Out With the Old, In With the New—In Three Days

Success Story

AbbVie is a global, research-based biopharmaceutical company formed in 2013 following separation from Abbott Laboratories. The company's mission is to use its expertise, dedicated people, and unique approach to innovation to develop and market advanced therapies that address some of the world's most complex and serious diseases.

Top: Dr. Tom Borkman working at Abbott Laboratories in the early 1990s. Bottom: Dr. Tom Borkman working at AbbVie in 2016.

A Smooth D/3® DCS Upgrade Allows New and Experienced AbbVie Engineers to Work in Their Preferred Ways

OVERVIEW & CHALLENGES

In 1999, NovaTech installed D/3® Version 9 at AbbVie's North Chicago facility. Although the system was still running seventeen years later, it became increasingly difficult to maintain. Replacement parts were either hard to find or unavailable. Dr. Tom Borkman, the Principal Controls Engineer at AbbVie, noted that "the skill for managing old systems is diminishing quite rapidly."

In addition to these challenges, the system was running on a VMS platform, which Corporate IT no longer wanted to support. With the backing from IT, engineering, and operations, AbbVie was ready to upgrade their NovaTech D/3 System in 2016.

AbbVie's IT organization asked NovaTech to craft a comprehensive, cost-effective plan. AbbVie wanted to gain the benefits of running a modern operating system, which IT, engineering, and operations could all support.

The new system would need to allow both new and experienced operators and engineers to capitalize on the capabilities of the new system while retaining their familiar interfaces and operating procedures.

"The skill for managing old systems is diminishing quite rapidly."

- Tom Borkman, PhD

NovaTech

SOLUTION

With this being NovaTech's first time upgrading any system to the D/3® Version 15 (D3V15), NovaTech field engineers worked closely with the NovaTech research and development team while configuring and staging the system. Windows® 2012 R2 was installed using a kit from AbbVie so the operating system would comply with AbbVie standards. The D/3 Version 9 applications were converted from VMS to Microsoft-based files, which were then installed along with the pre-released D3V15 software. This process, along with Factory Acceptance Tests, helped to minimize risk exposure in the field.

Another aspect of the preparation involved Dr. Borkman traveling to Owings Mills, MD, to experience hands-on training and learn the ropes of D3V15. Dr. Borkman also learned that he had a new favorite product: Windows Sequence Statement Debugger (WinSSD). "I love WinSSD," Dr. Borkman commented, "it's a well-thought-out product."

The extensive preparation allowed for a three-day turnaround on the 17-year-old system.

- **Monday:** The legacy system was shut down. AbbVie operations indicated to NovaTech's field engineers which part of their process they would like to have control over first.
- **Tuesday:** After replacing the D/3 equipment in the indicated area, operations had control before the entire job was completed. Then the field engineers continued the process by doing the same to the remaining part of the plant.
- **Wednesday:** By the afternoon, the whole production plant was back up and running on new servers and five new redundant Process Control Modules (PCMs).

Dr. Borkman not only is pleased with NovaTech's product, but with their service as well. "[NovaTech is] very responsive. When I have a problem, I can get help quickly, even if it's over the phone," Dr. Borkman explained. He also spoke of NovaTech's responsiveness in terms of customer feedback on a product: "If I recommend something, I'll see it quickly in the next version or patch, which is what I've enjoyed about NovaTech as compared to other companies."

Due to the success of the upgrade, AbbVie plans to migrate to NovaTech 8000 Series I/O.

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\- Tom Borkman, PhD

KEY BENEFITS

IT
- Cyber secure D/3 System
- Substantial increase in communications speed between system components

Engineering
- Reduced cost through migration of existing applications
- Reduced configuration time through graphical programming interface
- Broad familiarity with Windows Operating System

Operations
- Ability to display both legacy and modern operator screens (ProcessVision™), enabling a smooth transition

Management
- Quick turnaround time minimized impact on production and revenues
- Avoided risks due to software and hardware obsolescence

About NovaTech

NovaTech is a U.S.-based supplier of automation and engineering solutions for the electric utility and process manufacturing industries. Our products and services are used by hundreds of utilities and numerous Fortune 100 process manufacturers worldwide to simplify complex technical challenges, reduce operational risk, and deliver the highest long-term value.

To learn more, please visit novatechweb.com.