Environmental sustainability at the bottom of the pyramid

Giulia Tolotti

European Master in Business Studies
Abstract

Poor people established in Guatemalan suburbs are concerned with how to survive on a daily basis. These worries are common for the bottom of the pyramid (BoP) components: segment that aggregates people from all around the world with own characteristics. Studies indicate the potentially profitable promise for companies to enter this market and thus, the possibility to diminish the gap between rich and poor layers in society. The lack in the literature regarding studies of environmental problems originating from the entrance of poor people into the market is considered an essential learning in building an effective marketing strategy. Accordingly, the aim of this work is to investigate it with an analysis on the disposition behaviour of poor people in urban informal settlements in Guatemala City.

Keywords: Guatemala, environmental sustainability, disposition behavior
Introduction

Nearly two-third of the world population is struggling to survive with less than 2$ each day (Sethia, 2005, p. 42). Spread all around the world these people fall into the definition of bottom of the pyramid (BoP). The characteristics they have in common is that they are “generally excluded from the current system of global capitalism” (London & Hart, 2011, p. 8). Among them the differences are many, first of all their needs, then their ethnicity, literacy and finally culture (Kolk, Rivera-Santos, & Rufin, 2014, p. 15).

In the literature the first authors that argue that the BoP tier represents a new source of opportunities for companies were Prahalad and Hart in the publication “The fortune at the Bottom of the Pyramid” (2002). Here are Prahalad’s words during an interview with regards to the article in 2004:

“Competing in the bottom-of-the-pyramid markets is increasingly an imperative for managers seeking organic growth, innovation, and, most important, organizational transformation. The developing world offers large firms an opportunity to find new sources of value—and to do good besides. Ignoring these markets in the long term could be a fatal mistake; participating will help lay the groundwork for what I like to call inclusive capitalism.”

Thus, historical patterns of consumption have always hidden the massive market opportunities. As for an iceberg, the underlying part is much bigger than the one that is outside the water. The “prodigious opportunity” comes from billions of aspiring poor who are entering the market economy for the first time (Prahalad & Hart, 2002, p. 1). By doing business with the BoP segment, companies can reach both profitability and engage poor communities to improve their life’s conditions. “Doing well by doing good” is the proposition that lead companies to face
this target. What is more, it contributes “incalculable contribution to humankind” (Prahalad & Hart, 2002, p. 1).

Indeed, doing business with poor people requires innovation in technology and in business model. First of all, companies must change their mindset from the one they use to tackle the demand in the West system. Prahalad called it “a radical change in our genetic code” (Garrette & Karmani, 2004, p. 30). Second task is to understand the specific needs of people targeted (Prahalad & Hart, 1999, p. 18). Then, companies need to reduce costs in the development, manufacture and distribution process bearing in mind not to damage quality, durability and reliability of the product. Given that, in order to evaluate the financial success of operations there is a shift to small margin on a much larger volume basis.

With an expanding consumption, products have to match the duty to be designed in an environmentally sustainable way (Arnold & Williams, 2012, p. 7). Environmental concern nowadays is receiving much attention for the spreading information about the scarce resources our planet can provide us. The economic growth, in fact, benefits the growth of population in contrast with a ruining impact on the environment (Arnold & Williams, 2012, p. 8). Consequently, BoP consumption experience has to avoid the mistakes made in the West system (Arnold & Williams, 2012, p. 8).

Particularly, I will focus on the impact that disposal of goods by BoP tier can have on the environmental sustainability. I will gain new insights on how “getting rid of things” is managed by poor people. I do believe that the opportunity for both companies and poor people to exchange goods is crucial for improving welfare. Paradoxically, welfare is not the only facet of the coin: the market can harm those at the base of pyramid also. The beneficial impact for poor people to enter the market is to own products that previously were just possible in their dreams.
An example: the idea of serving the poor with single-serve size packaging is matching the limited availability of capital of the poor, mainly gaining a daily salary. As a result, poor people can afford them. On the other side, this method produces increasingly more waste than a normal-size package (Arnold & Williams, 2012, p. 9).

Given these points, welfare of poor people is not necessarily improved by their entrance into the market. For this reason, further analysis on their impact on the environment are needed.

**Problem statement**

In this section, I will outline the problem that inspires the following work. Moreover, the section illustrates some more information about the importance of disposition behaviour in marketing studies.

In Guatemala the act of throwing the garbage on the floor is a routine. You can see frequently that after having drunk a Coke, people throw the can directly wherever they are. Besides that, we do not know much about their practices in disposing of used products and how they make their decisions concerning that. Additionally, the disposal of goods by poor people seems contradictory since we know they own scarce belongings. Our common sense bring us to think that a voluntary give away of items is infrequent. In other words, although poor people do not have so many belongings some of their disposal behaviours are done in a totally dangerous way and others in very environmentally friendly ways (Saunders, 2010, p. 445). The issue is to find out more about that.

In other words, for improving the understanding of the consumption in BoP target is not just important to recognize their choices in seeking, purchasing, using, evaluating the products but also on how their disposition occurs (Shiffman & Kanuk, 2004, p. 3). The increased
importance of this aspect on marketing is explained by the need to find solutions to the environmental problem by creating products that are easier to recover, reuse and recycle (Hart, 1997, p. 2).

**Purpose of the study**

In this section, I will illustrate the purpose of the study: the study’s content, the research questions and sub-questions. Finally, I will explain the contribution I aim at.

My work has the final objective to find new insights into the impact of disposition behaviour by BoP on environmental sustainability. That is to say, how poor people get rid of their belongings. Tradition, culture and routine embedded practices play an important role in here and the aim of this study is to give space to the description of disposal actions of poor indigenous in Guatemala.

The major disposition behaviours are collected in a comprehensive taxonomy created by Jacob in 1977. The use of this guide will support me to build my research questions. Starting point of my analysis is the “what” of the phenomenon (Patton, Cochran, 2002, p. 3). This is a broad question that wants to open up the study to provide the participants perspectives.

- What is the impact of disposition behaviour by the poor on their daily lives?

I want to explore how poor people behave in disposing of items and what is the impact on environmental sustainability.

Following, I will describe more precisely my further sub-questions. When a consumer considers the disposition of a product, there are three general choices to make (Jacoby, Berning, & Dietvorst, 1977, p. 22). These choices are the ones that I will take into consideration in my study.
First choice: Keep products
- Poor people are keeping products for later use.
- Poor people are keeping products for continuing use them with the original purpose.
- Poor people are keeping products for a different scope than the original one.

Second choice: Permanently dispose of product
- Poor people are throwing products away after the decision of disposing of them.
- Poor people are selling products after the decision of disposing of them.
- Poor people are trading products after the decision of disposing of them.
- Poor people are giving products away after the decision of disposing of them.

Third choice: Temporarily dispose of product
- Poor people are renting products they do not use anymore.
- Poor people are loaning products they do not use anymore.

My contribution will be the collection of new insights for answering these questions. The final goal is to understand how their actions affect their daily lives and the environmental sustainability.
Methodology

In this section, I will illustrate the methodology: the setting, the participants, the reasoning behind this choice and the way to implement it.

The main step is to build individual open-ended in-depth interviews for obtaining new insights. The qualitative study I want to conduct will help me to gather information of the moments, emotions and decisions when people dispose of own products, since little is known in these situations (Patton & Cochran, 2002, p. 2). The choice is due to the importance given to the details, belief system and perspectives of people interviewed. I am looking for story-telling examples.

The study will be based on 7/8 participants of the urban informal settlement of Guatemala City. The selected target for this study demands an attentive treatment regarding participants consent and confidentiality. In the first place, the voluntary participation to the interviews is to enhance. This means that they have to be informed previously about what participation entails and reassuring that declining does not have any negative influence for them. So that, it is just necessary a verbal consent. In the second place, it is therefore essential to protect the identities of the people taking part to the study at any point during it (Patton & Cochran, 2002, p. 5).

The decisions I made for my study are supported by my experience with the poor communities of indigenous living in the suburbs of Guatemala City. As far as my direct understanding is concerned, indigenous people would be more willing to open themselves with native people of the country than with foreigner. Accordingly, I will rely on the support of native people from Guatemala for conducting the interviews.

The construction of the right questions for the interview will take inspiration from the taxonomy presented by Jacob et el. explained above.
## Literature review

I will present here the literature I refer to for the analysis of my topic.

<table>
<thead>
<tr>
<th>Title</th>
<th>Author</th>
<th>Source</th>
<th>Research question</th>
<th>Contributions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact at the “bottom of the pyramid”: the role of social capital in capability development and community empowerment</td>
<td>Shahzad Ansari, Kamal Munir and Tricia Gregg</td>
<td>Journal of Management Studies, June 2012 doi: 10.1111/j.1467-6486.2012.01042.X</td>
<td>Which are the activities that effectively help? Does business really bring to the poor the expected outcome from their point of view?</td>
<td>Poverty: not a lack of resource, but a lack of capabilities and social capital Capabilities framework: more capabilities, more able to accept opportunity Measure well-being: combination of the ability to achieve and achievement Reciprocity: sharing capabilities without fear against opportunism (opportunity, mutual interest, wants), leveraging bonds</td>
</tr>
<tr>
<td>Topic</td>
<td>Author/Resource</td>
<td>Summary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bottom of the pyramid as a source of breakthrough innovations</td>
<td>C. K. Prahalad 2011 Product Development Management Association DOI: 10.1111/j.1540-5885.2011.00874.x</td>
<td>How BoP is a driver for innovation? Products: (4As) Awareness Access Affordability Availability. Deepen the knowledge about the target group for specific solutions. Innovation: new things for BoP, then bring also to Western countries.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strategic innovation at the base of the pyramid</td>
<td>Jamie Anderson and Costas Markides Magazine: Fall 2007 Research Feature October 2007</td>
<td>How to serve customers at the BoP? (consumer goods, financial services, telecommunication, home appliances). Best practices for companies targeting BoP (ex. in relation with 4As) Hyp: Strategic innovation emerges from BoP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strategies for the bottom of the pyramid: creating sustainable development</td>
<td>C. K. Prahalad Stuart L. Hart August 1999</td>
<td>Is there a possibility to serve the BoP with products culturally sensitive, environmentally sustainable, and economically profitable? Bring quality and answers to needs within an opportunity space (cost, quality, sustainable and local knowledge) Innovation drivers: over-capacity, conscience of plight, environmental development problem</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Why MNC?
Resources, transfer innovation to the top
How?
access to credit, construct feasible aspirations for poor, care of the education of the consumer, opportunity to develop sustainable products (avoid mistake in developed countries), create access to the market (for goods and for info).

<table>
<thead>
<tr>
<th>At the bottom of the pyramid: responsible design for responsible business</th>
<th>Nirmal Sethia</th>
<th>Design Management Review Summer 2005</th>
<th>How to design products for BoP?</th>
<th>Product focus (low cost, not cheap, multiple uses, durable and robust); User focus (involve them in the process); Technology focus (new ones, cut cost for the old ones); Environmental focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reviewing a decade of research on the “bottom of the pyramid” BOP concept</td>
<td>Ans Kolk, Miguel Rivera-Santos and Carlos Rufín</td>
<td>Business Society published online 22 January</td>
<td>What has become of the concept over the decade following its first systematic exposition in 1999?</td>
<td>Majority of studies are conceptual, fewer are empirical (mostly case studies); Framework BoP</td>
</tr>
<tr>
<td>Articles: definition BoP, initiators, characteristics, outcomes after activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------------------</td>
<td>-----------------------------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>An exploratory study into the disposition behaviour of poor bottom-of-the-pyramid urban consumers</td>
<td>Stephen G. Saunders</td>
<td>Monash University, Australia, 2010</td>
<td>Which are the critical incidents, emotion and decision in disposing of common household items by BoP in Africa?</td>
<td>Thematic description of findings</td>
</tr>
<tr>
<td>Segmenting the base of the pyramid</td>
<td>V. Kasturi Rangan, Michael Chu, and Djordijia Petkoski</td>
<td>June 2011 Harvard Business Review</td>
<td>Segmentation of the market for linkage between financial success of the firm and benefit for target.</td>
<td>Living standard - low income (3-5$) - subsistence (1-3$) - extreme poverty</td>
</tr>
<tr>
<td>Challenges in marketing socially useful goods to the poor</td>
<td>Bernard Garrette Aneel Karnani</td>
<td>California Management Review vol. 52, no. 4 summer 2010</td>
<td>How to develop profitable strategies in BoP context?</td>
<td>Market is not just where unmet needs, but also the willingness to pay a price higher than the total costs</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Examples of companies</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>------------------</td>
<td>-----------------------------------------</td>
<td>-----------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>Beyond greening: strategies for a sustainable world</td>
<td>Stuart L. Hart</td>
<td>Harvard business review, Jan-Feb 1997</td>
<td>Commitment of companies not to harm environment. How? Which strategies?</td>
<td>Threshold in history to change the way of doing business</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Emerging economies: added billions of consumers to the market economy- environmental challenges</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Feasible strategy: changing the technology used for creating goods</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>DFE- Design For Environment Tool for the creation of products easier to reuse, recycle, recover. During the design phase are taken into consideration all the possible impact on the environment</td>
</tr>
<tr>
<td>What about disposition?</td>
<td>Jacob Jacoby, Carol K. Beming and Thomas F. Dietvorst</td>
<td>Journal for marketing, 1977</td>
<td>Is the taxonomy for disposition behavior comprehensive?</td>
<td>3 choices: Keep the product, Permanently dispose of, Temporarily dispose of.</td>
</tr>
</tbody>
</table>
Preliminary overview of chapters

1. Introduction
   1.2 Bottom of the pyramid concept
   1.3 Environmental problems due to poverty alleviation
   1.4 Structure of the thesis

2. Theoretical foundation
   2.1 Disposition facet of consumer behavior
   2.2 Research objectives/propositions
   2.3 Relevance of the topic

3. In-depth interviews
   3.1 Data collected
   3.2 Findings

4. Limitation

5. Conclusion
Work Plan

<table>
<thead>
<tr>
<th>Month</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>September/October</td>
<td>Searching secondary data material and working on the Exposé</td>
</tr>
<tr>
<td>Mid October</td>
<td>Hand in Exposé</td>
</tr>
<tr>
<td>October</td>
<td>Evaluation and modification Exposé</td>
</tr>
<tr>
<td>November</td>
<td>Building interviews + pilot interview</td>
</tr>
<tr>
<td>December/January</td>
<td>Conducting interviews</td>
</tr>
<tr>
<td>January</td>
<td>Starting analysis of the data</td>
</tr>
<tr>
<td>End of January</td>
<td>Intermediary MA presentation</td>
</tr>
<tr>
<td>February/April</td>
<td>Further analysis of the data</td>
</tr>
<tr>
<td>April/May</td>
<td>Finalization</td>
</tr>
</tbody>
</table>

“Never be afraid to take on a really tough problem. When you solve it, the benefits will be that much greater.” Carl Gerstacker
References


