Seeing the Invisible: How Trust Science® Scores the 53% of Americans Missed by Traditional Bureaus

⊕ Overview

A large BHPH auto dealer was challenged, in the midst of an uncertain COVID-19 credit market, with approving more borrowers for financing while keeping defaults steady. Despite rapid evolution in the credit market, over 65 million Americans remain excluded from traditional credit opportunities due to a lack of credit history or access to traditional financial services: roughly 1 in 5 people are credit invisibles out of the view of the traditional credit bureaus. Regardless, this BHPH auto dealer, like others, was able to sift "prime" borrowers out of a pool of wrongly-scored "subprime" borrowers to increase good loan origination, seeing results of up to **200X ROI** and an **18.8% increase in earnings** over a two-year period after implementation.

> "Trust Science® and its "Credit Bureau +™" service exceeded my expectations and continues to do so. The service properly and accurately scores consumers who are very hard to score." - Mark Eleoff - CEO - Eden Park

How did this dealer expand their model to better assess consumer creditworthiness, tap into new markets, and significantly grow the business? With the power of Credit Bureau +™ by Trust Science®: a wealth of alternative data analyzed by proprietary artificial intelligence and machine learning technology and synthesized into fully compliant and easily explainable Six°Scores™, offering highly accurate risk scores that enable more effective and inclusive lending decisions.

⊕ The Trust Science® Advantage

> Limited, overlapping, and restrictive data sets and criteria for traditional credit reporting result in inaccurate and rigid credit scores that label over 50% of Americans as less-than-ideal borrowers. Trust Science's® unique and patented approach yields more valuable and highly predictive Six°Scores™ using its data trifecta of bureau, public, and proprietary data synthesized by its powerful AI/ML models.

Conventional Scoring Approaches

According to Credit Infocentre, a traditional credit score, as determined by the three primary credit scoring bureaus in the United States, is usually determined strictly by a borrower's line of credit. These bureaus will look at a limited set of information, including payment history, amounts owed, length of credit history, new credit, and credit mix, to determine a score typically between 300 and 850. These criteria are not only incredibly limited in insight, but are also restrictive and exclusionary to the millions of underbanked and financially stressed Americans seeking to develop their credit. As a result, traditional credit bureaus are unable to generate an accurate credit score for approximately 53% of Americans while labelling over 50% of Americans as less-than-ideal borrowers.

Due to the limited competition in this space, lenders have become over-reliant on antiquated and rigid data and scoring systems, facing barriers in the fair and ethical scoring of specific groups of creditworthy prospects, such as immigrants and millennials. Put simply, traditional credit scoring offers rigid and limited insight to lenders with inadequate assessment of significant sectors of creditworthy prospective borrowers.

Conventional Scoring Approaches

"This solution is transformative in the under-served, financially-excluded sector of the economy. It can score thin files and no hits, and it can do so in a fluid credit environment." - Natalie Bell - COO - Magical Credit

According to research by Duke University (2019), behavioral data is as informative as people's credit bureau scores. Knowing this, traditional bureau data is just one facet of Trust Science® scoring: Trust Science® also leverages public data, proprietary data and consented data to produce highly predictive credit scores. These data sets are processed by the Trust Science's® cloud-based SaaS decision support platform to promptly deliver a fully compliant and explainable AI- and ML-powered score. As a result, Trust Science's Six°Score™ identifies a larger pool of creditworthy customers with increased accuracy and insight into probability of default, probability of delinquency and ability to manage payback. By delivering data-backed and AI-driven insights that help deserving people get the credit they deserve, Trust Science® gives lenders the ability to improve loan inclusivity, expand their loan originations, and grow their business with absolute confidence in their decisioning process.

⊕ Trust Science® Performance and Results

Trust Science® collaborates closely with clients in development and integration, providing significant and demonstrated improvements in lift, stability, bad loan analysis, and return on investment. By replacing the customer's custom score with the Six°Score™ platform, Trust Science was able to provide significant value-add and help the customer produce the following returns:
- **19.1x ROI***
- **An 18.8% increase in earnings over a two-year period**
- **A further projected 9.5% increase in earnings in the subsequent year at 19.1x ROI on similar application volume**

Stability Analysis
According to the results of the stability analysis performed using Trust Science's Six°Score™, the custom Six°Score™ had a 36.9% lift on the Kolmogorov–Smirnov test and 11.3% lift on bad capture (at approximately 20% of booked loans) versus the current custom scores.

Bad Loan Analysis
The custom Six°Score™ built by Trust Science® was able to identify bad loans better than the current customer's custom score. It also excelled at capturing past due amounts and bad loan principal. This is demonstrated through the fact that Six°Score™ captured more bad loans at lower score ranges, with the maximum of 4.1% (an 8.3% lift) more bad loans in the bottom 45% of booked loans. Additionally, where Six°Score™ agreed or scored the consumer higher, the performance was better than average.

Conversely, where Six°Score™ scored the consumer lower, the performance was lower than average.

Return on Investment

Below are some visualizations that demonstrate the performance of Trust Science's Six°Score™ model vs the customer's custom score:
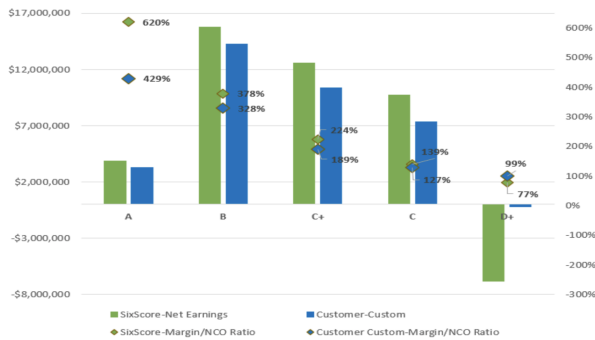

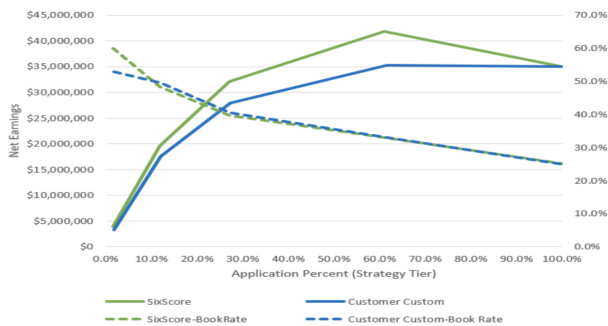**Figure 1: Strategy Comparison**

Figure 2: Optimized Strategy

With this model, more refined tier structure can be achieved with confidence. Trust Science® discovered that tier assignment based on the custom Six°Score™ tends to be lower than what was done using the customer's custom score. The results demonstrate that the current custom score should be replaced by Six°Score™ in the customer's underwriting strategy to achieve better business results.

By replacing the customers' current score with Six°Score™, the customer was able to see the following results:

- An 18.8% increase in earnings over the two-year period
- A 19.1x ROI* using the current strategy
- A further projected 9.5% increase in earnings in the subsequent year at 19.1x ROI on similar application volume

*The ROI calculation is done by taking certain variables and numbers such as sum of earnings, revenue, loss, incremental price, and applications.

Impacts

By using Credit Bureau +™ by Trust Science® and Six°Score™, this BHPH dealer was able to lend to more people with confidence in their ability to avoid defaults, witnessing substantial earnings growth and ROI quickly after implementation. Trust Science® is an industry leader in its ability to use AI/ML models that grow with your business, harnessing its numerous data sources to deliver meaningful, explainable, and fully compliant risk scores, even on those that were conventionally thought of as credit invisibles. For lending leaders who need to score financially stressed or underbanked borrowers in a fair and ethical way, Trust Science® offers a fully compliant, data-driven, AI-powered solution, right now. Join this and other BHPH dealers and learn more about Trust Science® at their website: **trustscience.com** or by emailing **marketing@trustscience.com.**