Monetising Customer Insights: the importance of big data analytics in 4G LTE networks

With the expansion of 4G LTE networks and increasing customer demand for the quality and diversification of digital services, operators face a highly competitive environment. And yet, contained within their networks, operators have a source of information at hand, which may enhance their ability to compete and strengthen their position in the face of persistent challenges. This source of information is often referred to as ‘Big Data’.

Big data - raw information generated by systems and processes in operator networks - reveals insights on network performance and customer behavior. Analysis of such data holds out the tantalising possibility of making a significant and positive contribution to several important business objectives, such as the creation of new revenue streams, improvement of customer experience, and boosting subscriber retention.

In particular, the all-IP 4G and LTE networks will generate significant volumes of new data that at present represent an untapped resource. Operators must take steps to ensure they exploit these resources and leverage this information to help address these opportunities.

Recent statistics reveal that 70 percent of telecommunications companies are committing themselves to big data analytics strategies, but only five percent of marketers within those companies are able to access and exploit this information. Those operators who continue to ignore the opportunities, buried within big data generated from their networks, do so at their own peril.

However, the generation of this data is meaningless at source. Real-time data collected by operators is unstructured when it is produced and it gains significance only through analysis and correlation. Sophisticated tools are needed to accomplish this task. Analysis introduces structure, which, in turn, enables operators to convert data into meaningful, useful and relevant information. Only information that is relevant can be exploited and monetised.

Targeted Marketing Campaigns deliver opportunities to upsell and cross-sell
Big data derived from LTE networks reveals a wide range of information about customer behavior and preferences. Such insights can be monetised through various means. Information that is available can include details about the devices and networks used by consumers, as well as the volumes of data they consume. In addition, it can reveal which OTT services and applications they prefer, the time and place that they most often use services or even indicate that certain services appeal to specific demographics within the subscriber base.

Further, by offering an overview of the average customer accessing its services, an operator is better enabled to establish where demand exists and to create accurate subscriber profiles. Age, gender, location, frequency of use and information on how much a given demographic may be willing to pay for services, are all vital information points that offer considerable value when developing marketing campaigns and competitively priced products.

Customer insights help operators to optimise such marketing campaigns and ensure they are directed to the most appropriate recipients. Targeted marketing
Based on the analysis of big data opens up opportunities to upsell and cross-sell to different profiles and demographics within which the need for a certain product has already been identified. As such, the intelligent use of such data opens up new revenue streams and can guide product development and launch.

Finally, by offering more personal and targeted marketing, a provider not only increases the quality of a customer’s experience but also delivers its products to areas where they will be most valued. This, in turn, can lead to increased ARPU.

**Offering personalised customer experiences**

In addition, analysis of Big Data derived from LTE network offers an opportunity to identify and manage competition – when, for example, comparable services begin to encroach upon a customer-base, and before they become a significant threat.

Repeated instances of customers accessing services at the same times, in the same places or through the same devices, will offer information on when, where and what provides the most satisfying experience.

Offering a personal, efficient and satisfying customer experience differentiates a company from competitive businesses and, in an increasingly challenging market, it can give an operator the edge over rivals. Analysing big data can show how an operator can enhance its customer experience through an optimised network, tuned to activity hotspots and areas with differing demand.

**An open system approach to data analytics**

Polystar takes an open system approach to data analytics. Once data has been captured and correlated, it can be stored in databases for retrieval and analysis. These open databases are accessible to all groups and teams within the operator so that information that has been analysed is not limited to a single area of operations, but can be accessed and spread throughout the company.

Through its Customer Insight Solution, Polystar is able to derive meaning from big data and enable different users within an operator’s organisation to receive the data that is relevant and useful to them.

To ensure that the right data reaches the right people, the insights derived from big data can also be delivered to help measure adherence to identified KPIs. This streamlining of information flow results in significant enhancements to operational efficiency.

*“By using customer data generated by LTE networks, big data analytics is able to offer strategies for managing customer experience that can reduce operating costs and open up new streams of revenue.”*

**Real-time network and customer insights**

When surveyed, customers have responded that the strongest factors influencing their decision to change networks included poor coverage, slow speeds and dropped calls. Performed in real-time, Big Data analytics enables a holistic view across an entire network and further increases efficiency, by optimising the speed with which a company can respond to a given situation and make proactive changes to offers, network provisioning and strategy.

In order to consider effective ways of improving customer satisfaction, it is vital to identify and alert operators about incidents before they have affected a critical number of subscribers. Issues such as the deterioration of coverage due to a surge in activity in a particular area can be dealt with proactively before significant disruption can occur. These elements, all of which can be monitored and measured through Polystar’s systems, have a direct impact on customer loyalty and churn rate, as well as the number of calls to customer support. Minimising their impact and effects not only saves operating costs, but also enhances customer satisfaction.

This provides one of the unique advantages of real-time monitoring and analytics. The positive effect of proactive strategies on customer experience has the greatest impact when they are applied to the factors that have the greatest significance for customer retention. Operators need to identify which of these factors matter for them and then leverage big data from their LTE networks to determine optimum solutions for retaining their customers.

By using customer data generated by LTE networks to create insight-based solutions for operators, big data analytics is able to offer strategies for managing customer experience that can not only reduce operating costs but can also open up new streams of revenue.

For those companies that rise to the challenge of developing strategies to monetise big data derived from LTE networks and use it to improve customer experience, Polystar is able to deliver tailored analytics that will transform unstructured data into meaningful and intelligent information.

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