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BOTTOM OF THE PYRAMID

# WORKING WITH THE BOTTOM OF THE PYRAMID

Success in Low-income Markets

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DANSK INDUSTRI  
Confederation of Danish Industries

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Success in  
Low-income Markets



**DANSK INDUSTRI**  
Confederation of Danish Industries

June 2007

# Foreword

Over the past few years, business leaders and strategists around the world have increasingly been focusing their attention on the challenges of intense competition and slowing growth in high income markets. This has led many of them to reconsider the potential of emerging and low income markets. To remain competitive and stay ahead of the curve, it is crucial for Danish companies to also look abroad for new and unexplored possibilities in less competitive markets.

The Confederation of Danish Industries (DI) wishes to contribute actively to assisting Danish companies when entering new and uncontested markets at the bottom of the economic pyramid. This concept refers to the 4 billion people living on less than \$ 2 per day and who constitute a huge consumer market where the growth potential by far exceeds the opportunities in developed markets.

This handbook is prepared by DI International Business Development (DIBD), which is a department of DI devoted to assisting the members of DI with facing the international challenge. The aim of the book is to clarify the opportunities for Danish companies in the developing markets as well as provide new ideas, models, and inspiration for companies to achieve success in these markets.

DIBD wishes to thank all the people who have contributed to the preparation of this handbook. Their kind participation and willingness to dedicate time and share their experiences have made this project possible.

Copenhagen, June 2007

Thomas Bustrup  
Deputy Director General

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# Introduction to the Bottom of the Pyramid

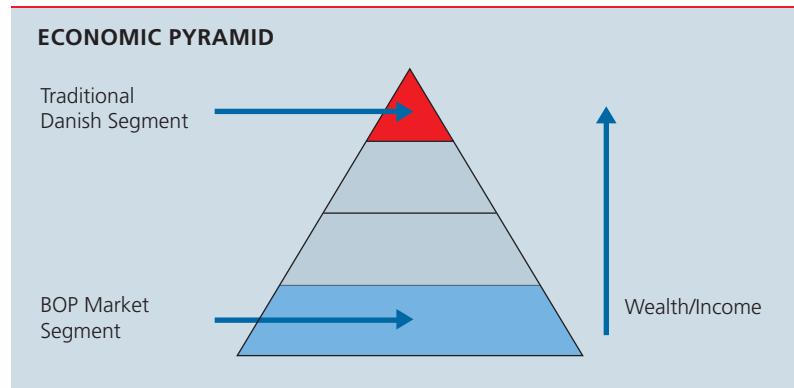
The Bottom of the Pyramid (BOP) constitutes the market made up by the world's poorest people, i.e. people living on less than \$ 2 per day mainly in Africa, Eastern Europe, Latin America, and Asia.

The concept of BOP was first introduced by Stuart L. Hart and C. K. Prahalad in 2002 in their widely acclaimed article, "The Fortune at the Bottom of the Pyramid". The idea behind BOP suggests that the best way to meet the needs of the poor is through a profit driven market-based approach. There are tremendous benefits for companies if they choose to serve the highly underserved and less competitive markets at the BOP. At the same time there are significant benefits for the poor in terms of poverty reduction, increased productivity, and empowerment. Companies interested in exploring the opportunities at the BOP should look for solutions in the form of new products and new business models that can provide products and services at affordable prices. The sustainability of the approach lies in this inherent win-win situation.

Most companies have not traditionally considered people at the base of the economic pyramid as potential consumers due to the low level of their individual incomes. However, an increasing number of companies are finding ways to profit from the total market size of no less than \$ 5 trillion by rethinking their business models. In this way, these companies are not just seizing a current business opportunity, they are also building their markets for the future.

In general, Danish exporters take their known business models with them when they go abroad. This may be fine when their products and services are targeted at consumers in other high-income markets. But when they go to emerging or low-income markets, this business model carries less potential.

Often times Danish exporters have found themselves chasing the 5 to 10 percent of consumers that can be classified as high income earners in a poor country or region.



Danish exports to the so-called BRIC-countries (Brazil, Russia, India, and China) have increased by 140 percent since 2000. While this is certainly impressive, it falls short of the full potential. This is because imports from these countries have expanded at an even faster rate, meaning that the share of Danish goods and services in the imports of these countries has actually decreased over the same period. One plausible reason for the lacklustre performance may be the business strategy of Danish exporters. The majority of Danish exporters have specialized their production and services, and as a result of traditional thinking, they are aimed exclusively at the top income segments of these markets.

This misses the critical mass of consumers who, because of their sheer numbers, hold tremendous collective purchasing power. The rewards may come in small droplets, but they add up to a significant flow. The central question is: How do you sell to the lower tiers of the market?

Indeed, the central theme of the book revolves around the relevance of the BOP market for Danish enterprises. While there is little doubt that the potential is huge, central questions are: (i) Are Danish companies geared to tap it? (ii) How can Danish businesses work with development and marketing of products for the poor? (iii) What can we learn from those that have embraced BOP

as a business model? (iv) And what can be done to increase Danish businesses' chances of success in these markets?

The BOP model is not a soft approach to business, nor is it an altruistic or philanthropic endeavour. There is no inbuilt dilemma between profitable business and making the world a better place. In fact, the long-term sustainability of the model lies in its win-win nature. Enterprises that work in BOP markets need to continuously make sound business decisions rooted in commercial considerations that promise a pay-off. On the other side of the equation, billions of people at the BOP have major unmet needs. Numerous studies have shown that the poor pay multiples of the price for basic goods compared to consumers at the top of the pyramid. The poor pay outrageous interest rates for credit and only have access to poor quality products and services. In other words, the poor live in high cost/low quality economies. This means there is an enormous opportunity to create consumer surplus at the BOP.

Each chapter of this book explores an important dimension of the BOP way of doing business. The next chapter provides a brief overview of the BOP market according to income, region and economic sector. The following chapter is dedicated to the "BOP business model". Insights into the modalities of engaging in partnerships with non-commercial partners and the opportunities of supplying to humanitarian organisations are also covered extensively. The last chapter is dedicated to BOP tools and other resources that Danish exporters can make use of when they move from thinking about the BOP market to actively engaging it.

The book is structured around a combination of insights drawn from the existing literature and good practice case studies taken from Danish businesses in emerging markets. A balanced mix of these elements is sought so as to facilitate the understanding of the BOP business model.

# Unlocking the Potential at the Bottom of the Pyramid

There are 4 billion people living on less than \$ 2 per day, together they make up a \$ 5 trillion global consumer market (in local purchasing power)

It is a common belief that the poor have no significant purchasing power and therefore do not represent an attractive market. However, this assumption ignores the volume of the market. Companies that learn how to produce and distribute low-cost products to the consumers at the bottom of the economic pyramid can be very successful.

This chapter presents the commercial potential at the BOP by uncovering the market size and highlighting the commercial advantages and challenges for companies. After a brief overview of the structure of BOP markets in different regions of the world, and a sector wide stock taking, the chapter lists the main economic characteristics of BOP consumers. The chapter concludes with a set of generalized features of the operational environment of BOP markets.

## How Big is the Market?

The first step in unlocking the commercial potential at the BOP is to start viewing the poor as value-conscious consumers. This proposition allows for a whole new world of opportunities to open up for the Danish companies, that are ready to explore the prospects of a new and underserved market. The BOP markets represent a huge business opportunity for Danish companies in terms of their vast size; rapid growth; cost-saving opportunities; a less competitive environment; and opportunities for innovation.

The 4 billion people that form the BOP represent an overwhelming majority of the population in the developing countries of Africa, Asia, Eastern Europe, Latin America, and the Caribbean. In total they constitute 72 percent of the world population. Though these people are cash-poor and live in relative poverty, together they

represent substantial purchasing power. Contrary to the dominant perception that people at the BOP are victims or a burden, they should be recognised as the value-oriented consumers that they are. Targeting this consumer group with the right marketing mix will increase their ability to purchase products and services. This is the key to unlocking the potential for Danish and foreign companies.

Unless otherwise noted, the market sizes and income levels in this and sub-subsequent chapters are in "international dollars". The international dollar is an artificial currency, which is constructed to reflect the purchasing power of local currencies across the world. The international dollar, or the Purchasing Power Parity (PPP) dollar as it is also known, is a useful metric for comparing incomes, living standards, and consumption across countries with different price levels.

As an example, one dollar will buy more in Kenya than in Denmark. This means that holding one dollar in Kenya is worth more than holding it in Denmark. Exactly how much more it is worth depends on the prices of goods and services in Kenya relative to Denmark. If prices in Kenya are four times lower than in Denmark, the value, or purchasing power, of the dollar is four times higher in Kenya than in Denmark.

Most strategy papers and reports on BOP markets use international dollars. This is important to bear in mind.

BOP POPULATION, INCOME, AND MARKET SIZE				
Region	BOP Population (millions)	BOP Population (share of total population)	BOP income (billion \$)	BOP share of total market
Africa	486	95%	429	70.5%
Asia	2,858	83%	3,470	41.7%
Eastern Europe	254	64%	458	36.0%
Latin America	360	70%	509	28.2%
<b>Global BOP</b>	<b>4,000</b>	<b>72%</b>	<b>5,000</b>	

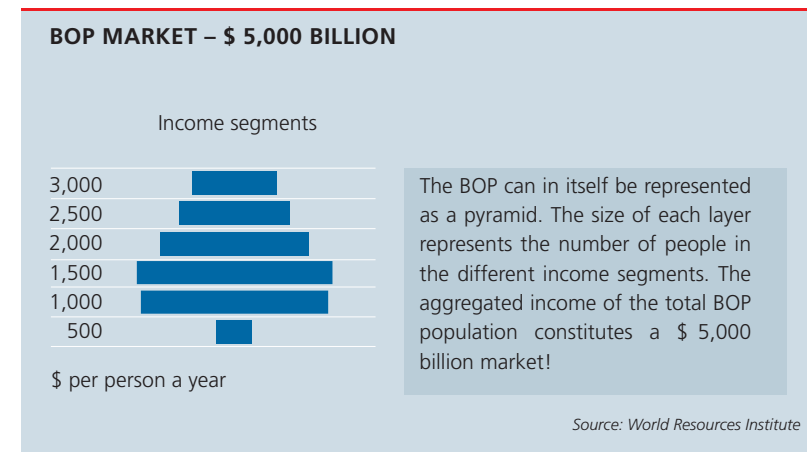
*Source: World Resources Institute*

## In this book, \$ values reflect local Purchasing Power Parity (PPP)

### Visualising the BOP

The aggregated BOP market constitutes the lower segments of the economic pyramid and represents the purchasing power of all the consumers living on less than \$ 2 per day or the equivalent of \$ 3,000 per year (in local purchasing power).

The global BOP market can in itself be represented as a pyramid. The top tier of the BOP, made up of people with annual incomes between \$ 3,000 and \$ 2,500, has more purchasing power than the ones at the very bottom, who survive on less than \$ 500 a year.



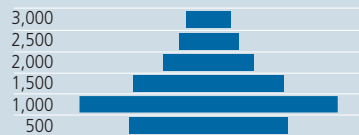
## BOP Regions

There are large regional variations within the global BOP market. BOP markets in Asia and Africa are primarily rural and concentrated in the lower segments of the economic pyramid, while the same markets in Latin America and Eastern Europe are predominately urban and in the top tiers of the bottom of the pyramid.

### THE FOUR REGIONAL BOP MARKETS

#### Africa

(total market \$ 429 Billion)  
Total market by income segment



\$ per person a year

**Africa:** The African BOP population consists of 486 million people (95 percent of the total population) and constitutes a \$ 429 billion market representing 70 percent of the total market. The actual BOP market is smaller compared to the other regions but it is the dominant consumer market on the African continent.

#### Asia

(total market \$ 3,470 Billion)  
Total market by income segment

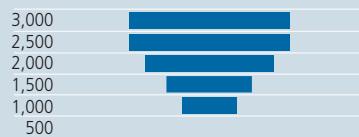


\$ per person a year

**Asia:** The Asian BOP population consists of 2.86 billion people (83 percent of the total population) and constitutes a \$ 3.47 trillion market representing 42 percent of the total market. The market is the largest of all the different BOP markets and makes up a significant share of the rapid growth in Asian consumer markets.

#### Eastern Europe

(total market \$ 458 Billion)  
Total market by income segment

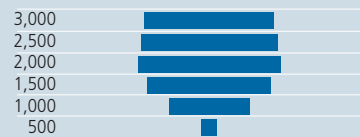


\$ per person a year

**Eastern Europe:** The Eastern European BOP population consists of 254 million people (64 percent of the total population) and constitutes a \$ 458 billion market representing 36 percent of the total market.

#### Latin America & the Caribbean

(total market \$ 509 Billion)  
Total market by income segment



\$ per person a year

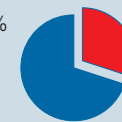
**Latin America:** The Latin American BOP population consists of 360 million people (70 percent of the total population) and constitutes a \$ 509 billion market representing 28 percent of the total market.

Source: World Resources Institute

### BOP SHARE OF THE TOTAL MARKET

#### Africa

70.5 %



#### Asia

41.7 %



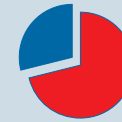
#### Eastern Europe

36 %



#### South America

28.2 %



■ BOP share of total market

Source: World Resources Institute



## Sector Markets

Sector markets for the 4 billion BOP consumers vary widely in size. The spending patterns differ in the various BOP regions and thus influence the market potential within the main BOP sectors. In general, food dominates household budgets at the BOP. Other important items are, perhaps not surprisingly, housing, energy and health care. As incomes rise, the share spent on communication and transportation grows rapidly.

## THE BOP SECTOR MARKETS

Sector	Market size (\$ billion)
Food	2,894
Energy	433
Housing	332
Transportation	179
Health	158
ICT	51
Water	20

Source: World Resources Institute

### Food market

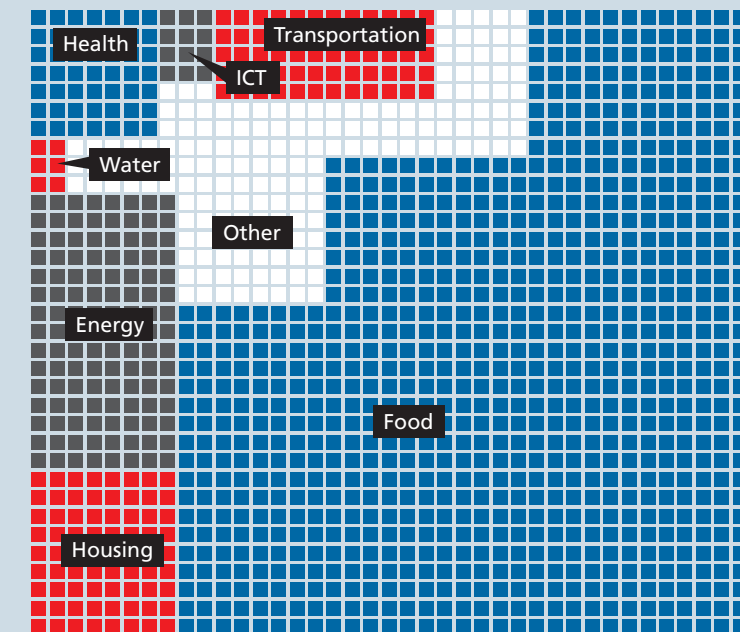
The food market (food and beverages) represents the largest BOP market and the largest share of household expenditures. It is estimated to have a value of \$ 2.89 trillion. Though the spending on food does not increase much with the rise in income, there are still obvious business opportunities in the BOP food market – e.g. providing better low-priced food products, improving distribution and availability, as well as inputs for the agricultural sector.

### Energy market

On average BOP households spend 9 percent of their expenditures on energy. This spending does not change significantly as incomes rise. Across all regions, the BOP segments of the energy markets account for a large share – exceeding 90 percent in the most populous countries. The total BOP household energy market in all the BOP regions is estimated at \$ 433 billion.

## ESTIMATED BOP MARKET BY SECTOR

\$ 5,000 billion



Note: Each square represents around \$ 400 million.

Source: World Resources Institute

### Housing market

Because rent is a major part of household spending, housing is one of the biggest BOP markets with an estimated total of \$ 332 billion. The increasing urbanization across all regions represents a huge untapped market opportunity for construction materials and know-how.

### Transportation market

The total BOP market for personal transportation is estimated at \$ 179 billion. There is also significant demand for more efficient distribution channels for products and services through new or improved transportation systems.

## Health market

The total BOP health market (medicine, life-saving products and health services) is estimated to be around \$ 158 billion, with national pharmaceutical markets as the most dominant. Spending on health care depends primarily on income level and access to services and thus varies across regions.

## ICT market

The total BOP market for information and communication technologies (ICT) is estimated at about \$ 51 billion. There is a significant and rising demand for ICT solutions at the BOP – especially mobile telephony, internet services and other ICT equipment represent a huge potential. Rapid market growth is expected to continue. Most BOP markets for ICT are urban and middle- or top heavy, indicating that the spending is an increasing function of income.

water market is small compared to other BOP markets, the growing problems of polluted water sources due to industrialization and poor sanitation in urban areas continuously pushes up demand for purified water and purifying mechanisms.

## Financial services market

There are significant needs for financial services at the BOP. By expanding access to financial services for BOP consumers, new ways to promote economic growth are evolving. This is particularly through entrepreneurship and job creation, which generate higher incomes. The financial sector is undergoing profound changes these years, and it is increasingly opening up towards the huge untapped market at the BOP.

## The Commercial Advantages of the BOP

The business potential at the BOP has five central advantages:

- Size
- Rapid growth
- Less competitive environment
- Opportunities for cost-saving
- Opportunities for innovation

### 1. Vast market size

As mentioned earlier, BOP markets include no less than four billion consumers with a combined purchasing power of \$ 5 trillion. At the same time, a large number of products are currently unavailable because so few companies have paid attention to the market so far. Though companies must expect low profit margins the unit sales can be extremely high due to the sheer number of potential consumers. Thus, profits are driven by volume rather than high margins.

## Water market

Clean drinking water is essential for human life, however more than a billion people lack access. The total estimated BOP market for water is \$ 20 billion. Across all regions the market tends to be predominately urban even though the majority of BOP households are rural. Many households still meet their needs by collecting it from free sources like wells and surface water. Though the BOP



## LIMITED COMPETITION IN THE BLUE OCEANS

In broad terms, most markets and industries can be divided into two categories “Blue Oceans” and “Red Oceans”. The Red Oceans represent the well known market space and thus represent all of today’s existing industries. In the Red Oceans companies fight to exceed their rivals in order to grab a greater share of the existing demand. As the market space gets more and more crowded, prospects for profits and growth are reduced and increasing competition turns the water bloody. Blue Oceans, on the contrary, represent the unknown market space and thus represent all the industries not in existence today. In Blue Oceans, there is no competition and companies have a huge opportunity to create demand rather than fight over it. Blue Ocean strategies focus on developing new technologies, products and services which generate obvious possibilities for both profitable and rapid growth.

Blue Ocean	Red Oceans
<ul style="list-style-type: none"> <li>• Create new market space</li> <li>• No competition</li> <li>• Create new demand</li> </ul>	<ul style="list-style-type: none"> <li>• Compete in existing market space</li> <li>• Beat the competition</li> <li>• Exploit existing demand</li> </ul>

In order to secure future growth and profits, companies must end the battle with competitors by exploring the Blue Oceans of uncontested markets with latent demand and growth potential. Such strategic moves create value for the company and its customers by avoiding rivalry and unleashing new demand.

Companies face obvious competitive advantages in the Blue Oceans at the BOP if they succeed in thinking out of the box by inventing innovative products – customised for the special needs and demands of BOP consumers – and by using innovative strategies for production, distribution, marketing, and sales.

## 2. High growth rates

The BOP market represents a vast market today and an opportunity for new sources of growth in the future. Several African countries are experiencing growth rates of 5 percent and countries in Asia, Latin America, and Eastern Europe are growing at an even faster pace. Consumers are expected to move from lower to higher income tiers, and being present in BOP countries now therefore means building markets for many years to come.

## 3. A less competitive environment

The majority of Danish companies are oriented towards the consumers in the top segments of the economic pyramid. However, the intense competition has saturated these markets, so today they no longer represent the same potential for rapid growth and profit. In contrast the BOP markets are highly underserved and make up a “Blue Ocean” of business possibilities in an environment characterised by limited supply competition.

## 4. Cost-saving opportunities

The BOP market offers cost-saving opportunities since the cost structures are typically lower in developing markets. Producing locally, using local suppliers and distributors can lower the production costs substantially.

## 5. Opportunities for innovation and spill-overs

Meeting the needs and demands of the BOP consumers requires new solutions. The demand for products specially designed for the BOP market (e.g. small unit packages and low price) calls for innovation. The BOP market represents huge potential for companies to innovate and develop new products, which potentially can act as incubator of new technologies and products in developed markets.

The Danish company Orana has successfully sought to profit from the less competitive food market at the BOP estimated to represent \$ 2.89 trillion.

## NAVIGATING THE BLUE OCEANS OF EMERGING AND DEVELOPING MARKETS

Case 

**Orana** is a leading Danish supplier of fruit based raw materials and semi-manufactures for the beverage industry and food producers. In search of new market opportunities, Orana discovered that approaching up-coming markets in the developing world presented great business opportunities but also required a completely different market approach. Orana took up the challenge and succeeded in developing unique solutions in regard to both local production and low-cost beverage products that sparked a new demand and thus created a niche for Orana with limited competition, high growth and revenue.

Today, Orana is an international business with production in Vietnam, Egypt, and Denmark serving their main food markets in Asia, the Middle-East, and Africa.

## The Commercial Challenges of the BOP

Investing in developing markets naturally represents certain challenges. When entering BOP markets, Danish companies should prepare themselves for five main challenges:

### 1. Cash poor consumers

The single largest challenge for companies entering BOP markets is the very limited purchasing power of the individual consumer. In addition, taste and habits vary across markets that may be geographically distant from one another. This means that companies must think in very different ways in order to reap the benefits of these markets. Customers in BOP markets often demand small unit sizes and single serve packages of goods that in developed countries are sold in "economy-packages" such as shampoo, cooking oil, detergent, and other household staples.

### 2. Geographic, economic, and cultural distance

There is tremendous distance between Danish companies and their new or potential customers at the BOP – geographically, culturally, and economically. This is a challenge for the people deciding on sales and marketing strategies to understand the customers they are targeting. Even the most brilliantly innovative product will fail in the marketplace if it is set outside the price range of its potential customers, or if it is related to the wrong set of values.

### 3. Limited product awareness and understanding

In BOP markets some products are widely available whereas other basic goods are unknown – and local consumers may be unaware of their needs for these goods. One example is safe drinking water. Many people are unaware of the connection between drinking unsafe water and various diseases and therefore do not realise that they have a need for safe drinking water. Suppliers to BOP markets consequently not only have to market their goods, they also have to educate their potential consumers.

### 4. Weak physical and institutional infrastructure

The physical infrastructure and formal institutions that Danish companies rely on at home are often missing in developing countries. This means that companies have to rethink the entire value chain from production to packaging, storage and distribution. In addition, the rules of the game are radically different in develop-

ing countries, and relationships and networks are often crucial to navigating the institutional environment.

### 5. Working with longer time frames

The fact that profitability in BOP markets rests on large volumes of goods with only a minor mark-up per unit means that companies targeting these markets need to work with a longer timeframe for profitability than they would normally do in developed markets. This is because it can take some time to reach enough customers for this business model to be profitable, and because it is necessary to adjust the model continuously in the early phases.

#### BOP AND CSR – DIFFERENCES AND COMPLEMENTARITIES

The essential motivation for engaging the BOP is the pursuit of promising business opportunities. This presents poor consumers with opportunities they would not otherwise have had. It is the combination of these benefits to companies and consumers that makes the BOP concept sustainable and noteworthy from a development perspective.

It is important to distinguish between the concept of BOP solutions or strategies, and the idea of Corporate Social Responsibility (CSR). When aspiring to make progress on issues related to CSR, enterprises essentially strive to become better corporate citizens. The most often noted dimensions of CSR relate to the plight of employees, and the potential adverse impacts on the natural and social environments of the enterprise. The concept also extends to everything from suppliers and sourcing of inputs to distribution of products.

In spite of the basic difference between the concepts, they often complement each other. As a consequence of increasing consumer pressures and public awareness, CSR is becoming increasingly important.

This trend also applies for companies investing in the BOP market. Integrating CSR considerations in a business strategy for a BOP market can be a tool for proactively managing business risks. By working actively with factors that may alienate consumers / buyers or reduce productivity, companies that integrate CSR into their value-chain are able to minimise some of the business risks – with a direct effect on revenue, in addition to enhancing their image and strengthening employee satisfaction.

## A Win-Win Scenario

Profit driven investment in the BOP market has a broad range of social benefits. Investing in the BOP market has great potential for reducing poverty by accelerating growth through job creation, and for lowering prices whereby the capacity to consume is increased. When companies provide services and market products in poor communities they can generate profit for themselves and at the same time benefit the poor by reducing their costs and improving their welfare. In fact it is the market approach that makes the investment in BOP both profitable and sustainable. When done well, the bottom line is a win-win situation for the companies as well as the BOP consumers.

## Key Lessons

The main advantages and challenges of BOP markets are:

### Main Advantages

- Vast market size
- High growth rates
- A less competitive environment
- Opportunities for cost-saving
- Opportunities for innovation

### Main Challenges

- Cash poor consumers
- Geographic, economic, and cultural distance
- Limited product awareness and understanding
- Weak physical and institutional infrastructure
- Working with a longer time frame

The following chapters further investigate how companies can build successful business models for BOP markets by exploring the advantages and preparing for the challenges.





# Building Successful Business Models for BOP Markets

Strategies to successfully enter BOP markets challenge the traditional business models that have worked well in Denmark and other high-income countries. The unique conditions in BOP markets differ from the economic logic that dominates the Danish companies' approach to the developed markets where high margins predominate. The BOP markets, on the contrary, rest on:

- Low margin per unit
- High volume

In order to successfully manage business conditions at the BOP, companies must be innovative in their approach and customise their products, production, and price to the realities in BOP markets. Companies chasing high margins will miss out on the opportunities at the BOP. On the other hand, companies that think out of the box, innovate, and focus on overall profits are likely to thrive at the BOP.

This chapter explores the importance of building business models that can help companies take advantage of the opportunities and prepare for the challenges that the BOP market presents. The chapter is structured around two overall sections. One is dedicated to products and services, while the other is devoted to the value-chain. The chapter provides an overview and understanding of the importance of innovation in relation to customising product design, actual production, and distribution and sales channels to the BOP market.

A business model is essentially a tool which contains a set of elements that characterize the economic logic of a company. In addition to the core elements of innovation in products and in the value-chain, the chapter touches upon such issues as the possibilities of

Innovative products and value-chain solutions are paramount to success at the BOP

spill-overs and synergies between BOP and high-income markets, and the importance of building partnerships for creating and delivering mutually profitable and sustainable revenue streams.

Experience shows that new and innovative business models and strategies for product development and production are key to reaching the consumers at the BOP. When developing the BOP business model and adapting products and production to BOP markets, it is useful to recall the following issues, which were also presented in chapter two as the main challenges associated with the BOP market:

- Cash poor and very price sensitive consumers
- Geographic, economic, and cultural differences between the Danish company's customers in developed countries and potential customers in BOP countries. Enterprises need to have a good understanding of their potential BOP customers before designing products and distribution channels
- BOP customers have limited product awareness and understanding. Many of the goods and services that are taken for granted in developed countries are unknown in BOP markets
- Weak physical and institutional infrastructure. In addition to the written laws Danish companies working at the BOP may need to increasingly base their decisions on advice from informal institutions such as relationships and networks
- Longer time frame for reaching economic targets. Due to the low margins per unit sold, it will take some time to build up sales that are large enough to reach the revenue targets. Companies therefore may need to work with longer time horizons than in developed markets

**Innovative business models are key to overcoming the challenges of the BOP**

## Innovative Products

The development of products customised for BOP markets must take its starting point in the conditions and demands of BOP consumers. Re-adjusting products developed for consumers at the top of the economic pyramid will seldom suffice. Companies must consider how the differences in environment and structures in developing countries can influence the functionality of the product.

The extreme price sensitivity of BOP consumers requires dramatic cost reductions to create products and services that these consumers can afford. This calls for a business model that accepts a low margin per unit sold in exchange for a high volume of sales. The traditional business process must be re-engineered with a focus on size, packaging and price.

### SAFE WATER TO THE SLUMS OF NAIROBI

Case 

**Southern Trident** is a Danish lead business that markets an innovative solution to household water purification called AquaSafe. The AquaSafe unit uses solar energy to purify water. The daily water needs of an average family can be treated over the course of a day. The AquaSafe unit is a truly innovative product and therefore has no direct competitors. On the other hand, a large number of the potential customers do not realise that they have a need for a water purification device to provide them with safe drinking water - often they do not see a clear link between drinking unsafe water and illnesses. The lack of safe drinking water often means that children must stay home from school and breadwinners are unable to work due to illnesses that could have been avoided by drinking safe water.

Southern Trident needs to educate its consumers on the importance of safe water in order to be able to sell the water purification device to them. Southern Trident has therefore developed a go-to-market approach involving the establishment of local health clinics in the slums of Nairobi. The clinics will be staffed by nurses who will provide education on the importance of safe water and hygiene. In cooperation with the clinics, the AquaSafe unit will be made available to the slum-dwellers. In this way, Southern Trident is able to make its potential customers aware of their need for safe water, while at the same time providing a cheap and simple solution. Being present in the slums means that Southern Trident can reach a vast number of people within a confined area.

Sometimes it is not enough to customise the product. It may also be necessary to stimulate demand by informing and even educating the potential customers. One example is Southern Trident. Southern Trident has succeeded in designing a unique business model that both meets the needs of consumers and delivers the required training.

Meeting the demand for customised products requires in-depth knowledge about the special needs and infrastructural possibilities in the targeted country or region. An electronic video clip for mobile phones is of no use if the required technology does not exist locally. Or take the case of selling ice cream in Sub-Saharan Africa. Here the product must be sold in small containers and not on sticks because the heat causes it to melt much faster than in Denmark and other markets in the Northern hemisphere.

## LEVERAGING KNOW-HOW AND EXPERIENCE FROM MATURE MARKETS

Case 

**Inmobia** provides mobile portals as well as low-cost mobile services such as news and entertainment content for customers at the BOP. For 5 Kenyan Shillings (the equivalent of \$ 0.08) a consumer can access international, national, and local news, weather forecasts as well as local, national, and international commodity prices. This is already a profitable business, and the mobile phone market is the fastest growing communication and information market in Africa.

Entering the BOP markets in Africa, Inmobia was able to make good use of the experience from working in developed markets. The product needed to be customised to the special demand from BOP consumers in terms of content and price, but the marketing and distribution strategies that worked well when the mobile market was starting in the developed countries was applied successfully in the African context.

In spite of all the dissimilarities between BOP markets and more affluent markets, there can be significant synergies between the two. Indeed, experience from product development in top tier markets can be very useful when approaching a specific BOP sector. This is the case in the mobile phone market. The total BOP market for information and communication technologies is estimated at more than \$ 50 billion. This market is set to show brisk growth rates over the coming years. The Danish wireless media company Inmobia has successfully seized opportunities in the African BOP market for mobile telephony by meeting the demand for entertainment and information.

### Innovation throughout the Value-chain

It is important to rethink activities throughout the value-chain from sourcing and procurement to service and support. This process is just as important as inventing unique products and services.



## INNOVATION THROUGHOUT THE VALUE-CHAIN



All the elements of the value-chain are of critical importance. However, the following sections are dedicated to the two overall themes of 'operations and production', and 'distribution, sales and support'. This is because these are the elements that have been found to represent the greatest challenges for Danish enterprises seeking to penetrate BOP markets.

## Operations and Production

Deficient infrastructure is a cross-cutting characteristic in BOP markets. Poorly maintained and congested roads cause unforeseen delays to production inputs and distribution; power cuts and voltage fluctuations result in disruptive downtime in production; and in many places water shortages can also hold back production. Finding ways to overcome these barriers should be an integral part of the BOP value-chain. Deficient and weak infrastructure services will require a level of attention and action that would not be needed in high income markets.

### SECURING HIGH QUALITY DAIRY PRODUCTION IN A DIFFICULT ENVIRONMENT

Case

**FanMilk** is a Danish owned dairy producer with five production plants in West Africa. FanMilk produces dairy products such as frozen yoghurt, ice cream, milk, and fruit juices. The local production facilities are designed to minimise the impact of the external environment.

FanMilk has met many challenges producing frozen products in African countries where the supply of electricity and water is very unstable. Voltage variations and black-outs are common. Likewise there can be significant seasonality in the water supply. This has led FanMilk to explore alternative ways to guarantee the necessary supplies and isolate production from infrastructural deficiencies. The regular power-stops are solved by using diesel generators or by connecting directly to high-voltage lines. The supply of water has been secured by skimming surface water and cleaning it thoroughly. And, FanMilk is considering sinking deep boreholes to secure a stable supply of water.

The development of sustainable production solutions when serving the BOP market relies on in-depth knowledge about the special possibilities and constraints of the specific location. It is important to leverage the comparative advantages while managing the overall challenges of a different and often times difficult business environment. Since some production costs can be considerable in emerging and developing markets, for example because of infrastructural constraints, it becomes even more important to identify alternative ways of lowering costs in order to provide low-price and affordable products for the BOP consumers. Localizing manage-



ment and relying increasingly on local supplies, where possible, are ways to balance the higher production costs.

### KEEPING COSTS LOW THROUGH LOCAL PRODUCTION

Case <

The Danish company **Emunio** develops, manufactures and supplies auto destructible syringes for immunization purposes, and syringes with reuse prevention features.

Emunio has set up production facilities in Tanzania, Malaysia and Bangladesh. Here syringes are produced and supplied to regional buyers and distributors. The production costs in these locations are considerably lower than in e.g. Denmark which contributes to keeping the overall costs low and the products affordable.

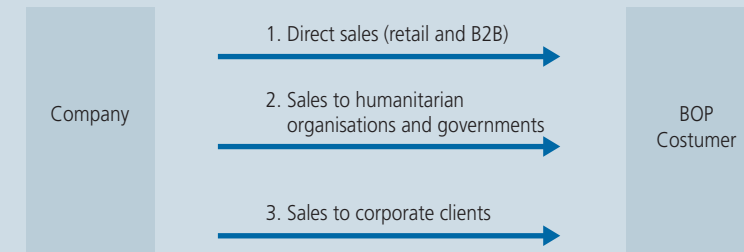
The equipment used for the production is state of the art and very sophisticated. This is needed to ensure uniform and top quality. The staff of Emunio undergoes continuous training in all matters relating to manufacturing of medical disposables. This is crucial for the business model, but is also presents a challenge for Emunio. This is because the company faces the permanent risk of loosing qualified workers that have built up valuable knowledge. This issue is approached with efforts dedicated towards creating an attractive work place with high labour standards, good production facilities, and attractive employee benefits. For example in Tanzania, the wage incentive structure takes the form of collective bonuses for good team work.

It has been a good strategy to secure engaged and motivated workers as well as an excellent reputation in the local communities.

## Distribution and Sales

Having designed and developed a product and a manufacturing process that answer to market demands, the next step involves actually reaching consumers. This section distinguishes between three different channels that can be used to reach BOP consumers. The relevance of the distinct channels obviously depends on the characteristics of the product. There will often be scope for using more than one channel at a time.

### THREE CHANNELS TO THE BOP CONSUMERS



1. Direct sales involve responsibility for designing and managing the complete value-chain from production to making the products available to BOP consumers, commonly through the use of agents and distributors. This is the most demanding sales channel, but it is also the one where largest number of potential customers can be reached.
2. Sales to humanitarian organisations and government agencies is typically characterised by the sale of large quantities. These organisations then distribute products to those deemed eligible.
3. Sales to corporate clients entail selling to companies in developing countries, which then offer or sell the goods to their employees.

## Direct Sales

This section addresses the challenges of reaching BOP consumers by focusing on four key characteristics of BOP markets – namely the urban and rural segments, credit as a sales factor, branding, and partnering.

## The Urban Segment

When thinking about distribution it is important to distinguish between rural and urban areas. Not because markets can be segmented by high and low incomes across areas, but because the population densities call for different approaches.

Not all the poor live in rural areas. Over the coming six to seven years, the population of cities in the developing world will increase to around 2 billion people. About 40 percent of these urban dwellers will be BOP consumers. With around 15,000 people per hectare, urban areas will allow for intense distribution opportunities. This is important because the commercial rewards of working in BOP markets are based on large volumes as a compensation for the lower margins per unit sold.

### BRINGING ICE COLD DRINKS TO THE STREETS OF WEST AFRICA

Case <

**FanMilk** is supplying frozen drinks and yoghurts to markets in West Africa. From production points in Nigeria, Togo, Ghana and Côte d'Ivoire, frozen drinks and yoghurts are hauled across West Africa in refrigerated trucks. From widely scattered storage facilities products are repackaged and distributed in smaller sizes to supermarkets, kiosks, gas stations, hotels, and restaurants. In addition to these more formal outlets, drinks and yoghurts are also distributed on specially designed bicycles and push-carts equipped with cool boxes.

This distribution network effectively allows FanMilk to reach consumers in all income tiers. The 125 ml. sachets of frozen yoghurt are sold by street vendors for the equivalent of around DKK 1.5 (\$ 0.25). This way FanMilk provides low-income consumers with access to products that are of consistently high quality and value. Bicycle vendors pickup the yoghurts at the storage facility in the morning and pay for the goods when they return at night. Typically the bicycle vendors charge a 25 percent mark-up, allowing them to maintain an average daily income of around \$ 7 – considerably more than the salary of factory workers in the region.

## The Rural Segment

The rural poor constitute a different challenge. Access to distribution across rural areas continues to be problematic. While the low quality of roads, ports and power supply make for a difficult business environment, recent technological developments are bringing rural areas in the developing world out of the "information dark". All experience shows that BOP consumers take to new technology easily. The case of the Danish ITC company Inmobia, illustrates how a commercial deployment of the newest technologies can be used to overcome rural constraints.

**Distribution is the key to  
success at the BOP**



## BRINGING RURAL AFRICA OUT OF THE INFORMATION DARKNESS

Case <

In 2004, **Inmobia** started supplying content and services to mobile operators in Africa. Inmobia's business concept is to supply news and entertainment via mobile phones, the fastest growing media in Africa. Today, Inmobia is active in 13 African markets. In Inmobia's Nairobi office, 15 local employees write, develop, and edit the mobile content that is delivered to operators.

In many areas of rural Africa, the mobile network has far greater coverage than radio and TV-signals. By providing low-cost mobile services for BOP consumers, Inmobia is profitably and effectively breaking the information isolation of rural Africa. For five Kenyan Shillings (the equivalent of \$ 0.08) a Kenyan farmer can access national and world news, local weather forecasts, as well as the latest quotes for commodities and cash crops. Needless to say this is an invaluable service, which greatly empowers farmers in negotiations with commodity buyers.

Creating opportunities for poor people to consume by facilitating access, and designing affordable products that can generate sufficient revenue combine to break the long held assumption that BOP markets are not viable.

## ECONOMIC DEVELOPMENT OPPORTUNITIES IN DISTRIBUTION

Case <

In many cases more people are employed and more value is created on the distribution side of the value-chain than on the supply side. Because many jobs are generated in distribution of BOP products this can in itself have notable impacts on economic development. So even when a product may not have a particularly large impact on employment or income on the supply side, it can still have a very valuable impact through distribution.

**FanMilk** directly employs around 1,500 people in production and administration, and create income opportunities for upwards 20,000 vendors and street hawkers. The employees and vendors of FanMilk are in general the breadwinners of families – on average they have 6 dependents.

## Buyer Credit as a Key Sales Factor

Like consumers in higher income brackets, the poor demand products and services for which they are willing and able to pay. However, they only have limited cash in hand. This means that ways must be explored to overcome this barrier. In addition to selling smaller quantities and focusing on cost efficient production and distribution, providing credit to buyers can be a key sales factor.

## USING INNOVATIVE CREDIT SCHEMES TO ACCESS NEW MARKETS

Case <

For more than 25 years, the Danish company **B-K Medical** has been producing high quality diagnostic ultrasound systems. A few years back, the company started selling the product to smaller clinics in Ghana and Kenya. B-K Medical was able to penetrate these new markets through an innovative financing model, which allows cash restricted clients to amortize the purchase of state of the art equipment over a number of years.

B-K Medical uses Ghanaian and Kenyan banks and leasing companies to manage the credit risk, while its local partners provide technical and logistic support.

This business model has to date resulted in more than 20 sales of scanning equipment to smaller clinics in the two countries. The daily number of patients scanned in these clinics is much higher than in more developed markets.

The merits of providing financial services to the poor, such as lending and savings facilities, have been proven in many countries over the past couple of decades. The founder of Grameen Bank in Bangladesh, Muhammad Yunus, was awarded the Nobel Peace Prize in 2006, and the United Nations declared 2005 International Year of Microfinance.

The key to understanding microfinance as a concept is to realize that the poor are good borrowers, and that their projects are bankable. In fact the only difference from traditional finance is the size of the loans and credits that are extended. But not only consumers at the BOP are cash strapped. Many profitable and sound businesses in developing countries face the same types of financial constraints. Accordingly there is significant potential in

sorting out and extending credit to the good buyers. Using credit as a BOP-type strategy can help Danish exporters access otherwise unapproachable but lucrative customer segments.

### KEEPING GOODS AND KNOW-HOW FLOWING INTO ZIMBABWE

Since the late 1990s **Orana**, a Danish supplier of fruit based raw materials and semi-manufactures to the beverage industry, has been supplying Dairiboard Zimbabwe with the know-how and inputs to produce whey drinks. Whey is the liquid remaining after milk has been curdled and strained.

Sales of the product rocketed once the packaging of the drink was changed from the expensive high-end Tetra Pak carton to a much more affordable plastic sachet. The drinks sell for the equivalent of \$ 0.15 at the retail level. The higher the sales volume, the greater the demand for Orana's inputs and assistance.

Like many of its customers and other companies in today's, Zimbabwe, Dairiboard Zimbabwe is cash-poor, at least when it comes to foreign currency. Orana has chosen to extend credit to its Zimbabwean partner in order to keep inputs and know-how flowing. By financing its partner, Orana is able to keep a foothold in Zimbabwe, and expects to be in a good position once economic stability is restored and demand for technology and inputs rebounds on a greater scale.

Brands and trademarks are used by consumers to distinguish products and services from those of other companies. However, it is not uncommon to see copies of branded goods with similar or almost identical names, slogans, logos, or symbols. Time and resources must be dedicated to handle these players decisively and firmly.

### SUCCESSFULLY BRANDING LIFE-SAVING PRODUCTS

Case 

**Vestergaard Frandsen** manufactures and sells life-saving products targeted at the consumers at the BOP. For Vestergaard Frandsen the question of branding is extremely important. A reputation for high quality and consumer trust is essential in the market for life-saving products. The majority of their sales depend on their success in convincing the consumers of the life-saving advantages in the Vestergaard Frandsen products and then of course delivering on this promise.

One way to create support for the company or product brand is by achieving a blue-stamp from a highly recognised international organisation. Humanitarian organisations find Vestergaard Frandsen's products useful and reliable. This is important for the company's brand building when exposing and raising awareness about the product and company – also in purely commercial retail markets.

## Branding

Branding refers to the process of influencing the perception of a product's or service's identity in the mind of the consumer, e.g. through the marketing of the product. Creating a strong corporate and product brand is as important in BOP markets as it is in mature markets. This is because experience shows that BOP consumers are very brand conscious.

The brand awareness of those at the BOP comes as a surprise to many. However, it may not be all that surprising. The generally high price sensitivity of consumers in BOP markets logically causes them to be extremely cautious about the commodities they purchase since they cannot afford to make low value purchases. In essence, the brand becomes a quality certificate or guarantee. Experience of Danish companies shows that building the trust and accountability, which is associated with strong brands, can have obvious and very tangible returns in terms of customer loyalty.



## Partnering

Different types of partners may help companies meet the five main challenges that companies generally come across when they enter BOP markets. These challenges were introduced in chapter two:

1. Cash poor and very price sensitive BOP consumers
  - Humanitarian and non-governmental organisations (NGOs) may help companies meet this challenge by contributing with non-profit services in distribution, provided the product or service helps the organisation achieve its own goals. This way, companies are better able to reach more potential consumers without adding significantly to costs
2. Geographic, economic, and cultural differences between the company's high income customers (often in developed countries) and potential customers in BOP markets
  - Local companies and organisations may help meet this challenge by sharing their knowledge about the relevant BOP customers – what are their values, habits and tastes? Furthermore, they have the local networks that may be necessary to build successful distribution channels
3. BOP customers' lack of realisation about their own needs and lack of knowledge about product offerings
  - Local non-profit organisations or international humanitarian organisations may help companies meet this challenge by education of consumers on the benefits of using certain products, e.g. on the importance of good hygiene and clean drinking water
4. Weak physical and institutional infrastructure
  - Local companies and organisations may help companies overcome the challenge related to institutional infrastructure by sharing knowledge about the informal institutions that work in their particular BOP market. Informal institutions such as relationships and networks may be needed in addition to formal laws and regulations

5. Longer time frame for reaching economic targets

- International donors and development partners may help companies overcome this challenge by supplying financing for carrying out BOP projects and implementing BOP strategies. Even so, companies may still need to work with longer time horizons than in developed markets

The choice of partner(s) will depend on the challenges the company is trying to overcome. Potential partners can be divided into financing partners and implementing partners.

## Financing Partners

Financing partners can be both organizations and companies. Either way, these are the partners that are crucial in the early phases of project development. They must have sufficient capital and patience to be able to cope with the ups and downs of establishing a presence in BOP markets. Typical financing partners for Danish companies include:

- Danida
- IFU
- Private funds
- Companies with CSR programmes
- Social venture capital funds

A direct benefit of the generally increasing awareness of and focus on the important role of the private sector in development is more available financing for projects and investments in developing countries. This is beneficial for companies interested in BOP markets. Often financing partners do not only contribute capital, but also knowledge about the local market and about similar projects that may be of great value to the BOP business model. Adding an official or development finance partner may also, however, add a degree of bureaucracy and rigidity to the process. There will most likely also be a requirement for proof of the beneficial social impact of the project. Still, these may be small costs in view of the potential market opportunities.

### SMALL SCALE FINANCING FOR LARGE SCALE IMPACT

Case 

The World Bank's Development Marketplace is a competitive grant programme that funds creative small-scale development projects that have the potential to be expanded or replicated. The projects must have a positive social and/or environmental impact and at the same time be financially sustainable in the long term.

In 2006, Kamworks, a company dedicated to installing and maintaining solar energy systems for off-grid purposes, together with Khmer Foundation of Justice Peace and Development was awarded a grant of \$ 174,784 for a project that uses solar electric panels to generate and store electricity for lighting purposes. The project will not only provide Cambodians with the possibility of purchasing solar-electric lighting but will also provide various disenfranchised groups with entrepreneurial opportunities. Young people without jobs will be given the opportunity to sell the affordable portable solar lantern Angkor Lights, using a micro-credit scheme, thereby earning a weekly income of approximately \$ 10.

In 2006, 30 projects received a total of \$ 5 million for their innovative projects. Since 1998, the Development Marketplace through its competitions has invested more than \$ 34 million in more than 800 projects around the globe.

Financing partners may also subsidize the product's price in order to make it cheaper for the end user. BOP consumers generally have low incomes and often unpredictable income streams. They therefore want to make purchases whenever they have cash and buy only what they need for that day. For the group of consumers with the lowest income, it will typically take several weeks or months to purchase a certain good or service. Financing partners can be used to subsidise products in order to sell them in the market at a price that is within reach of these consumers.

### REACHING CONSUMERS THROUGH SOCIAL MARKETING

Case 

**Vestergaard Frandsen** divides its market for life-saving products into three segments: sales to public agencies (NGOs, government agencies etc.), social marketing (subsidised sales), and commercial marketing (sales on commercial terms).

When targeting the poorest BOP consumers, Vestergaard Frandsen makes use of the social marketing approach. This means that they sell a mosquito net at approximately one third of the actual market price while a government institution, humanitarian organisation or private fund pays the remaining two thirds of the market price. The mosquito nets are primarily sold in rural areas e.g. at gas stations. This means that the mosquito nets are made available to customer groups that would otherwise not have access to this product and Vestergaard Frandsen is branding itself in "emerging BOP markets" while still making a profit.

**Innovative partnerships is a path to succes in BOP markets**

## Implementing Partners

Implementing partners can be crucial for overcoming the challenges of the BOP market. These partners help in the field. They have the local knowledge and networks that make it possible for Danish companies to better understand customers and make products available to them. Implementing partners typically include:

- Local NGOs
- Local government agencies and institutions
- International humanitarian organizations with local offices
- Local companies

A partnership with an implementing partner may take a multitude of shapes and forms from a very informal collaboration to a tight strategic alliance. The single most important characteristic of the cooperation is that both partners see a benefit for themselves in it. If the implementing partner is a humanitarian organisation or a public authority, the collaboration takes on a special form, as the two have quite different goals and often also very different ways of conducting their everyday work. Even so, it is possible to identify projects where the partners work towards the same goal.

### CONTRIBUTIONS IN IMPLEMENTING PARTNERSHIPS

#### The Danish company typically contributes by:

- Providing goods and services that meet the basic needs of the poor for e.g. credit, water and food
- Injecting resources and entrepreneurial spirit in local societies
- Supplying jobs and entrepreneurial opportunities to locals

#### Local partners typically contribute by:

- Giving access to their local networks
- Sharing knowledge of local markets
- Helping with distribution, often with a commercial incentive
- Adding legitimacy

## ICT-PARTNERSHIPS TO FIGHT HIV/AIDS IN EAST AFRICA

Case 

The Danish company, **Inmobia**, that supplies mobile portals (i.e. information and entertainment services via cell phones) has benefited greatly from a Public-Private Partnership with four partners – the National Aids Control Council (NACC), Celtel, Ministry of Health of Kenya, and Danida as the financing partner. Inmobia decided to offer information about HIV/AIDS as a text service. Inmobia supplies the software and hardware needed to set up the service, NACC supplies the actual information content of the text messages sent out via sms and Celtel provides the infrastructure and contact to cell phone users. Inmobia sells the HIV/AIDS information for 1 Kenya Shilling (the equivalent of \$ 0.01) per sms and does not make any money on this service. The Public Private Partnership project has, however, paved the way for a broad range of Inmobia's other services in Kenya. Inmobia is now present in 13 African countries and is planning to expand its operations to more countries over the coming years.

## Sales to Humanitarian Organisations and Government Agencies

Humanitarian organisations and government agencies procure a multitude of products ranging from tents and blankets to major infrastructure projects. A conservative estimate gives a market size of at least \$ 60 billion per year for humanitarian organisations only. Both humanitarian organisations and government agencies make use of international competitive bidding when procuring goods and services, and companies wanting to use this sales channel must therefore get acquainted with this method of selling.

## LARGE SCALE SALES TO HUMANITARIAN ORGANISATIONS

Case <

**Emunio's** auto destructible syringes have the potential to limit the spread of diseases such as HIV/AIDS and hepatitis because the syringes cannot be used more than once. Emunio sells its products to local hospitals and pharmacies, government institutions, and humanitarian organisations such as the UN system.

Selling to humanitarian organisations gives Emunio the possibility of selling large quantities to a limited number of customers, many of which are situated in developed countries, while at the same time pursuing the purely commercial retail markets in developing countries.

### The potential customers are:

- Government agencies in developing countries
- National aid organisations (such as Danida)
- The United Nations System (such as Unicef)
- NGOs (such as Save the Children)
- Development Banks (such as the World Bank)
- Other international agencies and institutions (such as the external programmes of the EU)

## Sales to Companies

Some BOP products can be sold to companies, which distribute them to employees for free, or for a price below the market price. The products with a potential for this market are mainly those that are likely to increase productivity of employees, e.g. by improving the health of employees and thereby decreasing the number of working days lost to illness.

## SALES TO PRIVATE COMPANIES' CSR PROGRAMMES

Case <

**Vestergaard Frandsen's** mosquito nets are so effective in preventing malaria that DHL, an international freight company, has purchased nets for all their employees in Africa. DHL has calculated that it is cheaper for them to procure a mosquito net for each employee than to have employees fall ill with malaria on a regular basis. The result for DHL is both higher productivity and lower insurance costs.



The companies with the largest potential for purchasing BOP products for their employees are typically companies that have CSR programmes in place, or at least the ones that have an interest in CSR. They would often be members of local Global Compact Networks or companies with large groups of employees that cannot be easily substituted on a daily basis. When targeting this group of customers it is very important that there is a proven positive impact on health and/or productivity.

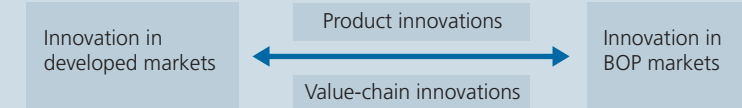
## Product and Value-chain Spill-overs

In some respects the BOP market can act as an incubator of new technologies and solutions that for various reasons are not deemed suitable for introduction in more developed markets. Thus, innovative inventions for BOP markets can potentially have positive spill-overs on developed markets and existing products.

When companies start re-thinking their own products and traditional business models as part of the process of targeting the BOP markets, new ideas for the home market can develop, whereby innovations from the BOP markets find their way to developed markets. The development of new technologies that are low-cost because they target the BOP and energy effective because of the typically unstable supply of electricity in developing countries, may well end up replacing unsustainable technologies in developed countries and thereby increase the company's competitiveness at home.

A classic example of a BOP business model giving a company an edge in a high-income market is that of the post-war Honda. After the second World War, Honda started producing small and basic motorized bicycles for the impoverished Japanese market. The business model could make money selling at very low prices. When Honda entered the US market, the product's simplicity and low price allowed it to capture a sizable share of the market. In other words, the company's base of Japanese BOP consumers gave it a huge competitive advantage in the high-income US market.

### SPILL-OVERS BETWEEN MARKETS



### Key Lessons

- Opportunities for intensive distribution exist in urban BOP markets – these markets will continue to grow at high rates
- The needs of the rural poor can be served profitably if the product and its delivery is right
- Danish exporters can help their customers overcome credit constraints, and increase sales by accessing lower market segments
- Working with BOP markets breaks our traditional way of thinking and challenges our well known business models
- Distribution in BOP markets is labour intensive – these jobs contribute significantly to economic development and poverty reduction
- Partnering is an efficient way to overcome many of the challenges associated with a BOP business model
- Branding is as important in BOP markets as in high-income markets, if not more so
- Sales to humanitarian organisations and/or government agencies may be a good way to generate volume in sales





# BOP Tools and Resources

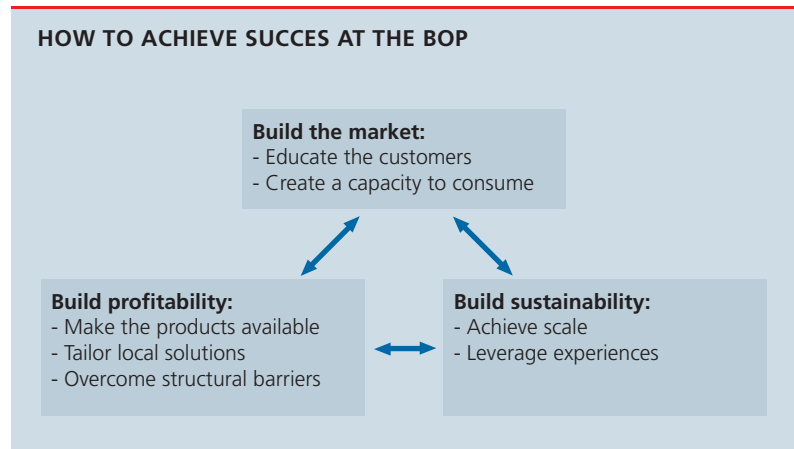
To reap the benefits of BOP markets, companies need to focus on development of products and services aimed specifically at the needs and demands of those at the BOP. The following key elements and stylized facts must become part of the thinking for Danish companies to be effective in BOP markets:

- Significant profits can be realized by meeting the needs of the poor. It is important to break down the mental barriers holding that the poor are bad customers because they only have small amounts of cash and limited education
- Business models from high-income markets will not work at the BOP. Innovative products and value-chain solutions that are customised to the special advantages and challenges at the BOP are the key to success
- Deep listening and learning are necessary if products are to meet real needs and be commercially viable
- To meet the needs of the poor or rather meet market demand at the BOP, it is often times necessary to apply new technologies in new ways
- Business models for the BOP market must be localized by leveraging local talent, hiring locals, and using local solutions where possible

It is not easy to reduce costs in a business model originally aimed at high-income customers without affecting its quality. However, in addition to capturing the BOP market there is considerable upside growth potential in doing it. The returns on the investment of developing business models for the BOP market can be significant. This is because the low cost structure and lean models needed to

serve the poor present an opportunity to add costs and features to products and move up-market to tiers of higher income and affluence.

The following model summarizes the elements that Danish companies have to consider to achieve success at the BOP. The model is based on the experiences of Danish companies as well as existing literature.



### Build the market

Building markets means making consumers aware of the products in relation to their needs, and enabling consumers to buy the products, e.g. by selling in single-serve packages or through credit-schemes that can help overcome cash constraints.

### Build profitability

Building profitability means making the products available to the consumers, e.g. through distribution systems. It also means tailoring the products and value-chain to local solutions and overcoming structural barriers such as lack of institutions, e.g. through the use of partners.

### Build sustainability

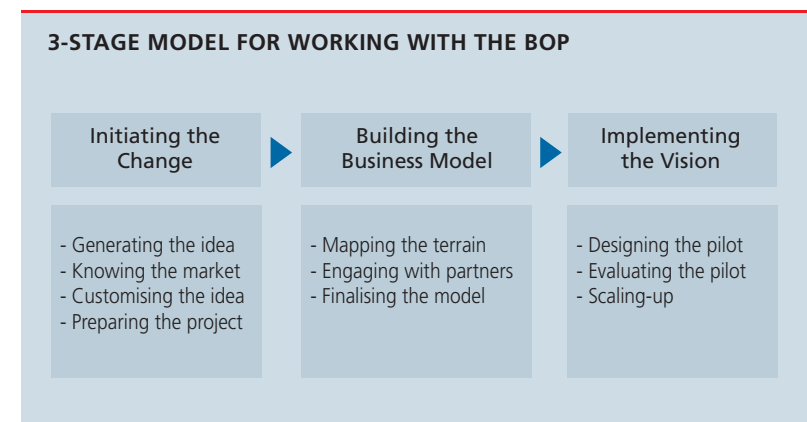
Building sustainability means achieving scale in all parts of the value-chain from production to distribution so as to ensure the long-term viability of the business model. It also means leverag-

ing experiences, both from BOP markets and from developed markets.

At this point, the question is how to *Build the Market*, *Build Profitability* and *Build Sustainability*? Applying all or some of the elements of the following 3-stage model can help companies develop an effective business model.

### A 3-stage Model for Working with the BOP

On the basis of the existing literature and the cases presented in this book it is possible to construct a 3-stage model for engaging with the BOP:



Companies can identify opportunities at the BOP by going through the model, asking the questions connected to each phase of the model, and applying the recommendations.

## Stage 1: Initiating the Change

Approaching the BOP, businesses should go through a preliminary initiating stage to make sure they have come up with a realistic and sustainable idea. The goal of this stage is to start a learning process – by engaging with partners – that leads to the realisation of the ideas and identification of the possibilities and challenges. In this process the following questions should be considered:

- Have we overlooked market segments, where needs are unmet and there is demand?
- Do we have the right product/service to offer? Or how can it be customised?
- What are our motivations to engage at the BOP?
- Can we build a customer base that can gradually be made more sustainable and grow?
- Are we blinded by our current business model?



## Generating the idea

- The first step in approaching the BOP market takes its outset in the right idea
- Sustainable business ideas should be identified by thinking out of the box
- By re-thinking the existing product and service solutions in the light of the advantages and challenges at the BOP new ideas can blossom
- The assets and strengths of the company should be considered and linked to the needs and resources in a different business environment like the BOP
- Broad internal company support for the project should be ensured in order to secure an engaged effort by everyone involved

## Preparing for the project

- It is crucial at this stage to conduct a first visit to the chosen location. This will help shape a picture of the actual environment at the BOP as well as broaden the understanding of the national and local stakeholders and possible partners
- A core team of people from the company who will take ownership of the project and carry it through should be formed. It is important that the team gets the necessary information and training to be ready to engage local partners in a very different business environment

## Knowing the market

- Equally important in the initiating stage is to understand the market and its opportunities in order to generate a realistic foundation for the business idea
- In this stage, the company needs a preliminary introduction to the opportunities, advantages, and challenges in the targeted BOP market
- Getting to know the market can be facilitated by engaging with partners. Companies need to engage with someone who has special knowledge about the market and who can assist in gathering all the relevant and necessary information

- It is important to identify a suitable location that is generally supportive and convenient for the purpose of the business
- At this stage of the process, trying to foresee critical gaps and challenges by thinking systematically about the idea from all possible angles is important

### Customising the idea

- Use the newly gained knowledge and understanding of the market to adapt the business idea to the expectations to the market
- Consider how best to take advantage of the resources and possibilities in the new market and simultaneously start preparing for how to overcome challenges
- It is important to end up with an idea that is realistic and customised to the realities at the BOP

#### EXAMPLES OF THE ELEMENTS OF STAGE 1: INITIATING THE CHANGE

Generating the idea	Preparing for the project	Knowing the market	Customising the idea
<p><b>Orana</b> helped their Zimbabwe partner develop a low cost/high quality whey drink</p>	<p><b>Emunio</b> undertook many visits to fully appreciate the production environment</p>	<p><b>B-K Medical</b> relied on the Danish Embassies to provide lists of possible partners</p>	<p><b>FanMilk</b> sells its ice cream in containers not on sticks</p>
<p><b>FanMilk</b> meets the needs of consumers with distribution of frozen yoghurt drinks</p>	<p><b>B-K Medical</b> has succeeded in building strong internal support for sales in this market</p>	<p><b>Vestergaard Frandsen</b> uses colours to differentiate markets for its mosquito nets</p>	<p><b>B-K Medical</b> used an innovative financing scheme to penetrate the market</p>
<p><b>Emunio</b> has customised the production of syringes to their context</p>		<p><b>FanMilk</b> is integrating the challenges of poor infrastructure into its planning</p>	

### Stage 2: Building the Business Model

The objective of the second stage is to build a sustainable business model that will be the centre of the project. At this phase it is crucial to consider all the relevant elements in a successful business model and find innovative solutions in order to customise it to the special conditions at the BOP. If the company does not have any prior experience from the BOP market that is being targeted, it is worthwhile to go through the first stage of "initiating change" before launching this stage, as a basic understanding of the local market and community is essential.

It is crucial in this phase to establish partnerships, which can secure a solid base for the project both with respect to financing, as well as for optimising the value-chain, and implementation. Before initiating this stage, the following "check list" of questions could be helpful:

- How do we finance the investment?
- How do we ensure that there is a demand for our product/service?
- How do we reach our customers?
- How do we overcome barriers through new technologies or innovations?
- How can we improve our supply-chain?

### Mapping the terrain

- During the second stage the learning process should be developed further with a more focused mapping of the needs and capabilities that are vital for the success of the project
- Once again engagement with partners can facilitate the collection of information and relevant knowledge that can contribute to mapping the entire terrain
- A thorough feasibility study should be conducted. It is important to map out the specific possibilities in regard to different market segments, locations, as well as national and local resources that can be harnessed

- Research should be made on the specific needs, demands, and preferences in the new market. In gaining an understanding of the economic and cultural differences it is important to develop a knowledge of local traditions and habits. This is valuable to see where your products and services can create consumer surplus
- Become familiar with the different kinds of resources that the new market can offer, such as abundant labour supply, and unique production and distribution possibilities
- Equally important is to study the national rules and regulations in order to avoid unnecessary administrative challenges
- Combine all this information with the resources and capabilities of the company to identify overlaps, complementaries, and special requirements

### Engaging with partners

- The mapping of potential business partners (financing and/or implementing) in the initial stage should be explored through preliminary meetings before the final selection
- When choosing the right partner(s) it is important to make sure that there is agreement on working towards a common goal as well as mutual motivation for the project. It is paramount that all parties involved are passionate about the idea and will work hard to carry it through
- Whether engaging with financial or implementing partners the goal is a more or less formal network to draw upon in order to gain specific resources like finance or market information, to maximize effectiveness in operations, and to manage perceived risks

### Finalising the model

- The final business plan needs to take into account all the aspects of the specific BOP market, such as the special needs and demands, the production and distribution opportunities, the barriers and challenges, as well as a realistic budget, taking into account the financing structure and the longer time horizon

- The company's strategic intent should also be clarified. The strategy needs to take into consideration the low return per unit and the possible barriers. This will help anchor expectations within the realm of the realistic in terms of cash flow, revenue, and reputation
- Alternatives should be retained. The uncertain environment calls for alternative models, back-up plans, and strategies that can be applied in case of unforeseen consequences
- Finally, the plan should be presented to the local players to secure a broad support through a transparent process. The feedback from the community and the market to reassess the business plan and strategy in order to adapt and adjust the goals, indicators, and deadlines

### EXAMPLES OF THE ELEMENTS OF STAGE 2: BUILDING THE BUSINESS MODEL

#### Mapping the terrain

Often used financing partners include **Danida** and **IFU**

**Emunio** and **Vestergaard Frandsen** have relied on local government partners and international organisations

**FanMilk** uses an internal group supplier, but uses other inputs when feasible

**Orana** is confident of the long term commercial perspectives in Zimbabwe because of its solid partnership

#### Engaging with partners

**Inmobia** relies on close partnership with **Celtel**

**B-K Medical** initially invested time finding and aligning local partners

**Vestergaard Frandsen** has found common ground with humanitarian organisations

#### Finalising the model

**Vestergaard Frandsen** and **FanMilk** set aside resources to meet IPR infringements

**Emunio** uses employee incentive schemes specially designed for the local context

### Stage 3: Implementing the Vision

The final implementation of the idea and the business model evolves around the development of one or more pilot projects that can pave the way for a more formalised business. The pilot projects are important mechanisms for testing the vision and the proposed strategy as well as ensuring support by local partners. The implementation stage should consider the following:

- How do we measure success?
- How do we scale up or replicate?

#### Designing the pilot

- Bringing the business model to life is an exiting step, putting action behind the vision and reaching the targets
- Flexibility is paramount during this stage. Everything is new and no formal business procedures have yet been established, thus it is recommended to expect and prepare for unanticipated situations that can cause targets and deadlines to change.
- The pilot phase also is a learning process where skills and capacities of the partner organisations are identified and utilized

#### Evaluating the pilot

- The project should be structured in stages that leave space for continuous adjustments along the way. This will allow time and space to monitor unintended consequences and adjust the project accordingly
- An essential benefit from the pilot is that the experiences can be used to assess the feasibility of the financial expectations, and adapt the revenue model and the rest of the business plan accordingly

#### Scaling-up

- A successful pilot should result in the establishment of a real business. This involves scaling-up the targets and adapting the production and distribution accordingly

- An important step in this phase is to establish governance structures that spell out the ownership and control structures
- Finally it is good practice to establish a sustainable exit-plan in case the project needs to be abandoned

#### EXAMPLES OF THE ELEMENTS OF STAGE 3: IMPLEMENTING THE VISION

##### Designing the pilot

**FanMilk** limits its vulnerability to local challenges and keeps its business model flexible

##### Evaluating the pilot

**B-K Medical** relied on a pilot to finalise the design of its financing model

**Inmobia** has had to give up some markets because of demands for “facilitation payments”

##### Scaling-up

**Vestergaard Frandsen** has scaled up to also sell to the CSR programmes of corporate clients

**Fanmilk** has a strategy to retain majority ownership and management control of its expanding activities





# Cases

## Vestergaard Frandsen

Vestergaard Frandsen was established in 1957 as a textile company developing and selling textiles and garments to Danish companies and consumers. Over time the production has developed into more specific technological solutions targeting developing countries. Vestergaard Frandsen has developed different life-saving products like PermaNet (mosquito net) and LifeStraw (water filtered straw) adapted to the needs of consumers at the BOP. Vestergaard Frandsen sells its products to humanitarian organizations as well as governments in developing countries in large volumes, and directly in BOP markets through local offices in smaller volumes. Today Vestergaard Frandsen is a medium-sized well-established company with operation in Africa and Asia.

## Emunio

Emunio was established as a start-up company in 2004 specialized in safe injection technologies. Emunio develops, manufactures and supplies auto destructible syringes for immunization purposes, and syringes with reuse prevention features for curative purposes to Ministries of Health, NGOs, private hospitals and clinics as well as to UN organizations. Emunio has set up production in Bangladesh, Tanzania and Malaysia from where the syringes are produced and distributed to regional customers.

## Southern Trident

Southern Trident is a Danish start-up company. Southern Trident manufactures and sells AquaSafe, a cheap and simple household water purification device which uses solar energy to purify water. AquaSafe is manufactured in South Africa in cooperation with a Black Empowerment partner and is made available to poor people

in both rural and urban areas through a mix of innovative strategies involving partnerships with humanitarian organizations and other companies.

## **Inmobia**

Inmobia was founded in 1998 as a wireless media company providing mobile portals as well as news and entertainment content (e.g. text, music, video etc.) to mobile operators. Inmobia has established an African Regional office in Nairobi, with Project managers, technical and editorial staff. The company has plans to aid mobile operators developing the African market for mobile content which is the fastest growing media in Africa. In addition, Inmobia works with Danida on a B2B project that uses mobile phones to reach young people between the age of 15 and 30 with information about myths, protection and treatment in the fight against HIV/AIDS in Kenya. Today Inmobia is a well-established company, providing mobile portals for operators in all regions of the world.

## **B-K Medical**

For more than 25 years, B-K Medical has been producing high quality diagnostic ultrasound systems. A few years back, the company started selling the product to smaller clinics in Kenya and Ghana. This new market has come about through a financing model, which allows cash restricted clients to amortize the purchase of very sophisticated state of the art equipment over a number of years. B-K Medical uses local finance companies and banks to do risk assessments, and their local partners provide technical and logistic support.

## **FanMilk**

FanMilk is a Danish owned dairy product company with several local production plants in West Africa. The aim is to provide high quality nutritious products made with high hygiene standards and make it available to the local public. The FanMilk cool box is the essential part of the distributing network and part of the equipment made available for self employed private vendors distributing the FanMilk dairy products. This gives locals a chance to make a better living and a key to many more jobs in the community.

## **Orana**

Orana is one of the largest Danish suppliers of fruit based raw materials and semi-manufactures for the beverage industry, dairies, and other food producers. Since the late 1990s Orana has been working with Dairiboard Zimbabwe in producing a whey drink customized to the BOP market in terms of high quality product at an affordable price. Sales of the product took off once the packaging of the drink was changed from the expensive high-end Tetra Pak to a much more affordable plastic sachet.

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Photos are by Lone Søndergaard, Lars Møller Holmegaard, DI, IFU, Vestergaard Frandsen, FanMilk, BK-Medical, Southern Trident and Inmobia.