Success story

A world-class Market Data Platform: improved data discoverability and insights and new ways of working for a global specialist in the wholesale energy markets.

Introduction

A specialist in the wholesale energy markets, our client is global, asset backed and operates from source to supply in wholesale power, natural gas, oil, environmental products, LPGs/NGLs, LNG and coal.

Our client is heavily invested in data-driven technologies to fuel insights and optimise commercial strategy. In 2021 Digiterre was invited to collaborate with the client's Data Team to assist with the build out of their strategic Data Platform. The platform was critical to providing analysts with quick and easy access to large volumes of data they needed to gain insights into the market and to back test their models. Our team worked closely with stakeholders throughout the company to create a bespoke strategic system for staff to search and consume data.

Situation

A high level architecture of the desired end state of the platform had already been produced with some of the components already in early stages of production readiness, but there were time pressures to scale up and meet delivery deadlines that were proving challenging for the existing team.

The Digiterre team was deployed with the expectation that they would integrate and collaborate with existing team members, delivering rapid and continuous value, sharing their domain expertise as well as helping establish best practice agile ways of working.

Over the 18 month engagement, Digiterre worked with the Data Team and with the three newly established product teams.

> *Digiterre consultants integrated well to the point where it honestly felt like they were part of our team. They often went above and beyond to discuss wider issues and I really appreciated the technical domain expertise they so obviously had. When Digiterre came onboard it was early days for our development function and so they were also very influential in establishing our agile ways of working.*

Head of Data

Deliverables

Establishing new ways of working

Digiterre helped establish teams with clear alignment and collaboration so that delivery progress could be tracked, and delivery accurately predicted. Working as fully integrated members of the teams, Digiterre consultants were able to demonstrate, and provide skills transfer around agile ways of working that gained buy-in and full adoption.

QA test strategy and support

Digiterre initiated and managed the new QA strategy, putting in place an end-to-end testing framework which was actively used by the developers.

In addition, SonarQube was integrated into build pipeline and pull requests to provide code quality analysis.

The Digiterre team set up a DevOps support model, heavily using automation to create efficiencies, improve system stability and observability.

The team also delivered a bespoke system for searching and consuming data, including the UX design. This was done in an iterative way to gain buy in to the work before any code was written. The first version was delivered in just three months with regular milestones met for onboarding new data types. This work laid a secure foundation for all future inputs.

Technologies used:

- NET Core
- WebAPI, GraphQL (HotChocolate)
- Kafka
- Angular
- SQL Server, Mongo, Postgres Timescale DB, Custom Timeseries Database

Outcomes

- The Data Platform went live in December 2021, allowing analysts to build predictive models for European gas balances through periods of market turmoil.

- With the collaborative input of Digiterre's team, our client met their original project milestones, and can now transition the Data Platform to a steady maintenance and support state.

- There is consistency and supportability established in the applications which brings stability and decreased risk.

- Effective agile ways of working are established across the data teams.

- Delivery of the Data Platform has provided improved discoverability of data for analysts, gas traders, algo traders and the organisation, helping them to do their jobs more effectively, have better data insights, and be more competitive.

- Data is a key enabler of organisational change, and has established the groundwork with these key initiatives.