

Building A Centralized Data Hub for University Reporting

→ Challenge

An Ivy League research university needed to improve the accuracy and timeliness of institutional reporting to support academic, strategic, and operational planning. Data was spread across multiple systems, including Faculty Affairs, Institutional Research, HR, and Finance, making it difficult to access consistent cross-functional insights. Calculations and key metrics were not standardized, which limited confidence in their reporting and heightened the manual reporting burden on administrative teams.

→ Solution

SEI partnered with the university to design and implement a centralized data hub that unified academic and administrative data and enabled automated, self-service analytics for leadership and operational users. Key activities included:

- Stakeholder interviews and design workshops to identify reporting pain points and define product vision
- Consolidation of 30+ reporting artifacts and 130+ analytical questions into a simplified, governed data model
- Enterprise data architecture design integrating faculty, student, staff, course, finance, and research data
- ETL pipelines, semantic models, and Oracle Analytics dashboards enabling intuitive self-service reporting
- Metadata standards and documentation frameworks to support long-term governance and data quality
- Agile project management, release planning, and BI engineering support to drive delivery and adoption

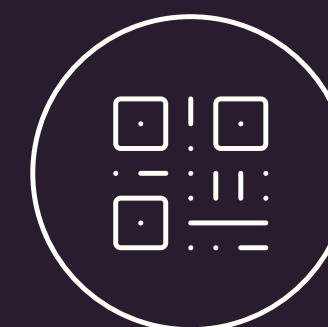
→ Results

The new data hub gave university leaders a trusted, accessible foundation for institutional reporting and analysis. Through this work with SEI, the university:

- Standardized metrics and reporting definitions across academic and administrative departments
- Reduced manual reporting effort by automating data integration and dashboard delivery
- Improved data accuracy and turnaround times by establishing a reliable source of truth for reporting
- Created governance standards and data hierarchies that can be replicated across university systems
- Strengthened internal capabilities by upskilling the BI team through embedded coaching



Data & Analytics



Data Modernization



Data Governance



Data Visualization