A Leadi... Instrum... Optimiz... Operati...

With Mindteck... Software

Market Study

A surging US economy and reduced energy prices have contributed to the rise in analytical instrument sales over the past several years. New technologies are constantly in development for process control, regulatory compliance, and other quality procedures. The market is slowly shifting towards continuous and portable instruments for field applications. Given the pace of the industry, companies need to implement protocols and systems that can accommodate new products and scale with ease.

Business Challenge

Our client is one of the leading analytical instrument companies in the US, providing innovative products used for chemical analysis. In order to meet market demand, the company consistently introduces new enhancements to their portfolio of analytical instruments. Existing products, on the other hand, also require ongoing support at all times. Between its legacy and new product lines, the company is constantly balancing the need for continuous software development while implementing new technologies. The client therefore required a solution that would address issues of obsolescence and ensure implementation of state-of-the-art PC applications on a continuous basis.

Mindteck has been one of the company's trusted software development partners since 2002, collaborating on various projects as the client built out its product line over time.

The strength of the collaboration between the Mindteck client project teams ensured that the new system was developed dynamically and responsively.

Solution Components

VC++, eVC, MFC, COM, OCX, C#, WPF, Access Database, Crystal Reports, Iocomp, and Microsoft SourceSafe.

Scope

The project's scope included designing and developing controller software that facilitated new product introductions. This parallel development of hardware/firmware and software also required coordinated oversight of project teams based onsite at the company as well as offsite at Mindteck.

The Mindteck Solution

A comprehensive control system was developed for the company's TOC and Cyanide Analyzer devices. The software configures, stores, and processes samples in a sequence. The sample processing results are stored in a database for post-processing and reporting. The system also accounts for reusability and scalability via the development of common components for instrument communication and customized UI controls.

Benefits

Mindteck's controller and post-processing software ensured smooth workflow to address product obsolescence. The key benefits of the system included:

➜ Development of multiple analytical instrument control software

➜ Deploying reusable components to lower costs

➜ Support for legacy instrument control software

➜ Development of multiple instrument simulators for development and testing to eliminate redundancies

About Mindteck

Mindteck provides product engineering and IT services to top-tier Fortune 1000 companies, start-ups, leading universities, and government entities around the globe. The company, established in 1991, is devoted to delivering knowledge that matters to help clients compete, innovate and propel forward. It is among a select group of global companies appraised at Maturity Level 5, Version 1.3 of the CMMI Institute's Capability Maturity Model Integration (CMMI).

For more information, please write to us at info@mindteck.com