

CASE STUDY

Creating a New Revenue Channel for Avanceon

24/7 Remote Monitoring Service Assures Factory Up-time and Productivity

background

Since 1984, Avanceon, Inc. has designed and integrated factory automation systems for large manufacturers in both discrete and process industries. Essentially, Avanceon creates the “central nervous system” of a factory, connecting sensors to all components along the manufacturing line to monitor the health and well-being of the entire operation. As in most industries, downtime in a manufacturing plant dramatically impacts delivery deadlines and company profit margins. However in a process industry — such as petrochemicals or pharmaceuticals where each step depends on the next — time equals money and downtime is costly.

Over the past few years, organizations have implemented a series of strategic initiatives to reduce downtime associated with the growing complexity and interdependence of manufacturing processes. Where engineers once served as the “walking encyclopedias” on the factory floor, sophisticated automation processes have now taken their place, reducing the potential for human error and increasing the speed with which decisions can be made.

challenge

Originally positioned as a project-oriented service company Avanceon would do an outstanding job in helping their corporate manufacturing clients streamline their process. The typical engagement was anywhere from 3-12 months, and when the project was over Avanceon would move onto the next project. Inevitably, however, Avanceon would get a frantic call from clients informing them that something had gone wrong in the plant. In response, Avanceon would drop everything they were doing (often for a different client), hop on a plane and go to the client site. Most of the time, the problem was a loose cable, a bad sensor or someone who had reset a switch. Quickly, Avanceon engineers would resolve the problem, go home and send an invoice for a service call. However, this model of crisis/fix, crisis/fix was not efficient or effective for either Avanceon or its clients.



Frontier helped Avanceon conceive of and design a new service that offered manufacturers remote monitoring of their automation system via the Internet, 24 hours per day, seven days per week.

solution

One of the value-adds Frontier Service Design brings to clients is a broad perspective of business models from many different industries. For Avanceon, Frontier applied the concept of managed services and service level agreements (SLA), commonly found in the IT industry. By applying SLA's to manufacturing, Frontier helped Avanceon conceive of and design a new service that offered manufacturers remote monitoring of their automation system via the Internet, 24 hours per day, seven days per week. Leveraging the fact that today's automation sensors all use open standard Internet protocols, Avanceon and Frontier designed a service that remotely monitors the real-time data and status of the most basic or advanced manufacturing plants worldwide.

In some cases, a down manufacturing line can cost a company hundreds of thousands of dollars per hour. By signing on with Avanceon's Support Service, clients are assured that their systems are being monitored by professional engineers at all hours of the day. Should a problem occur, clients have access to the Avanceon staff either via phone, text, online chat or even online video to resolve the issue. If none of those remote support functions work, Avanceon has put together a nationwide network of automation engineers who can be on-site at a plant within hours to troubleshoot and resolve the problem.

This service leveraged the core intellectual assets of Avanceon's engineering staff and the company's 25 years of project experience, as well as new technology opportunities provided by the Internet. Just a few years ago, a remote data monitoring service like this would have been prohibitively expensive due to dedicated data lines, and the fact that earlier generations of automation systems had no robust communications capabilities.

Avanceon's Support Services now help their clients prepare for and successfully deal with down-time emergencies before, during and after they happen, even going so far as to use predictive measurement software that can tell when and where a problem is likely to occur.

As the world has gotten flatter, today's factories run leaner and in a "just-in-time" mode, often in 24/7 non-stop process. Additional benefits include:

- ▶ Avanceon's clients can call anytime, night or day, with a complex technology question when their own on-staff engineer may be unreachable.
- ▶ Beyond remote monitoring of the health and well-being of their plant, Avanceon Support System clients can easily access up-to-date information about their own manufacturing system and software through TotalVue™, a proprietary software product developed by Avanceon for this purpose, made accessible through a secured Web portal.
- ▶ Avanceon has also set up a national network of support engineers that can go on-site when required.

result

Clients have responded favorably to Avanceon's Support Service. Developed in collaboration with Frontier Service Design, the new offering serves as a key differentiator and has helped Avanceon realize the following benefits:

- ▶ provides consistent and recurring monthly revenues
- ▶ strategically complements the core "project-oriented" work that makes up the bulk of their revenues
- ▶ positions Avanceon as a true value-added partner to clients since they are now literally "connected"
- ▶ drives more strategic engagements and high-end project work with existing clients
- ▶ attracts new clients who may not have a project currently budgeted - but do need remote support
- ▶ provides Avanceon with a "service-as-product" platform that can be easily explained and priced as compared to high-end consultative projects

Avanceon was recently named "Systems Integrator of the Year" by its trade group, an honor that attracted the strategic investment of an international engineering holding company, and enabled Avanceon to expand project work and support services worldwide.