TechneValue

TechneValue Enhances Telco Network Performance with a Data-Driven Approach Using Skyvia Data Integration

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TechneValue is a dynamic consulting group offering comprehensive business solutions tailored to enterprises' needs, leveraging their experienced team of consultants to deliver efficient and customized services.

Company name:	Industry:	Product:
TECHNEVALUE	**CONSULTING SERVICES**	**DATA INTEGRATION**

Challenge

One of TechneValue's customers, a major telco company based in Italy, wanted to understand how they could improve their network quality during the 2020 lockdown period. In fact, in that particular period, people were stuck in their houses and weren't allowed to go to work or meet with people, and they only relied on their Internet connection to work, study, or just talk to friends and relatives. As a result, households were always connected to the internet, using several devices at the same time: therefore, networks were overloaded, and this led to connection problems, such as delays in loading web pages and the impossibility of making lag-free video calls.

In order to improve this situation and avoid their users turning to competitors to have higher internet performance, their client wanted to collect data coming from devices and networks, analyze it and understand where the major issues in their service were and whether there was room for improvement. However, the data was scattered across different platforms and devices, which made it challenging to investigate it. The company was looking for a reliable partner that could help them to address this need within an aggressive timeline and with a proactive approach without compromising on quality.

The company's main objective was to design and build a data warehouse that could ingest data from multiple platforms and devices but also to have skilled experts that could work with their team, and that could read the retrieved data to improve their service.

Retrieving and analyzing data, in fact, was fundamental to understanding where the network quality issues were and addressing them proactively. This data-based and proactive approach resulted in:

- Improvement of the offered service
- Better economic offering to those customers who were mostly impacted by connection problems
- Enhancement of customer satisfaction, both by offering them better conditions and by eliminating the issues.

Solution

To meet the client's needs, TechneValue partnered with Skyvia, a SaaS data integration tool, to design and build a data warehouse to ingest data and metadata from multiple platforms and devices.

TechneValue leveraged Skyvia's data integration capabilities and its collaborative approach to design and build the right data warehouse.

Using Skyvia data integration tool TechenValue built an architecture to extract data, metadata, and dark data from modems and other devices connected to the internet (PCs, smartphones, gaming devices, etc.). This data then was cleaned to avoid redundancy and misinterpretation, transformed into a format that could be ingested and read, and loaded into the data warehouse.

Skyvia's collaborative and intuitive interface and cloud-based architecture allowed TechneValue to design and build complex infrastructure to extract, transform and load huge amounts of data with ease.
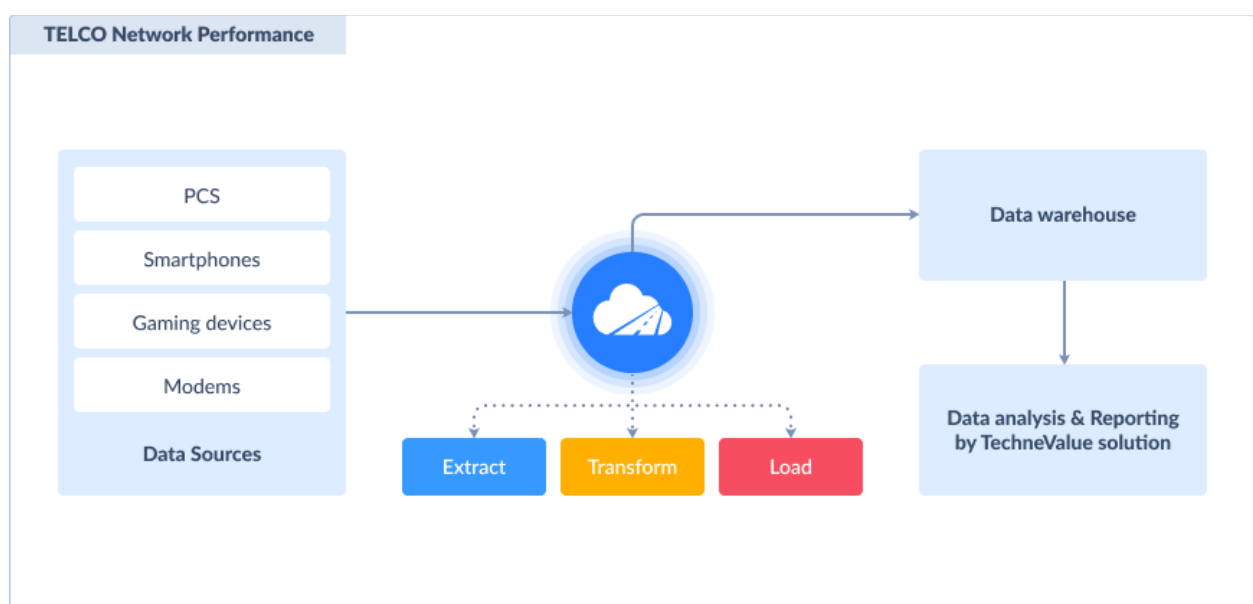
Once the data was ingested into the data warehouse, TechneValue's data experts used this infrastructure built with Skyvia to analyze this data to find repetitive and linked events. In particular, they focused on three main areas:

- How modems were distributed in Italy and on which technologies they relied;
- How often line had dropped over a certain timeframe;
- How many devices in a day were connected to the line (and if they were PCs, Android, or iOS devices)

Moreover, TechneValue partner used native Performance Management Solution 4próodoς to build graphics to present the data and their analysis to the company in an easily readable format.

Results

The analysis that was carried out on the retrieved data and the dashboards what were created, as a consequence, provided real-time insights into the company's operations and issues, allowing them to:

- Make data-driven decisions that improved the service they were offering: the implemented improvements were based on what emerged from the data
- Improve network quality: this was something every user-benefitted from

- Increase customer satisfaction: customers suffering from bad network quality were offered a better Internet plan before they turned to a competitor
- Fine-tune marketing and sales strategy: understanding where the problems were, and finding the right tools to overcome them, led our customers to create more engaging marketing messages, push upselling and ultimately increase their sales outcomes.

TechneValue's partnership with Skyvia, and their expertise in designing and building data architecture and warehouses, allowed them to deliver a high-quality solution. This project provided real-time insights that allowed their client company to make data-driven decisions and tune its marketing and sales strategy.