

Towards a profitable mobile data business model

The mobile data industry has evolved rapidly over the past two years, with the impact of growing 3G penetration, lower cost smartphones and USB laptop dongles on flat-rate data plans. This has resulted in huge growth in data traversing operators' networks. David Sharpley of Bridgewater Systems believes that the market has now reached a chaotic and critical point with network congestion being felt by operators and consumers alike.

Operators are introducing a toolkit of network resource management strategies that will reduce costs and improve economies of scale. Policy control, data traffic offload, evolution to 4G, and network optimisation will incrementally reduce data delivery costs by more than 60% over the next three years. A holistic approach in an era of huge mobile data growth is vital to long term success.

Policy control – how, when and under which circumstances subscribers can access networks, applications and services – will contribute cost savings of more than 10% by 2013 in the US market alone.

Data offload savings

Meanwhile, operators deploying a data traffic offload strategy to Wi-Fi or femtocells, using service control to ensure transparent and secure subscriber access, can expect annual savings of 20 - 25% by 2013. The evolution to HSPA and LTE will save just under 20% in costs, according to **Chetan Sharma Consulting**.

Cost reduction is only one side of the equation. Operators are now creating new service models that move away from unsustainable flat-rate plans towards tiered and usage-based pricing underpinned by subscriber, service, and policy control:

- **Speed-rated:** These plans offer operators the ability to increase revenue from the heaviest users by placing these subscribers on the most expensive tariffs, implemented through effective policy control on the consumer side.
- **Bandwidth usage and application specific:** Next generation policy control solutions enable operators to implement controls and pricing based on bandwidth usage or specific traffic types. Operators can flexibly charge for heavy bandwidth services such as video or peer-to-peer in real time.
- **Time of day:** Operators in mature markets have seen a clear time-of-day usage pattern

emerge for mobile data. Similar to other utilities, they can charge more at peak times according to network capacity, or conversely, offer consumers incentives to download during quiet network times.

- **Location-based service models:** Traffic patterns over the past two years demonstrate that the most congested cell sites are in urban centres. Could operators implement a 'congestion charge' model on their mobile networks if guaranteed quality of service (QoS) is the outcome?
- **Quality of service models:** Guaranteed QoS comes at a cost to operators, especially in mobile networks where bandwidth is necessarily a shared resource. But the emergence of 'bandwidth boost' models – whereby a user is offered a short-term increase in bandwidth for a set fee, for example – provide the opportunity to implement service level agreements.
- **Ad-funded solutions:** Mobile advertising is beginning to emerge as a revenue source for operators. With subscriber data privacy concerns now being addressed, mobile advertising could create new revenue streams for the operator.
- **Mobile commerce driven:** Japan offers insight into a commerce-driven mobile data market, with an open ecosystem driving adoption and consumer spending on services. Leading mobile internet players including **Yahoo! Japan** have developed a viable market for content and services in partnership with mobile operators.

These flexible, dynamic, and personalised pricing models that reflect subscribers' preferences and context, bandwidth and application usage, and network conditions are the wave of the future.

It is ultimately the responsibility of mobile operators to introduce these models with quality of service guarantees that are based on users modifying their behaviour. With that will come order from the mobile data chaos. 💰



The author is David Sharpley, Senior VP, marketing & product management., Bridgewater Systems

Service models may be based on various factors including service speed, time of day and congestion charging.

"Mobile advertising is beginning to emerge as a revenue source for operators."