HSPA.
MOBILE BROADBAND TODAY

Case Study Series

Dialog TELEKOM

Dialog Mobile, Sri Lanka

Sri Lanka's leading mobile operator is creating a broadband revolution. By leveraging HSPA mobile broadband technology, it is bringing affordable access to all levels of society, from the wealthiest businesses to the poorest villages.

Sri Lanka is this year celebrating its 60th birthday following its independence from Britain. Once famous for its tea, coffee, coconuts and rubber, now textiles and garments have become the largest industries. It is one of the economic stars of South Asia, one of the world's poorest regions.

Mobile communications have played a key role in Sri Lanka's economic development with penetration reaching 44%. At the forefront of this liberalised market is Dialog Telekom, a full service operator with more than 53% market share. Dialog's success lies in pioneering the low ARPU business model. Eighty-seven percent of the operator's 5 million mobile customers are prepaid with an ARPU of less than US$4.

But despite the success of the mobile industry to tap both the top and bottom of the economic pyramid, broadband has been less successful. All but the wealthiest people have no access to the Internet and computers. Sri Lanka has among the lowest internet penetrations in the region (1.4%) compared to India (4.5%) and Pakistan (4.6%).

Dialog, using its experience in low APRU mobile, decided to leverage its nationwide 3G network to bring broadband communications to rural Sri Lanka. "We saw an opportunity for generating new revenues while also addressing our corporate social responsibility," explains Dr Hans Wijayasuriya, Chief Executive of Dialog Telekom. By upgrading its 3G network to HSPA Mobile Broadband, it could bring low-cost broadband to homes, businesses and internet cafes. The question it faced though was whether there would be sufficient demand to justify this new business plan at all levels of the economic pyramid.

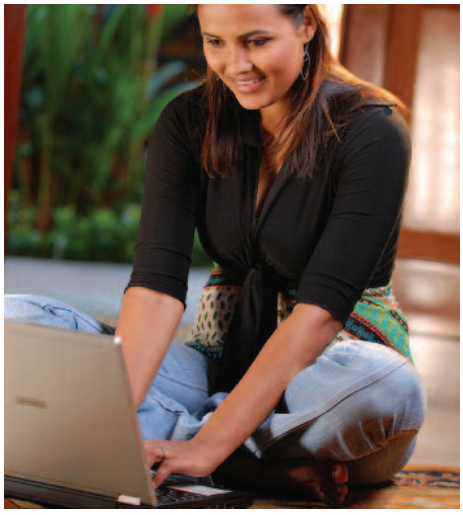
Highlights

- Sri Lanka's leading mobile operator is pioneer of the low-ARPU business model
- Targets bottom of economic pyramid with rural mobile broadband leveraging HSPA technology
- Initial 55 rural internet cafes prove that low-ARPU Mobile Broadband can be successful

Broadband for rich and poor, urban and rural

Dialog needed to ensure that costs to the user – of devices and bandwidth bundles – were attractive and not prohibitive. To make mobile broadband a successful mass-market service, it couldn't limit its focus to the wealthy urbanites and businesses. It would also need packages for the bottom-of-the-pyramid, the 4.3 million poorest adults many of which live in the countryside away from major cities. Dialog estimates that the rural economy generates $350 million per month compared to $110 million in the urban economy.

"Broadband presents us with a phenomenal opportunity. Throughout South Asia, markets are underpenetrated. We now face a similar problem as 10 years ago just as mobile voice was set to boom," adds Dr Wijayasuriya. According to Dr Wijayasuriya, penetration of mobile broadband, and mobile voice before it, depends partly on network and device availability, and partly on consumer's view of the costs and benefits.



Dialog was faced with either investing in network infrastructure and marketing to drive demand, or wait for demand to materialise. It correctly chose the path of market makers. In 2007, it took the decision to upgrade its nascent 3G network, which launched the previous year, to support HSPA Mobile Broadband. "HSPA presents a great opportunity from a financial perspective. The upgrade is simple and probably only requires a 20% incremental investment," adds Supun Weerasinghe, chief operating officer, Dialog Mobile.

In deciding to upgrade, Dialog looked at the many advantages HSPA offered over other broadband access technologies. Whereas fixed broadband would require significant investment in trenching copper and fibre lines, HSPA broadband could share the cell site infrastructure already created for the operators' GSM network. And unlike most fixed wireless broadband offerings, HSPA does not require line of site. Cell size can be quite significant also.

In rural locations, a single HSPA cell can extend to a diameter of 3-4 kilometres. With sufficient backhaul capacity, HSPA could offer a cost per megabyte unmatched by other broadband technologies.

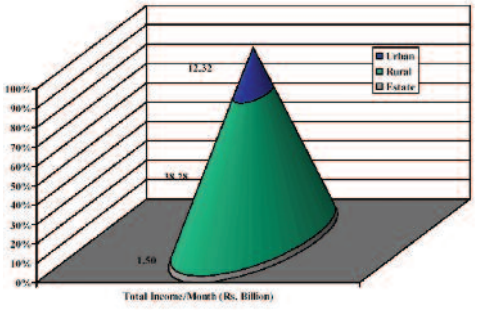
Targetting the bottom of the pyramid

For the top of the economic pyramid, it was relatively simple to design a range of broadband access options for monthly subscribers. These start at $0.45 per month for a 5 MB allowance, rising to $9.30 for a 1 GB allowance. Dialog partnered with Vodafone and Huawei to drive down HSPA modem prices to below $80 for a USB device capable of supporting 7.2 Mbps. It offers these to subscribers on an easy payment plan with 0% interest to encourage uptake. Dialog recently launched a new HSPA broadband unlimited package at $28 which includes the HSPA modem valued at $54. Utilizing a fair user policy, this offer allows customers use up to 5GBs a month using peak speeds upto 7.2Mbps speeds. The same package is offered to university students at $ 14 (50% off).

It is of course more complicated to bring broadband to poorer people, where digital literacy is extremely low.

To address this market, it was critical that Dialog leveraged its knowledge of the low-ARPU prepaid voice market. Its success had been sachet marketing - allowing prepaid customers to make very regular, small top-ups because pay in the rural economy tends to be weekly or even daily. "Sri Lankan consumers work with a no-commitment mindset. Cash and liquidity is very important. They won't buy anything they won't use, and we need to minimise the gap between use and payment," adds Dr Wijaysuria.

Broadband pricing models have traditionally taken a different approach to



While people in rural Sri Lanka are poorer than those in towns and cities, collectively the rural economy is three times larger than the urban one.

prepaid mobile voice. Broadband is often unmetered or measured in megabytes, a concept unfamiliar to people used to dealing in minutes. Broadband is often charged in advance on a monthly subscription basis.

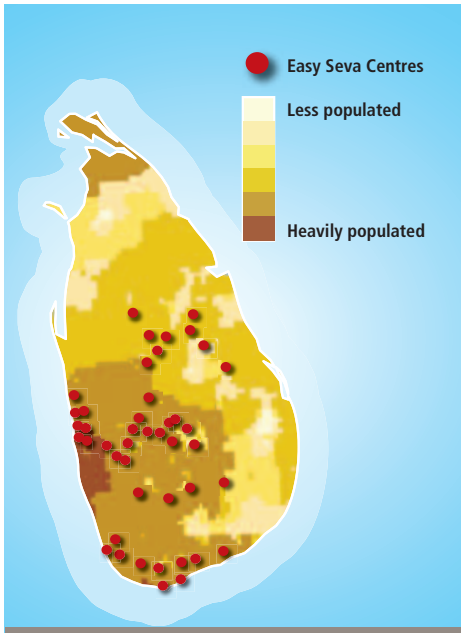
"We had to ask ourselves, could we support broadband with ARPUs in the $2-$3 range. We believed by aggregating lots of little bits of demand we could build a national business model," comments Weerasinghe.

Stimulating Rural Connectivity & Commerce

"We knew that simply delivering a lower cost of ownership would not suffice. That's not enough for people to take up broadband. As an operator, we have to do more than offer internet access. We have to participate in the value chain, giving users information as well as access. Information on agriculture prices, telemedicine, training and so on. It's a much bigger challenge than simply selling mobile voice. You have to become a total market creator," says Weerasinghe.

To address the very bottom of the pyramid, the villages where PC penetration is extremely low, Dialog needed to create a micro-market. One example of this has been the Last Mile Initiative developed in partnership with Synergy Strategies, Qualcomm Wireless Reach Initiative, USAID and Sri Lankan NDB. Easy Seva Centers are small Tele-centers promoting shared access, scattered across rural and semi rural towns in Sri Lanka, operating with a franchise model. "Easy Seva", the Sri Lankan arm of Synergy Strategies is the Franchisor while Dialog is the Broadband / Voice connectivity, retailer base and other telecom value added services provider. Through shared-access Easy Seva centres, Dialog and other partners have been able to bring data services to remote villages.

The first HSPA Easy Seva centre went live in the western coastal town of Wennappuwa in 2007. The initial phase of 25 centres are now operational, a further 30 are being introduced during 2008.



Easy Seva Centres in operation by Sept 2008

For entrepreneurs running the Easy Seva centres, the proposition is essentially a business-in-a-box. Each Easy Seva centre comes with multiple PCs, IP handsets, a router, and a 3G modem that utilizes HSPA for fast broadband connectivity.

Easy Seva selects franchisees from Dialog retailer base using an extensive review process to assure sustainability and the relevance to the community. Franchisees are equipped with training and support through a 24/7 help desk. The Easy Seva partnership also provides loan and lease facilities for the franchisees to help purchase the equipment and pay for the lease on the premises.

The low hardware and operational costs ensure that prices are kept low to the end users, the ultimate beneficiaries of the project. Broadband internet can be as little as $0.56 an hour and international calls $0.06 per minute. Users also have access to information on jobs, educational tools, and micro-loans. As more people use Easy Seva centres, and prices for modems fall, Dialog hopes that PC penetration will rise and more people will make the decision to have their own personal access to the internet at home.

Dialog's principle role is to ensure each centre has fast broadband access. It upgraded the GSM base stations in all the villages that will be home to Easy Seva centres, to support HSPA services. By increasing the coverage in the vicinity, an additional benefit is that it will allow Dialog customers and tourists with their own modems or 3G handsets to enjoy mobile broadband and multimedia.

Services for the top of the pyramid

While HSPA is a compelling alternative to fixed-line broadband, it also has massive potential in delivering next-generation mobile services. Already, Dialog has many attractive multimedia services in place to attract mobile users to upgrade their 2G handsets to 3G HSPA. These services include international Video Call, which lets overseas workers stay closer to their families back home. The service is available in 25 countries and costs $0.32 per minute. Video Call complements other mobile broadband content services such as movie downloads, online games and shopping, all via their portal. A full track MP3 download service prices each song at $0.46. Business users are well catered for with push email to a range of HSPA-compliant handsets from Nokia, Blackberry and iMate.

However, the multimedia service that benefits most of all from the high bandwidth afforded by HSPA, is mobile TV. Dialog has leveraged its experience in providing digital satellite and terrestrial TV to provide compelling video-on-the-go content to its mobile users. Dialog's mobile TV service is the first of its kind in South Asia, featuring more than 20 local and international channels ranging from News (CNN, BBC, Aljazeera), Sports, lifestyle (E!, NDTV Good times) and Business (Bloomberg).

Ingredients for broadband success

Dialog has proven that broadband has a massive potential in under-penetrated markets. HSPA has all of the necessary qualities - the ability to utilise existing infrastructure, low cost devices, high throughput - making broadband commercially viable even among the poorest people. But it's not simply a matter of technology deployment, as Dialog has discovered. Charging models and the service wrap are important however operators have to create the demand by supporting entrepreneurs and content developers to ensure that people that have not used computers before want to return time and again. Get it right, and profits can be made even among the smallest markets.

"We've proved there is very significant potential for broadband in the massively underserved rural Sri Lanka", says Dr Wijayasuriya. "It's not been about the threat of a digital divide. It's been about the opportunity for a digital bridge."

Sri Lanka's leading mobile operator

- Dialog offers a broad range of services, including 3G and GSM mobile services, fixed line telecoms, enterprise networking, digital terrestrial and satellite television, satellite telephony, internet services, business process outsourcing and customer contact centre services. Its 5 million mobile users represent >53% of the mobile market, and 40% of all telephone lines.
- In August 2006, Dialog became the first mobile network in South Asia to launch 3G.
- In 2007, the expanding nationwide network was supercharged with HSPA, giving users access to the internet and multimedia content at maximum downloads speeds of 1.8Mbps. This has subsequently been upgraded to 14.4Mbps.
- Currently evaluating HSPA Evolved to bring downloads to 42Mbps
- Over half the network's 1000 GSM cell sites now share their masts with HSPA.
- Dialog has roughly 120,000 3G customers, around 30,000 of which connecting their laptops and desktops to the internet with HSPA modems and data cards.
- Beyond the HSPA network, users have fast internet access via the EDGE-enhanced nationwide GSM network, and are charged at the same rate.

For further information
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