CSols INC.
Delivering Excellence

Implementation and Validation of STARLIMS™

Situation

A large molecular diagnostics laboratory company was seeking to increase their business and attract larger accounts. In order to accommodate the higher workload and throughput in the laboratory, they elected to implement the STARLIMS™ system. However, the LIMS project was falling behind due to lack of resources and lack of internal system expertise. CSols, Inc. was selected to assist the customer with their LIMS project based upon our STARLIMS expertise and our molecular diagnostics laboratory workflow and laboratory process knowledge, as well as our regulatory and IT expertise. CSols was engaged to perform continuing project support of the STARLIMS LIMS system and to increase project throughput and decrease support calls by resolving common help desk tickets through root cause analysis. Projects were deployed to production with minimal interruption through the development and execution of detailed unit and integration test execution plans in order to validate backwards compatibility and functionality of new processes.

Objectives and Challenges

The goal of this LIMS project was to enable the client to maintain is competitive business position and to facilitate its plans for growth. CSols' role was to provide key knowledge and resources to help to complete the implementation of their highly customized STARLIMS environment while also increasing LIMS project throughput. Our involvement allowed the client's lean IT team to continue providing optimal support while still completing projects on schedule.

There were several hurdles to overcome to successfully complete this project. Firstly, the STARLIMS LIMS was highly customized so extra effort was needed to become fully familiar with the system's architecture and functionality at the point of our joining the project. Additionally, the knowledge transfer by the client's previous employees who had originally developed the LIMS to the current team was not complete so gaps in knowledge existed. Lastly, the STARLIMS implementation project was given a very aggressive timeline.

CSols' Role in the Solution

CSols' effort included the following key tasks and deliverables:
- Stabilizing STARLIMS environment by correcting customized code causing numerous helpdesk tickets
- Implemented HL7 discrete data interface for one of the client's major customers
- Rebranded custom reports for all major orderable tests
- Implemented additional orderable tests and plate workflows
- Streamlined and updated clinical questions and calculations performed on specific questions for all orderable tests

PROJECT AT A GLANCE

BUSINESS SECTOR:

Molecular Diagnostics Lab

INFORMATICS SYSTEM:

LIMS: STARLIMS 10.4 clinical
Interfaces: Orion Rhapsody
XML/HL7 integration
US: Copia

SERVICE OFFERING:

Strategic Planning
Deployment
Project Management
Implementation
Validation

ELEMENTS:

3 Sites
3 Labs
8 Months
3 CSols Team Members

(Continuation...)

Benefits

- Increased project throughput while keeping the same internal head count.
- Resolution of many recurring help desk tickets, this in turn also improved end-user satisfaction and productivity in the lab.
- Helped increase revenues by up to 50% by being able to complete and deliver HL7 discrete data project on time with the integration team from both companies.
- Increased customer base by implementing additional orderable tests.