



Case Study: <smsml>

SMS, or text messaging, is one of the world's fastest growing communication technologies. In the UK alone, over 950 million text messages were sent during June 2001, while worldwide the figure was 20 billion. Most of these messages, however, were person to person messages. Only some 10 percent were requests for data.

The development of data services over SMS is complicated by proprietary systems that different SMS Vendors use; by particular languages that are needed for development; by the necessity to integrate with the SMS transmission and reception facilities (and the associated costs of this); and by the lack of standards in the development of these services. These issues make SMS Application development complex, expensive and time-consuming.

<smsml> and the SMS Browser remove the obstacles for SMS Application Developers. With <smsml> - an XML compliant markup language similar to HTML - any organisation with web expertise can quickly and easily develop and deploy SMS Applications using their existing infrastructure, their tested code and business objects, and their current skills in the development language and environment of their choice. <smsml> creates an open standard for SMS Services, permitting an SMS Application to be available to any user who can reach an SMS Browser.

The SMS Browser, which is at the heart of the system and is hosted by the mobile Network, is a sophisticated, highly fault-tolerant, robust and high-performance engine that manages incoming SMS requests, fetches and processes <smsml> responses from Applications, and sends the appropriate SMS's to mobile users. The Browser is written in Java 2, and works on a variety of platforms including Windows, Solaris and Linux. It integrates with a range of powerful databases, and has been extensively tested for reliability and performance.

The challenge of the development was to create a highly robust, fault-tolerant system that also achieves excellent performance, and true 24x7 carrier-grade uptime. The Browser was architected using a three-tier model of Browsers, Servers (Pools of Browsers), and Load-Balancers. A management console permits administrators to configure, monitor and maintain the installation.

The result is a system capable of linear scalability, where any database, server or hardware can be removed and replaced without the system going offline, and even software upgrades can be accomplished without downtime.

The patent-pending SMS Browser is being marketed to Mobile Network operators in Africa and in Europe, and a world-wide launch is foreseen for the near future. The technology has also been introduced to a number of influential marketing and interactive agencies who have been quick to realise the potential in reaching a wide audience through a medium that is currently white-hot, and are already pitching innovative interactive SMS marketing concepts to their clients.

The age of SMS Applications has arrived, and <smsml> is leading the charge.



How the SMS Browser Works

1. The user sends an SMS to the SMS Browser.
2. The Browser interprets the user's request, locates the appropriate Application and forwards the request via the World Wide Web to the Application Server.
3. The Application replies to the Browser in <smsml>, a markup language similar to HTML.
4. The Browser interprets the <smsml> reply, and sends the appropriate SMS's.



<http://www.smsml.co.za>

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