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### **'A Smart Idea – Delivering Mobile Services in Developing Markets'**

by **Jamie Anderson and Stephen Johnston**

It is without a doubt that the market for telecommunications services among the globe's poor is huge. Those consumers at the very 'base of the economic pyramid' (BOP) – those with per capita incomes of less than \$1,500 – are estimated to number more than 4 billion. For more than a billion people - roughly one-sixth of the world's population - per capita income is less than \$1 per day. The 20 biggest emerging economies include more than 700 million such households, with a total annual income estimated at some \$1.7 trillion. But the success of mobile network operators (MNOs) in penetrating these low-income customers has been patchy at best, with most companies choosing to focus on the middle and upper income segments of the developing world. But while the vast majority of mobile operators have seen the challenges of serving the poor as insurmountable barriers, Smart Communications Inc. of the Philippines has quietly pursued a strategy of experimentation in developing unique product and service propositions for some of Asia's most needy consumers. At the heart of Smart's success has been the development of an approach that delivers the 4As - availability, affordability, acceptability and awareness.

One of the biggest challenges of serving BOP markets is to ensure availability of mobile products and services. Unlike in the developed world, distribution channels in BOP markets can be fragmented or non-existent and the task of simply getting products to people can be a major hurdle to overcome. In the Philippines, Smart Communications Inc. recognized that availability was perhaps one of the biggest barriers to providing mobile telecommunications to BOP consumers. More than 65% of the Philippines' population lives in rural areas, and the country is comprised of more than 7,000 islands. While Smart had network coverage for 75% of the population by early 2003, the 50,000 resellers of its pre-paid cards were predominantly medium sized storeowners and dedicated mobile resellers in towns and cities, and the company had very limited penetration of the small 'Sari-Sari'(Sari-Sari means varied in Tagalog) stores in non-urban areas. The company recognized that providing such stores in isolated rural areas with pre-paid cards would make supply chain management costly and difficult. Many analysts claimed that it simply could not be done profitably.

To overcome the complexity of distributing pre-paid cards, Smart developed an innovative over-the-air (OTA) payment system. Called Smart Load, the new technology allowed a retailer to load a customer's airtime from a specially designed, retailer SIM (the small electronic network access card inside the retailer's mobile handset) - all electronically. With the launch of Smart Load, Smart minimized physical product distribution costs by creating a demand response stocking system for pre-paid airtime. Product distribution became faster, more efficient, and more secure. The special retailer SIMs allowed retailers to "open" or "close" their retail handsets via SMS and enabled them to sell their service outside a physical location, and outside regular store hours. The ability to reload electronically meant consumers could purchase airtime even in remote rural locations. Retailers did not have to obtain stock and sell pre-paid cards.

The second hurdle to overcome in serving BOP consumers is to ensure that products or services on offer are affordable. With close to 50 percent of the population in the Philippines living below the poverty line, affordability of mobile telecommunications was certainly an issue for Smart. Socioeconomic breakdown in the Philippines falls into five categories A, B, C, D and E. The A, B and C segments are upper, upper middle and lower middle income families, while the D and E segments are lower income and below the poverty line groups. Smart discovered that while P100 (the lowest price for a prepaid card in 2002) was not a lot of money for a consumer from the A or B segments, this amount represented a significant cash outlay for a family living in poverty. Indeed, one hundred pesos represented a more than 80% share of daily income for over half of the

families in the country. Quite simply, said the analysts, a very large segment of the population would be unable to afford mobile telephony, and mobile penetration was likely to peak at no more than 30% of the population by 2008.

To develop propositions to reach the low end of the market, and particularly consumers in the D and E segments, Smart recognized that it could not benchmark others in the mobile industry, as there were very few cases of mobile network operators who had successfully developed propositions for very low income consumers.

So to reach its BOP consumers, Smart Communications ignored industry best practice and instead built on its own OTA technology to develop prepaid pricing plans that offered airtime in sachet-like packages, with prices that were broken down into much smaller denominations than had previously been available – as low as P30 (US\$0.54).

The new pricing packages were a huge success, and within ten months these lower denomination packages were generating 3 million daily top-ups, with revenues of more than \$2 million a day. Smart subsequently launched Pasa (transfer) Load, making re-loads even more accessible for low-income customers. The new service allowed consumers to transfer loads as low as P10 (US\$ 0.18), from one account to another. By January 2004, denominations of P2 (US\$0.03), P5 (US\$0.08), and P 15 (US\$0.27) were added to the Pasa Load lineup. While Smart offered sachet pricing, the profits margins on these sachets matched or exceeded those that had been made on pre-paid cards. The result – as of end 2004 Smart had amongst the highest EBITDA margins (63.7%) of any network operator in the Asia-Pacific region, despite having amongst the lowest average revenues per user (ARPU).

The third challenge in serving BOP markets is to gain acceptability for the product or service. Therefore, there is a need to offer products and services that are adapted to the unique needs of both customers and distributors. Smart's consumer research revealed that mobile phone ownership was viewed as important by BOP consumers in the Philippines not only for 'entertainment and enjoyment' purposes. Many consumers indicated that access to mobile telephony could help to make their lives easier (and possibly even allow them to save money), by reducing the need for travel to adjacent villages or towns to search for work or to check market prices for their agricultural produce. For example, the cost of a text message to an employer in an adjacent village to check for work availability could be as little as one-tenth the cost of traveling to that village by public transport. Other consumers indicated a desire to be able to seek medical advice or call a doctor. Nor was the affordability of mobile handsets a barrier to acceptability, as Smart's research revealed that second hand handsets were becoming readily available at US\$35 to US\$40.

In the presence of strong consumer demand and low-cost handsets, Smart recognized that one of the major 'acceptability' barrier to overcome was the reluctance of Sari-Sari stores to stock pre-paid cards due to high inventory costs and security concerns. These issues were largely dealt with by Smart's introduction of OTA technology and sachet-based pricing. Furthermore, Smart worked to ensure that the start-up costs associated with becoming a retailer were minimal. A prospective merchant needed a bank account, a GSM handset, a retailer SIM card, costing P100 (US\$1.79), and an initial load balance of just P300 (US\$5.37). With such low capital requirements several hundred thousand retailers were attracted as Smart partners in a few months, allowing the company to build an extensive retail footprint. In turn, these retailers reached a broader market area since sales could take place electronically, eliminating any need for consumers to travel to a retailer. In some cases merchants extended their existing on-credit purchasing model already used for staples and sachets to Smart Load. End retailers received a 15% mark-up on sales, and many indicated that they could make as much or more revenue selling OTA minutes as they could from other consumer goods sales.

With many BOP customers largely inaccessible to conventional advertising media building awareness is another challenge for companies wishing to serve low-income consumers in the developing world. To overcome these constraints, Smart invested heavily in billboards along roads, in urban areas and in rural communities, and also developed point of sales marketing materials tailored specifically for Sari-Sari stores. The company also developed advertisements suitable for attachment to Jeepneys (the most pervasive form of public transport in the Philippines) and three-wheeler taxis. Smart also worked closely to train its seven largest

national dealers, who in turn trained sub-dealers and others in the distribution channel such as Sari-Sari storeowners, students and housewives who could also become resellers. A key element of this process was winning support for the system from these seven dealers through a series of workshops. Smart admits that the most powerful tool for building awareness of Smart Load came from these micro-entrepreneurs who marketed OTA reloads directly to friends, family and members of their local communities.

Up until now, MNOs have lacked a comprehensive framework for profitably addressing BOP consumers in developing countries. But as Smart Telecommunications has shown, by leveraging the 4As - availability, affordability, acceptability and awareness – mobile network operators can achieve growth and profit, two elusive goals in many developing markets. In early 2005 Philippine Long Distance Telephone Company (PLDT), Smart's parent organization, revealed a net profit of PHP 28.04 billion (USD 512 million) for the full year 2004, up from PHP 2.12 billion (USD 38 million) the previous year. The record results beat market expectations, thanks in the main to explosive growth in revenues coming from Smart's new customers in the D & E segments, and PLDT had the largest market capitalization among Philippine listed companies. Mobile penetration reached 30 percent at the end of 2004, is expected to reach 40 percent by end 2005, and some industry observers now predict penetration rates of 70 percent or more by 2008. But beyond financial success, delivering the 4As has also enabled Smart to provide significant social good. Low income consumers have benefited from access to life-enhancing telecommunications services uniquely tailored to meet their needs, and at a lower cost than in the past.

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The 4As Framework

