



Norwegian School of Economics

Bergen, Spring 2016

Business Model Categories for the Base of the Pyramid and Challenges in the South African Market

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Master Thesis in International Business and Strategy & Management

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This thesis was written as part of the Master of Science in Economics and Business Administration at NHH. Please note that neither the institution nor the examiners are responsible – through the approval of this thesis – for the theories and methods used or results and conclusions drawn in this work

Abstract

The purpose of this thesis is to map various categories of business models to reach the Base of the Pyramid (BOP) customer segment, and to highlight some of the main perceived challenges in the South African market, with an emphasis on how these are dealt with within the different business model categories. Applying a business model framework consisting of the four interrelated elements of target customer, value proposition, delivery and capture, we conducted a qualitative, multiple case study to aggregate the three business model categories Engaging the Entrepreneur (EE), Poverty Premium Eradication (PPE) and Multipurpose Product (MPP). These offer insights as to the role of the BOP, how to create value for this segment and how value might be captured. Value delivery was found to be independent of the business model categories. Furthermore, we found that the main perceived challenges were dealt with in similar manners across the business model categories, and that one means was used to solve several issues. As the solutions to the challenges were found mainly, but not exclusively, in the value delivery of the business model framework, it lead us to conclude that the solutions to the challenges were largely business model category independent.

Acknowledgements

We set out with a goal to discover how companies can make a profit by expanding into the very poorest segments, and by doing so, lifting millions of people out of poverty, not by charity, but as a positive side effect. With a strong ideological conviction that these two goals are indeed possible to combine, we wanted to provide managers with the tools and insights needed to do so. Through our study, we believe we have managed to provide further insights into this very interesting topic, and compared to what we knew a year ago, we can say for certain that the journey has been a learning process for us.

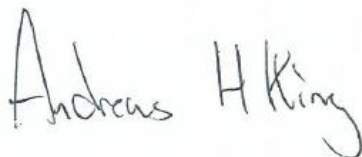
The research would have been impossible without the consistent guidance and support from our supervisor, Tina Saebi, who have helped us with facilitation, excellent feedback and a thriving commitment. Thank you!

In addition, we would sincerely like to thank the Strategy group at the Department of Strategy and Management at NHH for generous funding, allowing us to travel and collect first hand data for our research.

Of course, the research would not have been as valuable without the contributions from Tersia Esbach at Vodacom, Arnaud Blanchet at Last Mile for BOP, Berno Potgieter at Domestly and Ashleigh Coull at the Unilever Institute at the University of Cape Town. Thank you very much!

Finally, we want to extend our gratitude to our girlfriends, friends and family for their continuous support throughout the whole process of writing our Master Thesis.

May the force be with you!

Handwritten signature of Andreas H King in black ink.Handwritten signature of Tere # [unclear] in black ink.

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1 Introduction

During the last few decades, western markets have gradually been saturated. This has led to a stagnation of growth for multinational corporations (MNCs), and consequently, they have been forced to look elsewhere for expansion opportunities (London & Hart, 2004). Simultaneously, developing countries, especially in South East Asia, have experienced exponential growth, resulting in the attraction of profit-seeking western MNCs to these emerging markets. When entering these foreign markets, the corporations mainly approach the middle and upper class of consumers found at the top of the economic pyramid (TOP). This provides them with the convenience of catering to customers that are similar to their customers back home, and allows them to a larger degree to transfer their existing business models to the new market.

While this lets the companies conduct “business as usual”, it neglects the vast mass market found at the base of the pyramid (BOP), a term first introduced by C. K. Prahalad. According to him, this neglect is a result of several orthodoxies characterizing large corporations. These include, for instance, a conviction that the poor simply cannot afford their products and that only developed markets are willing to pay for new technology (Prahalad & Hart, 2002). Through several articles and books, Prahalad and his colleagues argue why this segment consisting of moderately and extremely poor people can actually be an attractive aim for market expanding and profit seeking companies, calling for a re-examination of the orthodoxies (Prahalad & Hart, 2002; Prahalad C. K., 2004).

As the customers at the BOP have limited disposable income, the traditional idea of high margins per transaction is not suited for this market. Rather, the companies should redirect their attention from margins to volume, recognizing and taking advantage of the fact that the BOP, estimated to 4 billion people worldwide, possesses significant buying power at an aggregated level. Furthermore, commercial corporations need to reconsider the view that the poor only have basic need and that these needs are taken care of by governments and non-governmental organizations (NGOs). Quite contrary, the BOP wants goods and services just like other income tiers, suggesting that by focusing on what the customers actually want rather than what they need, there is potential for profits. A positive side effect of approaching this market is the empowerment of the poor, and ultimately the alleviation of poverty, effectively making it a win-win situation for the parties involved and the society as a whole (Prahalad C. K., 2004).

Even though it is attractive in terms of aggregated purchasing power, catering to the BOP is associated with significant challenges, including affordability, accessing the segment,

infrastructure, lack of education and knowledge about products to name a few (Prahalad & Hammond, 2002; Prahalad C. K., 2004; Karnani, 2006). Common throughout the literature, regardless of which of the challenges are mentioned, is that they are discussed almost exclusively at an overarching level. As a result, there is no discussion of whether there is a set of main perceived challenges or whether certain challenges are more substantial in some parts of the world than in others. Additionally, solutions are rarely offered, and ultimately this creates a gap in the literature.

Despite the BOP being a challenging customer segment to reach, there are several case studies reporting on companies that have succeeded. While the BOP is found in both Africa, Asia, and Latin America, case studies are conducted almost exclusively in the latter two, consequently leaving a gap in African case studies. As the Sub-Saharan region of Africa (SSA) has experienced a high level of economic growth over the last years (Ernst & Young, 2014), this is a particularly interesting area seen from a business point of view. Furthermore, it contains a vast BOP segment, with for instance 70 % of South Africa's 50 million citizens living in moderate to extreme poverty (Research ICT Africa and Intelecon, 2012). Regardless of the recent growth and potential at the African BOP, research reveal that of the companies currently not present in Africa, only 10 % have a specific plan for making investments there. Furthermore, only 67 % of the companies that are present have such a design, which means one third of the companies currently operating in Africa, lack a specific business model for doing so (Ernst & Young, 2014). This highlights a business model gap on the practitioner side.

Even though the concept of business models is an emerging and much debated topic (Zott, Amit, & Massa, 2011), it enables the study of a business as a whole. This makes it a well-suited framework to analyse why companies might succeed in certain environments or with certain customer segments, such as the BOP. Nevertheless, business models aimed at the BOP is a scarce subject in academic literature, creating the theoretical equivalent to the above-mentioned gap. The various case studies mention and discuss selected business model innovations, but only rarely apply a designated business model framework. This makes the literature fragmented as it consists of several single and multiple case studies with no effort to aggregate them and look for common elements on which possibly to base a categorization of the various ways to approach the BOP segment.

1.1 Research Questions

Resulting from the gaps pointed out above, this thesis aims to contribute in two ways. First, to see whether there are common denominators in the various case studies found in the academic

literature, and if it is possible to create business model categories by aggregating these case studies. Second, it seeks to contribute to the gap in discussions regarding the challenges in reaching the BOP segment, by mapping the main perceived challenges and their respective solutions, in the South African market. Consequently, we propose the following two research questions:

1. *What are the different categories of business models at the BOP?*
2. *How do these business model categories deal with the main perceived challenges at the BOP in South Africa?*

1.2 Outline of the Thesis

We aim systematically to answer these two research questions throughout our thesis, of which the structure is provided in Figure 1.

In chapter 2, we discuss our choice of an exploratory and qualitative methodology, explain in detail how we collected and analysed the data. We then evaluate the methodological choices focusing on reliability, validity, generalizability before we finish the chapter by considering the ethical aspects of our research.

Chapter 3 provides a critical review of existing literature in which systematically go through articles on the BOP and business models for the BOP. Here we focus on shortcomings in the literature and identifying gaps to which we aim to contribute through our research.

In order to conduct a systematic and meaningful analysis of business models aimed at the BOP and how to deal with the main perceived challenges, an analytical framework is needed. This is provided in chapter 4, where we, based on a brief review of existing theory on the concept of business models, conclude with a four-element business model framework that provides the structure of chapter 5 and the basis for chapter 6.

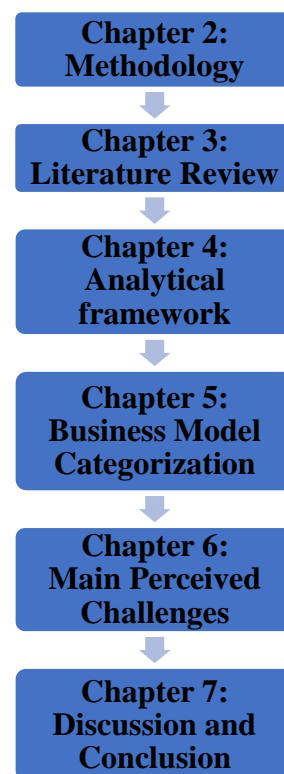


Figure 1: Structure of the Thesis

Chapter 5 deals with the business model classifications, going through the various business model elements of the three classifications Engaging the Entrepreneur, Poverty Premium Eradication and the Multipurpose Product before chapter 6 explores how three South African companies, representing each of the categories of business models, deal with the main perceived challenges in the South African BOP market.

Finally, chapter 7 provides a discussion of our findings and aims to connect the analytical findings from chapter 5 and 6. Furthermore, we point out the managerial and theoretical implications before we highlight the limitations in our research and propose ideas for future research on the subject.

2 Methodology

In order to explain how we conducted our research, we start this chapter by stating the purpose of our thesis and relating this to our choice of a qualitative methodology and an exploratory design. Then we elaborate on how we collected data for the various objectives, including concept definitions, gap identification, creating an analytical framework and analytical purpose. Following this, we describe how we performed the actual analysis before we evaluate our method by discussing credibility, generalisability and ethics.

2.1 Choice of Methodology

The purpose of our thesis is twofold. On one side, by studying both existing literature and our case studies from Cape Town, South Africa, we *generated business model categories for the BOP*. Furthermore, using the examples from Cape Town, we tried to say something about *how challenges are dealt with within the different business model categories*.

Rather than proposing a hypothesis to put to the test, our research questions' inherent nature calls for discussion and reflection. This implies that the method employed should ensure comprehensive and complete observations. Collecting data in this manner allows for an in-depth understanding of the concepts in question, and, furthermore, it allows us to generate new, grounded theories (Maxwell, 1996). For these purposes, Maxwell (1996) as well as Ghauri & Grønhaug (2005) argue that qualitative methods are better suited. Although the number of observations may be lower compared to that of quantitative methods, several aspects of the problem can be studied (Ghauri & Grønhaug, 2005), enhancing the understanding of the phenomenon. Following this line of arguments, we applied a qualitative methodology to answer our research questions.

As the field of business models for the BOP is relatively unexplored, we used an exploratory design enabling flexibility and adaptability (Maxwell, 1996; Saunders, Lewis, & Thornhill, 2012). This allowed us to start out with a broad focus, and, through adjusting when necessary, narrowing down the focus to point out the important findings and elements. Consequently, our findings can contribute to an increased understanding of business models for the BOP both at a higher level of abstraction and at a more context specific level.

2.2 Data Collection

The data collection was executed in four separate stages with four distinct purposes. We started by searching for articles about the BOP in order to highlight why this segment is interesting, challenging and relevant, and, ultimately, to enable us to define the term properly. Next, to identify gaps in the literature, we performed a literature search for business models for the BOP before we gathered literature about business models to provide us with an analytical framework. Finally, we travelled to Cape Town, South Africa, to conduct interviews with three service companies. These three interviews constitute, along with the relevant articles identified through our search for literature on the BOP and business models for the BOP, the data collected for analytical purposes, as shown in the overview in Figure 2. In the following, each of the data collection procedures will be discussed in the same order as they are listed above.

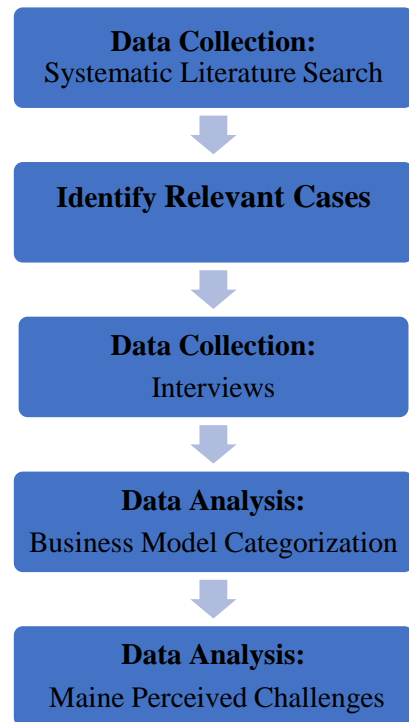


Figure 2: Data Collection and Analysis Process

A Systematic Literature Search

Starting with the collection of secondary data, we will in the following explain in more detail our search for existing literature on the BOP, business models for the BOP and finally, on business models.

The BOP

The first search we performed was in the Business Source Complete database for articles on “bottom of the pyramid” and “base of the pyramid” using quotation marks to avoid hits based on grammatical coincidence. Having checked off “scholarly”, “English” and “AB abstract”, this yielded 256 hits (see Appendix 2.A) that needed to be evaluated, and possibly eliminated, based on the following criteria:

1. *If an article by any means was unavailable, it was excluded*

2. *If the article did not provide any discussion of the term “bottom/base of the pyramid”, it was eliminated*
3. *If the article was a review of a book, it was eliminated and the book was acquired.*

After reading the abstract and the conclusion of the 256 articles, 43 remained that seemed relevant to this topic specifically, and 58 that might be relevant either partly to this topic, the discussion of business models for the BOP or more generally as a reference for our thesis later on. The 101 fully and partly relevant articles were read more thoroughly in order to map the articles that provide a deeper discussion of the BOP term. Ultimately, 20 articles remained that provided either descriptions, discussions, numbers or figures that in some way could contribute to get an overview of the different perceptions of the BOP and what has been written about it. These 20 articles became the basis of our literature review on the BOP.

In addition to the two books of which we found reviews in the literature search, we applied a snowballing technique and added six articles, increasing the total number of articles to 26. Though we were unable formally to identify whether the two books and six articles were peer reviewed, we ended up using some of them in the review as they included works of, among others, Prahalad and Hart, which are credited with the creation of the term.

Business Models for the BOP

Searching for articles about business models for the BOP, we continued using the Business Source Complete database and checked the boxes for “Scholarly”, “English” and “AB Abstract”. To find articles on the subject, still using quotation marks to avoid irrelevant hits, we used different variations and combinations of “business model”, “base of the pyramid” and “social innovation” to name a few. For a more comprehensive list of terms and hits, see Appendix 2.B. We ended up with 237 hits, and after having eliminated duplicates, 231 articles remained. These were evaluated based on the following criteria:

1. *If the article for some reason was unavailable, it was excluded.*
2. *If the article did not include neither BOP as a target group nor business models as a unit of analysis, it was eliminated.*
3. *If the article was mainly about public rather than private sector, it was eliminated.*

After reading the abstract and conclusion, articles were eliminated in coherence with the above-mentioned criteria, and 47 articles remained that seemed relevant to our case, meaning that they

to a larger or lesser extent analyse how firms act to reach the BOP segment. Following this, we did a more in-depth reading of the articles, and found that only 26 of the 47 articles were in fact relevant, and hence these 26 articles provided the basis for our review of business models for the BOP, focusing on identifying gaps in the literature.

Business Models

As this stream of literature is relatively well developed, we based our discussion of the business model concept on often-cited articles on the subject. With the most recent of the nine selected articles being from 2010, we added one article from 2015 to include literature that is more current. These ten articles provided us with a foundation upon which to base both a brief discussion of the literature, our choice of the business model concept as an analytical tool and our understanding of it.

Collecting Data for Analytical Purposes

For analytical purposes, our initial data set consisted of the secondary data collected through our literatures search on the BOP and business models for the BOP. While these books and articles to some extent discuss how companies act to reach the BOP, they relate the discussion only loosely to the concept of business models. As a result, we deemed it necessary to complement our data set with primary data in order to get a more complete picture and to discuss all aspects of the business model concept.

To make sure the additional data satisfied our needs, we chose semi-structured in-depth interviews as the additional data collection technique. This form of data collection allowed us to start by asking broad questions and asking follow-up questions when needed. Furthermore, it enabled us to collect comprehensive, in-depth data, in addition to permitting us to emphasize certain business model or contextual elements as we saw necessary. Adding interview to our data collection techniques, we end up with a multimethod qualitative study, as both the literature search and the interview are qualitative techniques that, in our case, will be analysed qualitatively. Furthermore, as time is not a variable in our study, the study will be cross-sectional.

Sampling

Following our decision on how to collect data, we needed to sample companies to interview. As the identified literature revolved largely around Southeast Asia and Latin America, we discovered a significant gap in SSA. With the telecom industry being known to engage with the BOP, we went on to map what telecom operators were present in the various SSA countries. Consequently, we found that several of the largest telecom companies, comprising Vodacom, MTN, Airtel and Orange, were simultaneously operating in one portion of the countries, whereas in the rest, only one of them was present. For a comprehensive list, see Appendix 2.C. Following this, we employed a volunteer, self-selection sampling technique, as we first made contact with the various companies in Ghana, Kenya, South Africa and Tanzania through e-mail and by phone during spring 2016.

Our initial sampling resulted in a continuous dialogue with Vodacom, Telkom and MTN in South Africa, two of which were situated in Cape Town. This led us to continue our sampling, adding local Cape Town companies within the service industry, ultimately leading to agreements on doing interviews with Vodacom and three smaller local businesses all of which catered to the BOP. The three local companies consisted of Domestly, Last Mile for BOP and Walletec, of which the latter was cancelled during our stay, leaving us with an additional three cases for our data set.

In order to collect the primary data, we travelled to Cape Town to conduct the interviews in person. This had several advantages as we got to experience the environment in which these companies operate within first hand. Furthermore, we could apply a technique of snowballing as the companies put us in contact with other parties that might possess relevant data that otherwise would be inaccessible. This was, for instance, the case with the Unilever Institute at the University in Cape Town and a consultant agency named Eighty20. Furthermore, as we experienced a certain level of difficulties in communicating via phone when making the initial contact with the companies, doing the interviews in person enabled us to avoid any such issues that might appear if the interviews were done via phone or internet. Being present with the interviewee and recording the interview with a voice recorder assured us that the data were as good as possible.

The interviews

In order for the interviewees to prepare, we sent an interview layout (see Appendix 2.D) prior to the meeting. The layout presented the main themes upon which we would touch, and had them categorized according to our business model framework. Under each of the categories, we included both more open questions and examples of more specific questions that we might ask if necessary.

On the days of the interviews, we met with the CEOs of Domestly and LM4BOP and the Executive Head of Strategy and Research at Vodacom. We started by explaining the interview layout and clarifying confidentiality and the recording of the interview. At the beginning of the interview, the interviewees were asked briefly to present the company before we went on to ask questions about their business models, starting with open questions like “How do you create value for the various users?” and “How do you market and distribute the product/service to the different customer segments/users?”. These questions gave the interviewees the opportunity to talk freely about the topic before we asked more detailed and specific questions if necessary. Whenever we asked questions, whether they were open or more specific, we aimed not to pose them in a leading manner. After all the topics were covered, we asked the interviewees if there was anything they wanted to add, in case they felt something important had been let out.

Having collected all the interviews, we transcribed them and hence prepared them for analysis. Though we aimed to transcribe them as accurately as possible, adjustments were made when necessary to clarify the meaning of what was said.

Collecting primary data through interviews served two purposes. First, they were added to the body of data, which was used as a basis to perform the business model categorization, and second, they constituted the entire data set on which we based our analysis of the main perceived challenges.

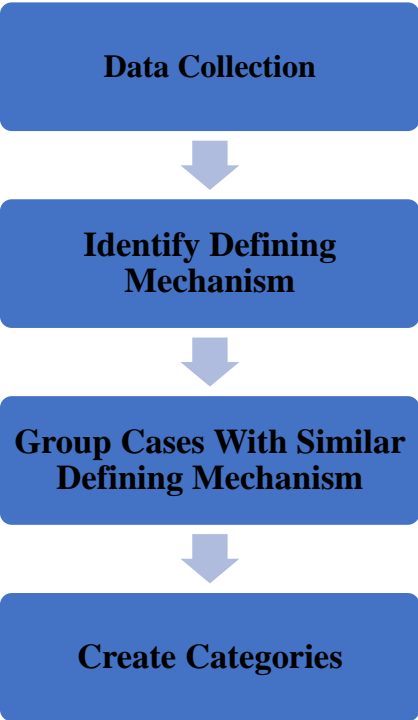
2.3 Data analysis

After the data was collected, we analysed it in two separate sessions in order to answer our two research questions. Both analytical processes bear resemblance to the process proposed by Eisenhardt (1989), as, for instance, we applied multiple data collection methods, employed a theoretical rather than a random sampling technique and used both within-case and cross-case analysis (Eisenhardt, 1989). As both analysis aimed to say something general based on several

cases, our study is an inductive, multiple case study. In the following, we will explain in more detail the procedures performed to answer our research questions.

Business Model Categorization

In the business model categorisation process shown in Figure 3, we started by going through all our data to identify the defining mechanism within each business model, as far as it was



possible. We focused on how the companies included the BOP, and as we analysed an increasing number of cases, we saw a trend that the essence of the business models were identified in the value proposition.

Not all of the cases were complete or detailed enough for us to identify this mechanism, but still, we had enough data to move on to the next step, where we grouped together all cases with similar mechanisms. Following this, whenever a company actively engaged the BOP to become entrepreneurs in any way, offering them work and a source of income, but leaving the BOP with the choice of how much work they would take on, we grouped them together.

In the final step of this analytical process, we created the actual business model categories based on the aggregations done in step two. Consequently, we ended up with the

business model categories presented in chapter 5.

Figure 3: Business Model Categorization – Analytical Process

The Main Perceived Challenges

For our analysis of the main perceived challenges in catering to the BOP, the data set consisted exclusively of our interviews from Cape Town. Shown in Figure 4 below, we started the process by going through the transcripts and identifying the main perceived challenges in each case. This was something we asked specifically for, regardless of whether the interviewees had touched upon the subject throughout the interview, and hence we could pinpoint what each company saw as the most significant challenges in reaching the BOP, such as trust or affordability.

In the next step, we established a more in-depth understanding of why each of these elements were in fact a challenge. Furthermore, we mapped each company's solution to the challenge before related it all to the business model framework attempting to locate in which of the business model elements the challenge originated. In the final step of the analysis, we compared the solutions to and the origins of the challenges aiming to say something about the dependency of the solution on the business model classification. This last step makes sense both as the three case studies from Cape Town represent each of the business model categories presented in chapter 5 and as they all replied with several of the same challenges when approaching the BOP, though not all had the same interpretations of the challenge.

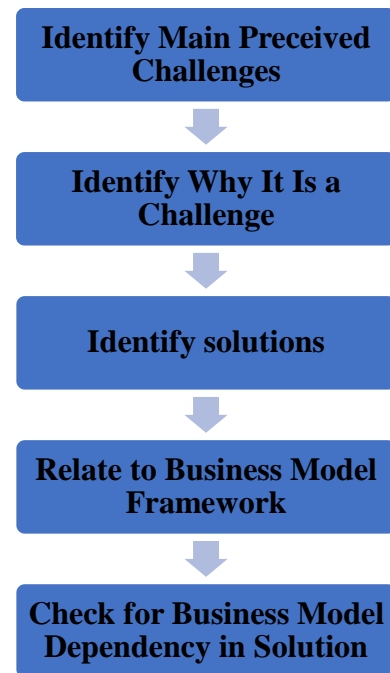


Figure 4: Main Perceived Challenges - Analytical Process

2.4 Evaluation of the Method

To evaluate the quality of our research we will start this section by considering the reliability and validity of our research before we assess the generalisability of our findings. Finally, we briefly judge the ethical aspects of how our research was conducted.

Concerned with the degree to which the data collection techniques and analytical procedures would produce consistent findings if they were to be repeated or replicated, the reliability of our thesis needs to be evaluated. The key to increase the reliability of a research is to ensure an open and transparent process, both in regards to participants and readers. The potential biases and errors were attempted dealt with through executing the interviews in location where no third party could overhear us and cause the interviewee to adapt his or her answer and to make sure we were well prepared for the interviews, both in terms of background knowledge about the company and how appropriately to conduct the interviews. However, a researcher bias might have been present, suggesting that we may have sought answers to support already existing knowledge or expectations about findings (Saunders, Lewis, & Thornhill, 2012).

Validity, being concerned with whether our research measured what it was meant to measure, can be increased by employing several sources in the data collection process. As for the

collection of secondary data, we used only one database. Nevertheless, this contains peer-reviewed articles from several journals, which in turn increases the validity even though we technically collected it from one source exclusively. Furthermore, we interviewed several companies to increase the validity, even though this increase is limited by the very nature of a qualitative study applying in-depth interviews, as the number of interviews possible to conduct within a given time-constraint is limited. Consequently, our data should measure what we set out to measure, and if our research were to be repeated or replicated, it should produce similar findings, given the same understanding of the analytical framework.

The generalisability, or external validity, of a research is concerned with the degree to which the findings are applicable to other settings, groups and times (Ghauri & Grønhaug, 2005; Saunders, Lewis, & Thornhill, 2012). This raises the questions of whether our business model categorisations and findings about the main perceived challenges apply to cases in other industries or countries. As for our business model classes, they are aggregates based on a large number of cases from several industries and from all around the world. This should make the findings generalizable, as the categories should be applicable to cases regardless of industry or country. Due to a sample of only three interviews, this may not be the same for our findings regarding the main perceived challenges. As the contextual and environmental aspects of the BOP varies greatly from country to country, the main perceived challenges may differ equally. However, the findings may arguably possess face generalisability in that there is no obvious reason why it should not be applicable to other similar cases and setting (Maxwell, 1996). Following this, the solutions to the challenges, as well as the connection to the business model framework may inhabit a certain degree of face generalizability.

One last element to consider is the ethics of the thesis. Throughout the process of obtaining data through interviews, we remained completely open with all potential interviewees about the purpose of the interview. This included an introductory mail explicitly stating both the purpose of the thesis and what type of data we sought, as well as presenting them with the layout of the interview containing both categories of questions and specific examples of questions we might ask. As for the actual interviews, every interviewee participated voluntarily, and before we started the recorder, we explicitly stated the options of either specifying when the answer was of a delicate nature or simply not to answer when or if it was not suitable. In our interviews, we kept strictly to the topic about the companies and their respective business models and avoided any questions or formulations that could potentially cause any bad feelings to appear. After the interview was done, we offered the interviewees to send over the transcripts and the thesis when

they were finished in order to maintain the openness that we had emphasized throughout the entire process.

3 Literature Review

This chapter will provide critical reviews of the literature concerning the BOP and business models for the BOP before we, in chapter four, will establish a definition of business models to provide us with an analytical framework. We start by reviewing the literature on the BOP to identify the opposing views on how to define the segment, the role of the segment when it comes to business and why it is a challenging segment to reach. Then we go on to map what has been written about business model innovation in order to reach the BOP segment. In order to detect what is missing, and hence identify a gap in the literature, our focus will be on what types of studies have been done and what they found.

3.1 The Base of the Pyramid

Customers with low purchasing power have been a subject in academic articles for several decades, and hence the segment in itself is not new to neither scholars nor practitioners. Nevertheless, this section will deal with the relatively young term “the base of the pyramid” which is credited to C. K. Prahalad. This term not only covers the customers at the low end of the economic pyramid, but aims at providing a more complete business proposition, presenting solutions as to how and why to try to reach customers with low purchasing power.

The articles found on this topic address the BOP theory from various angles including offering propositions, criticising existing theories and a more explicit focus on understanding the customers. Our discussion of the literature will follow the categorization shown in Table 1 before we conclude with the understanding of the term applied to our thesis.

*Table 1: BOP Articles Sorted by Main Themes
Source: authors' own research*

Author(s), Year	Main Area of Focus	Selected Elements
Prahalad & Hart, 2002	BOP (1.0)	Definition, orthodoxies among MNCs, challenges, who should cater to the segment.
Prahalad & Hammond, 2002		Definition, barriers to doing business, win-win and MNC's benefits.
London & Hart, 2004		Definition, unique challenges in serving the market.
Hart, 2005		The Iceberg Metaphor, need for disruptive innovation.
Payaud, 2014		Key elements to alleviating poverty.

Karnani, 2006	Criticism of BOP (1.0)	Size estimation, challenges in serving the market, problems with Prahalad's vision and examples, introduction of what would become BOP 2.0.
Karnani, 2007		Introduces moral to the discussion.
Seelos & Mair		Challenges, weaknesses in the BOP 1.0 proposition.
Shivarajan & Srinivasan, 2013		Weaknesses in the definition, the incompleteness of BOP 1.0, opportunity and challenges at the BOP, Benefits for BOP, NGOs and MNCs.
Agnihotri, 2012	BOP 2.0	BOP 1.0 vs. BOP 2.0.
Williams et al, 2012		Definition, from identifying to creating the market, understanding the customers.
Subrahmanyam & Gomez-Arias, 2008	Consumer Behaviour	Definition, Maslow's hierarchy and deviations at the BOP.
Guesalaga & Marshall, 2008		Segmentation, buying power, consumption patterns.
Wood et al, 2008		Status Quo Bias and use of local actors to deal with it.
Barki & Parente, 2010		Brazil, brand loyalty, importance of self-respect and personal service.
Cheung & Belden, 2013		Importance of brand value and leapfrogging opportunities at the BOP
Spers & Wright, 2015		Consumer typology, spending patterns, important elements to the BOP customer.
Jaiswal & Gupta, 2015		Effective marketing to the BOP
Webb et al, 2010		Segment Characteristics
Mohr et al, 2012	The need for sustainable solutions	

The BOP proposition

Contrary to the traditional view that the poor are the responsibility of the government, Prahalad claimed that this segment represents a large and underserved market that, through what he termed “inclusive capitalism”, could offer global growth opportunities for MNCs increasingly struggling with saturated middle and upper income markets (Prahalad C. K., 2004). However, as the segment consists of around 4 billion people earning less than \$1,500 per day, the potential lays within volume rather than margins, and with the large amount of people Prahalad claims are ready to spend their scarce income, the BOP market represents a market as large as \$13 trillion in purchasing parity (Prahalad & Hart, 2002). Though his estimation of the market is somewhat lower, at \$9.3 trillion, Hart claims that this is only the tip of the iceberg, and that the informal economies around the world is significantly larger (Hart, 2005).

As this consumer group often lives in rural villages or urban slums, have little formal education, enforce social rather than legal contracts and are hard to reach via traditional distribution and communications systems (Prahalad & Hart, 2002), they are subject to limited access to goods

and services. Furthermore, due to the above-mentioned characteristics, products sold in the informal market is often more expensive compared to the same product sold in a formal market. Prahalad & Hammond (2002) termed this phenomenon the Poverty Premium as the price premium stems from the fact that the poor are part of informal economies associated with poverty.

On the supplier side, these characteristics give rise to significant challenges. These include drastically reconsidering the price-quality ratio calling for a cost reduction of as much as 90 % without reducing quality, substantial investment in commercial infrastructure, (Prahalad & Hart, 2002), bridging formal and informal economies and building networks with adequate partners as traditional partners may lack relevant experience (London & Hart, 2004). However, these challenges are only discussed at an overarching level, and potential solutions or ways to deal with them lack in the literature.

As the challenges demands large amounts of both financial and human capital, Prahalad and Hart (Prahalad & Hart, 2002) argues that MNCs are the best suited actor to take the leading role. The reason is that MNCs have both the financial capacity and incentives to invest in creating the necessary infrastructure, and the human capital and skills needed to build networks and unite the necessary actors (Prahalad & Hart, 2002). The result, the literature claims, is a win-win situation where the MNCs provide the poor with basic goods at affordable prices while they generate an acceptable interest for their owners (Prahalad & Hammond, 2002). Following this, Payaud (2014) lists some key elements to alleviating poverty. Adding to Prahalad's 3 As, affordability, availability and adaptability (Prahalad C. K., 2004), she stresses the importance of consumer education and fair and inclusive growth, pointing out that "design, development, manufacturing and distribution of goods should build an ecosystem ensuring sustainable growth." (Payaud, 2014).

Criticism

Following the initial BOP proposition, several articles criticised the idea, stating that it was a logically flawed mirage (Karnani, 2006). The weak spots of the theory are many, and, as can be seen in Table 2, the assessment of the market, and hence the attractiveness, is at best inconsistent. In regards to the number of people living in poverty, most authors simply cite Prahalad stating that the segment consists of around 4 billion people around the world. Karnani

objects to this, and refer to The World Bank and The Economist claiming that the actual number is significantly lower, at 2.7 billion and 600 million respectively (Karnani, 2006).

As for the purchasing power within the segment, the numbers and measures vary substantially, ranging from less than \$1 per day (Williams, Omar, & Rajadhyaksha, 2012) to less than \$10,000 per year (Mohr, Sengupta, & Slater, 2012). While most authors simply state a number without saying anything about where the number is taken from or which part of the world it might apply to, Guesalaga & Marshall (2008) stand out as they applied the buying power index methodology to get numbers that were more reliable. They split the BOP into sub-tiers with the absolute threshold value being that they earn less than \$3,000 per year. With further dividing the segment into income groups earning \$2,001-\$3,000, \$1,001-\$2,000 and less than \$1,000 per year, they found that only around 20 % of the people were found in the least poor part of the segment, while almost 50 % earned less than \$1,000 per year. As there at one point is literally no money to spend on goods and services, the fact that almost half of the BOP population is found in the poorest part of the segment gives raise to the question as to whether the market estimation of the initial BOP proposition is credible. Shivarajan & Srinivasan (2013) goes as far as calling Prahalad’s definition self-serving, claiming that the inclusion of the absolute poorest contributes to an overestimation of the size, and that middle class consumers are included only to illustrate the success of the BOP approach.

*Table 2: Selected BOP Definitions
Source: authors’ own research*

Author(s), Year	Number of People	Purchasing Power	Market Size
Prahalad & Hart, 2002	4 billion	< \$1,500/year	Multi trillion
Prahalad & Hammond, 2002	4 billion	< \$2,000/year	N/A
Prahalad, 2004	4-5 billion	< \$2/day	\$13 trillion
Karnani, 2006	2.7 billion (World Bank)	\$1.25/day	\$1.2 trillion
	600 million (The Economist)	N/A	N/A
Subrahmanyam & Gomez-Arias, 2008	4 billion	< \$3,000/year	\$5 trillion
Guesalaga & Marshall, 2008	4 billion (total)	< \$1,000/year (43.3 %)	\$5 trillion (total)
		\$1,001-2,000/year (39.9 %)	
		\$2,001-3000/year (17.4 %)	
Williams et al, 2012	4 billion	< \$1/day	\$2.5 trillion
Mohr et al, 2012	3 billion	< \$10,000/year	\$8.2 trillion

The large deviations in assessing the purchasing power of the segment results in vastly different numbers on the actual market size. Prahalad (2004) provided the largest estimate at \$13 trillion, while it has become more sober over the years, with more recent articles saying the size is

around \$2.5 trillion (Williams, Omar, & Rajadhyaksha, 2012). While it is always talk of trillions, the difference between the extremities is large and hence crucial in whether the market is attractive for MNCs to enter or not.

Furthermore, Karnani (2006) sees the challenges listed by Prahalad as too large. Deeming the 90 % price reduction with no reduction in quality unrealistic, Karnani suggests a 50 % price reduction combined with an “acceptable quality reduction” (Karnani, 2006). In addition, he introduces a moral aspect to the discussion. Claiming that BOP consumers are not value conscious and would rather buy cheap unhealthy products than nutritious food for their kids, he emphasizes that the firms should carefully choose which products to offer to the segment (Karnani, 2007).

Some of the other challenges include the lack of infrastructure and the fact that the BOP is a high-cost segment to service, with only small margins coming back in (Karnani, 2006). Though there might be potential profits in the far future, Seelos & Mair (2007) sum up the long-term consequences of the challenges being too big, stating that there will be time compression diseconomies reducing the net present value of the investments needed, so that they will not be worthwhile.

When it comes to who should approach the segment, small and medium sized enterprises (SMEs) might be better suited. With low chances of economies of scale, and the products being less scale, marketing and brand intensive, Karnani argues that MNCs lose what makes them profitable and that SMEs or local firms are in a better position to cater to the BOP (Karnani, 2006).

BOP 2.0

Certain elements of the criticism made the foundation upon which the BOP 2.0 was built. This second version of the proposition sees the BOP not merely as a consumer, but focuses explicitly on co-creation and co-venturing with the segment. Consequently, dialogue between firm and end users is emphasized for the sake of needs identification, product adaption and trust building. In addition, the segment is included as intermediaries, resulting in job creation and empowerment (Agnihotri, 2012). This overall shift in mentality and perspective departs from the idea that the firms need to identify the market, and focuses on creating and building the market instead (Williams, Omar, & Rajadhyaksha, 2012).

Consumer Behaviour

Apart from the discussion revolving directly around the BOP proposition, several articles focus more explicitly and exclusively on consumer behaviour within the segment. A fundamental characteristic distinguishing the BOP from the rest of the pyramid (ROP) is that they shop for survival and group belonging, whereas the latter shop for luxury and uniqueness (Spers & Wright, 2015). While this makes the segment significantly more price sensitive compared to the wealthier segment, price is not the only important element to the BOP consumer. They are equally concerned with the attractiveness and the style, of both the product and the store, and respectful treatment from store personnel and sales attendants (Spers & Wright, 2015; Jaiswal & Gupta, 2015).

As for the actual spending of the BOP, they spend around 80 % on basic consumption like food, housing, household goods, energy and transportation and to some extent health care, tobacco and hygiene (Karnani, 2006; Guesalaga & Marshall, 2008; Spers & Wright, 2015). Relating to Karnani's moral aspect of selling to the BOP, overspending on non-essential products is increased by the high degree of awareness of sales promotion programs among the consumers (Jaiswal & Gupta, 2015). While a spending pattern like this can put the consumer at a severe disadvantage, it is otherwise found that an increase in income leads to relatively less spending on food and more spending on transportation, ICT and "other" goods (Guesalaga & Marshall, 2008).

Although food is still one of the largest expenditures for the BOP consumer, they do spend money on goods and services associated with higher levels of Maslow's hierarchy of needs. The fact that the BOP spend money on non-essential goods at all makes their behaviour deviate from Maslow's idea that "unless lower order needs are satisfied, higher-level ones remain dormant". The reasons for this can be many. As stated before, the BOP shop for group belonging, which can initiate compensatory or face-saving consumption. This trend may also be amplified by societies that are more collectivistic, making it more important to be at par with the community (Subrahmanyam & Gomez-Arias, 2008; Barki & Parente, 2010).

Connected with the face-saving consumption, is the fact that the BOP actually display brand loyalty. As the BOP cannot afford to make mistakes when it comes to buying and trying products, they become brand loyal, and more so than the ROP (Barki & Parente, 2010). Staying with brands they are familiar with are hence both functionally and emotionally a good investment (Cheung & Belden, 2013). This type of loyalty might be built on a store level as

well, as store personnel and connections are seen as very important and valuable (Spers & Wright, 2015; Jaiswal & Gupta, 2015). It is found that lack of personal service makes them feel as if value is taken away, and can hence be harmful (Barki & Parente, 2010). Even though the relationship with sales personnel is deemed important by the customers, there are elements present of mistrust and scepticism concerning the true intent and meaning of the meaning shared by the sales attendant (Jaiswal & Gupta, 2015). This scepticism is also found among producers at the BOP, which, in accordance with the Status Quo Bias, when they are offered new or alternative solutions by external parties, like firms outside of the BOP, they react with hostility and distrust (Wood, Pitta, & Franzak, 2008).

Our Understanding

Several of the BOP characteristics and behavioural patterns are similar in various regions, yet defining them solely based on an income threshold value, makes it challenging to land on one single definition of this segment. Webb et al (2010) augmented the definition to include not only income but also several other characteristics. The market characteristics they claim contribute to identify the BOP market are

- 1. The capital markets are informal with family ties and loan sharks as substitutes.*
- 2. The labour market is uneducated, unskilled and unorganized.*
- 3. The governance mechanisms are informal, with contracts being enforced by group norms, reputation and power rather than legal institutions.*
- 4. Property rights are enforced by informally recognized “barking dogs”.*

Even when looking at one specific country, like South Africa, there is no consensus on the proper threshold value of income. In a publication by The World Bank, they define the segment as anyone earning less than R432 (the local currency in South Africa is Rand) per household member, whereas The Unilever Institute at the University of Cape Town, a major research entity, defines the segment as those earning less than R 3,000 per household. Resulting from this, as our research is of a practical nature, we deem it unpractical and irrelevant to set the absolute income limit to define who are at the BOP and who are at the ROP.

Instead, based on these additional characteristics, we understand the BOP segment as the poor part of the population living in challenging environments and in informal settlements. This definition excludes urban lone wolfs and stray cats, but captures the vast mass market found in

urban slums and rural villages that makes the BOP segment potentially attractive to SMEs and MNCs, and it does so regardless of which country or region is being examined.

3.2 Business Models for the Base of the Pyramid

With the BOP being a relatively new concept in the literature, the discussion about how business models can be used to reach this segment is even younger and only slowly emerging. In the following, we will provide an overview over the literature discussing business models for the BOP.

The articles found in our literature search takes on different perspectives, and not all define the business model term explicitly. As a result, we segmented them based on whether they provided a clear definition of what a business model is, the level of abstraction, i.e. the perspective, and finally whether the focus is on economic or social returns. This is summed up in Table 3 below, which will provide the structure of our review.

*Table 3: Categorization of articles on business models for the BOP
Source: authors' own research*

Author(s), Year	BM defined	Perspective	Focus	Area
Jose, 2008	No	Overarching, theoretical	Economic	Not available
Simanis & Hart, 2009				N/A
Prahalad, 2009				India
Sinkovics et al., 2014			Social	India
Reiner et al., 2015				Bangladesh
Pitta et al., 2008			Both	N/A
Reynoso et al., 2015				N/A
Rashid & Rahman, 2009		Case studies	Economic	Bangladesh
Trevinyo-Rodríguez & Chamiec-Case, 2012				Mexico
Sesan et al., 2012			Both	Nigeria
Linna, 2012				Kenya
Esposito et al., 2012				India
Yunus et al., 2010		Yes	Case studies	Economic
Garcia-DeLeone & Taj, 2015	Social			China
Sánchez & Ricart, 2010	Both			
Jun et al., 2013	Overarching, theoretical		Economic	N/A
Angot & Plé, 2015				N/A
Spiess-Knafl et al., 2015	Business model categorization		Economic and/or social	N/A
Dohrmann et al., 2015				N/A
				N/A

Applying a rather high level of abstraction, several of the articles discuss business models for the BOP at an overarching and more or less theoretical level. The highest level of abstraction

is possibly found in Jose (2008), where he presents the following critical questions about any of the current BOP models:

1. *Do the BOP models create more problems than they are likely to resolve?*
2. *Should the BOP models be corporate or community centred?*
3. *Do BOP models increase brand power leading to a “Walmartisation” of the local economy?*

Without further elaborating on what a business model is, he suggests several elements that MNCs should incorporate in a BOP model. Some of these correspond with the suggestions in Pitta et al. (2008) and Prahalad (2012), such as affordability and creating access, not only for the urban part of the population, but for the rural as well. While some of the elements overlap, some differ. Pitta et al. (2008) stresses the importance of adapting the marketing mix, consisting of the 4Ps: price, product, place and promotion, whereas Prahalad (2012) explicitly states that the 4As, comprising awareness, access, affordability and availability, is more important. Despite this difference, they do, however, agree that there is no *one* BOP model, and that solutions need to be tailored to the local need in an attempt to create cultural closeness (Pitta, Guesalaga, & Marshall, 2008; Prahalad C. K., 2012).

A couple more articles have the same general perspective, but focus more on the creation of social value. They discuss how social goals do not need to be the main focus of an MNC for social value to be created, as this can be an organic part of the business (Simanis & Hart, 2009; Sinkovics, Sinkovics, & Yamin, 2014). Sinkovics et al. (2014) mentions several ways in which this can happen, such as dealing with unemployment through job creation and addressing education or healthcare, while Simanis & Hart (2009) applies practical examples. They use Grameen Bank, which provide poor, rural citizens with micro credit, as an example of how prosperity of the business is strongly related to the prosperity of the local community.

Whereas Simanis & Hart (2009) used a practical example to support their theory, several articles are pure case reports, discussing the actions of specific companies, without necessarily relating it to a clear business model definition. Nevertheless, they mention some common themes. Coherent with Prahalad’s 4As (Prahalad C. K., 2012), all articles mention affordability as an important element (Rashid & Rahman, 2009; Linna, 2012; Sesan, Raman, Clifford, & Forbes, 2012; Trevinyo-Rodríguez & Chamiec-Case, 2012), though this takes on a variety of forms.

Rashid & Rahman (2009) studies Telenor's joint venture with Grameen Phone, where they made phone services available and affordable through setting up village women with phones, enabling them to sell phone access through a shared access practice. Suggesting a different solution, Trevinyo-Rodríguez & Chamiec-Case (2012) found that small local stores in Mexico make their goods affordable for the BOP through providing credit and offering smaller packs, even selling single units of some goods. Yet another solution can be to scale down the product, stripping it of features to make the production less costly while at the same time providing some elemental functions making the product attractive (Sesan, Raman, Clifford, & Forbes, 2012).

Another component mentioned in the articles is the importance of partnerships. In most cases, the recommendation and purpose of partnerships when trying to reach the BOP, is to leverage the host country knowledge of an NGO, as they often possess substantial knowledge about the conduct of business, the culture and the preferences of the local BOP segment.

Common for all the above-mentioned articles is that, while some mention the term "business model", none defines it explicitly. Nevertheless, they all discuss what companies need to focus on when adapting to reach the BOP segment, and in doing this, they use several terms that may translate into business model elements, depending on the definition of the term. Contrary to the articles in the first classification, the next ones provide a definition of the business models, making the discussion potentially more structured and sound.

Applying the case perspective, Yunus et al. (2010), Esposito et al. (2012) and Garcia-DeLeone & Taj (2015) provide findings that support findings elsewhere in the literature. They stress elements such as partnerships, market segmentation, the 4As, experimentation and challenging conventional wisdom, and, while the definition may vary among the articles, they discuss the components in the light of potential business model elements such as value creation and profit formula (Yunus, Moingeon, & Lehmann-Ortega, 2010; Esposito, Kapoor, & Goyal, 2012; Garcia-DeLeone & Taj, 2015). Though they use the business model concept as a background for their discussion, they do however not use it as a framework or structure providing mechanisms, resulting in yet another list of important elements to keep in mind when modelling to reach the BOP.

Returning to a higher level of abstraction, Sánchez & Ricart (2010) and Jun et al. (2013) aim to say something about what types of business models are better suited when targeting the BOP. Even though the elements included are not the same, both articles provide a clear business model definition on which they base the discussion. Sánchez & Ricart (2010) distinguish

between isolated and interactive models, where in the former the company leverages its own resources and competencies and copies its business model when targeting the low-income market, and in the latter, the company focuses on building an ecosystem consisting of local partners both from the formal and the informal economy. The conclusion is that business models with a higher degree of cooperative interdependencies, i.e. one that facilitate a large ecosystem, are better suited for creating mutual value at the BOP. Jun et al. (2013) on the other hand, create a matrix consisting of interdependencies between various business model elements and use it to determine the relative importance of each one. Based on the relative importance of the different components, the framework concludes with a suggested business model tailored to the specific company.

Consequently, Jun et al. (2013) proposes a generally applicable framework that generates an outcome tailored to a specific company or industry, while Sánchez & Ricart (2010) proposes two classifications of business models that are mutually exclusive and that encompass every business model seeking economic profit.

The only articles that offers some sort of business model categorization are Spiess-Knafl et al. (2015) and Dohrmann et al. (2015), of which the former focus explicitly on social business models, and the latter range business models according to the degree to which they monetize the social value created. Based on 204 award winning social organizations Spiess-Knafl et al. (2015) identified six categories of innovations for social business models. Among these were, for instance, inclusive production, which aims to include challenged parts of the population, such as disabled people, HIV-positive or people with autism. This is also mentioned as one of the features that distinguishes social business models from the profit seeking ones (Spiess-Knafl, Mast, & Jansen, 2015). Whereas Spiess-Knafl et al. (2015) defined six categories of innovation that may or may not cover the entire spectrum of innovation, Dohrmann et al. (2015) identified four classifications of business models that span from pure charity to those that maximize the monetization of the social value created. Consequently, any business model that creates social value will fit into one of the categories.

In addition to the actual content of the literature, it is worth noticing that the oldest article included in our sample is from 2008, with more than half of the sample being published in 2012 or later. Furthermore, the only two articles actually discussing aggregates were both published in 2015. As for the geographical area of focus, most of the case studies are based on Asia, focusing on India, Bangladesh and China, and even though the theoretical articles cannot by nature focus on one designated area as they discuss on a higher level of abstraction, those that

use examples, also mention India and Bangladesh. In comparison, only two of the ten articles that define a specific area of focus, directs their attention to Africa.

What becomes evident in this emerging and largely Asia-focused literature is that most articles that discuss business models for the BOP, both case studies and theoretical articles, do not define business models explicitly, and of those that actually do define the term, only two articles from our sample identify aggregates that classify different types of business models for the BOP. Nevertheless, these classifications are based on companies that create social value and the degree to which they innovate their business models or monetize the social value created. Following this, we identified no articles that did any similar classification of for-profit business models for the BOP, which effectively creates the literature gap within which our contribution lies.

4 Analytical Framework

Having pointed out the lack of theoretical contributions in the field of business models for the BOP in chapter 3, the purpose of this chapter is to derive a business model framework that will serve both as an analytical tool for aggregating the business model categories and as a structure for chapter 5. In order to do this, we start by briefly presenting an overview of the concept and the different perspectives to highlight some of the trends in business model literature, before we, based on this, conclude with how we understand the term.

4.1 Business models

The term business model was first introduced in an article by Bellman et al in 1957 (Wirtz, Pistoia, Ullrich, & Göttel, 2016), yet it did not gain widespread popularity until the mid-1990s. Some of the main assumed drivers of the increased interest in the term include the dispersion of the internet, increased interest in emerging markets and in the BOP segment (Zott, Amit, & Massa, 2011). To get a picture of the evolution of the literature on business models, we look to the 2008 search in an EBSCO database for the term “business models” performed by George and Bock (2010), yielding 929 title hits. Of these, “only 107 were published before 2000, and only 7 of those were published before 1990”, suggesting a tremendous and ongoing increase in the use of the term. Supporting this, is an IBM study cited in Wirtz et al (2016) revealing that “financially successful companies attach around twice as much importance to consequential and sustainable business model management as less financially successful companies.”

Despite the large increase in articles written about business models over the last two decades, researchers and authors have failed in building on prior work done on the subject, resulting in a plethora of diverging definitions (George & Bock, 2010). This can be seen below, in Table 1, which lists selected definitions and key elements provided by various authors, as well as selected articles citing the respective definitions. The term is understood in a range of ways, including an architecture (Timmers, 1998), a narrative or a story (Magretta, 2002), a reflection of the realized strategy (Casadeus-Masanell & Ricart, 2010) and simplified aggregates (Wirtz, Pistoia, Ullrich, & Göttel, 2016), showing a lack of consensus on what perspective to apply to business models.

Nevertheless, as Wirtz et al (2016) state, there has been a convergence, not in the definition or perspective, but in the key elements included in a business model. These are highlighted with

bold font in Table 4, and they include various terms that can best be summed up as value proposition, target customer, value delivery and value capture.

Table 4: Selected Business Model Definitions
Source: authors' own research

Author(s), Year	Definition	Key Elements	Papers Citing the Definition
Timmers, 1998	A business model is “an architecture for the product, service and information flows, including a description of the various business actors and their roles; a description of the potential benefits for the various business actors; a description of the sources of revenue” (Timmers, 1998)	The actors and their roles, potential benefits for the business actors, sources of revenue (Timmers, 1998)	Hedman & Kalling, 2003
Amit & Zott, 2001; Zott & Amit, 2010	“A business model depicts the content, structure and governance of transactions designed so as to create value through the exploitation of business opportunities” (Amit & Zott, 2001). Arguing that transactions connect activities, the authors expanded this definition, stating that they “conceptualize a firm’s business model as a system of interdependent activities that transcends the focal firm and spans its boundaries” (Zott & Amit, 2010)	Transaction content, transaction structure, transaction governance (Amit & Zott, 2001)	Hedman & Kalling, 2003; Morris, Schinduette & Allen, 2005; Zott & Amit, 2007, 2008; Santos, Spector & Van Der Heyden, 2009; Bock, Opsahl & George, 2010
Chesbrough & Rosenbloom, 2002	A business model “creates the heuristic logic that connects technical potential with the realization of economic value” (Chesbrough & Rosenbloom, 2002)	Value proposition, target segment, value chain, cost/revenue structure, value network, competitive strategy (Chesbrough & Rosenbloom, 2002)	Chesbrough, Ahern, Finn & Guerraz, 2006; Chesbrough, 2007a, 2007b; Teece, 2007, 2010
Magretta, 2002	Business models are “stories that explain how enterprises work. A good business model answers Peter Drucker’s age-old questions: Who is the customer? And what does the customer value? It also answers the fundamental questions every manager must ask: How do we make money in this business? What is the underlying economic logic that explains how we can deliver value to customers at an appropriate cost?” (Magretta, 2002)	Target customer, Value proposition, value delivery, value capture (Magretta, 2002)	Seddon, Lewis, Freeman & Shanks, 2004; Ojala & Tyrväinen, 2006; Demil & Lecocq, 2010
Morris et al., 2005	“A business model is a concise representation of how an interrelated set of decision variables in the areas of venture strategy, architecture and economics are addressed to create sustainable competitive advantage in defined markets.” (Morris, Schindehutte, & Allen, 2005)	Value proposition, the customer, internal capabilities, how to make money, market positioning, growth/time objectives (Morris, Schindehutte, & Allen, 2005)	Calia, Guerrini & Moura, 2007

Johnson, Christensen & Kagermann, 2008	A business model “consists of four interlocking elements that, taken together, create and deliver value.” (Johnson, Christensen, & Kagermann, 2008)	Customer value proposition, Profit formula, Key resources, Key processes (Johnson, Christensen, & Kagermann, 2008)	Jonhson & Suskwicz, 2009
Casadeus-Masanell & Ricart, 2010	A business model “is a <i>reflection</i> of the firm’s <i>realized</i> strategy.” (Casadeus-Masanell & Ricart, 2010)	Choices and consequences (Casadeus-Masanell & Ricart, 2010)	Hurt, 2008; Baden-Fuller & Morgan, 2010
Teece, 2010	A business model “articulates the logic, the data and other evidence that support a value proposition for the customer, and a viable structure of revenues and costs for the enterprise delivering that value.” (Teece, 2010)	The benefit delivered, the benefit delivery, the value capture (Teece, 2010)	Gambardella & McGahan, 2010
Wirtz et al., 2015	A business model “is a simplified and aggregated representation of the relevant activities of a company. It describes how marketable information, products and/or services are generated by means of a company’s value-added component. In addition to the architecture of value creation, strategic as well as customer and market components are taken into consideration, in order to achieve the superordinate goal of generating, or rather, securing the competitive advantage.” (Wirtz, Pistoia, Ullrich, & Göttel, 2016)	Strategy, resources, network, customer, market offer, revenue, costs manufacturing and procurement (Wirtz, Pistoia, Ullrich, & Göttel, 2016)	

Our understanding of the term builds directly on the reoccurring key elements commented in Table 4 above, and hence, we see a business model as consisting of the four interrelated components target customer, creating, delivering and capturing value as shown in Figure 5 below. Each of these elements we understand as follows:

1. *Target Customer defines the specific segment targeted by the firm. In our case, the focus will mainly be on the BOP segment.*
2. *Value Proposition is concerned with how the firm can cater to its target customers’ needs, i.e. how the firm can create value for its customers.*
3. *Value Delivery revolves around how the firm communicates with, interacts with, and reaches its customers, i.e. how it delivers the value it creates and the resources and activities involved in delivering that value.*
4. *Value Capture is about the cost and revenue streams of the firm, i.e. how the firm captures some of the value it creates in the form of profit.*

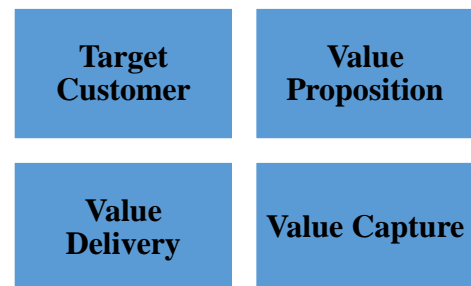


Figure 5: The Business Model Framework

We choose to apply the business model as the designated unit of analysis for several reasons. First, it provides us with a structured way to view a company as a whole and to see which parts have been, or may be, altered in order to reach certain goals. Second, the explosion of articles on business models and the emergence of articles explicitly discussing business models for the BOP segment suggests that it is relevant in an academic perspective, while, finally, the high focus on business modelling among successful companies supply practical relevance. Consequently, applying a business model perspective seems both timely and highly relevant.

5 Business Model Categorization for the BOP

Having established the business model framework in chapter 4, we will now present three categories of business models for the BOP based on the 52 articles identified in the literature search on the BOP and business models for the BOP in addition to the three interviews conducted in South Africa. Summed up in Table 5 below, the three classifications are “Engaging the Entrepreneur” (EE), “Poverty Premium Eradication” (PPE) and the “Multipurpose Product” (MPP), and they were supported by 13, 19 and 13 cases respectively from our data set. (For a complete list of which cases supported which categories, ask the authors for the data.).

We defined business models in chapter 4 as consisting of the four interrelated components target customer, value proposition, delivery and capture, and this will provide the structure for this chapter. However, as the essence of our categorization is found in the combination of value proposition and target customer, these two elements will be emphasized, whereas value capture will briefly be commented on. Value delivery, being the least business model specific component, will be discussed in a separate section rather than under the respective business models.

Table 5: Business Model Categories Summed Up

	Engaging the Entrepreneur	Poverty Premium Eradication	Multipurpose Product
Target Customer	-BOP as suppliers	-BOP as next part in the value chain	-BOP as end-consumer
Value Proposition	-Wage and job opportunity	-Market prices -Inclusion in formal markets -Increased market efficiency	-One product to server several needs
Value Delivery			
Value Capture	-Reduced costs -Increased volume	-Increased volume	-Increased willingness to pay -Increased volume

5.1 The Engaging the Entrepreneurs Category

The key pillar of this business model classification is found in the combination of target customers and the resulting value proposition for the parties involved. Summarized in Figure 9, this is essentially based on how companies include the BOP in the value chain offering them income, while offering the end consumers goods or services at lower prices. A defining

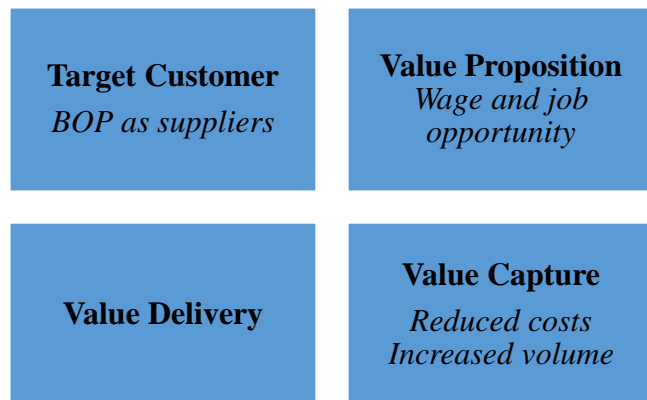


Figure 6: The Engaging the Entrepreneur Category

feature is that the BOP can choose the amount of work and effort they wish to yield as they act as independent entities rather than employees of the firm. This basic mechanism of engaging the BOP to become entrepreneurs is found in several case studies, (Pitta, Guesalaga, & Marshall, 2008; Rashid & Rahman, 2009; Sánchez & Ricart, 2010; Esposito, Kapoor, & Goyal, 2012; Spiess-Knafl, Mast, & Jansen, 2015), and hence it provided the basis for this category of business models.

Target Customer

The target customer in the EE classification must be understood in a wider perspective than including merely the end consumer. Much in line with the BOP 2.0 proposition, the BOP is included in the value chain, either as suppliers of labour or as producers and intermediaries between the firm and the end user, which can be either BOP or ROP. Consequently, the inclusion of the BOP in the value chain is the defining characteristic.

In the service industry, there are numerous examples of companies leveraging the BOP as labour to provide services or to reach formerly unavailable markets with their products. Domestically, a South African company situated in Cape Town, developed a mobile application allowing the BOP to enter as providers of cleaning services and the ROP to buy these services at prices slightly below the current market price (Potgieter, 2016). In other examples, the companies recruited people from the BOP to act as local sales personnel (Rashid & Rahman, 2009; Simanis & Hart, 2009). The alliance between Bangladeshi Grameen Phone and Norwegian Telenor resulted in the Village Phone Programme, where local women were given the opportunity to acquire a phone and thus provide their village and adjacent areas with phone

services (Rashid & Rahman, 2009). Quite similar was the case of Hindustan Unilever's Project Shakti, which empowered women from the BOP to act as sales personnel, servicing the local population (Simanis & Hart, 2009).

Leveraging the BOP as producers of goods and intermediaries towards the end-users, Arvind Mills sold kits containing all necessary elements to sow denim jeans to village women in India. In turn, they could choose whether to buy only one for themselves, or if they wanted to purchase more, set up a production (Garcia-DeLeone & Taj, 2015), and thus become a part of the value chain, delivering jeans to the local market.

Value Proposition

With the target customer being two-sided, the value proposition varies between the BOP and the end-user. The value offered to the end-customer is a good or a service available at a price more or less below the market price, a mechanism that consequently increases the consumer surplus. The actual form of the value is, nevertheless, highly dependent on the industry, as, for instance, Domestly provides house cleaning for the ROP (Potgieter, 2016), while Arvind Mills provides affordable jeans to the BOP (Garcia-DeLeone & Taj, 2015).

“Give a man a fish, and you feed him for a day. Teach a man to fish, and you feed him for a lifetime.”

Compared to the rather straightforward mechanism of the value proposed to the consumers in this business model category, the value proposed to the BOP when they act as suppliers or intermediaries is more complex. The BOP is benefited essentially through job creation, which in turn gives them income and increased purchasing power. Furthermore, in order to secure the quality of the product/service, they receive training (Potgieter, 2016). The result is an extensive empowerment of the BOP that increase their standard of living, both economically and socially, with the sum being that the EE category creates value for both the company, the entrepreneur, the consumer and the society as a whole.

Value Capture

Even though it is hard to say anything specific about how the companies within the EE category capture value, some mechanisms imply from where they capture it, as shown in Figure 10. An important element of the EE class of business models is to create new channels through which products and services are supplied. This can happen in one of two ways. As in the case of Domestly, they engage the BOP to supply cleaning services to the ROP

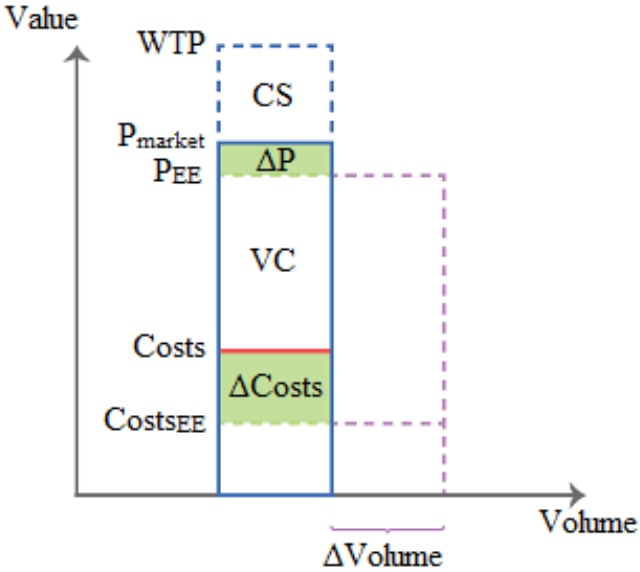


Figure 7: Value Capture in EE Business Models

(Potgieter, 2016). The service is offered at a price, P_{EE} , slightly lower than the market price, P_{market} , something that in itself compromises the company’s value capture (VC) and increases the consumer surplus (CS). However, with a streamlined delivery mechanism, the cost reduction, $\Delta Costs$, is likely to be larger than the price reduction, ΔP , resulting in an increase in potential value capture. The other way in which this can happen is when the BOP is engaged as sales personnel or producers catering to the BOP. This will increase costs in the form of wages, but, as shown by the purple, dotted line in Figure 10, the increase in sales volume resulting from accessing the vast amount of people that constitute the BOP, will likely cause the increased revenue streams to exceed the extra costs.

5.2 The Poverty Premium Eradication Category

The core of the second class of business models is the aim to eradicate the premium imposed on the poor simply because they are part of an informal economy, or what Prahalad & Hammond (2002) called the Poverty Premium. Identified in, among others, the cases of M-Farm in Kenya (Linna, 2012) and Last Mile for BOP (LM4BOP) in South Africa (Blanchet, 2016), the basic mechanism is to include the customers in the formal economy providing them with goods and services at market prices and thus reducing, or ideally eliminating, the poverty premium, effectively creating value for all parties involved. Even though the Poverty Premium

usually is understood as the higher prices incurred by the BOP, we expand it also to include the loss in revenues resulting from the informal economy. The PPE category is summed up in Figure 11, and will now be discussed in more detail.

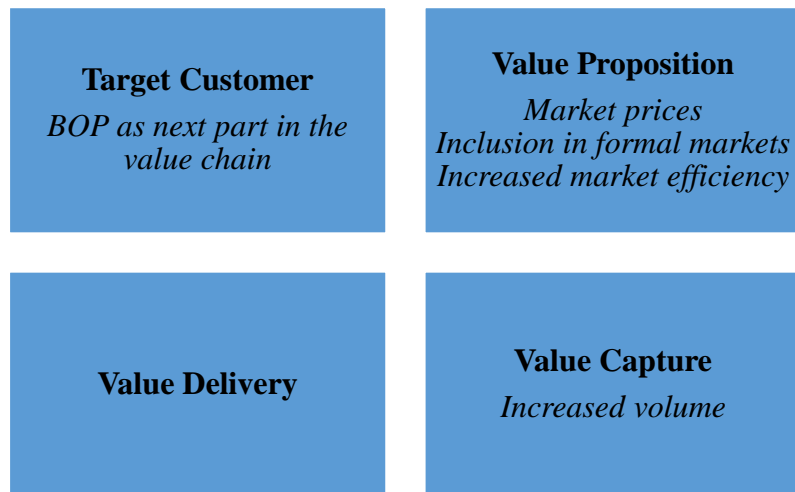


Figure 8: The Poverty Premium Eradication Category

Customer Segment

The customer segment in the PPE group of business models can be found in various levels of the value chain. In the case of LM4BOP, the customers are a series of small stores called Spaza shops situated in the urban slum areas (Blanchet, 2016). As they, in turn, sell the goods to the local end-consumers, LM4BOP's customers act as an intermediary. In other examples, like Grameen Bank that provides the BOP with credit (Prahalad C. K., 2004) the customer is the end-consumer. On some occasions, the target is a supplier of goods, as is the case with M-Farm in Kenya. This mobile application gave local farmers access to market information, effectively raising their revenues by helping them evading local merchants that underpay them (Linna, 2012). Compared to the EE category, the customer segment in this class, regardless of whether they are customers, end-consumers or suppliers, is exclusively found at the BOP.

Value Proposition

The most elementary part of the value proposition is found in the fact that companies can offer the BOP, whether they act as intermediaries, suppliers or end-users, a fair inclusion in the formal economy, thus increasing the market efficiency. This can happen in one of two ways.

The most obvious way in which it can be done is simply to offer the BOP goods and services at market prices, which would eliminate the poverty premium in its entirety. This has been done in a number of cases. LM4BOP put down significant resources in convincing the Spaza shop owners that they provided the goods at the lowest price available in the formal market. The result was that LM4BOP became the distributional link between wholesalers and the Spaza

shops, and the Spaza shops were included in the formal economy buying goods at market prices (Blanchet, 2016). Another example is Grameen Bank in Bangladesh, which included the rural BOP segment in the formal economy by offering them micro-credit at market rents (Yunus, Moingeon, & Lehmann-Ortega, 2010). As the BOP, in some cases, borrows money as a means to increase productivity of their business, it could be argued that this is an EE type of model. However, while an EE business model aims actively to leverage the BOP as part of a specific production or service provision, the PPE business model simply offers goods and services at prices closer to or at market prices. In the case of Grameen Bank, they supply micro-credit that may or may not be invested in local businesses, and hence they are only a service-providing actor.

The other way to increase the market efficiency is, rather than providing the goods and services directly, to provide information about market prices and sales points. This was done in the cases of M-Farm and Biashara in Kenya. Both are mobile applications that provide the users with information on where to get the better prices, whether it is farmers selling their produce or consumers looking for lower prices (Linna, 2012). One difference in this method compared to actually providing the goods and services, is that by simply providing information, the poverty premium may be reduced but not necessarily eradicated. Still, it can be argued that the BOP is better off, even with a small reduction in the premium.

Regardless of whether it is done by offering goods directly or through provision of information, the core value proposition to the BOP stays the same. They get access to market prices, which effectively increases their purchasing power and the consumer surplus, and consequently they are empowered through inclusion in the formal economy.

Value Capture

The PPE category can be seen as a market efficiency improving type of business models as it aims to include the informal economy in the formal one. Illustrated in Figure 12 on the next page, it secures the BOP access to market prices, P_{market} , rather than the higher $P_{\text{minformal}}$ characterized by the poverty premium. As the BOP are simply offered goods and services at the same prices as the rest of the formal market, the price reduction will increase the customer surplus, CS, rather than the value captured by the firms. Nevertheless, the firms access a vast

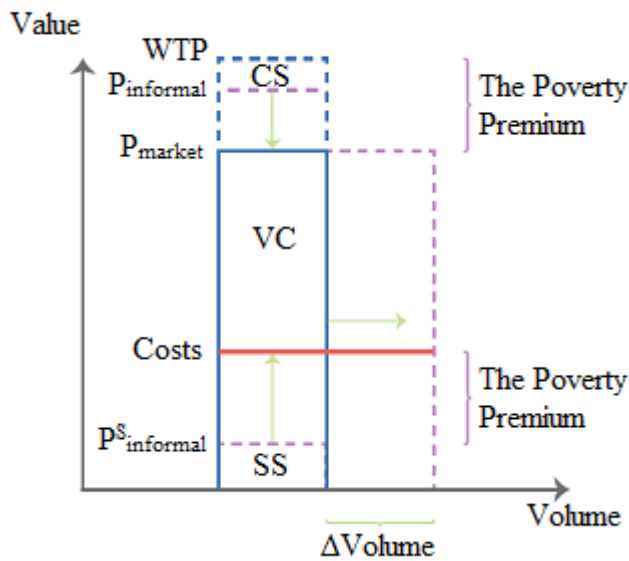


Figure 9: Value Capture in PPE Business Models

consequently increase the supplier surplus, as the users of the application were included in a formal economy. Regardless of these two perspectives on the PPE classification, the exact method for capturing the value created is not category specific, and hence it is not possible to say anything about the actual mechanism through which this happens.

5.3 The Multipurpose Product Category

The third and last business model category is founded on the concept of combining several features into one product. At first, this may seem counterintuitive, as it is likely to increase costs and in turn making the product more expensive. Considering the cost-side of this, the logic thing to do would probably be to cut costs by limiting the number of features and consequently increase the affordability of the product. However, contrary to this, by combining several features in one product, the idea is to increase the customer surplus and the willingness to pay, and thus making the investment worthwhile. Several case studies, including Vodacom in South Africa (Esbach, 2016), Kenyan mobile application Kilimo Salama (Linna, 2012) and Chinese white goods manufacturer Haier (Khanna,

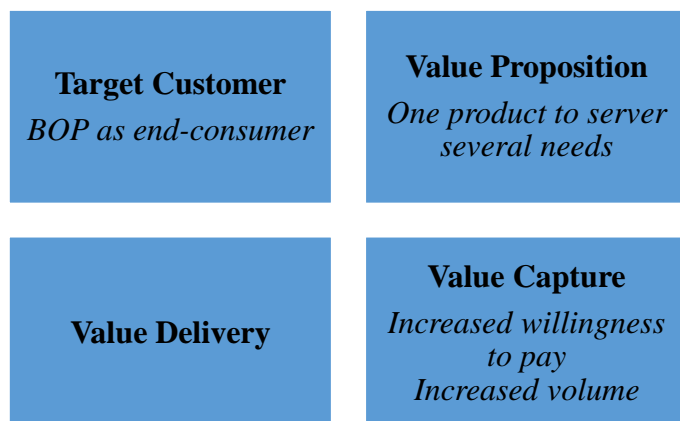


Figure 10: The Multipurpose Product Category

market that was not available before, and thus it increases the sales volume, Δ Volume, which, in turn, increases the value capture.

In the case of M-Farm, the suppliers gain access to channels through which they can sell their goods at market prices, whereas before, they had limited access to buyers and were subject to the significantly lower price, $P^S_{informal}$, characterized by the poverty premium as shown in Figure 12. This would

Palepu, & Andrews, 2012), report on how companies, based on a thorough understanding of customer needs, approached the BOP with innovative multipurpose products and services. Following this, the last classification is named The MPP category, which is summed up in Figure 13 above.

Customer Segment

In this class of business models, the BOP is mainly approached as end-consumers of the good or service. However, as the infrastructure gives rise to certain distributional challenges, firms might include intermediaries possessing local knowledge in order to reach the customers. Nevertheless, contrary to the PPE category, where the target is the next level in the value chain, the target customer here is the end-consumer, which, in turn, is found exclusively at the BOP.

Value Proposition

The specific value proposition in this business model classification is highly dependent on the product on offer. It is, however, possible to say something general about the nature of the value proposition as the essence is that whatever product or service is provided covers several customer needs. In the case of Vodacom, South Africa, the provision of mobile phones, tele communications and internet gives the BOP access to a series of services and value creating elements. The mobile phones can be used to anything from money transfer, job applications, education and mapping discounts at local stores to simply keeping in touch with family and friends (Esbach, 2016). It might sound irrational for the BOP to spend their scarce money on calling family and friends, but research provided by Vodacom, Cape Town reveal that safety in regards to family and friends is one of the most important elements in phone usage at the BOP (Vodacom, 2013).

Another example is the Chinese white goods manufacturer Haier, that when repairing washing machines in rural China found sediments of dirt in them. Following this, they realised that the customers used the machines not only to wash their clothes, but to wash their vegetables as well. Consequently, they customised the machines, making them suited to execute both tasks without taking damage from it (Khanna, Palepu, & Andrews, 2012).

The common denominator, regardless of the specific product, is the increase in efficiency in everyday activities, whether it is keeping in touch with family, shopping, applying for jobs or washing clothes and vegetables. There would be a certain increase even with single feature products as well, but with limited funds, the BOP might only afford one product, leaving other activities to be done manually. With multipurpose products, the increase in efficiency is potentially many-fold, as they can afford to streamline more of their daily chores and perform several tasks with a single product. As a result, they save time opening up for other activities, and hence they are empowered.

Value Capture

With the willingness to pay (WTP) initially being below the price, P_{market} , for a single feature product, the aim here is, as exemplified in Figure 14, to increase the WTP such that it becomes worthwhile to invest in the product. This is done by adding features to the product/service and educating the customer as to why the purchase is a good one. With the WTP raised above the current price to WTP_{MPP} ,

a consumer surplus is created, whereas the company’s value capture stays the same. However, the consequence of the increased value to the new customer segment of the product is access to a large number of new customers, which in turn increases sales volume. The result should be an increased value capture by the firm, even though it is hard to say anything specific about how the actual value capture appears, as this is not category specific.

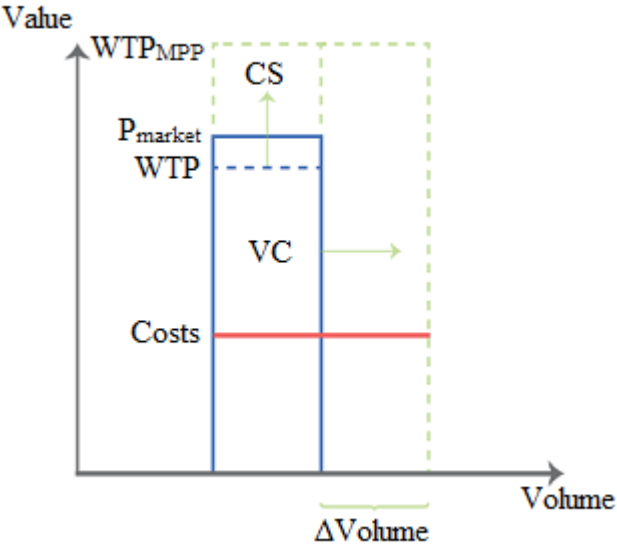


Figure 11: Value Capture in MPP Business Models

5.4 Value Delivery

As opposed to the other business model elements, it is hard to say much about how the value delivery relates to each of the business model categories, as the same methods and channels may be employed regardless of the category. With information and communications technologies (ICT) being increasingly widespread, and the BOP leapfrogging into modern technology, more and more companies apply mobile and internet based solutions to reach their

target customers, whether they are BOP or ROP. For instance, all business models are represented in the use of mobile applications to reach their customers, as both Domestly (Potgieter, 2016) (EE), M-Farm and Biashara (Linna, 2012) (PPE) and Vodacom (Esbach, 2016) and Kilimo Salama (Linna, 2012) (MPP) apply this channel.

With the same methods being applicable regardless of the business model category, it is not possible to generalize this element, and thus it must be determined in each single business model.

6 Main Perceived Challenges

Based on our interviews with Domestly, LM4BOP and Vodacom, each representing one of the business model categories presented in chapter 5, we have identified three main perceived challenges facing these companies when catering to the BOP. A complete transcript of our interview with Last Mile for BOP is found in appendix 6.A. For complete transcripts of all the interviews, please contact the authors.

In the following, we will present and discuss the issues related to trust, affordability and reaching the BOP in an attempt to answer our second research question concerning how the business model categories deal with the main perceived challenges at the BOP in South Africa. We do this on a case-by-case basis, discussing how the issues manifest themselves and in which business model component the companies dealt with them, before we perform a cross-category comparison of the three companies.

6.1 Trust

With a long history of discriminatory practices like apartheid, the BOP segment in South Africa is generally characterised by a lack of trust. Through the Cape Town interviews, we found that this lack of trust is not only directed against the government, but manifests itself in a common mistrust towards commercial corporations, fellow citizens and anything challenging status quo (Potgieter, 2016; Blanchet, 2016; Esbach, 2016) (Personal communication). Furthermore, in several of our examples, trust is closely related to the element of safety, and hence they will be discussed together.

Domestly

In the case of Domestly, the issue of trust is twofold. Launching a service that allowed the BOP into the homes of relatively wealthy people for cleaning purposes made the potential users of the service concerned with the possibility of theft, not trusting the cleaners' honesty and intentions. To secure the quality and honesty of the cleaners, Domestly performed a thorough background check on all applicants, revealing that 15% of them had criminal records of theft. Furthermore, they developed a rating system where the customers could evaluate the cleaners, effectively putting them out of work if they received bad feedback. Through these measures, Domestly managed to develop the trust of their customers. The cleaners, on the other hand,

faced the threat of robbery as they returned home after work carrying cash. This made Domestly utilize an online payments system, letting the cleaners travel cash-less and hence removing the chance of being robbed (Potgieter, 2016).

As the screening procedure and the rating system aim to secure that the value delivered is in line with the value proposed, and the online payments system is a means to deliver value to the BOP, all of Domestly's solutions to the trust issue relate to the element of value delivery in the business model framework.

Last Mile for BOP

The trust issue is in several ways similar in the case of LM4BOP. The Spaza shops, prior to being supplied by LM4BOP, usually restocked only once a month, causing a series of potential problems. Most significant, at the end of each month, they had a large amount of cash in their stores making them easy targets for robbery. Furthermore, due to the monthly restocking, the Spaza shop owners lacked information about what the market prices were, causing mistrust towards whether LM4BOP was actually offered fair prices (Blanchet, 2016).

To convince the merchants that LM4BOP in fact provided market prices, they gave them access to an online service comparing wholesalers' prices against the price offered by LM4BOP, and by consistently being cheapest in the market, the trust was won and the Spaza shops agreed to let LM4BOP supply them. Following this, they received a device that enabled easy and more continuous restocking at fair prices as well as allowing customers to pay by phone or credit card. On one side, this reduced the stock of both goods and cash present in the stores at any given time, reducing, if not eliminating, the threat of robbery, while on the other side, it was highly dependent on consistent and trustworthy service, which gave raise to yet another trust related issue. With the more lean production characterized stocking routine, each delivery was small enough to fit into a personal vehicle, allowing LM4BOP to hire local drivers from the Townships as drivers, which spawned an inter-personal trust issue based on the merchants' fear that the drivers might steal the goods. As with Domestly, the solution was to apply a strict screening procedure attempting to secure the quality and intentions of the applicants. In addition, to secure that the goods ordered were delivered undamaged, the Spaza shop owners had to go through the delivery upon arrival and give his approval to LM4BOP before the drivers received their pay (Blanchet, 2016).

With the screening of the drivers and the inspection of the goods by the merchants aiming to secure the value delivery while the online price comparison tool was a means to convince the customers that LM4BOP would deliver as proposed, these elements relate directly to the value delivery element in the business model framework. In addition, the online comparison tool relates to the value capture, since it shows that the value capture mechanisms of the company are trustworthy as well. As for the phone and card payments system, this is a service provided by LM4BOP, and hence it relates to the value delivery as well. This cannot be said as unambiguously when it comes to the lean restocking and the consistent and trustworthy supply of goods as these elements can be seen as parts of LM4BOP's core value proposal. However, they relate closely to value delivery as they are concerned with how and how often goods are supplied, leading to the conclusion that LM4BOP primarily deals with the challenges within the value delivery part of the business model framework, even though some of it in addition relates directly to its value proposition and capture.

Vodacom

Vodacom connects the issue of trust to a lack of understanding, and even though the mistrust might be stronger towards financial institutions, it is still one of the main challenges mentioned in the interview:

“The biggest challenge is trust. Because they do not trust for instance financial institutes, because they do not understand the system. They put money in the bank, and some money are gone. They somewhat trust the mobile operators, but trust is still an issue for us.” (Esbach, 2016)

Similar to LM4BOP, Vodacom stressed the importance of providing consistent service to the customers as a means to build trust. For instance, given the limited purchasing power of the BOP, it is relatively expensive for them to make a call and hence, they cannot afford to lose a call. As a trust building initiative, Vodacom automatically re-establish the call free of charge aiming to provide consistent service. Furthermore, they invest in the local community by sponsoring sports events and healthcare projects among other things. This helps them building their brand and creating awareness, which, in turn, builds trust at the BOP segment.

Even though the practice of sponsoring the local community is undertaken with the aim of strengthening Vodacom's position in the segment, it is to a certain degree a sidetrack of our

business model perspective, as it partly resembles a corporate social responsibility practice. However, to the degree that all interaction with the customer segment relate to value delivery, it falls within this business model element. The element of providing consistent service is a part of Vodacom's value proposal, and hence it relates primarily to this business model component. However, in our interview, the importance of the delivery of the service that was emphasized, that the BOP could trust Vodacom to sort things out (Esbach, 2016), and hence it relates to value delivery as well. Consequently, Vodacom, like the other companies, deal with the issue of trust within the value delivery element of the business model framework.

6.2 Affordability

Widely recognized in the literature, affordability is a challenge for any company approaching the BOP. With the limited purchasing power found in this segment, this challenge has a very pressing cost-side, necessitating a decrease in costs to offer goods and services at lower prices. However, as the customers lack an understanding of how and why products might create value for them (Esbach, 2016), the question of affordability has another side to it as well. By educating the customers, making them realise the actual value proposition, the consumer surplus increases, which in turn increases the WTP. This mechanism is shown explicitly in the MPP category in the chapter 5, yet, the challenge of affordability is dealt with in all three categories.

Domestly

With Domestly's customers being found in the ROP, affordability on the consumer side is not a pressing matter. However, for the BOP, the cost of applying for a job may amount to R 250 with no guarantee of actually getting the job (Esbach, 2016), which makes the entire process a high-risk engagement. To access the BOP, Domestly developed a mobile application designed for both smart phones and features phones, the latter of which are limited to basic functions such as voice, message and internet. By making the application free for all to use, Domestly effectively eliminated the high-cost-high-risk factor of applying for jobs, hence increasing the affordability for the BOP. As the mobile application is a means of communicating with the users of the application, this challenge is dealt with within the value delivery of the business model.

Last Mile for BOP

Affordability is found at the very core of LM4BOP's business model, as they seek to eliminate the poverty premium making goods more affordable for the BOP. Consequently, LM4BOP deal with this challenge on several levels. In order to offer the lowest market price available at all times, they buy goods in bulk from the cheapest wholesaler and split the quantum between the various Spaza shops. In addition to this direct confrontation with the challenge, they deal with it indirectly as they exploit their bargaining power towards the Spaza shops to prevent them from raising prices above what can be regarded as fair market prices towards the consumers (Blanchet, 2016).

Furthermore, the device used for ordering goods and taking payments, records all sales data. These records help the Spaza shop owners keeping track of stock and finances, which LM4BOP use to connect them to formal banks giving them access to micro-credit. In turn, the Spaza shop owners are committed to redistribute this credit to their customers, arguably increasing the affordability of goods and services (Blanchet, 2016).

“People don't have the cash flow to buy the social products [for instance bio fuel stoves or solar lighting], and we solve it using the data that we get. We know that the Spaza shops makes that amount of turnover, and sell these products and makes this profit at the end of the month we can then link them with formal banks, and get credit for them. Say you make 10 000 rand per month, we give you 5000 rand of credit/loan that you have to repay, and this loan must be used to give credit to your customers. So now, all your costumers asking for a candle, you will offer them to have this solar light for the same price, i.e. 1.5 rand per day for the next three months, and they will have access today to buy solar light. This makes it a no brainer, it is easy to make this decision, and for us it is easy to give this credit, because we have all this data backing the fact that we can believe them. Next month we give them 5,000 rand credit, and they will pay us back, because they need to get access to the best prices. We just try to solve the problems we have distributing social products, and adding this activity of distributing anything.” (Blanchet, 2016)

The sales and stock recording device is a communication tool that actively is used in the value delivery or LM4BOP. This is not the same when it comes to the bulk purchase of goods and exploiting the bargaining they possess over the Spaza shop owners. The bulk purchase, enabling LM4BOP to provide the best prices in the market, is the core of their value proposition, and hence it relates directly this business model element. As for the bargaining power, it is not in

itself found in a business model, but it is reasonable to believe that it originates from the fact that the merchants “*need to get access to the best prices*” (Blanchet, 2016). Following this, it relates directly to the value proposition, leading to the conclusion that LM4BOP mainly deals with the issue of affordability in the value proposition of the business model framework.

Vodacom

The challenge of affordability is interpreted in a more complex manner at Vodacom. Stating that it is easy to determine the cost and price of a good or service, affordability is mainly concerned with the customer’s alternative cost and educating the customers:

“The second challenge that we got is affordability. It depends on how you create value. It is not a challenge how to cost and price something, but its understanding affordability. It is not necessarily about rands and cents, but about the value and benefits that you create, and it is very difficult. In the upper end of the market, it is much easier. Because people can articulate, they know what they want, they know what it is. Here you are looking for something that people do not even know will change the way that they do it. So it is a challenge of understanding where the value is. How do you say to somebody; it’s actually valuable paying a little bit to know you are going to run out of electricity in a few hours’ time, because then you can do something about it. If you are struggling to get food on the table, how do you communicate that that’s actually valuable” (Esbach, 2016).

With the more intricate perspective, the solution is less straightforward. Understanding the customers takes a great effort and necessitates market research among other things. Based on this, Vodacom can develop and tailor new products, as, for instance, was the case when they discovered the high cost of applying to jobs for the BOP as mentioned above. This caused them to develop a mobile application streamlining the job application process for the BOP, adding yet another feature to their product and increasing the value of their product (Esbach, 2016).

However, understanding the customer and offering feasible solutions is only one side of the issue. It is crucial to make the customer understand why the product is valuable as well, and in order to educate the customers, Vodacom use online videos functioning as practical user manuals substituting the traditional text heavy version (Esbach, 2016). This way, Vodacom understand their customers and tailors solutions to their needs, thus creating value before they

educate them as to why the product generates a consumer surplus, which in turn increases the customers' WTP and through these mechanisms they making the product more affordable.

In relation to the business model framework, the various processes connects to different elements in the business model. While undertaking market research and adding features to the product is actively altering and enhancing the value proposition, the education of the customers happens in interacting with them, and hence it relates to the value delivery. This leads to the conclusion that this issue is handled through an intertwined process that starts in the value proposition before it ultimately is dealt with in the value delivery element.

6.3 Reaching the BOP

The BOP segment in South Africa is mainly found in the informal, suburban Townships, lacking formal addresses and having limited access to traditional marketing channels such as TV, radio, computers and internet. Furthermore, the degree of formal education is scarce, resulting in a substantial presence of illiteracy. This makes them hard to reach compared to the ROP, and companies approaching this segment might have to rethink their strategy for reaching them.

Domestly

Domestly, with its twofold user mass, apply traditional marketing techniques to reach the users of the cleaning service as these are found in the ROP. Thus, the challenge lies in reaching the BOP and the potential cleaners:

“Reaching that market is extremely difficult. We do google ads, twitter, ads, flyers, etc. to the customers, but reaching the other segment [the cleaners] is really difficult. I mean, you can buy SMS to send them, but you don't know how effective that is. We have what is called a “please call me SMS”, if you don't have airtime, then you send someone a “please call me”, so it doesn't cost you money. And then the person can call you. And, those ads in there is probably the biggest channel that financial institution use to market.” (Potgieter, 2016)

Even though the “please-call-me” service is mentioned, the effectiveness of that means of communication is questionable. Domestly is dependent on simpler methods to reach the BOP

and states that digital marketing is not necessarily the way to go. Rather, word of mouth and above the line marketing techniques, such as newspaper and billboards are emphasized:

“Word of mouth is probably a big one, but in terms of digital marketing, we’re not going to do google adverts for that. You might do Facebook, as that market (BOP) is on Facebook, or you might do more above the line type of marketing, like maybe newspapers. But the best thing would probably be to just have a big billboard in the township.” (Potgieter, 2016)

As far as communicating and interacting with the customer segment is embedded in the value delivery of a business model, the issue of reaching the BOP originates from this element. Furthermore, the means suggested by Domestly to solve the problem are all techniques to communicate their existence and value proposition to the BOP, and hence they deal with the challenge in the business model from which it stems.

Last Mile for BOP

The target of LM4BOP is exclusively the Spaza shop owners, and in order to promote themselves, they use the price comparison tool mentioned before. By giving the merchants access to this before further engaging in business with them, they can monitor prices from day to day, and eventually see that LM4BOP consistently offer the lowest market price available. The result is that gradually more of the Spaza shop owners return wanting LM4BOP to supply them.

As illiteracy is widespread at the BOP, LM4BOP had to adjust again after having made deals with the merchants to supply them with goods. The machine used to order goods, register sales and receive payment was designed using pictures and numbers rather than being text heavy. This way they avoided the entire illiteracy issue and provided an efficient channel through which they reached the customers enabling convenient restock.

Both these elements are means to communicate and deliver value to customers, and hence LM4BOP resolve this issue in the value delivery element in the business model framework. In addition, this example show how one factor can provide solutions for several problems. The price comparison tool was initially used to reach the Spaza shop owners, and in the same turn to build trust within the potential customers that LM4BOP were actually the cheapest supplier. This trust, in turn, gave LM4BOP the bargaining power to prevent the merchants to raise prices above what could be considered fair market prices to their customers.

Vodacom

The notion of using one means to solve several problems is repeated with Vodacom, as, in order to reach the BOP, they sponsor local events and institutions among other things. By supporting the local community like that, they market themselves through building trust and creating awareness in the target segment. Furthermore, they avoid the illiteracy issue by using videos to explain how to use the products or applications and why they are valuable.

Coherent with the arguments above, that sponsorships are ways to interact with the target customers, which in turn falls within the value delivery element of a business model, Vodacom deals with the challenge of reaching the BOP within this business model element, as they actively adapt their way in which they communicate their value proposition.

6.4 Conclusion

In comparing how the three companies deal with the various challenges, we can point out some interesting findings. Table 1 summarizes the findings discussed above, and as mentioned, the same means can resolve several of the challenges. This was, for instance, the case with LM4BOP and the price comparison service used both for marketing and trust-building purposes, before this eventually was exploited to commit the merchants to sell the goods at fair prices to their customers.

Table 6: Summary of Solutions to Main Perceived Challenges

	Engaging the Entrepreneur: Domestically	Eradicating the Poverty Premium: Last Mile for BOP	Multipurpose Product: Vodacom
Trust	-Screening -Rating -Online payment	-Price comparison service -Lean production -Pay by phone/card -Consistent service -Screening -Inspection of delivery	-Consistent service -Sponsorships
Affordability	-Mobile app	-Bulk purchase -Cheapest wholesaler -Exploit bargaining power -Record data	-Market research -Adding features -Educating videos
Reaching the BOP	-Word of mouth -Above the line -Billboards -"Please call me"	-Price comparison service -Tool for restocking	-Sponsorships -Videos user manuals

Furthermore, by comparing the solutions across the business model categories represented by the companies, it becomes evident that they employ similar solutions to the same challenge. For instance, both Domestly and LM4BOP performed strict screening of the cleaners and drivers in order to secure their quality and honesty. Another common solution between these two companies is the online payments system to increase the safety by their users and customers by reducing the chance of robbery. Both LM4BOP and Vodacom stressed the importance of consistent service in order to build trust, as well as refraining from the use of text when communicating with the customers in order to avoid the issue of illiteracy.

What is common in the way in which the companies deal with the various challenges is that, regardless of the point of origin of the issue, it is mainly dealt with within the value delivery of the business model framework. The only instance that in its entirety is an exception from this is how LM4BOP deals with affordability, as this is part of their core value proposition. This is particularly interesting as, according to our categorization process, the value delivery is not a defining feature of a business model classification. Quite contrary, following our categorization process in chapter 5, where we explicitly discussed the target customer, value proposition, delivery and capture within each category, value delivery is the least category dependent element in the business model. Consequently, our cases from South Africa seem to deal with the main perceived challenges regardless of business model categories, leaving the solutions category independent.

7 Conclusion

Through our thesis, we aimed first to categorize business models for the BOP, before we analysed how the different classes of business models deal with the main perceived challenges, using the case studies from South Africa as representatives for the identified business model categories. In the following, we will discuss our main findings and contributions, and point out the managerial and theoretical implications. Finally, we highlight the limitations of the research and suggest fields of future research.

7.1 Discussion

Following our two research questions, the main contribution in this thesis is twofold. First, we generated three business model categories based on existing case studies and our interviews from South Africa. The “EE” category illustrated how the BOP can be leveraged as a resource, both as a working force and as a distribution channel to reach the vast BOP market. The PPE classification demonstrated how mutual value is generated by including the BOP in formal distribution channels and value chains, and thus in the formal economy. Finally, the MPP group of business models explained how it can be possible to reach the segment by adding features to a product and, hence, increasing its value to the consumers.

Whereas prior work on categorizing business models has emphasized the social aspects (Spiess-Knafl, Mast, & Jansen, 2015; Dohrmann, Raith, & Siebold, 2015), our categorization was based on the firms being profit seeking, making this a parallel stream of research. In the process of aggregating the case studies into business model categories, we discovered that the key pillar of the business models consistently were found in the value proposition, and combined with the role of the BOP, this laid the foundation for grouping the different cases into business model categories. For instance, the EE category offered the BOP an opportunity to earn wages, hence engaging them as work force, whereas the MPP class approached the BOP as end-consumers offering them multi-feature products. Consequently, the value propositions and how the BOP is included differ significantly between the various categories, while the value capture mechanisms could only be implied. As for the value delivery, it was seen as category independent in its entirety, as the same methods and channels were applied regardless of the value proposition. This is for instance exemplified by the use of online services and mobile applications in all three categories.

The BOP is included in various ways, spanning from suppliers of goods and services to end-users. Regardless of how they are included, we showed how the BOP consistently is empowered by becoming part of a formal value chain. This is particularly interesting as it is one of the main social goals reoccurring in the BOP literature, regardless of perspective. Nevertheless, it has been subject to discussion. For instance, we pointed out how LM4BOP used sales data from the Spaza shops to get them access to microcredit, which in turn was redistributed to the consumers to enable them to buy social products. Isolated it may seem like the BOP would be better off, but Karnani (2006) argues that the empirical evidence of microcredit helping to alleviate poverty is mixed, and that it might even be harmful as “poor households simply become poorer through the additional burden of debt”.

Another topic found in the literature is how pricing should be used to reach the BOP segment. It has been stressed that due to the minimal purchasing power found among these customers, it is imperative that prices are reduced beyond what is found in formal, western markets (Prahalad C. K., 2004). Contrary to this, we showed how the PPE category of business models empower the BOP through simply including them in a formal value chain and distribution channel. This eradicated the poverty premium and gave the supplier the bargaining power to prevent the Spaza shops from raising prices above what could be considered fair, hence, they effectively increased the purchasing power of the poor by increasing the affordability.

The other major contribution of this thesis is the in-depth study of how the main perceived challenges are dealt with, connecting it explicitly to our business model classifications. This subject has, from what we found in the literature, only been discussed at a more aggregated level, and thus it represents a new branch of research.

Even though we based this part of our thesis on the cases from South Africa exclusively, the companies we interviewed reported that trust, affordability and reaching the BOP were the biggest challenges. While the element of trust is somewhat neglected in the existing literature, the latter two are repeatedly mentioned, and thus, this finding in itself is not too remarkable. However, we explored how the companies dealt with the challenges, and found both that they use one means to several ends, and that there are similar solutions found across the different categories of business models. For instance, LM4BOP’s online comparison tool was used both to build trust and to market themselves and reach the BOP, and online solutions were applied in Domestly and Vodacom as well.

With ICT being increasingly used in any setting in today's society, this may not in itself be extraordinary, but in connecting these findings to the business model framework, we showed how the main perceived challenges mainly, but not exclusively, were resolved within the value delivery element. This is strongly related to the fact that both trust building and reaching the BOP is highly dependent on and connected to interacting with the segment and securing that the value delivered is in line with the value proposed. This connection to value delivery is especially interesting as we revealed that this element was category independent in chapter 5, and consequently it should not be surprising that similar solutions are found across the cases analysed in chapter 6.

This line of arguments, lead us to conclude that the methods applied to tackle the challenges were largely business model category independent. However, as our research was based on a low number of case studies that provided ambiguous results as to in which business model element the challenges were tackled, this only serve as an indication.

7.2 Implications

Our research has yielded several findings, some more practical and some more theoretical. Following this, we will point out how our thesis offers theoretical and managerial implications, starting with the latter.

Managerial Implications

Several of our findings can be useful to managers planning to approach the BOP segment. First, our business model categories showed how the various categories proposed value to the BOP. Probably the most unexpected one was the MPP, in which features are added to an existing product or service, hence increasing the value of the investment to the BOP. As the combination of features may not always be obvious, this model has a certain emphasis on knowing the customers as well, which is of great importance to managers.

Through the EE category, we showed how the BOP could be included as resources. This is of managerial interest as the BOP can serve the purpose both as labour and as a distribution channel to reach the BOP segment. Furthermore, reaching the additional customers at the BOP may offer economies of scale affecting the companies as a whole.

In regards to the challenges in serving the BOP segment, managers can use this thesis as a guidance as to which issues to focus on, with trust being the most pressing one. Through our analysis, we provide suggestions as to how to overcome these challenges, pointing out how one action can solve several issues as we described in the Discussion section above.

Theoretical Implications

The term BOP and its definitions is a debated subject in the literature, and thus, our literature review can be seen as a contribution in itself as it provides an overview of perspectives on the matter. The definition that we adopted in our thesis can contribute to a more practical approach in defining the term, moving away from the much-debated absolute threshold values given in purchasing power parity.

Furthermore, through our literature review on business models for the BOP we pointed out how existing literature lacks work on this subject, effectively creating a gap to which we contributed by generating three business model categories for the BOP. This may be the start of an emerging line of research focusing on for-profit companies rather than focusing explicitly on the social elements of the picture. Even though our method for aggregating cases into categories may not be new, we showed explicitly how the key pillar of the classifications are found in the value proposition. This can be exploited in future research applying similar techniques, regardless of whether the focus is on monetary, social or environmental profits.

As mentioned above, the empowerment of the BOP is an often- mentioned subject in the literature, and the degree to which mechanisms such as microcredit and pricing of goods contribute to the welfare of the BOP is debated. Even though our contribution is only one among many, we have provided examples supporting both microcredit and exposing the BOP to market prices rather than to tailor the price level to this particular market.

Finally, our in-depth study of the main perceived challenges contributed to filling the gap created by the numerous overarching and general discussions about how and why the BOP is a challenging segment to service. Here, we provided both the start of the research field and a methodological approach to explore this area.

7.3 Limitations and Future Research

In writing this thesis, we have gained insights into how firms can service the BOP segment, taking on a business model perspective. Nevertheless, due to several reasons, such as time constraints, there are limitations to our research. In chapter 5, we identified three business model categories through a multiple case study. However, we lack the basis to say whether these are the only three categories, or if there might be other classifications that we did miss through our study. This could be explored further by simply replicating our research and approach, continuing to map more cases of companies approaching the BOP segment. In addition, this would strengthen the results found in our thesis, as it would continue to aggregate the already existing categories of business models.

Our study on the main perceived challenge at the BOP in relation to the different business model categories can provide a novel point of departure for further research. As more detailed information than what was generally provided in the case articles identified through the literature search was needed, we based this on the primary data collected in South Africa. Consequently, this is based on interviews with three companies of varying sizes in one country. As a result, our findings are only indications, suggesting that future research need to be conducted on the subject. In this case, it might be interesting both to add cases to a South African study, exploring the generalizability of our findings, in addition to replicating the research in other BOP markets around the world, such as, for instance, India or Brazil, to see if the challenges are the same or if they are dealt with using the same mechanisms.

When it comes to the value capture element of our business model framework, we only implied from where value could be captured by the firm and why this could happen. Here it could be interesting to see if the various business model categories had designated value capture mechanisms, or if specific mechanisms were better suited to certain categories of business models. For this purpose, a new methodology would be in demand, possibly an adjusted version of the one we applied in our thesis, focusing more explicitly on value capture compared to our focus on challenges.

If the perspective is elevated beyond this thesis and the qualitative approach, it could be interesting to compare the performance or profitability of the various business model categories. This would probably require an entirely different methodology than what we have applied in this thesis. As it would measure numerical values and compare these, a quantitative approach would be in place, which in turn might call for a larger sample than we had for this thesis.

With larger aggregates within each of the business model categories, originating from all around the globe, it might be possible to study whether the categories were more suited to certain environments, such as for instance urban or rural BOP markets. This demands large data sets from all around the world and a clear definition of what makes them “suited to an environment”, and thus it lies far into the future to be able to conduct such a research.

The ideas for future research are plentiful and limited only by our creativity. Regardless, in this thesis, we have hopefully sparked the ignition of two important streams of research that in time will help companies to access a new, vast mass market in a profitable way, lifting billions out of poverty, thereby raising the living standards of those who have the least, and ultimately, make the world a better place.

8 References

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9 Appendix

2.A Literature Search for the BOP

Search Term / Key Word	Date of Search	Number of Hits
Bottom of the pyramid <i>or</i>	January 12 th 2016	256
Base of the pyramid		
Snowballed articles	January 2016	6

*The key words were used to searched the abstract

2.B Literature Search for Business Models for the BOP

Search Term / Key Word	Date of Search	Number of Hits
Business model <i>and</i>	December 18 th 2015	6
Bottom of the pyramid		
Business models <i>and</i>	December 18 th 2015	11
Bottom of the pyramid		
Business model <i>and</i>	December 18 th 2015	9
Base of the pyramid		
Business models <i>and</i>	December 18 th 2015	9
Base of the pyramid		
Social business model	January 4 th 2016	4
Social business models	January 4 th 2016	4
Social business model <i>and</i>	January 4 th 2016	0
Bottom of the pyramid		
Social business model <i>and</i>	January 4 th 2016	0
Base of the pyramid		
Social business models <i>and</i>	January 4 th 2016	0
Bottom of the pyramid		
Social business models <i>and</i>	January 4 th 2016	0
Base of the pyramid		
Social innovation <i>and</i>	January 4 th 2016	1
Bottom of the pyramid		
Social innovation <i>and</i>	January 4 th 2016	1
Base of the pyramid		
Business model innovation <i>and</i>	January 4 th 2016	1
Bottom of the pyramid		
Business model innovation <i>and</i>	January 4 th 2016	1
Base of the pyramid		
Social innovation	January 12 th 2016	190

*The key words were used to searched the abstract

2.C List of Telecom Operators in Sub-Saharan Africa

Country	Number of Telecom Operators	
	Total	Major Operators
Angola	2	0
Botswana	3	2
Cameroon	5	2
Ethiopia	1	0
Ghana	6	3
Ivory Coast	8	2
Kenya	4	3
Madagascar	3	2
Malawi	5	1
Mozambique	3	1
Namibia	2	0
South Africa	5	2
Tanzania	12	2
Uganda	7	2
Zambia	3	2
Zimbabwe	3	0

2.D The interview Layout

Customer segment

- Who are the customers?
 - How do you segment them?
- How is BOP involved?
 - Are there any challenges?

Value proposition

- How does Vodacom create value for the various users?
 - What needs do you fulfil?
- Is the product differentiated to reach different categories of users?
- Does Vodacom provide any services other than the application?

Value delivery

- How does Vodacom market and distribute their product to the different customer segments/users?
 - How is the marketing and distribution differentiated?
 - Are there any challenges in distributing the service/product to the various customers?
 - How does Vodacom overcome these challenges?
- How does Vodacom interact with its customers?
 - Is the interaction different with the different users?

Value capture

- How does Vodacom earn profits?
 - What is the cost structure of Vodacom?
 - What are the revenue streams of Vodacom?
 - How does Vodacom earn money on the application?
 - Subscription, percentage, fixed amount per transaction....

Resources, activities

- What are the main perceived challenges within the market in which you operate?
- What experiences have you made along the way?

- How have you overcome these challenges?
 - What have you changed or plan to change in the future?

Partners

- Do you have any strategic alliances or partners?
 - What are the main purpose of having these alliances and/or partnerships?
 - How do you benefit from them?

General

- Is there anything you would like to add?

6.A A Semi-structured interview with Arnaud Blanchet, Last Mile for BOP.

The following text is written word by word from our recording of the interview.

A: Do you know the company Eastra?

Q: No

A: It's a French consulting firm that specialise in social innovations, and they actually released a list of the ten kind of best practise about social business at BOP. It was only targeting the marketing side of things, but it was an interesting report that they wrote, and there would be things like focus on below line marketing only, risk free for the costumer. Because they have to do a very rational decision, the buy is a big part of the budget, so it can't go wrong.

Q: What is below line marketing? How do you define it?

A: They define it in the report as everything that you would not use in a formal market. Above the line would be TV, radio, any kind of media. Below the line would be, okay, I go and do a demonstration of my product on the market, and what I do is that I tell people that, Il take an example that was quite good for clean cook stoves. I'll do a demonstration, then I give you one, and I say "try it for one month, you know what budget you spend every day on charcoal, wood or whatever you put in your usual cook stove. Take the same amount with you every morning when you go to the market, but buy only what you need to cook with the one we have here. So try one day, after one day you see what you have left. And everything you don't spend, you put in a tin, and you do that for one month. That's all you have to do, and you have a free product. And people come back after a month and say it was good, but quite expensive. They open the tin, and the money you save in a month would enable you to buy the tin. That's exactly the amount. They take the product and for the next month the saving would be yours. That's a clever marketing technique, which makes it risk free for the costumer. He saves money, there is no risk. If you don't manage to do that, people would not be able to buy your product, because of the risk.

Q: SO we have a list of questions: first, could you explain to us who and what is Last Mile for BOP?

A: We started with the idea that we wanted to distribute these social products. So, solar lights, clean cook stoves, sanitary pads, water filters. We wanted to make sure that every community

that needs these products, lets say a community where there is no electricity. We though that they needed to have access to solar light, and we though that they needed to afford it. That is not the case in a lot of places. There are a lot of social entrepreneurs who said that well, “Our innovation is great, but no one is using it.” That’s the distribution part that fails. So may aim with the company was to solve this challenge of distribution. So we tried first for the first year and a half – 2 years, to just distribute social products. To make sure they were in the communities where people needed it. We had three major constraints. The first one is the distribution channels are not ready, so you need to make your own distribution channel, which is very costly. The second one is that people usually can’t afford these kind of products. If we take the example of the solar light. Today they buy 3,50 rand for a candle every day. And they have this budget, but when you sell a solar light, you ask them to put the budget of more than three months’ candle in just one time. And they can’t do it, even if it economically makes total sense, because they will keep the solar light for way longer then for what they pay for in candle value, but they just can’t do it. So we had a problem of cash flow from the customer side, and the third problem was that the volumes of products, of social products, are too low to justify doing just that. For various reasons, if you find for example, in the panel distributors, they were distributing solar lights, if they have small territory, after six months, either everyone bought one, or people who wanted to buy one had done it. The rest are just not interested, or you won’t convince them now. And if you sold to all of these clients that you could sell to, it means that for three years, or at least for 1 or 2 years, you don’t have anything else to sell them, because they’re done. You have a guarantee on your product, if it doesn’t work, they’ll come back to you, but you have to give another one, not sell it. So we had a kind of a problem with the life cycle for the sale team and these kind of thing, and the volumes were just too small to have economies of scale and all of that. So we decided to totally shift the activity and to strand the distribution and to do the distribution of anything and everything. And that came from the learning that actually its cool to have solar light, but it’s also cool to just have toothpaste. And a lot of them actually don’t have toothpaste, because you don’t find them easily in townships or places, or you might have one, but its only one flavour, which is great, but when you are a consumer you like to have choices, and worse, you have only one, and it’s quite expensive, its actually more expensive than if you go to the waterfront and the supermarket there. Usually the person would go to a small informal grocery shop in a township earns way less than the wealthy person who lives in the waterfront and goes to shopping to the waterfront. That’s what we call the poverty premium; the poorer you are, the more you pay. We though that that was actually what we should try to target, and sell whatever product we can, but make sure that then its sold

to the final customer at the right price. And to do that we choose one distribution channel, which are called the spaza shops. So spaza shops are informal grocery stores, that you find everywhere in south Africa, in townships, in rural areas, you even have some in some areas in Cape town, like Bookat for example, you find some. And they're everywhere, but they are run as a means of survival. Historically spaza shops are small shops that were "eden" in townships during the apartheid area, and Spaza means Eden, so they were not allowed to trade, but people would just use one room in their house and they would sell a few products. Usually through the window, so you open the window, you sell the product, if there's any people coming around checking, you just close your window; there's no shop. So that's what they were doing, and there's still some stigma but what a spaza shop is. People are not very proud of being a spaza shop owner, and if they can find a job they'll just stop doing this activity, as a result, they only run as a mean of survival, its badly managed, they run out of stock very often, they don't have working capital, there's usually not a lot of space, it's just a very small room, so they don't give a good service to the customer, and it's very expensive, so it's a high poverty premium to shop there. So we decided to help them by designing an android application that could be used as the point of sales system, and on this system they can order all their stock, absolutely everything. We also use a physical point of sale system that we give to these shops. It's a tablet in a big plastic box, no one wants to steal it. There's a tablet, a bankcard reader, receipts printer and card reader, and when they order their stock, they don't have to go to the wholesaler and come back, we deliver it, so basically they order in five minutes on the tablet, we guarantee the best price in the area, and we deliver within 6 hours, at very affordable price for them. So it's cheaper than what they would have paid themselves. And this way we just make sure that there's less poverty premium, because we give them access to an efficient way of buying. In return we ask them to respect company prices, that we also check at normal supermarkets, say, that's the price of a 2 litre coke bottle, please respect this price. We haven't implemented that yet, but if they don't accept this prices, then we don't give them the guarantee of the best price for themselves. That's the first part of our activity, logistic distribution.

The second part, and we don't make any margin on that (the first part), it's like a really non-interesting business financially, but what we do is we then take all the data that we get on these point of sales system, and we help brands to manufacture better products for this market, or to better sell it on this market, so we will do so merchandising in store services where we make sure that the spaza shop owners display the product correctly, if you go there you will see like old products that, let's say this is packet Kellogg's, with the logo here, the box will be like that

on the shelves, you don't see anything, you don't know what product it is, there won't be any price, so there's a lot of things to do just in the merchandising and the stocking of the product. Making sure that the newest product is in the back so the one in the back don't stay there for months and are expired. So a lot of things that would help actually selling more products, because people would then have more trust in these shops, that's a main issue today. The trust issues. The products are not great, its expensive, so that they prefer to pay bus fees to go and shop at the supermarket, we want to transform these shops so people can trust them and have access to good prices. So we sell more things there, more profit for the spaza shops owner, better prices for the community, and also give access to the markets for the brands, for solar lights manufacturer, clean cook stove manufacturers, and all kind of social products, so we removed two of the barriers that we had in our first project. Which was the distribution channel, and the fact that the volume was too low. The third one that stays, is the working capital, or the cash flow. People don't have the cash flow to buy the social products, and we solve it using the data that we get. We know that the spaza shop makes that amount of turnover, and sell these products and makes this profit at the end of the month, we can then link them with formal banks, and get credit for them. Say you make 10 000 rand per month, we give you 5000 rand of credit/loan that you have to repay, and this loan must be used to give credit to your customers, so now all your costumers asking for candle, you will offer them to have this solar light for the same price, i.e. 1,5 rand per day for the next three months, and w\they will have access today to buy solar light. And it makes it a no brainer, it's easy to make this decision, and for us it's easy to give this credit, because we have all this data backing the fact that we can believe them, next month we give them 5000-rand credit, and they will pay us back, because they need to get access to the best prices. We just try to solve the problems we have distributing social products, and adding this activity of distribution anything.

Q: I'm amazed by combining microcredit with all the, yea

A: We have done this for 4 months now, just the logistical aspect, and we are piloting the merchandise aspect to see how it will work. And we plan to use another two months to prove the concept and see if we can do it, and then we will go to investors to scale it up.

Q: How do you earn profits for your company?

A: for the moment, we trade the products, we have a very small margin on the product we sell.

Q: you buy from the wholesaler and sell?

A: Exactly, but this margin is spent on the logistic on distributing the product. Where we make margin is by selling the merchandising services. Proctor and gamble will come to us and say “we have this new toothpaste to sell, that is adapted to the township, that we need now to distribute to make sure that they buy it, to launch the product, that’s what we will do. Because we have the contact with the spaza shops, we have the logistics to go there, and we can monitor that the products are well displayed, that we put a loyalty program action so the costumers receive a text message saying buy the new toothpaste from P&G and get a 10% discount or whatever, or group products together. So that’s what we will do, we will be a marketing company.

Q: and you market through SMS or?

A: We try to use a lot of different things. The POS system is our main way with communicating with the spaza shops, the SMS is obviously the best way to directly communicate with the clients. We will use that, we will use also in store actions, making sure that we can put some posters, that we can just display any discount or anything, we want to be the “Smalland”, or I mean you probably don’t know the local companies, I try to see if I know any international companies, I know that Smalland is international, but its basically the companies that goes to wholesalers and place the products. They make sure the shops look really great, and that people want to buy. We want to dot that, but at a spaza shop level. So today Unilever will pay a company to make sure that the stock is always high at the wholesaler, when these guys come and shop. And you will see things that are very interesting. I keep the example of toothpaste. You will see an ad in the wholesaler saying “mum, take care of your kids, and buy this toothpaste” and you will see under it like, in the shelves, it’s just men, so in south Africa, there is a lot of Somalian traders looking at what toothpaste they will buy, the only thing they look at is the price, and the ad saying “mum, take care of your kids”, it clearly doesn’t affect them at all, so it means that these brands, P&G, paid to make sure that someone pack the shelves to make sure it looks good, but no one took care of who will buy here, and how to actually incentives them to actually buy, and our aim is to say, we will do this job making sure that P&G doesn’t have to pay an intermediary that actually have very indirect action, and the buyer will make sure that the product is displayed in the shelves where the mum will come and buy the product for their kids, so if she sees that she might be receptive to this ad, and we will also make sure that these guy at the wholesaler still buy this product. So that’s what we want to do, and today companies are paid to do that at a wholesaler. We want to be paid to do that where the costumer comes and buy’s it. To be more efficient.

Q: How did you come to know the BOP segment, and the costumers?

A: It's a long story, but I discovered through a book called "80 men to change the world". That's the first time I heard about BOP and social business and all of that, then I travelled for a bit more than a year to meet a bit over a 100 social entrepreneurs, so I have first-hand knowledge about the challenges and the market, and then I choose south Africa, because of that's a market where there is a large BOP population, and there's good infrastructure. And I came here and studied the market by doing market research, first trying to sell social product, by doing pilot projects, you learn actually way more when you fail something than from studies. So we just learn on the field every day in the wholesalers, and in the spaza shops, I see how it works, I meet a lot of people working in this sector

Q: It would be really interesting to see these spaza shops, could we join you?

A: Yes of course, we try to keep it really, we try not to take to many people into the spaza shops we work with, just because were building trust, and usually when we take to many people, they are like, who are all these people. But you can come with us and see the township where we go, and spaza shops are everywhere, every 100 meter you will find one.

Q: We just talked to domestly, before we arrived here, and they said it was very dangerous, and we shouldn't, we could get robbed.

A: No, I mean I go there every day, I'm in the township every day. Of course, I mean, if you go to the bad area, at the bad town, I wouldn't advise you to go out in night, especially in Khayelitsha, but Langa, which is where we do our pilot project. Langa, I, I wouldn't say safe, because we actually did an interview there, and the main concern for them is safety. People would come and rob them, but I have never seen anything during my visits in townships. If you go during the day, and you are doing something, it's very safe. There's even visits for tourist in Langa.

Q: What about the townships, are they getting robbed, the spaza shops.

A: there are two problems. I would say there is one problem. It's kind of what they call here the "xenophobic" attacks. Usually the spaza shops owners where attacked and robbed are not south African. They are Somalian, or Bangladesh, or from other countries. And basically they are targeted because they won't be able to do or say anything, so they just arrived and they take the cigarettes and the air time and whatever cash they have, and these guy give everything.

Q: This happens a lot?

A: Yes, one of the guys me meet the other day said he was attacked in 2008, there was a mob, the population came and said you get out, and he lost everything, all the money he had put in his stock he just had to go and find another place, and he was robbed in 2010, where they came and they take almost everything, and just a few weeks ago, they came and took the bread that he was receiving, and the actually high jacked the bread truck, so yea. I wouldn't say that its often, but it's not something that is too special.

Q: is it a major concern, and do you have any strategy to deal with this?

A: yea, a major concern. We try to come up with strategies, cause we, our main approach to sell our system was to say that with us you have the best price, and interestingly, one of the spaza shop owners told us, well you know, since the beginning of the year, price on food have increased by 30%, so that the fact that you save me 5%, I'm not interested. Like people don't look for 5% anymore, like 30% is really high, so I'm not interested in your saving, so we decided that we needed to refocus our sales and try to see how we can be interesting for these spaza shops, so we did some interviews, and safety is the thing that they all say. It's difficult and they try to find solution for it, so clearly something that they want solved, and the only solution they have today is to move. So if you're attacked in Khayelitsha, and they take your shop, well you go to another township, and that's it. So, there's a lot of things to do, after its difficult, because you can try to, I mean, you'll see when you go there, they usually operate from containers, or small shacks, it's totally closed, there's like burglar bars everywhere, you have like totally something that is this sign, you put your hand, you give your money, they give you your product, nothing else. To rob these kind of places is difficult, but if you arrive when they are opening, and they point a gun, there is nothing you can do. And they know that these gangsters don't want to harm them. They are not interested in killing them, because they want to be able to come back in 6 months and take the same thing, so they want them to operate. So it's kind of, and what they say, is when they go to the police, the only answer they get is" do you know the guys that did this", and they like "no" and then they like "ah, okay"; and that's it. And people don't really care, they're somaline, there here, they work hard, send money back to their country, I mean that would be an interesting thing to visit, but I can't really take you there, but if you go to these shops, and you go in the back of the shop to see where they live. Usually its four people, not owning, but working in the shop, and they live in bung-beds. We are talking about people who like from 20-50, full-grown men, living there full time, 24/7, working in their shop. They have no personal life, like nothing. And they dedicate their life just to get money to just do something later, and when they managed to do that, they will invest in

other businesses. In Belgium, there is actually a big Somalian community. But for a few years they just work extremely hard. And that's how they managed to kill all the SA businesses, because they just accept conditions that no one else can accept. It's an interesting business, but the safety is very difficult to solve. So what we try to do is to reduce the stock they have, and reduce the cash that they have. Basically, today they try to buy as much as they can, so they can get some bulk discount, but they have constraint of space, and, not really Somalian, but South African constraint of working capital, so it doesn't work, you can get a lot of stock if you don't have a lot of space and a lot of working capital. So our solution enables to save that, because we give them access to the best bulk price, whatever volume they buy, and we deliver every day. So what we want them to do is to, and we try to have them with the data we get, but to be as lean as possible, you will sell ten bags of that today, just order ten. Then you can have all the product that you want, you won't be out of stock of any product, because you have enough space to have ten of each, and that's what you do. And if you train and do that every day, it means you don't have a lot of cash in your shop, if you buy once a month, then at the end of the month, just before you go and buy you sit on a pile of cash.

Q: How do people pay for the products?

A: For the moment, SA is a lot about cash, it's not like mobile payment like Kenya, but it's getting there. So for the moment, the side that has been taken care of is more the trader side. Traders usually don't, I mean, traders can pay the supplier to leave the cashless payment. But they still go and buy at the wholesaler with their cash. So we want to make sure then that's what we have card payment system that our POS, we want to make sure that people can buy with their cards. Today there are not a lot of people using banks, so the card system doesn't work. But a lot of people receive grants from the state, and the organisation in charge of that in SA is called SASA, so they give out the social grants, and the issue some cards for the beneficiaries, so what we want to do is that the beneficiaries don't have to go to an ATM or anywhere to get their cash. We want them to be able to just go to the spaza shops and use their card and use whatever grant they receive to buy products. It's not working yet, we still want to sell that to SASA, but it didn't work, but yea, that would be the aim. Then there wouldn't be any cash anymore.

Q: Because you buy from like the wholesaler, do you have large stock yourself?

A: yea, NO, we buy whatever we receive as an order on the day, that's why we need a large number of shops to be sustainable. Basically what we do is in the morning we receive the orders

on the POS, so we take some of it, we see with our wholesaler where is the best price we can get, we buy in bulk this thing, and then we just break it down for all the different spaza shops,

Q: Does that affect the prices you get from the wholesalers?

A: Yea, I wouldn't say the more volume you buy the price is, but it's kind of that. So if you buy one, you'll have the retail price not good. If you buy 12, you start having like good bulk price, but it's not that great. If you buy a pallet, then you'll have a good price. If you buy 20 pallets, it won't change much anymore, it would be kind of the same price. So what we try to do is, the spaza shops today buy 1-12. We want to go to the pallet price. And there we have a big saving, that enables us to finance the delivery part, and enable them to get access to good prices.

Q: So your goal is then to have many spaza shops?

A: Yes, exactly. And after, let's say 2-3 years, if we manage, our goal is to have 3000 spaza shops within two years. If we manage to have that, then we'll probably go directly to the manufacturers, and order directly from them. We can't do it today because we are too small, and you can order just when, if you like order truckloads of products, like 34 pallets. So we are far from there, but the aim is to get there.

Q: So today, is it, I mean, the cost vs the revenue, is it, delivering and buying through wholesalers, including transport cost, is it profitable?

A: basically we are not financial sustainable, but just on the trading part, we would be sustainable.

Q: I was just wondering about the customers, or like, what are the demographics of the spaza shops, the people who run them, and also the people who shops there.

A: Sure, yea, so the spaza shop owners themselves are, I would say 80% Somalian, or foreigner, and 20%, even less, South African, at least in the Western Cape. In other provinces, like Mpumalanga, it would be different because they enforce some law that prevents foreigners to own spaza shops, but everywhere where foreigners can own shops, you would see a very rapid change in the demographics. South African just stepping out of the market.

Q: Is that because of the working conditions?

A: Yea, because basically, as I said, its informal shops, and it's not a very good social status to be running a spaza shop, so you have the choice of running a spaza shop, you make little money in an informal way every day. At the end of the month you don't see anything. You don't have

impression that you get a lot, or you just rent the place to Somalian guy who will give you like real money at the end of the month, and you don't have to do a job. Usually people prefer that. And so that's why it's changing really fast, and the people who stay, they just have to get there in one, and then Somalian have a lot of working capital, they usually rely on the community around them, they will get working capital from the community and buy a lot of stock, and then they will offer cheap prices for three first months, enough for people to come and be like "woa, that's way cheaper than the neighbour shop owned by a south African, I'll shop here" and as there is a lot of stock, they shouldn't be out of stock, which is a big problem in south African shops, which don't have a lot of working capital. So very quickly there will be too much competition for the south African, they will earn less money, and then the Somalian will come and be like "would you like us to rent the shop", and they'll be like, "yes please take it". And then they will get their money at the end of the month. And they are very good at developing their network. So if you go to Langa today, probably 90% of the shops are Somalian run.

Q: how many Somalians are there in Cape Town?

A: I have no idea, but probably a big community, they don't come with their family, its four men working in a shop, and after a while, when they have made enough money, they will try to own more business and property and then try to make their family come with them.

Q: Are they men exclusively?

A: I have seen a few women, but in the shops in themselves its usually only men, except for the south African market, where of course south African families would be a man or a woman or, yea.

Q: The people shopping at these stores, are they men or women or both?

A: Both, it's really, every person living in township usually go to the spaza shop. The way it works is that when you get your money, your salary at the beginning or the end of the month. You try to go to the supermarket, it makes sense to pay the transport fee to get the cheap prices there, and you go there and buy whatever you can. But form the 15th of the month you start to be short on some products, and then you go to the spaza shop to buy what you need, and that's usually how it works. And it's really everyone, you see like small kids coming before school to get sweets or something like that, or chips. Actually the product that they sell are bad, chips, sweets. You don't see a lot of vegetables or fruit, its mainly processed food.

Q: What are margins and what profits do regular spaza shops earn every month?

A: I would say they make 10% profits every month. It depends a lot, if you take, they actually lack business skills. So you will see that on some products they don't make margins, on other products they make 50% margin. But mainly they take a gross margin of between 20-30%, and keep about 10% profits after paying the rent and all of that.

Q: So in local currency, how much are we talking about?

A: So that would make, and I'm talking about big shops, so smaller would probably not make that, but one that I talked to and accepted to give me all the details, made 500 000-rand turnover per month, and they would make 15 000 rand profits. So 10 % profit. I mean it's very small if you convert it to euros. Small spaza shops can do like 30 000 per month, and that's it, so it's just clearly difficult to live with what you get from that. Even if you manage to be as efficient as the big one and get 10%, its only 3000 rand, but that's what people live on here.

Q: Is there any problems, because from what we've read, there's a lot of trust issues, and may even be problems with illiteracy, is that a problem?

A: That is something we came across, and that's why our app and the POS system can be run by someone who doesn't know how to write or read.

Q: How is that possible?

A: Big image of the product, the thing that are in big are the prices. Everyone know how to ready the numbers, even if they can't really count it. The thing that doesn't work is to say I give you 10% discount. People will be like, woa, 10%. So that doesn't work. We don't talk in percentage. We just say I give you ten rand out of that. So yea, we have this problem of things. But on our app, it's like, image, price.

Q: Do you have to have a smart phone to use it?

A: A lot of people have smart phones, almost everyone has smartphones now.

Q: really? We had some reports saying that there actually, a large part of the segment use the "old school" phone

A: Yea, you can still find some of that, of these ones, you can interact with them using SMS, or USD app, but especially with the spaza shop owners, usually they have smart phones. And we sell them, I didn't take them with me, but we have really cheap smart phones, really good android smart phones, that retail for, there was a special deal of the day, say 600 rand for a smart phone. Everyone can get one.

Q: I might consider buying one myself

A: You should, it's really good quality!

Q: Okay, so the terminal you provide, is that something they rent, or is that something?

A: we are still in a pilot project phase; we are not sure what we will do. The thing is that some of our competitors, selling only air time use the same kind of device, and they give it for free. So we'll probably have to give it for free.

Q: Okay, how much does it cost you?

A: It cost, depend on the volume we take, but let's say 5000 rand per unit.

Q: How many shops to you cater to now?

A: For the moment we have 5 shops, but we plan to have 3000, so that's kind of an investment.

Q: yea, that's true. So when did you start, when did you get your first shop, and how's the growth rate been?

A: So, we started, I would say, talking to the shop a bit more than 6 months ago, trading 4 months ago, and we decided not to go for too many shops, because we want to learn really, especially the logistic. Its, you need to see how it works, so we only took 5 shops, and we don't plan to expand before the end of our pilot project, but we already have identified a hundred potential customers in the same area, and people are asking us, when can you provide us this service, and so we're not very worried about the traction and the scaling up on the sale side, managing to get this positions.

Q: You said that you are trying to figure out a way to enforce that they will keep the prices. Is that in regards to that they will raise the prices or lowering the prices?

A: What we want is that they use very competitive prices, as I said, what we want to do is to eliminate the poverty premium that people pay, and the problem is that they are not aware of the prices in the supermarket, so we want them to try not sell more than the higher price than the supermarket. And today they clearly do, and so we want to push them to decrease their prices.

Q: Partners, what are your strategic partners, if you have any today?

A: We don't have any today, but we want to get partners that can help us to access better prices, and also to, yeah. We might have one competitor soon, and I know that you are going to talk to

Vodacom, so you can ask them. Vodacom has tried to do the same thing that we are doing. It's in their plan, they have been working on it for three years now, we haven't seen anything on the field, but they are working on it. And their working with "smart mart" That's the kind of very interesting partnership that they have. Because you have one technology company that is actually everywhere in the townships. Because they sell airtime everywhere, and "my smart", which is the biggest distributor, which own a lot of wholesalers here, "gembo", "macro", "rhino", and different ones, and that have good like, presence in the country. Not everywhere, there are still a lot of places where they are not, but that could be the interesting strategic partner that we would be looking for. A retailer, or a wholesaler and someone interested in the market.

Q: I'm wondering about the transportation, is it truckloads, are you driving it yourself, or how is it done?

A: What we are doing, and that's where we are innovative, but we are basically using local people from the communities to do it.

Q: So they drive their own car and come pick it up?

A: Yea

Q: Are they connected to the spaza shop in any way?

A: We do the connection, we link the drives and the spaza shops.

Q: So you combine that into the business model

A: Yea, basically the way we presented our logistic system is kind of an Uber for logistics. We will use independent local drivers who we engage in a delivery to delivery basis.

Q: And how do you ensure the quality of the drivers, that they don't destroy the goods on the way, or drive away with it.

A: We have insurance for the goods, but they get paid only when the delivery is done, and so the spaza shop owners validate when you receive the delivery, so they check with the driver that everything is received and is in good shape. And they only get paid if everything is good. So that's the way we try to make sure that the quality remains good.

Q: very innovative, combing lots of....

A: Yea, I mean like, they can have like 20 000 rand per load, and 20 000 rand can be like seven months of salary for someone in a township, there will always the temptation, probably one day

we will have a driver who just leave with the stock, but first you need to sell it somewhere, and he will never drive for us anymore, so yea.

Q: Do you do background checks on the drivers?

A: Not really, because its very informal. We make sure we have their ID number, their driving license, the car plate number and everything and paper, and when we have that, we can find them. They can always disappear and go in the eastern cape, because they used whatever car and they don't care, but we will be insured for that.

Q: You mentioned one partnership, are there other ones you considering as well? Government, or NGO's or?

A: we would like to do that, we would like to partner, as I said, SASA for example, to be able to extract directly from the cards, but just like we create a lot of jobs, and there's a lot of programs in south Africa to try to pay companies who make jobs, to make sure that these jobs are sustainable and everything. We would like to look a bit more into that. But the thing is I'm French, and I'm white, which is, according to the "bee"- standard, is probably negative bee points, and bees are like positively discrimination policy that companies have to comply with to get with to get good rate to be able to get state contracts and things like that. So it's difficult for me, being a white foreigner, to get involved with governments as it is, but I have a South African business partner, so the aim is to make sure that we manage to get in touch with these organizations, and see what we can do with them, but yea, we would like to work more with the government, and to show them what we are doing.

Q: Investors, how's that going?

A: So for the moment, I have been funding the project by myself, and the aim is to go and meet the investors when we finish our pilot project on the merchandise side. The logistic and wholesalers side, we have done it, and we know that it works. But we still want to do the merchandise side, because that's where we earn money. To get investors, I mean, even impacting investment, they will still want to know that you are sustainable. So we need to finish that if we are going to meet investors. But we plan to do it within three months. And we need 45 million rands to scale it up to 3000 shops. So that makes 2.4 million euros.

Q: What experiences have you made along the way, and how have you overcome challenges. I guess we have been touching upon a lot of it, but if you want to highlight some...

A: I would say that the main challenge that we got was actually getting in touch with the wholesalers, and I agree that our offering for them is not very clear. We basically buy from them and ask them bulk discounts, but we only buy on the cheapest product, because we compare all the prices, and we buy the cheapest price. I would say that the main challenge was to trade with them with good conditions for us, and were still not there. What we would like to do is to send them an email, or even just plug into their system and just send, our system would communicate, they receive the order, prepare the order for us. We would pay via bank payments, and bank transfer, and then they will prepare the trolley, and our driver would come and take it, and we would never have to go there. But they're very old school, and that's not the way they work, and their not prepared to work like that. So our main challenge today is to solve that kind of process problem that we have with them.

Q: So now you go and pick up the goods at the warehouse /wholesaler and then give it to the drivers?

A: Yea, so we need to prepare it ourselves, I mean they can prepare it themselves, but they are on a different level. Like we want to deliver within 6 hours. When you order through the phone to the wholesaler, or through an email, they will send you answer the next day, and then they would prepare your order, and the next day you can come and collect it. So it takes 3 days, and we want to do it in 6 hours, so it doesn't work well for the moment. But we try to educate, and tell them that it would make sense. But at the same time I understand, like. As I said earlier, my vision is in three years I go straight to the manufacturers.

Q: And then keep your own warehouse?

A: Yea, for them it doesn't make sense, we are killing their business and asking for their help to do that. It's not something to jump in the air for.

Q: Is there anything you would like to add, that we haven't asked about, or that you feel should be mentioned?

A: There is perhaps one thing I haven't talked about, its way we approach the spaza shops, and the way we market ourselves to get more clients. We basically prepared bulk price check tools, so spaza shop can, from their phone, see what is the best price for any product they want in their shop, and as I said before, we guarantee the best price. So what they would see would be, they want to buy Sasko ten K G's, it's a cape flower, they would see that its 77 at giants, 79 at Gambo, 78 at cape cash n carry, and we have eight like that. And then there would be our price,

and as we guarantee the best price, we will always have the best price. We will basically take the price of the others and say that's our price. And we do that on all the products, so after three weeks using the price comparison tool, seeing that all the time, for each and every product they look for, we are always the cheapest, then they'll just ask, can we buy from you, and that's the way we want to approach the market and to get there, So we give this tool for free, and they access it for free, and if their interested in buying from us, they just have to get in touch, and so we hope this will be the way for us to just get as many shops that there is.

Q: Is internet connection any problem?

A: It is for the POS, it's not really for the phone, except if you go to eastern cape and a few other places, but there's not a lot of population there. If you go to Langa, the connection is great, everyone is using their smartphone. But for the POS we need to make sure that it works. It works mainly offline, everything can work offline, and unplugged. You can just charge it at night and then you're done for the day. You can use it. You only need connection when you send an order, and when we try to update the data we have in the catalogue, or when we try to get the data from the sales that they've done, but otherwise everything works offline.

Q: Would you say that if you get these agreements with the producers and scale up, would it be a profitable business?

A: Yea! Not the distribution part, but the merchandising and the data part. I met a company that is ready to pay 50 million rand, just to get the data that we collect. So that's the kind of business we need to be able to run the other one. But yea, it will be sustainable.

Q: You mentioned something about selling the information in order to have Procter and Gamble for instance adapt their products to that specific market. What kind of adaptations have you seen?

A: Yea, so I would say, one that, and its already existing, you find some butter, and yogurt, that you don't have to put in fridges. That's the kind of thing you see now in the townships, and we can try to see if these products sales develop according to the classic one, and say to the other suppliers, well, that's the product you put on the market, that's what your competitor is doing. That's the strategy they have, you don't have to put it in the fridge, it performs like it should, you should invest in that and produce more of these kind of things. I wouldn't say that we would change, we can see trends, we can see what people are buying, we can see what's happening in the townships, and then we can just try and help them to get a better product. We wouldn't change massively a product for them, but we can help them to test and improve. You want to

have red packaging. Let's try it for two weeks. Let's then try a green one, and then a blue one, and after a month, or even at the same time at different places, we can. So we want to be kind of a consulting company that help them to target this market, and to make the most of it. But at the same time, what we call the profit for purpose, we won't do that to sell more cigarettes, or sugar or whatever. We want to make sure that it actually has a good impact on the final consumer.

Q: Thank you, I think we are done.

A: It's still a lot of it is the loyalty program, the thing like that are still ideas. But the logistic part and the distribution part works well, and were just looking for investors to be able to scale it up. So let's see how it goes.