



EXPERT OPINION:

Re-inventing real-time charging

Service providers need to fill the profitability gap that is growing between the explosion in mobile data traffic and the tariffs they charge. Nothing less than a re-invention of the charging and policy management system is needed, says Dave Labuda, CEO of MATRIXX Software.



The author is Dave Labuda, CEO of MATRIXX Software

Service providers are experiencing a widening gap between explosive mobile data traffic growth and a small increase in revenue. To fill that gap, service providers are faced with how to more effectively monetise data, content and applications. Real-time charging and policy seem to be the key, but the economics of deploying real-time systems are in question. A clearer picture of the Cost Per Transaction (CPT) of delivering mobile data services would alleviate many of the challenges associated with the current influx of mobile data. But existing charging and policy engines do not enable this analysis.

If service providers better understood CPT, they could focus on lowering it so that services move from the red back into the black. So, how do they break out of the one-size-fits-all tariffing structure of recent years and build a profitable real-time financial relationship with their subscribers?

It seems foolish to be talking about how a service is monetised. The very idea that a new service is about to be launched and yet is not, somehow, going to be properly monetised is a worrying thought. Is monetisation an oxymoron? Doesn't it follow that there's no point in launching a service if it cannot be monetised?

Yet, this is how the industry has approached seeking profitable revenue generation in a difficult market. But why is the market difficult?

Put simply, a very noticeable profitability gap has opened up between the steep growth in mobile data traffic and the relatively low incremental revenue that service providers can charge for the data influx. It's a business model that is being stretched as far as it can go, and one day soon it will break.

While the astounding growth in data traffic shows there is demand for compelling, interactive mobile multimedia applications, today there isn't a predictable and profitable tariffing structure behind it – or even a way to accurately discover what the operational overhead is to deliver each transaction for each service.

Zero price tag

Gartner says that of the 4.5 billion applications downloaded during 2010, 80% will have a zero price tag. All the subscribers will pay for is the data tariff linked to their service bundle, which is likely to be flat-rate. The growth in app usage is one reason why service providers are facing strain on their business model. By 2013, Gartner concludes there will be a whopping 21.6 billion app downloads, and yet by then, 87% of them will be free. The meaning of this statistic for service providers is clear: find a new way to handle the huge tidal wave of data traffic, and monetise it.

That's not to say there's no revenue to be generated in the mobile data traffic market. **Infoma** puts this figure currently at US\$208 billion worldwide, rising to \$330 billion in the next three years. That's a lot of revenue, but there are two factors that dilute the amount that falls to the bottom line; the cost of delivering the service and the fee that can be charged in return. The two are diverging at an alarming rate.

Ovum predicts there will be over 2 billion mobile broadband users by 2014, a growth rate of about 50% per year from the 475 million mobile broadband users today. Alongside this, there is the growing amount of traffic they produce, with some service providers reporting an annual doubling of traffic volumes. With more subscribers using their mobile device to

“Find a new way to handle the tidal wave of data traffic and monetise it”



conduct micropayments, act as a conduit for widgets that constantly monitor and report on information changes, and for chat, video sharing and email, it's no wonder that traffic levels are building up in the network.

So, how long before the flat rate tariff model collapses? And when it does, how will service providers make money from the relentless 'more for less' consumption of services followed by little growth in revenue?

A three-point plan

I'd suggest a three-point recovery plan, and I predict that there will be a new metric as widely talked about in the future as ARPU: Cost Per Transaction (CPT). If service providers could find a method for reliably discovering the CPT per service, they would know in advance if a new service could be profitably launched, or how to tweak an existing service to keep it within profitable margins.

Until today, there has been no way to do this, based on the old batch-processing method of rating and charging for services. Indeed, it's a lack of dynamism in the very notion of 'batch' processing that has left service providers wrong-footed as they sweated their old billing, rating and charging assets well beyond their natural lifespan.

Understand your CPT

The first point of my recovery plan is for service providers to move towards sustainable, new real-time rating and charging functionality that helps them instantly understand what it costs to service each subscriber transaction. Armed with an accurate CPT for each service, they can then focus on making more profitable new services, rescuing unprofitable services, or replacing them with new ones based on stronger, predictably profitable business models. They can even offer real-time upselling such as a special discount on buying a whole album based on the two tracks a subscriber just downloaded. Knowing in advance the exact CPT and margin of every usage event takes the guesswork out of the equation and unleashes the business.

Closer subscriber relationships

Once strong business models are developed, the next job is to exploit real-time as a platform to generate a closer financial relationship with subscribers. A large part of why the data revenue needle is stuck on 'almost empty' is

because subscribers are resistant to paying for something they don't understand – like bits and bytes. This culminates in 'bill shock' as subscribers find they've been charged a lot for service overages they knew nothing about until they got their statement.


To resolve this, it's important to have the charging platform interact with the policy management system and trigger real-time alerts that let the subscriber know when they've reached pre-defined spending limits, and have them understand their spending at the moment they pass one of these thresholds.

At **MATRIX**, we believe that subscribers will pay more for services they actually enjoy using in an environment where their relationship with the service provider is much closer, because the service provider can offer special, personalised discounts and services based on historical usage. We also believe that subscribers will spend more money if they're able to set their own personalised limits for each service, and manage those metrics online for themselves, their family or business.

Hammer down operational costs

The final stage of my plan is to drive down the operational costs of delivering these services by making the real-time charging layer drastically more efficient. Today's real-time rating and charging systems require significantly more hardware and operational infrastructure than equivalent batch solutions. This creates an economic hurdle against operators moving to a full real-time charging environment and realising the benefits mentioned above.

As mobile data usage continues to explode, what operators really need is a real-time charging solution that can process tens of thousands of transactions per second on a minimal set of off-the-shelf hardware. This type of solution will not only drive down CPT, enabling operators to embrace the explosion of new services and usage, but it also drastically reduces data centre costs, power consumption and carbon footprint.

Armed with highly efficient online charging and predictably low CPT, service providers will finally break out of the one-size-fits-all tariffing structure and build a profitable real-time financial relationship with all of their subscribers. 

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– **Data source:**
Gartner