

A VAS Landscape Where Do We Go From Here?



As mobile usage in urban centres continues to grow, with basic infrastructure in place, it is expected that India's phenomenal growth in this vertical can only be sustained in the long term if the rural market is addressed. Read on for a sneak preview of a number of mobile applications targeted at non-English speakers.

Sridhar T Pai

The author is CEO and founder of Tonse Telecom, a boutique research and consulting firm focusing on the Indian telecom sector. Tonse Telecom specialises in developing business plans, delivering custom research and training, and provides investment advisory services to the wireless/telecom sector. To reach Sridhar, please e-mail stpai@tonsetelecom.com.

as 2007 drew to a close, in the Indian cellular industry the curtains came down on a year that was a beacon of stellar performance—from subscriber additions, operator revenues, stupendous share performance and returns on capital invested. This article is not a shrink-wrapped analysis of the traditional sector's performance; instead, it attempts to point out some of the less talked-about factors that could become important in 2008.

Cellular sector landscape

The sector performed really well over the past four quarters, and further growth appears to be imminent. Considering that average subscriber additions went up over the past twelve months from 5.29 million subscribers per month to 6.86 million subscribers (wireless), the broad growth rate has been impressive. Despite this growth, the nation still records a low 23.21 per cent tele-density—which means that

other factors remaining the same, the sector will continue to grow till about 2010, in the range of about 35-40 per cent per annum, by subscriber additions.

Has VAS usage per capita dropped?

Going by the overall achievement of the mobile VAS (value added services) sector against projected numbers of mobile VAS revenues as a percentage of total revenues, we can tell that the VAS revenues have fallen somewhat short of what was projected. Current VAS revenues as a percentage of 2007 quarterly earnings (for the three months ending September 30, 2007) for Bharti Airtel (9.8 per cent), Reliance ADA (6.2 per cent) and Idea Cellular (9.05 per cent) are lower than the projected VAS revenues in the graph below, which was 12.36 per cent.

It is important to note that according to TRAI (December 2007), VAS ARPUs (average revenue per user) have actually started dropping. While the actual drop may vary from operator to operator, TRAI states that the drop could be in the range of about 11 per cent among GSM operators, and 15 per cent for CDMA (code division multiple access) operators (compared to the numbers a

2007 India Telecom Sector Hi-lights				
Factor	Nov-07	Nov-06	Growth %	Comment
Total Telephony Subs (m)	264.77	183.51	44.28%	Month ending Nov 30
Tele-density (%)	23.21	16.6	39.81%	Month ending Nov 30
Total Wireless (m)	225.46	143.02	57.64%	Month ending Nov 30
Average Adds /Month (m)	6.869	5.2975		for 12 months ending Nov
Total GSM (m)	166.15	100.78	64.86%	Month ending Nov 30
Average Adds /Month (m)	5.4475	3.7891		for 12 months ending Nov
Total CDMA (m)	59.31	42.24	40.41%	Month ending Nov 30
Average Adds /Month (m)	1.4225	1.5133		for 12 months ending Nov
Total Fixed Line (m)	39.31	40.51	-2.96%	Month ending Nov 30
Tonse Analysis				

year earlier). This is a significant drop if it were to be a trend, and is something that perhaps the operators will try to understand better. The following points are significant to note:

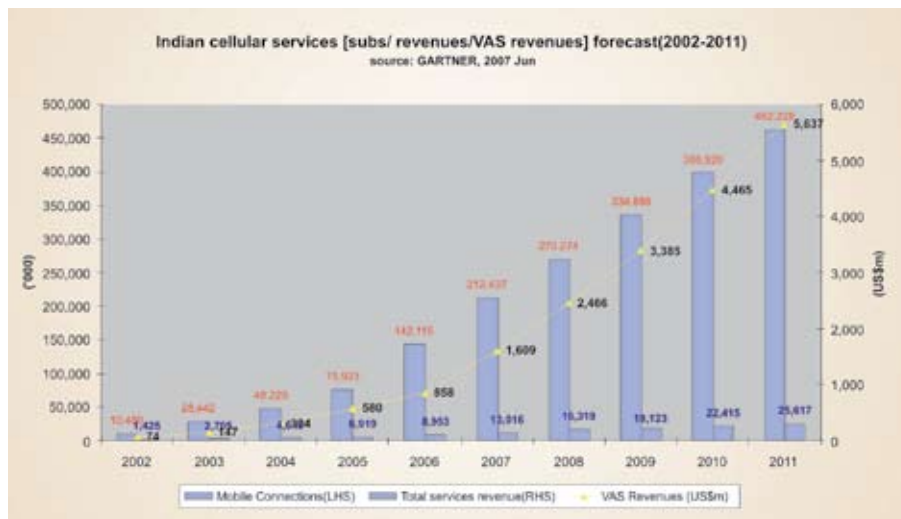
- SMS (short messaging service) infrastructure is a fairly mature piece of hardware/ software, with close to zero enhancement (except for capacity/ power factor) and is not any major concern for operators.
- A bulk of SMS in P2A has moved up significantly now, considering that a number of major television episodes are interactive and draw consumer responses via SMS. These are premium SMSs, and are charged anywhere from Rs 3 to Rs 8 per SMS (\$0.13 to \$0.20 per message). This is far higher than the P2P SMS, that could be as low as Rs 0.40 (\$0.01).
- Bundled options of 100 free SMSs per day and such other promotional plans for the youth have now stopped forcing

the younger crowds to pull back on their SMS budgets. This may have perhaps caused additional drop in SMS usage.

- A noticeable increase in mobile data traffic has been reported—this could be indicating that GPRS (general packet radio service) has finally come of age and an increasing number of GSM (global system for mobile communication) users (CDMA users were always data-enabled by default) have begun to surf the Net, check mails or browse via the cell phone. This is a very healthy trend, and could actually prepare the user community for the ensuing 3G suite of services. A mobile data-friendly consumer base would perhaps appreciate higher speeds and faster data throughputs, and be willing to pay more for the enhancements. To some extent, this could have contributed to user communities moving away from plain old SMS to more exciting data services.

- The operators are now prepared to squeeze extra dollars out of the consumers' pockets by pricing SMS higher, and offering alternate measures to retain 'stickiness' of the VAS services. Airtel, for example, is just beginning to trial SMS 2.0—a new-generation SMS service with colour screens/fonts/emoticons and advertisement clips inserted, for what might be the beginning of the ad-based VAS service suite.

- Wireless or Mobile IM, of course, is yet another option and has already been around for a few months now (no great uptake on this one yet, though!)



• The last, but certainly not the least of the reasons is that cellular phones are perhaps now ready to penetrate that large chunk of the mass-market: the bottom of the pyramid—from where it is believed the next 250 million subscribers will emerge. If this is true, then we will continue to see a percentage drop in overall SMS usage, as the new additions will not be SMS-friendly, but will predominantly use plain voice services.

How to fix it

To change that, though, there is a way—introduce regional-language

There are several rural innovations that have come a long way in demonstrating that some of these VAS services are life-changing (and even life-saving, in some cases). The key is to scale and proliferate these applications as widely as possible.

applications (perhaps regional SMS), but even that may not do (as the bottom tier may be non-literate communities). To get to them, regional-language voice applications/graphics- or icon-based simple menus, and a complete new 'Rural GUI' may be required.

In the context of the current discussion, Tonse researched regional-language application developers, and found the following companies in India that might have an edge in diving down to the bottom of the mobile seas of Bharat. As the operators scramble to dot the rural landscape with mobile transmission towers, these fledgling companies are keying in application code to enable the rural Indian mobile users go beyond voice.

• **QuillPad:** QuillPad is a groundbreaking transliteration tool developed by Tachyon Technologies.

QuillPad lets users type in English alphabets to input words in other languages easily, on the basis of phonetics. This allows users to communicate in their language of choice. QuillPad is based on advanced machine learning algorithms, and is an improvement on simple phonetic maps and specialised language keyboards, thus enabling millions of Indians to benefit from the Internet.

• **Geneva Software:** Geneva Software launched a telecom solution 'Geneva E2C' that enables SMS delivery in 11 Indian languages. The E2C tool can send up to one lakh

SMSs in an hour from PC to mobile. The software is based on the patented 'Vivid Technology', which allows rendering any world language on all electronic displays, irrespective of device constraints. The application enables SMS to be sent in Assamese, Bengali, Gujarati, Hindi, Kannada, Malayalam, Marathi, Oriya, Punjabi, Tamil and Telugu.

• **BhashaIndia:** Towards establishing a direct contact and providing a common platform to the larger community of people, including students, linguists, academicians, etc, Microsoft launched the portal "www.bhashaindia.com". This portal aims at building a community of developers and academia from different languages who will contribute towards the development and use of Indian languages for PC usage. The portals

are a one-point reference for all Indic-related activities. Additionally, this portal would be of interest and use for general PC users, educational and training institutions, and government agencies.

• **ITRANS:** ITRANS is a pre-processor that converts English-encoded text into various Indian language scripts for printing or display. The input text to ITRANS is in a transliterated form, each letter in an Indian script is assigned an English equivalent, and the English letters are used to represent what will eventually print out in the Indian language script.

• **CDAC: *Embedding Indian language engines into cellular phones***

A patented solution to enable mobile phones with Indian languages has been developed at the GIST (graphics and intelligence-based script technology) labs. This language engine makes it possible to use Indian languages on mobile phones. It allows the user to send SMS and e-mail as well. The input mechanism is available both in predictive and non-predictive forms. The language engine, inclusive of fonts for ten Indian languages, requires close to 250 KB of memory. This facilitates mobile handset manufacturers to pack in more features and functions along with Indian language support.

• **Eterno Infotech:** Eterno Infotech is a pioneer in innovative mobile applications that promise to add value to the mobile user experience. Eterno ushers in a new generation of mobile telephony, by offering unique mobile software and associated servers for MIDP (mobile information device profile), Symbian OS and other mobile operating systems. IndiSMS uses intuitive transliteration-based entry. This is the first Series-60 application that can send and receive SMS in Hindi and other Indian languages. The supported languages are Hindi, Marathi, Punjabi, Gujarati, Bengali, Telugu, Kannada,

Malayalam and Tamil.

- **Nuance Communications, Inc:** Responding to a population of over 350 million 'Hinglish' (mixture of Hindi and English) speakers in the Indian subcontinent, Nuance Communications Inc, the leading supplier of speech and imaging solutions and text input solutions, has announced the availability of its popular T9 Text Input software in Hinglish. Nuance Communications' T9 Hinglish software offers advanced alphabetic input prediction in Hinglish to help mobile phone and PDA users to quickly write SMS text messages, mobile instant messages and wireless e-mails in a language popular with India's youth.

- **Microimage Arichchuwadu Tamil Messaging:** Microimage Arichchuwadu Tamil Messaging is a revolutionary patented mobile messaging application developed for Sinhalese and Tamil messaging. This is the first-ever successful Tamil messaging product developed in the world. The product currently has patents pending. In order to facilitate SMS messaging, both sender and recipient should have the Microimage Arichchuwadu Mobile Edition.

- **Murasu Anjal 9.7: *Murasu Tamil SMS console:*** This product allows you to send Tamil SMS messages through a mobile phone connected to your PC via a data cable or infra-red. All popular Nokia phone models are supported.

- **Zi Corporation:** Zi Corporation has introduced predictive text input for SMS in Hindi.

- **Feedelix Wireless:** The company has indicated that Feedelix is currently working on future products such as Hindi SMS for the growing Indian market, and enFeedelSMS for users in the Americas and Europe. These products will be released in summer 2007.

- **Tegic:** Tegic, a subsidiary of America Online Inc, has already

launched T9 versions in Hindi, Punjabi, Marathi, Tamil and Urdu, and has now introduced a Bengali service. In addition, the Gujarati and Kannada versions will be launched shortly.

- **Axmor Software:** Axmor J2ME developers have created an Indian mobile messenger to address this market need. A messenger can now be loaded into a mobile phone, allowing the user to compose and send short messages read in five Indian languages—Hindi, Gujarati, Bengali, Punjabi and Urdu.

- **Tensor Technologies:** Tensor Technologies Pvt Ltd, Delhi, has joined forces with ZestADZ, India's first mobile advertising marketplace, to launch an ad-supported Hindi SMS solution called MeghDoot. MeghDoot uses a mobile transliteration technology

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application that enables users to send Hindi SMS to almost any phone using an English keypad. MeghDoot is a product of Tensor Technologies (T6 Labs), a company incubated at IIT Delhi. It strives to enable users to search for information in the language of their choice, and to receive information in the same language.


- **Hastha Software:** Hastha is another Indian-language software developer essentially maintaining a low profile, but developing some cutting-edge software applications to enhance the use of IT tools in rural India. It works with various governmental bodies and continues to operate in stealth mode.

- **Psiloc Crystal Hindi:** Psiloc Hindi localisation enables Hindi-speaking users

to enter and receive any information in Hindi, in any application. Users can input, send or receive in Hindi, the following: notes, sheets, documents, calendar entries, e-mails, SMS, MMS, contacts and data for all other editable applications available on the device. With this it is also possible to browse Hindi Web pages.

While we are not certain whether any of these developers have a Rural GUI for the Indian rural market yet, we are aware of a Nokia initiative to create a Rural app for the Indian mobile user, which automatically fetches regularly-required information (for a farmer) like pricing of essential commodities. Data is fetched in real time via GPRS, by

a small device-resident program that triggers at market opening times daily, and can be further programmed for more advanced users.

There are several other rural innovations that have come a long way in demonstrating that some of these VAS services are life-changing (and even life-saving, in some cases). The key is to scale and proliferate these applications as widely as possible, so the challenges of rural livelihood can become opportunities for entrepreneurs, resulting in benefits for the entire nation. 

Disclaimer: Please note that these are Web-sourced inputs, and Tonse Telecom has not validated the claims or current state of offerings of these companies.