

Top 10 Financial Services Firm Accelerates Credit Risk Analysis with Augmented Data Insights

The Opportunity: Evaluate Consumer Risk Using Expansive Data Beyond Credit Scores

The data analytics team in the credit risk department at this Top 10 financial services firm is responsible for the analytical capabilities related to credit risk strategy. The team serves multiple products, including mortgages, consumer credit cards, and small business loans. They were looking for faster and easier ways to evaluate credit risk by using more customer data available to them beyond just credit scores, so the firm can expand credit to more customers and reduce credit losses by identifying behaviors consistent with higher risk.

Challenges: Complex Data, Manual Analysis, Complicated Workflow with Disparate Tools

The challenges presented by the data analytics environment were extensive. Performing an analysis of customer behavior often required examining as many as 300 variables. Because this analysis was conducted manually, identifying the variables which were most important often focused on a subset of the data instead of analyzing all the data, or ended up taking days to complete.

While the data analytics team has a variety of tools to help them with different tasks - including data preparation, machine learning, Python code, and visualization - utilizing multiple discrete tools created friction in the overall analytical process, as data needed to be moved back and forth between applications, which made iterative workflows difficult to work with. In addition, there is typically just one specialist for each tool, so internal resources were a bottleneck for analytics requests. Some analyses took as many as 5 days to complete.



“One credit product has **saved \$700k per month** in mitigated losses - and we serve many products. With Tellius, the team has reduced the time it takes to identify the most significant credit risk factors amongst hundreds of variables from days to minutes.”

Director of Analytics
Credit Risk
Top 10 Financial Services Firm



50+ Users

Credit risk data analytics team, Business users in each credit product area



300+ Variables

Customer credit risk is analyzed in data sets with billions of rows of data and hundreds of variables



Days to Minutes

Complex analysis across 300+ variables is completed in minutes with a streamlined workflow

Tellius Delivers Powerful Insights From All Your Data Faster

Why Tellius

The data analytics team at the firm loves using Tellius. Here's why:

- **Guided Data Insights.** Automated data analysis enables the team to easily examine every data point to discover important patterns, identify variables of statistical significance, and uncover the reasons why performance metrics change. The system utilizes machine learning algorithms to analyze even the largest of data sets efficiently without the need to write code. Instead of spending days performing data analysis across multiple tools, or drawing conclusions from incomplete data, risk factors can quickly be identified across all the data in a unbiased, transparent way.
- **Unified Analytics Workflow.** Tellius gives the data analytics team complete end-to-end capabilities from bringing in data from multiple sources, preparing data, analyzing data with machine learning, and sharing content with business teams. With all this critical functionality in a single product, Tellius eliminates the friction that exists when using multiple tools, data is available to all users and every analysis after being prepared one time, and the workflow is more efficient, especially when going back and forth between steps.
- **Data Performance at Scale.** Tellius easily handles data sets that are both large (billions of rows) and wide (hundreds of variables). Analysts cleanse, prepare, and join data sets with point-and-click ease and flexibility of SQL and Python code. The analytical engines in Tellius are optimized for both machine learning analysis and interactive exploration at scale, allowing the firm to overcome the data limitations of legacy statistical applications and visualization tools.
- **Ease of Use for All Roles.** Tellius provides powerful capabilities in a user experience that is accessible to every user across the organization. Every data analyst can benefit from the end-to-end analytical functionality without having to become a specialist for a point application. Business users can utilize advanced analytical capabilities by asking questions in a search interface and perform their own 'why' type of analysis and customer segmentation, in addition to consuming visual outputs created for them.

Breakthrough ROI

Tellius has enabled the data analytics team to get 10x faster insights, reducing data analysis from days to hours, whereby gaining 1000s of hours in productivity. Through improved credit risk insights, one of the many departments that use Tellius has saved \$700k per month in mitigated credit losses.

"Tellius is a complete end-to-end analytics product that combines five existing tools into one. We have **gained 1000s of hours** in productivity due to the streamlined workflow, automated data analysis, and ease of use."

