



# Opportunities and challenges to innovate at the bottom of the pyramid

BY **CARLOS ARRUDA, NISIA WERNECK, ANDERSON ROSSI AND PAULO SAVAGET**

Throughout his tenure at the head of Grameen Bank Muhammad Yunus showed the world an important lesson: there is a latent market that has been dismissed by many organizations but which represents rich business opportunities that allow the fight against poverty to be associated to value generation. Therefore, it is not the conventional and exclusive actions of NGOs, but also those of companies that are motivated to add new and promising markets.

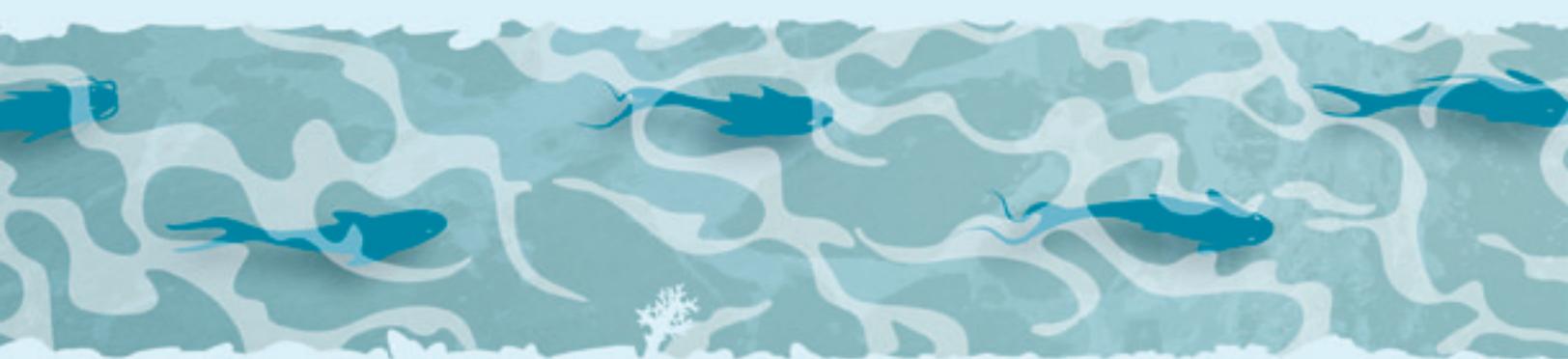
In his autobiography titled *Banker to the Poor*, Yunus states: “At Grameen we have never stopped saying that poor people are good payers, that it is possible to make loans to them on a commercial basis and make a profit, that banks can and should work for the poor people on Earth not only by altruism but also by interest. Treating the poor as untouchable ones, as pariahs, is not only morally indefensible; it is also perfectly silly from a financial point of view”.

The success achieved by Grameen Bank by promoting microcredit goes against some traditional economic concepts. Among others, it shows that it is not necessary to “grow the cake before sharing it”, and that we can promote social and economic

development sustainably while being moved not by altruism but by profit.

Therefore, many people have begun to perceive the bottom of the pyramid as a “Blue Ocean”, according to Kim and Mauborgne’s concept: an unknown ocean with some waves and a different movement of the tides, but one that is still blue. Although it is a promising market, it demands different strategies and actions from those that are directed to wealthier customers – thus, it demands a better understanding of the diversities and peculiarities at the bottom of the pyramid. Actually, the market made up by the poorest people shows growth rates that are superior to the average at the top of the pyramid.

This article explores opportunities for innovation directed at the bottom of the pyramid that will make it possible to achieve the needed differentiation to add, efficiently and profitably, these markets whose needs are generally met either informally or by small companies. It is an analysis of the different possibilities for sustainable development through innovation and it focuses on business performance from two aspects of the triple bottom line: social and economic.



**THE BOTTOM OF THE PYRAMID UNDER THE SPOTLIGHT**

When added to the rich experiences of Bengali microcredit – since Prahalad and Hart published the article *The Fortune at the Bottom of the Pyramid* in 2002 -, the expansion of such an approach in academic circles has been notable. There has also been an increased market perception of the potential business opportunities available doing business with the poorest people who have, up to now, been very much neglected.

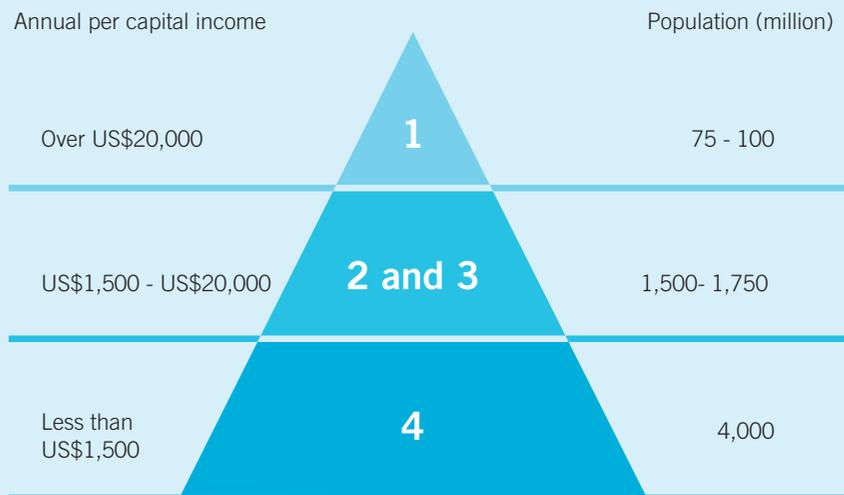
The impact of these ideas has not been restricted to catching the eye of companies and of academia, but also of multi-lateral organisms and international NGOs. These bodies have begun to grow interested in business actions not only in the field of traditional philanthropy but also as regards including the poorest people in their value chain.

What does the bottom of the pyramid mean? According to the study carried out by Prahalad and Hart (2002), the pyramid behaves as shown in **figure 1**:

It can be observed that there is a huge market that has been neglected by business: 4 billion people make up the bottom of the pyramid and their

annual per capita income is less than US\$1,500. Allen Hammond from the World Resources Institute has coordinated an important study about the topic and he estimates that low-income world markets represent over US\$10 trillion. On the other hand, Professor Aneel Karnani (University of Michigan) criticizes the expressive valuation of the bottom of the pyramid, as he believes it to have been exaggerated. He believes that this market would actually not represent more than US\$350 billion, which led him to parody Prahalad in the title of his article *The Mirage at the Bottom of the Pyramid*. Furthermore, according to Karnani, the poorest would not be in a position to take advantage of the opportunities the market offers, and this fact would make them vulnerable to exploitation. On the other hand, Stuart Hart (2005) states that this market is made up by “individuals who we do not know and who, for the most part, live in a rural environment and have little formal education - though they are not stupid”, and that corporations have never paid much attention to them. However, no matter the approach used, it is possible to state that such amounts are expressive enough not to be belittled by organizations.

**FIGURE 1 | THE BOTTOM OF THE PYRAMID**



SOURCE: PRAHALAD AND HART (2002)



**OPPORTUNITIES AND NEEDS** The arguments used to encourage business actions at the bottom of the pyramid can be classified into two broad fields: the market and sustainability (**Table 1**).

Most studies will take one of these fields as an entry point and the basis to build their arguments on, although they always highlight the other field's importance. The article *The Fortune at the Bottom of the Pyramid*, for example, stresses the "magnitude of the opportunities" and quantifies them by calling attention to the 4 billion people who make up the market of the poorest people. However, it does not fail to mention, among economic benefits (profits and growth opportunities), the "uncountable contributions to mankind" that stem from looking at globalization strategies "through the new lenses of inclusive capitalism". Among such opportunities, we should highlight the saturation of the markets that have already been developed and consolidated, which demands a quest for new alternatives for business growth.

Besides such saturation and the expressive market involved, in many instances meeting the needs at the bottom of the pyramid does not require

competing against third parties but simply supplying the "non-consumption" of either a good or a service that is generally linked to the lack of interest by businesses in offering it to peripheral regions. Thus it is that, in many cases, the needs of the poorest people are being met by small local companies, many of which belong to the informal market, that charge higher prices than those practiced by traditional companies. Such distortion has been found in many cases, including that of Nestlé products (**Page 93**), and studies carried out by the UNDP (United Nations Development Programme) have dubbed it "the scourge of poverty".

Another aspect that has been assessed in studies about the bottom of the pyramid is that the highest demographic rates can be found at this income level. Such findings, which from a certain point of view are cruel and polemic, show that this market's growth rates are much higher than those that are found among wealthier people.

**GREATER CHALLENGES AT** a meeting held with representatives from these companies at the Fundação Dom Cabral Innovation Reference Center

**TABLE 1**

Field	Focus	Dimension	Argument
Market	Opportunity	Economic	The size of the market
			Productive field for innovation
Sustainability	Needs	Social	The risk of social chaos
			The right to a better life
		Environmental	The impossibility of replicating the way of life

## BEING PRESENT IN THIS MARKET (THE BOTTOM OF THE PYRAMID) DEMANDS RADICAL INNOVATION BOTH AS REGARDS TECHNOLOGY AND BUSINESS MODELS

it was proposed to executives that they should rank, according to relevance, the challenges facing companies in their dealings with the bottom of the pyramid. The greatest consensus was that this “is not an existing market, but one that must be created” - that is, business development must be oriented by a completely new set of logic. The second most often mentioned challenge was “lack of experience on the part of the companies” as regards articulating alliances and partnerships that would help them not only to get to know bottom of the pyramid consumers better but also to create and operate a business model that would fit their profile. These two challenges are compounded by the difficulties in measuring return on investment by means of indicators.

Professor Ted London from the University of Michigan recommends a broader and organic analysis on the impact and changes brought about by companies' presence at the bottom of the pyramid. It is fundamental that such an analysis should extrapolate traditional economic and market indicators such as the return on investment rate, sales and market share. The idea here is to include and examine both the positive and the negative impacts of the company's operations and actions on the well-being of all the actors involved in the process: salespeople, local producers, distributors, consumers and the community where they are present.

When faced with all these challenges, this article proposes an analysis of the bottom of the pyramid market expansion through practices related to the open innovation concept, mainly that of co-creation, that are indispensable for this venture's success.

**PROMOTING INNOVATION** Several studies - we should highlight those carried out by Christensen and Hart - present the bottom of the pyramid as the most stimulating future market and a privileged place to develop the disruptive innovations that are thought to be essential to the economic development of poor countries. Recent studies have presented the bottom of the pyramid as “a market where one can learn”. Within such a context, being present in this market demands radical innovation both as regards technology and business models.

Practically speaking, how can Brazilian companies generate innovation and so benefit themselves from this “new” market that, according to IBGE statistics, will represent 170 million consumers from among the poorest in coming years?

Although there are various ways to differentiate products, services, processes and business models, successful and feasible innovation for the bottom of the pyramid is generally linked to being integrated with partners, customers, producers, distributors and NGOs. Thus, it is possible not only to encourage knowledge generation about such a neglected market but also to learn from other people's experiences and from closer contact with the target audience. Due to co-creation and interaction with the stakeholders, a company will minimize the risks that are inherent to the innovative process and also optimize business development and the development of the communities where it is present.

**INNOVATION THROUGH CO-CREATION** The BoP Protocol, which was launched in 2005, proposes a methodology and a set of recommendations to companies that are interested in doing business at the bottom of the pyramid. The model was revised in 2008 and named BoP Protocol 2.0. It delved deeper into practices and set out the move from the first to the second generation of strategies (**Table 2**)

The move from the first to the second generation reflects the change from a more adaptive attitude to a situation within which innovation is participative - the engine that drives a company's actions. While at first many companies used cost cutting in packaging and in product volume (sachets) to fit price to their consumers' possibilities, the second step leads to business co-creation by innovating in

TABLE 2

BoP 1.0	BoP 2.0
The poor as consumers	The poor as business partners
Deep listening	Deep dialogue
Price cutting	Expanding imagination-innovation
Redesign packaging and distribution process	Integrate capabilities and build commitments
Relations mediated by NGOs or other partners	Personal, direct relations facilitated by NGOs
<b>Sell to the Poor</b>	<b>Co-create businesses</b>

SOURCE: BOP 2.0 PROTOCOL

products, services, and business models. Therefore, they would be the result of an interaction and a deep commitment by the company to the market.

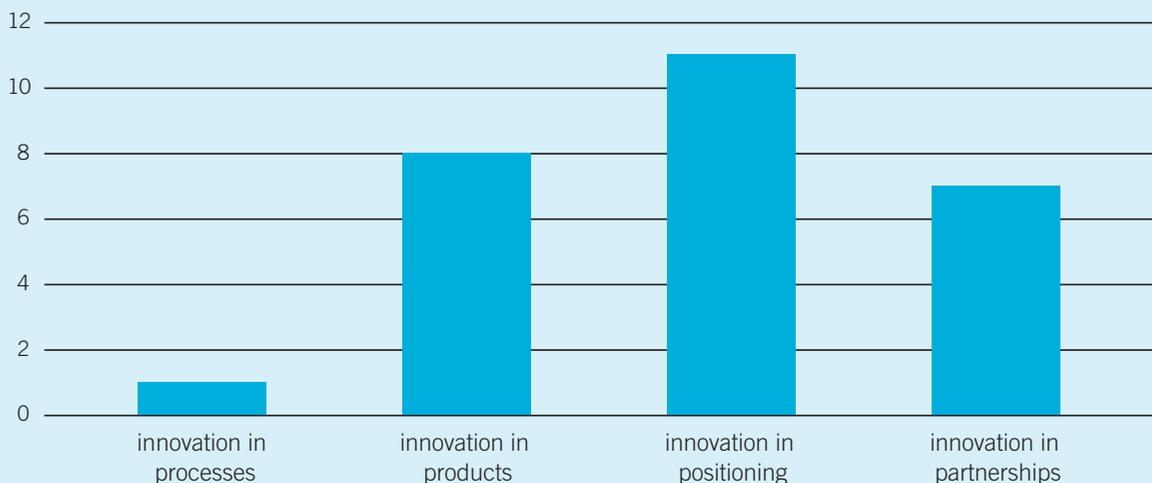
From the study developed by the UNDP, *Creating Values for All: strategies to do business with the poor*, Kramer and Belz (2008) selected the 10 most significant innovations whose development was aided by consumer participation. (Figure 2). By analyzing the cases they selected, they concluded that in all of them innovation was crucial to enter the bottom of the pyramid market. Among partnership innovations, they highlighted those that aimed to overcome distribution and communications barriers that stemmed from either lacking or insufficient infrastructure.

At least at first, co-creation implies conceiving local solutions that can be transposed to other

contexts as part of the evolution of the business and after checking it for fit. Such a process has been a success factor at the bottom of the pyramid, although, and in a certain way, it contradicts the management model adopted by large companies, whose model privileges economies of scale and centralized control at headquarters. The new model has a strong local basis that has been initially developed in small scale and through decentralized initiatives. Most of the time it will mean that making such solutions feasible will be based on a combination of commercial and nonprofit operations that will accrue economic, social and environmental benefits for both the company and for society.

The option for innovation through co-creation implies developing local capabilities and involves complementary actions such as investments to

FIGURE 2 | NUMBER OF INNOVATIONS



SOURCE: FROM KRAMER AND BELZ (2008)

create and enhance conditions for interaction and participation. It also demands increased access to credit as a condition for investments that can make it feasible to insert local consumers into the productive arena as either suppliers or partners in sales and distribution. That is why microcredit initiatives are frequently developed.

Besides using co-creation and alliances, companies overcome their lack of knowledge about the market by hiring local professionals. Nestlé's

experience is an example that takes advantage of such an opportunity.

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## CONCLUSION

Innovation that aims for presence at the bottom of the pyramid market raises great challenges, but it is absolutely necessary for both companies and society. As regards organizations, it represents new business opportunities and a more effective and deeper contribution to social development, while for society it is the magnitude of social inequality and the complexity of environmental issues that demand organizational skills that will keep it from depending only on governments and on volunteer organizations.

Nevertheless, there must be a cultural change at the company for such ventures to be successful - the company must recognize the potentiality of the new market and that its peculiarities will demand efforts that are different from those oriented to traditional markets. By understanding the singularities involved, companies will be able to reduce potential expansion risks as regards this market and be motivated to put open innovation into practice. It is through closer contact with potential partners and customers that companies will be able to acquire greater knowledge about the market. This will guide all their innovation process - from idea to absorption - and so it will increase their chances to gain new markets, achieve higher profits and promote the sustainable development of peripheral regions.

# Nestlé Case Study

At the end of 2004 Nestlé created a corporate area that is currently known as Innovation Directorship, and its purpose was to develop projects aimed at the bottom of the pyramid. Up to that time, as the company aimed its business model mostly to wealthier people, it did not have the appropriate knowledge and structure to enter this new market. Thus, it sought out a partnership with an NGO to enable it to understand the logic and the systems that were peculiar to each peripheral community and created multifunctional teams to contact such communities and to develop qualitative research.

The company noticed that the Nestlé brand was valued by peripheral communities and that they recognized the quality of its products. No matter how poor a community might be it was always possible to find products such as Leite Moça, Ninho and Nescau there. It was easy for the company to notice that those communities did not want a differentiated and less expensive product, but that they wanted the same products that were sold to wealthier people. Many of them were already sold at these places, but the region's small shops bought them from large supermarkets and sold them to the local population at higher prices.

Therefore, it is an innovation for the bottom of the pyramid without applying a formal model due to the inexistence of a development process for special products for these consumers. It was the strategy that was changed: the company had to sell the same products to the peripheral areas, albeit more cheaply and effectively. The company evaluated the possibility of selecting micro Nestlé distributors close to these districts and concluded that they should live in the same place where they would work. Micro distributor from the area would be better known within the community, better adapted to the district's specificities and better qualified to recruit salespeople. Such salespeople should work in the district where they lived and sell to their neighbors from little carts carrying Nestlé products. Thus, salespeople would know their customers' budgets, the advantages and the peculiarities of the products they were selling, and also establish a loyalty relationship with their consumers.

Besides making its products available to the peripheral communities, Nestlé encourages local commercial transactions and social and economic development by recruiting distributors from the community itself who, in turn, select salespeople from the region. The company has set up Nestlé products as kits, and some of them are offered at prices that are more accessible. People who live in peripheral districts receive such kits at home and the kits are generally offered together with gifts (dishcloth, plastic pots, cookbooks). Customers receive special conditions because besides receiving their products at home they can pay for them in several installments, as the salesperson trusts them.

Therefore, it is a system very much based on trust between consumers and salespeople and one that could never have been set up without close relations between the parties involved. It is important to highlight that this system has been extremely successful and that the rates of bad debts are extremely low.

(To gain access to the complete version of this case study, please see the publication "Inovações sustentáveis na base da pirâmide", available at [www.fdc.org.br/inovacao](http://www.fdc.org.br/inovacao))