

Case Study

Improving K–12 Digital Learning Usage Analytics for District Renewals and Governance

**Magic
EdTech**

The Client

An edtech analytics platform provider that gives school districts a districtwide view of digital learning usage, enabling leaders to evaluate adoption trends, utilization patterns, and governance readiness.

The Challenge

As the platform expanded across more districts and more varied device and browser environments, telemetry completeness and reporting consistency became harder to maintain. The client needed to reduce data gaps, protect rollup and drilldown accuracy, prevent regressions across common district configurations, and ensure performance at large-district volumes so leaders could trust the data for renewals, adoption support, and governance decisions.

Critical Success Parameters

- ✓ Reduce telemetry gaps across mixed district device and browser environments.
- ✓ Maintain accurate rollups and drilldowns from district to school, grade, and class.
- ✓ Prevent regressions through repeatable QA across common environment matrices.
- ✓ Validate performance and reliability during peak usage and large-district volumes.
- ✓ Ensure dashboards support real district decisions across IT, curriculum, finance, and leadership.

Our Approach

- ✓ Stabilized collection pathways to minimize telemetry loss in real-world district environments.
- ✓ Strengthened ingestion and aggregation logic to preserve consistent rollups and drilldowns.
- ✓ Improved dashboard workflows to better support renewals, adoption targeting, and utilization analysis.
- ✓ Built automated regression coverage across common device and browser combinations.
- ✓ Implemented data-validation test suites to protect reporting accuracy release over release.
- ✓ Executed performance and reliability testing for high telemetry volumes and peak periods.



Key Result Highlights

Validated decision value in a multi-district pilot: leaders reported the data supported ROI analysis, surfaced engagement gaps that can indicate inequity, and strengthened online learning initiatives.

Improved data trust and release confidence, enabling districts to shift from anecdotal renewals to evidence-based budgeting and rationalization.

Increased governance readiness by focusing privacy and vendor-risk discussions on applications with verified, active usage.