

Business Value Case

Network Monitoring and Quality of Service



FCR on Network IVR (+75%)



NPS of targeted population (+7.6%) in A/B testing



CSI 4.1 >> 4.9
{10% increase in CSI > leads to 6% ARPU;
10% increase CSI > leads to 3.2% Churn Reduction}



Query time reduced from 10 hours to 2 hours!

A leader in the telecommunication industry in Indonesia adopted SQream to perform Quality of Service analysis from base stations and from an additional analytics system they used. The SQream platform was used to ingest 30 TB daily. In addition, SQream transformed data as part of the ETL process and enabled cross-joins on external tables without the need to re-save the data. This enabled the operator to get accurate data about its subscribers and their QoS in near real-time. Query time was reduced from more than 10 hours, to 2 hours. They were able to identify all network issues and to respond correctly to customers.



Industry Vertical: Telco

Economic Buyer: Network Optimization Team

Enabler: Head of Traffic & Service Delivery Management; CIO; Head of Network BI

Why Do Anything?

The Telco had a process that failed after 10 hours. In cases where the network equipment didn't alert a problem (dropped calls; disconnections; higher/lower data consumption and more), the SQream platform helped the BI team analyze the problem source and fix it.

Why Now?

Network stakeholders were able to provide feedback to the customer care department on time. This enabled them to send proactive notifications and perform corrections on user profiles. Also, they could plan proactive maintenance activity on other network entities when they were able to identify patterns of failure.

Why SQream?

- Fast ingestion, near-real-time feedback
- Accelerate Total Time to Insight
- Ability to rapidly join many tables with large datasets
- Ability to upload 30 TB in 2 hours
- Reduce total cost of ownership
- Ability to run on- and off-premise and link between them
- Ability to query external tables
- Support multiple data types

Fastest time to insight on any size data

Business Challenge

Telco service providers are conscious that critical services are highly dependent on the 5G network QoS, and on the management of its network slices. They know it requires an increased effort to analyze the network/service data quickly, in order keep capacity, latency, reliability, availability and connectivity under close surveillance, and offer proactive remediation. 5G also provides opportunities to streamline and automate many maintenance-related processes, including the ability to respond to the challenge of failure, awareness that arises among any 5G provider. Poor customer experience leads to low NPS, and persistent QoS issues push customers to seek alternative solutions and increase churn.

Situation/Pain Business Impact

Situation - Network teams need to provide other parties in the organization with a report of **users who experience network issues**. The data is uploaded daily to their database, but they have not succeeded in providing the report on time to the other parties. **The data is collected from several systems which were deployed to better understand service usage**. They also need to **cross-join with the information from the BTS** (based transceiver station) to capture the exact location of the subscriber and the customer complaints to Customer Service in the last 24 hours.

Pain - The amount of events and data to be analyzed make these cross-joins non-feasible. The queries failed to complete even after 10 hours of processing. 5G networks contain many events due to IOT data consumption entities.

Business Impact - The customer is able to identify service disruptions on time, send proactive notifications to targeted users on time (involved ML), perform adjustments on networks (data offloading) and offer compensation in extreme network disruptions.

SQream Solution Components

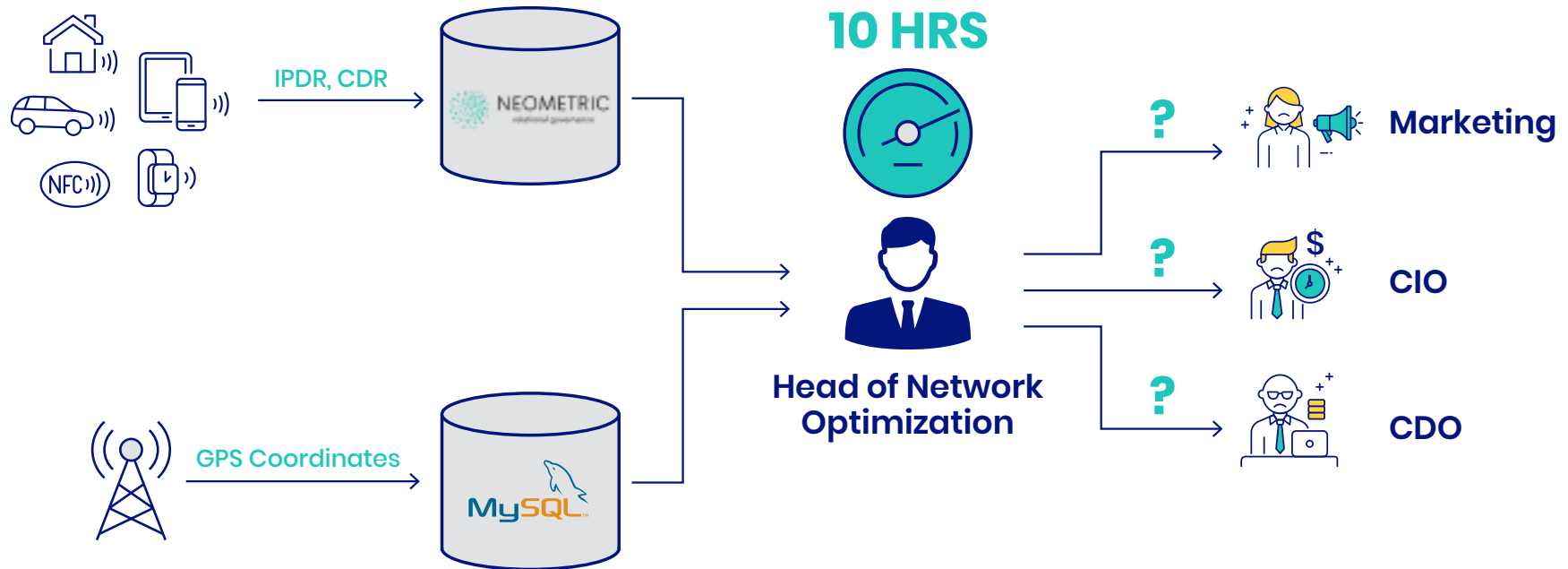
- SQream ad-hoc queries
- SQream cross-joins
- SQream for external table
- SQream uploader

Trusted By



Architecture Considerations (Before)

Service Usage 5G



Architecture Considerations (After)

