

June 30, 2021

Trust Science®
10130 - 103 Street
Edmonton, AB
Canada
T5J 3N9

Bureau of Consumer Financial Protection
1700 G Street NW,
Washington, DC 20552.

Delivery via email to: 2021-RFI-AI@cfpb.gov

RE: Request for Information and Comment on Financial Institutions' Use of Artificial Intelligence, Including Machine Learning

Docket No. CFPB-2021-0004

To Whom it May Concern:

Artificial Intelligence in general, and Machine Learning in particular (among other subsets of Artificial Intelligence) are powerful tools for improving the quality of service for customers of financial institutions. At Trust Science® we leverage AI / ML in order to help lenders make sound lending decisions, enabling worthy individuals access to credit where they may previously have been denied that access due to a lack of insight into their actual ability to repay their loans.

Trust Science® has had the pleasure of working with Gartner Inc. along with leading technology firms such as Google and Microsoft, to help further the discussion with regards to Explainable AI (XAI) in lending, and XAI's potential for positive influence on increased financial inclusion.

A handwritten signature in black ink, appearing to read 'ML', followed by a horizontal line and a period.

Martin Loeffler CISSP CISA CISM CRISC
Chief Security and Privacy Officer
martin . loeffler @ trustscience . com
Trust Science®

cc: Evan Chrapko
Chief Executive Officer
Trust Science®

Jeremy Mitchell
Chief Data Analytics Officer
Trust Science®

Chris Matichuck
Chief Technical Officer
Trust Science®

Trust Science® recognizes the challenges for financial regulatory agencies seeking to provide guidance on the prudent and effective use of Artificial Intelligence and Machine Learning (“AI” or “AI / ML”). Trust Science® supports those efforts and recognizes the applicability of Artificial Intelligence and Machine Learning to facilitate the provision of credit to financially stressed or under-banked borrowers in a fair & ethical way.

When evaluating AI and ML, as a subset of AI, there are clear uses of developing models/scores leveraging ML techniques such as Gradient Boosting, Neural Networks, Support Vector Machines, etc. Leveraging self-learning AI can be problematic in the credit decisioning space as it takes time for loans to age enough to get an accurate picture of performance and the significant number of loans are needed to have a material impact on the model. Therefore, dynamic AI will likely be relegated to scenarios that have short performance windows (ex. FPD, fraud, etc.) and for lenders that have high application volumes.

Trust Science has found that using ML, or XAI as it is commonly referred to, results in a better assessment of risk versus traditional regression or rules-based approaches, particularly for consumers viewed as “subprime”. Because the prediction accuracy is higher, the solution can find lower risk consumers to elevate that would otherwise get overlooked using traditional methods.

Trust Science®’s explainable AI provides immediate explainability that is compliant and AI based - with ranked, compliant, and easy to understand descriptions; which allow consumers to know the causes for any adverse action taken. Financial institutions benefit from XAI’s transparency and can offer consumers actionable insights from it.

In addition to probability of default, which is typically used for making approve or decline decisions, XAI can be leveraged to produce solutions that can aid in recommending loan amounts, optimizing pricing and terms and other data-driven decisions that are made during the underwriting process.

We continue to expand our capabilities in the applications of machine learning (XAI), ensuring that its use remains compliant, fair and with a goal higher inclusion of consumers through a more accurate assessment.

Submitted: June 30, 2021

ML/TSI