

Enhanced Credit Decisioning through Consumer Transaction Data Scoring

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Abstract

In an era of Open Banking, transaction and spending behaviour data are increasingly recognised as vital inputs into credit risk assessments. For the past three years illion has undertaken deep research into how an individual's banking transaction data can be used to improve credit scoring. This research resulted in the launch of a first-generation 'off the shelf' transaction risk score being launched in 2021 and a second-generation score launched in early 2023. These scores use a consumer's banking transaction data to produce a 0-1000 score that predicts their likelihood of going 60+ dpd in the coming 12 months. Transaction scores have been developed separately using Logistic Regression and XGBoost techniques leveraging a library of 16,000 business-interpretable transaction features. illion's transaction scores are currently used by a variety of credit providers across Australia and New Zealand to enhance their credit underwriting.

Transaction score case studies demonstrate that a material Gini improvement of +5-10 points can be achieved above what is possible using an application score or bureau score that only leverages 'traditional' credit data. This uplift translates to lenders using transaction scoring having the option to boost profit through materially reducing bad debt expense, increasing approval rate, and/or increasing decision automation. Lenders are also using transaction scoring to help them to meet their responsible lending obligations.

Our research has also identified that transaction scores are just as predictive of risk for individuals with 'thin' credit files as those with 'thick' credit files. As such, transaction scores can materially support efforts to improve access to finance for underbanked consumers globally.

In times of economic uncertainty and consumer cashflow pressures, financial stress will be evident through a consumer's bank statement data ahead of when it becomes visible through missed credit repayments on a bureau. As such, transaction scores represent a "finger on the pulse" of a consumer's financial health, offering strong complementary value above the longer-term risk lens taken by a credit bureau's score.

Transaction scoring offers a step-change in underwriting efficiency, risk management, and accessibility of consumer credit. Transaction scoring paves the way to make this step-change a reality for all lenders globally.