

Explosive mobile data growth paves the way for LTE; mobile strategy drives "value-added" service

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From 2G to 3G era, mobile communication technology has achieved rapid progress in just a few years, paving the way for continued innovation and developments.

Currently, there are 3.5 billion mobile subscribers and 350 million 3G subscribers globally, with an average growth of 3 million subscribers every quarter. However, with the proliferation of mobile devices and applications, human-to-machine and machine-to-machine communication platforms, it has proved to be increasingly difficult for mobile technology to keep up with user demands and technology development needs.

"As 3G services become more popular, service providers are facing many challenges," Bridgewater Systems President and CEO Ed Ogonek said in an interview. "Service providers have come to recognize that they must upgrade their networks and service architecture to the best possible state in order to continue to sustain growth and reduce costs, improve network performance, manage facilities and meet customer expectations."

LTE ushers in development opportunities

As mobile communication technology progresses, operators are increasingly challenged by the explosive growth in mobile data traffic. LTE is favored by many global operators as the next-generation network.

The latest statistics from the Global Mobile Suppliers Association (GSA) indicate that 56 countries and 132 operators are currently investing in LTE. It is expected that by the end of 2010, 22 LTE networks will be operationally ready to provide commercial services. 45 LTE networks are expected to do the same by the end of 2012.

"LTE has become the fourth generation mobile communication platform for GSM/HSPA and CDMA/EVDO service providers," said Ed Ogonek. "LTE can create immense value for service providers, businesses and subscribers."

With high-speed, high throughput and low latency attributes, LTE can help reduce costs and increase revenues for operators. LTE will also bring a whole new level of mobile experience to both businesses and subscribers.

Strategy to help address mobile data explosion

Operators continue to push forward the construction of new networks through large-scale deployments. However, the rate of mobile data growth generated by users is far exceeding the speed of network deployment or expansion.

Data show that, from now till 2014, mobile broadband users, smart terminals and other equipment will grow 4 to 5 times, while users accessing applications through these devices will grow from 9 to 10 times, and the resulting mobile traffic will experience a 30 to 40 times growth.

Ed Ogonek said, "The rapid development of user sophistication, devices and applications has led to the increased volume and complexity of mobile data."

In Ed Ogonek's view, despite the fact that operators have started deploying WiMAX and LTE 4G networks to enhance the user experience, bandwidth is still limited at the end of the day. Operators will have to consider the best possible way to offer mobile services with limited resources.

Under such circumstances, the demand for mobile strategy and policy control is expected to increase. Market research has shown that in the next five years, the mobile strategy and policy control market will develop rapidly to reach US\$1.2 billion by 2014.

The introduction of mobile services strategy and policy control is essential for operators. Operators can use smart controls to optimize 3G network policy, reduce burden on the network and ensure fair usage across all users. At the same time, smart policy controls allow the offloading of mobile data traffic from crowded 3G networks to Wi-Fi, femtocells and 4G networks.

In addition, intelligent policy control can be applied to allow other wireless network users, devices and applications to switch to 4G networks, and ensure fluidity for services between 3G and 4G networks. More importantly, intelligent policy control can help operators roll out innovative services through the use of flexible policy control, and real-time dynamic measurement of user information and functions.

Ed Ogonek said operators can use various ways to adopt intelligent control strategies to help manage data traffic and other requirements so as to meet capacity increase and infrastructural improvements, and provide users with a better mobile broadband experience and innovative services.

Creating value through Bridgewater intelligent control platform

Currently, Bridgewater already has a complete intelligent control platform and commands a leading position in the global mobile services strategy market. According to Infonetics, Bridgewater has had the largest share of the policy server market in 2009, given its success in the 3G and 4G network arena.

Ed Ogonek cited that Bridgewater has developed subscriber, service and policy control solutions for the LTE evolved packet core, which are interoperable with products from leading LTE equipment makers. Features include smart controls to manage the complexities of billion of mobile data transactions, enabling personalized services based on a unified view of subscriber preferences, state and usage behaviors, and centralizing control across all mobile access technologies spanning LTE, WiMAX, GSM/HSPA, CDMA/EVDO, Wi-Fi and femtocells.

Ed Ogonek added that Bridgewater intelligent control platform can provide real-time network, application and user policies for service providers to manage the growth of mobile data and to provide personalized services, hence allowing the network to offer a better value proposition.

For operators, intelligent control not only optimizes the network but can also help reduce operating cost by 15%, and by 20-25% for those migrating from 3G to 4G networks.

For users, intelligent control can help support services such as data roaming, video, Wi-Fi and other services, as well as prioritize access to such services for premium customers.

Other than Bridgewater, vendors such as Ericsson and Nokia Siemens have also forayed into the policy control market. Commenting on the competition, Ed Ogonek cited that Bridgewater is an independent software solutions provider and is able to integrate its own offerings with that of other equipment vendors to offer greater flexibility and shorten deployment time. More importantly, Bridgewater's solutions offer end-to-end network management, an edge over the competition which largely focuses on managing only the core network.

Using global experience to penetrate the China market

With the rapid development of mobile technology and the explosive growth in mobile data, China being the world's largest mobile market is experiencing similar challenges that other countries have once faced.

In the past, mobile data traffic was not high nor an issue for operators in China. However with the recent commencement of 3G services by the three major operators, mobile data traffic is now continuously on the rise. "In 2009, China Mobile data traffic accounted for only 3-5% of all data traffic when 3G services were in the infancy stage. Entering 2010, the proliferation of 3G services in China has created network challenges for operators. Bridgewater anticipated these challenges and decided to enter the Chinese market," said Ed Ogonek.

According to Ogonek, Bridgewater has recently joined hands with Motorola to deploy the world's first TD-LTE network at the 2010 Shanghai World Expo, offering ultra high-speed mobile broadband access for both visitors and organizers.

Bridgewater is very experienced and well poised in the policy control market, and has been working closely with 140 operators and service providers in 30 countries. To successfully penetrate the Chinese market, Bridgewater conducted in-depth research and made contact with the major operators here.

Relationships were fostered with the three domestic carriers with effort made to clearly understand the business requirements and the unique mobile landscape in which they operate.

With the continued pursuit of advanced mobile and multimedia services by subscribers, the implementation of smart subscriber, service and policy control can help address the challenges as well as seize the opportunities presented by mobile data growth in the long run.