

# Multiple Bills

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By 2005, BSNL, the country's largest telecom operator, was serving over 36.4 mn customers in fixed line and WLL telephony, making it the largest telecom service provider in India. Over 70% of all fixed telephone lines were of BSNL. In practically every home, small office and corporate that had a computer and an Internet connection, there was a BSNL fixed telephone subscriber. BSNL had its own prepaid dial-up Internet service for years, but now faced increasing competition from other Internet service providers who were using BSNL's copper network to provide the service to customers.

BSNL realized that this was a huge loss of revenues as the dial-up market was growing at an average of 800 new registrations daily, even when the broadband market was growing at the same rate. However, broadband services are offered only in Class 'A' cities and it is the dial-up connection which is used by 80% of Internet users in the country.

At this juncture, BSNL decided to go the postpaid route while competitors went the prepaid route. It decided to tap into its strong base of existing telecom users. But subscribers needed a greater incentive to choose BSNL's dial-up over competitors'. So, it decided to provide Internet services that would solve three pain points subscribers face—registration, renewals and multiple bills.

The problem before BSNL was to find a billing system that could scale to millions of users simultaneously with ease, at the same time ensure instant registration and service activation, no need for renewals, transparent service and single billing interface.

## Billing Solution

To create and sustain the service in India, which has a potential of millions

of Internet subscribers, BSNL required a vendor who could support the huge numbers.

Plenty of ISPs had come up and it was decided to tap our existing wireline customers for NetOne's data service quickly. BSNL needed quick rollouts across innumerable Indian cities and towns in a very short time frame. That's why BSNL chose Crestel—for speed and reach.

BSNL selected Crestel open APIs to offer NetOne—the postpaid Internet. Crestel was to support customers' needs and integrate NetOne with BSNL's existing billing system. Crestel provided an end-to-end automated solution to BSNL.

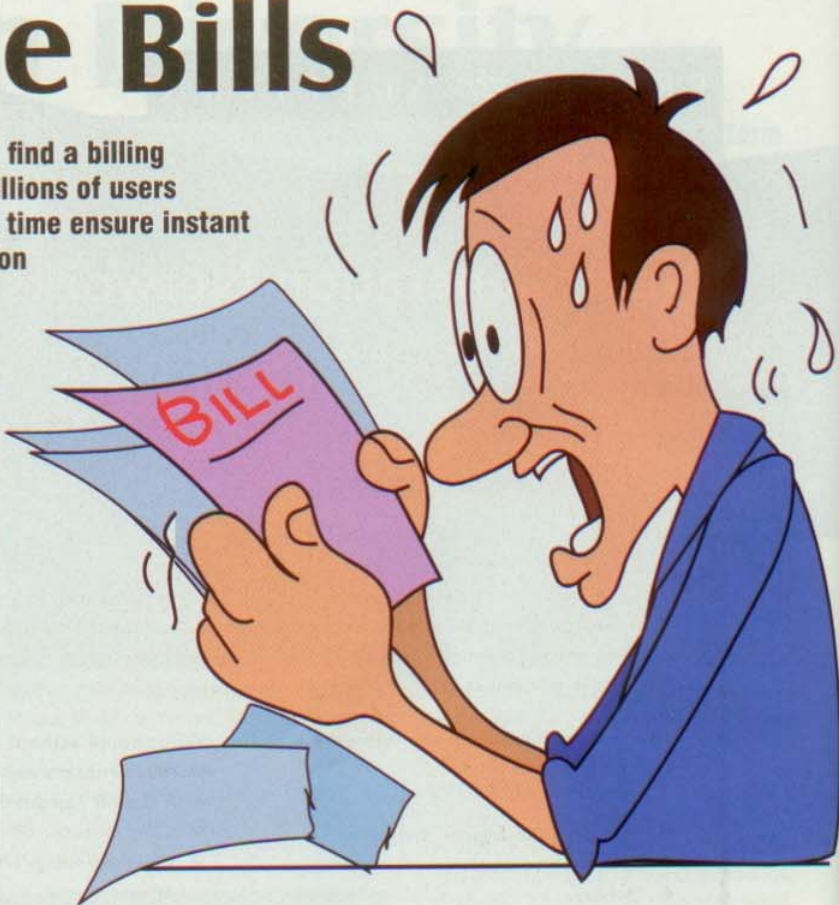
"The challenge was to provide a billing solution that could converge the innovative NetOne offer with BSNL's legacy telecom systems and scale to millions of users simultaneously. Crestel not only ensured a single Internet and Telecom bill to the subscriber, but also provided a complete range of services for revenue and customer manage-

ment," says Nikhil Jain, president and COO, Elitecore Technologies.

## Crestel's Open Platform Architecture

The Crestel CLI rollout was based on an Intel platform with distributed architecture. More than 100 Intel-based servers were located at over 70% locations. The design provides 99.9% uptime with backup fail over at the central site. All servers are in sync with the centralized servers with BSS. CDR transactions of nearly 2 mn and over 2,000 new registrations are handled per day. The entire architecture is highly scalable and can handle well over 10 mn subscribers comfortably.

Open, expandable APIs make Crestel a future-proof solution, empowering clients to deliver great customer service, introduce innovative revenue-generating products rapidly, reduce total cost of ownership and enjoy scale with margins. Elitecore is the choice of India's tier-1 service providers, servicing millions of subscribers.



## Solutions for All

- BSNL wanted to solve three issues of its subscribers: registration, renewals and multiple bills
- Challenge was to provide a billing solution that could converge the innovative NetOne offer with BSNL's legacy telecom systems and scale millions of users
- Subscribers received a single bill for both their voice and Internet usage at the end of BSNL's billing cycle
- Revenue that BSNL NetOne has achieved using Crestel billing solution during 2003-2006 stands at around \$16 mn with an addition of \$4.5 mn every month
- Crestel's platform and automated operations helped BSNL reduce operational costs

### Uniqueness Of the Project

With Crestel's high scalability, reaching out to BSNL's vast customer base was smooth and fast, numbers swelling to over 2 mn in just over a year.

Considering India's vastness, rapid geographical rollout was a challenge. Crestel managed the task with extreme efficiency, rolling NetOne into over seventy cities and towns in over a year. Crestel's service wing complemented the product's high scalability, making it a highly reliable solution where scale and reach are critical.

Ensured ease-of-use to subscribers, making NetOne the first option for most household and small offices having BSNL fixed telephone line as well as when other Internet services were down.

Great transparency was ensured to subscribers, with Crestel providing tabular and graphical reports of usage time and period of use online in addition to current usage information. Being a clientless Internet, the system passes on the CLI number to Crestel's AAA, where the user ID, subscriber's phone number, is matched with the CLI, full-proof eliminating chances of fraud. A captive database of existing subscribers was tapped at low cost.

The revenue that BSNL NetOne has achieved using Crestel billing solution from 2003 till 2006 stands at around \$16 mn with an addition of \$4.5 mn every month. Crestel's platform and automated operations have helped BSNL reduce operational costs to a great extent.

The end users have benefited significantly through this project. By supporting web-based registration, instant activation, post-paid service and a single telecom-Internet bill, Crestel removed the three-pain point's subscribers face, namely—registration, renewals and multiple bills.

Through Crestel, BSNL was able to offer real-time, web-based registration and instant service activation—a first in India. Subscribers did not have to wait for the customer service representative's call, give the registration details, pay the advance and then wait for the service to be activated. All they had to do was connect through a modem after entering a standard username and password given by BSNL. This would connect the subscriber directly to the BSNL registration page. The subscriber would register online and the service is activated instantly, which is why NetOne is also termed as "The Instant Internet". Thereafter, the subscriber had to enter the BSNL number and a password in the dialer to use the service.

The second interface between the service provider and subscriber comes at the time of account expiry and renewal. By making the service a pulse-based, postpaid facility through Crestel, BSNL removed this need. The largest benefit to subscribers was that they did not have an "account" of predetermined hours, making NetOne an account-less Internet service. For subscribers, the benefit was of using first and paying later. More importantly, they did not have to keep track of account expiry and renewals.

To cap it all, Crestel's convergent platform ensured a single billing interface by incorporating the Internet charges within BSNL's existing telecom bill. With this, subscribers did not

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—Nikhil Jain, president & COO, Elitecore Technologies

have to track the bill payment dates. Crestel, thus, successfully converged the innovative NetOne offer with BSNL's legacy telecom systems. The result was— subscribers received a single bill for both their voice and the Internet usage at the end of BSNL's billing cycle. NetOne's instant dial-up service is available at the lowest prices and highest flexibility.

### Impact on the Industry

BSNL's NetOne Internet services is expected to reach 5.5 mn subscribers across India by 2008 and is the first successful franchisee model in the country. It is the only Internet service in the country which allows BSNL's telephone subscribers to access Internet services without formal process of registration and renewals. NetOne services are currently available in 262 Class 'B' and 1,735 Class 'C' cities and towns, and enjoy strong subscriber base of more than 3 mn giving it extensive last mile connectivity, thereby increasing the per capita consumption of Internet in the country.

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