

Gap Analysis of a LabVantage LIMS for a Medical Device Company

CASE STUDY

PROJECT AT A GLANCE

Business Sector:

- Life Sciences
- Biotechnology
- Medical Devices

Informatics Systems

- LabVantage LIMS 6
- LabVantage 8.4

Service Offering

- Business Analysis

Elements:

- 2 Sites
- 1 Lab
- 4 Months
- 1 CSols Team Member

A multinational leader in biomarker development and medical device manufacture returned to CSols, Inc. to perform a gap analysis between their existing LabVantage 6 LIMS used in the clinical lab and the newly released LabVantage 8.3 LIMS. The client wanted to eliminate customizations and uncommon configurations in their original version 6 installation. CSols's performance on previous LIMS and ELN projects impressed both management and end-users, such that leveraging CSols's LIMS upgrade and LabVantage expertise for this project was an easy decision.

Objectives and Challenges

The client needed an easy-to-maintain laboratory informatics system for their clinical operations. Therefore, the overarching goal of this project was to identify the most efficient means of going

from their current state to a lower maintenance future state in their LabVantage LIMS.

To achieve the desired future state, the client first needed to compare the costs and benefits of maintaining the status quo in version 6 with the potential costs and benefits of upgrading to LabVantage 8.3. A senior CSols Business Analyst (BA) performed a comprehensive gap analysis to compare the two versions and the costs and benefits of each potential scenario, as well as modeled additional configurations to improve clinical operations workflows.

The BA encountered the main project challenge in the undocumented version 6 configurations. Without proper documentation, the purposes of the configurations could not be well understood. This lack

of understanding meant that the existing functionalities could not be adequately mapped to out-of-the-box (OOTB) functionalities in LabVantage 8.3.

CSols's Role in the Solution

The CSols BA leveraged many years of laboratory and LabVantage LIMS experience to parse the configurations. System analysis best practices were used to conduct meetings with client stakeholders, understand their system, and fill gaps in their LIMS documentation for both the current state and the desired future state.

The CSols BA recommended the most efficient, low cost way to use new, out-of-the-box (OOTB) functionality—based on years of user feedback about versions 6 and 7—to recreate the extensively configured functionality that existed in the version 6 installation.

Throughout the project, the CSols consultant served in the following roles:

- LabVantage 6 configuration analyst
 - » Understand the LIMS current state
 - » Review and document existing suboptimal configurations
 - » Compare configurations to OOTB features in the newest release
- LabVantage 6 technical customization SME and analyst
 - » Understand the LIMS current state
 - » Review and document existing troublesome customizations
 - » Compare customizations to OOTB features in the newest release
- LabVantage 8.3 configuration SME
 - » Recommend means to achieving equivalent functionality without complex or unconventional configurations in LabVantage 8.3



- Recommend means of achieving equivalent functionality with no customizations in LabVantage 8.3
- Recommend additional ways to maximize value and reduce upgrade-related costs

Benefits

In order to perform a gap analysis for the client, an evaluation of the current LabVantage 6 configurations were needed. But with the absence of documentation, the CSols BA leveraged their many years of laboratory and LabVantage LIMS experience to parse the configurations. Their thorough reconstructive efforts revealed that the uncommon and poorly coded configurations in version 6 were the cause of the slowed clinical processes, further leading to poor end-user experiences. The analysis of the client's current state of their LabVantage 6 system provided the insight and understanding the client was seeking.

The second half of the gap analysis required a deep understanding of LabVantage 8.3 to recommend the best way to use the new, out-of-the-box (OOTB) functionality to achieve the extensively configured functionality that existed in the version 6 installation. Years of user feedback about versions 6 and 7 that

the CSols BA acquired were key in order to understand the differences between the versions and to know which OOTB functionality could map to the existing configurations. The CSols BA again leveraged LIMS experience and LabVantage knowledge to suggest changes that could reduce—if not eliminate—future customizations, should the client decide to upgrade.

The client came to understand how an upgrade could eliminate or reduce their pain points, based on the report supplied by the CSols BA.

The new LabVantage 8.3 features would improve data collection and the end-user experience. The client felt confident in their path forward to better clinical laboratory processes and informatics tools because their upgrade path for the future was more clearly defined.

Stakeholders can now understand their roles in that process and the benefits they could see from these and any future upgrades.

The client followed CSols's recommendations and upgraded to LabVantage 8.3. In that process, the client eliminated a sub-optimal LIMS installation, improved the LIMS end-user experience, and reduced the overall cost and effort to use and maintain laboratory informatics tools in their clinical laboratory. If not for CSols's support, the client would have continued using a low-value, high-cost system. CSols's input freed up funds and resources for other projects and further expansion within the clinical sector.