Bottom of the Pyramid and Mobile Payments

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The Bottom of the Pyramid

Approximately half the world's population of over 6 billion people has access to a mobile phone and over 80 per cent live in areas covered by a mobile network. For the first time people living in the developing world own and use more mobile phones than in people in developed countries, and it is from the developing world that most of the next billion customers will come, and most of those will come from the 'bottom of the pyramid' or BOP.

Is There a Fortune at the BOP?[1]

The BOP covers annual incomes of less than $3,000, and over 80 per cent of people living in Greater Asia (including the Middle East) fall into that category, with over 40 per cent below $1,000 per capita income. Mostly they are hidden from view because much of their economic activity belongs to the 'informal' economy, which in Asia probably accounts for 30 per cent of official GDP – hence household surveys are more reliable than national accounts of income and expenditure.[2]

At the BOP across Greater Asia is a market for ICT goods and services estimated at $14.3 billion. This represents not what people are willing to spend but what they *do* spend, based upon household surveys.[3]

Where are the BOP markets for ICTs in Asia? The answer is overwhelmingly in urban areas, with only exceptions being Cambodia and Sri Lanka. India's BOP market for ICTs is 51 per cent urban, Pakistan's 69 per cent urban, Indonesia's 93 per cent urban; yet the scale of rural BOP demand is large, for example, $1.5 billion in Thailand and $3.8 billion in India. Although lack of access to mobile phones is the major structural problem facing the rural BOP, where they are available expenditure is high, for example, only 6 per cent of Pakistan's BOP rural households have a mobile phone, but their average annual spending is $24. Evidence supporting this finding goes back a long way, showing that rural households are willing to pay between 1-5 per cent (2-3 per cent is a reasonable average) of their disposal income on telecommunications.[4]

Network Services to the BOP: Remittances a Killer Application?

Traditionally telecom operators approached service to the BOP as a burden rather than an opportunity, but that is changing for three reasons. First, as subscriber markets in urban

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[1] See C.K.Prahalad and Stuart Hart (2002) *The Fortune at the Bottom of the Pyramid.*
[2] Allen L. Hammond, William J. Kramer, Robert S. Katz, Julia T. Tran, and Courtland Walker, IFC/World Resources Institute *The Next 4 Billion* http://pdf.wri.org/n4b_chapter1.pdf
[3] The BOP represents 42% of the urban consumer market and 76% of the rural consumer market in Asia.
[4] R.Kayani and A.Dymond (1997) *Options for Rural Telecommunications Development*, World Bank Technical Paper No. 359, The World Bank, Washington D.C

areas reach saturation levels, MNOs have sought to explore semi-urban and towns and villages in rural areas. Second, as the cost of network technology falls, and its efficiency increases, the incremental cost of providing network coverage has fallen. This happens progressively as networks established in smaller towns provide the platform for extensions into rural areas. Third, the demand for cheap and accessible communications, and other services and applications is proving a driver at the BOP.

The outstanding example to date is the use of *pre-paid* SMS and its application to remittance payments. As a means of effective communication SMS has proven invaluable to low-income customers who need to control their outlays and want to avoid voice calls which as open-ended communications can be costly and are often priced above SMS. As a tool for initiating a remittance for family or friends, or simply for a 'top-up' transfer of minutes from a kiosk owner to a customer, SMS is prizing open previously untapped markets.

Remittances, M-Payments and the BOP

According to estimates, around 200 million international migrant workers send anywhere between $200 billion (World Bank) and $268 billion (IMF) of remittances each year, and that's only the *recorded* flow of funds. Nearly $50 billion comes into East Asia and the Pacific, of which almost 80 per cent comes into China and India in roughly equal amounts. Close to $1 billion comes into the Philippines. No wonder the World Bank can say that remittances 'are the largest source of external funding in many developing countries.'[5] These remittances, because they are directly targeted, are vital for keeping families above the absolute poverty line, sending children to school, paying for shelter and health care, and helping people to rise out of the BOP, which explains why central banks across Asia are taking steps both to monitor this flow of funds (against money laundering and terrorist funding) and to facilitate it.

One step being taken is the promotion of m-payments and m-banking. For example, in India, as part of the GSM Association (GSMA) supported global 'Migrant Money Transfer' scheme,[6] a pilot project has just been launched by Bharti's Airtel MNO, the Bank of India, the ICICI Bank and the payments company mChek in the small Himalayan town of Pithoragarh. Overseas workers can deposit money in an overseas bank, and send an SMS instruction to have the money transferred to a bank account or to a mobile m-wallet in India. The recipient of the money will receive an SMS informing them the money waiting for their collection.

Lessons

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[5] 'Including these unrecorded funds, the true size of remittances is larger than foreign direct investment flows, and more than twice as large as official aid received by developing countries. Remittances are the largest source of external funding in many developing countries.' Remittance Trends, 2006, The World Bank: http://siteresources.worldbank.org/INTPROSPECTS/Resources/334934-1110315015165/MigrationDevelopmentBriefingNov2006.pdf

[6] Working with the CGAP (Consultative Group to Assist the Poor), a microfinance group of the World Bank's IFC, and the UK's Department for International Development (DFID) who are conducting a survey of 20 countries to understand what is possible and permitted under existing local laws and regulations.

The lesson is simple. *Trivial* technologies such as SMS, which are easily and rapidly accepted by consumers, often turn out to be the entry point to much higher value services. These may be international mobile money remittances, mobile banking, or mobile payments platforms that can be adapted to a wider range of applications such as mobile commerce, mobile online gaming and so on. These new market opportunities however rely upon a number of factors, of which the first and most necessary is easy and affordable access to these services. The second is the eco-system of stakeholders to make the delivery of services successful, the MNOs and the shop-keepers, the banks and the card companies, the handset manufacturers and the application service providers, and so on. The third is the vision to respond to the 'revealed' opportunities at the Bottom of the Pyramid.