

Integration Assessment for Department Store Chain

ORGANIZATION

XTIVIA's client is a department store chain founded in 1888, with nearly 300 locations in 16 states offering apparel, shoes, accessories, cosmetics, home furnishings, and wedding registries.

CHALLENGE

Our client is a leading technology innovator in retail, with mission-critical systems which handle high volume and high velocity of data movement from on-premise to cloud. XTIVIA partnered with the client to perform an integration process and technology debt assessment, to determine if the current integration strategy is optimal. We conducted technology sessions and evaluated tools involved in the integration of different sources and target systems and identified anomalies.

- Missing Enterprise-level architecture group
- Teams working independently, challenge being that this is not concise
- Different teams are using different tools for the same purpose and have different opinions about the tools
- Implementing all the used cases with the same commercial product is increasing license cost

TECHNICAL SOLUTION

The purpose of this assessment is to provide our client insight into industry integration best practices and determine if the current integration strategy is optimal. The assessment process was a combination of artifacts and technology sessions, conducted by XTIVIA over several weeks to understand the existing integration processes. The XTIVIA team evaluated several integration technologies; Talend, IIB, DataPower, MuleSoft, DataStage, SpringBoot, Workato, and Apache Camel. Since cost and ease of implementation were critical factors in determining future Integration options, XTIVIA recommends the following:

- Adopt microservices architecture with open-source technologies, frameworks, and tools (i.e. Spring Boot, Spring Integration, Apache Camel). This should be adopted across the organization.
- Limit the current use of MuleSoft
 - Only use MuleSoft for real-time integrations with complex transformations or orchestrations and mediations.
 - Do not use MuleSoft for simple database interactions or proxying APIs. This does not mean that MuleSoft cannot handle them. It is from the perspective of cost efficiency. Moving to open-source technologies like Spring Boot is a better solution for this kind of scenario.
 - Do not use MuleSoft for point-to-point integrations with simple transformations. Spring Integration or Apache Camel will be a more cost-effective solution. These solutions are highly scalable with lower cost and they can be deployed on the cloud or on-premise

- Adopt a single tool at the enterprise level for all of their ETL requirements. XTIVIA also recommends that our client consider using open-source frameworks such as Spring Batch, Spring Integration Apache Camel, and Spring Cloud Data Flow.
- Migrate all flows from IIB to MuleSoft or open-source technologies such as Spring Integration or Apache Camel.

BUSINESS RESULT

Enable our client to drive further retail innovation with scale and speed, XTIVIA provided:

- Insight into industry integration best practices,
- Identified technical debt, and provided cost-effective options
- Recommended open-source technologies to reduce licensing costs.
- APIs should be rearchitected to microservices when required

SOFTWARE

Talend, IIB, DataPower, MuleSoft, DataStage, SpringBoot, Workato, Apache Camel

KEYWORDS

Assessment, Technical Debt, Talend, IIB, DataPower, MuleSoft, DataStage, SpringBoot, Workato, Apache Camel

ABOUT XTIVIA

XTIVIA is a proven technology integration and innovation company known for delivering leading-edge technology solutions to our clients' specific requirements, regardless of project complexity. We bring next-level business operations to reality through Application Development, Business Intelligence, Data Warehousing, Database Support & Management, Enterprise Information Management, Digital Experience Solutions, and Enterprise Resource Planning. Our success stems from a demonstrated ability to deliver deep expertise via professional services, empowering clients to leverage their chosen technology successfully, competitively, and profitably. XTIVIA has offices in Colorado, New York, New Jersey, Missouri, Texas, Virginia, and India. www.xtivia.com