

Speeding Business Insights for the Leading U.S. Medical Testing Vendor

The client is transforming the operational processes and supply chain for medical diagnostic testing in the U.S. through a national network of labs and customized solutions that support payers, employers, and consumers. As an industry giant, the client supports the top 40 healthcare insurers in the country and a number of the Fortune 50. The importance of this medical testing transformation, which was already significant before Covid, has become significantly greater as the nation tries to deal with the pandemic.

Client Requirements

The company wanted to build a modern platform to customize screening and wellness programs and to develop an Extract-Transform-Load (ETL) platform for interaction between legacy and transformed systems. They also wanted a scalable architecture to maintain and analyze healthcare and wellness-related data.

In a second, related project, the company wanted to gain better insights from its new data warehouse through widescale migration of business intelligence dashboards from Excel to Microsoft Power BI. As part of this, they wanted to ensure strong sharing and security mechanisms.

Solution

For the ETL project, Celsior Technologies designed the ETL architecture and imported transactional data from multiple sources to SQL Server. We used exception handling for synchronization issues and an automation testing framework to check and report API and user-interface related issues.

For the business intelligence project, Celsior migrated over 240 reports across 5 subject areas (including sales, revenue, etc.). We reengineered over 120 SQL queries and developed 20 new dashboards for the company. We also were able to obsolete 60 unused and duplicate reports.

Business Benefits

Through the new ETL platform, we eliminated the manual work that had been previously required on a daily basis to manage the data integration process. Furthermore, we defined an exception handling process to handle any problematic data that was identified. More importantly from a business standpoint, we **reduced integration turnaround time by 30 percent** through the newly automated processes. This meant that significantly more up-to-data was available to support business decision making.

We demonstrated these same benefits of faster and more accessible business insights even more clearly through the business intelligence project. With the migrated and new Power BI dashboards, we **improved dashboard performance by 60 percent**. From an IT perspective, with the new self-help capabilities, we **reduced report development time by 40 percent**. Executives used the migrated Operations Dashboard to monitor and manage the company based on over 30 KPIs.

Although not specifically part of these projects, Celsior also worked with the client on the QA processes, tools & resources behind its patient-specific, multi-lab COVID test screening.