



TRANSFORMATION SERVICES



Honne is a technology partner that transforms the operations of institutions and businesses through cloud solutions, data analytics, and artificial intelligence.

With a consultative approach and tangible results, we help our clients optimize processes, reduce costs, and accelerate growth with a digital strategy tailored to their needs.

AI-POWERED ANALYSIS OF EDUCATIONAL PROGRAMS



CASE STUDY SHORT DESCRIPTION

Talis implemented an Artificial Intelligence driven platform to analyze and compare academic program documents at scale. The solution streamlined curriculum review, reduced redundancies across programs, and optimized institutional efficiency while delivering measurable cost savings. This initiative was designed and implemented in collaboration with Honne.

PROBLEM STATEMENT / DEFINITION

Talis manages a detailed repository of academic program documents, including subject schedules and syllabi. These documents are often difficult to analyze in their original format, especially at scale, when identifying similar or overlapping courses across programs. Without a scalable process, institutions face operational inefficiencies in curriculum review and updates, as well as a risk of misalignment between academic offerings and evolving market needs.

ABOUT THE CLIENT

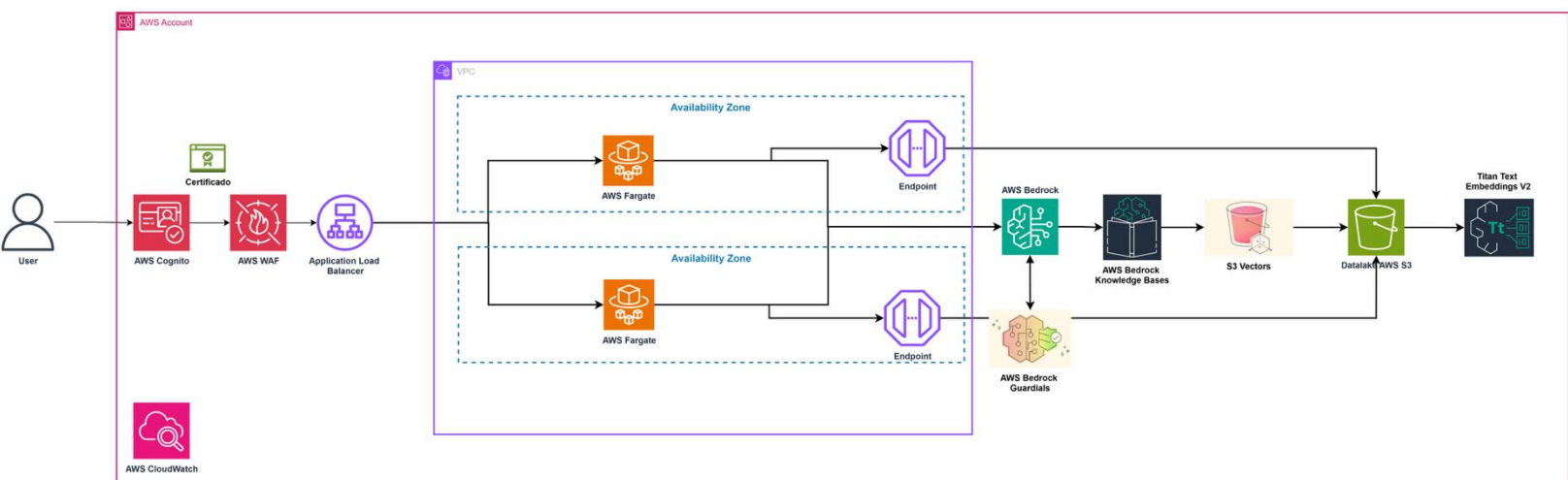
Talis is a renowned educational group in Mexico and Latin America that brings together universities, high schools, and training centers.

With a strong focus on academic innovation, it strives to deliver high-quality programs aligned with labor market needs, preparing new generations with the skills required to face future challenges.

PROPOSED SOLUTION / ARCHITECTURE

An AI-powered solution was designed and deployed leveraging AWS services to achieve scalability, accuracy, and efficiency:

- Amazon S3:** Used as the central repository for storing and managing large volumes of academic program documents in their original format.
- S3 Vectors:** Enabled scalable indexing and retrieval of embeddings, allowing the platform to efficiently compare courses and programs.
- Amazon Bedrock with Titan Embeddings:** Bedrock provided access to foundation models for Generative AI. Titan Embeddings were used to convert course descriptions and syllabi into high-dimensional vector representations for semantic similarity analysis.
- Amazon Nova Foundation Models:** Accessed via Bedrock to enhance semantic understanding and similarity detection.



This architecture enabled:

- Automated ingestion and classification of academic program documents.
- Semantic search and similarity detection across hundreds of courses.
- AI-driven recommendations to identify redundancies and streamline curricula.
- A scalable, cloud-native infrastructure with the flexibility to adapt as new programs are introduced.



OUTCOMES OF PROJECT AND SUCCESS METRICS

The AI-powered platform, delivered tangible business value for Talis through measurable improvements:

- Operational Efficiency:** Curriculum review time was reduced by up to 75% (from 4–8 weeks to 1–2 weeks).
- Cost Savings:** Projected savings of MXN \$500,000 through portfolio optimization.
- Scalability:** The solution enabled the review of thousands of academic documents that were previously impractical to process manually.
- Quality Alignment:** Improved alignment between academic offerings and institutional goals, reducing content overlap across programs.

DESCRIBE TCO ANALYSIS PERFORMED

A Total Cost of Ownership (TCO) analysis was conducted to evaluate the investment and projected savings. Key considerations included:

- Initial Costs:** Development and deployment of the AI platform, including AWS infrastructure and training.
- Ongoing Costs:** Maintenance, updates, and model retraining as new academic programs are added.
- Savings and ROI:** Reduction in manual review labor hours, faster decision-making cycles, and elimination of redundant programs. The analysis demonstrated a positive ROI within the first review cycle, with savings significantly outweighing operational costs.

LESSONS LEARNED

- Data Standardization is Critical:** Proper structuring and cleaning of academic documents was essential for accurate AI-driven analysis.
- Stakeholder Engagement:** Early involvement of academic and administrative teams ensured the solution met institutional needs.
- Iterative Development:** Implementing the platform in phases allowed for quick wins and progressive scaling.
- Strategic Impact:** Beyond efficiency gains, the solution created a framework for continuous optimization of academic portfolios to remain aligned with market demands.