

## PRESTIGE FINANCIAL SERVICES

## SAYING YES TO BETTER BORROWERS

**CLIENT:** *Prestige*

Prestige Financial Services

**INDUSTRY:** Auto Lending**DEPLOYED ON:** Microsoft Azure**CHALLENGE:** Reduce losses without negatively impacting approval rates**TIME TO IMPLEMENTATION:** 3 Months to Production**RESULTS:****33%** reduction in credit losses**14%** increase in borrower approvals

When car loan defaults started rising across the industry toward the end of 2016, Prestige Financial Services moved quickly to minimize the impact on its portfolio. Executives at the \$1.1 billion (assets) auto lender, which specializes in underwriting borrowers with lower credit scores, pulled out their traditional playbook for controlling losses and tightened up lending. The trouble was, they raised their underwriting thresholds to the point where roughly seven out of ten applicants were turned down for a loan.

So when Michael Francis, a junior risk analyst, proposed using machine learning in Prestige's underwriting process to reduce portfolio risk without a falloff in loan volume, his bosses were intrigued. They liked the concept, but with only a handful of risk analysts, they just did not have the technical expertise and resources to build and train a model quickly.

In July 2017, Prestige engaged ZestFinance to help execute its plan. To start, ZestFinance analysts requested the necessary data – historical loan performance data, credit

bureau data, and alternative scoring statistics that Prestige had relied upon in the past. But just as important, they took the time to dig into the numbers and held weekly conference calls with Prestige risk managers, IT personnel, and compliance staff to gain a deeper understanding of how they impacted the businesses. “They were challenging assumptions that we had never challenged in the past,” said Steve Warnick, Prestige's chief credit and analytics officer.

By the time the data analysis phase was complete, ZestFinance's analysts had identified more than 2,700 unique borrower characteristics, more than 100 times the 23 indicators that Prestige had traditionally used to underwrite loans. And they quickly put them to use.

Leveraging Zest Automated Machine Learning (ZAML™) software, ZestFinance's programmers were able to build and train a robust, new model in just three months. “That was fast,” Warnick said. “We had never done that level of implementation or production in a cloud environment.”

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By October, the results were in hand. The test model yielded substantial savings for Prestige: a one-third reduction in credit losses over the lifetime of the portfolio. The application of machine learning had enabled Prestige to rank-order risk more effectively across all types of borrowers, allowing them to swap out risky borrowers and replace them with thin-file and new-to-credit consumers who were more creditworthy than a traditional credit score might suggest.

What Warnick found most impressive was ZAML’s ability to provide clear and comprehensive explanations about every underwriting decision. “We had considered using machine learning models in the past. We knew their results were better, but we couldn’t

explain them,” he said. ZAML, by contrast, provides a read-out of the key factors that led to the credit model’s output, so Prestige can fully comply with all regulatory requirements.

Based on those promising results, Prestige signed a long-term contract with Zest and fast-tracked the production of a permanent model that went live a few months later. **Since then, Prestige’s lending volume has doubled, driven by a 36% increase in new applicants and a 14% increase in borrower approvals.** The new loans underwritten on the Zest platform are performing at least as well as, if not better than, those Prestige had previously issued. That has allowed Prestige to achieve their original goal of approving more borrowers without taking on more risk.

## ABOUT ZESTFINANCE

The world’s most innovative financial firms rely on ZestFinance to do more profitable underwriting through machine learning. Our ZAML solutions are the industry standard for explainable AI in credit, and we automate most of the risk management tasks so our customers can focus on finding new customers. ZestFinance pioneered AI in underwriting and today we’re one of the fastest-growing tech startups in the world. Founded in 2009. Based in Hollywood, Calif.

WANT TO LEARN MORE? EMAIL US AT [PARTNER@ZESTFINANCE.COM](mailto:PARTNER@ZESTFINANCE.COM)