

# Standard Chartered

Standard Chartered uses TruEra to analyze and improve machine learning model quality, ensure responsible use of AI

A long-time technology innovator, Standard Chartered continually looks for new ways to leverage technology to better serve customers. Using Machine Learning (ML) and Artificial Intelligence (AI) for faster, more accurate data-driven decisionmaking is a core part of the bank's strategy. The bank wanted to ensure that it used AI in a way that builds trust and transparency.

## The challenge: explainability and model quality, throughout the lifecycle

The Standard Chartered team sought a solution that could accurately explain and evaluate the quality of machine learning models, including fairness, conceptual soundness, reliability, and stability.

It was crucial that the solution work across the entire model lifecycle, including development, validation, and monitoring; and be easy to integrate across the different model development platforms in use by the Standard Chartered data science team. After an extensive search of available options, they selected TruEra as the best company to meet their requirements.

TruEra will help our data science teams ensure their models are sound and fair so that more of them can make it into production, to improve business performance while doing what is right by our clients.

- Sam Kumar

**Global Head, Analytics and Data Management**



Standard Chartered is a leading international banking group, with a presence in 60 of the world's most dynamic markets and serving clients in a further 85. Its purpose is to drive commerce and prosperity through its unique diversity, and its heritage and values are expressed in its brand promise, "Here for good."

## TruEra Benefits



Accurately explains and evaluates ML model quality, including fairness, conceptual soundness, reliability, and stability



Builds trust and accelerates the path to production by providing clear analytics proving model explainability and quality to stakeholders



Works across the entire model lifecycle, including development, validation, and monitoring, so that high quality is supported over time



Integrates across the different model development platforms, so that the bank has confidence across a broad range of critical models

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## TruEra: strong AI Quality core technology and a focus on best practices

TruEra provides a suite of AI Quality solutions that drive model performance, quality, and insights throughout the ML model lifecycle. The core technology is the result of over six years of AI Explainability research started at Carnegie Mellon University. It provides advantages of high accuracy and speed, which allows data science teams to identify issues and iterate quickly.



## Proving the value: credit decisioning model tests

To see how TruEra could help Standard Chartered ensure responsible AI, the teams worked with a number of credit decisioning models (and associated training data) built on multiple development platforms, including open source. The TruEra solution helped data scientists and other stakeholders build trust in the quality of the model by explaining the model, assessing it for unfair bias, examining its stability over time, and surfacing other relevant intelligence about its inner workings.

“New developments in analytical technology and expanding usage of data require us to fundamentally rethink how we demonstrate fairness, ethics, transparency, accountability and tackle the issue of unjust bias.

- Sam Kumar  
**Global Head, Analytics and Data Management**

“While there are a number of companies that are exploring the issue of explainability with AI models, we were impressed by the strong academic background of the TruEra team and their commitment to helping companies translate responsible AI principles into best practice.

- Vaman S., Risk Officer, Retail Banking  
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## Data scientists used the TruEra platform to:

- **identify the most important features that drove individual credit decisions.**  
For example, it could identify that a particular applicant may have been denied credit because of a low income and a high debt-to-income ratio.
- **Understand how individual features contributed to the model's assessment of risk.**  
For example, it could show how increasing income affects the model's risk scores.
- **Assess that the model remained stable over time** to maintain high performance and effectiveness against business goals.
- **identify and mitigate unjust bias** to better serve customers and ensure regulatory compliance.

Collectively, these capabilities provided all of the relevant Standard Chartered teams (including first line development, second line validation, third line audit/compliance and other stakeholders) with the level of visibility into the inner workings of the model that they needed to build trust in the quality of the model and move it to production.

TruEra provides the first comprehensive suite of AI Quality solutions that help enterprises analyze machine learning, improve and monitor model quality, and build trust. Powered by enterprise-class Artificial Intelligence (AI) Explainability technology based on over six years of research at Carnegie Mellon University, the TruEra platform leads to higher quality, explainable models that sustainably achieve measurable business results, address unfair bias, and ensure governance and compliance.



TruEra helps our data science teams ensure their models are sound and fair so that more of them can make it into production at a faster rate with greater confidence, to improve business performance while doing what is right by our clients

- Sam Kumar

**Global Head, Analytics and Data Management**

## Expanding use of TruEra at Standard Chartered

Based on the success of the proof of concept, TruEra was selected and deployed. As this initial use case has demonstrated real-world success, TruEra is now in use more broadly across a variety of models at Standard Chartered.

The TruEra logo, featuring the word "truera" in a lowercase, bold, teal-colored sans-serif font.