun, socializing events at which participants provide their knowledge and experience to generate a tangible output that will form part of the product offering (the making), while engaging in the kinds of routines and behaviors that the business concept will require of consumers (the modeling). This extends the feeling of ownership and the sense of personal identification for the business offering, and gets people over the initial hump that comes with trying something for the first time. Working with strong-tie networks is important, as they are much more likely to enter with a supportive and open mindset and be willing to give their time. Contrast this approach with, for example, paying people for their involvement, which tends to undermine the forming of personal commitments to the business and risks tainting the broader community's expectations.

In the third and final phase, *growth and consolidation*, the legally registered business is launched with an initial customer base already in place, and the full value proposition and business model are evolved through the same kind of make-and-model events, through targeting the friends and family of the community team (their strong-tie networks). This leverages the goodwill in the community one step further out and expands the base of personally vested consumers.

The key things to focus on at this stage are 1) maintaining the social connections among the various participants by creating tangible markers or "badges" of their involvement and 2) visibly showcasing to the broader community the growing mass of people using the consumer offering. In anthropological terms, this "normalizes" the consumer offering and makes it appear as a natural part of the community base.

For an example of embedded innovation, I turn again to my work with the Solae Company in India. In 2006, as noted earlier, Solae (in partnership with Cornell University) created a new business to bring soy protein to low-income consumers in India. Keep in mind that soy protein isolate is not an inherently attention-grabbing consumer product like an iPhone. On the contrary, it is a bland-tasting, off-white powder. Furthermore, it's not a plug-and-play product; it requires learning new cooking habits and skills, as the protein isolate's performance is affected by the acidity and temperature of foods into which it is incorporated.

The Solae case isn't a textbook example of embedded innovation—some of the elements in the process I outlined earlier were successfully implemented in-field, whereas other elements of the process were in fact derived from the challenges we experienced and, in some cases, had the opportunity to test out in other projects. But it should give the reader a good, intuitive feel for the different flow and focus of the approach.

We launched the Solae project in two urban slums and a rural village in India. The field team and I began the process with weeklong home stays, during which we participated in the host families' livelihood activities, such as rice harvesting and operating a local retail kiosk. Our intent was to show that we were committed to being part of the community. Afterward, we began recruiting a community business team, holding dozens of small group meetings in people's homes to share our goal of finding partners who would be committed to growing a new business with Solae that could serve the community. In the end, a group of some 20 women in each location stepped up.

Rather than jumping into brainstorming sessions of how to sell soy protein, the Solae team and I spent several weeks with the women exploring how they could work together as business partners. Both sides shared personal stories and experiences on topics like unique customer value, complementary products, business models, and strategic drivers. The work built a sense of camaraderie between Solae and the women and at the same time created a shared business language linked to the women's personal experiences.

Over a period of a month, we converged on a business idea that integrated the soy protein within an offering that tapped into the women's vision of owning a bakery and being chefs. (Cooking talent is a highly respected and prized skill among Indian housewives.) The concept combined a direct-to-home cooking consulting service—akin to Avon—that would help housewives cook great-tasting, healthy meals using soy protein, along with a line of packaged and prepared foods fortified with the soy protein.

From there, the team spent an entire month cooking with Solae's soy protein in their homes, testing out and sharing recipes with family and friends, as well as together at the team office. Daily debriefs were held during which the women shared their experiences, findings, and personal anecdotes. The women and their family members became believers in the soy protein.

The team then reached out to the wider community, hosting "neighbor cookery days" with friends they considered to be expert cooks. These local gurus, as they were called, were asked by the women to share the personal skills and secrets that made them such good cooks and to prepare their specialty dishes with them using Solae's soy protein. Organized tasting sessions brought together the neighbor's family and friends and community leaders—some 80 people at a time—to give other community members a stake in the process. A recipe booklet of the community-inspired dishes was created.

The team progressed to daily "cooking outreach," meeting up with several housewives at one person's home to jointly cook a healthy dish incorporating the soy protein. The focus was on fun and socializing, as well as getting people to model and practice cooking with the protein. In the rural site, the women did their own version of home stays in neighboring villages, staying with relatives and spending the day doing cooking outreach activities. Before the businesses had been formally registered, they were receiving daily requests from other community women to sell them the soy protein.

After launch, the business introduced the soy protein in branded, refillable plastic containers for repeat customers. These customers became part of a "container club" of housewives. The housewives were often invited as a group by the women business team to present with them at local schools where their children were enrolled. In less than a year of formal business operations, the business was generating enough take-home profit, driven by the sale of soy protein to housewives, to meet almost one-half of the women's targeted incomes. And Solae's margins on the soy protein (the price at which Solae sold the soy protein to the community businesses) were on par with what it got from its traditional business-to-business customers.

Despite this encouraging start, the recent worldwide economic downturn delivered a body blow to the initiative. The additional investment required to scale the business, together with the time to reach break-even on this incremental capital outlay, couldn't be sustained. The community businesses have continued to function and purchase protein from Solae, though the absence of the Solae field teams' management guidance has been hard to replace.

Interestingly, in the haste to grow sales quickly in light of Solae's departure, the tendency by the women teams in all three sites was to revert into a market-entry approach with the soy protein: They turned to value-closed messaging emphasizing nutrition in an effort to rapidly create awareness and interest among housewives. The strategy backfired, and sales growth flattened. In response, the women teams have refocused their efforts on protein-fortified packaged and prepared foods for which there do exist consumer markets in the slums and villages. The margins on these products, however, are less than half of what they were receiving for the soy protein.

Time will tell if they can sustain their businesses on a low-margin offering, particularly in the rural site.

## Aligning Business Strategies with BoP Opportunities

My main objective with this chapter has been to parse out the BoP opportunity space, outlining different kinds of business challenges that exist and, by extension, the different kinds of business strategies they require. One of the key fault-lines that subdivides the BoP opportunity space—and one that I've tried to emphasize here—is the distinction between *market-entry* and *market-creation* opportunities. The focus is on BoP consumer market entry and BoP consumer market creation because they represent endpoints of a continuum.

As I've suggested, entering existing BoP consumer markets (as did HLL with Wheel and Arla with Power Cow) presents much the same business challenge and, therefore, requires much the same project management structure as extending one's product into a new country. It requires getting on the ground and doing rigorous consumer and competitor research, followed by some degree of product redesign and repositioning in line with those findings (should they look promising). Participatory consumer research and design capabilities are valuable in this context, whereas nontraditional partnerships tend to be less so.

These are projects that can be driven by country and or regional-level management, with payback targets somewhere between one and three years. So from the perspective of getting started at the BoP, entering existing BoP markets presents the least organizational disruption and investment. The downside, as I've noted, is that these opportunities are limited in number and size. There is no fortune to be gained by *entering* BoP consumer markets.

Conversely, *creating* new BoP consumer markets—just like creating new, blue-ocean industries in developed countries—carries enormous upside potential. But the degree of management complexity is much higher, the investment cost much greater, and the payback periods much longer. Creating an initial seed market and taking it to a scale sufficient to pay back invested capital and deliver shareholders a return is every bit of a five- to seven-year proposition—and maybe more.[27] Grameen Bank—an excellent example of an organization that created a new BoP consumer market around micro-credit—spent six years on the ground before an initial consumer base was installed and the business model was in a position to be scaled.[28] KickStart, a well-known nonprofit that created a new consumer market in East Africa around its micro-irrigation pump, took a similar amount of time to get going.[29]

A BoP market-creation effort needs to be owned and driven at the level of the country manager but with the full support and involvement of corporate-level top management. Country-level managers are unlikely to have the necessary financial flexibility to make such long-term investments unilaterally. Furthermore, the churn that happens among country-level managers—particularly in developing markets, where many managers earn their stripes—makes it difficult to maintain the necessary continuity and focus on the ground. And as I've suggested, the process of market creation effectively requires outputs and milestones that are different from the traditional go/no-go decision criteria used for product development. Top-level management sign-off is needed to work outside of operational norms.

The management implication of this final discussion can be summed up in the following adaptation of a well-known adage: "Look before you do a BoP leap." Targeting BoP opportunities whose investment profile and organizational capability needs align with what the company can do and is prepared to do sets the stage for a successful BoP venture that can then serve as a springboard for creating a portfolio of BoP-targeted investments—and, not incidentally, serving the world's low-income populations.

## Notes

[1] Hanson, M. and K. Powell, Procter & Gamble PuR Purifier of Water (A): Developing the Product and Taking it to Market. 2006, INSEAD.

[2] Hanson, M. and K. Powell, Procter & Gamble PuR Purifier of Water (B): A Second Chance. 2006, INSEAD.

[3] Simanis, E.N., "At the base of the pyramid," *Wall Street Journal*. October 26, 2009. Dow Jones and Co.: New York City.

[4] See also Allen Hammond's discussion on BoP scaling challenges, in his chapter in this book, which also cites the PuR experience.

[5] For more on the Initiative, see http://www.csdw.org/csdw/home.shtml.

[6] For more on the LifeStraw, see http://www.vestergaard-frandsen.com/lifestraw.htm.

[7] Sarasvathy, S.D., "Causation and effectuation: a theoretical shift from economic inevitability to entrepreneurial contingency." *Academy of Management Review*, 2001. 26(2): p. 243–263.

[8] Alvarez, S. and J. Barney, "The entrepreneurial theory of the firm." *Journal of Management Studies*, 2007. 44(7): p. 1057–1063.

[9] Turkle, S., ed. *Evocative Objects: Things We Think With*. 2007, MIT Press: Cambridge, Massachusetts and London, England.

[10] Miller, D., *The Comfort of Things*. 2008, Cambridge, U.K.: Polity Press.

[11] For more on the opportunity (and approaches) to create markets with the base of the pyramid, see Ted London's chapter in this book.

[12] Gladwell, M., "Most likely to succeed: the trouble with spotting talent," in *The New Yorker*. December 15, 2008. p. 36–42.

[13] I led this work as part of the BoP Protocol Initiative, a multi-year action research project centered at Cornell University and conducted in partnership with the William Davidson Institute, the Ross School of Business at the University of Michigan, and World Resources Institute that aimed to test out and refine an innovation approach appropriate for sustainably serving the BoP demographic. For more information on the BoP Protocol Initiative, see: www.johnson.cornell.edu/sge/research/bop_protocol.html.

[14] Kemper, S., *Code Name Ginger*. 2003, Boston, MA: Harvard Business School Press.

[15] Prahalad, C.K. and S.L. Hart, "The Fortune at the bottom of the pyramid," in *Strategy + Business*. 2002. p. 1–14.

[16] DeSoto, H., *The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else*. 2000, New York: Basic Books.

[17] Hart, S.L. and H.K. Christensen, "The great leap: driving innovation from the base of the pyramid." *MIT Sloan Management Review*, 2002. Fall: p. 51–56.

[18] Gudeman, S., *The Anthropology of Economy*. 2001, Cambridge: Cambridge University Press.

[19] Here's an interesting perspective: in the entire U.S., there are something less than 20,000 governing entities—villages, towns, and cities.

[20] Gladwell, M., *The Tipping Point: How Little Things Can Make a Big Difference*. 2000, Boston, New York, and London: Little, Brown and Company

[21] Heath, C. and D. Heath, *Made to Stick: Why Some Ideas Survive and Others Die*. 2007, New York: Random House.

[22] And, of course, the solutions arrived at through the "value-open" approach can eventually be incorporated into product and service design. See, for example, Patrick Whitney's description of the evolution of the concept of the Chotukool in his chapter in this book.

[23] Pyles, L., *Progressive Community Organizing*. 2009, New York and London: Routledge.

[24] Simanis, E.N. and S.L. Hart, "Innovation from the inside out." *MIT Sloan Management Review*, 2009. 50(4): p. 77–86.

[25] These three phases have evolved from the initial three-phase innovation sstructure—consisting of Opening Up, Building the Ecosystem, and Enterprise Creation—that I and colleagues developed through the BoP Protocol Initiative (see Simanis, E. N., S. L. Hart, et al. (2008). *The Base of the Pyramid Protocol, 2nd Edition: Towards Next Generation BoP Strategy*. Ithaca, New York, Center for Sustainable Global Enterprise, Johnson School of Management, Cornell University). As noted earlier, the underlying strategy behind this earlier model was based on a market-entry logic.

[26] McDonough, W. and M. Braungart, *Cradle to Cradle: Remaking the Way We Make Things*. 2002, New York: North Point Press.

[27] See Robert Kennedy's and Jacqueline Novogratz's description, in their chapter in this book, of "philanthrocapitalists," social entrepreneurs, and "patient capitalists"—and the extended time horizons that they commonly need to accept.

[28] Yunus, M., *Banker to the Poor: Micro-Lending and the Battle Against World Poverty*. 1998, London: Arum Press.

[29] Simanis, E.N. and S.L. Hart, "Expanding possibilities at the base of the pyramid." *Innovations*, 2006. 1(1): p. 43–51.