

Strengthening Usage Intelligence for EdTech Product Renewal Decisions



The Client

The client is an educational reference and digital media publisher serving universities, K-12 schools, public libraries, and multi-institution consortia in the US.

The Challenge

As the client continued consolidating products into a unified platform, usage information needed to be interpreted across LibLynx, Google Analytics 4, Databricks, Power BI, product migration states, and multi-level account relationships. They wanted to define a governed reporting foundation that could support consistent renewal decisions as the platform evolved.

Critical Success Parameters

- ✓ Validate the collection and attribution of records for referral or discovery activity.
- ✓ Trace each measure from the original user action from collection to reporting.
- ✓ Distinguish genuine changes in usage from differences caused by instrumentation, platform migration, or account hierarchy.
- ✓ Prioritize tracking changes that improve renewal and product analysis.
- ✓ Establish clear definitions, confidence ratings, ownership, lineage, quality controls, and monitoring requirements.
- ✓ Build the recommended future state within the client's existing Databricks and Power BI environment.

Our Approach

- ✓ Developed testable hypotheses for duplication, attribution, and reconciliation between analytics sources.
- ✓ Scanned platform source files and interactions for a full activity measurement inventory.
- ✓ Reproduced interactions in live sessions and inspected LibLynx and GA4 network traffic to cross-check against real platform behavior.
- ✓ Traced key measures through instrumentation, collection, Databricks processing, account attribution, and downstream reporting.
- ✓ Reviewed production pipelines, notebooks, source schemas, migration signals, and master-recipient account relationships.
- ✓ Designed a phased Bronze, Silver, and Gold data architecture with ownership, lineage, scheduled quality checks, and failure alerts, using the client's existing technology stack.

The audit combined full-code analysis with live verification. Recommendations covered immediate priorities and architectural improvements.



Key Result Highlights

Delivered an evidence-backed inventory of **1K+** source files and **~700** interactions, giving the client a clear view of what was being measured.

Identified account-resolution logic affecting the attribution of **10M+** usage events across large institutions, consortia, library systems, and multi-campus accounts.

Created a phased implementation roadmap for governed reporting within the Databricks and Power BI stack the client already used, without requiring a new analytics platform or additional licensing.

Provided the client with a clearer basis for strengthening renewal reporting, account-level analysis, and future usage-intelligence initiatives.