
PROFITING FROM A MOBILE INTERNET

Three network principles that enable value-added services

Today's mobile lifestyle is driven by data, as people talk less and use e-mail, social media, and the Internet more. Mobile data has rapidly eclipsed mobile voice traffic and will be 95% of global mobile traffic by 2015¹. While traffic volume is growing, mobile operators are facing decreasing margins due to competition from over-the-top (OTT) providers, other mobile operators, and even fixed line operators' Wi-Fi networks. As mobile operators move to LTE, they have a choice: They can optimize their operations for a lower margin business, or they can selectively compete or collaborate with OTT players by offering attractive value-added services (VAS).

Industry Challenges

If mobile operators choose the VAS route, there are a few key things that they must achieve. First, operators need to be able to launch services more quickly. Next, they must reduce the cost of introducing those new services. Finally, since no one can go it alone, they must find a way to efficiently collaborate with application developers and content providers

to deliver new services. Fortunately, a mobile network architected for flexibility and dynamic data traffic goes a long way towards reaching these goals.

Read on for three key principles that can help you transform into a mobile service innovator:

¹Chetan Sharma, 2012, Global Mobile Market Update 2012

1. Deploy a “network as a platform” that supports and fosters innovation

To launch services rapidly and reduce the cost of introduction, your mobile network must be able to easily adapt to new services and the increased demands those services will place on the network. This flexibility is one of the promises of software-defined networking (SDN), which can simplify service provisioning, improve operating efficiency, and reduce costs. Any SDN network should deliver these attributes that contribute to the network as a platform:

- **Virtualization**, which allows you to add network capacity without complexity, meaning you can scale the network quickly to meet service demand

- **Support for heterogeneous networks** (such as macrocell and small cell sites, as well as 2G, 3G, and LTE), to meet diversified needs and help transition networks to LTE
- **Open SDN platforms**, which can support network services from a wide variety of vendors, increasing the potential for new services and improving time-to-market
- **Service velocity**, which is achieved through virtualization and SDN, where third-party network services and capabilities can exist in the network as virtual machines (VMs) rather than physical appliances

2. Show them the data

Mobile operators are sitting on a treasure trove of information, including billing relationships, subscriber user profiles, and device and location information. Aggregate information, including subscriber demographics such as where people go, when they go, and what they do on the mobile network when they get there, is all valuable data for marketers, retailers, infrastructure planners, and more. With this subscriber information, for example, marketers can target customers more effectively, analyze advertising efforts, develop tighter customer relationships, and plan locations for new products or services.

Using careful data mining, you can monetize this information, making it anonymous and providing analysis and metrics to content providers and other third-party organizations. Verizon² and Telefónica³ are examples of mobile operators who have already launched programs that package and sell data to third parties.

Applying big data technologies to network and subscriber data allows you to take



advantage of this VAS opportunity. But big data analysis can also help you make better, quicker decisions by creating a clear picture of traffic patterns and customer activity. For example, Web dashboards with near real-time network visualizations can help operations staff proactively address performance issues before they impact service quality. Or visibility into traffic volumes, distances, and geographic distribution can provide insights that inform new pricing plans or service options.

²Verizon Precision Market Insights, <http://business.verizonwireless.com/content/b2b/en/precision/precision-market-insights.html>

³Telefónica Dynamic Insights, <http://blog.digital.telefonica.com/?press-release=telefonica-launches-telefonica-dynamic-insights-a-new-global-big-data-business-unit>

3. Network policies and monitoring contributes to profit

Network policy management not only offers an efficient way to manage capacity on networks, it also offers new monetization options. For example, the average data consumption is far less in countries where operators have a tiered pricing structure or have instituted stricter policy controls compared to operators who have had an unlimited pricing and policy structure on smartphones.

Network policy management is by far the most efficient way to manage data traffic, since its implementation doesn't require any major

infrastructure or handset upgrades. However, some operators will need to invest heavily in customer education to manage the transition to more tiered mobile data options.

In LTE networks, you can offer differentiated service tiers that offer better quality of service (QoS) at premium prices. For example, business users may pay a little more for a premium quality of service; or you can offer different pricing tiers for certain applications, such as real-time video.

Conclusion

If you blink in our rapidly changing, digitally-enabled world, you may miss the opportunity to capture a market. By architecting the network as a platform, including data analysis tools and network policy management, you will have more flexibility in deploying an open and programmable infrastructure that not only provides operational efficiencies and insights, but also paves the way for a new generation of

services such as mobile cloud, mobile security, healthcare, and identity management.

To learn more about how Juniper Networks can help you meet the challenges and exploit the opportunities of next-generation mobile networks, please visit www.juniper.net/us/en/dm/mobile-lte/?utm_source=promo&utm_medium=home_page&utm_content=carousel&utm_campaign=mobile_lte.

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