



The "3" brand represents several mobile phone networks operating around the globe in Australia, Austria, Croatia, Denmark, Hong Kong, Macau, Indonesia, Ireland, Italy, Sweden and the United Kingdom.

Industry: Telecommunications
Geography: Australia

Challenge

3 Australia needed a highly available real-time billing solution with network grade reliability that was proven to support massive volumes of transactions and accounts, yet could be implemented rapidly.



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3 Australia.**



3 Australia Enables Prepaid Mobile Broadband and Internet Access

Background

3-branded networks operate 3G mobile technology and as of 2008 had more than 19 million customers worldwide.

Hutchison introduced the "3" networking to Australia in 2003 through its majority ownership of Hutchison Telecom Australia Ltd. (HTAL). In February 2009, HTAL and Vodafone Group Plc announced their plans to merge their respective Australian operations into a 50-50 joint venture, VHA Pty Ltd., which was completed in June 2009.

In 2008, 3 Australia took the lead to strategically build for the dual pressures of exponential subscriber and usage growth and rapidly shrinking average revenue per subscriber. As was the case with all mobile providers, the following issues were of particular concern to the company:

- Competition and flat-rate pricing had already accelerated the commoditization of voice services.

- User behavior was evolving much more quickly than anticipated, spawning a rapidly growing population of mobile data service users. Inability to quickly and successfully exploit that opportunity would place 3 Australia at a decided competitive disadvantage and seriously impede the company's efforts to improve revenue and margins.
- The company was experiencing difficulties launching a pre-paid mobile data package and being able to offer more granular service packs.

Challenges

An integral part of 3 Australia's strategic plan to proactively handle the trends it faced was to launch a new pre-paid mobile broadband and internet access suite of products. Competitive and financial pressures dictated that product roll-out must be expedited as much as possible, while in a manner that could support a precipitous growth in new subscriber and usage volumes and minimize revenue leakage. Furthermore, since these new product offerings were based on a prepaid model, billing and charging now had to be accomplished in "real-time."

Solutions

3 Australia selected TIBCO to provide the real-time policy and charging rules function for this project using TIBCO's core transaction platform technology in order to provide the company and its customers accurate charging and billing information. Pricing for 3 Australia's telecommunications services required the ability to support various charging models, including volume, duration, and subscription level based pricing.

Implementing this solution posed several difficult challenges. The relevant billing and rating, subscriber profile, and service aware components needed to correctly charge for the services existed in several different databases that were spread across the company's network and IT systems. Moreover, the prepaid internet service required these different data sources and the billing and rating system to be integrated with the company's Cisco serviceware GPRS network elements.

On the surface, the simplest path forward would be for 3 Australia to extend their incumbent mediation platform to handle new use cases and new traffic. However, although technical management at the company believed that the incumbent solution could potentially manage the initial pilot project, that technology was clearly unable to manage the transaction load increase that would result from the subscriber and usage growth.

TIBCO's solution design accomplished this by integrating Cisco's Content Services Gateway with the 3 Australia's incumbent Intec real-time billing and rating engines.

At the core of the TIBCO solution is how it applies a layer between the network and

the IT systems. This reconciles the high reliability, speed and other characteristics associated with the network, with the flexibility and open industry standards associated with IT. As a result, the TIBCO solution has enabled 3 Australia to integrate all of the critical components relevant to the prepaid service. The richer functionality of the TIBCO solution facilitates the cost-effective and swift development of new services with its support for an open source service creation environment.

Moreover, TIBCO also can function as STIP (stand in processing) when 3 Australia's single view billing system is unavailable. It also can apply a "worthiness" flag for each subscriber and deny service based on the flag before any CDRs are created.

TIBCO's 3 Australia solution architecture is deployed on Sun Microsystems® servers using chip multi threading (CMT) technology. By integrating with the Cisco CSG2, the TIBCO technology enables 3 Australia to offer its prepaid data customers an enhanced self-service offering. The company's prepaid data customers were able to receive real-time reporting of their data usage on their personalized "My3" web self-service facility.

The TIBCO software solution utilized the high availability and scalability features of TIBCO's proven Fluency™ Transaction Platform and was designed to support both single server (node) and multipleserver deployment configurations. TIBCO's solution for 3 Australia is supported on SPARC architecture servers running the Solaris 10 operating system, as well as on x64-based servers running RedHat Enterprise Linux 5.

Results

After the implementation of the TIBCO real-time billing mediation component, 3 Australia had the ability to deliver high quality mobile internet services with real-time capabilities and highly-personalized and granular policy management, coupled with charging models based on fine-grained service and subscriber profile data.

3 is now benefiting from a high-performing software platform that directly and easily integrates billing with the core network. The TIBCO technology executes events in real-time and caches key data for real-time transactions that include confirmation of credit worthiness. The technology also facilitates virtual billing and rating to ensure accurate venue capture and real-time prepaid service billing.

"This platform has allowed us to share real-time data usage with our customers, delivering a high level of service for 3's customers" said Easwaren Siva, general manager of content and product technology, 3 Australia.

"The tidal wave of mobile data service adoption presents great opportunities for mobile operators," said Larry Lang, vice president and general manager of the Service and Mobility Business Unit at Cisco. "Through our integration with TIBCO, we are able to help 3 Australia effectively optimize their next generation mobile data services."



TIBCO Software Inc. (NASDAQ: TIBX) is a provider of infrastructure software for companies to use on-premise or as part of cloud computing environments. Whether it's optimizing claims, processing trades, cross-selling products based on real-time customer behavior, or averting a crisis before it happens, TIBCO provides companies the two-second advantage™ – the ability to capture the right information at the right time and act on it preemptively for a competitive advantage. More than 4,000 customers worldwide rely on TIBCO to manage information, decisions, processes and applications in real time. Learn more at www.tibco.com

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