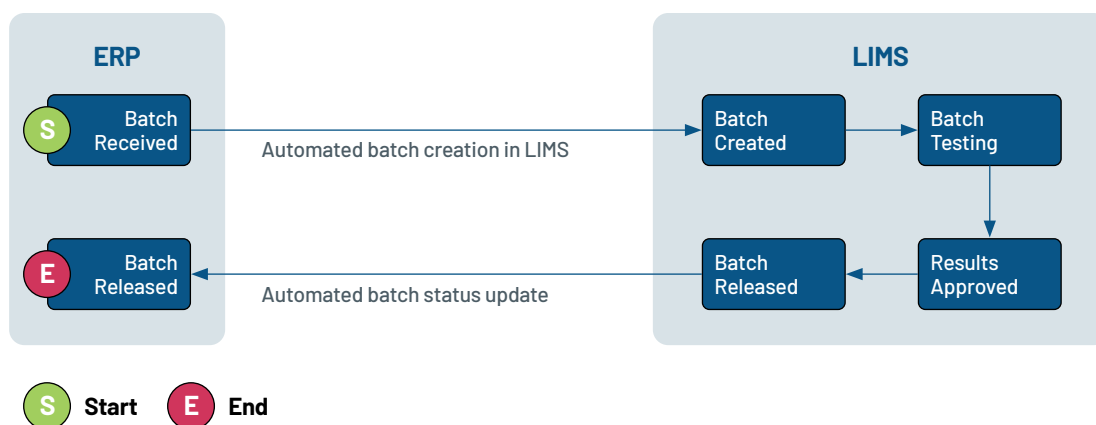


Scitara DLX Case Study: ERP and LIMS Integration with DLX

Objective

A key objective of the client's digital transformation initiative is to deploy technology that yield efficiencies in the end-to-end workflow from receipt of materials to batch release. This makes the integration of the various tools along this workflow a key part of the strategy.

This case study focuses on the value of automating the batch creation in the Laboratory Information Management System (LIMS) and batch release in the Enterprise Resource Planning (ERP) system. Bidirectional integration of the ERP system and LIMS with Scitara DLX enabled the required automation. The graphic below describes the high-level workflow and the integration actions.

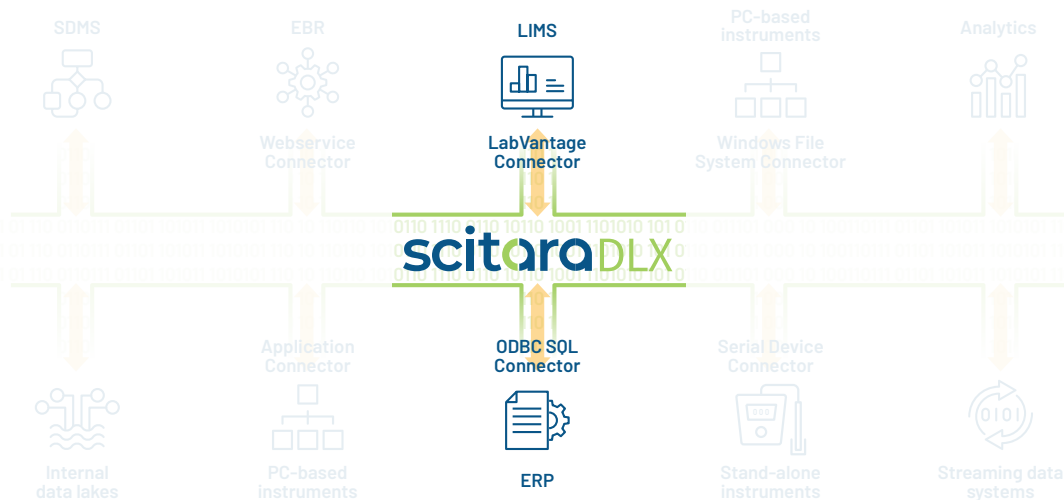




The Solution - Scitara DLX

Point-to-point integration solutions have proven to be ineffective in the past, from a deployment and management perspective. The client evaluated Scitara DLX to be a single integration solution that can be used for all integrations planned in their digital transformation roadmap.

Scitara DLX, the iPaaS for science, facilitates data mobility in a laboratory environment. Scitara DLX Connector technology opens bi-directional communications between each system, an endpoint, and DLX. Once connected, an endpoint can consume any data flowing within DLX. Scitara's DLX Universal ODBC SQL Connector enabled interactions with the ERP system. Scitara's Branded LIMS Connector, specific to LabVantage LIMS, enabled bi-directional interactions.



To achieve the client's objective of enhancing efficiency through digital transformation, Scitara DLX was selected as their integration platform. The client's approach is to deploy an integration solution in parallel with the deployment of the LIMS to provide efficiencies and benefits beyond those provided by a LIMS alone. If DLX was not deployed as part of the solution, the process would have required the following manual steps:

- (1) LIMS batch creation
- (2) ERP lot disposition updates

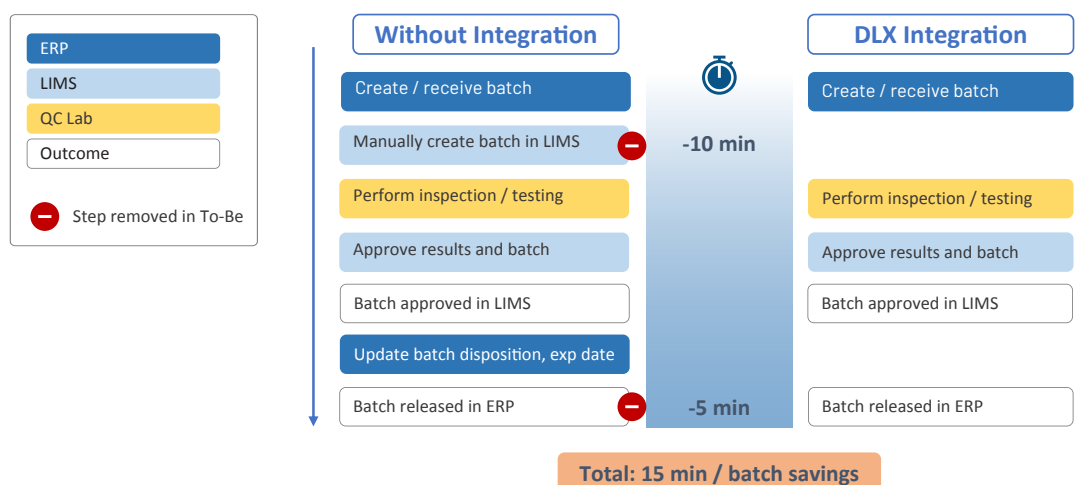
Current initiatives include the integration of instruments, an Electronic Batch Record system, and an upgraded ERP system. As assets are added or replaced, the existing integrations with DLX (e.g., LabVantage LIMS to DLX integration) remain intact and operational.

Value Discovery & Impact

Value assessment and discovery focused on two target value areas:

(1) Batch Creation and Update Efficiency (2) Data Integrity

The processes with and without integration using Scitara DLX were compared to identify the impact of DLX on the workflow and derive quantitative value. The end-user workflows without and with DLX integration are depicted below along with the estimated time saved for the various manual steps eliminated.



1) Batch Creation and Update Efficiency

Integration with DLX facilitates the workflow in two major ways:

(1) DLX automates the creation of the batch in LIMS (2) DLX automates the batch disposition update in ERP

Laboratory subject matter experts estimated an average total time savings of 15.0 minutes / batch to create the LIMS batch and update the ERP batch. Assuming a total of 3,000 batches per year, yields total savings of 94 days/year.



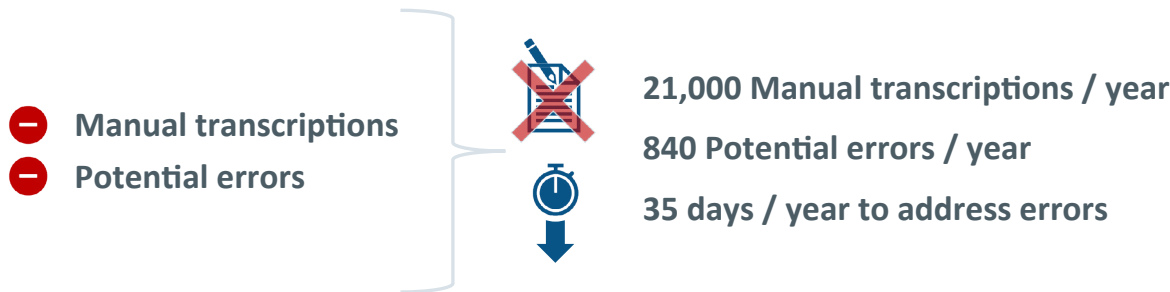
2) Data Integrity

Data integrity value is derived from the elimination of errors made from manual data entry and transcriptions. The integration eliminates the manual entries required in:

- (1) Creation of the batches in LIMS (2) Batch disposition updates in ERP

Assuming a total of 3,000 LIMS batches, yields a total of 21,000 manual entries avoided per year.

Assuming an average error rate of 4.0%, yields 840 potential errors / year. Assuming 20 minutes to correct an error, yields savings of 35 days per year through error avoidance.



Summary

The total potential quantitative value derived from the automation and integrations for the ERP Batch Release workflow is a total of 129 days/year savings and elimination of 21,000 manual transcriptions.

