OKEFORD Media Platform Mobile Pre-Paid Case Study

Meeting the needs of a rapidly growing mobile market

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Where **innovative thinking**
meets **engineering excellence**

telesoft TECHNOLOGIES

Contents

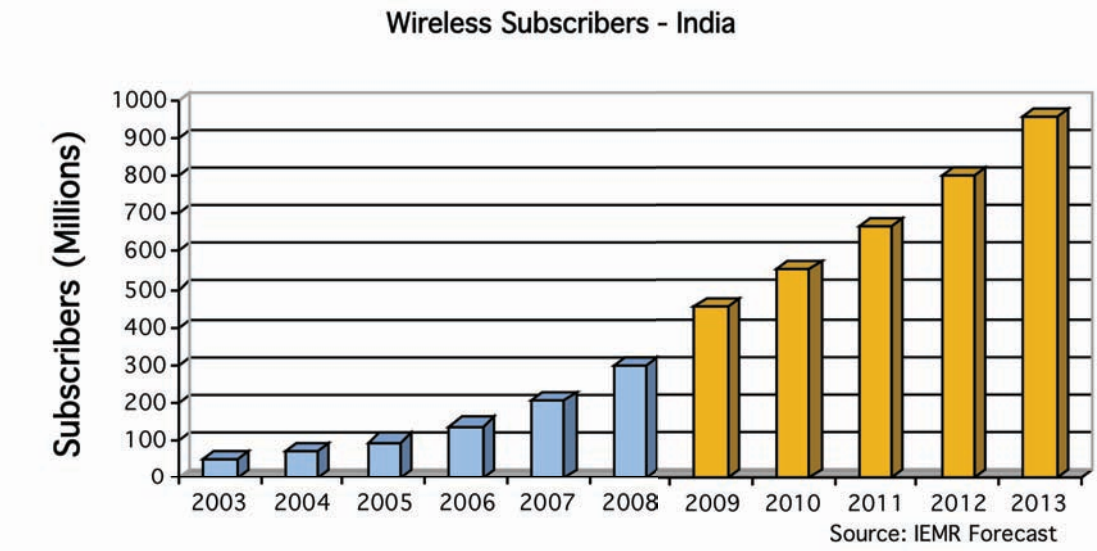
OKEFORD Media Platform Drives Pre-Paid In India

Introduction

Telesoft Technologies, a leading supplier of high-capacity, carrier-grade converged media platforms, has deployed its OKEFORD Media Platform in three of India's largest wireless networks. This paper discusses the challenges faced when deploying a large-scale mobile pre-paid solution in one of the world's fastest growing telecommunications markets and describes how the OKEFORD Media Platform has successfully met these challenges, and has proven to be an extremely reliable and cost-effective solution.

The Challenge - The Indian Telecommunications Market

It is no secret that the telecommunications market in India is booming. In August 2009, over 15 million new wireless subscribers were added to India's wireless networks, bringing the total number of mobile subscribers in that country to over 456 million. With numbers like these, it is little wonder that India has become a target for the world's leading telecoms equipment manufacturers.



Growth in the Indian telecoms market is coming from the mobile sector. Wireless subscribers are being added at 10-15M per month while the wireline segment, at 37M subscribers, is slowly declining. IE Market Research (IEMR) forecast that India will have over 950M subscribers by 2013. This explosive wireless growth is driven by the availability of affordable pre-paid mobile tariffs from the major operators in India. IEMR estimate that 90% of all subscribers will be on a pre-paid tariff in 2013, similar ratio to today. India however also has several challenges for operators including having to support mixed CDMA/GSM networks and the need to interact with customers in multiple languages.

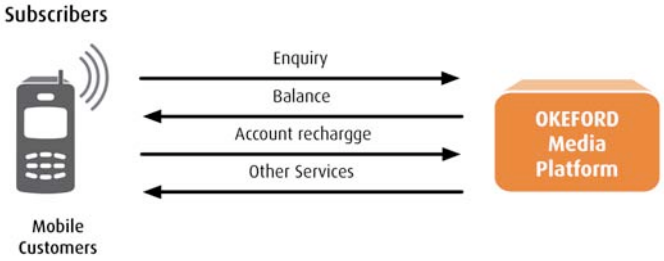
Mobile Pre-Paid

Mobile pre-paid services are clearly attractive to customers. However, pre-paid is a relatively complex service for a wireless operator to provide. In addition to the requirement for real-time rating and real-time charging, the operator needs to provide a much more comprehensive customer care environment than is necessary for a traditional post-paid service. Customers need to check their pre-paid balance, recharge or top-up their accounts and set their personal preferences. In competitive markets it is a proven fact that the quality of customer care is a key factor in the retention of customers. One successful proven way to improve customer experience and convenience is to use in-call announcements to welcome users to the service and to remind them of their remaining balance as each call commences.

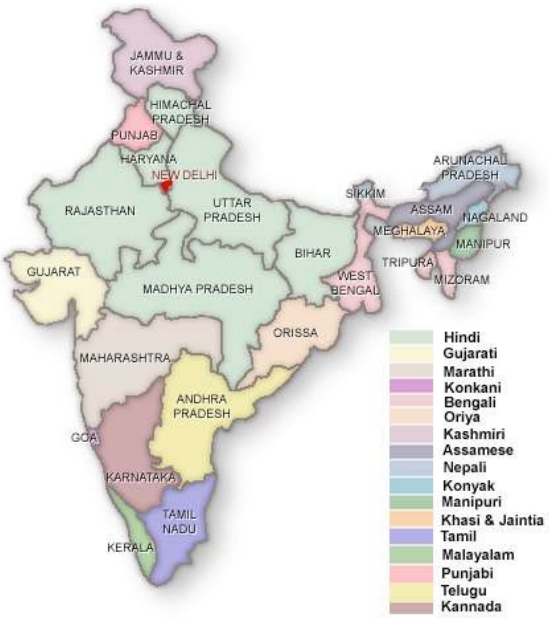
To deploy a successful pre-paid service, it is vital to have a reliable and high-performance media platform, capable of handling the very high volumes of voice play and DTMF 'touch-tone' input required. The nature of the pre-paid service means that the media platform must cope with extremely large volumes of short duration calls, where short duration announcements are used. Because of the phenomenal growth of this type of service, the chosen media platform must also scale easily and cost effectively as new subscribers are added and call volumes increase.

Automating customer interaction brings other benefits to the operator as well:

- Reduces the need to create huge call centers, with an expensive IT infrastructure and multi-lingual staff to service customers.
- Allows for huge peaks in call volume without long waiting times building up, thus improving the overall customer experience.
- Provides for rapid infrastructure expansion – with 10-15M subscribers being added per month this is an important consideration.



There are two deployment options for a large-scale mobile pre-paid service. Operators may choose to centralise the media platforms or they may decide to place the media platforms close to their subscriber base. By centralising the media platforms, operators will typically deploy fewer, larger systems and therefore enjoy lower hardware costs and simpler support infrastructure. By distributing the media platforms, operators will reduce the backhaul costs associated with routing calls to the media platforms. This is a particular problem for operators without a long-distance licence, who need to use a third party to backhaul their traffic to a central location.



"India has 22 official languages"

India now has 22 officially recognised languages. To ensure that all subscribers receive a high level of customer care, it is important that they are able to interact with the mobile pre-paid service in their own language. It is therefore vital that an operator selects a media platform that can support many languages simultaneously and has sufficient capacity to store the high numbers of announcements needed to deploy a multi-language pre-paid service.

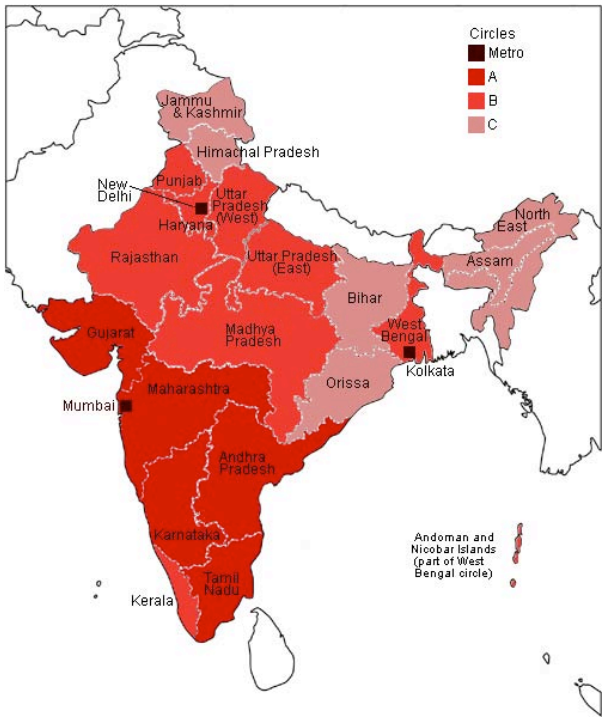
The Solution - OKEFORD Media Platform

The OKEFORD Media Platform has been providing pre-paid subscribers with in-call and customer care announcements, such as balance enquiries and account top-ups, since going into service with one of India's leading wireless operators over 3 years ago. Since then two other country-wide operators have adopted the OKEFORD Media Platform and expanded their services so that today installations serve mobile networks in all 22 mobile 'circles' (or network areas) in India.

"Since going live in August 2006, the OKEFORD Media Platform has been providing extremely reliable service to pre-paid customers in India. The OKEFORD now provides 230M announcements daily across all 22 circles that form India's network areas", remarked Andy Evripides, EVP Sales & Marketing at Telesoft Technologies.

The OKEFORD is an extremely powerful and compact unit, a fraction of the size of rival systems. Offering up to 2016 channels in a 2U chassis and up to 3360 channels in a 5U chassis, the OKEFORD's high density makes a significant contribution to reducing any service provider's operating costs. Not only does the small form factor reduce overall space requirements, it also provides a considerable saving in power and cooling costs. In addition the OKEFORD's performance and scalability makes the OKEFORD suitable for deploying centrally or in a distributed architecture.

The OKEFORD is suitable for deploying in PSTN, SIP and 2G & 3G GSM and CDMA wireless networks and supports a wide range of global signalling protocols including India's National Standards for MTP and ISUP, defined by the Telecommunications Engineering Centre within the Department of Telecommunications.



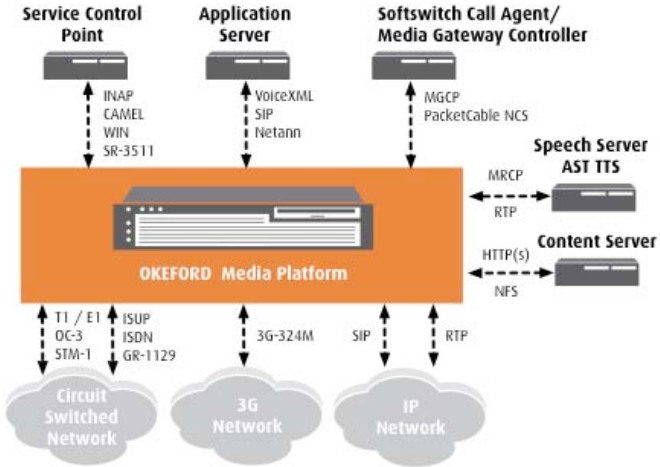
"India's 22 Mobile 'Circles' "

The Result

Now playing over 230 million in-call and customer care announcements every day to 79M subscribers, the OKEFORD provides voice prompts in English, Hindi, Malayalam, Tamil, Kannada, Telugu, Marathi, Gujarati, Punjabi, Bengali, Oriya, Assamese, Dogri & Kashmiri as well as collecting DTMF 'touch-tone' input from callers. To ensure that the widest possible market can be addressed, new announcement sets can easily be added, to provide an additional language, or to add a new brand or persona to one of the already supported languages.

OKEFORD 5500 Media Platform

To support a typical pre-paid service, over 1000 separate announcement files are required for every language or brand / persona supported. The OKEFORD's sophisticated announcement provisioning interface means that this number of announcements can be managed easily. In addition the OKEFORD also has built-in announcements (grammars) to directly support times/dates/ currencies etc without the need for costly text-to-speech software.



The OKEFORD's easy to use browser-based, graphical provisioning system allows the system to be managed locally or remotely, and comprehensive performance statistics ensure that all resources are used optimally. This is particularly important when rapid traffic growth is occurring.

About Telesoft Technologies

For more than 20 years the world's leading Operators, SIs, OEMs and application developers have relied on our signaling, media and monitoring platforms. They continue to depend on our technology to deliver revenue and non-revenue generating solutions for mobile and converged networks in areas such as media services, fraud, billing, roaming, monitoring and location.

As networks evolve our experience in real-world deployments coupled with our engineering prowess and financial stability ensures we are the partner you can rely on.

More information is available at www.telesoft-technologies.com.

OKEFORD Media Platform Highlights

The OKEFORD Media Platform has the following key features:

- ✓ High performance, suitable for low call-hold time applications
- ✓ Suitable for centralised deployment, simpler support, less hardware
- ✓ Also appropriate for circle-wide deployment, reduced backhaul
- ✓ Multi-Language support – 14 Indian languages deployed today.
- ✓ Variable on-box announcements without costly text-to-speech licences
- ✓ Scales to Millions of subscribers
- ✓ Field proven in India's largest networks
- ✓ Simultaneous GSM & CDMA wireless support via CAMEL & WIN IS-771
- ✓ VoiceXML

Please see the OKEFORD Media Platform Datasheet for more details: www.telesoft-technologies.com

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