

## EXPERT OPINION:

# Profiting from the boom in mobile data with policy management

In the fast moving broadband market, predictions of which innovation will next drive growth, are an exercise of guesswork, says Jonathan Downey. Anyone forecasting future data bandwidth usage patterns should be wary of anything but the very nearest-term predictions.



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What is crystal clear, however, is that the surge in data traffic will continue, as user behaviour adapts to faster broadband, better devices and compelling applications. This is forcing operators to walk a tightrope between competitively priced offers to grow market share, and managing the network costs of meeting the seemingly insatiable demand for bandwidth.

Policy management provides a flexible and extensible approach for operators to address a multitude of data opportunities and challenges. A recent *Heavy Reading* analyst report on the policy market points to operators wanting to use these capabilities to address a multitude of data opportunities and challenges.

The inherent flexibility of a rules-based policy management system, with its ability to dynamically implement service-, session-, and subscriber-aware rules gives operators a very robust capability. It enables operators to holistically configure and blend various parameters to create new and richer solutions: to enhance existing business models, to offer a differentiated customer experience, and to allocate finite network resources.

### Policy enables creative pricing and packaging of mobile data

To avoid the commoditisation trap, future revenue growth and profits from mobile data will be heavily influenced by how operators package and sell their data plans to address the diverse needs of well defined market segments.

Policy management can be a highly sophisticated approach capable of managing the delivery of data traffic, enabling operators to address the sophisticated needs of both high-ARPU users and the specific needs of low-ARPU, occasional users. With smarter devices and new applications driving consumer demand for internet connectivity, operators that can rise above confusing, cost per MB and volume quota pricing strategies will be in a position to win big.

One of the most common applications of policy management is using it to create service plans based on data usage caps, wherein carriers create a data plan that allows a subscriber to consume a specific volume of data per billing period. At Openet, we have seen operators evolve their data plans from a simple cap, to one that is very specific to network conditions, devices and subscriber activity.

Looking at an operator's customer base there's a huge disparity in the amount of data that subscribers use and the amount of bandwidth consumed, even for customers using similar devices. Service tiers enable operators to reach different market segments, by creating data plans targeted at the needs of different user types. Operators can segment their customer base by offering a choice of data plan and prices, composed by speed of access, data volume limits, exclusion of certain applications, and devices. This gives operators the flexibility to create innovative plans tailored to specific subscriber traffic mix, device and application usage types. ▶

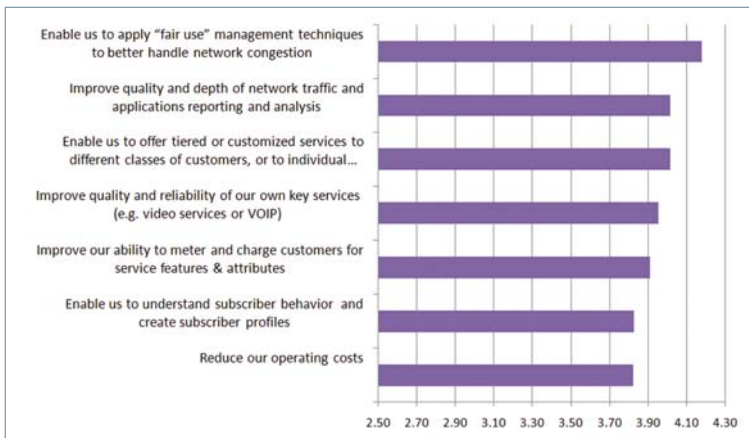


Fig 1. Top Drivers For Policy Management, Heavy Reading's Next Generation Policy Management Study, July 2010



### A differentiated subscriber experience

Mobile operators are central to subscribers' internet experiences as more and more users become familiar and comfortable with using mobile data services. This applies equally to users with high data use and high dollar plans, as well as novice users with less data usage and simpler contracts. Putting the capabilities in place to improve the customer experience for all subscribers will provide revenue and differentiation opportunities.

Policy-based controls such as parental and content controls, 'bill shock' and roaming controls, URL filtering, notifications, time of day restriction and quality of service can all form part of the managed customer experience. These provide opportunities for operators to add value to differentiate their services, by improving the user's service experience.

When dynamic policy management controls are combined with charging capabilities, the concept of personalisation is further extended, to include how subscribers can pay for their services. These controls make it possible to make intelligent, real-time decisions based on whether the user has sufficient credit to make a payment, if they need to purchase a service pass or bundle, have an inclusive data plan, whether they are in a WiFi hotspot or are roaming. With this information, operators are enabled to deliver an integrated, interactive and highly individualised service experience to customers.

### Better congestion management

After years of operators being forced to compete for customers on price, there are signs that smartphone users care more about network quality than tariffs, giving operators the chance to claw back some pricing power. Ironically though, as more usage and more demands are placed on network bandwidth, for many operators, service is becoming increasingly spotty, networks are becoming overloaded, and capacity is being crunched.

It's clearly a critical issue, with forecasts showing demand for data due to accelerate. The widely quoted **Cisco VNI Mobile** forecast from February, 2010 estimates that worldwide mobile data traffic will double every year through 2014, increasing 39 times between 2009 and 2014. Investments in network capacity alone will not ensure operators can sustainably deliver a high-performance broadband experience.

Operators in search of more efficient bit delivery are enlisting intelligent policy and network management controls to continue growing their data revenues profitably. Policy management can

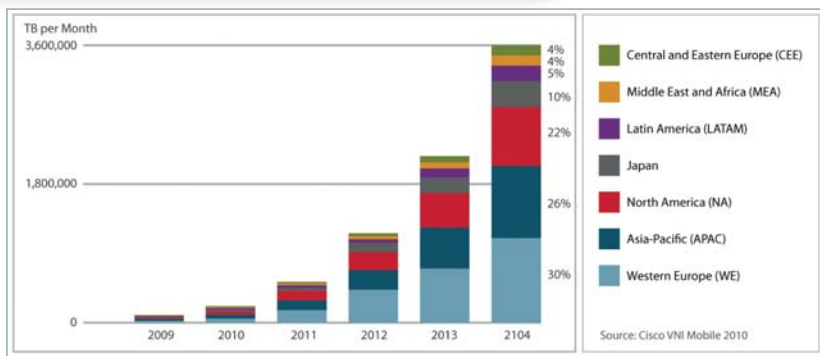


Fig 2. Cisco's Global Mobile Data Traffic Forecast

be used to align data plans with subscriber usage, to influence subscriber behaviour, to reduce stress during peak congestion periods, and where necessary, to manage bandwidth-intensive applications and services during periods of network strain.

Policy management enables carriers to become more congestion- and application-specific in how they manage the flow of data traffic on their networks, implementing true, dynamic, real-time subscriber management controls to optimise the wireless experience and minimise congestion in the network.

### Conclusion

Rapid mobile data traffic growth is forecast to accelerate with new smart devices, mobile dongles and the growing popularity of video and social networking. Even though network evolution brings higher capacity and new technology like HSPA+ and LTE, the radio resources will always be scarce and building networks to maintain high quality for all subscribers will be expensive.

With policy controls, operators can alleviate the strain on network resources by enforcing subscriber- and application-aware policies to mitigate the need for network overbuilds. But more importantly, these controls provide the means to innovate. Policy management enables network-based capabilities to be flexibly packaged and sold, giving operators the tools to intelligently manage network growth, more effectively meet subscriber needs and better match revenues with network utilisation. Operators recognise they must innovate if they are to make the most of their resources, and also deliver differentiated service. With new services being delivered almost exclusively over IP-networks, operators have thus far struggled to identify, measure, manage and monetise IP-based services in real-time. The good news is that with policy management operators can marshal the innate capabilities of their network and BSS assets, to create value by introducing new services and data plans.

"Policy management enables network-based capabilities to be flexibly packaged and sold."

- Jonathan Downey, Openet