



When It Comes To Data-Driven Telecommunications, It Pays To Know Who You're Talking To

Realise the Staggering Potential of Your Telco Network and Customer Data

The mobile market is awash with transaction, interaction, and network performance data.

And certain forward-thinking communication service providers (CSPs) are committing hard-won resources to make the most of its operational and commercial potential. Unfortunately, as you read this sentence, integration and deep analysis of the data are transforming their businesses.

These are your data-driven competitors.

Game-changing insights

They've created a real competitive advantage. A killer edge. It gives them clear, fresh insights into the complex relationship between their organisations, their networks, their customers, their services, and their devices.

But that's not enough for the other market contenders. In spite of the awesome potential of synchronised data warehousing, integration, analytics, and the commercial spark they bring, their data goldmines remain either unworked, abandoned, or they've had all the true value and relevance raked out of them.

Fact not fiction

Combined with more conventional sources of customer information, this data could help them see their organisations through the eyes of their customers. Not only that, but it could help them make better-informed business decisions too – critical, data-driven decisions like actions on network investment, customer loyalty and retention, and revenue generation.

So if you're a contender, what's holding you back? This is a game-changing opportunity but the stakes keep getting higher. You're obliged to keep up with technological developments and increasing customer expectations. Then there's the escalating budgetary pressures, declining revenues and dwindling customer loyalty. Plus, customers now expect AI coverage as a given, and the trend towards flat-rate tariffs and 'all-you-can-eat' service bundles is making life increasingly difficult.

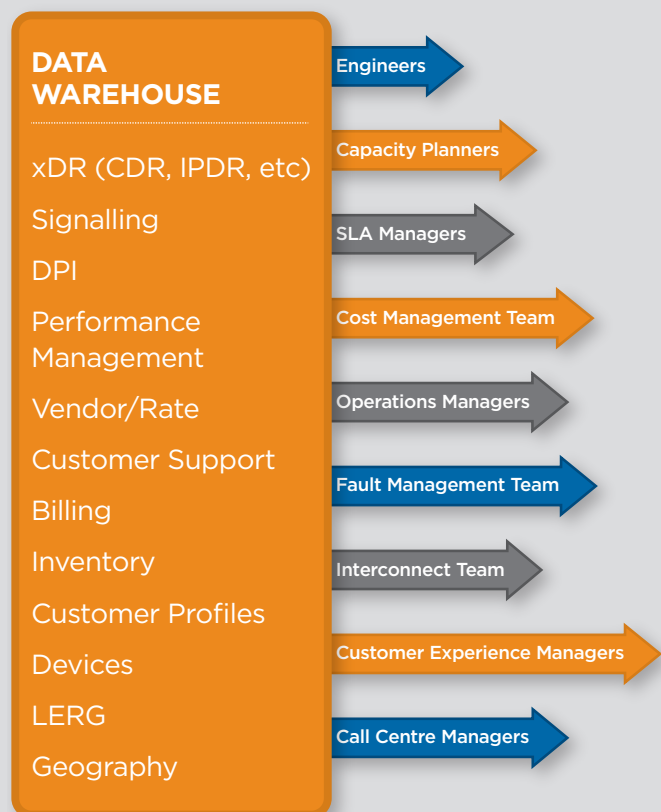


The thing is, network coverage and price are no longer effective differentiators. Network accessibility, quality of experience, and customer service are the commercial kings now. Consequently, protecting revenues, maintaining a high-quality service, retaining valuable customers and managing costs are rooted, front of mind.

But You Know That. Right?

So why not talk to someone and get the ball rolling? Break down your organisational siloes. Get to know your customers better by combining data from network management and probing systems, to create insights into the behaviour of individuals. Then you'll be able to quantify the impact of network and user device, as well as service performance and the overall quality of the customer experience.

Data Integration



Keeping all your data in one place is more accurate, convenient, and cost effective.

And together with more conventional customer-level data like Customer Lifetime Value (CLV), usage and revenue, tariff and subscription, billing and payment, credit risk, and churn score, you'll build a powerhouse of contextualised information to support activities like:

- churn analytics and model refinement
- pro-active customer care and retention initiatives
- campaign management and more accurate customer targeting
- customer segmentation, targeted offers and upgrades based on network experience and behaviour
- new product and service implementation
- reduced call-centre waiting times, more accurate diagnostics for customer experience problems, and improved first-call resolution rates.

It's Six Times Cheaper to Retain Customers Than Find New Ones

By importing customer value management (CVM) and network data into an analytical ecosystem, you can quickly identify and segment your most profitable customers. Correlating this information draws a detailed picture of the quality of their experience, plus their location, behaviour, and usage habits. You can use the insights to target network investment, maintenance, and performance improvements towards locations occupied by your highest spenders. This ensures that they get the best possible levels of service and experience, and you get a swift and significant return on your investment.

Using the power of data warehousing and analytics, one European mobile operator recently modelled the relationship between dropped calls and the likelihood of a pre-paid customer leaving their network. Through analysis they found that high-use, pre-pay customers who had a negative experience more than once a day were three times more likely to churn.

Of course, most mobile operators understand this, intuitively. But analytics allow you to identify which of your high-value, pre-pay customers are most at risk. Then you can layer that knowledge with other data such as device type, service usage, location and network-level information. In turn, this can trigger precision-targeted retention activities by the customer care team and corrective actions by the network services team, to ensure that customer dissatisfaction is reversed.

The Power Of Network Analytics

1

Reporting

What happened in the network yesterday?

2

Analysing

Why did ASR for vendor 'X' drop?

3

Predicting

How soon will my heavy data users reach their monthly data limits?

Combine traffic management with vendor contracts to predict quality, usage and cost

4

Operationalising

Is the down cell tower affecting my most profitable customers?

Network data and geospatial info can help improve visibility into who is affected

5

Warehousing

Alert customers along the hurricane path with info regarding outages, help centres, etc.

Integrate time and geography to create sophisticated 'what if' scenarios

Don't Let a Breakdown in Communication Ruin Your Relationship

Creating detailed insights into customer behaviour by combining network signalling and usage data, opens up a whole new range of up-sell and cross-sell opportunities. In a recent example, a European operator was able to identify high-value customers whose user

experience around their home mobile site was severely degraded by poor network coverage.

Because of this enhanced level of insight, the operator was able to devise a more personalised and precisely-targeted marketing campaign. This campaign significantly increased in-home, coverage-enhancement-solution sales and customer-satisfaction ratings, while reducing the likelihood of churn.

Integration is the Key to Efficiency

Recent advances in database technologies and analytical processes have been phenomenal. Now you can consolidate multiple customer and network-data sources into a cost-effective and technologically-efficient data warehousing and analytical environment. In other words, a fully-integrated Customer Experience Management (CEM) capability.

Concepts like Teradata's Unified Data Architecture (UDA) create the perfect environment for integrating traditional and highly-structured sources of network and customer data. Non-traditional data types can be analysed too and other data sources which, previously, might not have been usable due to their complex structures or high volumes, are handled easily. Which means large quantities of data can now be stored cost-effectively within Big Data appliances.

Become a Smoother Operator

In this way, network data from both voice and data networks can be analysed in conjunction with other information from customer touch points such as the Customer Relationship Management (CRM) and Customer Value Management (CVM) systems. Call-centre log files, social media and social networking sites, self-care web channels, as well as information from retail outlets and other points of sale can also be analysed by the following methods:

- Creating a single customer identity across the full range of CSP products, technologies and services. 'House-holding' family members across a complete range of mobile and fixed-line services to identify the total quality of the household's experience.
- Text mining and sentiment analysis on call-centre log files, network-trouble tickets, social media sites and customer satisfaction survey data to identify a range of customers whose experiences are either positive or negative.

- Path analysis to identify both the customer journey through various touch points and components of the organisation, as well as the various stages of the customer lifecycle. These processes are used to identify 'golden paths' which can significantly influence a customer's perceptions, levels of satisfaction, and their subsequent actions.
- Social Network Analysis (SNA), using customer-level network information to identify highly-influential customers whose network or customer experience is unsatisfactory. For example, a CSP might decide to prioritise retention and customer care activities towards key influencers who regularly fail to connect to the network, experience poor network service, or suffer from unacceptably long call set-up times.

Get More Value From Your Data

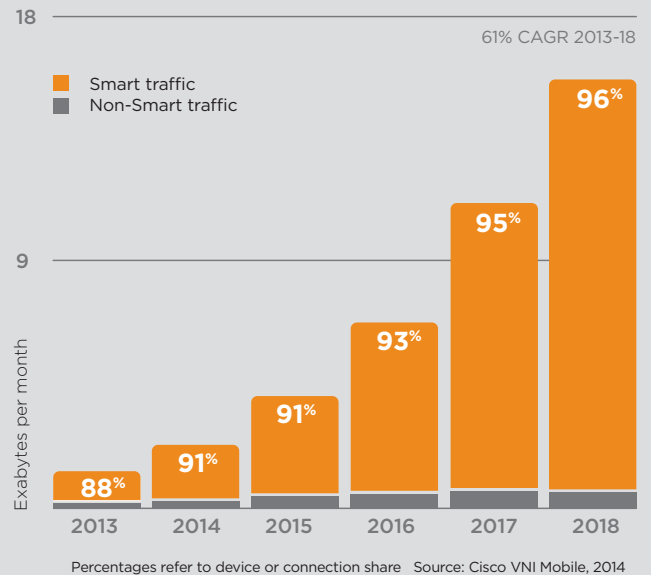
Combining network and customer data also creates a unique opportunity for CSPs, making the most of near-real-time, customer-specific, and location-based information, to monetise the value of their data. This data is drawn from a variety of sources including network-probing and call-tracing systems, as well as handset-based GPS data, and information fed back to the network from a variety of applications. Not surprisingly, it throws up a number of cost saving and revenue-generating opportunities such as:

- monitoring and fixing customer experience issues
- capacity planning and network optimisation
- providing SLAs to high-value customers
- mobile advertising and value-added services
- machine-to-machine (M2M) and Internet of Things (IoT) profitability
- anonymous, segmented data, and business intelligence to third parties such as: travel and transportation; retail; banking; local authorities and event planners; security and public safety services.

We Could Be Panning For Gold

The fact is that increasingly-sophisticated smartphone devices are fuelling the demand for data-hungry applications and services. Which is creating a data rainstorm and placing unprecedented demands on network capacity and service quality. Meanwhile, M2M communication and the IoT are generating a further deluge of new data.

The Effect of Smart Mobile Devices and Connections on Data Traffic



However, not all data is of equal value and, consequently, there are golden nuggets to be found. Lots of them. By combining these nuggets with various other sources of network and customer information, you can create a single view of each customer across all devices and activities, converting them into better-connected, more profitable, more loyal revenue streams, and transforming your embattled contender into a prime performer.

A data-driven business.

Can you really afford not to get into integrated data analytics?

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I specialise in creating advanced network-intelligence capabilities through the integration and analysis of multiple networks-based data sources. I'm also responsible for the development of enhanced Customer Network Experience (CNE) and Customer Experience Management (CEM) solutions, through the integration and analysis of network, customer, and business data.

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