

CASE STUDY

Cardinal Health, Alaris® Products

Innovative Product Lifecycle Management Solution Reduces Time-to-Market

Challenge

Alaris® Products needed to streamline and speed up the development of new products to remain a market leader. The challenge was to shave 30 days off the product development cycle to introduce products to market faster. The company needed to simplify and expedite internal processes to bring new solutions to customers faster while meeting FDA requirements for Part II compliance.

Solution

As part of an enterprise resource planning project, Alaris and Clarkston built a fully validated product lifecycle management (PLM) solution. The system streamlines electronic approval processes and digital signature capabilities around two key areas:

- Engineering Change Management – Streamlines electronic approval with digital signature capability and the automatic routing of engineering changes for approval and red lining
- Document Management – Facilitates collaboration with the ability to capture, approve, track, and electronically store critical documents

Benefits

The initiative was successful in cutting 30 days off new product development and launch contributing to a \$4 million increase in annual revenues. The continued expected Return on Investment is as follows:

- \$8 million annual revenue enhancement through improved customer service and satisfaction
- \$2 million annual savings by increased operating efficiency
- \$5 million annual cost avoidance through enhanced enterprise visibility
- Increased product reliability and compliance estimated at \$25 million revenue over three years

“Clarkston took an innovative view of our business to create strategic processes for new product development, and accelerate their launch into the marketplace. Clarkston’s ability to assess our business holistically was critical to developing and executing long-term strategies to manage the entire product lifecycle.”

**William H. Murphy, Senior VP,
Quality and Regulatory Affairs,
Alaris® products**

Overview

Cardinal Health, Alaris® Products develops and markets products for the safe delivery of intravenous (IV) medications. Their IV medication and infusion therapy delivery systems, software applications, needle-free disposables, and related monitoring equipment are marketed in the United States and internationally. With \$65 billion in annual revenues and 55,000 employees on six continents, Cardinal Health is the second-largest distributor of pharmaceuticals, medical supplies and equipment in the United States.

Prior to the Cardinal Health acquisition, Alaris Products had undergone several mergers since its founding in 1988. In 1996, IMED and IVAC merged to form ALARIS Medical, Inc, and in 2003 changed its name to ALARIS Medical Systems as part of a recapitalization plan. Executive management understood the mission-critical need to integrate and simplify the disparate, non-compliant systems that were in place. At this time, they undertook a leading-edge business process reengineering initiative that would drastically change the way they did business to attain their vision of becoming the “gold standard” against which all of its competitors are compared.

This global reengineering strategy defined several highly strategic initiatives that would directly impact their business. Three of these initiatives included:

- Product Lifecycle Management (PLM)
- Sales Force Automation (SFA)
- Case Management

As part of a three-part series on Alaris Products, this case study will outline their challenges and solutions around a fully validated Product Lifecycle Management solution.

Challenge

A pioneer and leader in medical technology, Alaris Products had to streamline and speed up the development lifecycle of new products to maintain their edge on the competition. They estimated that cutting 30 days off of the product development cycle and getting products to market quicker would directly contribute to top-line growth.

The document management and collaboration processes that Alaris had in place were manual-intensive. In addition to the risk of documents being misplaced or damaged, the passing of copies between multiple departments sometimes created bottlenecks in the approval process. It was also difficult to pinpoint where a document was within its lifecycle because there was no way to track its movement or identify approval constraints.

The challenge was how to simplify and expedite internal processes to bring new solutions to its customers faster while meeting FDA requirements of a fully validated, Part 11 compliant system.

Solution

Alaris engaged Clarkston Consulting to evaluate its business processes. Together, management identified Product Lifecycle Management as a strategic business driver because of its impact on shortening the development and delivery of new products to market.

Alaris and Clarkston built a fully validated PLM solution as part of an SAP® ERP installation that is integrated with CAD through a third-party interface. The system streamlines electronic approval processes and digital signature capabilities around two key areas: engineering change management and document management.

- **Engineering Change Management:** Streamlines electronic approval with digital signature capability and the automatic routing of engineering changes for approval and red lining.
- **Document Management:** Facilitates collaboration with the ability to capture, approve, track, and electronically store critical documents.

A workflow application automatically directs documents to the right group of people to accept or collaborate on changes, and provides visibility into the collaboration process. Improving document maintenance and administration is the first step to decreasing time to market. Additionally, once a document has been digitally signed, it is no longer editable by any user without creating a new version. All versions of a document are linked so that changes can be viewed and tracked.

The PLM solution is capable of supporting FDA requirements, as well as double-digit sales growth and a complex distribution process to more than 5,000 hospitals and healthcare systems in over 120 countries.

Benefits

The investment in PLM solutions was arguably one of the most strategic parts of Alaris' undertaking to reengineer their business. The initiative cut 30 days off of new product development and launch, resulting in millions of dollars in revenue.

Alaris expects continued Return on Investment (ROI) through:

- Improved customer service and satisfaction: **\$8 million** annual revenue enhancement
- Accelerated time to market by one full month: **\$4 million** increase in annual revenues
- Increased operating efficiency: **\$2 million** annual savings
- Enhanced enterprise visibility: **\$5 million** annual cost avoidance
- Increased product reliability and compliance: **\$25 million** revenue over three years

Global product innovation and integration continue to drive Alaris' success. Accelerating new product development remains at the forefront of their focus on improving medication safety at the critical point of care, the bedside.

Clarkston Consulting is a leading management and technology consulting firm that provides strategic business solutions for clients within the life sciences and consumer products industries worldwide. These market leaders turn to Clarkston to help them bridge the gap between strategy and execution to sustain a competitive advantage. Clarkston is a sought-after business partner because of its recognized industry thought-leadership and superior client relationships, as measured by The Conference Board's survey on client satisfaction. For more information, visit www.clarkstonconsulting.com.