

## DRIVING INNOVATIONS AT THE BOTTOM OF PYRAMID

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### Abstract

The concept of Bottom of the Pyramid (BOP) marketing has now gained prominence among academicians and businesses owing to its regenerative impact on billions of the poor across the world. There are significant opportunities for MNCs to generate profits while simultaneously making a social contribution by targeting the BOP. In fact the BOP segment holds great potential for expansion and profits to the tune of US\$ 5 trillion. The BOP market in India accounts for 95 percent of the country's population and 84.8% of the total \$1.42-trillion national household market. So, entering BOP market in India will open up a huge customer base of nearly 925 million people with \$1.2 trillion in purchasing power parity. Prahalad (2004) has rightly stated that 'the bottom of the economic pyramid is a sandbox for innovation'. In the backdrop of this, the paper elaborates the BOP, business issues, strategic innovations and pitfalls of the BOP approach with case studies. This will provide marketers rich insight to explore the huge, untapped market and more importantly drive innovations leading to sustainable development of people occupying the bottom of pyramid.

**Keywords:** Bottom of Pyramid (BOP), Innovations, Pitfalls, Cases

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## Introduction

The concept of Bottom of the Pyramid (BOP) has attracted substantial academic and managerial attention in recent years. It was first introduced by Prahalad and Hart (2002). Their proposition was that there were significant opportunities for MNCs to generate profits while simultaneously making a social contribution through marketing to 4 billion people who occupy the lowest tier in the world's economic pyramid. The BOP market has been defined as persons who have an income of less than US\$ 3000 per capita per annum on a local purchasing power basis Hammond et al. (2007). The size of the BOP market has been estimated at US\$ 5 trillion and the major product/service categories in this are food, energy, housing, transportation and health. According to Katz (2007), the BOP market in India accounts for 95 percent of the country's population and 84.8% of the total \$1.42-trillion national household market. So entering BOP market in India will open up a huge customer base of nearly 925 million people with \$1.2 trillion in purchasing power parity Katz (2007). In the Indian context, BOP can be considered as a section of people who have moved above the poverty line and live in rural or semi-urban areas. At present, BOP consumers spend 42 percent of their income on food and beverage, tobacco, transportation and housing. However, by 2025, the spending on food, beverage and tobacco is estimated to decline to 25 percent as disposable income increases. There are a variety of reasons for firms to undertake BOP market initiatives. Martinez and Carbonella (2007) have proposed that "firms that are searching for new markets and business opportunities may find a means to commercial revitalization and ethical commitment by concentrating on the most disadvantaged". Fletcher and Fang (2006) stated that western markets have become saturated so many international marketers are turning to these markets in developing countries. But then he also pointed out that the marketers, here, are mistakenly targeting the 'minority' - the wealthy and middle class consumers - instead of the 'majority' (i.e. BOP consumers). In fact the BOP segment is one that holds great potential for expansion and profits - US\$ 5 trillion market size. So there is a huge, virtually untapped market of approximately 4 billion people located at the Bottom of the Pyramid, or the BOP. Hahn (2009) has attempted to derive an ethical rationale for engaging with the poor through BOP initiatives. He links BOP initiatives to sustainable development and suggests that the concepts of inter-generational justice and intra-generational justice could serve as the ethical basis for engaging in BOP activities. Further, Prahalad (2004) has stated that 'the bottom of the economic pyramid is a sandbox for innovation', by providing the opportunity for global firms to

discover what is likely to be the next practice. BOP markets will provide MNCs the opportunity to test new ideas and products on a huge, diverse customer base that can give better insight into whether new ideas have potential to bring in revenue. Thus, it can be inferred that the BOP market is untapped and with a lot of potential; the added advantage is that it will offer low-cost alternative to firms to introduce, examine and innovate fresh ideas, technologies, and products/services that are currently risky to be tried out in the developed markets.

The BOP markets are stated to have certain characteristics, which are unique from other markets, as:-

The first characteristic is the low purchasing power of the BOP markets. They do not purchase products at a frequent basis and if it does only in low quantities. So, the implication is that companies need to design a low-cost strategy with products tailored to their needs.

Second aspect is the lack of information concerning the BOP markets. In this case companies desirous of entering a BOP market would require certain information on its size and structure. This can be accessed by ways of potential partnerships with the non-governmental organizations (NGOs) that possess rare data on the size and structure of these markets.

The third feature is the lack of knowledge and awareness prevalent in the BOP markets. They do not know the advantages, features and usage of even basic products. So, firms will have to conduct awareness training in such markets. In addition to all these, the BOP markets have limited financial resources, lack awareness as to their rights against exploitation and live in abject poverty. These pose a major challenge to MNCs vying for a large stake in the untapped BOP markets with huge potential.

A review of BOP marketing extant literature has identified the following business/marketing issues. These issues are important and need to be addressed prior to starting any BOP initiative. The main crux is that the BOP segment though with great potential is largely untapped and not integrated into the global market economy. Other issues underlying the BOP's business alignment are as:-

Prahalad (2004) indicated that there are 4 billion people who live on less than \$2 per day and they constitute the BOP. On the other hand, Hammond et al. (2007) considered BOP at income levels of less than \$3000 per annum on a PPP basis. These varying estimates suggest that the

BOP lies within an income range of \$2 to \$6 per day. Still, more research is needed to develop a precise estimate of the BOP size.

Firms aspiring for marketing to the BOP must be clear as to how the BOP venture would fit with their business vision. For instance, they must ask these questions, as: –

- Is the venture for profitability or as a corporate social responsibility activity (CSR)?
- Is the primary aim market expansion or is it part of strategic intent which aims to stretch the organization's capabilities? Elyadi and Harrison (2010)
- Do firms have an ethical checklist which will guide their activities?
- Are ethical compliance standards built into their business and operational processes? Davidson (2009)

Since firms, often, find it difficult to implement successful BOP initiatives on their own. So, they have to devise plans for establishing linkages with multiple institutions within the commercial, government and non-governmental sectors for BOP initiatives? Prahalad (2004)

These analyses will be important in guiding the way firms conduct their businesses at the Bottom of Pyramid. It will pay rich dividends to business and government in times to come. It will help them to think creatively about new products/services that meet BOPs unmet needs and offer opportunities for market-based solutions to achieve them. For businesses, it will be important for identifying business opportunities, developing business models, developing new products/services. For governments, it will enable reforms in social sector through increased participation of the private sector. Prahalad and Hart (2002).

### **Strategic Innovations at the BOP**

As proposed by D. Abell (1980) in his seminal work on the subject, all companies must develop innovative strategies on the basis of these three key questions, as:-

- Who should they target as customers?
- What products/services and what value propositions to offer to the chosen customers? and
- How to offer these products/services in a cost-efficient way?

Strategic innovations take place when a company identifies the *gaps* in an industry positioning map and abridges these gaps in a major way. Addressing these "gaps" actually relate to finding: (a) a *new WHO* - customer segments emerging or existing customer segments that other competitors have neglected; (b) a *new HOW* - customer needs emerging or existing customer needs not served well by other competitors; and

(c) a *new HOW* - ways of promoting, producing, delivering or distributing existing (or new) products/services to existing (or new) customer segments. Prahalad, C.K. and Hammond, A. (2002). In case of the BOP markets it must be remembered that there is little need of identifying or searching for a new WHO but in actually understanding a new WHAT and a new HOW to communicate with their consumers. Unfortunately, much of the research on these strategic innovations has been focused on developed rather than developing markets. The attractive, yet virtually untapped BOP market, offers immense opportunity but there are many challenges which the firm might have to face, unlike as in the developed economies. The BOP market is plagued with low per capita disposable incomes, large number of daily wage earners, and poor infrastructure, roads, power problems. These have hampered the growth of firms in the BOP market. Further, lack of knowledge on consumer buying pattern and preferences in these markets are other related problems. Given the paradigm shift in marketing in context of the BOP, research studies have highlighted the importance of the four As in addressing the marketing challenges in the BOP. These are affordability, acceptability, availability and awareness which are synonymous with the 4 Ps of marketing.

**Affordability** - relates to the degree to which a firm's goods/services are affordable to BOP consumers. This is fundamental in reaching the new 'who' in developing markets - customers who are either non-consuming or under consuming due to low incomes. To reach this new 'who' strategic innovators need to develop products that match the purchasing capacity of these customers. Prahalad (2004) has rightly mentioned that, "Corporates should design products around a certain price rather than the other way around," To illustrate, two-thirds of Indian villagers are in the bottom income band making them very sensitive to price, and more than two-thirds of their income is typically spent on food. Given the low disposable income of BOP consumers, pricing would be the key to higher product penetration among these rural consumers. Further, people in rural areas are not only price sensitive, but also quality conscious. So, the first

step to strategic innovation at the BOP is to deliver offerings at a price point that enables consumption by even the poorest consumers.

**Acceptability** - The second challenge in serving BOP markets is to gain acceptability for the product/service. The extent to which consumers and others in the value chain are willing to consume, distribute or sell a product/service relates to the acceptability aspect. In BOP markets, strategic innovators create a new 'what' – products/services that are adapted to the unique unmet needs of customers, distributors or both. These firms respond to specific national or regional cultural or socioeconomic aspects, and their adaptations for the BOP segment as a whole. For example, to respond to a large demand for affordable products/services, the country's largest conglomerate TATA has successfully brought out several products at the lower end of the market, such as the Ginger, Nano, Tata Swach (water filter), and the Tata Housing (low-cost residential apartments).

**Availability**-Another significant challenge in serving BOP markets is to ensure the availability of products and services. It is the extent to which customers are able to readily acquire and use a product/ service. Unlike in the developed world, distribution channels in BOP markets are fragmented or non-existent and the task of getting products to people is a major hurdle. So here, strategic innovators have to manage their supply chain to deliver a new 'how' – a new way of producing, delivering or distributing products or services at the BOP. In India there are 627,000 villages spread over 3.2 million sq. km and approximately 110 million Indians live in rural areas. So reaching them is not easy, especially given the poor road infrastructure. Hence, operations costs increase and sometimes it is even higher than that in urban markets. So, though the BOP market size is of 700 million Indians, delivering goods and services to them is not easy. Hindustan Lever Ltd (HLL) is a classical model for developing a distribution system to reach even the most isolated BOP consumers. To access far-flung towns and villages, HLL distributors use auto rickshaws, bullock-carts and even canoes.

**Awareness**-Another dimension for developing a new 'how' is awareness which relates to the degree to which customers are knowledgeable about product/services. With many BOP customers largely unaware about conventional advertising media, building awareness is a significant challenge for firms in the developing world. In the Indian scenario the cultural heterogeneity makes it difficult for marketers to create awareness among BOP consumers. In

addition, low literacy rates, coupled with limited reach of the electronic media, also act as a barrier to promotional efforts. So, here strategic innovators must think about alternative communication modes and methods. Apart from the 4 As, firms targeting the BOP segment also face the following challenges, like aggressive pricing by local brands, distribution costs, inability of retailers to maintain inventory due to insufficient credit support from firms, the rural-urban divide and lack of skilled workforce.

### **Pitfalls of the BOP approach**

For any innovation to be successful marketers need to understand the market before targeting and properly positioning themselves in the minds of these consumers. Infact, innovation in developing markets has less to do with finding new customers (given the massive population) but in properly addressing issues of product acceptability, affordability, availability and awareness. There are some generalizations that must be kept in mind specifically for the BOP markets. The BOP market is large and substantial but then they don't have two of the vital characteristics that constitute a consumer market. First, they are not conditioned to easily accept products being offered that a normal consumer would naturally buy as per his requirements. And they haven't adapted their behaviors and budgets to fit the products into their lives. As it is rightly stated by marketers that a 'consumer market' is nothing less than a lifestyle built around a product. So, companies must be able to create markets—new lifestyles—among the poor consumers as well. They must make the idea of paying money for the products seem natural, and they must induce consumers to fit those goods into their long-held routines. That means working closely with local communities in developing products and businesses, to give consumers a stake in adopting the goods. This is proved by the first case on PUR's failure to capture the market despite a sound product idea with significant benefits. Further, trying to change people's mind set and behavior through an educational campaign—is often a long, uphill battle that requires continuous effort. Alternatively, companies can also start getting the community involved in creating, implementing and shaping the business itself. The sense of ownership this brings will help ensure that interest in the company's product will be widespread and sustained. The second case proves this point. Since such exploration and market penetration is a risky venture for new firms, the firms can also try to diversify their product portfolio in order to minimize the risk. This portfolio of products

should be launched with a minimum of fixed-cost investment—to give flexibility in reallocating resources—and companies should regularly monitor the offerings to see which should get more backing and which should be dropped. The third case is a pertinent example to support this viewpoint. Companies that are selling to an existing market rightly focus their message on what makes their products' 'unique' value which should be distinctive and superior to the competitor's offerings. This enables the customers while evaluating decisions but generally for BOP markets consumers are not familiar with the product concept and have no reference points for evaluation. So here, firms should offer chance to consumers to offer something new that might intrigue them and push them to try out the product. The new and unique value proposition of Lifebuoy complements this idea. Thus it can be summed from the above discussions that innovative and successful enterprises operating in the BOP markets should make use of these four broad strategies, as:-

**Focusing on the BOP** with unique products/services, or unique technologies that serve them best.

**Localizing and Co-creating value** through franchising, through agent strategies that involve building local ecosystems of vendors or suppliers, or by treating the community as the customers, or through their capacity building and training

**Enabling access** to goods/services—financially (through single-use or other packaging strategies that lower purchase barriers, prepaid or other innovative business models that achieve the same result, or financing approaches) or physically (through novel distribution strategies or deployment of low-cost technologies).

**Unconventional partnering** with the governments, NGOs, or multiple stakeholders.

**Conclusion:** When marketing to the BOP, companies should be positive. Instead of telling consumers that a product will alleviate their hardships, companies should stress how the product will make their lives more enjoyable. It is high time that global corporates start recognizing the BOP as *resilient and creative entrepreneurs and value-conscious consumers*. This positive approach will enable firms to realize fortune at the Bottom of pyramid and for the people at the bottom of pyramid.

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**Table 1: Case Studies on Pitfalls in BOP approach****CASE 1 : PURs failure**

The first problem in implementing a proper BOP strategy can be captured in this case accounting PUR's failure. It was conceived by P&G and the product was meant to convert murky, contaminated water into pure drinking water. The development team did everything from visiting the homes of slum dwellers and villagers to understanding their needs. They launched tests around the world and used local health workers to help get the word out. The final product, meanwhile, seemed perfectly suited to the potential customers. One sachet of PUR, which could purify almost three gallons of water, retailed for just 10 cents. It was also simple to use and shelf-stable, an important factor given the distribution challenges to rural villages. But PUR was a commercial failure. Three years of test marketing in four countries returned mostly low penetration rates as well as a weak return on investment. To this P&G acknowledged that its marketing effort for PUR wasn't successful, but then it was the business plan, not the approach, that proved flawed. It admitted that it lacked in its educational efforts that was needed to make the product acceptable and useful to the BOP masses.

**Case 2: Co- Creation and DuPont's Solae success**

Solae, which produces soy protein, went into a rural village in Andhra Pradesh and a slum in the city of Hyderabad and recruited people interested in starting a new business. A group of about 20 women in each location joined up and co-developed a business concept: a service that would help housewives cook great-tasting, healthy meals and provide foods using the soy. The women partners first spent an entire month cooking with the soy protein in their homes, testing out recipes for their families and perfecting culinary skills. Then they reached out to the wider community, hosting "neighbor cookery days" that invited friends considered to be expert cooks to prepare their specialty dishes but incorporate the soy protein. Then family, friends and community leaders would taste the dishes at a party. From there they progressed to doing "cooking outreach," meeting up with several housewives at one person's home to jointly cook a healthy dish incorporating the soy protein. A recipe booklet of the community-inspired dishes was created. After about six months—and before the women were ready to formally launch the businesses—the women were fielding daily requests from community residents to sell them soy

protein. Now the services are moving rapidly toward profitability.

**Case 3:** KickStart's innovative venture

The nonprofit group KickStart used this strategy to create an irrigation-pump market that stretches across Africa. KickStart began in 1991 by launching products that used manually powered technology that allowed low-income consumers to quickly make money. Along with the irrigation pump, the group developed an oilseed press, a block-making press and a hay baler, among others. Interestingly, the pump ended up being used for a wide range of applications, from washing cars to watering plants in nurseries—not just irrigation. And that brings up another crucial strategy: Companies should drive home the idea that their products have a range of uses.

**Case 4:** New value proposition and Lifebuoy's 'SwasthyaChetna' Campaign

A pertinent case is of Unilever's Lifebuoy 'SwasthyaChetna' (Health Awakening Campaign) that is probably India's largest rural health and hygiene education program. It educates people on the importance of health and hygiene in preventing diarrhoea and encourages them to adopt a simple hand-washing regime using soap. Many potential Lifebuoy customers live in remote, rural areas which can be hard to reach through conventional media. Ogilvy worked with Lifebuoy to create a direct communication campaign specially designed to raise awareness among India's largely rural and often illiterate population. Lifebuoy health officers visited 43,000 Indian villages and schools over five years where they used product demonstrations, interactive visuals, competitions and drama workshops to spread the health and hygiene message. The program was based on the simple insight that 'visible clean is not actual clean' which was brought alive through a special 'Glowgerm' UV demo. When held under ultra-violet lamps, glowgerm powder glows on hands washed only with water, symbolising germs on those hands, and does not glow on hands washed with soap.

Source: <http://online.wsj.com/article>