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THE FORTUNE AT THE BASE OF THE PYRAMID: STRATEGIES FOR CREATING INNOVATIONS

by Santosh Jagtap, Andreas Larsson, Anders Warell and Elin Olander



The Fortune at the Base of the Pyramid: Strategies for Creating Innovations

The 'Base of the Pyramid' (BOP) consists of about two-fifths of the world population living in poverty. One of the promising approaches to tackle the wicked problem of poverty is business development combined with poverty alleviation. In this approach, innovations in products and services are required to address different constraints in the BOP such as inadequate physical infrastructure, under-developed regulatory environment, etc. This article presents strategies for innovating at the BOP. These strategies have successfully been used by several businesses to develop innovative products and services at the BOP.

by Santosh Jagtap, Andreas Larsson, Anders Warell and Elin Olander

The base of the world income pyramid, generally called the BOP, consists of poor people living on less than 2 dollars per day. About two-fifths of the world population can be categorized as poor. Poverty is multifaceted, and has the following characteristics: (1) Lack of income and resources required to satisfy basic necessities such as food, shelter, clothing, and fuel; (2) Lack of access to basic services such as public health, education, safe drinking water, sanitation, infrastructure, and security; and (3) Social, cultural, and political exclusion. Mahatma Gandhi often said - poverty is the worst form of violence.

Need of innovations to fight against poverty

In recent years, an approach combining business development and poverty alleviation has received attention. This approach, originally proposed by the late C.K. Prahalad, considers the poor people as producers and consumers of products and services. According to Prahalad and Hart, the most visible and prolific writers in the area of the BOP, this approach is important in "...lifting billions of people out of poverty and desperation, averting the social decay, political chaos, terrorism, and environmental meltdown that is certain to continue if the gap between rich and poor

countries continues to widen."

By focusing on the poor as producers, their income can be raised. This can also help to generate employment opportunities for them, and can alleviate poverty. There are two ways to focus on the BOP people as consumers. The first involves tapping BOP markets by selling products and services to the poor with the primary aim of earning profits. Aneel Karnani has rigorously argued that this approach cannot alleviate poverty, and that it can exploit the poor. The second aims at the development of the poor and to market appropriate products and services to them. In this approach, innovative solu-

”Products originally developed for the BOP can be adapted for the markets in developed countries, and this is called reverse innovation”

tions are devised to seek financial sustainability combined with the development of the poor.

Motivation for businesses to innovate at the BOP

Saturated markets and a highly competitive business landscape motivate companies to pay greater attention to opportunities at the BOP. The International Finance Corporation together with the World Resources Institute measured the size of BOP markets. The potential purchasing power of the BOP is five trillion US dollars. Furthermore, the products originally developed for the BOP can be adapted for the markets in developed countries, and this is called 'reverse innovation'. For example, GE developed an ultrasound scanner, a medical device, for rural India and China. These products are now being sold in the United States.

Strategies to innovate at the BOP

Regardless of the location of a BOP market, the constraints in innovating at the BOP are the following. (1) *Market information*: businesses often lack detailed information about BOP markets (e.g. what the poor need, their capabilities, etc.). (2) *Regulatory environment*: The regulatory frameworks are under- or un-developed in the BOP. (3)

Physical infrastructure: The infrastructure (e.g. roads, electricity) in the BOP can be inadequate. In the BOP, the existence of a logistics infrastructure cannot be assumed. (4) *Knowledge and skills*: The poor, generally, are illiterate and do not possess knowledge and skills regarding the availability of products, usage of products, etc. (5) *Access to financial services*: The poor lack access to credits and banking services.

At the BOP, innovations in products and services must address the above constraints. Consequently, strategies for innovating at the BOP are as follows.

Adapt products and processes:

This strategy includes product redesign, business model innovation, and technological adaptation. Innovations at the BOP can benefit from technological 'leapfrogging' - that is - avoiding intermediate steps to replace poor technology with the state of the art. While technology helps to deal with the daunting challenges in the BOP, it needs to go hand-in-hand with innovations in business models.

Invest in removing market constraints:

This strategy includes investing for educating consumers, enhancing or building capacities of the poor (e.g. supporting small producers who form a part of the supply

chain), and building social marketing (e.g. health campaigns to increase demand of malaria nets).

Leverage the strengths of the poor:

This strategy builds on the knowledge, networks, and abilities of the poor and their communities (e.g. developing cooperatives of the poor, employing the poor to fulfill some tasks of a business, leveraging the knowledge of the poor to design and develop products and services).

Combine resources and capabilities:

Through collaborations and partnerships, this strategy combines resources and capabilities of different organizations such as businesses, NGOs, charitable sector, local governments, etc.

Engage in policy dialogue with governments:

Businesses can overcome different constraints in the BOP by engaging in dialogue with relevant governments, and this can help, for example, to formulate appropriate regulations, reduce bureaucracy, etc.

Product and service innovations at the BOP need to use one or more of the above five strategies, which address one or more of the applicable constraints in the BOP.

The BOP design projects

At the Department of Design Sciences, Lund University, Sweden, we have undertaken research and design projects at the BOP. The design project "Made in Kenya", performed by our students Gabriella Rubin and Niklas Kull, received the Michael Treschow scholarship. They designed a human powered juice extractor that can be locally produced at a low cost.



Examples of BOP design projects by the students of the Department of Design Sciences, Lund University

Last year (2012), our students An Ni Le and Johanna Bengtsson visited Manaus in the Amazon region of Brazil for their design project aimed at creating sustainable livelihood for the local people. An Ni designed a cassava peeling machine, and Johanna designed a device to transport river-water to the households. This year (2013), Joana Cespedes, a student from our department, visited Indonesia. She designed a system to convert biomass (e.g. coconut shells) into bio-coal and gas.

One of the promising approaches to tackle the wicked problem of poverty is business development combined with poverty alleviation. In this approach, different constraints in the BOP are address-

ed through innovations in products and services. Main strategies to create these innovations are: (1) adapting products and processes; (2) investing to remove market constraints; (3) leveraging the strengths

of the poor; (4) combining resources and capabilities; and (5) engaging in policy dialogue with governments. ●

”*There is a need of innovations to address different constraints in BOP markets*”

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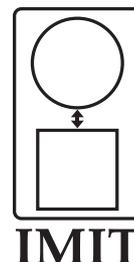
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