



IFC

**International
Finance Corporation**
World Bank Group



**Accelerating
Inclusive
Business
Opportunities**

Inclusive Business Models

Guide to the Inclusive Business Models
in IFC's Portfolio

CLIENT CASE STUDIES



ABOUT IFC

IFC, a member of the World Bank Group, is the largest global development institution focused exclusively on the private sector. We help developing countries achieve sustainable growth by financing investment, providing advisory services to businesses and governments, and mobilizing capital in the international financial markets. In fiscal year 2011, amid economic uncertainty across the globe, we helped our clients create jobs, strengthen environmental performance, and contribute to their local communities—all while driving our investments to an all-time high of nearly \$19 billion. For more information, visit www.ifc.org.

ABOUT IFC'S INCLUSIVE BUSINESS MODELS GROUP

Launched in 2010, IFC's Inclusive Business Models Group mobilizes people, ideas, information, and resources to help companies start and scale inclusive business models more effectively. For more information, visit www.ifc.org/inclusivebusiness.

ACKNOWLEDGEMENTS

These case studies are based on the pioneering efforts of IFC's clients, whose inclusive business models they capture. IFC thanks all of you for your leadership.

The cases were written by Piya Baptista, Beth Jenkins, Jonathan Dolan, Daniel Coutinho, Alexis Geaneotes, Soren Heitmann, Sabine Durier, Samuel Phillips Lee, and Marcela Sabino. A wide range of IFC investment and advisory services staff shared information and insights with the case writers and served as liaisons with the clients featured—without their help these cases could not have been written. These allies include:

María Sheryll Abando	Luc Grillet	Arata Onoguchi
Anup Agarwal	María Victoria Guarín	Roopa Raman
Samuel Gaddiel Akyianu	Edward Hsu	Andriantsoa Ramanantsialonina
Yosita Andari	Lamtiurida Hutabarat	Chris Richards
Kareem Aziz	Ludwina Joseph	Bradford Roberts
Abishek Bansal	Tania Kaddeche	Olaf Schmidt
Subrata Barman	Sylvain Kakou	Michele Shuey
Adrian Bastien	Yosuke Kotsuji	Shamsher Singh
Svava Bjarnason	Nuru Lama	Anil Sinha
Brian Casabianca	Darius Lilaoonwala	Satrio Soeharto
Omar Chaudry	Ishira Mehta	Miguel Toledo
Alejandra Perez Cohen	Gene Moses	Ana Margarita Trujillo
Andi Dervishi	Asheque Moyeed	Carolina Valenzuela
Inderbir Singh Dhingra	Sachiho Nakayama	Rick van der Kamp
Asela Dissanayake	Ali Naqvi	Colin Warren
Samuel Dzotefe	Samuel Kamau Nganga	Patricia Wycoco
Gabriel España	Olivier Nour Noel	Zaki Uz Zaman
Jamie Fergusson	Damian Olive	
Guillermo Foscariini	Alexandre Oliveira	

COVER PHOTOS

Jaipur Rugs, India (Eriko Ishikawa)

RIGHTS AND PERMISSIONS

The material in this publication is copyrighted. Quoting, copying, and/or reproducing portions or all of this work is permitted provided the following citation is used:

International Finance Corporation. 2011. "Accelerating Inclusive Business Opportunities: Business Models that Make a Difference." Washington, DC: IFC.

The findings, interpretations, and conclusions expressed herein are those of the authors and do not necessarily reflect the views of IFC.

Inclusive Business Models

Guide to the Inclusive Business Models
in IFC's Portfolio

CLIENT CASE STUDIES



Table of Contents

Alquería S.A.	2
Anhanguera Educacional Participações S.A.	4
Apollo Hospitals Enterprise Limited.	6
Bakhresa Grain Milling Malawi & Mozambique	8
CEMAR	10
Coca-Cola SABCO	12
Dialog Telekom PLC	14
Duoc UC	16
ECOM Agroindustrial Corporation	18
Esoko Networks Ltd.	20
Faculdade Mauricio de Nassau	22
Financial Information Network & Operations Ltd. (FINO).	24
Husk Power Systems	26
Idea Cellular	28
Ideal Invest S.A.	30
Jain Irrigation Systems	32
La Hipotecaria Holding Inc.	34
Manila Water Company.	36
Mi Tienda	38
Moderna Alimentos S.A.	40
Nib International Bank.	42
Promigas	44
PT Summit Oto Finance	46
Salala Rubber Corporation	48
Sociedad de Acueducto, Alcantarillado y Aseo de Barranquilla (AAA).	50
Suvidhaa Infoserve Private Limited	52
Tribanco.	54
Uniminuto	56
VINTE.	58
YellowPepper	60
Zain Madagascar (now Airtel Madagascar).	62

Alquería S.A

COMPANY BACKGROUND

Alquería S.A. is Colombia's third-largest dairy company engaged in the production and marketing of a wide range of Ultra High Temperature (UHT) dairy products. Founded in 1959 by Dr. Jorge Cavelier, Alquería is still 100% owned by the Cavelier family. Dr. Cavelier saw an opportunity for a more modern approach to milk processing and was the first to introduce UHT milk into the Colombian market.

With revenues of \$280 million in 2010, over 3,500 employees, and 6,415 farmers and third party suppliers, Alquería is one of the leading dairy producers in Colombia. On a national level, Alquería controls 13.3% of the milk market, and leads the UHT market with a 25.4%

share. Colombians consume around 67 liters of milk per year, making Colombia the second largest consumer market in Latin America, after Costa Rica.

Alquería owns production plants in three of Colombia's major cities—Bogotá, Cali, and Medellín—and distribution centers in the cities of Bucaramanga, Villavicencio, Cucuta, Ibagué, and Neiva. Each plant serves as headquarters to one of the four business units under which Alquería operates. Alquería also has a 7% ownership in DASA, a joint venture with Danone, which produces and markets yogurt products under the Danone brand.

ALQUERÍA'S INCLUSIVE BUSINESS MODEL

Alquería does business with low-income populations on the supply side as dairy farmers and on the distribution side as retailers.

Supply Chain

Alquería sources 99% of its milk from about 6,500 independent farmers: 1,000 of these farmers supply the company directly, for approximately 48% of its total milk supply. Over two-thirds of these direct suppliers produce less than 200 liters per day—considerably less than the international average of 400 liters per day for a medium size farm. Most of them produce approximately 80 liters per day with an average of 15 cows, on farms of fewer than 20 acres each. It is important to note that more than 80% of milk producers in Colombia are of this type, and large farms with production over 10,000 liters per day are very few.

Another 5,500 farmers in Alquería's value chain supply the company indirectly, for approximately 42% of its total milk supply. These indirect suppliers tend to be smaller, producing as little as 10 liters per day. The company reaches them through intermediaries such as cooperatives, independent tanks, and other intermediaries with their own trucks and refrigerated tanks. These intermediaries facilitate the collection and payment processes with smaller farmers, particularly in remote, rural regions.

Alquería does not have long-term supply contracts and relies on strong relationships with farmers to maintain supply chain security. The company leverages its well-established reputation for paying on time and consistently off-taking milk, even when the market is flush. It also offers various forms of technical assistance. Through a dedicated supply chain management team, the company provides advice and assistance with:

- Appropriate feed rations
- Clean milk collection procedures
- Bulk procurement of fodder and fertilizer, which helps keep production costs down
- Microcredit financing

To date, Alquería has provided COP 54 million in financing directly to small farmers who are ineligible for commercial bank loans. This program was implemented recently and will grow in importance.

Distribution

Alquería has a robust distribution network reaching over 125,000 points of sale. In Colombia, small-scale retail outlets such as corner stores and kiosks continue to be the leading distribution channel and account for 75% of Alquería's sales, while supermarkets comprise only 25%. Because UHT lasts longer than pasteurized milk and does not rely on refrigerated systems, storage is easy and affordable for these small-scale outlets.

Alquería reaches small-scale outlets in a variety of ways. The most important is *pre-sales*, which account for over half of its revenues. Every morning, company staff visit small-scale outlets nationwide, taking orders to be delivered the following day. In Bogotá, 150 pre-sellers visit approximately 80 shops each, taking orders equivalent to 1,500 liters or \$2,000 a day. To facilitate this process, the company has developed a mobile application that allows orders to be uploaded and transmitted through cellular phones. Depending on location, deliveries are made anywhere from three times a week to once a day by third party transporters using trucks, carriages pulled by motorcycles, and small trolleys that support canteens and very small shops.

Payments are made directly to delivery personnel on a purely cash basis. For safety reasons, Alquería has made express service arrangements with local banks. This arrangement allows delivery personnel to make frequent deposits, skip the customer line, and promptly continue their delivery activities.

A new distribution strategy targeting very small towns and remote areas is *micro-sales*. Introduced in 2009, micro-sales now account for approximately 5% of total revenues and continues to grow. In this model, Alquería selects one person in a specific locale to serve as an independent distributor to small retail outlets in that area. Each person must meet screening criteria such as being married or receiving the recommendation of a local priest. His or her home serves as a warehouse, and Alquería sometimes provides financing for a motorcycle or small truck to use for deliveries.

Alquería S.A

DRIVERS FOR ALQUERÍA'S INCLUSIVE BUSINESS MODEL

- The majority of milk producers in Colombia are small-scale; supporting them underpins Alquería's ability to secure raw milk at competitive prices to sustain its growth plans
- Demographics and cultural preferences favor small-scale retail

On the supply side, Alquería focuses on small-scale dairy farmers because they comprise the majority of milk producers in Colombia. The company's success depends on their success: to remain competitive and grow, Alquería must work with them to increase volumes and enhance production quality.

On the distribution side, traditional, small-scale retail outlets continue to be Colombia's most important channel. According to AC Nielsen, there are 489,000 such outlets (on average, one store per block) compared to 5,440 supermarkets. In the past two years, traditional stores were the only channel that experienced growth at 3.9%, while supermarkets and drugstores declined at -3.9% and -1.8% respectively.

The continued success and growth of the traditional channel is reinforced by demographic factors. About 70% of the Colombian working population earns a minimum wage, getting paid on a bimonthly or even daily basis, which makes small, frequent purchases more convenient. Only 15-18% of the population own a car, making it difficult and expensive to reach supermarkets. Furthermore, small shops provide credit and retail prices that are on average only 3% more than in supermarkets, making them relatively competitive given their accessibility to people at the base of the pyramid.

RESULTS OF ALQUERÍA'S INCLUSIVE BUSINESS MODEL

- Distribution linkages with 125,000 small retail outlets that earn on average 5% on sales
- Distribution linkages with 690 small, independent distributors who earn on average 3.5% on sales
- Direct and indirect supply linkages with approximately 6,500 mostly small, independent dairy farmers worth \$120 million in 2010
- \$280 million in revenues and \$30 million EBITDA in 2010
- 25.4% market share in UHT milk

Alquería supports micro-enterprise development and employment through distribution linkages with 125,000 small-scale retail outlets ranging from mom-and-pop stores to kiosks to coffee shops. These outlets earn, on average, 5% on sales of Alquería products. Some of these outlets are, in turn, served by 690 small, independent distributors affiliated with the company—these distributors earn an average of 3.5% on sales of its products.

On the supply side, Alquería sources from approximately 6,500 mostly small, independent dairy farmers—providing a stable and reliable income that compares well with alternative activities such as cattle ranching. Purchasing totaled \$120 million in 2010. In addition, through its technical assistance efforts, Alquería is helping small dairy farmers increase and improve the quality of milk production, thereby

stabilizing and enhancing their incomes and supporting job creation on their farms.

By offering technical assistance, Alquería is also facilitating a change in mindset for these small producers. Rather than viewing their businesses purely as means of survival, they now see growth potential. They are recognizing the benefits of shifting to more professional approaches that raise their incomes and improve quality of life for their families.

Alquería's efforts have earned it market leadership in UHT milk with a 25.4% share, and second position in the milk market overall with a 13.3% share. In 2010, the company generated \$280 million in revenues, reflecting 152% growth since 2006. During the same three-year period, EBITDA margins increased from \$10 million to \$30 million.



IFC'S ROLE AND VALUE-ADD

IFC has provided Alquería with long-term financing in the form of \$5 million in equity and \$15 million in debt, with terms that are not available in the local market without real guarantees—yet are necessary given the company's projected cash flows.

IFC's investment is enabling Alquería to increase milk sourcing by increasing volumes from current suppliers, bringing additional dairy farmers into the supply base, and helping new dairy farmers to emerge. This financing facilitates expansion to remote regions outside Bogotá, where farmers are smaller and less sophisticated. In order to achieve expansion targets, Alquería must provide farmers with technical assistance to improve volumes and adhere to quality standards.

IFC's investment is also improving the risk profile of a local player in the dairy industry by strengthening its balance sheet and providing a valuable international "stamp of approval." Until recently, Alquería focused primarily on the Bogotá region. Without IFC's participation, Alquería's strategic plans to become a major player at the national level would be delayed, or would have to be financed with shorter-term debt—bringing with it higher risks and higher financing costs.



IFC's Investment:

\$5 million in equity and \$15 million in long-term debt financing

Anhanguera Educacional Participações S.A.

COMPANY BACKGROUND

Anhanguera Educacional Participações S.A. (AESA) is Brazil's leading private, for-profit professional education company. Founded in 1994 as a single college, AESA is currently the largest post-secondary education institution in Brazil, with approximately 255,000 students distributed across 54 campuses and 450 distance learning centers, and an additional 500,000 students per year enrolled in its vocational and training programs. AESA educated over 755,000 Brazilian adults in 2009, more than any other educational institution in the western hemisphere. Through its network of campuses, distance learning and vocational training centers, AESA is present in every Brazilian state.

The company's primary shareholder (with an approximate 25% stake) is the Fundo de Educação para o Brasil, a dedicated investment vehicle established specifically to invest in AESA. The company's founders own approximately 2% of its shares with the balance (73%) held by institutional investors, including leading emerging market funds and asset managers who invested in AESA following its Initial Public Offering in 2007. AESA is the largest publicly-held education company in Brazil in terms of market value, with an estimated market capitalization of R\$3.05 billion based on official closing price on December 31, 2009.

ANHANGUERA'S INCLUSIVE BUSINESS MODEL

AESA's target market consists of lower-income working adults aged 18-30 that generally attend evening classes. The average monthly salary of an incoming student is R\$660 (approximately US\$290) per month, which increases to R\$1,000 (approximately US\$450) upon graduation. Average tuition is R\$280.3 (US\$195) per month, 20% to 40% below AESA's main competitors.

The company's decision to focus on the lower-income segment has had a profound impact on its business model. Recognizing that low-income students have different educational needs throughout their lives, AESA has developed a comprehensive portfolio of offerings along three lines of business:

- **54 campuses** provide 148,000+ students with access to a wide variety of undergraduate, graduate and continuing education programs. Prices range from R\$199 to R\$699/month.
- **650+ vocational training centers** provide 500,000 students per year with industry-relevant technical and vocational education and training (TVET). By emphasizing TVET in its business mix, the company has helped to bridge the gap in education services between the secondary and college levels for low-income students that are unable to attend university. Prices range from R\$75 to R\$120/month.
- **450+ learning centers and a distance learning platform** have enabled AESA to reach 107,000+ students that are either far away from its campuses or seeking greater flexibility in where and when to study. This platform has also allowed the company to offer short-term courses to college graduates (e.g. preparatory courses and placement exams). Prices range from R\$159 to R\$400/month.

The challenge for AESA has been to balance the provision of affordable, high-quality education while achieving a reasonable return on equity. The

company's business model has proven to be both profitable and scalable due to four key factors:

- **National coverage** that offers easy access for working adults with busy schedules, in both urban and rural areas;
- **Standardized curricula**, which minimize class preparation time for instructors, and reduce the number of administrative and support staff required by the company;
- **High-quality faculty**, many of whom are practitioners rather than full-time instructors; and
- **Rigorous monitoring and evaluation** to ensure strong educational outcomes across programs and sites, and to identify and eliminate low-demand courses that drain valuable resources.

Loans and scholarships have been critical success factors in acquiring and retaining low-income students. In 2008, the company provided scholarships to 108,735 students in partnership with federal, state, and local governments. On average, these scholarships covered 23% of student fees; 27,677 covered upwards of 50% of fees and 8,757 covered 100%. These scholarships are valued at R\$134.7 million. AESA students also have access to market rate loans offered by a private Brazilian bank.

AESA's innovative marketing initiatives have also helped the company acquire and retain low-income students. In addition to a variety of low-cost promotions, such as billboards and celebrity appearances, the company has garnered significant brand recognition and goodwill through its community outreach initiatives. In 2008, these initiatives allowed AESA students from a cross-section of programs to provide pro-bono services to more than 800,000 low to middle income people. For these and other programs, Brand Analytics/Millward Brown named the company a *Top 100 Brand in Brazil* in 2009.

Anhanguera Educacional Participações S.A.

DRIVERS FOR ANHANGUERA'S INCLUSIVE BUSINESS MODEL

- Growing demand for tertiary education
- Government policy created a market opportunity for the private sector
- Research showing that as incomes rise, a disproportionate amount is spent on education

Post-secondary education in Brazil has historically been the province of the public sector, with high-quality public universities offering highly regarded degrees free of charge. The commitment to free education created capacity constraints, however, with the result that only the best students—typically those from wealthy families who attended private high schools—could access the public system. Pent-up demand among low and middle income students grew, especially as education policy reforms increased by an order of magnitude the number of students going through primary and secondary school.

In the mid-1990s, the Ministry of Education began accrediting and licensing private sector providers to serve pent-up demand

for post-secondary education. This created a market opportunity for entrepreneurs like the founders of Anhanguera. As the number of private post-secondary schools grew from several hundred to several thousand, enrollment swelled from 2.4 million students in 1999 to an estimated 4.9 million in 2007.

Today approximately 75% of all post-secondary students in Brazil attend private schools. Much of this growth has taken place in the lower income segments. Until recently, only 5% of students from the two lowest economic quintiles were able to attend post-secondary school. Today, this segment represents the fastest growing demographic entering post-secondary schools in Brazil.



IFC'S ROLE AND VALUE-ADD

One of the key pillars of IFC's global Health and Education Strategy is to invest in education projects with strategic clients. These are predominately larger, for-profit providers, which have the ability to grow and operate in several markets and to move down-market to serve lower income households. In recent years, IFC has also strengthened its pipeline of technical and vocational education and training investments, recognizing that this type of post-secondary education is frequently the most affordable and relevant to low-income working adults.

IFC's Health and Education Department has invested approximately US\$39.5 million in AESA through two consecutive projects. IFC has also helped AESA clearly articulate its business lines and to expand its network.

While AESA has accomplished a great deal in Brazil, one of its greatest contributions has been the demonstration of a profitable and scalable business model for serving low-income students. This is a model that IFC will continue to support in Brazil and that it will seek to replicate through future investment and advisory work in the region and across the globe.

RESULTS OF ANHANGUERA'S INCLUSIVE BUSINESS MODEL

- Net revenues of R\$904.5 million in 2009
- EBITDA in excess of 20%
- Approximately 755,000 students educated in 2009
- Graduates' earning potential increased more than 50%

AESA has achieved impressive financial results through consistent execution. From 2006 to 2009, net revenues and EBITDA grew from R\$112.5 million and R\$21.6 million to R\$904.5 million and R\$188.6 million, respectively. During 2009, AESA preserved EBITDA margins in excess of 20%, which are likely to improve as new campuses and acquisitions expand the company's reach over the next 12 to 24 months.

In 2009, AESA educated over 755,000 Brazilian adults, of which more than 600,000 participated in vocational training and distance learning programs that allow low-income individuals to improve their skills and earning potential while continuing to work during the day. The company also strives to promote increased access to its programs by offering students

scholarships and loans in partnership with the Brazilian government and a private bank. In 2008, AESA provided scholarships to 108,735 students valued at R\$134.7 million.

Student surveys suggest that AESA graduates improve their earning potential by more than 50%. Whereas the average monthly wage of an incoming student is approximately US\$290, he or she will typically earn more than US\$450 after graduating. What is more, the wage differential over the working life of an AESA graduate is likely to be much higher. According to World Bank studies, the Brazilian economy displays a particularly large wage premium between university and high school of 339%, as compared to a 74% premium in the United States.



IFC's Investment:

\$39 million in long-term debt financing

Apollo Hospitals Enterprise Limited

COMPANY BACKGROUND

Apollo Hospitals Enterprise Limited (Apollo) is among the largest private integrated healthcare groups in India and recognized as a leader in the management and delivery of high-quality tertiary care in Asia. In addition to hospitals, Apollo owns and operates clinics, diagnostic centers, pharmacies, and provides healthcare management consulting, education and training, and telemedicine services. The company is a forerunner in bringing state-of-the-art medical technologies to India for tertiary and quaternary care. Apollo also provides project consultancy services to hospitals in Africa, East Asia and the Middle East.

Apollo owns 30 hospitals and manages 15 in India and abroad with a total bed strength of 8,000. The company also has a network of 1,200 retail pharmacies. Apollo's shares are listed on the Mumbai Stock Exchange and the National Stock Exchange.

Dr. Prathap C. Reddy, a visionary cardiologist, started Apollo Hospitals in 1983 despite great obstacles to private sector health delivery. In keeping with his mission of "providing international quality healthcare to all who need it," Apollo launched Apollo Reach Hospitals for smaller cities and their surrounding rural and semi-urban areas in 2008.

APOLLO HOSPITALS' INCLUSIVE BUSINESS MODEL

With over 25 years of experience in setting up hospitals across India and the world, Apollo is well placed to identify cities and towns that are in urgent need of healthcare facilities and the type of hospitals and services required. Accessibility is thus a key feature of Apollo Reach hospitals, which are located in less-developed population centers known as Tier II cities in India. Earlier, patients would have traveled considerable distances to large cities, often at great expense.

Low cost is another key feature of Apollo Reach hospitals. Treatments in the Apollo Reach model cost 20-30% less than at other hospitals in the Apollo network and other major hospitals. Apollo Reach hospitals are smaller, simpler facilities, offering more limited but robust services than other hospitals in Apollo's networks. Each Apollo Reach hospital is being built to house 150 beds, 40 intensive care unit beds, and five operation theaters. The range of tertiary care includes cardiac, oncology, radiology, neurosurgery, and other specializations. Other services and facilities include video endoscopy, blood bank, check-up, radiology, complete lab, dental, ear, nose and throat (ENT), and eye care services. Apart from traditional ambulance emergency services, Apollo Reach hospitals also offer emergency air ambulance services for life-threatening emergencies and remote areas.

Another measure to increase access to quality healthcare and reduce costs is telemedicine. With telemedicine available at all Apollo Reach hospitals, people no longer have to travel long distances for a second opinion or wait for weeks before they can meet a specialist doctor. According to Apollo, telemedicine will improve patient care, enhance medical training, standardize clinical practice, and stabilize costs.

These innovations, combined with a steady stream of high-quality physicians, put Apollo Reach hospitals on a strong footing in underserved communities. Hospitals located in semi-urban and rural areas have more difficulty attracting quality physicians. To mitigate recruitment problems, Apollo offers a fast-track career which gives doctors more responsibility and faster promotions if they work for a few years in a Reach hospital. Apollo's presence throughout India is an advantage to facilitate this recruitment strategy as employees are aware that there are opportunities elsewhere once they have completed a rotation in a Reach hospital.

To make healthcare affordable to low-income patients, Apollo Reach hospitals treat both low- and high-income patients. The higher fees paid by more affluent patients help make the hospitals profitable for the parent company—illustrating how cross-subsidization between high-income and low-income consumers can bring affordable health services to the poor.

The Rashtriya Swasthya Bima Yojana (RSBY), the Government of India's recently introduced national health insurance scheme for families below the poverty line, also enables Apollo Reach to serve low-income patients. RSBY covers hospital expenses up to Rs. 30,000 (\$659) for a family of five. Transport costs are also covered up to a maximum of Rs. 1000 (\$22) with Rs. 100 (\$2.19) per visit. Each beneficiary pays Rs. 30 (\$0.66) at the time of enrollment, while the central government pays 75% to 90% of the total premium depending on the state with the balance paid by the state government.

Apollo Hospitals Enterprise Limited

DRIVERS FOR APOLLO HOSPITALS' INCLUSIVE BUSINESS MODEL

- Demand for low-cost, high-quality healthcare
- Changing disease patterns resulting in need for specialized care
- Absence of quality hospitals providing specialized care outside of major urban centers

Public health insurance creates a market opportunity to serve low-income patients.

In countries with underdeveloped healthcare systems, severe illness or injury can be financially devastating for the poor. For millions of patients in India, a single episode of hospitalization can cost up to 58% of annual expenditures. Research shows that 40% of those hospitalized must either borrow money or sell personal belongings to pay medical bills. Advances in medical technology are also increasing the need for specialists, making healthcare expensive and inaccessible to the masses. Further,

over 700 million people in India lack access to quality healthcare as over 80% of hospitals are in urban India. In particular, smaller cities, semi-urban areas and rural areas do not have access to hospitals for specialized healthcare services. Demand for the latter is increasing as chronic adult diseases such as cardiovascular illnesses, diabetes and cancer are on the rise in India. These factors, combined with the government of India's health insurance scheme for families below the poverty line, create a significant market opportunity for Apollo to provide specialized healthcare to underserved low-income families via Apollo Reach.

RESULTS OF APOLLO HOSPITALS' INCLUSIVE BUSINESS MODEL

- Revenue per bed at a Reach Hospital is Rs. 6,000 (\$132) to Rs.7,000 (\$154)
- Plans to establish 250 Apollo Reach hospitals over time
- Estimated to serve 120,000 patients per year who earn less than \$2 per day

Indian Prime Minister Dr. Manmohan Singh launched the first Apollo Reach hospital in Karimnagar, Andhra Pradesh, in 2008. Karimnagar is 162 kilometers from the major city of Hyderabad. This hospital serves 16,800 outpatients and inpatients annually. Approximately 50% are low-income. A second Apollo Reach hospital has been established in Karur, Tamil Nadu, and Apollo plans to set up an additional four hospitals in the near future.

Apollo expects to set up 15 Reach hospitals over the next three years and these hospitals are expected to serve about 400,000 people annually by 2015, of which about 30% or 120,000 people per year would be considered very poor, earning less than \$2 per day. Over time, Apollo Reach plans to establish hospitals in 250 of the 600-plus districts across India.



IFC'S ROLE AND VALUE-ADD

IFC has supported Apollo since 2005 as an equity investor. In 2009, IFC signed a \$50 million loan to help finance the rollout of the Apollo Reach hospitals. IFC's value-add to Apollo lies in its ability to provide ongoing strategic advice and guidance based on its broad global and regional experience as well as knowledge of healthcare investments.

IFC's investment in Apollo helps bring much needed capital and provides a strong signal of support to the health sector in India. According to the World Health Organization and the Confederation of Indian Industries, the private sector is crucial to the provision of healthcare in India and already accounts for over 75% of total healthcare expenditures. Creating an adequate hospital infrastructure alone will require \$34 billion in private investment by 2012 in secondary and tertiary care hospitals, medical colleges, nursing, and hospital management schools.



IFC's Investment:

**\$50 million in long-term debt and
\$5 million in equity**

Bakhresa Grain Milling Malawi

COMPANY BACKGROUND

Bakhresa Grain Milling (BGM) Malawi is the market leader in flour milling in Malawi. BGM Malawi is part of the Bakhresa Group of companies, a leading industrial house founded by the Bakhresa family in Tanzania in the 1970s. The Bakhresa Group currently operates in Tanzania (including Zanzibar), Malawi, Uganda, Kenya, Zambia, Rwanda, and Mozambique. Its flour milling operations in East Africa make up more than 89% of total sales. The Bakhresa Group also operates food, transportation, and logistics businesses, mainly in Tanzania. It has an annual turnover of more than \$300 million and employs nearly 2,000 people in the region.

BGM Malawi was established in December 2003 and currently has a national market share of 80%. Its flour milling facility is located in the south in Blantyre, the country's industrial and commercial capital. The company also has branches in Mzuzu in the north and Lilongwe in central Malawi. BGM Malawi supplies to 90% of commercial bakeries, an estimated 75% of small bakeries, and 60% of small retail outlets in the country. In 2010-11, the company's revenues reached \$82 million.

BGM MALAWI'S INCLUSIVE BUSINESS MODEL

BGM Malawi sells packaged wheat flour to commercial bakeries, small bakeries and small retailers, and supermarkets under a variety of brands and package sizes ranging from 2-50kgs. Commercial bakeries requiring larger stocks tend to purchase 25kg and 50kg packages. To target smaller bakeries and retail outlets with lower inventory requirements, the company recently launched a 10kg package size.

Distribution

The company has four primary distribution channels, two of which serve small retail shops and bakeries:

- Distributors: 60% of BGM Malawi's volume is channeled through five major distributors that resell to small retail shops (90%), small bakeries (5%), and individuals (2%)
- BGM Malawi branches: 10% of volume is sent to company branches that sell to small bakeries and retail shops

Distributors collect packaged flour directly from BGM Malawi's packaging plant in Limbe and 90% of this volume is then sold to small retail shops through distribution outlets located throughout rural and urban parts of the country, each servicing an area of 15-20km. Retailers, which typically purchase 14-35 bags on a weekly basis, are family-owned, employ one to two assistants, and range in size from 30-60 square meters. Small bakeries located in suburban and rural markets throughout the country, but predominantly in the southern region, comprise 5% of the distributors' sales. These bakeries, on average, employ three to four employees and purchase one to two bags of flour on a daily basis.

BGM Malawi branches, the company's newest distribution channel, were initiated as a way for the company to directly reach smaller businesses located too far from Limbe to regularly pick up supplies. Around 200-300 small businesses already purchase from BGM Malawi branches, including small mom-and-pop retail outlets (70%), small bakeries (20%), and small wholesalers (10%). Mom-and-pop outlets tend to be located within a 300km radius of a branch, have four to ten employees and operate in busy trading areas near fuel or bus stations.

In addition, BGM Malawi salespeople call small retail outlets and bakeries on a regular basis to collect orders. When enough orders have been

collected, typically twice a month, it deploys vans from the factory or branches to drop off supplies directly. This occurs most frequently in the outskirts of Limbe and Lilongwe.

The company plans to open six additional branches in all of Malawi's major trading centers over the next three to five years. By that time, BGM Malawi anticipates that 30% of its packaged wheat flour volume will be distributed through its branches.

BGM Malawi also directly distributes to large commercial bakeries, each of which buys an average of 100-500 bags per week. They account for 20-22% of the company's total volume. While they are not a primary target for BGM Malawi, approximately 1-2% of its packaged wheat flour is distributed to supermarket chains.

Technical Assistance

BGM Malawi provides training to small bakeries purchasing either directly from the company or from distributors. Workshops are conducted in rural areas predominantly in the central region, where most small bakeries are located. They are scheduled every six months—after the harvest season when individuals have time to participate. As many as 100 people participate at a time. Elements covered include bakery management, baking processes and machinery, ingredient usage, and basic business skills like sales and marketing. Training not only enables these bakeries to be more successful; it also helps BGM Malawi establish brand loyalty and strong customer relationships. Over the past two years, the company has trained 1,000 people from 200-250 small bakeries.

In addition to formal training, company staff visit 250-300 bakeries during routine monthly or bi-monthly market visits to understand market needs, monitor sales throughout the value chain to the end customer, and provide input on technical aspects including machinery and processes. Distributors also monitor the bakeries they are supplying, though less frequently and specifically for consumption.

Finally, BGM Malawi sales and merchandising staff visit small retail outlets once a quarter and provide merchandising support including stocking, displays, and point-of-sale advertising. Currently, 200-250 outlets across the country and their 1,800-2,000 staff receive such support.

Bakhresa Grain Milling Malawi

DRIVERS FOR BGM MALAWI'S INCLUSIVE BUSINESS MODEL

- Rising consumption of wheat, at 6% growth annually
- Products and distribution channels are tailored to large commercial bakeries, making it harder for small bakeries and retail outlets to purchase

The primary driver for BGM Malawi's inclusive business model is local market demand for wheat. Wheat consumption has experienced 6% annual growth since 2008 due to improving economic conditions and increased urbanization.

Small bakeries and retail outlets constitute a significant portion of the wheat market in Malawi, yet they are inadequately serviced by large wheat distributors. BGM Malawi opened local branches in the central and northern parts of the country to directly service these customers. Before, mom-and-pop retail outlets were required to travel long distances or purchase packaged wheat flour from large, third-party

distributors, distributors of competing brands, and unorganized sources such as informal traders selling by the scoop. Interruption in the supply of BGM Malawi products was a common problem since these retailers were not a priority for large distributors. Now, BGM Malawi branches ensure that small retailers have a consistent and uninterrupted supply of products at competitive prices. The business opportunity in branch-based sales to small bakeries and retailers has been validated by the huge growth in sales that company branches established in 2010 have already experienced. The branch distribution channel already comprises 10% of sales.

RESULTS OF BGM MALAWI'S INCLUSIVE BUSINESS MODEL

- Small retail outlets receive an average margin of 10-15% on sales of BGM products and bakeries an average of 20-25%
- Over 1,000 small bakery staff have received business and technical training to date
- Over 1,800-2,000 staff from more than 1,000 small retail outlets have received merchandising support
- 33.6% annual revenue growth in calendar year 2010
- \$12.5 million in EBITDA in calendar year 2010

To date, BGM Malawi has provided over 1,000 small bakery staff with business and technical training. As a result of this training, bakeries are better equipped to produce high-quality baked goods and resell to customers. At the same time, BGM Malawi builds brand loyalty within its customer base. Additionally, BGM Malawi has provided merchandising support to more than 1,800-2,000 staff at more than 1,000 small retail outlets. Bakeries selling goods

made with BGM products receive an average profit margin of 20-25%, and small retail outlets selling packaged flour typically achieve a margin of 10-15%.

As a result of BGM Malawi's inclusive business model, the company has positioned itself as the market leader in wheat milling in Malawi, achieving 33.6% revenue growth and \$12.5 million in EBITDA in calendar year 2010.



IFC'S ROLE AND VALUE-ADD

In 2008, IFC provided a \$5 million loan to help BGM Malawi to finance short-term supplier credit, allowing it to strengthen its balance sheet and reduce the refinancing risk. This loan was provided as part of a \$20 million loan to the Bakhresa Group, of which an additional \$7 million went to BGM Mozambique to establish a grain handling and storage facility in Nacala. This storage facility has enabled the Bakhresa Group to increase food security and efficiency of distribution in northern Mozambique, Malawi, and Tanzania. With this port, BGM can transport wheat from Nacala to Malawi via rail in a more direct and reliable way. The wheat terminal in Nacala reduced costs by allowing larger quantities of wheat to be transported, quick unload times, and lower inland transportation costs due to the rail link between Nacala and Blantyre. This directly enabled BGM Malawi to ensure a stable supply, thus making the product consistently available to small bakeries and retail outlets at competitive prices.

IFC's investment has enabled the Bakhresa Group to access longer-term loans than those available locally and to pursue regional expansion. Additionally, with concurrent support in corporate governance and environment and social standards, it has been able to improve its risk profile.



IFC's Investment:

\$5 million in long-term debt financing

CEMAR

COMPANY BACKGROUND

Companhia Energética do Maranhão, or CEMAR, is the power distribution company servicing Brazil's northeastern state of Maranhão. Maranhão is one of the poorest states in Brazil, whose 6.2 million inhabitants earn a per capita income 29% below the national average. With increasing demand for power, and electrification a key element to both improving the quality of people's lives and fueling economic growth, CEMAR is working to bring power to the entire state, with a particular emphasis on rural and low-income segments. Since 2004, the company has participated in a Brazilian government program called Light for All (Programa Luz Para Todos) aiming to bring about universal access to electricity throughout the country. At the end of

2009, CEMAR's geographic coverage spanned 97% of the state, with approximately one million of its residential subscribers classified as low-income.

The company's primary shareholder is Equatorial Energia, a publicly listed holding company with 65.1% ownership, whose investments target power generation, distribution and transmission primarily in Brazil. The public power utility, ELETROBRAS, holds a 33.6% stake and minority shareholders, which include CEMAR's management, hold the remaining 1.3% of the company. CEMAR is a regulated utility company, with tariffs and contracting obligations set by Brazil's National Agency for Electrical Energy (ANEEL).

CEMAR'S INCLUSIVE BUSINESS MODEL

CEMAR's concession mandates it to continuously invest in its distribution network, but reaching Maranhão's rural and low-income populations presented the company with a number of challenges. Expanding infrastructure into rural and sparsely populated areas represented significant capital expenditures. Moreover, the potential customer base was approximately 88% residential—of whom about 70% were low-income—meaning their power needs and tariff categories would be relatively low. Yet the needs for power were clear, and for CEMAR this represented a hugely untapped customer base. The challenge was therefore to develop the rural power market both profitably and inclusively.

In 2004, GP Investimentos, a private equity firm and the former parent company of Equatorial, took control of CEMAR, which was left financially adrift in the wake of Brazil's 2001 energy crisis. Under the direction of GP Investimentos, CEMAR adopted a new strategy, focusing on building a strong, stable platform for future growth and rural electrification. At the same time, the government of Brazil launched the Light for All program providing the needed incentives to stimulate demand and develop these rural markets.

The company underwent major organizational and operational restructuring, which focused on efficiency improvements in three main areas. First, CEMAR invested heavily in modernizing and expanding its distribution network, including replacing obsolete equipment, installing new distribution lines and sub-stations and voltage regulating equipment. The modernization mitigated technical power losses, a particular concern given that Maranhão lacks any generation capacity and reaching rural areas requires transmission lines to traverse greater distances.

Reducing commercial losses was another key component, addressed by many operational improvements to the network, such as upgrading information systems, enabling precise GPS-based location for distribution poles and automating network operations. This enabled CEMAR to improve collection rates and combat electricity theft. The modernization also led to significant reductions in the frequency and duration of service disruptions and boosted service quality and customer satisfaction.

Finally, the management structure was dramatically overhauled, focusing on reducing costs and increasing productivity. Regional departments were eliminated, and the management structure was reduced from seven layers to three. Many operational aspects were outsourced, such as billing, customer service, and network maintenance. CEMAR focused on providing stronger incentives, including performance-based bonuses for all its employees and stock options for management.

CEMAR's enrollment as an implementing agency in the government's Light for All program obliged the company to electrify the entire state of Maranhão and to contribute 15% of the costs while government grants and subsidized loans comprised the rest. This was designed to reduce capital costs, as low-income and rural customers would have been unable to bear the initial connection costs. The government also provided incentives to promote demand in rural markets through a low-income consumer subsidy. This program allowed residential customers classified as low-income to receive a reduction of up to 65% off their energy bills, with the reduction depending on the amount of power consumed, such that the lowest users paid the lowest rates. In 2007, nearly 65% of CEMAR's customers were eligible for the low-income rebate.

CEMAR

DRIVERS FOR CEMAR'S INCLUSIVE BUSINESS MODEL

- Reaching a new customer base
- Better service is more efficient and less costly
- The Brazilian government's Light for All program
- ANEEL's low-income tariff structure

The primary driver for CEMAR's inclusive business model was a federal government program, Light for All, that created new market segments for the company to reach. The objective of the program, launched in 2003, was to connect 1.7 million households and 12 million individuals by the end of 2010.

The northeast region of Brazil saw the highest need for rural electrification, nearly half of the total, and consequently received nearly 44% of overall federal funding, according to a report from the US Commercial Service. Total project cost was estimated at R\$9.5 billion (\$4.3 billion), with 71% to be funded by the federal government and the rest split among state governments and distribution companies.

Bringing power to over one million individuals under the Light for All Program fueled the state's demand for more power. Brazil's Institute of Geography and Statistics reports GDP growth rates for Maranhão averaging 10% per year between 2004 and 2007. Strong economic growth, supported by increased electricity access and coupled with low starting levels of consumption, has pushed electricity demand across all customer segments, increasing CEMAR's electricity load by 4.2% between 2007 and 2008, outpacing the national increase of 2.9%. In 2009, the company reached an increase of 1.4% in electricity load, outpacing the northeast region's increase of 0.2% and the national decrease of 1.0%.

RESULTS OF CEMAR'S INCLUSIVE BUSINESS MODEL

- 1.69 million customers reached by the fourth quarter of 2009
- 230,000 new power connections under the Light for All program
- Costs fell as efficiency improved
- Large service quality and reliability gains
- Power demand grew as the market developed and stimulated the state's economic growth

CEMAR's emphasis on efficiency gains proved a winning strategy: since 2004, the company has seen consistent growth that's climbed into the double-digit levels. Net operating revenues and EBITDA have respectively climbed from R\$526.1 million and R\$85.24 million in 2004 to R\$1,148 million and R\$470.3 million in 2009, an average revenue growth rate close to 12% per year. Moreover, the reorganization quickly led to a drop in costs relative to revenues, stimulating a sharp improvement in EBITDA margins, which climbed from 16.2% in 2004 to 40.2% in 2006, remaining around 41.0% through 2009.

Strong increases in demand fueled this growth, with CEMAR seeing an average annual increase in total residential power consumption between 2007 and 2009 of 8.5%. Moreover, as demand rose, customers posted high repayment rates of 93.4%, suggesting that policies to stimulate both economic growth and power demand among low-income consumers were sustainable. At the same time, CEMAR achieved

significant gains in the quality and reliability of service, with measures of the length and frequency of interruptions dropping by 44.6% and 38.2% between 2006 and 2009.

Expanding distribution through the Light for All program has had the greatest development impacts: CEMAR has reached over 230,000 new customers to date in rural Maranhão, directly reaching over one million inhabitants under this program. And through expansions outside the program, CEMAR has increased its reach to over 300,000 additional customers, growing from a total of 1.161 million in 2004 to 1.688 in 2009. Over this time, nearly 50% of this increase targeted un-electrified rural and low-income segments. In 2010, CEMAR expects to reach a total 1.777 million customers. Access to electricity is a fundamental element to improving the quality of people's lives and driving economic growth, enabling both domestic and commercial refrigeration, use of appliances, machinery and artificial lighting.



IFC'S ROLE AND VALUE-ADD

Brazil's power sector reform led to the privatization and purchase of CEMAR by Pennsylvania Power and Light (PPL) in August 2000. However, in 2001 low rainfalls caused the country's significant hydroelectric generation to plummet, creating an energy crisis that put distribution companies under severe financial pressure. As demand fell and customer delinquency increased, CEMAR faced mounting losses. PPL wrote off its entire investment and exited the Brazilian power sector in 2002. Although the energy crisis abated, investor confidence did not return quickly and local companies who previously had relied on foreign currency financing were left nervous about facing foreign exchange risks.

IFC provided CEMAR an \$80 million Reais-linked loan that helped address market failures stemming from the energy crisis by offering local currency financing at a longer maturity compared to the market. The transaction also assured the application of IFC's environmental and social performance standards as CEMAR expands its distribution network.



**International
Finance Corporation**
World Bank Group

IFC's Investment:

\$80 million in long-term debt financing

Coca-Cola SABCO

COMPANY BACKGROUND

The Coca-Cola Company (TCCC) is the largest non-alcoholic beverage company in the world, manufacturing nearly 500 brands and serving 1.6 billion consumers a day. In the 200 countries in which it operates, TCCC provides beverage syrup to more than 300 bottling partners, who then manufacture, distribute, and sell products for local consumption. Its bottling partners are local companies owned independently, or either partially or fully by TCCC.

Coca-Cola SABCO (CCS) is one of TCCC's largest bottlers in Africa, operating 18 bottling plants and employing more than 7,900 people in Eastern and Southern Africa. Headquartered in South Africa, it is 80% owned by a private investment group, Gutsche Family Investments, and 20% by TCCC.

COCA-COLA SABCO'S INCLUSIVE BUSINESS MODEL

The Coca-Cola Company utilizes a wide range of distribution methods to ensure that consumers around the world have access to its products. In East Africa, CCS has adopted a manual delivery approach working with small-scale distributors to deliver products to small-scale retailers in densely populated urban areas. These distributors previously had limited economic opportunities and were unemployed or underemployed, working part-time or in the informal economy. As many as 75% of the distributors in Ethiopia and 30% in Tanzania never owned a business before. Most of the retailers they serve are kiosks or small stores serving neighborhood customers, and have enough funds and space to manage a few days' supply at most.

The Manual Distribution Center (MDC) approach was first developed as a pilot with 10 MDCs in Addis Ababa, Ethiopia, in 1999. By 2002, the company had implemented the successful model on a broad scale throughout its markets in East Africa. SABCO utilizes the following approach when establishing new MDCs:

- **Assess the need for MDCs:** First, CCS collects detailed data on every retail outlet in the target area. This information is used to develop a beverage demand forecast and determine whether a new MDC is needed, ensuring that MDCs are introduced in areas where they are likely to thrive.
- **Recruit MDC owners:** Next, SABCO sales managers identify and recruit candidates they believe would be good MDC owners. Successful candidates must plan to be directly involved in the business on a full-time basis and have a strong work ethic, access to a suitable site, sufficient funds to support start-up costs, and good relationships with the surrounding community.
- **Define MDC territory and customer base:** Once a new MDC has been identified, CCS gives that MDC exclusive access to the retail outlets in a defined geography based on a map that CCS provides. The exact size of the territory is based upon the terrain

and anticipated volume of the retail outlets it will service. Ideally, each MDC services an area 1 kilometer in circumference, reaching a maximum of 150 retail outlets.

- **Provide limited start-up guidance and support:** MDC owners are responsible for financing the start-up costs of their MDC including business licenses, pushcarts, rent, initial stock of empty crates and bottles, and beverage supply. Occasionally, CCS offers credit for crates and empty bottles, which represent some of the biggest start-up costs, though this is less frequent today than when the model first started. Owners hire their own staff, though CCS guides them on staffing numbers and salaries.

Once new MDCs have been established, the most critical success factor in the model is regular training, monitoring, and communication. The level of interaction with CCS staff largely determines how well MDCs perform.

There are two regular points of contact for each MDC, which are the Area Sales Manager (ASM) and the Resident Account Developer (RAD). ASMs are full-time Coca-Cola SABCO employees who manage 10-20 MDCs each, which they visit daily or every other day to monitor supply and inventory, adherence to CCS standards, and overall business performance. The RAD, typically a part-time CCS staff member based in the same neighborhood, develops retail accounts, regularly monitors and manages in-store beverage placement and productivity, and generates orders as needed. They also visit their local MDCs daily to check stock and ensure routes are followed.

Through this interaction, MDCs are regularly coached and supervised on warehouse and distribution management, account development, merchandising and customer service, which is helpful since more formal training occurs less frequently. They and CCS staff have access to a set of management tools SABCO has developed to track inventory, sales, market competitiveness, and overall business performance.

Coca-Cola SABCO

DRIVERS FOR COCA-COLA SABCO'S INCLUSIVE BUSINESS MODEL

- Increase sales and facilitate delivery in areas hard to serve with conventional trucks
- Enable small but frequent deliveries to retail outlets

In many countries, Coca-Cola primarily uses traditional distribution models in which large quantities of product are delivered via trucks or other motorized vehicles to large retail outlets. Yet in much of the developing world, such as East Africa, where road infrastructure, retail markets, cost implications, and customer needs differ, other distribution methods have been developed—ranging from bicycles to boats.

Thus, Coca-Cola SABCO's MDC model was born out of this business need to adopt its delivery model to local infrastructure, customer needs and market conditions. Through the MDC model, SABCO has been able to more effectively and efficiently reach small-scale retail outlets located in densely populated urban areas where truck delivery is challenging. It has been able to improve sales and customer service by providing outlets with access to smaller, more frequent deliveries of product.

RESULTS OF COCA-COLA SABCO'S INCLUSIVE BUSINESS MODEL

- Generated company revenues of US\$420 million and improved customer service
- Created entrepreneurship opportunities for 2,200 new MDC owners and over 12,000 jobs
- Enabled MDC owners and staff to support over 41,000 dependents and invest in health, education, and housing
- Built human capital through business and customer service training

The MDC model has helped CCS increase sales by improving customer service to small retailers compared to the traditional model of distribution. Providing retailers with regular interaction and constant access to products, the MDC model enables them to carry less inventory and purchase more on a demand-driven basis, addressing some of the financial and space limitations they face. In Ethiopia and Tanzania, more than 80% of the company's volume is now distributed through MDCs. MDCs are CCS' core distribution model in Kenya and Uganda, where they are responsible for 90% and 99% of total volume respectively. They account for 50% of volume in Mozambique and have been used to a lesser extent in Namibia and elsewhere.

The MDC model has had development impact in three broad areas. First, the MDC model creates new opportunities for entrepreneurship and employment in the formal sector. As of the end of 2008, Coca-Cola SABCO had created 2,200 MDCs in Africa, generating over 12,000 jobs. Three-quarters of MDC owners in Ethiopia and one-third in Tanzania reported that they were full-time business owners who previously held only part-time jobs, or worked in the

informal sector. MDC owners and employees support an estimated 41,000 dependents. With the income they receive from their MDCs, they are now able to invest in housing, health, and education for their families, as well as create job opportunities for relatives from the countryside.

Second, the MDC model has created new economic opportunities for women, both as MDC owners and employees and as SABCO managers and sales staff. Across East Africa, the MDCs have created entrepreneurship opportunities for close to 300 women. In Ethiopia and Tanzania, samples showed that 19% and 32% of MDCs, respectively, were owned by women. In addition, couples own a high proportion of MDCs jointly, many of which are managed by the women.

Finally, the MDC model has helped develop human capital. The training SABCO provides to ensure that the business is successful benefits the MDC owners and staff members who receive it even after they leave the Coca-Cola system, helping them qualify for higher-skilled jobs and more lucrative business opportunities.



IFC'S ROLE AND VALUE-ADD

IFC investment has played an important role in enabling Coca-Cola SABCO to expand and modernize its operations in Ethiopia, Kenya, Mozambique, Tanzania, and Uganda—particularly in Ethiopia, where it was considered a pioneering investment in a country perceived to be highly risky. In 2002, IFC provided a \$15 million loan, equity of up to \$10 million, and \$12 million in bank guarantees in Ethiopia and Tanzania. IFC also helped address challenges associated with banking requirements in Ethiopia by facilitating dialogue with government officials.

With this initial investment, the IFC played an important role in discussions to scale up the MDC model at that time and helped to create an inclusive business model that would later become the core business model in East Africa. In 2007, on behalf of the Coca-Cola Company, IFC conducted research to assess the MDC model in Tanzania and Ethiopia and generate recommendations for improving the model's business and development impact moving forward. This research alerted SABCO to the ongoing opportunity and impact of training, financing and women's empowerment in inclusive business models such as the MDCs.



IFC's Investment:

\$80 million in long-term debt financing across multiple projects

Dialog Telekom PLC

COMPANY BACKGROUND

Dialog Telekom PLC is Sri Lanka's leading mobile telecommunications service provider with approximately 6.3 million subscribers and a market share of around 49% in 2009.

In 1993, Dialog was awarded a 20-year license to provide cellular telecommunications services by the government of Sri Lanka. The

company is 83% owned by Axiata Group Berhad, the leading telecommunications company in Malaysia, and 17% owned by independent shareholders. It is listed on the Colombo Stock Exchange.

DIALOG'S INCLUSIVE BUSINESS MODEL

In its expansion plans, Dialog has undertaken South Asia's first "quadruple play" strategy, offering mobile telephony, fixed wireless telephony, broadband internet, and satellite-based pay television services. Quadruple play is an important element in reaching underserved remote populations with wireless services, as it helps lower costs by leveraging synergies across all four product offerings.

Another important element in reaching underserved populations is Dialog's distribution network. Dialog has 32 primary distributors that work exclusively for the company servicing and supervising independent retailers. Close to 40,000 retailers spread throughout all provinces of Sri Lanka currently stock Dialog products. These include phone cards and SMS-based reloads in which a user purchases airtime electronically through a retailer. These retailers keep margins of 5-7% on the Dialog products they sell.

The typical Dialog retailer owns or operates a primary business and sells Dialog airtime as an additional source of income. Approximately 60% of these retailers run small grocery stores and 40% run shops that sell a range of communications products and services such as telephones and Internet access. On average, these shops are open 13 hours per day and have 1.8 employees: 95% are sole proprietorships, 50% have been operating for fewer than five years, and 15% are not formally registered, and 81% of them have not had any formal business training.

Because these are independent retailers without exclusive arrangements with Dialog, the company must compete with other mobile network operators for shelf space for its products. In part this is done by offering competitive margins on the Dialog products they sell. However, the company has also found that helping to facilitate business training and access to financing helps to build a loyal retail network — the key to promoting its brand and expanding its business.

To facilitate business training and access to financing for the retailers in its network, Dialog has worked with IFC on a capacity-building project called Dialog Viyapara Diriya (DVD) that leverages a local language version of IFC's SME Toolkit. So far 1,835 retailers have participated in the program.

Through this project, Dialog and IFC provide these retailers with training on business skills such as business planning and tax compliance. These sessions improve retailers' ability not only to manage and sell Dialog products but also to operate their primary businesses — grocery stores, communications kiosks, and other enterprises — a facility that has helped Dialog draw and maintain loyal retailers even while the Sri Lankan mobile sector has become increasingly competitive. This strong distribution network has provided a backbone for the company's efforts to expand further into rural markets and connect lower-income consumers.

In addition to business skills training, the DVD project aims to build loyalty and grow retailers' business by facilitating access to financing. For internal purposes, Dialog categorizes its retailers into three categories: Category A are super-grade dealers with monthly sales of Dialog products greater than \$500; Category B are average-size groceries that sell between \$250 and \$500 each month; and Category C are microenterprises that sell less than \$250 each month. The DVD training helps retailers graduate into higher categories. While the company does not provide or facilitate credit for retailers, this system is laying the foundation by tracking and grading retailer performance over time, showing the company — and prospectively banks — which ones are likely to be good credit risks.

Dialog is now coordinating with IFC to train a total of 5,000 retailers by the end of 2010, including retailers in the post-conflict northern and eastern regions of the country.

Dialog Telekom PLC

DRIVERS FOR DIALOG'S INCLUSIVE BUSINESS MODEL

- Growth and brand awareness, including in lower-income, more remote regions
- To maintain market share and competitiveness as the Sri Lankan mobile market expands
- As part of achieving these objectives, to build a loyal, high-quality retail network

In 2007, Dialog's primary business area of mobile telephony was growing at 27%, a relatively low level when compared to the rest of Asia. In addition, growth was concentrated in wealthier urban regions of the country. Dialog identified the need to connect the unconnected—to extend the benefits of connectivity and communication to underserved rural segments—and thus embarked on an aggressive

program of expansion with the provision of coverage and affordable service options as key drivers. By 2009, penetration reached 66% and the market was growing at an annual rate of 40%. With the corresponding entry of new players into the market, Dialog identified the need for a strong and loyal distribution and retail network offering economies of scale.

RESULTS OF DIALOG'S INCLUSIVE BUSINESS MODEL

- 6.3 million subscribers, an increase of 3 million since 2007
- 32% compound annual growth rate
- 49% market share
- \$16.3 million in sales income for retailers selling airtime in 2009, approximately \$408 per retailer
- 1,835 retailers trained

Since its expansion in 2007, Dialog has acquired more than 3 million new subscribers at a compound annual growth rate of 32%, reaching a 50% market share. Leveraging its quadruple play strategy to reduce prices, Dialog has remained the leader in the competitive Sri Lankan telecommunications market and has been able to expand its reach into previously underserved groups, tapping into significant unmet demand. Increased telecommunications penetration is typically associated with GDP growth and poverty reduction. It is estimated, for instance, that a 10% increase in mobile phone density leads to a 0.6% increase in per capita GDP.¹

Dialog's inclusive business model is not only expanding access to telecommunications but also expanding economic opportunity for the micro- and small-scale retailers that sell its products. During 2006, Dialog's retailers earned \$16.3 million selling airtime. This translates to an average income of \$408 per retailer. Capacity-building efforts, which have reached 1,835 retailers so far, are expected to help them increase their incomes even further.



IFC'S ROLE AND VALUE-ADD

As the Sri Lankan mobile market grew, Dialog needed large-scale, long-term financing to expand and remain competitive as well as technical assistance to strengthen its retail network.

In this context, IFC provided \$50 million in long-term debt financing (which the company prepaid in early 2009) and \$15 million in equity to finance the company's overall expansion and quadruple play strategy. IFC's involvement also reassured other lenders and helped Dialog mobilize additional financing. This was important given that Dialog's expansion efforts are amongst the largest-ever in Sri Lanka and involve communication and media business models that are new to local lenders.

IFC has also been involved in providing technical assistance to strengthen Dialog's retail network through the DVD project, delivering SME Toolkit-based training to improve their skills and business performance. A project of IFC, the SME Toolkit offers free business management information and training for SMEs on accounting and finance, business planning, human resources, marketing and sales, operations, and information technology. In collaboration with Dialog, IFC has been able to tailor SME Toolkit materials to the Sri Lankan context.



IFC's Investment:

\$50 million in long-term debt financing and \$15 million in equity

¹ Waverman, Leonard, Meloria Meschi, and Melvyn Fuss. 2005. "The Impact of Telecoms on Economic Growth in Developing Countries." Vodafone Policy Services.

Duoc UC

COMPANY BACKGROUND

Duoc UC is a non-profit, private institution of higher education. Duoc UC has been established as a professional institute in accordance with Chilean education regulations, providing official recognition to its courses and diplomas. It has 13 campuses in three economically important regions of Chile (Santiago, Valparaíso, Viña del Mar, and Concepción) and is planning to build five additional campuses.

Duoc UC was founded in 1968 by a group of students at the prestigious Universidad Pontificia Católica de Chile (the University), with the help of professors and labor unions, to offer training courses for blue-collar workers that lacked access to university education. In 1973, Fundación Duoc was created to achieve managerial and

financial independence from the University. In 1990, two additional Duoc foundations were created following regulatory changes in the Chilean education system, which distinguished among three types of institutions: universities, professional institutes, and technical training centers. As a result, three foundations comprise “Duoc UC.” *Fundación Duoc*, the original Duoc foundation, includes a polytechnic high school and an adult education program; *Fundación Instituto Profesional Duoc* is a professional education institute; and *Fundación Centro de Formación Técnica Duoc* is a technical training center. Duoc UC remains a part of the University’s network.

DUOC UC’S INCLUSIVE BUSINESS MODEL

In contrast to five- or six-year university programs, Duoc UC offers two-year technical degrees and four-year professional degrees. Students are admitted on a “first come, first served” basis. Approximately 64% of Duoc UC students are from the lowest three income quintiles compared to 39% for the Chilean tertiary education sector as a whole. A quarter of its day students work while in school and 15% pay for their own studies; for evening students, the percentages are 75% and 70%, respectively. Day students tend to be younger, at an average of 21 years, than evening students, at an average of 25 years. Around 70% of students are the first in their families to receive higher education, representing a significant opportunity for a new generation of Chileans whose families historically have lacked access to higher education. Regionally, 70% of Duoc UC students are based in Santiago, 22% in Viña del Mar/Valparaíso, and the remaining 8% in Concepción.

Duoc UC focuses on employability with 72 courses relevant to the labor market, offered through nine schools: engineering, informatics and telecommunications (ICT), communication, design, health, business administration, natural resources, construction, and tourism. The most popular courses by number of students are business administration (11,876), construction (8,544), ICT (7,679), and engineering (6,511). Duoc UC also offers cross-cutting subjects like English and ethics, as well as entrepreneurship programs that are unique in the region. Duoc UC focuses on “learning by doing,” using state-of-the-art infrastructure and equipment to simulate conditions students will find on the job. Professors also have work experience in their fields of specialization. To ensure that its curriculum stays up-to-date with labor market needs, Duoc UC schools have business councils comprised of industry representatives.

Duoc UC also focuses on employability after graduation. Students receive career services support through three avenues. First, Duoc UC maintains an online jobs portal that is exclusively available to its students and graduates. Second, professors play a key role in job linkages as 65% are also employed outside the institution. Third, Duoc UC facilitates connections with potential employers through internships, contests, conferences, and collaborative projects that give students opportunities to create prototype products or services for companies.

Another key characteristic of Duoc UC’s business model is affordability. Duoc UC programs cost \$2,500 to \$3,600 per year as compared to university programs that cost \$5,400 to \$9,600 per year. Students at Duoc UC pay a fixed semi-annual tuition fee regardless of the number of courses they take, and therefore have an incentive to complete their education in the shortest possible timeframe. Other features that make Duoc UC programs affordable include evening classes that enable students to work while in school and a modular course structure that enables them to receive intermediate certifications even if they must leave before completing the program.

Duoc UC also offers student loan financing through private banks and the government Credit Guaranteed by the State (CAE) program. In 2007, Duoc UC, IFC and the Banco de Crédito e Inversiones (BCI) created a student loan risk-sharing program of up to \$51 million to offer student loans. Interest rates are competitive at 6%. In 2010, 60% of Duoc UC students accessed financing. In that year, CAE provided 81% of loans and private banks provided 19%, and 21% of students also received scholarships.

Duoc UC

DRIVERS FOR DUOC UC'S INCLUSIVE BUSINESS MODEL

- Duoc UC's mission is to provide equal opportunity access to tertiary education
- Demand for affordable, quality tertiary education which leads to higher income
- Demand for practical programs oriented to the labor market

The fundamental driver of Duoc UC's inclusive business model is its mission to create equal opportunity access to high-quality tertiary education for all Chileans. Access to tertiary education remains uneven among different income groups in Chile largely due to the high cost of university programs. In 2003, while 74% of the population between the ages of 18 and 25 in the highest income quintile was enrolled in tertiary education, only 15% of the population in the lowest income quintile was enrolled. Duoc UC's non-university tertiary education programs seek to reduce this disparity.

A second driver of Duoc UC's model is the strong and growing demand for affordable, quality tertiary education based on the income differential between graduates of secondary and tertiary education. Graduates of non-university professional institutes and technical

training centers earn on average 2.8 times and 1.6 times the income of those with secondary education alone. However, the high cost of tertiary education in Chile—which is among the highest in the world when adjusted for per capita income—has limited enrollment especially among low-income segments of the population. Meeting the needs of this population in Chile is a significant market opportunity for Duoc UC.

A third driver is that tertiary education programs in Chile have generally been characterized by highly theoretical curricula and technical offerings not in sync with the needs of the labor market. Students also have limited opportunities to personalize their learning paths. Thus, programs that equip students with competencies to enter and compete in the labor market are in great demand.

RESULTS OF DUOC UC'S INCLUSIVE BUSINESS MODEL

- Over 63,000 students enrolled in Duoc UC programs in 2011
- 70% of students are the first in their families to receive higher education
- 81% of surveyed graduates are employed in the fields they studied at Duoc UC

Duoc UC is the largest provider of technical and professional tertiary education in Chile. As an indication of its quality, in 2010, Duoc UC became the only professional institute granted the maximum seven-year accreditation by the National Accreditation Commission (CNAP).

Duoc UC's student body has tripled in size over the past ten years, and has been growing at 13% annually since 2006. As of 2011, more than 63,000 students were enrolled at Duoc UC including foreign students from 25 countries. Approximately 70% of current students are the first in their families to receive higher education. More than 60% received loans and scholarships in 2011 compared with 0.5% in 2002.

Duoc UC has more than 63,700 alumni and 81% of surveyed alumni are employed, most in the fields they studied at Duoc UC. The average

time for finding a job after graduating from Duoc UC was estimated to be five months. Graduates earn competitive wages after attending for a relatively short period of time and paying relatively little compared with universities. As an indication of the economic mobility that education at Duoc UC provides, a student whose father earns \$500 a month, upon graduation from Duoc UC, earns on average \$900—almost double his father's salary.

Duoc UC has shown strong financial results over the past years. Its annual revenue is approximately \$200 million. Given its non-profit status, Duoc UC allocates all of its retained earnings to the expansion of existing campuses and the construction of new ones. Duoc UC is also establishing a strong reputation in Peru, Ecuador, Bolivia, Argentina and Colombia.



IFC'S ROLE AND VALUE-ADD

IFC's investments have enabled Duoc UC to support rapid growth in student enrollment on two fronts. First, an IFC guarantee of \$19 million in 2007 enabled the creation of a \$51 million student loan risk-sharing program by Duoc UC, IFC, and local bank BCI. In designing this program, IFC drew upon its global experience in structuring risk-sharing facilities for student lending—in particular drawing on lessons learned in other programs to reduce the overall risk profile. As a result, low-income students can secure loans without which they may have either not enrolled in tertiary education or dropped out. Approximately 40% of the loans are targeted at students from the poorest two quintiles.

Second, an IFC investment of \$30 million in 2009 is now enabling Duoc UC to meet long-term financing needs for campus expansion. The project involves the construction of five new campuses and the expansion of nine existing campuses. This will increase capacity by approximately 32,000 students, or more than 60%. The expansion will also allow for penetration into new geographic areas of Santiago, with new campuses that offer programs tailored to local labor market needs.



IFC's Investment:

\$30 million in long-term debt financing and a \$19 million guarantee

ECOM Agroindustrial Corporation

COMPANY BACKGROUND

ECOM is a soft commodity trading company founded in Barcelona in 1849. Originally a cotton trader, ECOM has expanded primarily into coffee and cocoa. The company is an integrated commodity originator, processor, and merchandiser, and it sells its products to branded product manufacturers, including Nestlé Group, Starbucks, Hershey, Mars, Sara Lee, Kraft, and Folgers. Now incorporated and headquartered in Switzerland, ECOM and its subsidiaries operate in 30 countries. The company employs approximately 6,000 people worldwide

and has average annual sales of \$2.7 billion, positioning it as one of the world's leading traders of coffee, cocoa, and cotton.

ECOM's coffee business is global, with more than 20 offices on five continents. In recent years, 20% of ECOM's total coffee trade was in certified varieties and the company's long-term vision is to increase this percentage significantly.

ECOM'S INCLUSIVE BUSINESS MODEL

In Central America, where coffee is predominantly grown by smallholder farmers at the base of the economic pyramid, ECOM engages with coffee growers to support farm productivity and promote certification. The model includes seasonal and very selective medium term financing to farmers for inputs and capital improvements, as well as technical assistance to increase yields, improve quality, and become certified under one of the labels ECOM markets (Rainforest Alliance, Starbucks 4C, or Nespresso AAA).

On the financing side, ECOM is providing seasonal credits to its coffee suppliers in Mexico, Guatemala, Nicaragua, Honduras, and Costa Rica. These pre-payments finance the farmer throughout the production cycle, supporting the purchase of inputs like fertilizer, the maintenance of the coffee plants, and harvesting. Before extending credit, ECOM visits farms to determine their production capacity for the coming year. Based upon this assessment, ECOM and its operating subsidiaries determine the size of the loan, typically under \$1,000, and manage the financing process—from credit approval to monitoring to servicing the loans.

On the technical assistance side, ECOM works with Rainforest Alliance, a US-based NGO that promotes sustainable livelihoods, and CIRAD, a French agricultural research center, in a partnership facilitated by IFC to improve farmer productivity, sustainability, and eligibility for certification. Farmers are encouraged to improve their operations through better documentation of production processes, management of fertilizer, improved labor conditions, and other measures. Improvement programs vary in duration depending on the nature of the problems encountered, with

topics like soil conservation and biodiversity protection typically taking longer to address.

Rainforest Alliance and CIRAD contribute their expertise through training of trainers and farmer workshops. ECOM staff participate in both, and then follow up with further knowledge-sharing for farmers. They conduct follow-up visits to monitor progress and resolve the implementation issues that arise as farmers work toward their production and certification goals.

Successfully implemented, these improvement programs can enable farms to increase productivity or meet the eligibility requirements of certification programs.

In addition to the financing-technical assistance combination described above, the participation of a high-value coffee buyer like Nestlé Group's Nespresso is critical to ECOM's inclusive business model in Central America. Nespresso's participation includes money to co-finance, with IFC, the roles of Rainforest Alliance and CIRAD. This sends a strong signal to farmers about the company's intention to purchase high-quality, sustainable coffee at premium prices and allows ECOM to work with its farmers to plan in advance the quantities that are required. This signaling is important as farmers decide whether or not to invest in the improvement programs they need to meet Nespresso's strict quality and sustainability criteria.

ECOM Agroindustrial Corporation

DRIVERS FOR ECOM'S INCLUSIVE BUSINESS MODEL

- Need to ensure stability and security of coffee supplies
- Market demand for high-quality, certified coffees and related sales premiums
- Company vision to scale up its certified coffee trade

Given the characteristics of coffee farming in Central America, ECOM must do business with smallholder farmers. The company must also invest proactively in their development: any loss of competitiveness would threaten the company's supply chain.

Farmer competitiveness is also critical to ECOM's access to premium coffee markets. Demand for high-quality, certified coffee is increasing, with roasters, retailers, and consumers looking for various combinations of high quality, environmental sustainability, traceability, and social standards.

Depending on market conditions, premiums paid for certified coffee can be significant to the growers. As of 2008, 20% of ECOM's coffee was sold as certified. The company aims to increase this figure to 50-80% over time. This will be possible only if the smallholder farmers in its supply chain can consistently produce certified varieties in the necessary quantities, making the availability of smallholder financing and technical assistance key to the company's long-term vision.



IFC'S ROLE AND VALUE-ADD

IFC's value proposition to ECOM lies in its ability to provide both investment and advisory services, including \$25 million in debt financing and \$1.5 million in technical assistance, of which IFC is funding 50%. While investment and advisory services are each available separately from other partners, IFC's integrated offering has enabled ECOM to provide a package of financing and technical assistance helping farmers improve their productivity, sustainability, and livelihoods.

IFC's relationship with ECOM in Central America has led to an additional \$55 million in debt financing and \$8 million in advisory services to support the company across Africa (Kenya, Tanzania, and Uganda) and Asia (Indonesia, Papua New Guinea, and Vietnam). Together, these new programs are expected to reach 80,000 coffee farmers, of which 43,000 are expected to be certified.

RESULTS OF ECOM'S INCLUSIVE BUSINESS MODEL

- Increased productivity for farmers reached, in some programs by more than 40%
- 481,606 bags of certified coffee purchased, representing \$3.7 million in additional income for coffee farmers
- Increased farmer loyalty to ECOM and more stable supply chain
- Increased trade volumes of certified coffee

The business and development results of ECOM's inclusive business model are intimately linked. As smallholder farmers are reached with financing and technical assistance, they enjoy greater productivity, security, and earning potential. Meanwhile, ECOM strengthens and secures its supply chain, expands its access to high-quality, certified coffees, and captures the premiums they bring.

By June 2009, ECOM had purchased 481,606 bags of certified coffee in the three years since the model was established, representing a premium of \$3,692,000 paid to smallholder farmers in Central America. This has been

made possible through \$17.4 million in seasonal financing to 14,149 smallholder farmers and technical assistance that has enabled 10,145 farmers to work toward the certification and quality standards of Nespresso AAA, FLO-Fairtrade, and Nestec 4C. An additional 3,282 farmers have improved their productivity through training in management, pruning techniques, and the benefits of hybrid plants.

These results are encouraging and point to a greater impact potential as ECOM estimates it works with about 125,000 growers in Central America.



IFC's Investment:

\$80 million in long-term debt financing across various projects

Esoko Networks Ltd.

COMPANY BACKGROUND

Esoko Networks Ltd. (Esoko) began providing market information for the agricultural sector in Ghana in 2004 under the name TradeNet, getting its start within the Ghanaian ICT incubator BusyInternet. TradeNet was rebranded Esoko (after the Swahili word *soko*, meaning “market”) in 2009. Esoko is now a holding company that owns, maintains, and licenses the use of a web and mobile platform offering market information and communications services for the agricultural sector in Ghana and 14 other countries in Africa. Esoko also

owns its Ghanaian franchise, Esoko Ghana, and BusyLab, a subsidiary that provides system development, maintenance, and tech support to the company and its franchisees.

Esoko was founded by Mark Davies, a British entrepreneur with a track record of successful technology ventures in the United States, United Kingdom, and Ghana. Esoko now employs 60 staff in Accra and 30 contractors across Ghana.

ESOKO'S INCLUSIVE BUSINESS MODEL

The Esoko platform is a web-managed system that enables real-time data gathering and dissemination via the Internet and mobile phones. Though it is industry-agnostic, the first and most highly developed application on the platform targets the agribusiness sector. The application allows users to contribute and receive various types of market information through text messaging, and is designed to work on any phone on any network. Primary users include individual farmers and traders, farmers' associations, agribusinesses, and public sector organizations such as national agricultural ministries. The platform handles buy and sell offers, agricultural input and crop prices, extension messages, locations where seeds and fertilizers are available, stock counts, and SMS polling.

Esoko users access content on the Internet and on their mobile phones, choosing from a range of applications to create a personalized interface. For example, farmers can sign up to receive alerts on their mobile phones when new market prices are posted or send one-time price requests for the most recent prices. The ability to tailor the interface allows Esoko to target a diverse range of customers and maintain user-specificity and navigability.

Esoko generates content in two ways: its own collection efforts and users' submissions. Market price information is collected by the company, and goes through an online approval process before it becomes available. Beyond market price information, Esoko allows users to upload and share information, without screening by the company. For example, any user can upload an offer to buy or sell their goods via SMS or the web, and that message will be redistributed to others who have signed up to receive news on that specific commodity. Another example is bulk SMS, where governments, associations, businesses, and other groups can send extension messages to members or suppliers.

While individual subscriptions are available, it is difficult to reach individuals to sign them up, there is no training involved, and it can be challenging for them to pay or make changes on their own. Organizational sales and marketing has, therefore, been an important strategy for Esoko, enabling the company to get a critical mass of users on the system. In Ghana, organizational subscription and SMS fees range from around

\$250 to \$8,000 a year, depending on the scope of the project, number of members, and tools used; prices are similar in other franchises, but tailored to the local market.

Organizations like producers' associations, non-governmental organizations (NGOs), and agribusinesses use Esoko to communicate with smallholder farmers, traders, dealers, and other actors in the value chain more frequently and at much lower cost than would be possible through field visits. Producers associations and government agencies can share weather information, notify farmers of disease and pest outbreaks, and send reminders for trainings. Agribusinesses can track how products are used, market to new customers, conduct polls to estimate crop yields among farmers, and track inventories among distributors.

Esoko's growth strategy is two-pronged: to license country franchises and to facilitate multi-country projects in collaboration with large non-governmental organizations (NGOs) and corporations.

The franchise strategy has grown out of the company's experience with its Ghanaian franchise, where Esoko is learning that deploying management information systems works best when promoted by a local champion.

Multi-country projects establish regional management information systems in collaboration with large NGOs and, in the future, corporations—which interact with producers' associations, agriculture ministries, and others in multiple countries. For example, the International Fertilizer Development Center (IFDC) is using the Esoko platform to collect and disseminate price data on fertilizers, pesticides, seeds, and other agricultural inputs in eight Eastern and Southern African countries.

Esoko has made two additional strategic decisions to position itself for growth. First, from a technology standpoint, it has adopted an open API architecture, which allows any third party to build or customize applications for the Esoko platform. Second, through its support services subsidiary, BusyLab, Esoko will invest in developing local technical knowledge and skills rather than outsource to an international firm, creating stronger links between software developers and the markets they serve.

Esoko Networks Ltd.

DRIVERS FOR ESOKO'S INCLUSIVE BUSINESS MODEL

- Market inefficiencies in the African agriculture sector
- Rapidly increasing mobile phone penetration
- A ready organizational market of development agencies, NGOs, and agribusinesses that had struggled to develop and maintain their own mobile-enabled solutions

Esoko was created with the goal of addressing market information asymmetries in the African agriculture sector. In Ghana, for instance, agribusiness is a sizeable part of the economy, accounting for 65% of land use and 59% of labor. However, the sector is also characterized by huge inefficiencies that cost both buyers and sellers money. Four million people work as farmers, and 70% of their farms are small—less than three hectares apiece—making it nearly impossible for buyers to estimate which crops are being grown in what quantities, or where. As a result, many buyers resort to importing what they need. At the same time, smallholder farmers are limited in their ability to sell their products at market value because they are unaware which markets need what products; because they are unable to physically get their product there; or because they lack pricing information, reducing their ability to negotiate.

Advances in information technology and rapidly increasing mobile phone penetration throughout Africa have turned these inefficiencies into a market opportunity for Esoko. With Ghana's

mobile penetration rate at 60% and Africa's at 41%, and increasing rapidly, that opportunity will only grow.

Finally, other early efforts to provide agricultural market information via mobile phone have struggled to achieve financial viability, due to the time and costs required to build the technology and the inability to scale. The inability to scale was rooted in several factors, the most important being flexibility and a valid business model. Earlier systems were project-based and limited to specific countries or value chains, while Esoko has developed a product that can be used regionally, in many different languages, and by many clients at the same time. That flexibility allowed the company to envision a solid revenue stream that provided a basis for large investments. Esoko believed that by establishing a platform that could be used across countries and sectors—achieving economies of scale—it could tap into a ready market of development agencies, NGOs, and agribusinesses that would find licensing its platform a more affordable option than trying to develop their own.

RESULTS OF ESOKO'S INCLUSIVE BUSINESS MODEL

- 4 franchises in Ghana, Nigeria, Mozambique, and Malawi
- 7 international partnership projects spanning 15 countries
- Early evaluations showing 30-40% income increases for farmers using the system

Since Esoko's time in the market is still relatively short, the full impact of its model is yet to be realized. However, early customer feedback indicates increased market efficiencies through more equitable pricing, and better access to markets for farmers and buyers. Early evaluations of Esoko's impact on farmers specifically found that those using Esoko in Ghana have increased their revenues by an average of 30% to 40%.

In 2009, Esoko won the United Nations' World Summit on the Information Society award for e-inclusion and participation, highlighting the importance of locally acquired, relevant content. Esoko was also the runner up for 2009's One Africa Award. The company has been featured on CNN, Voice Of America, and in *The Economist*.



IFC'S ROLE AND VALUE-ADD

Esoko began operations in 2004 within the Ghanaian information and communications technology incubator BusyInternet, a client of the World Bank's infoDev program. As a client, BusyInternet received funding for specific incubation projects in Ghana, access to a worldwide community of practice on incubation, and exposure for its technology center model. After an incubation period funded by the founder, the company raised its first outside investment in early 2009.

In 2010, IFC made a joint investment with the Soros Economic Development Fund (SEDF) of \$1.25 million in equity each. For IFC, Esoko is a high risk, high development impact investment in an early-stage business. As such, IFC is helping with a number of issues early-stage businesses face, such as building robust financial controls, accounting and reporting systems; ensuring good governance and transparency; and meeting environmental and social standards. IFC's involvement is also expected to help Esoko attract high-quality franchise partners.



IFC's Investment:
\$1.25 million in equity

Faculdade Mauricio de Nassau

COMPANY BACKGROUND

Faculdade Mauricio de Nassau (FMN) is a leading for-profit provider of undergraduate, graduate, and technical education programs in northern and northeastern Brazil. Founded in 2003 with one campus in the city of Recife in Pernambuco state, FMN now operates nine campuses across five states. As of May 2011, approximately 27,000 undergraduate and 5,000 graduate students were enrolled, with more than 50% of these students studying at its original campus in Recife. To date, 8,000 undergraduate students have graduated from FMN. The company employs 3,000 employees of whom 1,400 are teaching staff.

The primary shareholder is founder and CEO Janguê Diniz, a Brazilian lawyer and professor, who holds 88% of the company. The balance is held by Cartesian Capital Group, a private equity group based in New York (11%), and Jânio Diniz, brother of the founder and CEO (1%).

FMN was one of the top 15 post-secondary education providers in Brazil in terms of sales in 2010.

MAURICIO DE NASSAU'S INCLUSIVE BUSINESS MODEL

Faculdade Mauricio de Nassau's mission is to offer flexible, relevant, quality education at affordable prices. It targets low- and middle-income students in north and northeastern Brazil, a region where private sector options for education are minimal despite relatively rapid economic growth.

FMN offers three main educational products:

- **Undergraduate degree programs:** Four-year undergraduate degree programs comprise the majority of FMN's offerings and include fields such as accounting, health services, law, and business administration. There are 27,000 students currently enrolled and they attend classes in the morning or evening.
- **Vocational and technical programs:** These are, on average, two-year courses emphasizing practical training in areas such as radiology, computer networks, fashion design, and gastronomy. There are 5,000 students currently enrolled.
- **Non-degree graduate courses:** These courses tend to be shorter professional development courses or specializations within a field such as health, law, or finance. FMN also offers several business courses including marketing, logistics, banking, and auditing. Unlike its undergraduate programs, some courses are taught by partner institutions, though FMN provides assistance and certifies graduates. There are currently 3,000 students enrolled.

FMN has developed a branding approach in which it operates schools under two different name brands—FMN and Faculdade Joaquim Nabuco (FJN). The FMN brand targets “students who work.” These students are an average of 21 years old and more likely to study full-time while working part-time: 60% are enrolled in night classes. With tuition being 5-10% lower than their competitors, FMN-branded campuses primarily serve students from Brazil's B and C income classes with monthly household incomes of \$667 and up. These campuses currently educate approximately 75% of the company's students.

In contrast, the FJN brand targets “workers who study.” Its students generally work full-time and study part-time to improve their employment prospects. At FJN-branded campuses the average age is older, at 26, and a higher concentration (65%) is enrolled in night classes to accommodate

work schedules. With tuition approximately 30% lower than at FMN-branded campuses, FJN-branded campuses can target even lower socioeconomic classes than its sister brand. 100% of FJN students come from the C and D classes, with household incomes between \$459 and \$2,874 per month. FJN educates approximately a quarter of the company's students and is reaching one of the fastest-growing markets for post-secondary education in Brazil.

Accessibility is a critical success factor for FMN across both brands. The company operates a decentralized model in which campuses are located in areas with a high concentration of the target student population and close to public transportation. This is important as studies have shown that the farther students have to commute to school, the more likely they are to drop out. Additionally, FMN offers night and weekend classes so working students can still pursue a degree.

Affordability is another key success factor. First, the company maintains tight control on overhead costs, for example by maintaining well-equipped but “no-frills” campuses. Second, it has developed standardized curricula to significantly reduce teacher preparation, thus reducing costs. As a result, an FMN education tends to be 5-45% cheaper than that of its competitors. FMN has also established agreements with the government that enable students to access government scholarships. One such scholarship, PROUNI, provides universities with tax breaks in return for granting full tuition scholarships to 10% of their students. Another program, FIES, offers highly subsidized long-term loans for lower-income students. Approximately 20% of FMN students currently receive partial to full tuition scholarships.

Quality and job relevance are also critical for FMN. The company focuses on hiring highly trained teaching staff, with more than 50% of its 1,400 professors holding Master's or more advanced degrees. Wherever possible, FMN hires working professionals as professors; this provides students with current, “real world” perspectives. The company maintains modern classrooms with multimedia equipment, and adjusts course offerings to reflect changing market conditions based on insights from internal research. Finally, FMN has a placement office and is increasing efforts to ensure students can move directly into the job market upon graduation.

Faculdade Mauricio de Nassau

DRIVERS FOR MAURICIO DE NASSAU'S INCLUSIVE BUSINESS MODEL

- Market demand, as economic growth increases the need for qualified human resources and graduates' incomes rise relative to those of non-graduates
- Relatively little competition in the post-secondary education sector in northern and northeastern Brazil
- Targeted government policies incentivizing the private sector to deliver market-based solutions to post-secondary education

As Brazil's economy has grown, demand for qualified labor has outstripped supply, and raised the incomes of those with college degrees up to three times higher than those without. This premium has increased market demand for post-secondary education—but there are few options in northern or northeastern Brazil. Places in the prestigious public university system are limited, and tend to go to higher-income students who are better prepared academically. The region's 500 private sector post-secondary providers tend to be small and of mixed quality. More than 60% have fewer than 1,000 students each. Combined with growing demand, this fragmentation in the market for post-secondary education in northern and northeastern Brazil created a business opportunity for FMN.

Targeted government policies incentivizing private sector participation in post-secondary education have enabled and enhanced this opportunity. For instance, the 1996 Education Law simultaneously reduced regulation and focused on the quality and accessibility of education offered. In 1999, the government passed legislation enabling full participation of for-profit private institutions in post-secondary education. It created a more amenable regulatory environment including tax breaks for schools that accept a percentage of low-income students. It also created full and partial scholarships and a government-sponsored student lending program. As a result, whereas only about 5% of students from the lowest-income households were able to attend university in the late 1990s, today this is the fastest growing demographic in the country.

RESULTS OF MAURICIO DE NASSAU'S INCLUSIVE BUSINESS MODEL

- Total undergraduate enrollment of almost 27,000 across nine campuses as of May 2011
- Net revenues of \$89 million and EBITDA margin of 36% in 2010
- One of the top 15 private post-secondary education providers in Brazil in terms of sales in 2010

Today, total undergraduate enrollment is 27,000 across the company's nine campuses. More than 55% of students are female and nearly half are from the lowest three income classes, with less than \$2,874 in household income per month. FMN has facilitated access to financing for 5,000 students or 20% of its student body, for a total of \$6 million in financial aid.

Through its emphasis on accessibility, affordability, quality, and job relevance, FMN was able to grow its sales to \$89 million and reach an EBITDA margin of 36% in 2010. The company's original campus in Recife is its largest and most important, accounting for more than 75% of its revenues. FMN is considered the second most popular post-secondary education brand in Recife.



IFC'S ROLE AND VALUE-ADD

In 2010, IFC extended a \$35 million loan to FMN with the goal of helping expand access to post-secondary education among low- and middle-income students, raising the quality of education available in northeast Brazil, and stimulating job creation. This loan will help finance the completion of FMN's 2008-2011 expansion program which includes the inauguration of six new campuses and a library as well as the remodeling and refurbishment of existing buildings.

Through this investment, IFC has provided FMN with longer-term financing unavailable in the local market, and leveraged its credibility to send a signal to other investors about the attractiveness of the education sector in Brazil. IFC has also shared best practices and industry contacts among private sector providers in Brazil, and guided FMN on improvements to its environmental and social management systems.



**International
Finance Corporation**
World Bank Group

IFC's Investment:

\$35 million in long-term debt financing

Financial Information Network & Operations Ltd. (FINO)

COMPANY BACKGROUND

Mumbai-based Financial Information Network & Operations Ltd. (FINO) builds and implements technologies that enable financial institutions to serve under-banked populations. FINO offers a suite of products to banking, microfinance, insurance and government clients serving primarily rural and semi-urban regions of India. As of November 30, 2009, the company's client base included 20 microfinance institutions (MFIs), 14 banks, seven government entities, and four insurance agencies with over 12 million individual customers combined. FINO reaches clients in 208 districts across 21 states in India.

FINO was incubated by ICICI Bank, India's largest private sector bank and second largest bank overall, before spinning off as a separate entity in April 2006. Currently public sector banks, including Corporation Bank, Indian Bank, Life Insurance Company of India, and Union Bank of India, account for 16% of investment financing. Private sector investors include HSBC (25%), ICICI Group (25%), and IFMR Trust (1%). International investors are IFC and Intel which own 17% and 16% respectively.

FINO'S INCLUSIVE BUSINESS MODEL

FINO offers a banking and payments system that uses smart cards and agent-operated mobile point-of-transaction terminals to facilitate reliable, low-cost financial transactions between institutions and customers. With this system, FINO addresses a number of challenges that financial institutions face when serving low-income customers in particular, including illiteracy, information asymmetry, inadequate infrastructure, security, and—highly important—high cost relative to transaction size. The system enables users to overcome these barriers to achieve financial sustainability and scale in serving under-banked populations.

FINO's core product offerings consists of several components, including:

- **Accounting and MIS systems:** back-end processing systems that FINO builds and may maintain to facilitate and track transactions at the financial institution
- **Point-of-transaction terminals:** hand-held mobile devices that 6,000+ FINO agents and their customers use to conduct transactions, such as deposits, loans, and payments
- **Biometric smart cards:** authentication devices carried by customers and agents alike to ensure transactions are secure on both ends; each card carries fingerprints, demographic and financial relationship information on a chip and a photograph with cardholder details on the face of the card

FINO's core system can be used for a variety of financial transaction types for which specific products have been developed. For example, in the savings account product, the smart card enables people to check balances, transfer funds, make deposits, and withdraw cash. The smart cards

can also be used to access services such as subsidies, payments, or credit as well as health, life, and weather insurance. Today, they are used by the government to transfer payments under the National Rural Employment Guarantee Act and to administer health insurance under the government's health insurance program for people below the poverty line. Other services include a remittance solution which enables individuals to send remittances from cash-to-smart card, card-to-bank, or card-to-card; a deposits management product that enables institutions to process recurring deposits or mutual funds; and a credit scoring solution for banks and MFIs with plans to extend to credit bureaus and financial risk management services. Finally, one of FINO's newest offerings, FINO MITRA, utilizes a mobile platform to enable agents to enroll and conduct transactions and end users to conduct mobile banking and commerce.

Although the revenue model varies by product and by client, FINO generally charges the financial institution ongoing rental fees for space on their back-end system and for point-of-transaction terminals, annual maintenance fees for the terminals, and new card issuance fees. Some institutions may opt to buy point-of-transaction terminals as well. Customers do not have to pay for any services except for the remittance product—for which they pay 20 rupees, less than \$.50, directly to FINO in exchange for remitting up to 10,000 rupees in a single transaction.²

Currently, FINO's revenues are driven by one-time fees, such as enrollment charges and sales of point-of-transaction terminals. It anticipates that by 2011, about 57% of its revenues will come from recurring revenue streams, such as transaction fees and card and POT maintenance.

2 Mahalingam, T.V. 2009. "Bank at the Doorstep." *Outlook Business India*.

Financial Information Network & Operations Ltd. (FINO)

DRIVERS FOR FINO'S INCLUSIVE BUSINESS MODEL

- Market opportunity for technology that enables financial institutions to serve more than 600 million under-banked Indians cost-effectively
- Mission to enable greater financial inclusion among under-banked populations

The primary driver for FINO's business model is a market opportunity for technology and services that enables financial institutions to realize the untapped potential to serve profitably the more than 600 million rural Indians who are currently under-served by or excluded from the formal financial system.

According to the Reserve Bank of India, 41% of the adult population in India today is unbanked and only 27% of farmers have access to formal credit sources. Informal money lenders control up to 75% of the market and charge interest rates as high as 90%. Non-credit related services are virtually non-existent in remote areas.

RESULTS OF FINO'S INCLUSIVE BUSINESS MODEL

- Operating revenue growth of 140% since 2006 (34% CAGR from 2006-2009)
- Client base of 20 MFIs, 14 banks, seven government entities, and four insurance agencies
- Financial institutions can reduce costs, increase efficiency and productivity, improve transparency, and reach a larger population, including those in more remote settings
- As of early 2010, over 12 million individuals in 21 states across India had access to credit and non-credit related services, including loans, payments, remittances, savings, insurance and government subsidies

Operating revenues grew by 140% between 2006 and 2009, for a compound annual growth rate of 34%. Further, in just a few years, FINO has grown its customer base to 20 MFIs, 14 banks, seven government entities and four insurance agencies serving over 12 million individual customers who were previously unbanked. FINO has deployed over 7,000 point-of-transaction terminals to date, and currently reaches 26,000 different locations which are predominantly small villages or towns.

FINO's automated payments systems enable financial institutions to lower transaction costs, increase efficiency and productivity, and improve transparency. Institutions can allocate greater staff time to account acquisition and scale up operations. FINO's clients can offer customized products to their clients, provide cashless and paperless insurance, and ensure timely and full payment. Finally, with simple and reliable data systems, smaller institutions, such as microfinance institutions can attract

more capital and, in turn, offer credit to more individuals.

This model serves to promote financial inclusion among people who currently lack access to financial services, particularly in rural regions where 90% of FINO's customers live. Financial inclusion is critical to enabling individuals to increase incomes, build savings, and manage uncertainties such as sickness or financial shortfalls. Without financial inclusion, individuals have to rely on themselves to invest in education or economic growth, greatly limiting their opportunities and perpetuating economic inequality and poverty.³ Through FINO, even individuals in more remote regions of India can access formal loans as well as insurance, savings, remittances and government payments. FINO has also substantially contributed to employment generation, with more than 800 direct employees and 6,000 field agents, of which nearly 70% are women.

³ Demirgüç-Kunt, Asli, Thorsten Beck, and Patrick Honohan. 2008. "Finance for All: Policies and Pitfalls in Expanding Access." World Bank Policy Research Report. Washington, DC: The World Bank. Page 21.



IFC'S ROLE AND VALUE-ADD

IFC's role has been a combination of early-stage financing and technical assistance. IFC's investment included \$4 million in equity in the first round and another \$2.8 million in the second round. This filled an immediate financing gap that early-stage companies like FINO face, and enabled the company to reach a stage where funding options were more widely available.

Through its role as a trusted intermediary, IFC helped FINO to spin off successfully and to encourage banks and MFIs to adopt its technology.

IFC also agreed in December 2007 to provide a technical assistance grant of up to \$1 million to support pilot projects and training programs. With these funds, FINO worked with MFIs such as SEWA to develop and test its technologies, as well as conducted 872 training workshops for 8,002 participants across the country. FINO conducted several pilots including one for a mobile application in Andhra Pradesh, during which FINO enrolled 1.7 million families below the poverty line in a cashless health insurance coverage program.



IFC's Investment:
\$6.8 million in equity

Husk Power Systems

COMPANY BACKGROUND

Founded in 2007, Husk Power Systems (HPS) is a decentralized power generation and distribution company serving rural India. It has developed an innovative biomass gasification technology capable of generating power as efficiently as conventional biomass gasifiers, but on a micro scale—enabling the company to serve rural villages at prices they can afford. HPS covers 250 villages and employs 350 people.

HPS is promoted by first-generation entrepreneurs Gyanesh Pandey, Ratnesh Yadav, Manoj Sinha, and Charles Ransler, who won several business plan competitions in the United States and decided to implement their idea in the state of Bihar. Besides IFC, Draper Fisher Jurvetson, Cisco, Oasis Fund, Acumen Fund, and LGT Philanthropy Foundation also have equity stakes in the company.

HUSK POWER'S INCLUSIVE BUSINESS MODEL

HPS provides electricity in remote, rural villages in India through small-scale systems that generate and distribute power cheaply enough for base of the pyramid consumers to afford. Its target markets are previously unelectrified villages in India's low-income states, including Bihar, Uttar Pradesh, Orissa, and Jharkhand. Most of HPS' target customers earn around \$2 a day.

Each HPS system consists of a 30-50 kilowatt (kW) power plant that runs entirely on rice husks, generating electricity through biomass gasification, and a simple distribution micro-grid connecting subscribers directly to the plant using insulated wires strung from bamboo poles. Systems are sited only in locations where rice husks are plentiful. HPS plants offer competitive prices for husks year-round, approximately \$0.02-0.03 per kilogram, and farmers have an incentive to supply them in order to ensure that electricity remains available in their villages. The typical plant can serve two to four villages—approximately 500 households—within a radius of 1.5 kilometers, depending on size and population.

Including both generation and distribution, HPS systems can provide electricity at a leveled cost of approximately \$0.20 per kilowatt hour at current system utilization levels (likely to drop to \$0.15-0.16 as utilization increases). Household subscribers pay a base rate of \$2.20 per month, which includes 40W of electricity for 6-8 hours every evening, enough to power two 15W compact fluorescent lamp (CFL) bulbs and recharge a cell phone. Business subscribers tend to use more electricity, between 60-75W, paying an average of \$4-4.50 per month. Subscribers can pay more, at \$1.10 for each additional 15W connection, if they have appliances requiring greater wattage. HPS' service compares favorably to the cost of alternatives such as candles, kerosene lamps, and LED lanterns, which serve only lighting needs.

Local employees collect payments once a month, in advance. In two villages, smart meters installed on subscribers' premises help the company make sure that subscribers are using only the wattage that they have, keeping non-payment under 5%—compared to a national average of approximately 30%. Smart meters will be part of each new HPS system

built, and will be added gradually to those already in operation. In addition, circuit breakers are designed to cut off the flow of electricity if it exceeds the designated level, and resume when it returns to normal.

HPS uses two primary revenue models.

- **Build, own, operate, maintain:** In the first model, HPS builds, owns, operates, and maintains the power generation and distribution system, with revenues coming from subscriber fees. Each plant requires four staff—an operator, husk loader, collector, and electrician—though the company plans to reduce this to two or three staff via process and technology improvements that would enable HPS to increase salaries and save on costs. It typically takes two to three months for a plant to reach operational profitability, and three to four years to recoup capital expenditures, depending on whether (and how much) subsidy is received. Additional revenue streams come from the sales of rice husk ash (to be mixed in cement or used to produce incense sticks) and, starting in 2012, carbon offsets. Each of these revenue streams could add up to 50-60% to the total margins of each plant.
- **Build and maintain:** In the second model, HPS builds and sells the system to an independent owner-operator. The owner-operator is responsible for all costs and entitled to all revenues. Staff training is included in the purchase price, and maintenance and repair are provided on a fee-for-service basis. For a share of the revenues, HPS will also facilitate marketing of rice husk ash and obtaining carbon credits. HPS also facilitates access to Indian government subsidies available for rural electrification, which can cover up to 50% of the total project cost.

The build and maintain model will be HPS' primary focus scaling up. The company is establishing processes, technologies, and training infrastructure to facilitate its growth as a solutions provider. For instance, HPS has set up a training institute called Husk Power University to help fulfill human resource needs. HPU uses both classroom-based and experiential learning to train power plant entrepreneurs and technicians.

Husk Power Systems

DRIVERS FOR HUSK POWER'S INCLUSIVE BUSINESS MODEL

- Demand for affordable, reliable electricity in rural India
- Ready supply of husks left over from rice processing, as well as other biomass, with few competing uses
- Government support for off-grid energy solutions

More than 400 million Indians lack access to electricity. Approximately 125,000 rural villages are “off the grid,” with 25,000 of these considered unviable to connect via conventional means. The problem is particularly acute in the state of Bihar, India's third largest state (with 83 million residents) and also its poorest (with average per capita income of \$260 per year, less than a dollar a day). Bihar is very rural, with 85% of its citizens living in villages. Only 28% have access to electricity. Those without are forced to rely on kerosene, wood, and dung for their household energy needs and diesel for their agricultural and commercial energy needs. These alternatives are costly and cause health hazards like indoor air pollution. They are also damaging to the environment.

HPS' founders saw a market opportunity in the swelling demand for more reliable, affordable sources of energy. People were already paying high prices for kerosene and battery-powered

lighting, and energy needs for non-lighting purposes—like mobile phone recharging—were going unmet. While Bihar is a low-income state, it also has a young population and a pro-reform government, and has experienced rapid economic growth in the last half decade—at an average of 11.5% a year between 2005 and 2010. It is also an important rice-producing state, generating approximately four billion pounds of husks a year that—with few competing uses—can be used to generate electricity through biomass gasification.

Indian government policy has provided an additional driver for HPS. Recognizing that electricity is fundamental for economic growth and poverty alleviation, the government is encouraging the development of off-grid power solutions through subsidies and other forms of support available through the Ministry of New and Renewable Energy.

RESULTS OF HUSK POWER'S INCLUSIVE BUSINESS MODEL

- 72 power plants installed, serving more than 30,000 households in 250 villages in Bihar
- Total customer savings of \$1.25 million thus far, compared to available alternatives (\$17 per household per year)
- 358 jobs created

To date, HPS has installed 72 power plants serving more than 30,000 households—150,000 people—in 250 villages in the state of Bihar. HPS' services enable parents to work and children to study beyond daylight hours; reduce the amount of time women must spend collecting firewood; and cut down on indoor air pollution from burning fuel. HPS' services also save customers money. Estimating average annual energy expenditure per household at \$38 for villagers using kerosene lanterns, HPS customers paying approximately \$21 save \$17 per year. In total, since its inception, HPS has saved customers \$1.25 million.

HPS has also created economic opportunities for power plant owners, operating partners, and

staff, including operators, husk loaders, collectors, electricians, and mechanics. HPS employs 350 people directly, and two independent plant owner-operators have created eight additional jobs between them. Close to 300 of these employees are from the villages HPS serves.

While the company is still young, it has experienced fast growth, from three to 72 plants in three years. HPS expects to have built more than 100 plants by the end of 2011. Plant level margins are between 20 and 30%, and the company is on track to break even within six to nine months of reaching the 100-110 plant mark. HPS won an Ashden Award for Sustainable Energy in 2011 and a BD Biosciences Economic Development Award in 2010, among others.



IFC'S ROLE AND VALUE-ADD

In 2010, IFC invested \$350,000 in convertible quasi-equity in HPS. At the time, HPS had just completed a \$1.75 million round of equity financing, attracting mostly “impact investors” interested in social as well as financial returns, like Acumen Fund and the Oasis Fund. HPS had initially received grant funding and technical assistance from the Shell Foundation, which continues to be a strategic partner assisting the company with research and development, management information systems, and training infrastructure.

The off-grid power sector is still evolving and is considered too risky for commercial financing. IFC's investment in HPS is intended to help bridge this gap. IFC is helping HPS, an early-stage venture, to firmly establish its business model; develop a financial structure conducive to scale; and comply with social and environmental standards. Together with the Shell Foundation, IFC Advisory Services is helping the company to build up the Husk Power University—for example, by developing a soft skills training module. In addition to building the company's capacity, IFC's participation is also expected to have an important signaling effect to larger, more commercial investors.



IFC's Investment:

\$350,000 in convertible quasi-equity

Idea Cellular

COMPANY BACKGROUND

Idea Cellular Limited (Idea) is the fastest growing telecom service provider in India. The company's origins extend back to 1995, and it started its commercial operations in 1997 in Maharashtra and Gujarat states. Idea expanded into other service areas through a combination of organic growth and acquisitions.

In late 2006, the Aditya Birla Group consolidated majority ownership over Idea and assumed management control. In February 2007, Idea

engaged in an initial public offering to raise the capital necessary to support a network expansion. The Aditya Birla Group (Birla) now owns 57% of Idea. Private equity investors Providence Equity Partners, Inc. and Citigroup Global Markets (Mauritius) hold a combined 17.7%. The remaining 24.6% is held by approximately 350,000 individual shareholders.

IDEA CELLULAR'S INCLUSIVE BUSINESS MODEL

When Aditya Birla Group took over, Idea's new management reoriented the company's strategy to focus network expansion mostly in India's remote areas where demand is both high and underserved. The company also built a distribution network of 1,520 branded service centers and more than 700,000 multi-brand retail outlets around the country as of March, 2009. These investments have enabled Idea to serve customers at the base of the economic pyramid by bringing coverage to rural areas and achieving economies of scale that help keep prices low.

Idea's approach has also included a suite of products and services customized to meet the needs of rural and low-income consumers. For example, Idea has launched small recharge sachets in denominations as low as \$0.20. The company provides value-added services such as "music on demand," which has been particularly successful in rural areas where FM radio does not reach. Idea's media and advertisement campaigns are also conducted primarily in local languages to reach out to rural users.

Most recently, Idea has been working to extend its reach specifically to consumers who cannot afford their own phones through a Pocket Public Calling Offices (PPCO) project. PPCO is at once a product of Idea's expansion efforts and a part of its strategy for further growth. The company considers PPCO a commercial project, and as such it was developed via Idea's standard business development process: concept documentation, management approval, product configuration, testing, and full commercial launch.

PPCO is a shared access model in which a mobile phone is used as a public phone operated by a micro-entrepreneur. To develop the model, Idea partnered with IFC to leverage its experience with shared phone

projects around the world. Central to the model is a grassroots-level partnership, originally brokered by IFC, with India's Self-Employed Women's Association (SEWA). With limited financial support from IFC, SEWA fulfills critical project functions, namely:

- Providing access to the information and relationships required to partner with rural micro-entrepreneurs
- Financing micro-entrepreneurs to purchase and operate PPCO equipment
- Training and building the capacity of PPCO operators

While Idea provides overall management for the project and ensures regulatory compliance, SEWA is responsible for identifying and screening PPCO operators and providing them with training in their local languages. SEWA gives PPCO operators the financing to purchase PPCO equipment—including a handset, shared phone software, SIM card, and airtime for about \$35, or just a SIM card for about \$11 for operators who already own their own phones. This financing, in turn, provides the organization with interest income. SEWA also provides PPCO operators with technical support and collects data for monitoring and evaluation purposes.

PPCO operators are responsible for maintaining PPCO equipment, promoting their businesses, and maintaining accurate call records. PPCO operators generate income by selling airtime to their communities, for which Idea pays a 20-47% commission depending on the volume of airtime an operator sells each month. Operators may also have additional revenue streams such as phone recharging and sales of prepaid cards to customers who own their own phones.

Idea Cellular

DRIVERS FOR IDEA CELLULAR'S INCLUSIVE BUSINESS MODEL

- To increase the number of Idea customers
- To increase the number of transactions per consumer
- To increase brand awareness, remain competitive, and increase market share
- To maintain Aditya Birla Group's reputation as a socially responsible company by expanding access to telecommunications services and economic opportunities

The primary driver for Idea's inclusive business model was significant pent-up demand throughout India, especially in semi-urban and rural areas where 2008 telephone penetration or "teledensity" averaged approximately 6%. This compares with 40% teledensity for India as a whole, still less than half the average for Asia. The specific objectives of Idea's PPCO project were to extend the company's services

to 50 million new rural customers via 300,000 operators within three years.

An additional driver was the Aditya Birla Group's commitment to commercially sustainable, pro-poor approaches. The company's efforts have been enabled by measures by the Government of India to liberalize the telecommunications sector and introduce pro-competitive policies.

RESULTS OF IDEA CELLULAR'S INCLUSIVE BUSINESS MODEL

- 185% increase in subscribers to 60 million since 2007, approximately 40% of these in rural areas
- 2% increase in market share since 2007, from 9 to 11%
- 31% increase in revenues and 8% increase in EBITDA
- Increased access to telephony among rural and other previously underserved populations
- 1,228 PPCO operators in business in the pilot phase, earning 20-47% commissions
- Income and employment generation in the retail sector

Idea's overall inclusive business model, in which network expansion brings coverage to rural areas and economies of scale help keep prices low, has enabled the company to increase subscribers by 185% to 60 million since the network expansion began. Approximately 40% of these are in rural areas. During the same period, the company gained two percentage points of market share, reaching 11% percent. Idea's revenues increased by 31% from 2008 to 2009 to \$2.15 billion.

The PPCO project has helped facilitate customer acquisition in more rural, lower-income segments that previously had little access to mobile

telecommunications. PPCO has also created business opportunities for 1,228 PPCO operators in the pilot phase alone, each of whom earns between 20-47% on sales.

Idea's growth has also contributed to overall growth in the telecommunications sector, where increasing penetration has fueled competition and helped maintain affordability. Studies have shown that increasing penetration is also associated with GDP growth and poverty reduction. It is estimated, for instance, that a 10% increase in mobile phone density leads to a 0.6% increase in per capita GDP.⁴



IFC'S ROLE AND VALUE-ADD

For Idea, IFC's value-add has been the combination of large-scale debt financing for network expansion and advisory services to help bring the benefits of network expansion even closer to the base of the pyramid through the PPCO project.

With respect to the PPCO project, IFC brought two distinct benefits. First, IFC offered expertise in the planning and management of shared phone models. Drawing on its experience with such models in multiple African countries, IFC was well-positioned to advise Idea and its implementing partner, SEWA, on appropriate business and operating models. Second, IFC's long-standing relationship with SEWA and its experience linking large corporations with micro, small, and medium enterprises allowed IFC to play a critical role brokering and facilitating the partnerships involved.



IFC's Investment:
\$100 million in long-term debt financing

⁴ Waverman et al. 2005.

Ideal Invest S.A.

COMPANY BACKGROUND

Ideal Invest S.A. (Ideal) is the leading private provider of student loans in Brazil, with a current portfolio of over \$65 million. Founded in 2001, Ideal originally offered working capital financing to private universities, backed by student tuition receivables. The company moved into student lending in 2006 with the development of its signature lending product, *Pravaler*. Since then, *Pravaler* has reached over 17,000 students enrolled in 175 private partner universities in 14 Brazilian states, making it the largest such program in the country.

Ideal was founded by Oliver Mizne, a young entrepreneur with a vision to leverage the use of finance to increase access and choice for lower-income students seeking tertiary education in Brazil. Following several rounds of equity financing, the company attracted an experienced group of investors, including prominent individuals with ample experience in the Brazilian financial sector, as well as leading local and international private equity firms such as Gavea Private Equity. IFC has also invested BRL 12 million (approximately \$7.5 million) in equity in the company.

IDEAL INVEST'S INCLUSIVE BUSINESS MODEL

Pravaler loans are available to students enrolled in one of more than 8,000 approved courses offered by 175 partner universities with which Ideal works. Students interested in applying for *Pravaler* loans must first fill out an online form. The online process limits Ideal's staffing needs and helps keep costs down. Applicants are not required to have bank accounts, but must demonstrate, among other conditions, that their monthly family income is sufficient to meet loan payments. Interest rates vary according to programs and courses, and participating universities share some of the costs in order to make the loans more affordable to students. In 2011, over half of new *Pravaler* clients have joined Ideal's Zero Interest Program, where students pay only the principal amount and participating universities pay 100% of the students' interest. Delinquency rates are currently well below those of traditional consumer lending loans in Brazil.

Ideal's in-depth knowledge of student repayment behavior has been critical to the success of the *Pravaler* product. Over the years, Ideal learned important lessons about when students repay and when they do not. For example, issues like the distance a student travels to and from school, the specific courses he or she takes, and the quality of the educational institution all factor into the likelihood he or she will repay on time. This information now influences Ideal's lending decisions.

Another aspect of Ideal's model is that it partners with educational institutions; Ideal currently has 175 university partners and will only lend to students attending these universities. This partnership is mutually beneficial because the universities gain students who would otherwise not have the means to attend, and Ideal gains allies that will market its services and help reduce the cost of the loans to students. Ideal has also signed an agreement with Itaú Unibanco, a large Brazilian commercial bank, to gain access to its network of university partners. Students at those universities will now be referred to *Pravaler*, expanding the market for Ideal and allowing Itaú to observe how the student lending market develops.

An incremental approach to lending has also been critical, further minimizing Ideal's risk and accommodating the needs of lower-income students. Ideal finances students' educations through successive small loans. Once a student is approved to borrow, Ideal issues an initial loan covering part of the first semester. Each subsequent loan covers another semester's tuition and is repayable in a period of 12 months. While each of these semester loans are independent from each other, repayment is coordinated and staggered, such that only one installment is due each month. Students begin repaying the first loan right away, the second loan after the first is paid off (effectively receiving a grace period of six months where no interest accrues), the third loan after two years (a grace period of one year), and so on as needed until they complete their studies. New loans are only issued to students who are up-to-date on their payments. This incremental approach limits Ideal's exposure to any given student. It also appeals to lower-income students and families whose cash flows may be too uncertain to commit up front to larger, longer-term loans.

Ideal has two main revenue streams. The first is a commission fee charged to partner institutions, equivalent to a percentage of the principal amount on loans issued to their students. This fee reflects the important role Ideal financing plays in expanding access to its partners' programs among students who might not have been able to afford it otherwise. Ideal's second revenue stream comes from a special purpose vehicle (SPV) that the company has structured to carry the loans to maturity. Ideal receives management and performance fees from the SPV, as well as capital gains from the percentage of junior notes that it holds in the vehicle. The SPV collects interest from both students and universities. It funds itself in the Brazilian capital markets by issuing senior notes, which are currently rated AA by Standard & Poor's.

Ideal Invest S.A.

DRIVERS FOR IDEAL INVEST'S INCLUSIVE BUSINESS MODEL

- Market demand for university education, due to economic growth increasing the need for qualified human resources and graduates' incomes rising relative to those of non-graduates
- Insufficient supply of free public university education relative to demand
- Limited financing options for students attending private universities

As Brazil's economy has grown, demand for qualified labor has outstripped supply and raised the incomes of those with college degrees up to three times higher than those without a degree. This premium has increased market demand for post-secondary education—but spots in the free public university system are limited, and tend to go to higher-income students who are better prepared academically.

Because the government will not increase the number of publicly funded universities in the country anywhere near the levels needed to address pent-up demand, it has encouraged private operators to come into this space. In 1996, the government created the Education Law to incentivize private operators. The Law simultaneously reduced regulation and focused on the quality and accessibility of the education offered. In 1999, the government passed legislation enabling for-profit private institutions to

operate fully in the post-secondary education market. It created a more amenable regulatory environment for these institutions, including tax breaks for schools that accept a percentage of low-income students.

Private institutions have played a critical role in expanding access to post-secondary education among lower-income students in particular. In the late 1990s, only about 5% of students from the lowest-income households were able to attend university, whereas today this is the fastest-growing demographic in the country. The government has offered full and partial scholarships and created a government-sponsored student lending program, helping to fuel this trend. However, these programs are expensive to maintain and do not address the needs of all students who see education as a stepping stone to a better life. Ideal was founded to address this gap.

RESULTS OF IDEAL INVEST'S INCLUSIVE BUSINESS MODEL

- Over 17,000 student borrowers have attended 175 partner universities in 14 Brazilian states as of April 2011
- Over 10,000 female students
- Portfolio of approximately \$65 million

Ideal has become the largest private student loan provider in Brazil with a portfolio of \$65 million, having served over 17,000 students at 175 partner institutions in 14 states. An additional 38,000 students have been approved but have not yet chosen to borrow; they feel safer enrolling in post-secondary education programs knowing they have been pre-approved for financing in case they need it.

Approximately 88% of Ideal's borrowers are located outside the major Brazilian cities of Rio de Janeiro and São Paulo. Nearly 61% are women and 64% work while in school, at an average age of 25. Approximately 62% come

from families with less than \$1,500 (R\$3,000) a month in household income, and 66% are the first in their families to go to college.

Further growth will not be without its challenges. Market-based financing for education in Brazil is still in its nascent stages, and Ideal must compete with other forms of credit—like ubiquitous consumer credit—and with government scholarships and loans that offer subsidized interest rates. However, as more and more Brazilians aspire to go to university, the demand for additional financing options will only continue to grow.



IFC'S ROLE AND VALUE-ADD

In 2009, IFC committed BRL 12 million (approximately \$7.5 million) in equity to enable Ideal Invest to expand its student loan program. Ideal's innovative way of leveraging the capital markets to mobilize funds for student loans was a unique approach in Brazil. IFC's investment was and continues to be important because it adds to the credibility of the organization, thereby making it more attractive for other investors to participate. IFC's knowledge of the education sector in Latin America and Brazil, as well as its expertise in structured finance, helped Ideal mobilize capital from investors. In addition, access to best practices within IFC's network is enabling the company to serve its student customers better and more sustainably.



IFC's Investment:

BRL 12 million (approximately \$7.5 million) in equity

Jain Irrigation Systems

COMPANY BACKGROUND

Jain Irrigation Systems Ltd. (JISL), based in India, is the largest manufacturer of efficient irrigation systems worldwide and a leading processor of fruits and vegetables—JISL is the world's largest processor of pureed mangos and third-largest in dehydrated onions, and over the years, has expanded into bananas, guava, pomegranates, aonla, papaya, and tomatoes. The company has establishments in India, the Middle East, Europe, Australia, Central and South America, and the

United States. Within India, JISL is the largest provider of micro-irrigation systems—with a 55% share of the drip irrigation market and a 35% share of the sprinkler market.

JISL is listed on the Bombay Stock Exchange, but the Jain family has controlling ownership of the company. JISL currently employs 6,000 people in India and this number is expected to reach 8,000 by 2012.

JAIN IRRIGATION SYSTEMS' INCLUSIVE BUSINESS MODEL

Centered around agriculture, JISL's business model makes almost a full circle through the value chain. The company provides farmers with micro-irrigation systems (MIS), seeds, and other inputs to produce more and better crops and then purchases fruits and vegetables through its food processing division. In this way, Jain's inclusive business reaches farmers as both consumers and producers.

Serving farmers as consumers

JISL's MIS are enabling farmers to switch from flood irrigation to more water- and energy-efficient systems, such as drip and sprinkler. These products are supplied via a network of 1,750 distributors throughout India. JISL has also set up an institute to train distributors, government officials, and others on the skills to lay out and use MIS. All of JISL's dealers and distributors are trained by the company, including specialized training for engineers and fitters.

A key factor in the success of JISL's MIS business is a subsidy provided by the central and state governments in India. Farmers working less than five hectares of land receive a 50% subsidy on MIS equipment. The subsidy is routed through banks in some states and administered through special purpose vehicles set up by the government in other states. Farmers raise the balance of the funding from their own sources or from the banks responsible for routing the subsidy. JISL works with several banks to facilitate access to financing for MIS, including Yes Bank, Central Bank of India, IDBI Bank, and others. These banks have developed the necessary procedures as well as systems for monitoring and reporting. An average loan for purchasing a drip irrigation system is about \$817 per farming household.

Reaching farmers as producers

JISL procures fruits and vegetables directly from 4,150 contract farmer suppliers and indirectly through traders who source from over 25,000 farmer suppliers.

Launched in 2002, JISL's contract farming model is built on selecting progressive, receptive farmers and providing them with high-quality seeds; access to MIS, fertilizers, and other inputs; agronomical training and guidance on all aspects of planting, input application, and other farm functions via JISL's 60 extension associates. Additionally, farmers' relationships with JISL often allow them to obtain credit from commercial banks to fund MIS and other purchases, such as seeds, planting material, and packaging for certain crops. The company then buys the produce back—at a minimum price established at the beginning of the growing season or at approximate market price at harvest time, whichever is greater. Successful contract farms are used for demonstration to encourage others to adopt good agricultural practices.

In response to its major buyers' concerns about food safety and increased interest in farm-level practices and traceability, JISL is also helping farmers to meet international standards. JISL's own farms are GLOBALGAP-certified and the company is now working with IFC to develop and apply the Jain GAP standard to farmers in its supply chain. The Jain GAP standard will help the company meet its buyers' concerns without significantly increasing cost to low-income farmers. By 2011, around 1,000 farmer suppliers of onions and mangoes will be certified on Jain GAP, bringing 2,500 acres of farm land under sustainable management. In the long term, JISL hopes to expand Jain GAP to the larger number of farmers from whom it sources via traders.

For JISL, the advantages of contract farming include greater control over the quality and quantity of supply compared to traditional procurement channels. JISL has thus far applied the contract farming model to onion procurement, and is expanding the model to mango and tomato. Approximately 90% of JISL's onion contract farmers are small, with an average farm size of less than 2 hectares.

Jain Irrigation Systems

DRIVERS FOR JAIN IRRIGATION SYSTEMS' INCLUSIVE BUSINESS MODEL

- Market opportunity for MIS which increases productivity and income for farmers, enabled by government subsidy
- Need to ensure consistent quality and quantity of produce for processed foods for export
- Buyer and consumer concerns regarding food safety and farm-level practices
- Water scarcity and low productivity of farmers in JISL's supply chain

Driver for serving farmers as consumers

JISL founder Mr. B.H. Jain's underlying vision to promote sustainable water management in agriculture, based on his own experiences with the challenges facing farmers in India, is a strong driver for the company's entry into and commitment to promoting MIS in India.

Another driver is the large and growing market for MIS, enabled by the government of India's subsidy and by the increased production and income that MIS make possible for the purchaser. The government's Task Force on Micro Irrigation recommended that 17 million hectares of cultivated land be brought under MIS between 2004 and 2012. This will eventually save the government money as it reduces the need for other subsidized farm inputs such as fertilizer and water.

Finally, as JISL's food processing business procures fruits and vegetables from farmers, it is in JISL's interest to ensure consistent supply

quantities, and the use of MIS is a key element in ensuring farm productivity especially in water-stressed regions.

Driver for reaching farmers as producers

Securing regular supplies of consistent quality and quantity for its food processing business is a strong driver for JISL's entry into contract farming. Contract farming is enabling the company to develop a cost-effective supply chain in a market characterized by fragmented supply chains with many intermediaries.

Further, compliance with food safety standards for export markets and growing interest from buyers regarding traceability and farm-level practices are leading JISL to introduce systems such as Jain GAP into its supply chain. Such measures are necessary to maintain and grow the company's customer base over time, and they are easier to introduce in a contract farming model given the level of monitoring required.



IFC'S ROLE AND VALUE-ADD

Since 2007, IFC has invested \$60 million in debt and \$14.47 million in equity in JISL to promote water-use efficiency in agriculture via MIS. In addition to financing, IFC advisory services are helping JISL to develop and roll out the Jain GAP standard with specific support for project design and implementation, monitoring and evaluation, and knowledge-sharing of international good practices. IFC is also working with JISL on a water footprint assessment to document and disseminate the benefits of MIS.

RESULTS OF JAIN IRRIGATION SYSTEMS' INCLUSIVE BUSINESS MODEL

- 35,000 tons of onions procured from 1,800 contract farmers in 2008, of which 90% are small farmers
- Ensured market and increased income by \$300-400 per acre for onion farmers
- Farmers using MIS are increasing net incomes by \$100 to \$1,000 per acre due to efficiency gains
- Estimated reduction of 500 million cubic meters of water per year through JISL drip and sprinkler irrigation, compared to flood irrigation

By working with JISL, onion contract farmers benefit from the availability of high-quality seeds, input finance, agronomic support, MIS and an assured market for a crop that yields an additional \$300-400 per acre compared with previous growing practices.

Farmers in general using JISL's MIS products alone have also increased their efficiency and reduced their dependence on rain for their livelihoods. As a result of these efficiency improvements, farmers are increasing their net incomes by \$100 to \$1,000 per acre depending upon the crop, meaning the investment pays for itself typically in less than one year. Finally, going

forward, farmers who eventually comply with GLOBALGAP will be able to sell their higher-grade fresh mangos to markets outside India at substantial premiums. Compliance with Jain GAP is a stepping stone to this end.

For its part, JISL benefits from its work with farmers both as a built-in market for its agricultural inputs and as a way to manage quality and security of supply. In 2008, JISL procured 35,000 tons of onions from 1,800 contract farmers cultivating 3,700 acres of land, of which 90% were small farmers. JISL expects to increase the area under contract farming to 6,000 acres by 2012.



**International
Finance Corporation**
World Bank Group

IFC's Investment:

**\$60 million in long-term debt financing and
\$14.47 million in equity**

La Hipotecaria Holding Inc.

COMPANY BACKGROUND

Headquartered in Panama, La Hipotecaria Holding Inc. (LH Holding) is a full-service housing finance company specializing in originating, servicing and securitizing residential mortgages for low- and lower middle-income borrowers. LH Holding was established in 2000 to manage the operations of three subsidiaries: Banco La Hipotecaria S.A., a regulated banking institution established in Panama in 2010 (originally a non deposit-taking financial institution established in 1997 as La Hipotecaria, S.A.); La Hipotecaria S.A. de C.V. formed in

2003 in El Salvador; and most recently La Hipotecaria de Colombia, S.A. which will become operational in mid-2011. The latter two currently operate as non-deposit-taking specialized commercial institutions. Today, LH Holding employs 161 people in its eight offices in Panama, El Salvador, and Colombia. In 2010, LH Holding's total assets were \$253 million and its total mortgage portfolio under administration was \$375 million.

LA HIPOTECARIA'S INCLUSIVE BUSINESS MODEL

LH Holding's inclusive business model is built on a niche product: mortgages for owner-occupied homes targeting formally employed borrowers whose average family incomes range from \$400 to \$800 per month. The majority are first-time homebuyers seeking homes generally priced between \$15,000 and \$50,000. Loans range from \$5,000 to \$80,000 with an average of \$24,700.

LH Holding offers mortgages at variable interest rates with maturities of a maximum of 30 years. In Panama, a preferential interest rate law enables the company to offer interest rate subsidies in which the government compensates mortgage lenders through a tax credit equal to the difference between the Panamanian Reference Rate⁵ and the subsidized rates. As of June 2011, the Panamanian Reference Rate was 6.5%. Borrowers pay zero interest for homes up to \$30,000, 2.5% for homes between \$30,001 and \$65,000, and 4.5% for homes between \$65,001 and \$80,000. Correspondingly, mortgage lenders receive tax credits of 6.5%, 4%, and 2%, respectively, for mortgages in these three home price categories. Loans issued prior to July 2001 are eligible for subsidized interest rates for 10 years and subsequent loans for 15 years. Mortgages for used homes and refinancings, however, are not eligible. In El Salvador, where no such law exists, LH Holding offers loans at market rates. It will do the same when it launches in Colombia.

Rather than a bricks-and-mortar model of extensive branch offices, LH Holding reaches new home buyers through an on-the-ground sales force—assigned to between eight and ten housing developers in target regions and educating them about loan products and the application process. Housing developers, in turn, promote LH Holding's products and refer clients to the company. Housing developers also allow sales representatives to be based at their construction sites to meet potential clients. There, they can expedite a sale by initiating the loan application process on the spot. LH Holding employs this marketing method to originate new home mortgages and uses its branch offices to serve clients seeking used home loans or refinancing.

⁵ The rate represents the weighted average of the interest rates charged on mortgage loans not subject to any subsidy by the five private banks and one state-owned bank with the largest residential mortgage portfolio at the beginning of each calendar year.

Prudent, consistent underwriting criteria and a standard approval process for all types of mortgages are essential to LH Holding's success in serving its target borrowers. Its underwriting criteria include, but are not limited to, a good credit history, a minimum of two years of formal employment, a mortgage payment of 35% or less of gross family income at the time of loan approval, and a total debt payment (including consumer loans) of 55% of gross income. LH Holding also uses a four-stage loan approval process. First, sales representatives or applicants submit loan applications to branch offices. Second, staff at branch offices screen loan applications before sending them to the credit department in the country where the loan is originated. Third, the credit department conducts further credit analysis. And fourth, the credit department presents loan applications to the loan committee based at LH Holding's headquarters for final credit analysis and approval.

Monthly payments are collected in three ways: payroll deduction, bank account deduction, and voluntary payment. Legal frameworks enabling payroll deduction in Panama, utilized by 85% of clients, have minimized late payments and delinquencies. In El Salvador, payroll deduction is negotiated with individual employers, and used by 75% of clients. Borrowers making voluntary payments in Panama have three options intended to maximize customer convenience, and therefore likelihood of on-time payment: first, to deposit payments into La Hipotecaria bank accounts at two banks with over 100 branches; second, to pay authorized collectors located in a major supermarket chain offering extended hours seven days a week; and third, through an authorized money transfer company that also operates seven days a week nationwide. LH Holding's servicing systems automatically signal a missed payment, regardless of the payment method.

The key to LH Holding's success serving lower-income borrowers is to minimize the transaction costs involved in servicing a large number of smaller-sized mortgages. LH Holding places strong emphasis on efficient loan origination and servicing procedures—income verification, appropriate documentation, and timely loan collection. The company's proprietary Spanish-interface Management Information System (MIS) is critical in this respect, managing each mortgage from the point of origination to the point of securitization.

La Hipotecaria Holding Inc.

DRIVERS FOR LA HIPOTECARIA'S INCLUSIVE BUSINESS MODEL

- Increased demand for mortgages among low- and lower middle-income borrowers as affordable housing development takes off
- Market opportunity for a specialized, private sector mortgage finance institution
- Government policies that enhance affordability for borrowers and reduce risk for the company

The affordable housing construction sector has become more competitive in all three countries in which LH operates—generating increased demand for home mortgages. Today, there is a diversified, experienced and reputable group of affordable housing homebuilders offering a variety of homes in different price ranges. These homebuilders are seeking to reduce the housing deficit across the three countries.

Yet the supply of mortgages has not kept up with demand, particularly among low- and lower middle-income segments. In Panama, LH Holding's main competitors are the government-owned banks, Banco Nacional de Panama and Caja de Ahorros, and private banks such as Banco General. All banks mainly target upper middle- and high-income borrowers. Similarly, in El Salvador, government programs such as Fondo Social para la Vivienda target very low-income borrowers, while private banks mainly focus on upper middle-income borrowers,

leaving a large underserved swath in between. There is ample opportunity to target this in-between segment in Colombia, too, as the five largest private banks—controlling 85% of the mortgage market—are also focused on middle- and high-income borrowers.

LH Holding believes the market opportunity is particularly strong for a specialized mortgage finance institution, as opposed to one that offers a range of financial products. Specialization enables the company to operate more efficiently, resulting in lower cost and better customer service.

Finally, government policy has played a role in enabling LH Holding's successful model. In Panama, the government compensates mortgage lenders that offer subsidized interest rates. In both Panama and El Salvador, legal frameworks facilitate loan collection via payroll deduction, thus reducing lenders' repayment risk.

RESULTS OF LA HIPOTECARIA'S INCLUSIVE BUSINESS MODEL

- Efficient mortgage origination, with approximately 42% of all applications approved in Panama and 50% in El Salvador
- 18,612 total mortgages issued, approximately 65% of these to first-time homebuyers
- Net income of \$3.7 million in 2010, up 21.2% from the previous year
- Multiple successful mortgage-backed securities issuances in Central America and the United States

LH Holding prides itself on being an efficient originator of mortgages in both Panama and El Salvador, and expects to reach and maintain this efficiency in Colombia. It approves approximately 300 loans per month in Panama and 60 loans per month in El Salvador—approximately 42% and 50% respectively of all applications received in those countries. To date, 18,612 loans have been issued in total: 13,900 in Panama and 4,712 in El Salvador. Approximately 65% of these were to first-time homebuyers.

At the end of 2010, LH Holding's residential mortgage portfolio consisted of 15,300 loans for a total of \$375 million. Its non-performing

loan ratio for loans on its books and securitized stood at 0.91%, well below the averages for the banking sector in Panama and El Salvador. Its net income reached \$3.7 million, up 21.2% from the previous year.

In 1999, La Hipotecaria S.A. in Panama became the first company in Central America to successfully issue a \$15 million mortgage-backed securities (MBS) transaction. In 2007, it was the first non-bank company to issue a \$90 million cross-border securitization in the United States, and in 2008 the first to securitize mortgages originated and serviced in El Salvador through a \$12.5 million issuance in Panama.



IFC'S ROLE AND VALUE-ADD

In 2004, IFC provided a three-year credit line of up to \$15 million to support La Hipotecaria S.A. (now known as Banco La Hipotecaria S.A.) in its mortgage origination business in Panama. In the same year, IFC provided a seven-year revolving warehouse credit line of up to \$20 million to finance the expansion of La Hipotecaria S.A. de C.V.'s nascent mortgage origination business in El Salvador. IFC funding aimed to increase access to long-term finance for low- and middle-income borrowers in both countries. To that end, it assisted LH Holding in developing the sale of mortgage-backed securities for the Salvadorian capital markets, and provided a true revolving feature for the El Salvador loan that enabled the company to issue a volume of mortgages many times larger than the size of the facility.

More recently, in 2009, IFC provided a revolving warehouse credit line of up to \$25 million to LH Holding's three operating subsidiaries in Panama, El Salvador, and Colombia, co-borrowed by the parent company. IFC also made an equity investment of \$3.5 million in LH Holding (for a 15% participation) to strengthen the company's capital base and support expansion. This recent round of financing aimed to further strengthen LH Holding's existing mortgage lending operations in Panama and El Salvador, and to facilitate ramp-up of the company's new operations in Colombia. Although funding from local investors was sufficient to enable LH Holding to get through the 2008 financial crisis, IFC funding has been critical to pursuing growth opportunities.



**International
Finance Corporation**
World Bank Group

IFC's Investment:

**\$60 million in long-term debt financing and
\$3.5 million in equity**

Manila Water Company

COMPANY BACKGROUND

Manila Water Company (MWCI) operates a 25-year concession for the water and wastewater system in Metro Manila's east service zone, a 1,400-square kilometer area encompassing the Philippine province of Rizal, with 23 municipalities and home to 6.1 million people. Following the 1995 Water Crisis Act, the floundering state-owned and operated Metropolitan Waterworks and Sewerage System (MWSS) was privatized in 1997 by partitioning its operations into two east-west concessions and offering them in an internationally competitive tender. The Manila Water Company was established by the consortium winning the tender with the lowest tariff bid of PHP2.32 per cubic-liter, 73.6% below the prevailing rate.

In 1997, the Ayala Group, one of the largest holding companies in the Philippines, took a controlling 52.7% interest in the newly-formed Manila Water Company, which immediately sought to address the system's chronic problems. Becoming profitable in 1999, the company continued to expand, and in 2005 was listed on the Philippine stock exchange. Today, Ayala retains a 43.3% stake, followed by Mitsubishi Corporation and IFC with 7% and 6.7% respectively, and the public and MWCI employees with the remaining 43%.

MANILA WATER'S INCLUSIVE BUSINESS MODEL

Manila Water's inclusive business model, Tubig Para Sa Barangay (TPSB), or Water for Poor Communities, is designed to reach low-income communities based on a clear business case: underserved, low-income households demonstrate a willingness to pay for safe, reliable water and connecting them means reaching new markets while reducing costs from inefficiencies and illegal connections.⁶ The TPSB model creates partnerships with local government units (LGUs) and community-based organizations (CBOs) to actively include communities themselves in the design and implementation of water supply systems. This establishes positive incentives for all stakeholders and helps ensure the success and sustainability of the program.

Manila Water's partnerships with LGUs and CBOs are formalized in Memoranda of Agreement (MoA) that legally define each party's financial and operational roles. Broadly, Manila Water takes responsibility for installing infrastructure, including pipes and meters, while local and municipal governments help reduce the cost, for example by waiving permit fees, providing small subsidies, or offering construction labor.⁷ Communities may determine their own level of participation; this is typically high, especially in low-income neighborhoods, where CBOs or LGUs are responsible for collecting and remitting fees to Manila Water, monitoring and maintaining systems, and preventing pilfering. Exact obligations are negotiated for each community or municipality.

Program costs are typically shared between Manila Water, municipalities and communities, although the communities typically remit payments

post-completion, leaving MWCI to bear the bulk of initial capital expenditures. For the 2004-2009 period, the company allocated P19 billion (\$351.85 million) for TPSB capital expenditures, funded directly from operations and borrowing. The precise cost-sharing breakdown is decided per MoA, but the P1.3 million Quezon City project serves as an illustrative example: MWCI bore 46.2% of the cost, while the municipal government and community shared 38.4% and 15.4%, respectively.⁸ The community component typically represents the cost of bringing water from central metering points to individual households, although both MWCI and LGUs offer financing mechanisms to reach as many homes as possible.

Communities themselves are central to the efficiency and cost-savings components of Manila Water's inclusive business model. By visibly placing water meters in side-by-side arrangements in public areas, meter monitoring becomes easier and the community can regulate itself as water use and fees become more transparent. In informal settlements or very low-income areas where land ownership is a problem, bulk metering and cost-sharing programs enforce self-monitoring through collective responsibility. The community also assigns or elects individuals to administer collections, monitoring and maintenance, which directly supports local employment. These methods help build a sense of local ownership and responsibility that enhances the system's good repair, promotes on-time payment, and discourages water pilfering. This results in superior service and water quality for the community and lower costs for Manila Water.

⁶ Baclagon, Maria Lourdes et al. 2004. "Water for the Poor Communities (TPSB), Philippines." Pro-poor Water and Wastewater Management in Small Towns, United Nations Economic and Social Commission for Asia and the Pacific. Page 12.

⁷ Ibid., page 40.

⁸ Ibid., page 43.

Manila Water Company

DRIVERS FOR MANILA WATER'S INCLUSIVE BUSINESS MODEL

- MWCI's concession agreement and associated operational targets
- Reducing system inefficiency costs and increasing metering and payment
- Reducing water contamination from aging or illegal water lines

When Manila Water Company began operating the concession in 1997, only 58% of the population had water service and only 26% of the service area offered 24-hour access. With a mere 1,500 connections, Manila's low-income households were especially underserved, forcing people to meet their needs for drinking and cooking water by fetching it from public faucets, buying it at inflated prices from street vendors, or tapping illegally into nearby pipes. Combined with physical losses from leaky pipelines, non-revenue water levels were as high as 63%. Meanwhile individuals buying from street vendors faced prices up to 16 times above MWCI tariffs, not to mention the health risks

of a nearly non-existent sewerage system that reached just 3% of the population.⁹

To remedy this situation, the service zone concession agreement set 23 operational targets, which formed the primary driver for Manila Water's inclusive business model. These targets included increasing water and sewer coverage, achieving 24-hour supply, meeting water quality and environmental standards, and decreasing non-revenue water. To enforce them, Manila Water was obliged to post a \$70 million performance bond that permitted the government to withdraw up to \$50 million from the bond for non-compliance.

RESULTS OF MANILA WATER'S INCLUSIVE BUSINESS MODEL

- EBITDA increased from P277 million to P6,803 million between 1999 and 2008
- The TPSB program has reached 1.6 million people
- 99% of customers have 24-hour water availability
- Customers now pay 20 times below per cubic meter rates previously charged by water vendors

Manila Water turned a loss-making operation into a financial, social, and environmental success story. EBITDA grew from a P37 million loss in 1997 to P277 million in 1999 and reached P6,803 million in 2008, an average increase of 42% per year.¹⁰ Manila Water has also successfully met its concession targets. By 2009, a total 3,155.86 kilometers of pipeline had been laid and MWCI served over one million households, reaching over six million people, with 1.6 million individuals benefiting under the TPSB program. These customers have 24-hour access in 99% of the distribution area, at water pressures high enough to conveniently use faucets and enable indoor plumbing.

System losses and non-revenue water have fallen dramatically, coming down from 63% in 1997 to 15.8% as of year end 2009, surpassing the concession obligation.¹¹ This has reduced costs for the company and customers alike, and connected households now pay 20 times below per cubic meter rates previously charged by water vendors.

MWCI's efforts have achieved 100% compliance with national drinking water standards, with a direct, positive impact on people's health: the Department of Health reported a 300% reduction in diarrhea cases from 1997 to 2007.¹² Finally, by providing local communities the opportunity to collect fees, monitor meters, and service pipelines, Manila Water's inclusive business model has generated over P25 million in new jobs, benefiting 850 families over the last several years.¹³

9 McIntosh, Arthur C. and Cesar E. Yñiguez. 1997. Second Water Utilities Data Book: Asia and Pacific Region. Manila: Asian Development Bank. Cited in Comeault, Jane. 2007. "Manila Water Company: Improving Water and Wastewater Services for the Urban Poor." Growing Inclusive Markets Case Study. New York: United Nations Development Programme (UNDP). Page 8.

10 Manila Water. 2008. "Manila Water Company Inc. 2008 Annual Report." Online at <http://www.manilawater.com/downloads/MWC-AR-2008.pdf> (accessed March 23, 2009).

11 Ibid.

12 Baclagon et al. 2004, page 43.

13 Manila Water. 2008.



IFC'S ROLE AND VALUE-ADD

IFC acted as lead advisor for MWSS's privatization, designing the operating agreement and overseeing the bid. This marked the first large-scale water privatization initiative in Asia. However, to meet the concession targets, Manila Water required an estimated \$2.72 billion over the concession period. The privatization also coincided with the Asian financial crisis, leading to a near doubling of Manila Water's existing foreign-denominated debt burden, which included a concession obligation to take on 10% of MWSS's outstanding loans. MWCI thus required significant long-term financing during a time that markets were constrained and shaken.

IFC provided Manila Water a \$30 million loan in 2003, a \$15 million equity investment in 2004, and an additional \$30 million loan in 2005. Advisory services supported these, helping the company rewrite its corporate governance manual and develop a sustainability strategy, marking the first time a Philippine company publicly disclosed its environmental and social performance on an annual basis. IFC's involvement also served as a stamp of approval supporting the company's 2005 IPO, which raised an additional \$97.8 million.



IFC's Investment:

\$60 million in long-term debt financing and \$15 million in equity

Mi Tienda

COMPANY BACKGROUND

Mexico's Sistema Integral de Abasto Rural S.A.P.I. de C.V., or Mi Tienda, is a privately held rural distribution company founded in 1999 by José Ignacio Avalos, one of the founders of Banco Compartamos, the country's leading microfinance bank. Mi Tienda began operations in Atlacomulco in central Mexico as a single distribution center

offering non-perishable food and personal care products to stores in surrounding villages, typically with populations of less than 5,000 each. Mi Tienda focuses on the country's more than 600,000 small-scale retailers in rural markets—where large retailers do not reach.

MI TIENDA'S INCLUSIVE BUSINESS MODEL

Mi Tienda's customers are small-scale retailers in small, rural villages. These retailers face a number of challenges, including small markets and traditional over-the-counter sales formats which further limit sales. With low weekly store purchases, they are unable to take advantage of economies of scale. They tend to have low levels of business knowledge and very limited access to finance. Most of their shops are below 10 square meters in size, often integrated into the owners' homes, where they are tended overwhelmingly—approximately 80%—by women. They serve customers with incomes averaging an estimated \$4 a day.

Mi Tienda offers these retailers a distinctive value proposition: affordable door-to-door delivery of individual items within 48 hours, extended payment terms, and business training and advice to improve sales. This is because its growth strategy includes increasing the volume of sales per customer, in addition to the numbers of distribution centers and of retail customers per center.

Mi Tienda's distribution centers are simple, approximately 1,000 square meter warehouses where products are stored. Once or twice a week, sales agents travel six or seven different routes, which typically cover between 620-740 rural stores, taking orders on laptops and synchronizing them at the warehouse at the end of the day. There orders are pre-assembled in boxes, by hand, for delivery drivers to take out the following day. There are approximately six trucks and six cars for every warehouse.

From a cost perspective, it is also important to note that villages in central Mexico are located fairly close together, which enables Mi Tienda to achieve operating efficiencies and economies of scale.

Mi Tienda also keeps costs down by stocking primarily non-perishable food and personal care products in a limited number of stock-keeping units (SKUs): roughly 1,000 compared with as many as 80,000 for a large retailer like Wal-Mart. Selection is highly customized to local demand and can vary from warehouse to warehouse. Mi Tienda sales agents, who

visit each retail outlet at least once a week, are well-positioned to gather information about what is selling and what is not. In addition, outlets that participate in the company's capacity-building program undergo more systematic demand assessments. As a general rule Mi Tienda has found that rural Mexican consumers are highly brand conscious, and would rather buy a smaller package of brand name detergent than a larger package of generic detergent. As a result, the company carries very few generic items.

Mi Tienda's single unit delivery helps retail outlets use their working capital more efficiently. The company helps further in this regard by offering extended payment terms of typically seven days to stores with proven track records. Approximately 60% of stores avail themselves of this option. Creditworthiness is assessed by sales agents based on personal knowledge and relationships developed during their weekly or twice-weekly visits. If stores are late in their payments, they cannot get more products—such a strong incentive to repay that the default rate has been less than 0.1%. The single unit delivery and extended payment options are both key differentiators for Mi Tienda in the rural distribution market, where store owners would otherwise have to travel long distances and pay in cash up front for large quantities of product.

Finally, Mi Tienda offers retail outlets free training and capacity-building intended to help increase their sales—and by extension their purchases from the company. The company has its own training unit staffed with trainers who typically visit and stay with each participating outlet for a week, helping with accounting, working capital management, inventory management, and product assortment. Trainers often help modernize store design as well, moving from traditional, over-the-counter sales set-ups to shelf displays that increase product visibility. Modernized stores have experienced, on average, 35% increases in sales.

Mi Tienda

DRIVERS FOR MI TIENDA'S INCLUSIVE BUSINESS MODEL

- Market opportunity for efficient commercial distribution in rural Mexico
- Desire to improve the lives of rural families by improving rural supply chain efficiency

Mi Tienda aims to build a business and improve the lives of rural families by improving rural supply chain efficiency. Four factors create a market opportunity for more efficient commercial distribution in rural Mexico: layers of intermediaries, limited access to working capital financing for micro, small, and medium retailers, high transaction and transportation costs, and poor feedback on the needs of rural populations to food and consumer products companies.

Many small, rural retailers are not yet served by wholesalers. If they are served, it is with minimum quantities of products and no working capital access. In Atlacomulco, for example, where Mi Tienda's original distribution center is located, 30% of stores are unserved. Mi Tienda's main competitors are Diconsa, a government entity with approximately 22,000 distribution centers across the country, and local wholesalers. However, these wholesalers do not deliver single units of product and their prices are higher—both of which increase retailers' working capital requirements.

RESULTS OF MI TIENDA'S INCLUSIVE BUSINESS MODEL

- 2 distribution centers serving 1,300 stores
- Operational break-even achieved
- 200 stores trained, with an average 35% increase in sales for those undergoing modernization
- Improved product accessibility and affordability

Mi Tienda has two distribution centers in operation, reaching about 1,300 stores and generating enough revenue to cover operating costs. With \$2.5 million in equity from IFC, a \$2 million loan and \$1 million capacity-building grant from the Inter-American Development Bank, and additional equity from other investors, Mi Tienda is now rolling out an additional 34 distribution centers over the next six years. Together, these 36 centers are expected to reach 25,000 stores serving 4.7 million households.

For the small-scale retailers in its network, Mi Tienda's inclusive business model has reduced working capital requirements and, where modernization has taken place, increased sales by an average of 35%. Cumulatively, additional revenues from modernization are expected to reach \$200 million by 2016.

At the consumer level, Mi Tienda's inclusive business model has improved product accessibility and affordability, and offers the possibility to pass on a portion of the efficiency gains to customers. Possible savings have not been measured but are estimated at 2-3%, which is not negligible for customers earning \$4 a day.

Finally, the company has begun to create a platform through which other services—such as micro-credit, insurance, and utility bill payment—can eventually be offered. As it develops, this platform is expected to become a major source of both revenue growth and development impact.



IFC'S ROLE AND VALUE-ADD

With overall profitability predicted only in the medium term due to the cost of ramping up, IFC's \$2.5 million equity investment has helped Mi Tienda go ahead with its plans to expand. IFC's investment has also played an anchor role, enabling the company to attract additional investors.

In addition to investment capital, IFC has contributed global retail sector knowledge and helped Mi Tienda implement international environmental, social, and corporate governance standards.



IFC's Investment:
\$2.5 million in equity

Moderna Alimentos S.A.

COMPANY BACKGROUND

Moderna Alimentos S.A. (Moderna) is Ecuador's leading miller and marketer of wheat flour. The company has been in operation since June 2009, when it was formed by the merger of Molino Electro-Moderna S.A., Molinos del Ecuador S.A., and Grupo Moderna. Each of these companies had more than 12 years of experience in Ecuador's wheat and flour market. The merger gave Moderna immediate control of 39% of the market; combined the companies' reach to different regions and customer groups nationwide; and generated competitive advantages like the ability to negotiate full cargo vessel shipments and consolidate port handlings and internal freight. This

has resulted in lower costs and greater affordability for customers at the base of the pyramid.

Headquartered in Quito, Moderna operates three wheat flour mills located in Manta, Riobamba, and Cajambe. Its trademark brand, Ya, is Ecuador's leading wheat flour brand. Additionally, Moderna produces and markets bakery products, and manages a chain of 13 bakeries under franchise in Quito. Today, Moderna is owned by the Correa family with 36.6%, Seaboard Corporation and Continental Grain Company with 25% each, the Lopez family with 10.6%, and investment fund Fondo País Ecuador with 2.8%.

MODERNA'S INCLUSIVE BUSINESS MODEL

Moderna reaches approximately 75% of Ecuador's nearly 6,000 small bakeries with its flour products. These bakeries come in two forms and sell their products in two different ways:

- **Individual bakers** bake bread in their own homes to be sold at open air markets. Because their volumes tend to be smaller, they sell directly from baskets as they walk through the markets.
- **Small bakery stores** are typically operated by two or three people, usually family members, who bake and handle sales. They are slightly more formal than the individual bakers because they have their own stores; however, these stores tend to be very small, approximately 40 square meters, with baking activities taking place in the rear and sales taking place in the front.

Moderna's approach is to supply bakeries with flour together with yeast, sugar, flavorings, and other essential ingredients as part of a "one-stop" package. In addition, Moderna provides extensive training sessions on efficient usage of flour, including the correct proportions and temperatures to use for baking bread. The company has deployed four training sites and offers training on the bakeries' own premises. It conducts periodic workshops on a variety of topics, such as bakery, pastry, business management, taxes, and even self-esteem. The company has 10 technical assistants who make an average of 400 client visits per month, and remain on call to support clients with production concerns and product development.

The one-stop package and technical assistance create business value for the bakeries in its client base. They also provide Moderna with a direct marketing channel that allows the company to establish and maintain direct relationships with its clients. Moderna flour is not the least

expensive brand in the Ecuadorian market, but small bakeries choose it over other brands for consistent quality, convenience, and opportunities for technical assistance.

Moderna's preferred method of distribution is direct sales and delivery. Moderna serves more than 2,700 bakeries this way in the country's two largest cities—Quito and Guayaquil—and most of the country's Andean region. In other markets, wholesalers comprise a large portion of Moderna's sales, and serve more than 1,500 additional bakeries. Wholesalers are serviced by Rey Ventas, a Moderna subsidiary.

Through the direct sales and delivery method, salespeople from Moderna or one of its exclusive, independent distributors visit bakeries weekly to review inventory and outstanding payments and place orders for delivery the following day. Deliveries are typically made weekly or bi-weekly, depending on the bakeries' storage capacity, and "emergency" deliveries can also be made if additional needs arise. The flour is delivered by truck, with the majority of customers receiving five to ten 50kg bags per delivery. Sales are made on credit for seven days, with payment expected on the salesperson's next visit. Credit is not used as a sales tool.

Whether a given bakery is served by Moderna staff or those of its exclusive, independent distributors depends on geography and security factors in the market. For example, in sparsely populated rural areas, highly dispersed and hard-to-reach bakeries are better served by independent distributors with the appropriate distribution models, and who can deliver other products at the same time. In cities like Guayaquil, informal settlements pose security challenges, and bakeries there are better served by local distributors.

Moderna Alimentos S.A.

DRIVERS FOR MODERNA'S INCLUSIVE BUSINESS MODEL

- Consumer preference for the *cachito* bread rolls sold by small bakeries
- Small bakeries consume over 90% of flour used for baking (baking, in turn, accounts for approximately 70% of the total flour market)
- Stability, loyalty, and profitability of the small bakery segment
- Rising demand for flour, at 3-4% annually

The overarching driver for Moderna's inclusive business model is market opportunity: Ecuador's approximately 6,000 small bakeries account for more than 90% of flour sales in the country. The company has found these small bakeries to be stable, loyal, and profitable customers. They tend to switch products infrequently because of the cost involved in adapting their baking methods. Furthermore, their demand for flour is rising, at a rate of 3-4% annually. One in 20 small bakeries, on average, grows into a medium-sized business.

Demand for flour at the small bakery level is further driven, in part, by consumer preferences.

The country's best-selling baked product is the *cachito*—a bread roll similar to a croissant sold primarily by smaller bakeries. Industrial bakeries do not produce *cachitos*, reinforcing small bakeries' competitive advantage. At \$0.30 for three, *cachitos* are well within reach of the average Ecuadorian consumer and small bakeries can sell large volumes, fueling demand for Moderna flour. While most bakeries sell on a cash basis, some have expanded into small convenience stores offering credit—further heightening the appeal for consumers at the base of the pyramid.

RESULTS OF MODERNA'S INCLUSIVE BUSINESS MODEL

- Over 10,000 individuals at more than 5,000 small bakeries have received business and bakery training
- 20% compound annual growth in revenues since 2009
- \$17.4 million in EBITDA in 2010

Moderna currently supports more than 4,200 small bakeries with critical ingredients, convenient ordering and delivery methods, technical assistance, and credit—contributing to their business stability and success, and helping to fuel a significant leap forward in the bakery business in Ecuador over the years. In total, over 10,000 individuals at more than 5,000 small bakeries have been trained.

As a result, Moderna has become the largest player in the flour market in the country, well-known to all experienced bakers. Revenues have grown at a compound annual rate of 20% since the merger in 2009. In 2010, EBITDA reached \$17.4 million.



IFC'S ROLE AND VALUE-ADD

Given the challenging economic environment in Ecuador, private sector companies are finding it increasingly difficult to raise financing. This includes strong and viable companies like Moderna. In 2010, IFC invested \$8 million in debt to help improve Moderna's competitiveness in the production and commercialization of wheat flour, and to extend its product mix to other staple food products such as pasta and bread.

IFC's investment is also acting as a catalyst, attracting other international financial institutions that can co-finance the investment program. For instance, IFC's participation has helped mobilize additional long-term debt from the Inter-American Investment Corporation.

Finally, through a partnership with the Global Alliance for Improved Nutrition (GAIN), IFC is supporting Moderna to develop a new commercial business model capitalizing on the company's experience in nutrition to benefit infants from underserved, low-income families. Through the IFC-GAIN Challenge Fund, IFC is contributing project management, project monitoring and evaluation, and knowledge of low-income market dynamics and incentives.



IFC's Investment:

\$8 million in long-term debt financing

Nib International Bank

COMPANY BACKGROUND

Founded in 1999, Nib International Bank S.C. (NIB) is one of Ethiopia's fastest-growing private banks, with total assets having grown 64% between 2008 and 2010 to reach \$400 million. It is headquartered in Addis Ababa and operates a network of 48 branches, providing extensive coverage throughout the country. NIB employs a workforce of about 1,700 people and serves more than 181,000 customers.

In 2010, NIB had the largest market share of loans to the Ethiopian agriculture sector, providing nearly 29% of all lending by private

banks. Also, with 6% of its lending allocated to agriculture, NIB had the highest share of total loan portfolio dedicated to the sector.

NIB is owned by 3,316 shareholders, of which Nib Insurance Company S.C. (6%), Moplaco Trading Co. Ltd. (4.6%), and Mr. Seid Hussein Ali (2.1%) are the three largest. The Bank's Board of Directors is comprised of 12 Ethiopian nationals who are responsible for formulating strategy and approving major policies and risk limits.

NIB'S INCLUSIVE BUSINESS MODEL

The Ethiopian economy is based on agriculture. In 2010, the sector accounted for 43% of GDP and employed 85% of the population. Coffee is a particularly important crop—it represents 35% of all export revenues and employs more than a million smallholder farmers. Ethiopia is currently the largest producer of coffee in Africa and the fifth largest in the world. In 2010, the country's coffee exports were valued at over \$500 million.

NIB is the market leader of the private banking sector in lending to agriculture. To maintain and grow this position, the Bank aims to expand its reach into rural areas and to continue to strengthen its risk management practices. In support of these goals, NIB is providing access to finance for cooperatives of smallholder coffee farmers as part of the Coffee Initiative in East Africa. The Coffee Initiative is a \$47 million program funded by the Bill and Melinda Gates Foundation and managed by the US-based non-governmental organization TechnoServe. Its goal is to increase the incomes of coffee farmers in Ethiopia, Kenya, Rwanda, and Tanzania by increasing the quality and quantity of coffee they produce.

In Ethiopia, participating cooperatives range from 300 to 500 smallholder farmers who average approximately three-quarters of a hectare of land each. Nearly 40% of NIB's bank branches are outside of Addis Ababa, providing a foundation on which to reach these farmers. Beyond physical access, the Bank's inclusive business model hinges upon partnerships for financial risk-sharing and farmer capacity-building.

For financial risk-sharing, NIB entered into an agreement with IFC establishing a three-year, up to \$10 million facility to provide working capital loans to cooperatives working with TechnoServe. The facility offers up to \$250,000 per cooperative, disbursed against cash flow requirements and collateralized by coffee stocks. The program is designed such that cooperatives should be able to repay their working capital loans within one year entirely through the sales of their coffee. However, IFC will cover up to 75% of any credit losses NIB incurs.

In order to qualify for the working capital loans, cooperatives must have the capacity to produce high-quality washed coffee that earns a premium in the market—the product of using the wet milling process to remove the skin and pulp from coffee cherries, and then wash and dry the coffee beans. During the coffee harvest, the cooperatives use the

working capital from NIB to purchase farmers' fresh coffee cherries and process them through the wet mills. Farmers benefit by receiving a competitive price from the cooperative at the time of sale and then a second payment, or dividend, out of the cooperative's net profit (calculated after all exports and debt payments are complete). Combining the first and second payments, farmers typically receive a share of two-thirds of their cooperative's gross revenues. Gross revenues for the 2010 harvest averaged \$100,000 but in some cases exceeded \$300,000 per cooperative.

TechnoServe's role is to help the cooperatives make effective use of the wet milling process to produce higher value-added coffee. TechnoServe provides technical assistance in operating and managing the wet mills, as well as close collaboration in the business development and governance of the cooperatives. For instance, it helps them organize and register formally, provides their leaders and farmers with training and technical support, and creates linkages with other players along the coffee value chain. One TechnoServe business advisor works closely with two to three cooperatives at a time, and coordinates local specialists that can provide additional training and agronomy services. In addition, TechnoServe helps the cooperatives negotiate and export their coffee directly to buyers instead of working through intermediaries.

TechnoServe's support for the cooperatives not only helps build their capacity, but in doing so, helps mitigate NIB's risk in lending to the coffee sector. TechnoServe also helps mitigate NIB's risk by getting involved at the due diligence stage, using its on-the-ground knowledge and experience to help the bank identify the best cooperatives to invest in. The due diligence process first considers technical aspects, such as the amount of coffee available, levels of competition around the cooperative, suitability of the wet mill site, and availability of labor. TechnoServe then helps the cooperative to develop a leadership team and assesses the leaders' skills and commitment to ensure strong governance. The final stage of due diligence involves supporting the cooperative to prepare a business plan and have it approved by member farmers. At any stage, a cooperative can be ruled out of consideration for NIB's working capital loans, which gives them strong motivation to fulfill its due diligence requirements. TechnoServe also plays an important role in ensuring that the cooperatives comply with environmental and social best practices.

Nib International Bank

DRIVERS FOR NIB'S INCLUSIVE BUSINESS MODEL

- Underserved but significant business opportunity in lending to the Ethiopian coffee sector
- NIB's commitment to support small farmers and promote sustainable growth in the coffee sector
- Need to mitigate risk in lending to the agriculture sector in Ethiopia

Despite the size and importance of the agriculture sector, and of coffee in particular, Ethiopian banks are often reluctant to lend due to the inherent risks of weather-dependent agriculture and the challenges of lending to smallholder farmers with no formal collateral or credit history. In fact, the general trend over the last year has been for private banks in Ethiopia to allocate smaller portions of their total loan portfolios to agriculture.

Nevertheless, agriculture remains one of Ethiopia's most promising sectors, and NIB's inclusive business model is designed to capture the business opportunity associated with its growth potential while at the same time mitigating the attendant risks.

TechnoServe's analysis suggests that in recent years, high-quality washed coffee has received, on average, a 50% premium

to low-quality, unwashed coffee in export markets. Furthermore, global demand for high quality or specialty coffee is increasing, making it the fastest-growing segment of the coffee export market. This represents an untapped opportunity in Ethiopia, where only 20% of coffee today is produced and sold as high-quality in export markets.

Over the life of the risk-sharing facility, the volume of coffee processed by borrowing cooperatives is projected to increase to 4,000 metric tons with an increasing share sold as high-quality—a strong indication that they will be able to repay the loans they take out. Furthermore, TechnoServe's capacity-building is designed to help build cooperatives that are sustainable after the organization phases out its assistance, representing potential repeat business for NIB.

RESULTS OF NIB'S INCLUSIVE BUSINESS MODEL

- Working capital loans to 62 cooperatives made up of 45,000 farmers
- Cooperatives have exported two million pounds of green coffee, receiving an average premium of 40% (\$0.75 per pound) above the price of low-quality, unwashed coffee
- Increase in cooperative revenues of approximately \$1.5 million
- 8% growth in NIB's agriculture lending portfolio in 2010

In 2010, NIB made working capital loans to 62 cooperatives made up of 45,000 smallholder coffee farmers. With TechnoServe's support for the wet mill model, the cooperatives produced and sold high-quality, washed coffee directly to 12 international buyers in Europe and the United States. They received on average 40% (\$0.75 per pound) more than they previously received for low-quality, unwashed coffee, translating into a total of \$1.5 million in added revenues. Over 1,500 full- and part-time wet mill jobs were created.

TechnoServe also supported the cooperatives to implement a broad set of sustainable business practices by providing trainings in environmental

stewardship, transparent economic practices, social responsibility, and operational health and safety. The recommended practices and associated training content were developed through close collaboration between TechnoServe and IFC. Each cooperative received 12 unique trainings before the start of the coffee harvest, for a total of 744 trainings delivered to cooperative leaders, employees, and farmers in 2010.

For NIB, the working capital loans have allowed it to remain a leading lender to the agriculture sector and to expand its portfolio even further, increasing its lending by 8% in 2010 over the previous year.



IFC'S ROLE AND VALUE-ADD

IFC's risk-sharing agreement of up to \$10 million with NIB facilitates access to finance for cooperatives of smallholder coffee farmers in Ethiopia. Given the risks associated with lending to the weather-dependent agriculture sector and a difficult regulatory environment, access to finance is one of the key challenges to scaling up and improving the quality of coffee production in the country. IFC's agreement with NIB not only reduces NIB's financial risk but also demonstrates confidence in the producer side of the country's coffee sector.

IFC's value-add also lies in its experience working on environmental and social best practices in sectors characterized by large numbers of smallholder farmers. In particular, IFC has been able to contribute its experience with sustainability standards and, in collaboration with TechnoServe, help improve wastewater and coffee pulp disposal practices.



IFC's Investment:
\$10 million risk-sharing facility

Promigas

COMPANY BACKGROUND

Founded in 1974, Promigas is an energy holding company headquartered in Barranquilla, Colombia. In addition to its own operations, it has investments in 18 other companies in the natural gas transmission and distribution, power distribution, and telecommunications sectors in Colombia, Perú, and Panamá. Its customers include power plants, cement, petrochemical, and mining companies as well as residential users. In its home country, Colombia, Promigas through

its five distribution companies serves close to 2.2 million households or 12 million people—approximately 25% of the total population.

Promigas is mainly owned by private investors such as Corficolombiana, Corredores Capital Private Equity, EEB, Amalfi, and Consultoría de Inversiones. Around 8.5% is owned by Colombian pension funds and the remainder is owned by more than 800 minority shareholders. The company has been listed on the Colombian stock exchange since 1989.

PROMIGAS' INCLUSIVE BUSINESS MODEL

Approximately 87% of Promigas' residential customers in Colombia belong to the country's lowest-income strata. The company has connected more than 90% of these customers to the natural gas network for the first time. Because the cost of a new home connection can be as much as three times monthly income for these families, at approximately US\$500 per home, Promigas and its five distributors offer financing in order to get over this main barrier to service penetration. New customers pay \$25 up front, and then spread the remaining amount over up to 72 months, paying an additional \$10-15 a month on their regular gas bills. Because natural gas costs less than other available energy sources, customers generally recoup their investments in four to six years through energy cost savings.

At various points, donors have provided funds partially subsidizing new home connections for certain low-income groups, but even the subsidized cost has typically exceeded recipients' capacity to pay up front. Nearly 98% of users belonging to the country's lowest-income strata have utilized the financing option, with an overall repayment rate of 98%.

As market penetration increased and more new customers paid off their connections, Promigas' revenues from that part of the business began to decline, leading the company to undertake a strategic planning process. Promigas realized that with more than 30 years of financing new home connections, it had developed a "hidden asset": knowledge of the payment habits of two million clients, 70% of whom had no other access to the financial system, and did not have credit histories available to other companies. The company also had a certain "share of wallet" from these clients already—the \$10-15 set aside in their monthly budgets to pay off their gas connections.

Promigas decided to leverage this asset and retain its "share of wallet" by offering its clients credit for other uses once they had paid off their gas connections. The company conducted a large-scale survey and found that people needed credit for home improvements, starting their own businesses, school fees, household appliances, and emergencies. Home improvements, especially floors, were clients' top priority since 50% of respondents either had plain cement floors in their homes or no floors at all.

After a year-long pilot phase, Promigas launched a new financing product focused on home improvements and appliances in December 2007 under

the Brilla name. The single brand name enabled Promigas and its local distribution companies (LDCs) to launch a unified marketing campaign and maximize brand recognition for the new program. Endorsing it using their individual brand names enabled the companies to take advantage of the consumer trust they already had.

Brilla offers loans of the same amounts clients had borrowed for their gas connections, at market interest rates and with repayment periods of up to 60 months. No down payment, co-signer, or collateral is required. The average amount borrowed is \$400, with monthly payments of \$15-30 incorporated into the borrower's gas bill. To be eligible, a borrower must have four years without missing a gas payment, be the gas account holder, and be finished repaying the gas hookup. He or she must present an identification card, two gas receipts, a signed contract, promissory note, and a repayment instruction letter. The monthly repayment includes credit life insurance (typically up to \$0.50 per person/month premium) to cover the outstanding amount in the event of the borrower's death.

Promigas and its five LDCs approach Brilla sales in different ways. They all rely heavily on two sales channels: door-to-door (either through contractors or through agents belonging to retailers) and direct point-of-sale transactions. Other channels include fairs, agencies, and call centers. For Brilla as a whole, points of sale account for 50% of transactions, door-to-door for more than 45%, and other channels for a minor share.

Once a borrower is pre-approved, he or she can purchase on credit from any one of the 271 retailers registered with Promigas. These retailers include hardware stores, department stores, and appliance vendors eager to expand their sales into segments that would not have been able to afford their products without credit—without those retailers having to provide credit themselves.

Promigas obtains capital to lend from its own retained earnings and local commercial bank lending. To manage risk, it relies on accurate assessment up-front, rigorous document control, and a convenient repayment channel—the borrower's existing monthly gas bill. As a safety measure, the company also sets aside 3% of loans outstanding as a provision for delinquency levels in receivables; so far this provision has not been used.

Promigas

DRIVERS FOR PROMIGAS' INCLUSIVE BUSINESS MODEL

- Company desire to sustain revenue stream from financing, once new gas connections had been paid off
- Demand for home improvement materials and appliances to improve low-income households' quality of life
- Limited access to financing for such purchases

Approximately 98% of Promigas customers took advantage of the company's financing option to connect their homes to the natural gas network for the first time since they could not afford to pay cash. While it required a lot of working capital, at market interest rates, this financing activity generated a reasonable revenue stream for the company, complementing its regulated revenues from distributing gas. As more and more customers paid off their gas connections, Promigas' revenues from financing began to fall, and the company began to look for ways to preserve its EBITDA and value by financing other items.

Through the survey conducted, the company found considerable demand for financing to purchase home improvement materials, such as flooring and appliances. Approximately 93% of the Colombian population and 70% of Promigas customers lacked access to financing from the formal financial system, leaving them dependent on informal lenders that charged up to 240% interest per year. This created a market opportunity for Promigas—given its intimate knowledge of its customers' repayment habits—to offer credit at more affordable rates, as allowed by financial authorities.

RESULTS OF PROMIGAS' INCLUSIVE BUSINESS MODEL

- More than 499,567 borrowers have benefited from Brilla credit, 93% of them in low-income segments; 31% of loan proceeds used to make home improvements
- \$140.4 million in loans outstanding, with only 1.31% more than 60 days past due
- Net revenues of \$30 million in 2010, up from \$1.5 million in Brilla's first year, and EBITDA of \$14 million

To date, Brilla has provided more than 499,567 borrowers with access to home improvement materials, appliances, computers, and capital to start micro-enterprises and pay school fees, thus helping to improve their standards of living. 93% of these borrowers come from low-income segments of the population. The company currently has \$140.4 million in loans outstanding, with only 1.31% more than 60 days past due. This compares favorably to almost 4% for the Colombian microfinance sector overall. Brilla generated net revenues of \$30 million in 2010, up from \$1.5 million in the program's first year, and an EBITDA of \$14 million. Promigas now considers Brilla one of its best businesses, mainly because of its impact on low-income families' living standards

but also because—being profitable—it is something the company can sustain over time. Brilla has created a wider economic ripple effect as well, creating 1,000 jobs within the Promigas system and among the suppliers and retailers that are part of the program.

Promigas' natural gas business has generated impressive results as well, serving close to 2.2 million households—12 million people, or approximately 25% of the Colombian population—with a cheaper and more environmentally-friendly cooking fuel. 87% of the company's natural gas customers come from low-income segments. Promigas' natural gas business registered consolidated net revenues of \$780 million in 2010, and a consolidated EBITDA of \$210 million.



IFC'S ROLE AND VALUE-ADD

IFC has been involved with Promigas since its inception as a shareholder, lender, and advisor on project formulation, structuring, and strategic planning. Though Promigas is a successful company, it has at various times faced the barrier of country risk in financing its operations. IFC has helped in a number of ways, including providing early stage equity, lending, and mobilizing additional debt financing from other international financial institutions. IFC was critical in enabling the company to access donor funding for new customers' natural gas connections. Finally, IFC has provided technical support on the environmental aspects of several projects, in some cases raising standards above Colombian government requirements.

With IFC's assistance, Promigas has transformed itself from a local company in the gas transmission business to an important player in the Colombian energy sector, with a diverse portfolio of transmission and distribution companies. Promigas has also become a multinational entity able to promote expanded natural gas use—with its significant economic and environmental benefits—to other countries in the region, such as Perú. The company has also successfully entered the telecom services market in Panamá.



IFC's Investment:

\$36.3 million in long-term debt financing and \$2 million in equity

PT Summit Oto Finance

COMPANY BACKGROUND

Based in Jakarta, PT Summit Oto Finance (OTO) is one of the largest motorcycle financing companies in Indonesia. OTO was initially established in 1990 as PT Summit Sinar Mas Finance, a joint venture between PT Sinar Mas Multiartha and Sumitomo Corporation. Sumitomo Corporation, an integrated trading company based in Japan, owns 99.6% of OTO directly and indirectly through Summit Auto Group and PT Sumitomo Indonesia. As the majority shareholder, Sumitomo Corporation provides support to and controls all aspects of the business, from management and treasury to financial and operational needs.

In 2003, OTO shifted its focus from corporate leasing to motorcycle financing exclusively, and changed its name to PT Summit Oto Finance. OTO provides financing to low- and middle-income consumers primarily in Java and Sumatra, and is currently expanding to rural regions. With over 13,000 employees and 12.4% market share, OTO has capitalized on the strong growth of the Indonesian domestic motorcycle market, and maintains its position as one of the leading players in the motorcycle financing business.

OTO'S INCLUSIVE BUSINESS MODEL

With good fuel efficiency and low acquisition and maintenance costs, motorcycles are widely used by low-income groups in Indonesia for both personal and business transportation. OTO focuses exclusively on new motorcycle financing through small loans to low- and middle-income borrowers. Nearly 99% of its more than 1.6 million active borrowers are individuals. The vast majority earn \$150 to \$300 per month and do not have bank accounts. Approximately 99% of them have only primary education and typically run micro-enterprises, or work as low-level employees. The average initial loan amount per customer is \$1,460.

OTO has successfully engaged a large pool of unbanked borrowers in a viable way by basing its business strategy on the microfinance model. Its approach relies on an effective understanding of its borrowers and close, continuous customer contact, rather than formal underwriting processes. Because its borrowers are typically the owners or employees of micro-enterprises, they often do not have good records and are unable to produce salary slips or other documentation to validate their incomes. As a result, client due diligence includes a mandatory visit before each credit decision is made—usually within 24 hours of receiving an application. OTO Credit Marketing Officers (CMOs) also talk to people in the applicant's neighborhood.

To maintain a structured appraisal process, CMOs are required to complete a standardized form for each applicant, verifying that he or she has

a credible and stable revenue source and a permanent residence. The form also tracks the size of the down payment made to the dealer (preferably more than 10% of the total motorcycle price) and the size of the monthly loan repayment relative to the applicant's income (preferably less than 30%). In an effort to reduce the risk of fraud prior to final loan approval, OTO has established a separate, internal team to provide oversight and order verification. This team's task is to ensure that the information collected by the CMO is correct.

Upon approval, loan proceeds are disbursed directly to the dealer following delivery of the motorcycle to the customer. The loan repayment period is typically 36 months, during which time OTO retains the title as collateral.

OTO has a national market penetration strategy built on a robust distribution network and strong partnerships. The company has 137 branches spread across the country, and cooperates with more than 4,000 authorized dealers of leading motorcycle brands—it is not captive to any particular manufacturer. OTO has entered into additional partnerships to support its collection efforts. For example, it has established payment and collection arrangements with the country's largest microfinance institution, Bank Rakyat Indonesia; the commercial banking system's ATM network; and the Indonesian Post Office network.

PT Summit Oto Finance

DRIVERS FOR OTO'S INCLUSIVE BUSINESS MODEL

- Strong demand for motorcycles
- Gap in access to motorcycle finance, especially among low-income groups
- Opportunity to capture first-mover advantage in rural areas

In many emerging markets such as Indonesia, motorcycles are the primary family and work vehicles and a principal means of transport for low-income groups. The Indonesian motorcycle market is the world's third largest after China and India, accounting for about 10% of global demand. Since 2004, national motorcycle sales have increased at an 11.5% compounded annual growth rate. Upgrades (e.g. from two-stroke to four-stroke engines) and business applications (like two-wheeler taxis) are expected to fuel even greater demand.

Nevertheless, market penetration in Indonesia remains low compared to neighboring countries. One reason for the difference is a lack of

access to financing in the country, as the main customer groups generally have insufficient savings to purchase motorcycles in cash.

Demand for motorcycles and a lack of access to financing to buy them have created a market opportunity for OTO, particularly in Java and Sumatra. Now, the company is seeking first-mover advantage by expanding into rural areas in Kalimantan, Sulawesi, and Aceh, which are not yet served by many financial institutions. In these areas, roads tend to be less developed than in cities like Jakarta, making motorcycles an even more effective means of transportation than other vehicles. In 2010, over half of OTO's new branches were opened in rural markets.



IFC'S ROLE AND VALUE-ADD

Sumitomo Corporation, OTO's majority shareholder, supports the company primarily through equity injections and requires it to raise its own debt financing. Sumitomo Corporation provides OTO with only emergency credit support in situations of market disruption, and guarantees none of its mid-term borrowings. Unlike many other financial institutions, which are majority-owned by banks, OTO has no easy access to cheap financing or to fixed long-term rupiah loans.

IFC's funding is designed to match the repayment and interest rate profile of OTO's loan portfolio, helping improve its asset-liability structure and reduce its market risks. IFC provides up to five-year, fixed-rate rupiah loans which are in short supply from other lenders. IFC is also building OTO's capacity to tap the securitization market when securitization becomes a viable source of financing in Indonesia.

With IFC's investment, OTO is expanding its motorcycle lending especially in underserved locations. More broadly, IFC's investment is strengthening Indonesia's limited Non-Banking Financial Institution (NBFI) sector. With lower operational costs than most banks, NBFIs can more efficiently finance low-income individuals and SMEs, making them critical to financial inclusion.

RESULTS OF OTO'S INCLUSIVE BUSINESS MODEL

- Increased mobility of people and goods, enabling greater access to markets and services
- Significant job creation along the motorcycle value chain, from manufacturing to sales to service
- Sustained improvement in OTO's business performance

In Indonesia, motorcycle finance has done more than enable consumption. First, it has helped develop a credit culture among large numbers of low-income customers with little to no previous exposure to the formal financial system. In the process of repaying motorcycle loans, these customers have built credit histories that will enable them to access other formal financial services in the future, moving closer to full financial inclusion.

Second, motorcycle finance has increased mobility among low-income groups. Mobility is an essential component of economic opportunity, as it increases productivity and may enable people to take higher paying jobs located farther from where they live. It also expands access to goods and services that may be available more cheaply, or at a higher level of quality, farther away. Compared with other mobility solutions, motorcycles are relatively inexpensive to purchase, operate, and maintain, making them especially well-suited for individuals with

limited incomes. Motorcycles can also be used to generate income, by working or trading.

Motorcycle financing has also played a critical role in enabling the motorcycle industry to grow and create jobs along the value chain, from manufacturing to distribution to sales and finally to after-sales service.

As a reflection of the value it has created for Indonesian society, OTO has maintained healthy growth coupled with good profitability. From 2004 to 2010, OTO's consumer financing receivables grew at a compound annual rate of 47%, and its net income rose at a compound annual rate of 55%. As a result of improving overall performance, the local rating agency Pefindo raised OTO's rating to AA-, indicating a stable outlook. In terms of asset quality, OTO's accounts more than 30 days past due stood at 3.9% at the end of 2010. Actual portfolio losses were slightly higher at 5.5%.



**International
Finance Corporation**
World Bank Group

IFC's Investment:

\$45 million in long-term debt financing

Salala Rubber Corporation

COMPANY BACKGROUND

The Salala Rubber Corporation (Salala) is Liberia's fourth-largest rubber producer. The company was formed in 2007 when the Weala Rubber Company, a stand-alone rubber processing factory, acquired the Salala plantation to secure and expand its raw rubber supply. The "new" Salala is currently owned 56% by Socfinaf (formerly Intercultures), a subsidiary of Socfin, and 44% by agribusiness investment company Agrifinal N.V. of Belgium. The Socfin Group is a holding company that owns a number of rubber and oil palm plantations, as well as management and trading companies.

The Salala plantation and factory are managed by Socfin Consultant Services, another subsidiary of Socfin. The marketing and sale of all Salala rubber products has been contracted to Sogescol, a third subsidiary of Socfin.

The Salala plantation is situated in the middle of Liberia's rubber producing belt with ideal soils, climatic conditions, and topography. It comprises a total area of 8,500 hectares of land with 90% suitable for planting. Salala also sources rubber from private farms and smallholders to supplement its own production capabilities.

SALALA RUBBER'S INCLUSIVE BUSINESS MODEL

The processing capacity at Salala's rubber factory greatly exceeds the volume of coagulated raw rubber (the sap-like extract known as latex) produced on its own plantation. As a result, Salala relies on third-party suppliers to meet its processing requirements and maximize efficiency. Only 20-25% of the company's rubber input is sourced from the Salala plantation, with the remaining 75-80% sourced from third parties.

Since IFC's investment in 2008, Salala has sourced more than 9,000 dry metric tons per annum from independent producers. The majority of these producers are smallholders based in Liberia's rubber belt. These smallholders own farms that are typically half a hectare to two hectares in size. Salala sources raw rubber from smallholders in two ways:

- **Direct supply:** Salala purchases raw rubber at its factory from independent producers within close proximity.
- **Indirect supply via buying stations:** Smallholders who cannot reach Salala's factory sell their rubber at one of 14 remote buying stations. These stations are owned by third-party agents who purchase smallholder rubber on Salala's behalf in exchange for a commission. When much smaller farmers are unable to reach either Salala's factory or one of the buying stations, they sell their produce to independent traders and other rubber producers, who then deliver to Salala's buying stations.

At the factory or buying station, the rubber is weighed, inspected, and paid for in cash. Salala's purchase price is benchmarked against the world market price and is in line with other players' purchase prices.

Purchasing managers at Salala's buying stations work with smallholders to increase yields, while forging relationships that help ensure their loyalty to the company. Salala provides in-kind support, technical assistance, and in some instances, credit to smallholder producers.

For example, the company provides smallholders with 1,000 rubber tree stumps for every 20 metric tons of raw rubber they sell to the company. In 2010 this amounted to over 350,000 stumps. Salala also provides additional inputs in-kind such as fertilizer, cutting knives, formic acid, rubber tapping containers, wires, and even rice for distribution to laborers—all at cost. Farmers have the option to pay in cash or on credit. When credit is extended to smallholders, repayment is deducted from the price they receive upon delivery of raw rubber to Salala. However, credit is extended only on a limited basis to suppliers who are reliable, long-standing partners because the company does not have enforcement mechanisms, such as contracts, to fall back on in the event a borrower does not pay.

Salala has also established a rubber tapping school. Through the tapping school, smallholder farmers receive quality improvement training and technical skills. Salala's quality enhancement team teaches farmers how to protect rubber from external contamination, for example, and shows them the correct ratios for mixing acid with wet rubber to make it congeal. Smallholders also receive guidance on how to tap rubber from a tree, when to tap it for the first time, how to build coagulation tanks, and how to organize tapping activities on a farm. Several hundred farmers have received agronomy support from Salala's quality enhancement team.

Salala Rubber Corporation

DRIVERS FOR SALALA RUBBER'S INCLUSIVE BUSINESS MODEL

- Production limits on Salala's own plantation, leading to reliance on third-party suppliers to fulfill raw rubber needs
- Prevalence of smallholder rubber farming in rural Liberia
- Government policy and declining productivity create a need for smallholder support programs

Production limits on Salala's own plantation lead the company to rely on third-party suppliers to achieve the volumes it needs to keep its processing plant operating at full capacity and minimize the unit cost of processing. The company has an installed processing capacity of 20,000 dry metric tons per annum, while presently it sources only 2,000 dry metric tons per annum from its own plantation.

Because of huge unmet demand by Salala and other buyers, and because the soil and climatic conditions are favorable for rubber cultivation in Liberia, rubber is the main agricultural crop in rural areas. Virtually all rural households grow some rubber trees. It is therefore logical for Salala to procure from them. The transaction makes sense for these smallholders, too,

because they cannot process the rubber themselves due to the high investment required.

In the absence of systematic replanting efforts due to the civil crises and the need for income during those periods, most timber trees were over-tapped, thereby reducing the economic lives of the trees. Yields from older trees are lower, adversely impacting profitability for the small farmer. The challenges to replanting or new planting are access to the planting material and related land preparation and agricultural services. Smallholders have limited capital available to meet these needs. These challenges have led Salala to deploy its tree stump program, offer technical assistance, and provide essential inputs at cost.



IFC'S ROLE AND VALUE-ADD

Liberia is a fragile state undergoing a dramatic post-conflict transformation. As a result, long-term financing is extremely scarce overall and is limited to a few of the largest export-oriented companies. However, new rubber plantings require long-term financing because they only begin to yield after seven years. IFC has filled this gap for Salala, providing a loan of \$10 million repayable over 11 years.

IFC's financing was also used to upgrade the company's processing capacity. This has facilitated its certification under ISO 9001 and the receipt of the quality accolade from Michelin. IFC's financing also supported improvements in social infrastructure, especially worker housing that was in very bad shape due to neglect during the civil crises.

IFC is also helping to ensure that Salala's operations comply with environmental and social standards. Finally, IFC's participation provides validation and a strong signal to the Liberian government, which is keen to implement broad-based economic, social, and environmental development measures.

RESULTS OF SALALA RUBBER'S INCLUSIVE BUSINESS MODEL

- 75–80% of raw rubber—more than 9,000 metric tons per annum—sourced from smallholders since 2007
- 1,800 smallholders in Salala's supply chain support an additional 4,000 farm workers and a total of 20,000 people, including dependents
- Only Liberian processor of smallholder rubber to be awarded a 10 grade by Michelin

Salala currently procures 75–80% of its rubber requirements—more than 9,000 metric tons per annum—from 1,800 smallholder farmers. This activity supports the livelihoods of an estimated 4,000 farm workers and a total of 20,000 people, including dependents. It also supports a network of small, local companies and entrepreneurs, including 11 transporters of wet rubber from buying stations to the factory.

Salala is the only processor of smallholder rubber in Liberia to be awarded a 10 grade by

the Michelin Tire Company. This designation recognizes the efficiency of Salala's production process and the low level of impurities in the finished product. This is typically difficult to achieve with rubber sourced from smallholders, which tends to contain more impurities than plantation rubber due to less efficient tapping and coagulation. Salala has also achieved ISO 9001 certification for quality management.



IFC's Investment:

\$10 million in long-term debt financing

Sociedad de Acueducto, Alcantarillado y Aseo de Barranquilla (AAA)

COMPANY BACKGROUND

Sociedad de Acueducto, Alcantarillado y Aseo de Barranquilla (AAA) was the first company established under an innovative policy framework for the water and sanitation sector in Colombia. Called the “mixed capital model,” this framework encourages public-private cooperation to expand coverage in poorer municipalities not effectively served by traditional public utilities. AAA began providing water, sanitation, and solid waste management services to the city of Barranquilla, in northern Colombia, in 1993 with an exclusive

20-year concession that was later extended for another 20 years. The company has since expanded into 12 other municipalities.

AAA is majority-owned by Interamericana de Aguas y Servicios S.A., a Spanish water systems management and consulting services company, at 82.15%. The District of Barranquilla owns a 14.51% stake with the remaining 3.34% being held by private local shareholders.

AAA'S INCLUSIVE BUSINESS MODEL

When AAA began operating Barranquilla's water and sanitation system in 1993, only 66% of households were connected to water, and only 54% were connected to sewer. Among low-income households, there was virtually no coverage.

Under AAA's concession agreement, the District of Barranquilla (DoB) retained ownership of existing water and sanitation infrastructure, as well as the responsibility for constructing additional infrastructure as required to expand the network. AAA was to pay royalties and invest in network maintenance. However, in 1999, the company launched a major capital investment project with its own funds. At that moment, the value of this investment was equivalent to the payment of the royalties until 2013. The company thus paid in advance the royalties until that year. The Suroccidente Project aimed to extend water and sanitation services to the southwest part of Barranquilla where the city's poorest citizens live. Over the next four and a half years, the approximately \$48 million project installed more than 361 km of water pipeline, 378.9 km of sewerage ducts, and 40,000 household water connections in 53 neighborhoods. The company also installed water meters in each house. The cost of the connection was billed to the household in installments included in each monthly bill.

AAA knew low-income households would be willing to pay for safe water piped into their homes—they typically bought water from tanker trucks at very high prices, and suffered from gastrointestinal diseases related to low water quality and a lack of sanitation services. But turning them into customers took more than physically connecting them to the grid.

Public awareness and community outreach were important first steps. The vast majority of people living in southwest Barranquilla never had access to formal water and sanitation services, and were suspicious of outsiders coming in to offer them. Many people believed that the water meters meant they would have to pay more, and considered sewage a luxury. Doubt and mistrust were encouraged by local political interest groups connected to the water tanker trucks.

AAA responded with a large-scale public awareness campaign about the benefits of water and sewer service in the home, how water meters work,

what the costs are, and how they are billed. The company used radio and television, and hired more than 40 full-time staff—mostly social workers familiar with the area—to help educate community members and answer questions. To integrate itself even further, AAA hired local workers to help dig the pipelines.

Turning low-income households into customers has also required innovations in customer service. For example, recognizing that many of these households' income patterns are variable and many have difficulty saving until the end of the month, AAA went to great lengths to incentivize them and make it easier to pay on time. Customers without bank accounts can pay at pawnshops, grocery stores, and department stores, among others. The company also sets up portable bill paying stations in low-income neighborhoods so that those in arrears can arrange customized payment plans, ensuring their service isn't cut off for long. Customers who stay current with their bills are recognized as “super clients,” receiving discounts and points receivable for goods from local retailers eager to do business with households known to be good payers. “Super clients” also receive special treatment from AAA, including thank-you letters from the CEO, which are valuable in seeking credit. These strategies have had a strong positive impact on the company's collection rate.

Technology has been critical to good customer service and also to keeping costs down. For example, AAA has dramatically improved the way it responds to maintenance requests by using custom software to coordinate field inspectors and work crews via mobile phone. This system has reduced the time it takes to make repairs by nearly half. Such operating efficiency helps AAA keep its prices within reach of low-income households.

Cross-subsidization also helps the company keep prices within reach. By Colombian law, water tariffs are designed such that higher-income households pay more for service than lower-income ones. Specific rates are negotiated with federal regulators, company by company, on a “cost-plus” basis. The federal government also provides subsidies based on the number of people being billed and the specific rates being charged.

Sociedad de Acueducto, Alcantarillado y Aseo de Barranquilla (AAA)

DRIVERS FOR AAA'S INCLUSIVE BUSINESS MODEL

- Pent-up demand for affordable, safe water in low-income neighborhoods
- Policy framework encouraging public-private cooperation in the water and sanitation sector in Colombia

Before Barranquilla's low-income neighborhoods were connected to the water and sewer grid, they bought water from tanker trucks at very high prices and suffered from gastrointestinal diseases related to low water quality and a lack of sanitation services. AAA saw a market opportunity to provide access to safer, more affordable water in the home.

Colombian government policy also contributed to the market opportunity. To expand water and sanitation services in historically underserved

areas, the federal government promoted the "mixed capital model" in which municipalities allow private companies to operate publicly-owned distribution infrastructure in return for royalties. It also offered subsidies, channeled through municipalities, to make serving low-income households more attractive. In line with these policies, the District of Barranquilla (DoB) concessioned existing infrastructure to AAA and agreed to pass on the federal government subsidy.

RESULTS OF AAA'S INCLUSIVE BUSINESS MODEL

- 24-hour water and sewer coverage has increased from 66% and 54% in 1993 to 99% and 96% today, respectively
- 1.1 million low-income citizens of Barranquilla connected to water and sewer services, paying 72% less than they would pay water tanker trucks
- Collection rates have increased from 66% in 1996 to 96% today

In 1993, when AAA began operating, only 66% of Barranquilla's population had access to piped water 24 hours a day. Only 54% had access to sewerage. Today, those figures are 99% and 96%, respectively. 1.1 million low-income citizens have been connected for the first time, 350,000 of them through the Suroccidente Project. Such customers pay 72% per cubic meter less, on average, than they did when they relied on water tanker trucks.

Thanks to customer service innovations like convenient bill payment and the "super client" recognition program, AAA has increased its collection rate from 66% in 1996 to 96% today. Technology-enabled efficiency gains have also

contributed to its financial success. From net losses of \$1.86 million in 1996, the company reached a net profit for the first time in 2001, and has been profitable ever since. In 2010, AAA registered net revenues of \$150 million and a net profit of \$0.4 million. AAA also registered a gross margin of 39% and an EBITDA margin of 28% in 2010. As of December 2010, the company had total assets of \$230.3 million, total liabilities of \$131.3 million, and total equity of \$99.1 million.

From its original operations in Barranquilla, AAA has expanded into 12 additional municipalities in Colombia. The company now serves approximately 1.58 million people.



IFC'S ROLE AND VALUE-ADD

The Suroccidente Project to expand water and sewer infrastructure into Barranquilla's low-income southwestern region required significant capital expenditures that strained AAA's finances. With a \$24 million partial credit guarantee (PCG) from IFC, the company was able to issue two local currency bonds with long maturities that would otherwise have been impossible to obtain, replacing shorter-term debt it had previously used to finance its investment program. The bond issue also helped reduce the company's currency risk, as some of its shorter-term debt had been denominated in dollars, while its revenues were in Colombian pesos. These advantages, combined with process improvements made to comply with IFC's strict guarantee covenants, have put AAA in a solid financial position—helping the company serve low-income households in a financially sustainable way.

In addition to providing the partial credit guarantee, IFC has helped AAA raise its environmental performance standards. Most recently, IFC Advisory Services has begun working with the company on a utility efficiency program intended to reduce unaccounted water levels, as well as energy losses. This program is currently in its first phase of implementation.



**International
Finance Corporation**
World Bank Group

IFC's Investment:

\$24 million partial credit guarantee

Suvidhaa Infoserve Private Limited

COMPANY BACKGROUND

Suvidhaa Infoserve Private Limited (Suvidhaa) offers individuals the means to make electronic payments—online and over their mobile phones—for a variety of virtual products and services, making payments more convenient and less costly and expanding consumer choice in the marketplace.

The company was founded in 2007 by Paresch Rajde, an e-commerce entrepreneur. Suvidhaa currently employs over 250 staff

with experience in retail payments, e-commerce, and technology. Suvidhaa's shareholders include the company's founder Rajde; angel investor Shapoorji Mistry, chairman of the leading Indian conglomerate Shapoorji Pallonji Group; Northwest Venture Partners in California; Reliance Venture Asset Management Ltd. of the Reliance ADA Group in India; and IFC. Suvidhaa is headquartered in Mumbai, India.

SUIDHAA'S INCLUSIVE BUSINESS MODEL

India is predominantly a cash-based economy. Suvidhaa's innovative business model uses modern information and communications technology (ICT) to address the needs of consumers who transact in cash, and thus find their purchasing options limited to those available in their immediate vicinities. By the same token, Suvidhaa serves companies wishing to reach these consumers, who would otherwise have had to travel long distances and forego wages in order to purchase their products. As of mid-2011, Suvidhaa offered online and mobile payments for the products and services of 250 businesses in categories such as utilities, travel, banking and financial services, entertainment, telecommunications, and education. Many of these products and services are "virtual" and don't require physical distribution—including rail, air and bus tickets, life insurance premiums, domestic remittances, mobile phone airtime and more.

The company reaches consumers through a two-tiered franchised distribution network. Closest to the consumer are Suvidhaa Points, where purchases and payments can be made. Between the Suvidhaa Points and the company are Suvidhaa distributors, which serve as intermediaries.

Suvidhaa Points are small-scale retailers whose primary business is to sell groceries, travel services, mobile phones, airtime or insurance. They must own or purchase at their own cost a computer, a printer, and broadband Internet service to run Suvidhaa's Point of Sale (POS) software, connect to its proprietary Service Commerce (s-commerce) technology platform, and make transactions. To make online payments on behalf of customers paying in cash, retailers must also deposit INR 5,000-10,000 with Suvidhaa in advance, which is then stored in an electronic money wallet ready to be transferred online at the time of payment. Retailers may conduct transactions up to the amount in this wallet, which they may increase at any time.

Suvidhaa Points are selected by Suvidhaa distributors. Typically Suvidhaa distributors are independent retailers selling groceries, fast-moving consumer goods or telecommunication products. With an average staff of five and strong finances, each distributor is responsible for approximately 200 Suvidhaa Points. Suvidhaa distributors hand-hold retailers by advising them on managing day-to-day operations, cash and credit, and other topics. They can also accept cash and top-up retailers' electronic money

wallets on their behalf, if retailers are unable to deposit directly into Suvidhaa's account.

In a typical Suvidhaa transaction, an individual consumer purchases a product or service in cash at a Suvidhaa Point. The owner accepts the consumer's cash, and uses the Suvidhaa POS application to submit the payment online out of his or her pre-paid electronic money wallet. The Suvidhaa system then manages the flow of electronic money from the Suvidhaa Point to Suvidhaa to the product or service provider, processing payments, settling accounts, and fulfilling transactions via a receipt or e-ticket issued to the consumer by the Suvidhaa Point owner. Each transaction generates a commission, which is shared by Suvidhaa, the Suvidhaa Point owner, and the distributor. Suvidhaa also earns revenues through sign-up and subscription fees charged to Suvidhaa Point owners.

Scale is important for an electronic payments provider like Suvidhaa, and the company is working to build a ubiquitous retail network. It counts over 42,000 small-scale retailers as part of this network. In addition, Suvidhaa is forging partnerships with the government and businesses that have strong delivery channels in place. For example, Suvidhaa has been appointed an official partner in the National e-Government Program of the Indian government, allowing the company to offer online payments through 68,000 Rural Common Service Centers providing e-government services. Suvidhaa has also partnered with the government-owned telecom company Bharatiya Sanchar Nigam Ltd. to work through 234,000 Public Calling Offices. Also, through a partnership with Financial Information Network and Operations Ltd. (FINO), Suvidhaa offers electronic payments through over 8,600 FINO agents who provide financial services to individuals with low incomes. Moreover, Suvidhaa is working with leading companies such as Essar Oil, Tata Consultancy Services, and others to offer its e-payment services through kiosks on their premises.

Suvidhaa is also helping to bridge both the digital and rural-urban divides in India through Suvidhaa Points offering mobile phone-based payments to consumers in rural areas with limited or no access to electricity, PCs, or the Internet.

Suvidhaa Infoserve Private Limited

DRIVERS FOR SUVIDHAA'S INCLUSIVE BUSINESS MODEL

- Business opportunity to facilitate the spread of e-commerce in India
- Market demand for electronic payment solutions to reach consumers that transact in cash
- Demand from employers for electronic payment services for employees to reduce productivity losses
- Rapid mobile phone penetration presents an opportunity to reach consumers in rural areas

E-commerce offers consumers advantages like convenience, greater choice and easier access. In India, however, only 8% of the population uses e-commerce due to limited or no electricity, as well as low PC and Internet penetration (7% and 10% respectively). Only 60% of the population has a bank account and only 28% of the adult population has a credit or debit card. And mobile phone-based “wallets” that enable unbanked consumers to pay electronically are at a nascent stage of development. As a result, India is predominantly a cash economy, with 91% of all transactions conducted in cash. Suvidhaa has found a business opportunity in offering an alternative e-commerce system capable of improving efficiency, reducing cost, and increasing consumer choice and convenience under these difficult circumstances.

At the same time, product or service providers are looking for ways to transact with geographically dispersed consumers that lack access to financial services and modern ICTs, and therefore pay in cash. Employers, too, are looking for ways to facilitate electronic payments for their employees. Employers seek to reduce productivity losses incurred when employees must take time off to pay bills, purchase travel tickets, and make other such transactions.

Finally, with over 827 million mobile phone subscribers in India, the mobile phone-based business-to-consumer sales channel holds great promise. Businesses seeking to leverage mobile phones to reach underserved consumers need an intermediary like Suvidhaa to address the complex distribution and electronic payment logistics involved.

RESULTS OF SUVIDHAA'S INCLUSIVE BUSINESS MODEL

- More than four million individual Suvidhaa customers as of mid-2011
- 42,000 Suvidhaa Points offering payments in 1,700 cities or towns in 28 states of India
- 250 product or service providers in 20 industries using Suvidhaa to transact with customers

Suvidhaa has more than four million customers—including 300,000 unique customers added each month in the first half of 2011 alone—that make online payments using one of approximately 42,000 franchised Suvidhaa Points in more than 1,700 cities or towns spanning 28 states. Suvidhaa expects to have a total of 250,000 Suvidhaa Points by 2015, including an estimated 70,000 in rural areas. Suvidhaa has enabled electronic payments for 250 product and service providers in 20 industry categories.

Suvidhaa has brought benefits to small-scale retailers, consumers, and product or service providers alike. Small-scale retailers with average revenues of \$75 to \$100 per month have been able to increase revenues by offering Suvidhaa services. In addition, retailers have seen greater customer traffic, which has helped drive sales of

their core products. Consumers have benefited from greater choice of products and services; increased convenience; and reduced costs in the form of travel time, foregone wages, and the need to pay higher, non-standard commissions to middlemen. Product and service providers have reduced their operating costs using Suvidhaa to reach and engage customers, and gained access to new customers.

Suvidhaa has received various international and national awards, including the Red Herring 100 Asia Award for its technology platform and socio-economic business model in 2009. Suvidhaa's founder also received the Institute of Chartered Accountants of India's Business Achiever Award in 2009-10 for leadership in taking the company to scale in a short period of time.



IFC'S ROLE AND VALUE-ADD

In 2010, IFC invested \$5 million in equity in Suvidhaa, contributing needed long-term investment capital to an early-stage company. IFC's investments in Suvidhaa and similar companies are intended to help fuel growth in the electronic payments industry as a whole, recognizing that the associated efficiency and financial inclusion gains have significant implications for economic growth worldwide—and for development in emerging markets in particular.

In addition to financing Suvidhaa, IFC is contributing global expertise and knowledge that it has gained from its portfolio of companies in payments processing and e-commerce, as well as relationships with mobile network operators, financial institutions and other relevant service providers. IFC is also supporting Suvidhaa to strengthen its corporate governance, which is critical for an early-stage company seeking to expand operations and sources of finance.



IFC's Investment:

\$5 million in equity

Tribanco

COMPANY BACKGROUND

Tribanco is a financial institution established by Grupo Martins in Brazil in 1990. Headquartered in the city of Uberlândia in the state of Minas Gerais, Tribanco maintains a full banking license and as such is monitored by the Central Bank of Brazil. It provides financial and management assistance to Grupo Martins' retail clients and does not service the general public.

Grupo Martins is the largest wholesaler and distributor in Latin America with more than 50 years of experience in the region. It distributes food, electronics, home improvement supplies and pet food to more than 300,000 micro, small and medium enterprises (MSMEs) in Brazil. Grupo Martins created Tribanco as part of a broader strategy to maintain market positioning against large foreign retailers entering the Brazilian market and to better service its own retail customers.

TRIBANCO'S INCLUSIVE BUSINESS MODEL

Tribanco serves as a financial intermediary in the Grupo Martins distribution chain, offering financial and management solutions for retail clients that are predominantly family-owned micro, small, and medium-sized enterprises (MSMEs). Martins' philosophy is that its own growth will be driven by its customers' growth. Thus, it sees itself as a logistics company in the business of helping its customers become more competitive, rather than a traditional distribution company. Tribanco proactively visits more than 90% of Brazilian towns, identifies the most entrepreneurial of the small stores it services, and then partners with them to provide renovation loans, training, and other services to enable them to grow.

Tribanco offers several credit and non-credit services to retailers, including:

- Extending check-cashing services and loans to retailers for purchases or store renovations
- Issuing Tricard customer credit cards for retail outlet shoppers
- Offering capacity-building and business training to retailers

Tribanco has about 150,000 MSME clients borrowing in the short term for purchases made from Martins, borrowing on average \$312 each time. In addition, approximately 15,000 clients each year borrow for other needs, with an average loan size of \$8,600. Lending is offered as a way for stores to purchase inventory on credit and make store improvements such as lighting, displays, and technology. A small team of loan officers, who are full-time Tribanco employees trained in credit risk assessment and analysis, works directly with stores to help them access credit through Tribanco and to educate retailers and customers on financial services outside the Grupo Martins system.

Additionally, 9,000 MSMEs participate in Tricard, Tribanco's branded credit card program. After receiving training from credit officers on customer creditworthiness, retailers decide which of their customers are

eligible to receive shopper cards. Although Tribanco assumes non-payment risk, those stores with higher repayment rates receive lower transaction fees. Thus, retailers are incentivized to choose wisely and help ensure shoppers repay.

Tricard has issued 4.04 million credit cards to shoppers, 40% of whom earn monthly incomes below \$280 and 71% below \$450, to provide them with short-term access to credit to buy needed food and products. The repayment rate is 96.5%, likely due to the fact that Tricard holders tend to be regular customers who live in the area. They recognize that if they do not pay, they will have their cards taken away and may also have to find new, less convenient stores to purchase groceries.

Retail owners and managers also benefit from capacity-building and training on store management and marketing practices such as creating displays and offering customer promotions. Training is predominantly offered through distance learning, although some retailers also have access to more formal, classroom training. In some instances this is tied to performance incentives; for example, retailers earn points based on their purchases which they can redeem for free classroom training through Martins Retail University. Further, Grupo Martins employs mixed training models to address the needs and geographic constraints of their customers. For example, Grupo Martins has used a bus that converts into a classroom to travel around to rural areas, providing online courses and in-person instruction.

In 2009 Tribanco started to work with insurance through Tribanco Seguros, issuing over 4,500 insurance policies to low-income customers. Tribanco also partners with financial and non-financial institutions to offer other services for its clients, for example collecting customer checks by the National Postal Service or issuing private label credit cards.

Tribanco

DRIVERS FOR TRIBANCO'S INCLUSIVE BUSINESS MODEL

- Business opportunity to provide micro, small and medium retail clients with access to financing to maintain operations and improve profitability
- Competitive need for Martins to differentiate itself and maintain strong market presence against large, foreign retailers entering Brazilian market

Tribanco has enabled Grupo Martins to differentiate itself from large foreign retailers and maintain its market position as one of the largest distributors in Latin America. By offering credit services and training to retailers, it is helping them remain profitable and in many

cases, expand. This in turn helps Grupo Martins maintain its own growth and market presence as the distributor to these retailers. Further, Grupo Martins is offering customized, value-added services to its customers which serve to strengthen brand loyalty.

RESULTS OF TRIBANCO'S INCLUSIVE BUSINESS MODEL

- Serves over 150,000 MSMEs nationwide with credit and financial services
- Issued over 4.04 million credit cards to consumers accessing 9,000 retail shops
- Greater financial inclusion among the two thirds of the Brazilian population without access to banking services today

Tribanco now serves about 150,000 MSMEs nationwide, offering credit and financial services. It has issued 4.04 million credit cards to consumers shopping at 9,000 outlets. This model has enabled small shops to enhance their profitability, long-term survival, and growth. In turn, it has enabled Grupo Martins to develop a competitive advantage versus large foreign retailers entering the Brazilian market, build customer loyalty, maintain a strong market presence.

Brazil is one of the least "banked" middle-income countries, and lack of access to finance negatively impacts the country's economic productivity and social inclusion.¹⁴ Operating in the most remote and neglected urban and rural areas of Brazil where little to no access to financial services exists, Tribanco is therefore enabling people to save, manage risk, increase earnings, and pursue profitable business opportunities.

Tribanco's credit assessment approach addresses the market failures deriving from the current financial system, which perpetuates lack of access among the working poor. Specifically, regular banking credit assessment models give low scores to lower income people even if they have a steady source of income. With an alternative credit assessment model that relies upon the storeowner's input, Tribanco is able to address this asymmetry of information and provide credit to its customer base. In doing so, it provides the working poor with a way to smooth irregular cashflows over the short term and promotes greater financial inclusion in the long term. Finally, since Tribanco is often an individual's first credit card ever, it enables consumers to build credit histories and access greater financial services in the future.



IFC'S ROLE AND VALUE-ADD

IFC extended a credit line of \$10 million to Tribanco in 2004 and an additional \$15 million in 2009 to enable it to diversify debt sources and gain longer-term flexibility in financing. Additionally, Tribanco collaborated with IFC to strengthen its role as a financial intermediary to retailers.

IFC complemented its investment with a \$200,000 advisory services program to develop Tribanco's internal training capabilities. Investments have helped Tribanco introduce a "credit-centric" culture and hire and train more full-time credit agents; develop marketing, finance and credit assessment training modules for credit officers; incorporate sustainability training (social responsibility and environmental awareness) in the curriculum; and partner with a third party to carry out monitoring and evaluation programs.



IFC's Investment:

\$25 million in long-term debt financing

¹⁴ Kumar, Anjali (2004). "Access to Financial Services in Brazil." Washington, DC: The World Bank.

Uniminuto

COMPANY BACKGROUND

Corporación Universitaria Minuto de Dios, or Uniminuto, is a rapidly growing not-for-profit tertiary education institution established in 1990 in Bogotá, Colombia. Uniminuto offers affordable, high-quality technical, technological and university education. Its largest presence is at the principal Bogotá campus where 30% of its students attend school. Its national network reaches 35,000 students in 34 locations in 11 municipalities, as well as 500 students enrolled in distance learning programs.

Uniminuto is a subsidiary of Minuto de Dios, a Catholic organization founded by Father Rafael García Herreros in 1955 to help the neediest populations regardless of faith. Minuto de Dios implements low-income housing, health, small and medium enterprise finance, agribusiness, media and education programs in 1,000 municipalities in 17 out of 32 departments in Colombia.

UNIMINUTO'S INCLUSIVE BUSINESS MODEL

Uniminuto's mission is to offer high-quality, easily reachable, complete and flexible higher education to support the development of highly competent and ethically responsible individuals in Colombia. Uniminuto offers undergraduate, technical, specialty and master's courses, targeting lower-income students with courses emphasizing employability, affordability, and accessibility through multiple sites around the country and a distance learning platform.

Uniminuto operates independently and through formal collaborations with other universities or government entities. It owns five teaching sites and leases several other sites. It also receives fees to administer 18 government-sponsored sites located in marginal urban or remote areas and works with two independent tertiary schools to provide education services through a management agreement. Its main source of revenues is tuition fees, although it also receives grants and government funding.

Uniminuto courses emphasize quality and flexibility through a modular structure with early, compulsory levels covering core material and later levels covering more advanced material, leading to higher qualifications. This enables individuals to move from level to level, and exit with qualifications at more than one point. Uniminuto maintains quality standards by meeting mandatory accreditation requirements and is working to achieve higher institutional accreditation by 2012, a rare achievement attained by fewer than 10% of tertiary schools in Colombia today.

Since the end goal is for students to find employment, Uniminuto's offerings emphasize technology and focus on providing students with the skills needed to find full-time employment after graduation. It works with business, government and non-governmental organizations to ensure that curricula meet potential employers' needs. In fact, more than half of Uniminuto's programs are vocationally-oriented. Course offerings represent key productive sectors in Colombia, including agribusiness and

construction, and are tailored to reflect regional industry mixes, with certain sites offering hotel management and agro-ecology. Short-term courses in skills demanded by prospective employers, such as web design and occupational health, are also offered. Finally, Uniminuto offers low staff-to-student ratios and programs such as pre-term workshops and basic skills tutoring to support students from lower socioeconomic groups.

Uniminuto has been able to ensure geographic reach through a network of classroom facilities in different regions and through distance learning. Its Bogotá campus is housed in an urban part of the city close to the surrounding region and serviced by public transportation. In addition, Uniminuto works through 34 sites, each reaching from 107 to 2,920 students. In 2007, Uniminuto won a public tender to establish a "virtual campus" in partnership with other local institutions. Today, a quarter of courses are available through distance learning, reaching 500 students. The organization works with experienced universities, such as Mexico's Monterrey Tech, to develop distance learning materials—for example, for teacher training in rural regions.

Another important element of the Uniminuto model is its pricing. Through innovative cost-sharing arrangements and the use of technology, the organization is able to keep tuition rates affordable. For example, business undergraduate studies are priced at less than \$1,000 a semester compared to an industry average of \$1,450. Rates are also differentiated by site so that they align with ability to pay in different regions. Finally, Uniminuto offers financing through a subsidiary, Cooperativa Uniminuto. The cooperative manages longer-term loans provided through Colombia's public student loan agency ICETEX, allocates the organization's own funds to offer additional short- and medium-term financing, and helps students apply for external loans.

Uniminuto

DRIVERS FOR UNIMINUTO'S INCLUSIVE BUSINESS MODEL

- Market need for accessible, affordable tertiary education, which aligns with the parent organization's mission to aid the neediest populations
- Insufficient public supply of higher educational institutions and expensive private supply
- Insufficient quality technical and technologically-oriented offerings among other providers to prepare students for employment after graduation

Uniminuto addresses a social need for increased access to tertiary educational services, particularly among lower-income and geographically isolated students. Today, tertiary education opportunities vary greatly based on students' socioeconomic status and proximity to major urban centers. Approximately 1.5 million students are enrolled in tertiary education in Colombia, which is a gross coverage ratio of 34%, lower than other middle-income countries in Latin America. Coverage ratios differ greatly by region and are close to 50% in the

capital district of Bogotá compared with 10% in less urban areas. Although there are 283 tertiary education providers in the country, private offerings are concentrated in major urban areas and are very expensive. Public offerings are insufficient to meet demand. In addition, whether public or private, tertiary education in Colombia today largely overlooks the technical and technological skills for which there is a clear need in the labor market—and which would give students an edge in finding full-time employment after graduation.

RESULTS OF UNIMINUTO'S INCLUSIVE BUSINESS MODEL

- Approximately 32,000 students educated in 2009, including 16,000 women and 18,000 students from the lowest two quintiles of the population by income
- 45% average annual growth rate in student enrollment from 2006 to 2009
- 41% revenue growth from 2006 to 2009, with double-digit growth expected through 2013

Uniminuto appears to be addressing a clear market need, with 45% average annual growth in student enrollment from 2006–2009—significantly greater than the average 5–7% growth rate for tertiary education in Colombia. In 2010, the student population reached 35,000 students, over 50% of whom were female. Uniminuto is currently expanding its physical and technological infrastructure and institutional capacity, planning to reach over 45,000 students in 2011.

Uniminuto's enrollment growth reflects the significant value it is creating for students. World Bank studies estimate that the average Colombian family spends just under 30% of GDP per capita per year on tuition for tertiary education, and 64% for total costs including expenses. This is significantly higher than in high-income countries, where families spend

on average 10% for tuition and 19% for total costs¹⁵—highlighting both the role that affordability plays in limiting education opportunities in the region and the market opportunity for a low-cost provider. Uniminuto competes well by keeping costs down and facilitating student loan financing. In fact, the financing subsidiary, which assists over 70% of students in accessing loans, managed the issuance of 14,249 loans valued at US\$7.7 million during the second semester of 2009. That same year, the organization was able to reach 18,000 students from the lowest two quintiles of the population by income, and it plans to grow this figure to 25,000 by 2011.

From 2006 to 2009, Uniminuto's net revenues grew from \$8.5 to \$27.6 million, with an EBITDA that represented an acceptable level given the organization's focus on affordability and its expansion into non-traditional regions. It experienced a net revenue growth of 41% between 2006 and 2009, with double-digit growth anticipated through 2013.



IFC'S ROLE AND VALUE-ADD

In 2009, IFC disbursed \$4 million of a total commitment of up to \$8 million equivalent to support Uniminuto's five-year plan to expand in the tertiary education market in Colombia. With this investment, IFC is providing Uniminuto with the funds it needs to finance physical expansion with new classrooms, offices, and laboratories; information and communications technology improvements; and institutional strengthening. IFC's investment is also expected to strengthen Uniminuto's ability to secure long-term financing from other sources in the future.

With experience in the region and knowledge of the tertiary education industry, IFC is able to provide Uniminuto with expertise in university project implementation and help the organization build new university partnerships. Also, IFC guidance on insurance and environmental management supports the organization's planning and risk management processes.



IFC's Investment:

\$8 million in long-term debt financing

15 Murakami, Y. and A. Blom. 2008. "Accessibility and Affordability of Tertiary Education in Brazil, Colombia, Mexico and Peru within a Global Context." World Bank Policy Research Working Paper 451. Washington, DC: The World Bank. Pages 4, 13, 16.

VINTE

COMPANY BACKGROUND

Founded in 2001, VINTE is a homebuilder specializing in affordable, sustainable housing for low- and middle-income families in Mexico. As a vertically integrated company, VINTE's operations span land acquisition, housing design, housing development planning, construction, marketing, and sales. VINTE's shareholders have a collective vision to raise housing standards in Mexico while providing innovative, value-added affordable housing.

Vinte Viviendas Integrales S.A.P.I. de C.V. is the holding company that consolidates all of VINTE's operations. The holding company is

comprised of VINTE and its five operating subsidiaries: (i) Promotora de Viviendas Integrales, engaged in promoting the housing developments; (ii) Urbanizaciones Inmobiliarias del Centro, engaged in research and development on housing, including technological, environmental, and design features; (iii) Edificaciones e Ingeniería del Centro, engaged in urbanization and construction activities; (iv) Conectividad para el Habitat, engaged in the distribution of computers, Internet, and related services; and (v) VINTE Administración, Diseño y Consultoría, engaged in human resources management.

VINTE'S INCLUSIVE BUSINESS MODEL

VINTE is a niche player in the low- and middle-income housing market, with a customer offering that is differentiated by the use of innovative technology and modern infrastructure services. Its research and development in cutting-edge technologies is helping the company to introduce innovations that save homebuyers on ongoing home maintenance costs. For example, homes are designed to reduce gas bills by 75%, and in 2011 VINTE added the option of rooftop solar cells for energy generation, thus significantly reducing electricity bills. Individual wall meters to measure electricity, gas, and water consumption enable homeowners to both save money and reduce their environmental footprint. VINTE also provides modern infrastructure services that are not offered by other affordable housing builders. Homes are equipped with a computer and Internet, facilitating access to security cameras in each housing cluster as well as a housing development website that provides information about energy management and community affairs.

Another key aspect of VINTE's differentiated offering is its focus on enabling homeowners to manage the housing developments, particularly maintaining communal areas and putting in place measures to increase security. Following the sale of a housing development, VINTE has a year-long transition period during which it helps homeowners managing the development, teaching residents basic property management skills and community values. The end result is that VINTE's housing developments stand out from the competition in terms of both design and maintenance. After-sales services such as home maintenance and re-sale assistance are other important elements of VINTE's offering.

Currently, VINTE designs, constructs, and sells eight types of homes, from entry-level to middle-income. A typical entry-level home is about 450 square feet, and consists of a kitchen, living-dining area, two bedrooms and one bathroom. A middle-income home consists of a kitchen, dining room, living room, three bedrooms and two bathrooms. VINTE's housing developments also feature gated courtyards, schools, water treatment plants, playgrounds, and recreational areas. Similar to condominium fees, residents pay community fees for maintenance of these communal facilities.

VINTE targets customers who are planning to live in the housing development—not those who want to buy a home to rent to other tenants.

Customers are generally salaried workers such as schoolteachers, bus drivers, factory and office workers with annual household incomes ranging from \$6,000 to \$27,000. Most are young working adults, and many are first-time homebuyers who grew up in Mexico City's informal housing settlements with marginal access to clean water, electricity, sanitation, roads, schools, and parks. Home prices start at \$23,000 and reach \$74,000, with more than 50% of homes between \$23,000 and \$39,000.

Government-sponsored programs have been instrumental in enabling VINTE's customers to access housing finance. The Institute of the National Housing Fund for Workers (Infonavit)—a mutual savings and mortgage lending agency that aims to improve the quality of life for Mexican workers and their families—is the main source of housing loans. Private sector employers are required by law to register themselves and their employees with the fund. Thereafter, employers allocate 5% of their employees' monthly payroll to their individual Infonavit accounts. These registered employees, whose incomes start at the minimum wage, may then apply for a mortgage loan through Infonavit. Once a person meets the standard eligibility criteria, he or she has the right to use the funds accumulated in his or her account and to obtain a new home mortgage loan. Infonavit qualifies prospective homebuyers based on points awarded for income, monthly contributions, age, and number of dependents, among other factors. The accumulated funds are used as a down payment or credit guarantee, and subsequent monthly installments are used as loan payments. Individuals who don't exercise the option to obtain a mortgage automatically have their contributions added to their pension fund at retirement age. Infonavit originated more than 475,000 new loans worth on the order of \$9 billion in 2010.

Similar to Infonavit, the Housing Fund of the Government Worker Social Security and Services Institute (Fovissste) originates more than 90,000 loans (worth approximately \$3.5 billion) annually for employees of federal and local governments, as well as public universities and local agencies. Infonavit and Fovissste, together with other federal public entities, now grant more than 80% of all mortgages in Mexico. Approximately, 75% of VINTE's customers received loans through Infonavit and Fovissste in 2010.

DRIVERS FOR VINTE'S INCLUSIVE BUSINESS MODEL

- 40% of housing demand is concentrated in central Mexico, a significant market opportunity for a niche player
- Stable supply of government-backed mortgages for low- and middle-income housing customers

Mexico has 26.7 million households, of which 17.8 million own homes considered to be in adequate condition. Around 75% of the estimated shortage of 8.9 million houses is concentrated in the affordable housing segment. By 2030, Mexico's population is expected to reach 121 million people, creating demand for 11 million additional new houses. This market opportunity is a key driver of VINTE's business model. In particular, VINTE, as a niche player, is focusing on the central region of Mexico where 40% of housing demand is concentrated. Unlike some other regions, which experienced a reduction in demand for affordable housing during the financial crisis as a result of unemployment and

other factors, the central region experienced stable demand and is viewed as a high growth region.

In addition, the government of Mexico's support for housing finance is incentivizing homebuilders to target the affordable housing segment given the availability of mortgages through Infonavit and Fovissste. The government sees the housing sector as an instrument for social and economic development, and has set a target of six million mortgage credits under its 2007 to 2012 national development plan. Most of this plan's measures focus on families earning less than \$920 per month.

RESULTS OF VINTE'S INCLUSIVE BUSINESS MODEL

- 8,500 affordable homes sold as of 2010
- Net revenues increased by more than 70% between 2008 to 2010
- Winner of six national housing awards

As of 2010, VINTE had sold more than 8,500 homes. Due to its after-sales services and sustainable designs, each of VINTE's home models has increased in value over time, reaching up to 10% annually—becoming valuable assets for low- to middle-income families, as well as for the mortgage providers that supported VINTE's customers. VINTE's G7 Habitat or "Housing of the Seventh Generation," which encourages efficient use of water, gas, and lighting, has enabled homeowners to save money on their utility bills. The company has won six national housing awards—the most recent one for building environmentally-friendly communities.

VINTE is successfully competing with the largest publicly-traded Mexican homebuilding companies. Between 2008 and 2010, VINTE's net revenues increased by more than 70% while its EBITDA almost doubled in those two years. VINTE currently has eight housing developments—three finalized and five under construction—in four different states of Mexico: five in Tecamac, Estado de Mexico; one in Pachuca, Hidalgo; and one in Playa del Carmen, Quintana Roo; and one in Queretaro, Queretaro. VINTE also owns land reserves in Tula, Hidalgo and in Cancun, Quintana Roo. Both sites will target low-income families with an average home price below \$25,000.



IFC'S ROLE AND VALUE-ADD

Despite improvements in housing sector finance in Mexico, medium-sized homebuilders continue to face limited access to medium- to long-term working capital. Their options are limited to construction project-specific bridge loans offered by local mortgage banks (*sofoles*) and commercial banks, which are rigid and expensive. Homebuilders have to finance land reserves and initial development with their own cash or through equity injections.

In 2008, IFC provided a revolving loan of an amount and tenure generally not available to local homebuilding companies. IFC also provided an equity investment that will facilitate the company's initial public offering process. In 2010, IFC approved a partial credit guarantee to help VINTE issue long-term bonds in the domestic Mexican capital markets. VINTE successfully issued bonds in the Mexican domestic market in March 2011, the first developer to do so in the last two years. The issuance was oversubscribed amount. This round of financing is supporting the company's growth strategy and helping VINTE build more quality and affordable entry-level housing benefiting large numbers of its target clientele: low- to middle-income families.



IFC's Investment:

\$10 million in equity, \$12.5 million in long-term debt financing, and a partial credit guarantee of up to \$14.3 million

YellowPepper

COMPANY BACKGROUND

Incorporated in Panama as YellowPepper Holding Corporation and founded in 2004, YellowPepper is the leading mobile financial network in Latin America and the Caribbean. In 2007, the company's focus shifted from delivering value-added services via mobile phones to an exclusive focus on mobile financial services. YellowPepper has successfully executed its vision of a future in which any person can use a mobile phone at any time to buy goods, receive remittances, pay bills, repay loans, and more. Its network enables banks, businesses, and consumers—both banked and unbanked—to use mobile phones to conduct many of the financial transactions that are commonplace in the developed world.

Serge Elkiner, a pioneer in mobile payment solutions, founded YellowPepper and has grown the company to 135 staff in ten countries. YellowPepper's staff have backgrounds in three major areas: (i) banking and payments, (ii) Internet, e-commerce, and technology, and (iii) payment network deployment. YellowPepper's shareholders include a mix of early-stage angel investors, a Latin American strategic group, and IFC. The company operates in nine countries: Mexico, Colombia, Peru, Ecuador, Guatemala, the Dominican Republic, Bolivia, Haiti, and Panama. YellowPepper has over 3.2 million active users and handles over 14 million transactions per month.

YELLOWPEPPER'S INCLUSIVE BUSINESS MODEL

YellowPepper offers mobile financial services to banks, mobile network operators (MNOs), utility providers, and fast-moving consumer goods (FMCG) companies, enabling them to transact with banked and unbanked customers, distributors, and suppliers. Its products and solutions include (i) traditional mobile banking (m-banking) services to reach individuals with bank accounts, (ii) mobile wallets (m-wallets) to reach individuals without bank accounts, and (iii) an innovative business-to-business (B2B) mobile payments network. This mobile payments network targets FMCG companies and their distribution channels, which range from hundreds to thousands of small "mom-and-pop" shops throughout Latin America.

YellowPepper's key strength is the ability to allow any participating bank, MNO, FMCG company, or individual to connect in a fast, efficient, and reliable manner. At the core of the network sits YellowPepper's platform, acting as a clearinghouse for financial transactions conducted through mobile phones. This enables consumers, businesses, and banks to interact, issue, manage, and accept electronic payments.

YellowPepper's **m-banking solutions** enable banks to deliver financial services via mobile phones to existing bank account holders. Customers can easily and conveniently access their bank and credit card accounts, check account balances, transfer funds, receive fraud alerts, and make various types of payments readily available through their mobile phones.

YellowPepper's **m-wallet** is a virtual, pre-paid account accessed using a mobile phone. This product targets individuals who do not currently have bank accounts and do not participate in traditional financial networks. M-wallet customers access the YellowPepper network via user-friendly interfaces, such as text messaging and USSD, to remit money, pay utility bills, recharge mobile phone airtime, and pay for goods. In addition, the m-wallet offers unbanked customers integration into formal financial networks. These services provide convenience, security, and efficiency, thus freeing up valuable time for income-generating activities while reducing the risks of cash transactions.

M-wallets are issued by banks in association with YellowPepper and MNOs. They can be purchased from correspondent-banking agents that YellowPepper engages and develops in the country of operation. Small businesses or "mom-and-pop shops," which make up a significant proportion of these agents, must undergo extensive background checks as well as financial rules and regulations compliance training before they are able to sell m-wallets.

Customers open m-wallet accounts with correspondent banking agents by purchasing m-wallet kits and completing the necessary paperwork, providing their addresses and identification information. Initial cash deposits made with the agents are credited to the customers' new m-wallets. They then receive text messages notifying them of their available balances. Thereafter, they can visit an agent to deposit additional cash or to withdraw cash by sending a text message request. These cash-in, cash-out services are vital for the m-wallet ecosystem to run smoothly, making the role of the small shop owners serving as agents very important.

YellowPepper's **B2B product** facilitates mobile payments and collections between large enterprises, particularly FMCG companies like Coca-Cola and SABMiller, and their suppliers, distributors, and retailers—particularly small-scale retailers. This product enables these retailers' *tenderos*, or shopkeepers, to pay their wholesalers for goods upon delivery using m-wallets rather than cash. In Ecuador, for instance, YellowPepper is working with six FMCG companies whose products constitute 85% of the product inventory of these small shops. The shop, the company, and the bank use text messaging to transact through YellowPepper's network. The shop no longer needs to keep large sums of cash on hand to pay for goods; distributors, in turn, reduce cash collection costs, security risks, delayed payments, accounting errors, and counterfeit currency.

YellowPepper

DRIVERS FOR YELLOWPEPPER'S INCLUSIVE BUSINESS MODEL

- YellowPepper's core mission is to integrate unbanked consumers into the traditional financial system via mobile phones
- Two market characteristics in Latin America and the Caribbean—a high (78%) mobile phone penetration rate and a low (35%) financial access rate—present a significant business opportunity
- The proven market need for a neutral, universal network that enables financial transactions among a wide variety of stakeholders

YellowPepper's inclusive business model is driven by the company's mission to bring the banking system to unbanked consumers via the mobile phone. Two market characteristics create a significant business opportunity for YellowPepper in doing so. On one hand, the 580 million people living in Latin America and the Caribbean have approximately 439 million mobile phones, a 78% mobile phone penetration rate. On the other hand, an estimated 377 million people, 65% of the region's population, lack access to adequate financial services.

Furthermore, YellowPepper is fulfilling a market need for a neutral, universal network that enables financial institutions, MNOs, wholesalers, retailers, consumers, and others to conduct financial transactions using mobile phones. By doing so, YellowPepper is laying the foundation for a robust mobile financial network in which businesses, governments, and consumers can transact with each other more easily, efficiently, and affordably.

RESULTS OF YELLOWPEPPER'S INCLUSIVE BUSINESS MODEL

- 3.2 million monthly active users in nine countries for m-banking services
- 38,000 m-wallet users in Haiti, completing an average of three transactions per month
- More than 40 corporate partners in the region

YellowPepper's network has 3.2 million monthly active users in nine countries, conducting over 14 million financial and informational transactions per month. In early 2011, over 38,000 customers in Haiti were using m-wallets issued by Scotia Bank in association with YellowPepper and mobile network operator Digicel. In Ecuador, with Banco Pichincha, YellowPepper's m-wallet targeting unbanked customers with average household incomes of \$700 is expected to reach hundreds of thousands of customers in a short period of time. YellowPepper plans to launch m-wallets in Peru, the Dominican Republic, Colombia, and Mexico in 2011.

More than 40 banks and companies in Latin America and the Caribbean, including Western Union, Coca-Cola, and Credibanco VISA, have selected YellowPepper as their strategic partner for mobile financial services. Over 17 companies in five countries (Peru, the Dominican

Republic, Colombia, Mexico, and Ecuador) use YellowPepper's B2B mobile payments solution to transact with small businesses in their supply or distribution chains. Currently, over 700 small businesses benefit from this solution and YellowPepper expects this number to grow to over 500,000 by 2013.

YellowPepper has received media recognition and several awards. In 2011, YellowPepper was shortlisted for the Financial Times-IFC Sustainable Finance Award and received the USAID/HIFIVE Grant for Establishing Mobile Financial Services in Haiti. In late 2010, the company received the Inter-American Development Bank's Beyond Banking Award for providing access to financial services through non-traditional channels and for reaching the unbanked.



IFC'S ROLE AND VALUE-ADD

In 2008, the international financial crisis had greatly reduced the appetite for risky investments in emerging markets, thus posing critical challenges for many innovative, early-stage companies that needed capital to support their growth. To address this challenge, in 2010, IFC made a \$3 million equity investment in YellowPepper and helped secure an additional \$2 million from a strategic Latin American group. The total \$5 million investment facilitated the company's expansion in Latin America.

IFC's investment in YellowPepper, and other companies like it, is intended to fuel growth in the electronic payments industry as a whole. The resulting usability, efficiency, and financial inclusion gains have significant implications for global economic growth, particularly in emerging markets.

In addition to its equity investment in YellowPepper, IFC is contributing its global business knowledge, best practices, and experience in mobile payments. It has facilitated links between YellowPepper and its Latin American financial services and telecommunications clients for partnerships. In addition, IFC's best-in-class corporate governance, strategic advice, and fundraising efforts have supported YellowPepper in helping to make financial inclusion in the region a reality.



IFC's Investment:

\$3 million in equity

Zain Madagascar (now Airtel Madagascar)

COMPANY BACKGROUND

Zain Group is a mobile network operator reaching more than 65 million customers in 25 countries in the Middle East and Africa. Founded in Kuwait in 1983 under the name Mobile Telecommunications Company (MTC), by 2005 the company had controlling stakes in operations in 14 African countries where it reached 18.5 million subscribers. In March of that year, MTC acquired 85% of Celtel, a leading pan-African mobile telecommunications company founded by

Mohammed Ibrahim. Two years later, MTC acquired the remaining 15% of Celtel and rebranded itself as Zain.

In Madagascar, Zain reached more than 1.4 million customers by September 2009, a 60% increase on 2008. Zain Madagascar is 66% owned by Zain and 34% owned by Malagasy nationals, as per the requirements of its operating license and local legislation.

ZAIN'S INCLUSIVE BUSINESS MODEL

In 2007, Zain Group announced a new growth strategy known aiming to reach more than 70 million customers by 2011 largely by tapping new, predominantly rural and underserved African markets. And while Zain did see new acquisitions as one channel for growth, it was also highly committed to expanding its existing operations.

In Madagascar, where the company essentially competed in a duopoly with Orange, Zain projected that its growth would come from the acquisition of customers brand-new to mobile telecommunications. The country was largely unserved, with a penetration rate of less than 5%. In this context, the company outlined a network expansion plan to bring coverage to areas with no prior access. As part of the plan, Zain developed 105 new towers, reaching 372 at the end of 2008. This gave Zain the widest geographic network coverage in the country.

Zain also worked to extend its reach to consumers who could not afford their own phones through a Village Phone Program (VPP). The VPP can be understood as part of a broader inclusive business model in which network expansion makes coverage possible in geographically remote areas and economies of scale help keep prices low enough for base of the pyramid customers to afford.

The VPP is designed as a cost-efficient addition to existing network infrastructure, effectively extending coverage beyond the point at which a conventional network rollout would be too expensive. The VPP is a shared access model in which a mobile phone is used as a public phone operated by a micro-entrepreneur. Each village phone comes with equipment that allows it to capture a Zain network signal remotely, significantly reducing initial capital expenditure and virtually eliminating the operational expenditure associated with standard network expansion. This is important in rural areas, where such costs are higher and where networks serve small numbers of low-paying subscribers.

To develop the VPP model, Zain partnered with IFC to leverage its experience with shared phone programs around the world. It is based on a series of grassroots-level partnerships, originally brokered by IFC, with six local microfinance institutions (MFIs). The MFIs are involved to reach as many rural locations as possible. To be sustainable, the location must have a market sizable enough to support both Zain and the MFIs.

With limited financial support from IFC, these MFIs fulfill critical program functions, namely:

- Providing access to the information and relationships required to partner with rural micro-entrepreneurs
- Financing micro-entrepreneurs to purchase and operate VPP equipment
- Training and building the capacity of village phone operators

While ZAIN provides overall management for the program and ensures regulatory compliance, its MFI partners are responsible for identifying and screening village phone operators (VPOs). The MFIs give VPOs the financing to purchase a Village Phone Startup kit containing everything needed to start a Village Phone business, from handset to solar charger to SIM card, which provides the MFIs with interest income. The kits cost approximately \$150 after a subsidy of \$100 per kit from the Malagasy government—which has been instrumental in extending the opportunity for entrepreneurship to even lower-income entrepreneurs. Zain's MFI partners also provide VPOs with technical support and collect data for monitoring and evaluation purposes.

VPOs are responsible for maintaining VPP equipment, promoting their businesses, and maintaining accurate call records. VPOs generate income selling airtime to their communities—for which they keep about 25% of the price. Prices are set at the lowest possible point that allows both Zain and the VPOs to make money. VPOs may have additional revenue streams as well, such as phone recharging and sales of prepaid cards to customers who own their own phones.

Zain Madagascar (now Airtel Madagascar)

DRIVERS FOR ZAIN'S INCLUSIVE BUSINESS MODEL

- To increase the number of Zain customers
- To remain competitive and increase market share as the Malagasy telecommunications market grows
- To fulfill the Zain Group's commitment to corporate social responsibility by expanding access to telecommunications services and economic opportunities

The primary drivers for Zain Madagascar's inclusive business model were to increase customer numbers and competitiveness in a liberalizing telecommunications market. In 2006, the market was characterized by significant pent-up demand, with mobile penetration at a mere 4.4%—but projections showed that the figure could reach 14.5% by 2016. At the same time, the Malagasy Telecommunications Law of 1997 had stipulated free competition as a basic principle, and the Madagascar Action Plan had prioritized the need to expand basic infrastructure including telecommunications throughout the country—making the telecommunications market more competitive over time. Until late 2006, the market was essentially a duopoly—Orange with 56% market share

and Zain Madagascar with 43%. Telma, a privatized provider, entered the market in December 2006. By June 30, 2007, Zain had added more than 70,000 subscribers, but lost almost 10% market share compared with the previous year.

In response to these trends, in order to maintain and improve its market share, Zain Madagascar developed an aggressive rollout of services into previously unserved markets. As part of this rollout, the Village Phone Program aimed to establish 7,000 Village Phone Operators reaching 2.5 million new rural customers within three years. In addition to the market drivers for VPP, the Zain Group is committed to corporate social responsibility, and the program offered an opportunity to increase its social and economic impact in a commercially viable way.



IFC'S ROLE AND VALUE-ADD

IFC provided Zain Madagascar with long-term funding unavailable in local financial markets through a \$25 million loan. IFC also mobilized an additional \$21 million loan from international commercial banks and other development finance institutions. With its financial experience and comprehensive appraisal and monitoring processes, IFC's participation provided other potential lenders a degree of comfort that was critical given the risks associated with the Malagasy operating environment.

Beyond investment, IFC's experience in telecommunications markets in Africa provided Zain with access to key benchmarks and an external perspective on potential risks. IFC also brought important assets to the Village Phone Program, including experience linking large corporations with local entrepreneurs and a knowledge base on shared phone program planning and management built over successive engagements with similar models in other African countries. Through the VPP, IFC helped Zain develop a business model that grew its customer base in underserved rural and peri-urban areas, augmented the income of women and previously unemployed youth, achieved financial sustainability, and is now positioned to become a separate business unit.

RESULTS OF ZAIN'S INCLUSIVE BUSINESS MODEL

- 60% increase in subscribers, from 1.087 million to 1.425 million, between September 2008 and September 2009
- Increase in market share from 36% to 38% over the same period
- 6,600 village phone operators in business earning an average of \$16 a month
- 1,130,000 calls from village phone operators using 565,000 minutes per month

Zain Madagascar's overall inclusive business model, in which network expansion brings coverage to geographically remote areas and economies of scale help keep prices low, enabled the company to increase subscribers by 117% from 2007 to 2008, from 574,000 to more than 1.2 million. The company now has the widest geographic coverage of any mobile network operator in the country.

The Village Phone Program has helped facilitate customer acquisition in more rural, lower-income segments that previously had no access to mobile telecommunications. VPP has also created business opportunities for 6,600 village phone operators as of March, 2010. Operators buy airtime at a price of 4 Madagascar Ariary (MGA) per second and sell at a price of 300 MGA per minute—which translates into a margin of roughly 25% for the operator. In

US dollars, operators earn on average \$16 additional revenue a month. Operators are chosen among people who already have business activities such as groceries, agriculture, and hairdressing, so for them the Village Phone business comes as another source of income in addition to their existing business. Each operator serves on average five to six customers per day.

Zain Madagascar's growth has also contributed to overall growth in the telecommunications sector, where increasing penetration—at a rate of 9% in 2008—has fueled competition and helped maintain affordability. Studies have shown that increasing penetration is also associated with GDP growth and poverty reduction. It is estimated, for instance, that a 10% increase in mobile phone density leads to a 0.6% increase in per capita GDP.¹⁶

16 Waverman et al. 2005.



**International
Finance Corporation**
World Bank Group

IFC's Investment:

\$25 million in long-term debt financing

This page intentionally left blank.

This page intentionally left blank.

This page intentionally left blank.

For more information, contact
IFC's Inclusive Business Group:

Toshiya Masuoka
tmasuoka@ifc.org

Eriko Ishikawa
eishikawa@ifc.org

+1 (202) 473-9538
ifc.org/inclusivebusiness

IFC
2121 Pennsylvania Ave., NW
Washington, DC 20433, USA
Ifc.org/inclusivebusiness

2011