Advantage Finance™

A forward-thinking approach to developing scorecards for an innovative motor finance provider

experian™

Ahead of its game

Grimsby based motor finance provider, Advantage Finance, was founded in 1999. Providing hire purchase products for both new and used motor cars, vans, motorcycles or caravans, the company has seen success from the very start. A key driver has been the steps the company has taken to achieve outstanding service and meet the needs of both business introducers and customers. Advantage Finance have developed their own highly flexible account management systems using in-house developers. Demonstrating a real technological edge, this has won them praise and attention from dedicated software houses.

Operating in an extremely competitive market, Advantage Finance has continued to look for ways to innovate and improve. For example, the company has demonstrated their significant analytical capability by adopting a multi bureau data approach to fully understanding the circumstances of applicants and their ability to pay – taking the raw data from each provider and creating their own blended 'data block.'

Their highly innovative approach coupled with their ability to adapt and implement better practices very quickly, has enabled the team to meet the needs of individuals who have historically struggled to secure finance for a vehicle, providing credit on a responsible and affordable basis.

As a result, Advantage Finance has gained a reputation as a standout, ambitious and forward-thinking motor finance provider.

Advantage finance wanted to continue to accelerate their competitive proposition, through **leading with technological excellence**

The challenge of scorecards: to rebuild or not to rebuild?

At a time when the overall sales of vehicles are falling, staying competitive is vitally important. Through an established network of brokers Advantage have succeeded in responsibly meeting the specific needs of consumers who have historically struggled to secure funding for a vehicle for over 20 years and Advantage Finance is keen to expand its offerings through new channels.

Given the current environment with the rising costs of living, economic uncertainty and the rapid pace changes are taking place, Advantage needed to be confident that their decisions were the right ones and continued to reflect a consumer's circumstances accurately. A key driver of this was the performance of the company's scorecards.

To respond, and reflect the economy, Advantage Finance saw a need to assess the performance of their scorecards

Advantage Finance had been monitoring the accuracy and performance of their existing scorecard, which had been in place for several years. While they had noted some small changes in how the scorecard was performing, several questions arose:

Was the performance of the existing scorecard suitable to support their growth plans?

What was the correct change threshold to warrant a complete rebuild of the scorecard?

Were there better-performing models and strategies that they could be investigating?

For Advantage Finance the challenge was not about whether the scorecards were performing, but more if the scorecards they have are suited to their risk appetite and growth plans.

Knowing when it is the right time to rebuild an existing scorecard is a common challenge faced by every finance provider at some point in a scorecard lifecycle. The task can be extremely time-consuming and cause a massive strain on resources, which is often prioritised elsewhere. A rebuild needs to be able to demonstrate a significant enough improvement on previous performance to justify an investment.

It is, however, difficult for organisations to ascertain whether a new model would perform better, especially in a climate that holds a lot of uncertainty. Until a rebuild has been carried out organisations are often in the dark about whether the exercise was worthwhile.

'Advantage Finance wanted to be proactive, versus reactive ...'

Historically, the benefit realisation of a new model development, is only available when a new model is built. Advantage Finance wanted to be proactive, versus reactive – and be certain that any developments, or changes – were going to deliver value. As such, they partnered with Experian.

Always on the lookout to innovate and improve, Advantage Finance started a conversation with Experian, with whom they already had a positive relationship. Experian has supported Advantage Finance as their primary credit reference bureau since they launched and have a history of building high performing scorecards for them.

Advantage Finance's key messages to the Experian team were that they wanted complete confidence in their decisions to be able to set the scene for further growth and, more notably, they were open to new approaches.

The solution: a new approach

Encouraged by the motor finance company's innovative attitude, the Experian team was keen to demonstrate the value of rebuilding their scorecards now, especially considering the significant changes witnessed by the industry post-Covid. They were also, however, keen to showcase the power of machine learning in modelling. With over 10 years' experience in developing machine learning models, Experian sees this as the future of scorecard development.

Experian would need to build more than one model to enable a comparison of performance and demonstrate value, so they introduced the team to Ascend Intelligence Services Challenger™. It is a powerful and collaborative model development service that allows for rapid iterations at scale, automating a vast proportion of the work.

Experian AIS Challenger has enabled Advantage to adopt machine learning and rapidly deploy a significantly improved multi-bureau scoring model in a matter of weeks.

When starting the project, we knew our existing scoring model would have naturally degraded and wished to consider new options in any new build. Experian suggested the use of AIS Challenger as a way to consider how machine learning, something we hadn't previously used, could have a positive impact into our decision making. AIS Challenger allowed us to quickly assess multiple different types of models and analyse which model would give us most benefit.
The outcome has ensured a significant improvement over the existing model and gives us confidence to continue delivering significant value to our business over the coming years.

Alan Tuplin – Chief Risk Officer, Advantage Finance

Machine Learning was key for Advantage Finance in their quest for accuracy, and speed.

The service enables Experian to build and present multiple model options, including different modelling techniques, for clients to review and compare - all done through a single convenient web portal. It quickly delivers a clear view on whether it would be beneficial to rebuild a model now or hold on for a few more years – all without having to completely rebuild the scorecard. Once approved, new models can be deployed in a few clicks through an API, and companies can periodically retrain their models to ensure their continued effectiveness.

By working with Experian, we were able to offer an environment that allows for rapid model iterations at scale, benefiting also from automating a vast proposition of work.

For the Advantage Finance team, who were themselves highly analytically and technologically capable, the service triggered great interest and a collaboration was agreed. They sent Experian their data through the web portal. This data was then combined with Experian's bureau data to create the modelling data set. Several versions of new models were rapidly prebuilt, with an Experian data scientist working on the models and decision rules. Experian then recommended the best model for their specific requirements.

Through Ascend Intelligence Services Challenger™, Advantage Finance was able to compare their existing model to the new models and quantify the benefits to their business.
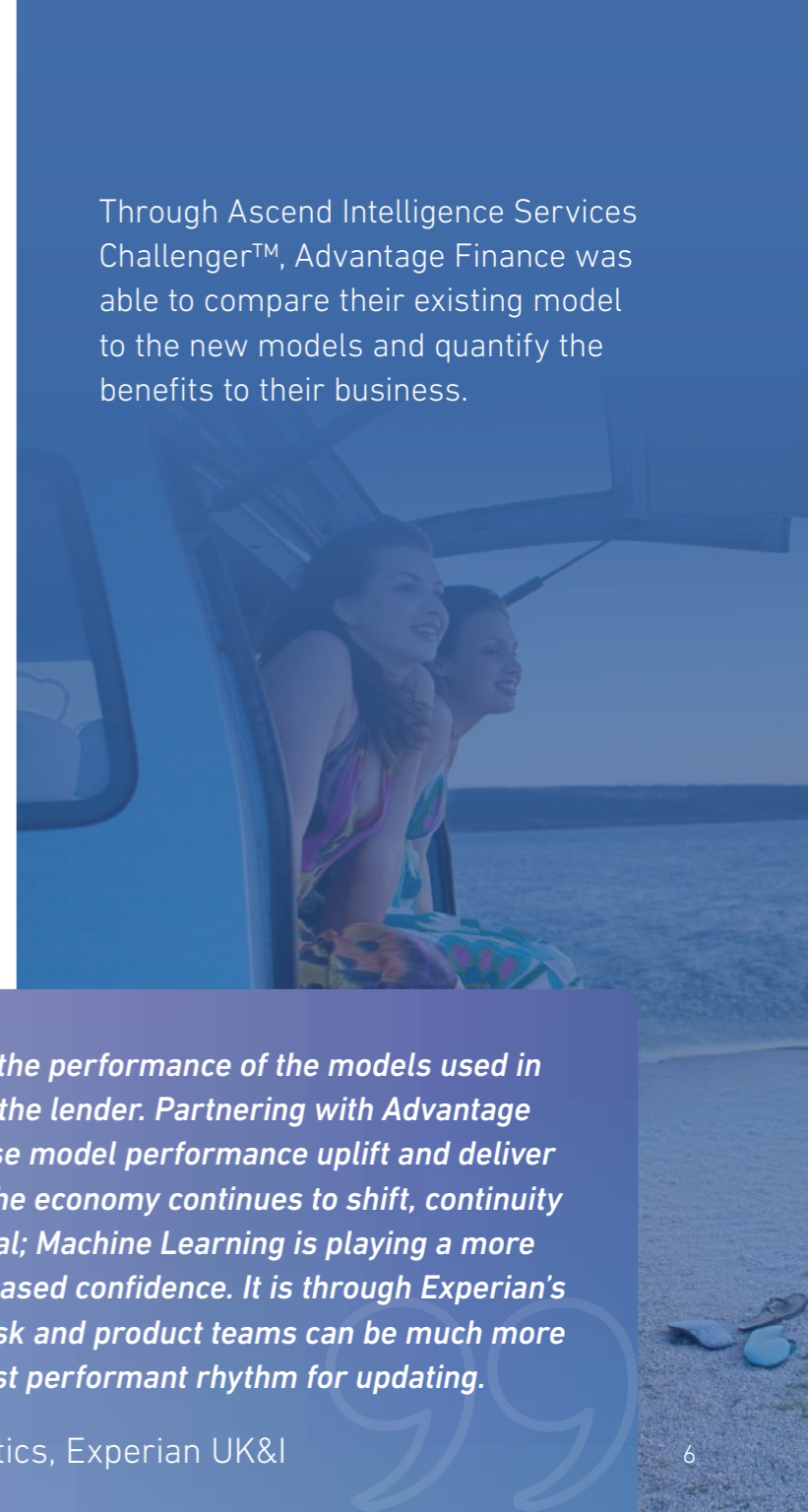
Machine learning presents an opportunity to further improve the performance of the models used in credit scoring, delivering improved financial performance to the lender. Partnering with Advantage Finance, we have been able to leverage ML techniques to realise model performance uplift and deliver the value of an updated scorecard faster than ever before. As the economy continues to shift, continuity of the confidence in your decisions becomes even more critical; Machine Learning is playing a more significant part within credit risk decisions to support this increased confidence. It is through Experian's improved capability to evaluate, monitor and deploy, lender's risk and product teams can be much more informed about model redevelopment and finding the most performant rhythm for updating.

Ed McKeown, Managing Director, Analytics, Experian UK&I

The significant uplift in predictive power

Experian's Ascend Intelligence Services Challenger™ revealed that if Advantage Finance were to rebuild their existing model now, they would see significant benefit. Using traditional modelling techniques, they'd see an improvement in predictive power of 6%, compared to the predictive power of their existing model. This would be, on its own, enough to warrant a change for most organisations.

However, if Advantage rebuilt using machine learning modelling techniques, then they could potentially see an 11% improvement in the predictive power of the new model compared to the existing one, as well as a 20% reduction in bad rates. It was a clear demonstration of how beneficial rebuilding the model using the machine learning technique would be, and there was no doubt that it was the best fit for their business.

Advantage Finance have now deployed the new machine learning model through their own platform. By enabling more accurate decisions, they have greater confidence as they implement their growth plans. They can also be sure that they are continuing to protect their customers by providing credit on a responsible and affordable basis. Advantage are also exploring more models, as well as ongoing monitoring of models, with Experian.

'...ongoing value...'

Advantage Finance were able to quickly deploy the new Machine Learning model offering more accurate, confident decisions.

Offering immediate value, as well as ongoing value as they expand and grow their business.

Value for Advantage Finance was identified fast:

6% Traditional modelling techniques would yield a 6% improvement in predictive power.

11% Machine Learning could deliver 11% improvement in predictive power

20% The outcome for Advantage Finance included a 20% reduction in bad rates