

# EXPERT OPINION

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## Bigger and faster isn't necessarily better when it comes to data analytics

**Data analytics and big data remains big business, of that there's little doubt, writes Kevin Stanfield who warns that communications service providers (CSPs) should avoid being drawn into a data analytics arms race**

**B**ig data analytics in telecoms has a market value in the billions of dollars and continues to grow at a healthy rate. In spite of the investments that many CSPs are making, churn, ARPU and customer satisfaction remain just as much of a challenge today as they have always been. Rarely are CSPs held in high esteem by their customers or seen as paragons of customer service virtue.

### Investing in data analytics

In terms of investment and returns from data analytics, there's a real danger that CSPs and MVNOs will be drawn into an arms race of bigger and faster data analytics. It may be that those organisations with the deepest pockets could have the most impressive arsenals. Yet it's important to realise that data analytics, like any other IT project, must have real and tangible business cases; just being able to analyse huge amounts of data quickly is not enough.

CSPs and MVNOs will increasingly have to choose their data analytics battlegrounds carefully to ensure that business value is understood, measurable, targeted and monitored. Choosing when, where and how to deploy data analytics is as big, if not a bigger, challenge as developing the capability and platforms to perform analytics. Knowing something about your customers is not the same as being able to take positive actions. This often results in a so what scenario.


It's a given that the nature and cost of deploying data analytics will result in challenges for smaller CSPs/MVNOs. They have neither the budget nor the in-house expertise to exploit the opportunities that data analytics could present. Increasingly, they will need to turn to an outsourced model, perhaps utilising BSS vendors who have recognised the need to meet data analytics challenges on behalf of their customers and are responding with their own integrated solutions.

### The sum of the data whole

There are some compelling use cases, particularly around network performance and quality. When this data can be combined with customer details such as lifetime value, contract status, profitability and other segmentation information, then the data whole is worth more than the sum of the data parts. Where both OSS and BSS data can be brought together to enrich decision-making, there will be a clear competitive advantage. For those CSPs able to realize one complete view of the customer, far richer and more effective analytics data analytics are possible. However CSPs/MVNOs risk putting the cart before the horse, if adequate consideration isn't given to the data model that underpins the analytics.

Ultimately, the end game is to turn data analytics into actions and outcomes that can demonstrably add value. It is critical to be able to appreciate the context of the customer at any given point in an analytics lifecycle. This is to avoid wasted effort, inappropriate offers or at worst, alienate the very customers the analytics is aimed at delighting, monetising and building emotional connections with.

### Do the basics well

What we mustn't lose sight of in a world awash with data is that analytics isn't a substitute for doing the basics well. Any CSP or MVNO worth its salt must have a fully-assured customer journey that eliminates the need for retrospective corrective actions; prevention being better than cure. Ensuring the network is performing, provisioning is precise and billing timely and accurate, eliminates many of the analytics use cases. It also provides a more stable, satisfied customer base upon which to let the analytics perform their magic. 



The author **Kevin Stanfield**, is analytics product manager at MDS

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**Joe Hogan:** Streaming analytics is being used on real-time data so that it can provide a real-time trigger



**Jarkko Multanen:** Based on network data, a CSP can tell a mapping provider how fast motorway traffic is moving



**Jennifer Kyriakakis:** CSPs need a real-time digital infrastructure that extends from the network to all of the customer touch points

from drivers' mobile phones, the CSP can tell TomTom how fast motorway traffic is moving so that, in turn, they can inform the driver of delays to their journey or to avoid certain routes."

Another example is that of banks asking users for their mobile number for ID purposes. Banks also use location data to "verify a credit card user is who they say they are by associating the location of their mobile phone signal with the location of the card they are using to avoid fraud," adds Multanen.

Raja at Cloudera cites other examples. "Similarly the location information coupled with subscriber density maps in real-time can be a huge advantage for the public service domain specifically for assisting with city planning, traffic optimisation and enabling law enforcement," he says.

CSPs are stretching their muscles to unlock new opportunities in new markets. "We see service providers expanding from their traditional domains and introducing new services that were usually associated with third parties, such as mobile financial services," says Shahar Dumai, the product marketing manager for Big Data & Analytics at Amdocs. "Data definitely can help service providers enter such new areas as it enables a better understanding of the customer and is instrumental in delivering a better service."

For Gabriele di Piazza, the senior vice president for products and marketing at **Guavus** adds: "CSPs are

able to monitor subscriber activity across their network and they can pass the insights generated from analysis of this data onto third parties to help them create more accurate profiles of their customers. New high-volume data streams, coupled with advanced customer analytics and personalisation algorithms means 360-degree profiles will be dramatically improved."

The capacity to use the information to gather 360-degree profiles of customers delivers multiple potential benefits, benefits to which CSPs hold the key. "CSPs have a deep insight into the customers' profiles, while OTTs provide a crowning view of the customers actively using social networking and e-commerce websites. The mix of the two gives a full, detailed view of customers' behaviours of great interest to the verticals to segment their customer base and offer relevant services," Glatt explains.

The reality is that as BSS moves towards real-time so does the opportunity to use that data for deeper analytics and personalised customer offers. Until now this information languished in data warehouses for use in historical analysis, but more sophisticated real-time analytics changes things. "This why streaming analytics is being used on real-time data so that it can also be used to provide a real-time trigger, along with the historical customer business intelligence, to activate contextual aware offers," explains Hogan.

The biggest obstacles are technical, internal and regulatory. "CSPs need to have technology and processes in place to ensure customer engagement and provisioning are considered when capturing data. CSPs also need to extend analytics and engagement capabilities to third parties to monetise the data while still respecting customer privacy. For this to happen, they need a real-time digital infrastructure that extends from the network to all of the customer touch points," explains Jennifer Kyriakakis, the founder and vice president of marketing **MATRIX Software**.

Digital transformation is a big opportunity, with alliances likely to drive the initial charge "What's more likely in the short term is the strengthening of partnerships between CSPs and OTT content providers, based on a mutual value from real-time data and an ability to action it and rapidly build offers from it," adds Kyriakakis. 