What Works Case Study

WHAT WORKS: SMART COMMUNICATIONS -- EXPANDING NETWORKS, EXPANDING PROFITS

Providing telecommunications services to low-income markets in the Philippines

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EXECUTIVE SUMMARY

Smart Communications, Inc. had almost 12.5 million GSM (Global System for Mobile Communications) subscribers as of June 30, 2004, 98% of whom are pre-paid subscribers.[1] In the first half of 2004, Smart's ongoing growth has enabled it to become the Philippines' leading wireless operator. Smart increased operating revenues in this period by 40% to nearly P31 billion (US$554 million) compared to P22 billion (US$395 million) in the same period of 2003.[2] Operating income increased by 91%, to P15.27 billion (US$274.1 million), and net income by 90% to P11.64 billion (US$208.79 million).

Smart's growth is credited as the primary growth driver of its parent company, Philippine Long Distance Telephone (PLDT), during the last five years. Additionally, Smart has won GSM Association awards in 2002 and 2003 in recognition of product and service innovations. These innovations are Smart's solutions to business problems they have encountered in their efforts to capture and retain the low-income market in the Philippines.

BUSINESS MODEL

Smart's business model has had a "base of the economic pyramid" (BOP) market orientation from the start. The company has continuously modified their products and services to sell further downstream in this market. Smart Buddy is the pre-paid cellular phone subscriber service upon which their BOP focus rests. Smart Buddy subscribers used pre-paid, text-only phone cards in units as low as P100 (US$1.80) to re-load airtime onto their cellular phones. The service, called PureTxt, was introduced in August 2002 in order to provide an alternative to subscribers who were not able to afford other "call and text" cards on the market. The lowest denomination previously available to subscribers was a P300 (US$5.38) card.

Smart Money was introduced in December 2000 to both post- and pre-paid subscribers. A partnership with MasterCard, the company calls Smart Money "the world's first electronic cash card linked to a mobile phone."[3] Smart Money enables users to transfer money from a bank account to a Smart Money account. Subscribers can then use a Smart Money card like a debit card to pay for a variety of goods and services at a network of retail stores and restaurants. Another element of the service allows users to transfer cash from one Smart Money card to another via short message system (SMS). The service being restricted to customers with a bank account, it could be characterized as more of a "top of the pyramid" service.

In May 2003, Smart introduced a new service based on the Smart Buddy mobile commerce technology platform. Called Smart Load, the service enables the electronic transfer of airtime via SMS. Whereas Smart Money transferred cash and required a bank account, Smart Load transfers pre-paid airtime from a retail merchant or other reseller to a pre-paid phone customer, allowing for cash payments to the reseller. This capacity provides merchants with incentives to sell airtime, effectively expanding Smart's distribution network and market. In searching for a way to increase their revenue on pre-paid sales, Smart's answer was to eliminate the need for a physical card as the mechanism to purchase or re-load cellular phone minutes. As a result, by the end of the second quarter of 2003, Smart eliminated production and distribution of their P100 re-load card.

Also at that time, Smart Load prices were broken down into smaller denominations: P30 (US$0.54), P60 (US$1.07), P115 (US$2.06), and P200 (US$3.58). Advertised by Smart as "telecoms in sachets," the smaller denominations were designed for the low-income Filipino market that already purchases consumer goods in small quantities. Smart realized that most

Filipino incomes fall in the lower income brackets, with as much as 51% of the population surviving on US$2.00 per day or less.

Additionally, the Smart Load payment model paid attention to low-income market practices. Despite the technology of the product, as noted by the company, "relationship selling" is what ultimately makes Smart Load possible. Smart retailers are predominantly "sari-sari" (sari-sari means "varied" in Tagalog) storeowners – small merchants with close connections to their patrons. Furthermore, sari-sari merchants often provide credit when their patrons are unable to afford cash purchases. Smart has created a network of over 500,000 retailers including sari-sari stores, housewives, students, and other "roving agents." Retailers complete transactions using SMS as well, but Smart catered a special system to their needs, including a unique menu and a specially-designed subscriber identity module (SIM). According to the company, some retailers earn up to P1000 (US$18.00) per day in re-load sales.

Smart had 50,000 outlets when Smart Load was launched in May 2003, but that number jumped to over 500,000 retail agents due to the success of its current distribution network.[4] By September 2003, "two thirds of Smart's pre-paid users were reloading their phones electronically."[5] Additionally, the company reports that "[a]s of June 30, 2004, approximately 91% of Smart Buddy subscribers were using Smart Load as their reloading mechanism" and that "Smart Load accounted for approximately 61% of sales derived from reloads."[6]

In December 2003, Smart introduced the Pasa Load initiative, which further lowered the denominations of pre-paid cellular services into P2 (US$0.03), P5 (US$0.08), P10 (US$0.18), and P15 (US$0.27) increments.

BUSINESS BENEFITS AND DEVELOPMENT IMPACT

Smart's innovative approach minimizes physical product distribution costs and creates a demand-response stocking system for pre-paid airtime, reducing risk across the firm. Product distribution is now faster, more efficient, and as the company claims, more secure (though technology specifics are not easily available in order to fully analyze network security).

The new distribution structure and pricing scheme benefits retailers as well. Retail distributors have no physical stock to store and manage and no accompanying property theft risks (except that of retailer handsets and SIMs). The SMS distribution interface is reportedly easy to use and can be sold in a personal fashion complementary to sari-sari business practices. The special retailer SIMs have a function allowing retailers to "open" or "close" their retail handsets via SMS and allowing retailers to sell outside of a physical location, and for shop owners, outside of regular store hours.[7]

Finally, consumers benefit from the "telecommunications-in-sachets" model of small unit sales. Smart Buddy, PureTxt, and Pasa Load made telecommunications services affordable, while Smart Load and Smart Money made services accessible with faster, more convenient reloads that don't require physical presence for purchase. The ability to reload electronically means consumers can purchase airtime in rural locations. The community as a whole benefits from broader service (wherever a Smart signal is available). Additionally, jobs have been created for entrepreneurs, the service's resellers, which run the gamut from store owners, to housewives, to students.

KEY LESSONS

Smart Communications, Inc. has become the Philippines' leading wireless company by paying attention to the needs of the country's low-income market. They have created innovative products and services designed specifically for the bottom-of-the-pyramid (BOP) consumer, thereby growing their pre-paid subscriber base and, in turn, steadily generating income from these subscribers.

Smart's ability to adapt to customers' shopping patterns and limited individual purchasing power generated a ripple effect in the Philippine wireless market. Not only did their approach with Smart Buddy, Smart Money, Smart Load, and Pasa Load help telecommunications services reach the majority of Filipinos, but Smart's applications have helped to generate real revenue and opportunities for small entrepreneurs.

Smart's sensitivity to local business practices at the small- and micro-enterprise level allowed them to capitalize on an existing distribution network that they did not have to create by themselves. In particular, the low-priced, "on credit" purchasing practices of sari-sari's presents an opportunity for other types of mobile business transactions to occur in a similar fashion to the Smart Load model. Increased mobile banking activity from Smart and more inclusion of the BOP in formal banking channels could mean significant business developments in the Philippines – especially in the area of remittances.

WHAT WORKS: SMART COMMUNICATIONS AND LOW-INCOME MARKETS

ENTERPRISE OVERVIEW

Smart, PLDT, and Growth History

Smart is a wholly-owned subsidiary of the Philippine Long Distance Telephone, PLDT. Incorporated in 1991, Smart "was the main growth driver among the subsidiaries of the PLDT group" in the first quarter of 2004.[8] The PLDT group serves three telecommunications segments: fixed line, wireless, and information and communications technology.[9] Smart is its primary wireless subsidiary. PLDT also has satellite and VSAT operations within the wireless division.

PLDT reported 2003 sales of P97.72 billion (US$1.75 billion), its fourth successive year of sales growth. A majority of this growth is attributable to wireless sales, which increased at "more than double the company's growth rate; sales were up 49.5% in 2003" to P50.38 billion (US$903 million). The highest operating profits in 2003 were in the wireless segment, netting 35.3% of the company's total sales. By comparison, fixed line operating profit was the lowest, bringing in just 26.6% of sales.[10] According to PLDT, "Smart's success has been so critical to PLDT that the profile of PLDT's revenue base has shifted – in percentage terms – from fixed to mobile. For the first time, in 2003, Smart's share of consolidated sales exceeded 50 percent."[11] As a result, First Pacific, which "has a 24.3% economic interest and a 31.4% voting interest in PLDT"[12] is considering making Smart the parent firm of PLDT.[13] See Appendix I for more on Smart's growth.

Recent Growth Data

Smart increased its subscriber base by 53% over the 12 months ending in June, 2004. In the first half of 2004, it added 2,394,400 subscribers compared with "the previous historic high of 1,936,723 million net additional subscribers recorded in the second half of 2003." There are almost 12.5 million Filipinos subscribed to Smart.

As of June 2004, Smart had increased operating revenues by 40% to P30.9 billion (US$554.56 million), compared to P22.1 billion (US$396.9 million) in the same period of 2003. Operating income increased by 91% to P15.27 billion (US$274.1 million) and net income by 90% to P11.64 billion (US$208.79 million).[14] "Smart's GSM network ha[s] 34 switches with a capacity of approximately 16.2 million subscribers, 4,565 base stations, as well as 37 messaging centers capable of processing 974 million text messages per day."[15]

In addition to its own subscribers, Smart provides services to 3.6 million pre-paid subscribers through a reseller agreement with Piltel.[16] Piltel, another operating unit of PLDT, is the third largest telephone company in the Philippines[17] and, until recently, has been mired in debt-related problems. However, in early July, a debt-exchange transaction made Smart Piltel's primary creditor. Smart has also begun acquiring 59.2 million Series K convertible preferred shares in Piltel. When the transaction is fully complete, Smart will have 32.7% ownership in Piltel. While slightly diminishing PLDT's ownership, the full conversion makes PLDT and Smart's combined ownership of Piltel equal to 92.1% of the common stock.[18]

Organization and Leadership

PLDT had 18,191 employees as of end of 2003.[19] Smart had 5,441 employees at the end of 2003, and 5,537 as of June 30, 2004.[20] There is considerable crossover among the leadership of PLDT and Smart. Management moves have integrated Smart leadership into the upper levels of PLDT.[21]

Currently, the president and CEO of both PLDT and Smart is Napoleon Nazareno. Nazareno is also president of ACeS (a VSAT operator within the PLDT group) and former president and CEO of Piltel (from 1998-2003).[22] He replaced Manuel Pangilinan in February 2004. When Smart acquired its shares of First Pacific, Pangilinan was appointed as that firm's managing director and CEO (he is one of First Pacific's founding partners).[23] Other management moves made Smart's mobile services chief the supervisor of three PLDT executives, and gave Smart's public affairs director authority over PLDT's corporate communications and public affairs department.

MARKET OVERVIEW

Income & Poverty

"In current market prices, the [Philippines'] GDP in 2003 was about P4.4 trillion pesos. This translates to an average per capita income of P52,952 - or US$997."[24] The Philippine population numbers over 82 million and "more than 50% of Filipinos are under 25 years of age.[25] For a more detailed country overview, see Appendix II.

Socio-economic class breakdowns in the Philippines are widely referred to as falling into five general categories: A, B, C, D, and E. There is not a readily available standard for income divisions within these categories.[26] In general, the A and B segments are the upper to upper-middle class sectors, while the C, D, and E segments include those in middle-lower, lower and below-the-poverty-line income sectors.[27] Sources indicate that about 40% of the population lives below the poverty line[28] and that between 46% and 51% of the population survives on US$2 per day or less.[29] Such an income structure establishes the Philippines as a lower-income, developing country with a significant BOP market.

Wireless Market Composition and Activity

Once regarded as a country "notorious for its poor telecommunications,"[30] the Philippines is now seen as a "developing [telecommunications market] with high potential for rapid evolution." While the industry is deregulated, a small number of firms dominate, tending towards oligopoly.[31] The telecommunications industry leaders are PLDT and Globe Telecom.

The number of cellular subscribers in the Philippines grew from 15 million in 2002 to about 21.5 million in 2003 - an increase of 43%.[32] Globe Telecom, owned jointly by Singapore Telecom International and Ayala Corporation, began as the cellular leader in the Philippines by offering inexpensive SMS services.[33]

Smart Communications, Inc. has since surpassed Globe's market dominance – Smart holds 45% of the market while Globe controls 40%. The competitors have a 95% majority of the market share, "despite new threats posed by Pilipino Telephone Corp.'s (Piltel) Talk 'N Text and by Sun Cellular."[34] Sun Cellular is an initiative of Digital Telecommunications (Digitel). With about 700,000 subscribers – roughly 3% of Smart's total – Sun Cellular is the next closest competitor to Smart and Globe.[35]

SMS and the Philippines

Known as text-ing in the Philippines, SMS' popularity and low cost, coupled with the introduction of pre-paid phone cards, quickly propelled the use of cellular phones and services throughout the country. The Philippines is known as the texting capital of the world – it claims 15% of the world market.[36] According to the Economist Intelligence Unit, "[i]t is now estimated that the country's 22 [million] phone owners send an average of seven texts a day."[37] Another source indicates the figure is as high as 20 text messages a day, though that is based on a smaller, less statistically significant survey of cellular phone users.[38]

Texting's low cost, "as little as half a peso [US$0.009]," has "made it accessible to just about anyone owning a mobile phone."[39] The U.S. Commercial Service's International Market Insight report estimates that "Smart and Globe combined handle more than 200 million [SMS] messages per day" in 2003.[40] According to Smart's second quarter report, "Smart's SMS system handled 16,774 million outbound messages, an increase in 56% from 10,774 million text messages handled in the same period in 2003."[41]

BUSINESS MODEL

As a Filipino-owned company and a subsidiary of the former state-owned telecommunications provider, Smart entered the Philippine market familiar with its difficulties and limitations. Although Globe started out as the wireless leader, first introducing SMS services in the early 1990s, its focus had been on the higher end of the market. By contrast, when Smart set out in 1999, it courted the mass market of low-middle and lower income consumers - to the extent that now, nearly 98% of their subscribers are pre-paid, a service which appeals to cash flow conscious customers. Smart developed innovative pre-paid products and services, molding their business model, product development, distribution, and marketing efforts to fit the needs of a previously-ignored segment of the market – the poor.

In response to Smart's success serving the low-income (C, D, and E) segments, Globe has begun to offer their own pre-paid products.[42] Despite new competition, however, Smart remains firmly in control of the lower-income, BOP market in the Philippines, giving the company a definite advantage. The company consistently innovates, building systems complementary to each other in order to solve customers' problems and create real profits for the company.

Products and Services

Smart is a full service telecommunications company offering a wide range of products and services. However, this report focuses on those Smart products that have propelled Smart's BOP-oriented business model. For a full list of Smart products and services, see Appendix III.[43]

Smart Buddy

Smart Buddy is the company's pre-paid, GSM product. It is used by all but a small fraction of the firm's subscribers. Smart Buddy acts as a delivery channel for the company's range of product offerings, which have evolved to address obstacles the company has encountered as it worked to capture the BOP market. Soon after it entered the market in 1999, Smart encountered a multifaceted problem: managing subscriber acquisition costs, maximizing average revenue per user, and minimizing the churn rate (the rate at which subscribers disconnect from service).

In 2002, Smart Buddy subscribers were considered "active" as soon as they activated and used a pre-paid SIM card in a handset. These SIM cards came loaded with P100 (US$1.80) of pre-stored airtime. Subsequently, the cards were reloaded by purchasing "call and text" cards in P300 (US$5.38), P500 (US$8.97), and P1000 (US$17.95) denominations. However, as noted by Smart in their 2002 year-end report, the sluggish Philippine economy impacted some subscribers' ability to afford the Smart Buddy service. As a result, their average monthly churn rate "in 2002 was 3.2%, up from the 1.8% churn rate in 2001."[44]

In August 2002, Smart introduced PureTxt 100, a pre-paid, text-only card sold in P100 (US$1.80) increments, as a way to "encourage subscribers to stay in the system, even in a limited capacity, instead of churning and re-subscribing at a later time."[45] Previously, the least expensive pre-paid card available to Smarty Buddy subscribers was P300 (US$5.38). PureTxt 100 was specifically designed as an alternative for subscribers who may temporarily be unable to afford the higher-denominated 'call and text' card. Smart Buddy charges P1.00 (US$0.02) per text message. Compared to P4.00 (US$0.07) for an off-peak call and P8.00 (US$0.14) for a peak time call, text messaging and the associated text-only pre-paid card was an obvious lower income product option.[46]

From December 2002 to March 2003, Smart Buddy subscribers increased by 527,158, from 6,649,038 in December 2002 to 7,176,196 in March 2003. Their average monthly churn rate remained at 3.2% in the first quarter, but it was "slightly lower than the 3.3% churn rate for the same period in 2002."[47] "PureTxt 100 cards [came] with a free allocation of 10 text messages and [were] valid for one month."

When PureTxt was introduced, it opened up an entire subset of the BOP market for Smart. Furthermore, existing subscribers whose cash flow might have otherwise caused them to unsubscribe were able to use PureTxt, thereby stabilizing the company's churn rate. Smart Buddy's 3.2% monthly average churn rate in the first quarter of 2003 showed no dramatic decrease from the end of 2002. However, the rate was slightly decreased from the first quarter of 2002 figure (3.3%), which had been a significant increase over the 1.8% rate in 2001. Smart attributed that increase to the "the general economic sluggishness of the Philippines" in 2002.[48] During this economic period, Smart Buddy's pre-paid and lower-income subscribers might otherwise have been forced to drop their subscriptions without the introduction of PureTxt P100 to keep them enrolled. Even the modest decrease of the churn rate following the PureTxt product introduction demonstrates Smart's successful retention of low-income customers by paying attention to their unique economic needs.

Smart Money

Smart's interest in mobile banking and commerce led to the introduction of Smart Money in December 2000. A partnership with MasterCard, the service was heralded by the company as "the world's first electronic cash card linked to a mobile phone." Smart Money requires users to transfer money from a bank account to a Smart Money account. Subscribers can then use a Smart Money card like a debit card to pay for a variety of goods and services at a network of retail stores and restaurants. Users can also "transfer cash from one Smart Money card to another via SMS." In the early part of 2000, Smart funded the research and development of a proprietary mobile commerce platform developed in-house. Smart Money is the first product developed for the platform. Another product now using this platform is Smart MBS (Mobile Banking Services). MBS allows users to make account balance inquiries, funds transfers, and to reload their of Smart Money accounts (with a personal identification number) using SMS messaging on their handsets.[49]

MBS subscribers enroll in the program at their bank. The MBS enrollment form requires a subscriber/account name, Smart GSM mobile number, the bank account number, and secondary bank account numbers if subscribers plan to transfer funds between accounts. Once enrolled, the subscriber receives, via text message, a unique, randomly generated 4-6 digit Mobile PIN from the bank onto their enrolled GSM phone. Because of Smart Money's and MBS' required connection to a bank savings account, the services are not geared to include those subscribers whose incomes prevent them from obtaining bank accounts. As such, both were not well-developed for BOP consumer's needs.

SMS text of M-PIN notification

Smart Load

Smart continued to develop products for its mobile commerce technology platform. In May 2003, Smart Load was introduced. The new service allows users to transfer airtime (voice and text credit) via SMS. Whereas Smart Money transferred cash and required a bank account, Smart Load transfers pre-paid airtime from a retail merchant or other reseller to a pre-paid phone customer. Smart needed a way to increase their revenue on pre-paid sales; the answer was to eliminate the physical SIM card as the purchase or reload mechanism for cellular phone minutes. As a result, by the end of the second quarter of 2003, Smart had eliminated production and distribution of their PureTxt P100 re-load card.

When the PureTxt card was eliminated, the company simultaneously reduced Smart Load prices into smaller denominations. Smart Load denominations and airtime breakdowns are[50]:

LOAD	PRICE	CONTENT	LOAD EXPIRY	SIM VALIDITY
Economy	P30	30 text messages 3 mins voice calls	3 days	30 days
Regular	P60	60 text messages 6 mins voice calls	6 days	30 days
Extra	P115	115 text messages 13 mins voice calls	12 days	60 days
NEW!	P200	200 text messages 25 mins voice calls	30 days	120 days

(P30 = US$0.54, P60 = US$1.07, P115 = US$2.06, P200 = US$3.58)

To electronically re-load, a Smart Buddy subscriber simply gets in contact with a Smart Load retailer, chooses from the selection of Smart Load denominations, and pays the retailer. The retailer then loads the customer's airtime from a specially designed, retailer SIM phone to the subscriber's phone – all electronically. The subscriber receives a text message indicating the new load amount once the transaction is complete. The transaction does not require the customer and the retailer be in the same room; the entire transaction can take place electronically.

The smaller denominations are marketed by Smart as "telecoms in sachets" and were designed specifically for the low-income Filipino market where "tingi-tingi" or "purchasing goods in small amounts" is part of daily life.[51] As Smart notes, Filipinos in the C, D, and E income brackets:

> "…average four trips a week to the neighbor store (compared to just once a week or less for A and B consumers). Selling sachets has thus broadened the market for a wide range of consumer goods…[and] is now doing the same thing for the mobile phone services."[52]

The Smart Load payment model also pays attention to low-income market practices. While the product's technology is quite advanced, the company notes that "relationship selling" is what ultimately makes Smart Load possible.[53] Smart retailers are predominantly "sari-sari" storeowners. Sari-sari's are small storefronts that sell foodstuffs and sachet-type products predominantly to low-income populations in communities throughout the Philippines. In 2003, there were an estimated 566,260 sari-sari's in the Philippines.[54] Customers favor sachet products because their daily cash flow cannot support larger volume purchases. When customers cannot afford even low-priced products, the sari-sari neighborhood relationship becomes important. Storeowners extend credit, making Smart Load's electronic sales and re-loads possible even for Filipinos living under the poverty line. To meet customers' demand for telecommunications services, sari-sari merchants simply extended the existing on-credit purchasing model already used for staples and sachets.[55]

Smart claimed 50,000 outlets at the launch of Smart Load in May 2003, but that number increased ten times over to 500,000 retail agents through its current distribution network.[56] As a result, four months after the launch of Smart Load, "two thirds of Smart's pre-paid users were reloading their phones electronically."[57] Additionally, the company reports that "[a]s of June 30, 2004, approximately 91% of Smart Buddy subscribers were using Smart Load as their reloading mechanism" and that "Smart Load accounted for approximately 61% of sales derived from reloads."[58]

Pasa Load

To make sales and re-loads even more accessible for cash-poor customers, Smart modified the Smart Money software to break down Smart Load denominations even further. In December 2003, Smart launched Pasa (transfer) Load. The new system allows consumers to transfer loads as low as P10 (US$0.18), from one Smart Buddy or Piltel Talk 'N Text account to another. By January 2004, denominations of P2 (US$0.03), P5 (US$0.08), and P15 (US$0.27) were added to the Pasa Load lineup.[59]

Distribution

The electronic load innovation made it possible for Smart to improve and extend their distribution chain without incurring major additional costs. No longer did company retailers have to obtain, stock, and sell pre-paid cards. Instead, Smart Load retailers sell micro loads of airtime. Transfer loads are sent from retailer phones directly to the handset of their customers. The system is more efficient, secure, and allows for flexibility on the retailer's end, all of which makes the service more accessible to the end user.

Smart estimates that, of their more than 500,000 retailers, "approximately 90%…are micro businesses (e.g. neighborhood stores [including sari-saris], housewives, and students acting as roving agents).[60] Smart makes distribution simple for these small entrepreneurs. Retailers complete transactions using a menu embedded in a special retailer SIM card by sending "specially formatted text messages that execute the sale."[61]

The start-up costs associated with becoming a Smart retailer are minimal. A prospective merchant needs a bank account, a GSM handset, a retailer SIM card, costing P100 (US$1.79), and an initial load balance of P300 (US$5.37). Low capital requirements enabled the company to "build an extensive dealer network and recruit several hundred thousand retailers in a few months."[62] These retailers, in turn, serve a broader market area since sales can take place over the phone eliminating the need for consumers to physically travel to a retailer site. Retailers receive

15% commission. The most popular packages are P30 (US$0.54), P60 (US$1.07), and P115 (US$2.06).[63]

Innovation Recognition

Smart's innovations were recently recognized by the telecommunications industry. Smart Load was awarded "Best Mobile Application or Service for the Consumer Market" at the 6th GSM Congress in France in February 2004. Smart Money was awarded a similar recognition in 2001.[64] Industry recognition outside of the Philippines prompted Smart to think about developing similar mobile commerce technology in other BOP markets. Their subsidiary, Smart Money Holdings Corporation, is responsible for licensing the technology. See Appendix IV for more details on Smart's subsidiaries.

SOCIAL IMPACT

With an explicit focus on the BOP market, Smart's business model targets consumers who would otherwise have little or no access to telecommunications services. Pre-paid services, sold in ever-smaller denominations, are Smart's entry point to the BOP market – as well as its profit center. There is not, as yet, a proven or quantified correlation between Smart's products and the socio-economic impact on its consumers. It is clear, however, that there is "pent up demand" for telecommunications services in developing markets.[65] Smart's share of the overall wireless market continues to grow, driven by BOP demand. Such services, absent innovations such as those created by Smart, are usually too expensive for the population living on less than two dollars per day.

Smart's electronic distribution network created a new class of entrepreneurs. By simplifying its Smart Load retailer requirements, the company has helped generate job opportunities and created a new revenue stream for these entrepreneurs. Some retailers even indicate that they can make as much or more revenue selling over-the-air minutes as they can from other consumer goods sales. Some Smart retailers load a minimum of P1,000 (almost US$18.00) to customers' handsets every day.[66]

Furthermore, the Philippines' maturing cellular phone market encourages price competition, lowering the cost of owning a new handset. When demand increased among the C, D, and E income segments, due in large part to Smart's offerings, entrepreneurs began selling used handsets.[67] By offering services geared towards low-income consumers, Smart catalyzes demand for less expensive handsets.

Overall, Smart has paid close attention to the reality of its Filipino market. With as much as 90% of the population in the D and E income segments, many in the Philippines are beginning to acknowledge consumers in the "lower-income bracket" as those "who are keeping the country's retail industry afloat, proving true the adage that there is strength in numbers."[68] Smart came to this realization earlier than most Filipino businesses and designed their business model to target these segments from the beginning. The result is that Smart's BOP-oriented business model, in particular their Smart Load product, has had a real impact on their overall financial success and on the low-income customers they serve.

Consumers benefit from access to low-cost telecommunications services that fit their needs and align with their daily cash flow. Smart, meanwhile, enjoys a self-sustaining, low-cost product distribution network that eliminates physical inventory and the associated risks. Product distribution is now faster, more efficient, and as the company claims, more secure (though technology specifics are not easily available in order to fully analyze network security).

The new distribution structure and pricing scheme benefits retailers as well. Retail distributors have no physical stock to store and manage and no accompanying property theft risks (except that of retailer handsets and SIMs). The SMS distribution interface is reportedly easy to use and can be sold in a personal fashion complementary to sari-sari business practices. The special retailer SIMs have a function allowing retailers to "open" or "close" their retail handsets via SMS and allowing retailers to sell outside of a physical location, and for shop owners, outside of regular store hours.[69]

Finally, consumers benefit from the "telecommunications-in-sachets" model of small unit sales. Smart Buddy, PureTxt, and Pasa Load make telecommunications services affordable, while Smart Load and Smart Money make services accessible with faster, more convenient reloads that don't require physical presence for purchase. The ability to reload electronically means consumers can purchase airtime in rural locations. The community as a whole benefits from broader service (wherever a Smart signal is available). Additionally, jobs have been created for entrepreneurs, the service's resellers, which run the gamut from store owners, to housewives, to students.

Texting, Cellular Phone Adoption, and Cultural Context

The in-depth study, *Txt-ing Selves: Cellphones and Philippine Modernity*[1] addresses the impact of cellular phones and texting on the Philippines' social and cultural landscape. It is the first study of its kind to focus on the impact of mobile technologies in the Philippines. Written by De la Salle University in the Philippines and funded by the Embassy of Finland, Manila, some of the study's conclusions reflect the general global impact of mobile technology, others are less obvious and clearly specific to the Filipino market.

The authors cite "the lack of adequate telephones and other modern communication technologies," including "ordinary postal, telegraphic and telephonic services" as one of the reasons for Filipinos' rapid acceptance and adoption of cellular phones. As with many other developing countries, traditional telecommunications services are generally unavailable in areas other than cities, and, even if they are available, are prohibitively expensive.

The study indicates that "Filipinos use the cell phone like most other people in the world, except for their preference for texting." They attribute this preference to the Philippines' oral tradition, noting that the combination of "the informality of speech with the reflectiveness of writing" inherent in texting, along with its lower cost, makes texting popular with Filipinos.[2]

For years, expatriate Filipinos have helped support their families back home; it has become a significant element of the Philippine economy and culture. The authors note texting's importance as a medium that supports and facilitates the financial aspects of long distance family obligations.[3] Based on user interviews conducted by the study's authors, Filipinos use cellular phones to stay in contact with family members working abroad - often to request transfers of money or confirm bank deposits.[4]

While the survey did not ask respondents to report the telecommunications provider they use, it makes sense that, since Smart's dominates the BOP market, the respondents are representative of Smart subscribers. The study does not establish a direct correlation between rapid cellular phone acceptance and economic improvement in the Philippines. Despite this, Smart's recent contributions to the telecommunications arena are widely recognized as innovative and important to the country's rapidly growing cellular phone density.

[1] Pertierra, Raul et al., Txt-ing Selves: Cellphones and Philippine Modernity, De La Salle University Press, Inc., 2004. The study is available on line at http://www.finlandembassy.ph/texting1.htm. Accessed July 1, 2004.
[2] Ibid. Chapter 7, p. 20.
[3] Ibid. Chapter 5.
[4] Ibid. Also see Chapter 4 for case studies.

COMPETITION

Globe is Smart's primary competition in the Philippine cellular market. Until recently, Globe focused mainly on serving the A and B market segments; this management decision leaves it considerably behind Smart in terms of capturing lower-income market share. Only in May, 2004 did Globe officially announce a plan to challenge Smart in this market.[70] The plan, however, closely mirrors Smart's existing business model, and its "innovative" facets simply replicate Smart's future strategy.

Globe's strategy breaks into a four-part plan calling for the company to expand network coverage to the low-income market, particularly outside of Manila. An expansion of the sales and distribution network as well as achieving lower operating costs are other major elements of Globe's strategy.

Though Globe may be responding late to Smart's BOP market focus, the rival cannot be ignored. The low-income wireless market in the Philippines is not only increasingly viable market, but increasingly educated and informed as well. The competition between Globe and Smart for market share will continue to be very close for the conceivable future. Whether they are successful will likely depend on how well the two companies can continue addressing the needs of the BOP consumer. This is both a challenge and an opportunity for the two companies, particularly for Smart. As the current market leader and industry expert, Globe and other competitors will look to successfully replicate Smart's BOP-focused business model for low-income cellular consumers.

CHALLENGES AND OPPORTUNITIES

Continued BOP Focus

Despite Smart's success, the company continues to carefully plan future growth looks to expand its share of the BOP market. Smart is attending to network and service improvements to ensure high quality of service. Additionally, their first quarter 2004 company analysis indicates a continued focus on the BOP market. Specifically, the company plans to target the D and E market segments more so than in the past.[71]

Future plans include introducing lower-cost handsets, and lowering the cost of infrastructure expansion to allow expansion into "smaller, less affluent municipalities that were previously uneconomical to serve." Finally, the company plans to continue innovating to make mobile services even more accessible to low-income segments.[72]

New Market Areas

Smart has also orchestrated an expansion into new markets. In October 2003, they acquired a majority interest in Wolfpac Mobile, Inc. Wolfpac was one of Smart's content providers and has been recognized by the international telecom community for innovative application development.[73] With Wolfpac on board, Smart plans to offer its own content along with the data services, such as enhanced texting services, which they already provide.

Expansions outside of the Philippines are taking shape. In January 2003, Smart's subsidiary SMHC began to market their e-Mobile Commerce Platform to international operators.[74] Smart continues to show a commitment to mobile e-commerce and e-banking activities.

The company is also committed to a culture of corporate social responsibility, specifically by addressing the needs of their BOP customers. Smart currently operates its Connecting Communities Program (CCP), which promotes ecotourism and sustainable business activities in the country. The CCP offers GSM service or Smart Link satellite communications services in areas not currently served by fixed lines or by GSM service. It also provides equipment through a use-to-own plan, which allows communities to own phone equipment once a minimum volume threshold is met in the area. Smart is known already as the wireless provider with the most extensive rural coverage throughout the Philippines. Its nearest rival, Globe, only recently began plans for wider service coverage in rural areas.[75]

Smart is committed to its vision of a mobile system that is fully integrated with banking services. Through its mobile commerce platform, the firm introduced a variety of products to address the demand for secure, convenient, and inexpensive financial services. Smart's continued activity in this area, combined with explicit targeting of the D and E income segments, leads to the possibility that more of the BOP market could be integrated into the formal banking structure of the Philippines using Smart technology. As one of the top remittance income countries in the world,[76] the Philippines and Smart's BOP business model and product innovations hold promise for the continued development of products and services based on the cellular phone as a transaction platform.

KEY LESSONS

Prior to Smart's aggressive move into the lower income markets, Filipino companies held the same stereotypical resistance to courting these markets as companies in more developed countries. Telecommunications was concentrated in metro areas, where it was assumed (incorrectly) that disposable income from upper-class and business customers could support the cost of services. Overcoming this misconception was crucial to Smart's success.

Cellular Phones and Financial Transactions – Africa's CelPay[1]

Smart is not the only company in a developing country that is experimenting with the cellular phone as a transactional platform. MSI Cellular Investments, parent company of African telecommunications giant Celtel, recently developed its CelPay initiative, which it is piloting in Zambia. Celpay is an innovative payment solution that works like a bank account but is managed through a cellular phone using a special SIM card purchased for a one-time cost of K25,000 (US$5.32).

After joining CelPay, customers and businesses insert the SIM, allowing them to complete cash transactions from their mobile phones. The card works by transmitting data over a frequency incompatible with voice transmissions, ensuring that account information remains secure and that high call volume at certain times of the day does not interrupt transactions. To begin, customers must transfer money from their bank account to an interest-bearing CelPay account.

Financial transactions between their customers and merchants are completed via SMS with a PIN. Customers simply text the amount to be paid and a merchant code from their handset to the merchant's. Merchants pay a commission of 3.4% of the total transaction amount and a value added tax. Confirmations for merchants and consumers are received via SMS on their cellular phones and payment is transferred to the merchant account and recorded by the bank.

With more than 50 retailers enrolled in Zambia, CelPay is also currently operating in the Democratic Republic of Congo, and has plans to expand into other African countries. CelPay provides another example of electronic financial services delivery in developing countries, and highlights the growing possibilities of the cellular phone as an effective transaction platform.

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[1] See the CelPay project capsule in the Digital Dividend Clearinghouse, http://wriws1.digitaldividend.org/wri/app/navigate?_action=opencapsule&dbId=10240194%3afe20d9007b%3a-7fe4%3a3f-692c-7

Smart has succeeded in increasing its pre-paid subscriber base and steadily generating income from subscribers that were once written off by telecommunications experts. When combined with the overall rapid rise of pre-paid wireless services in the Philippines, Smart rose to become the number one wireless provider in a country of 82 million. The business community, especially the competition, has taken notice. Globe, in its May 2004 announcement of company business strategy, states:

> "The lower income segments have increasingly become a viable target customer group given changes in subscriber dynamics, and with improving efficiency, lowering of capital expenditure costs and enhanced economies of scale. This segment fuelled much of the growth experienced by Globe and the cellular industry as a whole in the past year."[77]

Smart's ability to understand the spending habits and limited cash flow of its individual consumers generated a ripple effect in the low-income community. Not only did Smart's approach with Smart Buddy, Smart Money, Smart Load, and Pasa Load help telecommunications services to finally fall within reach of the majority of Filipinos, but their applications have helped to generate real revenue and opportunities for small Filipino entrepreneurs.

Smart's sensitivity to local business practices at the small- and micro-enterprise level allowed them to capitalize on an existing distribution network that they did not have to create by themselves. In particular, the low-priced, "on credit" purchasing practices of sari-sari's presents an opportunity for other types of mobile business transactions to occur in a similar fashion to the Smart Load model. Increased mobile banking activity from Smart and more inclusion of the BOP in formal banking channels could mean significant business developments in the Philippines – especially in the area of remittances.

Appendix I: Smart Company Reports[78]

Report End Date	Total Smart Subscribers	Pre-paid Subscribers (Smart Buddy)	Pre-paid Net Revenues (Smart Buddy) in millions	Average Monthly Churn Rate
12/31/02	6.8 m	4,569,616	Not separated from post paid revenue	3.2%
3/31/03	7.4 m	4,981,156	P 8,588.9 (US$ 154.27)	3.2%
6/30/03	8.1 m	5,212,103	P18,171.4 (US$ 326.38)	3.1%
9/30/03	9 m	5,818,005	P28,230.9 (US$ 507.07)	2.9%
12/31/03	10 m	6,649,038	P40,910.1 (US$ 734.80)	2.9%
3/31/04	11 m	7,176,196	P11,912.0 (US$ 213.96)	3.3%
6/30/04	12.5 m	7,920,447	P25,165.0 (US$ 452.00)	2.0%

Appendix II: Country Overview[79]

The Philippines, an archipelago made up of 7,107 islands, covers an area of 300,000 square kilometers. It is divided into the island groups of Luzon (location of the capital city Manila), the Visayas, and Mindanao, and subdivided into 16 regions, 78 provinces, 81 cities, 1,542 municipalities, and 41,949 barangays.[80] It is a mountainous country with extensive coastline (36,289 km) and tropical weather conditions including regular monsoon seasons (April to November).

Estimates of the country's population in 2004 run from 82.7 million[81] to just over 86 million[82] with 60.2% of those in the 15-64 year old age group. The literacy rate (those over 15 years of age) is 95.9% of the total population. Filipino and English are the official languages and there are numerous dialects throughout the country.[83]

Economically, the Philippines is a developing country with a GDP of US$390.7 billion (purchasing power parity) and a 4.5% real growth rate (2003 estimate). Services constitute 50% of the GDP with industry (35%) and agriculture (15%) making up the remainder.

Recently re-elected President Gloria Macapagal Arroyo has made economic growth a priority, part of which includes spreading the country's progress beyond urban areas into all regions of the country.[84] Methods for spurring economic growth include measures to increase trade and investment, broaden the tax base and improve tax collection efforts, and increase support for entrepreneurship and small- and medium-sized enterprises (SMEs).[85] The country's current fiscal deficit is close to 5% of GDP.[86]

Appendix III: Smart Communications - Full Products and Services List

Products

- Smart Gold: post-paid GSM cell phone subscriber service
- Smart Buddy: pre-paid GSM cell phone subscriber service
- Smart ACeS: GSM mobile to satellite coverage
- Smart Link: pre-paid satellite - not GSM - for those without access to landline or without cell coverage (in remote or isolated areas)
- Smart Talk: pre-paid pay phone service with outgoing text message service and personal text mailbox
- Talk 'N Text: pre-paid Piltel GSM cell phone subscriber service
- Other post-paid products:
    - Smart Amazing Phone
    - Blackberry e-mail service
    - Smart Infinity: multiple cell phone lines in one handset
    - Smart Kid: cell/texting service for children/parents

Services

- Text: post- and pre-paid includes:
    - Women's club
    - Election-related texting
    - Movie, restaurant reviews
    - Beauty/living/lifestyle
    - Celebrity
- Voice: post- and pre-paid includes:
    - Ring tones/tunes
    - Call blocking
    - Call waiting, forwarding, and holding
- MMS: international Multimedia Messaging Services
- Data: post- and pre-paid
    - WAP (Wireless Application Protocol)
    - GPRS (General Packet Radio Service)
    - Mobile Data/Fax (post-paid only)
- Smart Money: post- and pre-paid service partnership with MasterCard. Transfer money from bank account to a Smart Money Card in order to:
    - Use card in nationwide shops and restaurants
    - Re-load airtime for Smart Buddy over the air
    - Transfer from one Smart Money card to another
    - Pay utility bills (Smart Gold subscribers only)
    - Use like an ATM card
    - Get reward points with transactions
    - Use of the click and browse menu in Smart 64K Super SIM
    - Average transaction cost - P2.50; mobile e-commerce
- Mobile Banking – post- and pre-paid
    - Online banking transactions including re-load of Smart Buddy over the air
    - Pay bills through cell phones
    - Re-load Smart Money
    - 9 Banks including Citibank, East West Bank, Equitable PCI

        - Cost P2.50 per transaction
- International Services include:
    - International Roaming – post- and pre-paid
        - Post-paid: Gold phones; GSM; use Smart SIM in rental phones abroad
        - Pre-paid: Smart Buddy; international text roaming; send and receive to and from 100 countries for P15 per send, includes reloads by text while traveling
    - Roaming within the Philippines – for visitors to the Philippines
    - IDD (Internet Data Distribution) – post- and pre-paid
        - calling abroad for $.40 a min
        - Smart international texting for P10 for Gold and P15 for others
- TextMail: post- and pre-paid; complimentary service to combine e-mail accounts into Smart phone mail with web-based service
- Smart Zed: ring tones, logos, games, messaging, stock prices, etc. Entertainment, communication and information services through Sonera Zed, Ltd., a subsidiary of the Finnish telecommunications company Sonera Corporation.

Additional Offerings

- Cell Phones: Offer handsets from the following companies: Alcatel, Smart Amazing Phone, Mitsubishi, Motorola, Nokia, Panasonic, Philips, Samsung, Sendo, Siemans, Sony, Ericsson

- SIM Packs: Various pre- and post-paid amenities depending on needs and type of phone services
    - Super SIM 64K for P199
    - Super SIM2 64K for P199
    - Super SIM3 64K for P150 with P50 pre-load value
    - Super SIM3 64K for P199 with P100 pre-load value
    - TNT Power SIM Plus for P90

- Pre-Paid Cards – Call and text cards with the following rates:

TYPE OF CALL	PEAK	OFF-PEAK
Smart/TNT/ACeS	P 6.50/min	P 6.50/min
Voice Retrieval	P 6.50/min	P 6.50/min
WAP via CSD	P 6.50/min	P 6.50/min
Other Mobile/landline	P 7.50/min	P 7.50/min
NDD	P 7.50/min	P 7.50/min
IDD	$ 0.40/min	$ 0.40/min
PLDT premium services	P 10.00/min	P 10.00/min
Text Messaging	P 1.00 per message	P 1.00 per message
International Text	P 15.00 per message	P 15.00 per message

- Buddy Load, the over-the-air reload with Smart GSM phone to load airtime into Smart GSM pre-paid account.

Packages include:

LOAD	PRICE	CONTENT	LOAD EXPIRY	SIM VALIDITY
Economy	P30	30 text messages 3 mins voice calls	3 days	30 days
Regular	P60	60 text messages 6 mins voice calls	6 days	30 days
Extra	P115	115 text messages 13 mins voice calls	12 days	60 days
NEW!	P200	200 text messages 25 mins voice calls	30 days	120 days

Appendix IV: Smart Subsidiaries[87]

Smart has two wholly-owned subsidiaries: Smart Money Holdings Corporation and i-CON.

Smart Money Holdings (SMHC)

SMHC was born out of Smart's development of their Mobile Commerce Platform, one of Smart's award-recognized innovative products (see Products and Services section below). The platform has enabled Smart's secure mobile services in the delivery of financial and transactional data. SMHC is responsible for the licensing of Smart's integrated mobile commerce systems and was established in January 2002.

i-CON

i-Contacts Corporation (i-Con) was founded in June 2001, and is a call and contact center. In addition to its individual subscriber call center function, it also provides corporate clientele with access to customers using voice, fax, Internet and Short Messaging System services.

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offer income breakdowns by the ABCDE categories. Similarly, the National Statistics Office provides income by percentage breakdowns of the population but not by the ABCDE category; see http://www.census.gov.ph/data/sectordata/dataincome.html for a complete list of income data results. All sites last accessed July 23, 2004.

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[75] For a more details on some of Smart's community programs see Connect, pages 16-25 and Villanueva.
[76] See Diamond, David, *One Nation Overseas*, Wired, June 2002 at
http://www.wired.com/wired/archive/10.06/philippines.html accessed July 23, 2004.
[77] Villanueva.
[78] Chart compiled from Smart Communications, Inc. financial statements available at
http://www.smart.com.ph/SMART/About+Us/Financials/.
[79] Information in this Appendix taken primarily from the Philippine government site page *Philippines at a Glance*, http://www.boi.gov.ph/basicfacts.html and other government agency links found at the country's web portal http://www.gov.ph/. Also see the CIA World Fact Book www.cia.gov/cia/publications/factbook/geos/rp.html all accessed July 22, 2004. Economic and population figures from the CIA World Fact Book are similar to the World Bank estimates from 2002 at www.worldbank.org/cgi-bin/sendoff.cgi?page=/data/countrydata/aag/phl_aag.pdf.
[80] From USAID Philippine page accessed www.usaid-ph.gov/documents/phil%20profile.doc July 9, 2004.
[81] Based on Philippine government's *Philippines at a Glance* page.
[82] Specifically, the July 2004 estimate from the CIA World Fact book is 86,241,697.
[83] Statistics here also from the CIA World Fact Book, but for more detailed statistics on population up to 2000, see the National Statistical Coordination Board website, http://www.nscb.gov.ph/secstat/d_popn.asp.
[84] President Gloria Macapagal-Arroyo's 10-point Agenda from http://www.news.ops.gov.ph/pgma_10point-agenda.htm accessed July 22, 2004.
[85] See Philippine Government website news pages at http://www.gov.ph/ accessed July 22, 2004.
[86] Philippines Factsheet from the Economist.com from the Economist Intelligence Unit, February 27, 2004. At http://www.economist.com/countries.Philippines/profile.cfm?folder=Profile-FactSheet accessed on July 14, 2002.
[87] From Smart Communications, Inc. corporate website http://www.smart.com.ph/SMART/About+Us/Subsidiary/ accessed July 30, 2004.