



# Running a business by QoE

## Tier-one Asian mobile operator Case Study

### SUMMARY

#### Area of Business

Fixed and mobile communication services.

#### Challenges

Cost-effectively feed in-depth subscriber experience data into management analytics system to enhance decision making and improve business outcomes in their large mobile communications business.

#### Solution

Deployed eVolution, virtual subscriber experience probe, to track the quality of subscriber experience.

#### Results

- Cost-effective deployment of virtual data probe on standard network hardware
- Able to directly feed network subscriber experience data directly into business analytic systems
- Data is assembled to track key quality of experience outcomes
- Management gains in-depth view of the subscriber experience and make critical business decisions accordingly

This Tier One Asian operator offers fixed and mobile communications services to businesses and consumers. Its mobile business provides leading edge wireless services and devices to over forty million subscribers. The operator supports a country with a large and diverse economy across a broad and varied geography.

#### CHALLENGE

Customers come first. For this network operator, this statement is much more than just a slogan. It's a philosophy that compels the company to see things from the customer's point of view. It's a way of doing business that drives the network operator to continually improve the quality of its services. And it's a guiding principal in the company's efforts to improve its business when adding subscribers, providing new services, reducing customer churn, managing network resources and finding fresh revenue sources.

But in order to understand the customer's point of view, this network operator knew it needed to get a complete picture of the quality of its mobile services. Befitting its position as a leader in the communications market, the network operator sought detailed information on its network performance that could be leveraged by its big-data analytic system.

The company's executive team and IT management wanted to use such analytics to track and ensure that a high quality of experience would be maintained while making critical business decisions such as selecting new services, determining rate strategies and prioritizing network investments.

The network operator had been employing software-based analytics probes from another vendor running on commercial off-the-shelf hardware to track network traffic performance. The IT team knew that the network operations team used Sandvine Networks' family of DPI-powered intelligence engines to deliver policy and charging services across their mobile network, and after getting a demonstration of the analytics in Sandvine's Engineering Insights, determined that the data provided by PacketLogic™ software was superior to that of their existing vendor.

The operator wanted to change to PacketLogic, but required that this performance tracking be provided from within a virtualized environment that could deliver high data throughputs directly from the network to IT systems used by its data analytics team.

Critically, eVolution feeds high-quality subscriber experience data from the network directly into the operator's IT analytics systems using IPFIX.



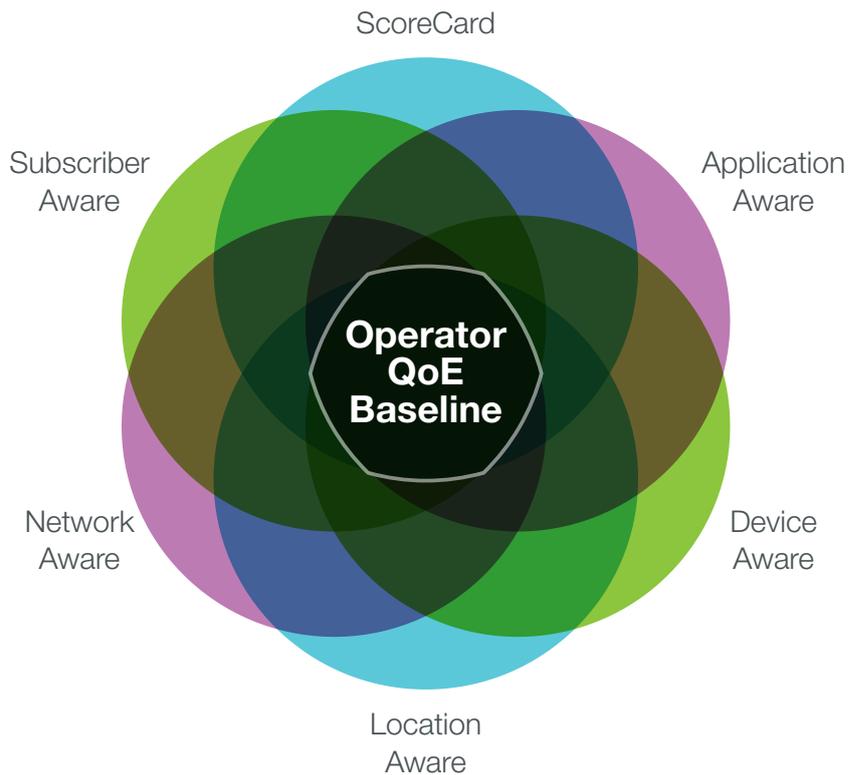
#### SOLUTION

With this knowledge, the network operator chose to adopt Sandvine's eVolution, a purpose-built virtual subscriber experience probe. With eVolution, the network operator's organization, from network engineers to senior executive management, can now track the quality of the subscriber experience.

The eVolution deployment provides the operator with the subscriber, application, network, device, and location data that is so important for its QoE efforts.

eVolution, based on Sandvine's industry-proven PacketLogic technology, can run as a Virtual Network Function Components (VNFC) as part of an ESTI-defined virtual network function (VNF) environment.

The solution is able to run on the operator's standard hardware system, making it extremely cost effective. Critically, eVolution feeds high-quality subscriber experience data from the network directly into the operator's IT analytics systems using Internet Protocol Flow Information Export (IPFIX).



By choosing Sandvine's eVolution virtualized solution, the network operator is able to equip its data analytics, IT, and executive management teams with access to valuable network data results.

## RESULT

By choosing Sandvine's eVolution virtualized solution, the network operator is able to equip its data analytics, IT, and executive management teams with access to valuable network data results. This data provides a view into the quality of the overall subscriber experience, based on eVolution's unique ability to track key network and subscriber factors.

These factors include subscriber locations, customer service plans, devices being used, applications and content being consumed, performance of the access network and even the peering connection through which the content traverses. This correlation of information provides the network operator with a comprehensive view of the quality of experience based on the results delivered for each network subscriber.

eVolution's data is compatible with popular IT data packages and big data analytics systems. The depth of data insight provided by eVolution supports multiple business decision-making and planning functions which can then more accurately track and evaluate the subscriber experience.

This includes historical data, as well as real-time feeds that can pinpoint problems that affect a customer's perceived experience, such as congestion related to high usage for a single cell site or the broader usage of a very popular app or service.

Using eVolution, the network operator's leadership can evaluate the quality of current services, applications and network performance to determine areas for future investment, and how to better deploy the resources that they already have. The solution also helps the company to identify new services to reduce churn, attract new subscribers and raise revenues, as well as to determine which existing activities and services are no longer popular.

By choosing Sandvine's eVolution, the network operator has been able to improve its top-line business outcomes by supplying overall subscriber experience data to more accurately guide executive and operational decision making. In doing so, the operator has successfully kept its focus where it belongs: on the customer.

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## ABOUT SANDVINE

Sandvine helps organizations run world-class networks with Active Network Intelligence, leveraging machine learning analytics and closed-loop automation to identify and adapt to network behavior in real-time. With Sandvine, organizations have the power of a highly automated platform from a single vendor that delivers a deep understanding of their network data to drive faster, better decisions. For more information, visit [sandvine.com](http://sandvine.com) or follow Sandvine on Twitter at [@Sandvine](https://twitter.com/Sandvine).



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