



Customer Success Story

Data Engineering: Collecting, rationalizing, and compiling disparate data to make it dashboard-ready

SPK saves a global SaaS leader time and resources—6x faster than competing bids, saving nearly 75 percent in computing and licensing costs

The Client

A respected provider of SaaS (software-as-a-service) solutions for the global telecom industry was faced with a problem common to many businesses: Their data was distributed across a wide footprint of disparate internal sources that couldn't be easily imported into decision-empowering dashboards.

This included server-management metrics, ERP data, and development systems data—all of which were effectively hidden from business stakeholders who desperately needed the info to crunch vital KPIs and make informed business decisions.

The problem was made all the trickier by the fact that each of these systems possessed very large data sets, in disparate formats—and each data set needed to be accessed by different means.

And the company already had their hands full, simply developing and supporting their core SaaS solutions. They needed a specialist to help.

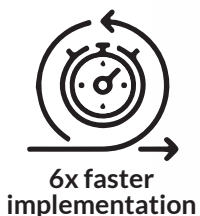
A Compounded Problem

Prior to contacting SPK and Associates, this company attempted to solve the problem using another vendor. The situation dragged on interminably, and was costly in terms of computing resources and software licenses. Indeed, when we were called in, the previous project still had six months to go down this expensive road.

Fortunately, SPK and Associates was able to stop the bleeding.

The Solution

SPK and Associates started by listening to the customer, and understanding the business needs which underpinned the data needs. We scrutinized the existing environment, identifying available resources as well as gaps that needed filling. And we employed an Agile approach to the endeavor, in order to make fast, incremental changes toward the final solution.



Leveraging our knowledge of cloud, databases, and data engineering, SPK and Associates devised a “data-transformation pipeline” which would ingest all of the disparate data sources, and automatically rationalize them into dashboard-friendly data. The “pipeline” analogy is apt, for our solution fed the different data

sources, incrementally, into a data warehouse, where it could be easily manipulated to create visualizations and reports for the different business stakeholders.

Specifically, the SPK solution employed four different platforms, each of which utilized specific configurations and custom code that we created for them:

- **Amazon Web Services** provided both server-based and server-less computing resources for the project.
- **Snowflake** provided data-warehouse functionality; this was where all of the normalized data was stored.
- **Matillion**, an ETL (extract, transform, load) tool, allowed SPK to create a pipeline of transformation steps; it was especially helpful because it integrates into third-party computing resources. Matillion provided the data import, modification, and output steps. Our code was executed on the Matillion platform.
- **Grafana** is a dashboarding application, but in this instance, it served as one of our sources of data.

Thus all of these components worked in relay-race fashion: Data in from Grafana, processed through Matillion, output to Snowflake for consumption by the business.

The Results

Company stakeholders now have full access to a wide assortment of business data. They can easily create reports that are meaningful to each of their teams, allowing them to make better business decisions as a result. Among the new at-their-fingertips data are KPIs such as:

- How many servers are in their fleet
- How many are underutilized
- Which services they are attributed to
- The costs associated with each

Importantly, SPK freed up the company's engineering team to focus on developing their own product, rather than expending valuable time trying to develop this internal tool.

The Savings

As noted above, the earlier vendor's attempt at a solution—never completed—had an estimated timeframe of six months.

SPK and Associates was able to create this entire solution, from scoping to implementation, in just one month. That's **six times faster** than what the other vendor had promised (yet never delivered).

There were savings in cost, too. The SPK solution was vastly simplified, compared to the previous attempt; our solution **saved our client approximately 75 percent** in computing and licensing costs alone.

Get a no-obligation initial assessment

If you're having trouble wrangling disparate data sources—and would rather focus your energies on core business challenges—get in touch with SPK and Associates. Contact us today at **(888) 310-4540** or **info@spkaa.com**.

