Innovation as a Tool of Building Competitive Advantage at the Bottom of the Pyramid

Shiv Shankar Tripathi Dr. Sadhan K. De

"The strength of these innovative approaches, as you will come to appreciate, is that they tend to create opportunities for the poor by offering them choices and encouraging self-esteem".

- C K Prahalad in "The fortune at the bottom of the pyramid"

Introduction

According to CK Prahalad (2005), almost two-third of the world population which earns less than US\$ 2 per day comprises of the bottom of the pyramid (now onwards referred to as BOP) population. United Nations Development Program (UNDP) established some Millennium Development Goals (MDGs) covering various goals to be achieved by all the countries of the world. One of the major goals amongst these was reducing income poverty and uneven distribution of wealth across the world which is gradually being achieved almost everywhere in the world barring a few exceptions like the Sub-Saharan Africa. The latest Human Development Report (2006) released by the UNDP says that "The poorest 40% (of the world population), corresponding to a \$2 a day poverty threshold, account for 5% of world income. In other words, the BOP people across the world are able to generate only 5% of the total wealth generated by the whole world. From a marketer's point of view there lies a huge opportunity in this sector (i.e. BOP) once they are able to increase the purchasing power of the people at the BOP. The same report also says that "High economic growth in China and India has been the most powerful motor for reducing income poverty". Therefore, it is indicative of the fact that something has definitely happened at the grass-root level in these countries which has spurred this economic growth and acted as an enabler for poverty reduction.

The Indian BOP scenario

According to a report of National Council of Applied Economic Research (NCAER), there are almost 400 million people in India who belong to the BOP (Table1). Another research agency KSA Technopak in its report states that 26.5% of the income of the rural consumer is spent on purchasing groceries. It means almost 73.5% of their total disposable income is spent on items that are not required for their subsistence needs, which is a big opportunity for the marketer.

Table 1

Anatomy of Rural Market			
Class	Annual Income (Rs.)	Number of People (mn.)	
The Very Rich	Above 2,15,000	4	
The Consuming class	45,000-2,15,000	115	
The Climbers	22,000-45,000	331	
The Aspirants	16,000-22,000	170	
The Destitute	Less than 16,000	124	

Source: NCAER

There was a time when the poor Indian consumers fulfilled most of their daily requirements from nearby towns and only few selected households consumed branded goods. Thanks to the ICT revolution, today a consumer in a rural area is not only increasingly becoming literate but also aware of the various products that are on offer in the marketplace. Today the markets for the BOP are as critical for the marketers as the urban markets. The BOP market is emerging as a large market for a number of goods or services- be it a consumer good or a financial or telecom service. According to KSA Technopak, rural India accounts for 55% of total private spending in the

country which is more than the total private spending of the Urban India which stands at 45%. This potential market has been largely ignored till recent past, but when the potential of the Bottom of the Pyramid is understood and assimilated by them, every company of the world is eying a share in the pie.

Innovation Patterns in the BOP markets

According to Srinivasan (2005), Prahalad offers 12 forms of Innovation to he companies in order to be able to operate in the BOP market. He puts all these into his theory of 'Inclusive Capitalism'. These are:

- 1. Alterations in the customary price performance relationship
- 2. The hybridization of technology for deployment in harsh environments
- 3. The scalability of innovations to make it accessible to a large number of people
- 4. The quest for sustainable and eco-friendly solutions since developing economies cannot afford the resources necessary to process industrial waste
- 5. The development of alternate forms of functionality
- 6. Process innovation to reduce costs and increase the scale of operations
- 7. Deskilling work to accommodate the uneducated and the untalented
- 8. The education of customers to new economic possibilities
- 9. The development of robust designs for hostile environments
- 10. Creative interface design to make technology accessible to the poor
- 11. The innovation of new distribution systems for low-cost products
- 12. The willingness of all the relevant economic actors to move into the new BOP paradigm. Prahalad (2006), says that the breakthrough innovations for the BOP market are started with the identification of the following four conditions, all of which are difficult to realize even if taken one at a time. These are –
- 1. The innovation must result in a product or service of world-class quality.
- 2. The innovation must achieve a significant price reduction at least 90% off the cost of a comparable product or service in the west.
- 3. The innovation must be scalable: It must be able to be produced, marketed, and used in many locales and circumstances.
- 4. The innovation must be affordable at the bottom of the economic pyramid, reaching people with the low-levels of income in any given society.

After the realization of the pre-requisites for innovation, companies specially the MNCs can select any of the following drivers of innovation resulting to some implications for them (Prahalad and Hart, 2002), as shown in table 2.

Table 2

Drivers of Innovation	Implications for MNCs
Increased access among the poor to TV and	Tier 4 ¹ is becoming aware of many products and
information	services and is aspiring to share the benefits.
Deregulation and the diminishing role of	More hospitable investment climate for MNCs
governments and international aid	entering develoing countries and more cooperation
	from from nongovernmental organizations
Global overcapacity combined with intense	Tier 4 represents a huge untapped market for
competition in other tiers (in the social strata)	profitable growth
The need to discourage migration to overcrowded	MNCs must create products and services for rural
urban centers	populations

Therefore, innovations are a major source of competitive advantage for the BOP. The following can be some of the modes of innovation in terms of the four basic Ps of Marketing as shown in the exhibit 1.

Modes of Innovation in the 4Ps for the Bottom of the Pyramid

Product

- New product forms convenient for the BOP consumers keeping in mind their habits and environment.
- Packaging forms like sachets, dab-on-packs, reusable boxes etc which can give them value for money and at times some value even after the consumption of the product (e.g. reusable boxes, containers etc.).
- Those products can be developed which can help the BOP people in their day to day needs specially related with agriculture. These can be rain water harvesting methods, flood warning devices, credit facilities for seeds and fertilizers,

Price

- Offering products at an attractive and affordable price, slight premium can be charged for very famous brands to satisfy the self-esteem needs of the youth.
- Providing micro-credit facilities wherever possible.

Promotion

- Using exciting vehicles of advertisement, especially those which involve the BOP consumers in some way into some activity.
- Innovative modes of communication like community radio can be used which is becoming
 very popular these days as it gives an opportunity to raise the voice of a community which
 makes the members feel important.
- Kiosk marketing is also a good means to club products, distribution (of information) along with promotion.
- For every new product, project or scheme, the village elders, prominent people like village headman, Principal of the local primary / secondary school, doctors, postman should be included from the very outset. These are the people who can spread the message at a fast pace with credibility, giving a wide Reach which is otherwise not feasible for even a large MNC due to low margins and wide geographical spread.

Place

- Companies can follow a distributed model of physical distribution of products to the customers. Here the companies need not distribute the products and services upto the end user. Rather they can empower the village folks who in turn can be motivated and guided to do so with some temporary employment like commissions etc.
- During product promotions at the *Haats, Mandis* or local fairs, companies can make a group of aspirants as a reference group for its products which will easily become popular within the community and later on they can become company's distribution agents. It will serve two purposes for a company viz., distribution of products and promotion of its products.

Exhibit 1

Models of Innovation at the BOP

In the words of Prahalad, "Innovations must become "value-oriented" from the consumer's perspective. The BOP focuses attention on both the objective and subjective performances of the product or service". In other words, for all the means of innovation to be used with the BOP people, the following two things are the pre-requisites:

- 1. The Innovations should be objective enough to be able to deliver the tangible benefits to the consumers like total value for money &
- 2. They should be able to provide some intangible benefits to the BOP people like self-esteem, financial independence, etc.

For working and getting success in the BOP market we propose some models which can be explicitly tested and implemented in the market by the companies.

1. The Rational Model

The basic features of the model can be:

• Segment the customers into two parts: BOP and Non-BOP.

- Install state-of-the art facilities in the premises to attract customers. Charge a fee from the non-BOP customer and provide the service for free to the BOP customer.
- Keep the ratio of free vs. paid such that the organization is able to finance the facilities, salaries and maintenance of the organization besides earning a profit for growth and expansion.
- This has to be done on a basis of Economies of scale, i.e. the scale of operations should be large enough to achieve economies of scale.

E.g. a similar model is being followed by "Aravind Eye Care" and "Narayan Hrudayalaya Cardiac Care", and both are profitable.

2. The Non-Profit Model

The features of this model are:

- Find out the sources of income for the company from the BOP market by serving the same market
- Pool back whatever you earn from the BOP market into the same market and expand the business.
- Follow a no-profit, no-loss philosophy.
- The modes for doing it can be empowerment of the rural women, community employment, Self-Help Groups.

NGOs, government bodies and UN supported initiatives can follow the model.

3. The MNC Model

- Send young and top management grads to the BOP market which can act as a training ground for them in their initial forming years.
- Formulate, Launch and assess various types of well-researched modes of communication to the BOP market and work upon the successful ones.
- Leverage upon the widespread distribution network to supply the goods and services to the villages through decentralized distributed system of Supply chain management.
- Based upon the knowledge of the customers develop strategies to capture market share and in turn improve the standards of living of the BOP people.

Large organizations and MNCs can follow the model.

Sources of Competitive Advantage for BOP Marketing

According to Prahalad and Hammond (2002), Businesses can gain the following three important advantages by serving the poor viz.

- A new source of revenue growth
- Greater efficiency
- Access to innovation

Out of all these what we believe is that innovation is the major tenet for success as there can be an innovative way of doing business for revenue growth. Secondly, efficiency can be improved by adopting innovative ways to say communicate with the consumers at the BOP. Examples of it can be the "Cleanliness Campaigns" of Hindustan Level Limited.

Further, Rural markets and specially the BOP markets are the hotbeds of innovation. This market can test all the business acumen a company has because it is comparatively difficult to market to these people than their urban counterparts not only in scale of operations but also in scope and sustainability. This is why large MNCs having high disposable income for R&D are ideally suited for not only experimenting with this market but also sustaining their marketing efforts.

Further, the source of competitive advantage for these companies lies in the following efforts:

1. Enabling technology as prime source of competitive advantage

All the elements of 4P, be it product, price, promotion or physical distribution, they all use technology as a prime source to build competitive advantage from the BOP market. Almost all the successful business models used today in the business world are making the best use of IT by

developing some sort of kiosk or an interactive man-machine system to market its product or service to the BOP people. In other words, we can say that information technology is the starting point for all the innovations at the BOP.

2. Promoting Social entrepreneurship

It can be done in the following ways -

- Empowering rural women and making them self-reliant
- Employing local youth in the marketing efforts who would otherwise migrate to the cities and just add to the pool of the unemployed and leave the resources at the villages underutilized.
- ITC's *e-choupal, Choupal Sagar*; HLLs Project *Shakti*, all are a hit due to targeting the potential key players in the rural economy like the women.

2. Creating Purchasing power at the BOP

As per the World Employment Report 2001, released by International Labor Organization (ILO), nearly one billion people in the world are not able to support their families. The only way out to uplift them from the shambles of poverty is to increase their buying power. Now almost all companies in India having identified the BOP as a new segment for growth of their business are working upon poverty alleviation through various means.

If we look at a more recent report of ILO report titled "Global Employment Trends Brief, 2007" a mixed result is found regarding the employment patterns of the people at the BOP as shown below in table 3.

No. of US \$2 a day working poor 1996 2001 2006* 1996 2001 2006* Share in total Share in total Share in total (million) (million) (million) employment employment employment (%) (%) (%) World 1'354.7 1'394.1 1'367.8 54.8 52.2 47.4 Central & Eastern Europe 54.5 51.4 18.0 33.0 31.0 10.5 (non-EU) and CIS 442.9 347.2 55.0 412.6 61.9 44.2 East Asia South-East Asia and the 142.3 148.4 151.6 64.7 61.2 56.9 Pacific South Asia 425.0 458.8 498.2 89.1 91.1 87.2 Latin America & the 67.3 72.4 74.5 35.4 33.6 30.9 Caribbean Middle East & North 35.8 40.5 42.8 41.3 39.5 34.7 Africa 209.5 235.5 Sub-Saharan Africa 186.3 86.5 86.8 86.3

Table 3

Source: International Labor Organization

As per the table, though there is a rising trend in terms of growth in poverty in the South Asian Region as a whole, thankfully, the same report says that the working poverty has been dramatically reduced in India at 87.2% which is an exception amongst all other economies in the region. It can have a direct inference for the companies in India who can see that their plans for the BOP consumers aimed at empowerment through employment generation are getting success (with the supportive infrastructure provided by the government).

3. Providing Micro-finance to the BOP consumers

- It will solve the problem of initial capital required to sow the crop and release the worries of a farmer, who can thereafter be engaged in some sort of the value creating activities for himself and in turn for the companies.
- When the BOP consumer will interact with institutions like banks etc., his awareness would increase and companies can therefore develop partnerships with them.

4. Developing need based products and services for the market at the BOP

Some examples** of the above specifically for the BOP market include the following

- Swedish company Ericsson, has developed a small cellular telephone system, called MiniGSM, which provides a cell phone service to a small area at a radically lower cost than conventional equipment system. It provides stand-alone or networked voice and data communications for upto 5,000 users within a 35-k.m. radius.
- The MIT Media Lab (Media Lab Asia) is a joint initiative of Massachusetts Institute of Technology and the Indian government which has developed low cost devices that allow people to use voice commands to communicate without keyboards with various internet sites in multiple languages.
- An Indian company called n-Logue connects hundreds of franchised village kiosks containing both a computer and a phone with centralized nodes that are, in turn, connected to the national phone network and the internet. Each node, also a franchise, can serve between 30,000 and 50,000 customers, providing phone, e-mail, internet services and relevant local information at affordable prices to villagers in the rural India. The cost of the system is almost 10 times lesser than the conventional telecom system.
- **5.** Awareness programs to increase 'Reach' and develop partnerships with the BOP market Awareness programs of all sorts like the "Cleanliness Campaign" of HLL, various AIDS awareness programs, Polio vaccination movement supported by almost all public, private organizations all build credence for the company, besides increasing its reach and understanding of the BOP market. It also helps in building trust and hence develops partnerships with the BOP stakeholders.

Marketing Innovations for the BOP markets: Case Studies

Besides the commonly known examples popularized by C K Prahalad like Jaipur Foot in artificial limbs, Aravind Eye Care in Cataract operations, Narayan Hrudayalaya in Cardiac surgery, ICICI bank in micro-credit, there are some other examples which have gained popularity these days. Some of them are described below.

1. CavinKare: Sachetization

It is the company behind the highly successful concept of 'sachets' which is reckoned in the personal skin and healthcare segments. Starting from sachetization of its 'Chik' shampoo to the ever-popular 'Fairever' cream that took the FMCG granddaddy – HLL, with its entrenched fairness brand, Fair & Lovely head-on, CavinKare is making successful inroads into the rural as well as urban households.

CavinKare embraces the classic long-term approach to marketing, i.e. maintaining exclusivity of the distributor and customizing product, communication and packaging and communication to suit those specific markets. Even the advertising agencies are from those countries so as to tailor their communication according to the local tastes. All this has helped them evolve with brand like Chik, Nyle herbal Range of products, Indica hair dye, Fairever fairness cream etc.

Innovative Spirit of CavinKare

- The first brand to introduce floral fragrances in shampoos.
- The first brand to break the price barrier and offer shampoos at 50 paise
- The first to offer perfumes in a unique dab-on pack at Rs. 10.
- The first to introduce a single-use perfume at Rs. 2.
- The first company who introduced pickles in Sachets.

Exhibit 2

2. ITC - E-Choupals

Indian Tobacco Company (ITC) is one of the fastest growing FMCG companies of India which launched an initiative called 'e-choupal' or Electronic Choupal as part of its social responsibility

concerns. The e-choupal through its operators called "Sanchalaks" amd "Samyojaks" broadly offer the following facilities to the farmers –

- Information on weather forecasts, market prices for grains etc., all news affecting agriculture.
- Best practices on farming, equipments, and risk management.
- Information regarding sources of agri-input supplies and also about consumer goods.
- Information about where to sell the agricultural produce.

In this way E-Choupal provides real-time information and customized knowledge by enhancing the ability of farmers to take decisions and align their farm output with market demand and secure quality & productivity. The aggregation of the demand for farm inputs from individual farmers gives them access to high quality inputs from established and reputed manufacturers at fair prices. As a direct marketing channel, virtually linked to the 'mandi' system for price discovery, 'e-Choupal' eliminates wasteful intermediation and multiple handling. Thereby it significantly reduces transaction costs. Launched in June 2000, 'e-Choupal', has become the largest initiative among all Internet-based interventions in rural India. 'e-Choupal' services today reach out to more than 3.5 million farmers growing a range of crops - soyabean, coffee, wheat, rice, pulses, shrimpin over 31,000 villages through 5372 kiosks across seven states (Madhya Pradesh, Karnataka, Andhra Pradesh, Uttar Pradesh, Maharashtra, Rajasthan and Kerala).

Each of these kiosks are supposed to achieve a break-even in an year, which they generally do and after that the operation is profitable on a standalone basis.

3. HLL- Rural Market Initiatives

HLL has undertaken a number of projects in order to improve the might of the rural consumers hence creating a large customer base of itself. Some of these initiatives are:

- Project Shakti: Aimed at empowering the rural women by providing a sustainable micro
 enterprise opportunity to them in order to improve rural living standards through health and
 hygiene awareness. Under this scheme a typical Shakti entrepreneur conducts a steady
 business by selling products of HLL, which gives her an income in excess of Rs. 1,000 per
 month.
- **Project Bharat:** It was launched in the year 1998-99. Under this project HLL vans visited villages and sold small packs consisting of a low unit price pack consisting each of its detergent, toothpaste, face cream and talcum powder for Rs. 15. The customers were shown the videos regarding how to use the products an how the use of company's products is beneficial for them as compared to their current habits.
- **Project Millennium:** It is targeted to tap the tea-vendors (chai-ki-dukan) in order to sell them the branded tea at a small price and packet size in order to improve the sale.

4. AMUL – DISK Project

The Amul model of co-operative farming represents a system that is collectively owned, operated and controlled by the farmers. It is an integrated 3-tier organized structure that procures, processes and markets the produce. The 3-tiers involved in the model of dairy farming includes village societies, district milk unions and the milk federations. This model removes the irrationalities of the traditional model where the processing and marketing was done by the middlemen, leading to major diversion of profit of the hard-earned labor of the farmer. Amul is able to do all this with the support of an ongoing project named the DISK project which comprises of computerization of more than 70,000 village societies and automation of the milk collection process. The salient features of this project are described below.

Dairy Information System Kiosk (DISK) project

The DISK project as conceived by Amul has two components:

- i) An application running at the society level that could be provided with internet connectivity and.
- ii) A dairy portal at the district level serving transactional and informational needs of all members and staff in the district co-operative structure.

The software developed for the society is able to provide

- a) Data analysis and decision support to help a rural milk collection society in improving its performance, i.e. increasing milk collection.
- b) Data analysis to improve productivity and yield of milch cattle.
- c) Farmers with facilities to place orders for goods and services offered by different agencies in the co-operative sector and seek information on subjects of interest.

The services offered by each of the centers include

- Delivery of all sorts of information related with dairying.
- Access to a multimedia database on innovations captured by Shristi (an NGO working on innovations with IIM A).
- Facilities of communication like E-mail, fax, Internet Banking services, ATMs.
- Providing facility to farmers to download government forms, receive documents etc.
- Automatic printing of daily payment slips for farmers

In this way it acts as a complete solution provider for the farmers engaged in the dairying business by leveraging Information Technology in the best way.

All of these models thus do the following things for the BOP market

- Creating opportunities for entrepreneurship
- Increasing the sustainability of business in the rural areas; and above all
- They enable the consumer at the BOP to become more aware of the globalized world and help them join the main stream of the society.

Conclusions

In the last chapter of his book "The Fortune at the Bottom of the Pyramid", Prahalad says, "we have looked at the BOP as a viable and profitable growth market. We have also understood that treating the BOP as a market can lead to poverty reduction, particularly if NGOs and community groups can join with MNCs and local companies as business partners. The development of markets and effective business models at the BOP can transform the poverty alleviation task from one of constant struggle with subsidies and aid to entrepreneurship and generation of wealth. When the poor at the BOP are treated as consumers, they can reap the benefits of respect, choice, and self-esteem and have an opportunity to climb out of poverty trap."

A competitive advantage can thus be build upon the premises of innovative marketing practices if companies:

- a) Make the products available to the BOP consumers at a convenient place and at an affordable price.
- b) Understand their reference groups where the BOP customer is influenced primarily by his culture and sub-culture.
- c) Adopt innovative advertising campaigns which not only inform but also educate them in some way, thus contributing towards the social upliftment of the society.
- d) Identify the middlemen involved in the rural areas and strategically replace them with much rational distribution and logistics channel in an organized manner in order to gradually phase them out.
- e) Are able to continuously carve out niches through all types of marketing strategies so as to fully utilize the government's support to rural development.

Therefore, with the help of the MNCs, Self-help Groups, NGOs and government's initiatives like the Common Minimum Program and PURA (Providing Urban Amenities in Rural Areas) initiatives, the BOP consumer can be the new growth driver for the globalized economy of India. All of this is possible through the innovative initiatives of the above parties which can together change the face of the Bottom of the Pyramid.

Notes

¹ The world development reports have given a World Economic Pyramid classifying the total population of the world into 4 tiers as per their Per Capita Income at PPP prices in US\$. Tier 1 has between 75-100

million people earning more than \$20,000; tier 2 and 3 comprises of 1,500-1,750 people earning between \$1,500-\$20,000 and tier 4 having the largest 4,000 people earning less than \$1,500. These tier 4 people are described by CK Prahalad as the people at the Bottom of the Pyramid.

* Preliminary Estimates.

** More such examples can be found in Prahalad's papers in various issues of Strategy+Business and Harvard Business Review.

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