The Infozech Bulletin

A monthly Newsletter brought to you by Infozech

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editor's note

Dear Friends

This month, we bring you news about Infozech's participation in global standards building initiatives, that will become key drivers within the telecom space. We also talk about SDP, a new architecture developed by a leading global network equipment provider, that is drawing vendors. Infozech too is looking at aligning its products with this emerging platform.

In this issue, we also share with you a recent deployment of eBill and other products that Infozech undertook for a leading telco in Bangladesh—Sheba Phone. The case study highlights the key features of the Infozech solution and the benefits it brought to the telecom services provider. Finally, we have an article that focuses on an emerging trend within the telecom environment in India, that is expected to revolutionize mobile charging mechanisms. Reacting to announcements by leading telco of a lifetime mobile connection at Rs. 999, Mr. Ankur Lal talks about how it will ring in a new era of transaction oriented, unbundled cell phone billing!

We look forward to your feedback on the Infozech Bulletin. Do write in to us with your comments and suggestions.

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Infozech Joins OSS Through Java Initiative to Speed Adoption of Component-based Telco Solutions

Company to Lead the Development and Maintenance of OSS/J Billing Mediation API

Infozech has joined the OSS through Java (OSS/J) Initiative, a working group of telecommunications industry leaders that provides standards-based Application Programming Interfaces (APIs) and designs guidelines for the development of component-based OSS systems. As a member of the OSS/J Initiative, Infozech will lead the development of the OSS/J Billing Mediation API. This will include aligning the API to OSS/J Design Guidelines and supporting on-going changes in the OSS Common API (JSR 144).

Building on the success of the Java Platform Enterprise Edition (Java EE), XML and Web Services technologies in enterprise applications help service providers jump start the deployment of end-to-end services on next-generation networks and leverage the convergence of telecommunications and Internet-based solutions.

"We are proud to join the prestigious group of industry *(Continued on page 3)*

Infozech to Back Emerging Service Delivery Platform

Infozech has announced that it will be providing support to the new Service Delivery Platform (SDP), that's been recently out of the door of a leading global network equipment provider. The Indian telecom solutions specialist will be porting some of its products to SDP, expanding its ranges of choices and options for customers.

The SDP story

SDP integrates with existing deployed enablers, such as Short Message Service Center (SMSC), Multi-Media Services Center (MMSC), location servers, and OSS/BSS back-end systems. It includes a set of software tools for developing, testing and deploying new applications utilizing Java, Web Services, and OSA Parlay. The SDP solution can interoperate in a multi-vendor network environment and support GSM, GPRS, EDGE, UMTS and CDMA networks and devices.

SDP is a highly scalable service delivery solution that enables the rapid development, deployment, management and delivery of new applications and personalized content across networks to multiple devices. The SDP solution helps operators minimize total cost of ownership (CAPEX), while helping to minimize the subscriber churn and accelerate the time-to-revenue through rapid delivery of new applications/content and superior end-user experience. Additionally, it also provides an easy-to-use application development environment, tools and easy-to-use programming interfaces that isolate the developers from the complex network domain knowledge required to introduce mobile applications.

Service Delivery Platform Benefits

↑ **Customer value comes from enabling the rapid development, deployment, management and delivery of wireless applications across networks to multiple devices.**

↑ **It helps in revenue generation from the customer. SDP helps drive data volume growth and generate further revenues through developing new services (from the creation of new value-added service applications) that increase airtime for the operator.**

↑ **SDP centralizes common functionality such as provisioning and billing, simplifies the network and leverages common functions, thereby reducing requirements for capital and operating expenses and cutting costs of ownership.**

infozech
Convergent Billing & Settlement Solutions

Infozech's e-Bill Enables CDMA Service Provider Roll Out Gamut of Services

- ▶ Provisioning of subscriber data into three HLRs
- ▶ Call Center and Customer Care Services
- ▶ Dual rating for international calls
- ▶ Managing Receivables, Payables, Adjustments and Security Deposit
- ▶ Real time credit control
- ▶ District specific promotional messages
- ▶ Bundled minutes on call type
- ▶ Invoicing of carriers from the Interconnect point of view
- ▶ Inter-Carrier Reconciliation
- ▶ Prorating on a monthly subscription charge
- ▶ Efficient rating and re-rating of invalid CDRs

The benefits

Using the Infozech solution, the telco gained the following benefits:

The customer

Sheba Phone, a reputed telecom services provider in Bangladesh, was among the first few players to enter the market. The telco has the license to offer basic WLL–CDMA telephone services in the country's rural sector—in 34 districts out of 64. Sheba phone, which is providing these services since 1995, was using Telos switches as the backbone infrastructure for its operations. Owing to an expansion of its services, the telco added new Alvarion switches to its existing hardware. With the new expansion plan in place, Sheba Phone has three additional Alvarion Call servers catering to 34 Base Stations. This is enabling the service provider to offer its services to 34 districts across Bangladesh.

The requirement

Sheba Phone was looking at introducing WLL-CDMA services across the rural landscape in Bangladesh. The aim was to address the communications needs of PCOs operating across the country's smaller towns and villages.

In order to launch these services, Sheba Phone required a convergent billing and customer care platform that would integrate its existing services with the new network components.

The solution

Sheba Phone already had Telos switches in place that were being used for the existing network. The company acquired Alvarion switches to cater to the above mentioned requirements.

The billing system provided by Infozech, was seamlessly integrated with these components along side an interconnect solution for inter-carrier settlement.

Infozech's solution provided the following capabilities and features to Sheba Phone:

Sheba Phone required a convergent billing and customer care platform that would integrate its existing services with the new network components.

360 degree view from the revenue perspective

From one system, everyone—including the telco and its subscribers—could view the billing.

Bridging between billing, operations and customer service management

Using the same platform, the telco could also disseminate information to its technical people, which helped them answer queries when customers called in at the Technical Help Desk. e-Bill helped the customer build a bridge between billing, operations and customer service management.

Improved service delivery

The telco, owing to e-Bill, perceived a significant improvement in its service delivery, including answering queries, bills generation, sending out notifications for payments, etc. In the case of notifications for payments, the telco was able to inform its subscribers about their bill well in advance. If a customer reached 60 percent of his/her deposit amount, the company was able to send out a reminder for the payment of the bill.

Introduced credit control for subscribers and generated more business

The telco's customers, who were primarily PCOs, benefited from the e-Bill implementation. On the credit control side, the company was able to make sure that the users didn't cross the deposit amount. In this way, not only was the telco able to assure revenue collection, it was also able to inform PCOs in advance about their billing status. It kept its subscribers in the picture about when they had to pay and how they had to pay before their actual bills were produced. In this

way, the telco did not need to shut off their service in case they exhausted their deposit amount or wait for the PCOs to pay up to restart them. By eliminating this time lag, the telco was able to generate more business.

Gained access to several product and people capabilities
Infozech offered the telco three different applications on a core platform. The customer found in the solution a rating platform that had credibility and crucial interconnect carrier consolidation capability. Besides, it was not just the system but also the people behind it that made the big difference for the telco.

Access to a special rating mechanism
The telco liked Infozech's rating mechanism—the variable rating, discounts, discount packages that were beneficial for it. With the Infozech solution, the telco was able to able to support different types of services, at different prices to different types of customers.

Access to feature-rich, cost competitive solutions
When the telco compared Infozech's offering to those offered by competitors, it found them far more feature rich. It found that Infozech was providing the same services and features at virtually half the price of other players. The telco gained a solution that was very price competitive and great value for money.

CUSTOMER
CDMA Service Provider

BUSINESS SITUATION
Sheba Phone, an upcoming CDMA service provider, required a convergent billing, retail and interconnect solution for its CDMA services.

SOLUTION OVERVIEW
e-Bill was customized to cater to all the requirements of the customer and i-CAS was deployed for interconnect partner settlement.

BENEFITS
· **360 degree view from the revenue perspective**
· **Bridging between billing, operations and customer service management**
· **Improved service delivery**
· **Introduced credit control for subscribers and generated more business**
· **Gained access to several product and people capabilities**
· **Access to a special rating mechanism**
· **Access to feature-rich, cost competitive solutions**

PRODUCTS USED
- **e-Bill**
- **i-Rater**
- **i-Mediator**

sudden surge in the number of subscribers (arising out of such new and revolutionary schemes) and the increase in in-coming calls and SMSs are also likely to create congestions in the networks.

Mobile service providers will also be faced with the challenge of creating fresh charging methodologies. How do they book their revenues or provision their books for a 20-year period? How do they shift to a billing piece that's more transaction-oriented? With productization becoming key, creating and distributing products will become very important—enabling mobile operators to define their competitive edge. There are policy issues too that will need to be resolved. TRAI regulates that a subscriber must re-charge his/her account at least once in six months. How will such policy guidelines be adhered to under the new dispensation?

Telecom services companies, catering to the mobile space meanwhile are watching these new development closely and looking at creating billing solutions that are more transaction-oriented. Just as in the case of the mobile operators, telecom service providers too are expected to stretch their imagination and get their innovative juices going to create subscriber delight in a dynamic marketplace!

leaders focused on the development of open standard technologies that are making end-to-end telecommunications both practical and profitable," commented Ankur Lal, CEO of Infozech. "OSS/J APIs greatly reduce the complexities of integration by providing a well designed and easy-to-use architecture that closely matches the industry's vision for next generation OSS as defined by the TeleManagement Forum's NGOSS," he added.

OSS/J constitutes of leading telecommunications service providers and technology companies, including: BEA, BT, Ceon, Covad, Dialog Information Technology, Highdeal, IP Value, MBT, MetaSolv Software, Motorola, Nakina Systems, NEC, Nokia, QinetiQ, Sun Microsystems, Vallent, Vodafone, and Wipro Technologies.

"We are extremely pleased when expert companies like Infozech join OSS/J for the specific purpose of maintaining and contributing to the evolution of our APIs," said Antonio Plutino, OSS/J project manager, Sun Microsystems.

"This is a clear sign that our standards are self-sustaining. When initial spec leaders choose to focus on other areas, new members quickly step forward to ensure the continued evolution of our technologies," he added.

A time will come when different user requirements will be catered through specific cards, that will dramatically increase the commoditization process. In the emerging scenario, if someone is a user of GPRS or streaming, he/she will be able to pick up a streaming card. If it is someone who is hooked to mobile gaming, the same purchase possibilities will open up. For linking to the Internet and sending e-mails, subscribers will be able to do much of the same thing.

A Life-Time Relationship!

A lifetime mobile connection at Rs. 999 is ushering in a new era of transaction-oriented, unbundled cell phone billing!

By Ankur Lal

"Get a life-time pre-paid connection for Rs. 999!" When these banners and hoarding first appeared on the Delhi and NCR skyline a few days ago, I thought they were a delayed gift from Santa Claus. After all, who else could display such amazing generosity that had the potential to completely transform the mobile scenario across the country?

I almost rubbed my eyes in disbelief. A life-time pre-paid connection for Rs. 999! What did it mean and more precisely what was the fine print? Clearly, India's reputed mobile operators, keen on exponentially growing the base of the country's cell phone subscribers, are looking at new and innovative means of getting the user and revenue numbers moving. In order to truly catalyze mobile usage, they are coming up with schemes that mean to woo and wow the consumer.

The life-time prepaid connection is one such truly revolutionary offering which will create a significant surge in the number of subscribers. It's beneficial impact will certainly be felt by users, though how it will impact the mobile operators themselves, still remains a question mark.

The hot new offering from the telcos, meanwhile looks like this. You buy a connection from a mobile operator at a reasonable sum of Rs. 999 and it remains valid for a life-time! The term "life-time" however is encouraging some amount of debate, particularly as telecom regulatory and big brother TRAI probes the scheme and the longevity of the claim. While in the ordinary sense, life-time ought to refer to the duration the subscriber wants to hold the connection—which can virtually stretch across a life span—in reality it possibly implies the period for which the operator's license is valid. Typically, the licenses for mobile operators are valid for 20 years, after which they come up for renewal. "Life time" therefore is still a nebulous claim!

The good news about the scheme, however is that during this "life-time" phase, subscribers will be able to receive in-coming calls and SMSs free of charge. They only need to pay for their outgoing calls. This may sound simple, but in this easy step are contained the seeds of a huge movement—the commoditi-zation of talk time, which need no longer be pre-paid or post paid.

Incidentally, it was my driver who explained the finer nuances of the arrangement to me on one of the warmer January days, when the mercury was not plummeting below four degrees! He was requesting me to get him a phone (costing Rs. 1500) and the advertised Rs. 999 mobile connection. In his opinion, his worries would end at that point. Since receiving calls was free, he would request his family to call him from Riwari (the village where he lived) from an STD PCO, at a time when calls were half price! The same would hold good for his friends and acquaintances, who would have his number. At the end of the day, he would not need to dial out or make any outgoing calls! Moral of the story, he would be able to keep in touch with the people he wanted, without having to spend a paisa on his phone bill!

Clearly, this development is ushering in a new era in mobile charging mechanisms. It does away with the need for pre-paid, post-paid billing or monthly fees and ushers in a scenario where people buy talk time based on their actual need. They can decide what they want to use the phone for. If it's calling out, they can buy voice cards. Depending on the amount of calling they want to do, subscribers can choose cards with the relevant denomination.

Your young teen at home, for instance, can buy a special SMS card for sending out those hundreds of messages that keep his fingers well exercised—at a reasonable Rs. 180 for the comfort of 18,000 SMSs!

Take the instance of an NRI who makes regular trips to India. All this traveler has to do now is get this Rs. 999 connection and own a life-time number. Each time the visitor lands on Indian soil, he can begin using his same old number and remain always accessible, always reachable either via voice or the SMS!

A time will also come when different user requirements will be catered through specific cards, that will dramatically increase the commoditization process. In the emerging scenario, if someone is a user of GPRS or streaming, he/she will be able to pick up a streaming card. If it is someone who is hooked to mobile gaming, the same purchase possibilities will open up. For linking to the Internet and sending e-mails, subscribers will be able to do much of the same thing. Calling overseas to family members, will possibly need a separate card for "long distance" dialing. For the "chat"-oriented, there could be yet another option available. You might even have the opportunity to pick a card that allows you to talk all you want through a single call, post 10 pm at a paltry Rs. 5! The possibilities are mind-boggling and immense. All in all, one is likely to witness considerable "unbundling" of charges for mobile applications. Pay-as-you-go and pay-for-what-you want, will be the new way!

Clearly, mobile subscribers will be the key beneficiaries. Concerns, on the other hand are likely to come up for the mobile operators who will have to transform their charging mechanisms to keep in tune with the changed environment. Typically, mobile phone companies generate revenues through outgoing calls and call origination. With the life-time connection offer, the call may originate from a fixed line or a user subscribing to another network. In some situations, users may not even opt for outgoing calls, using their phones predominantly for receiving calls and SMSs. The

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