KORAConnect

Beyond the Credit Score

How Cash Flow Underwriting Is Transforming Subprime Auto Lending

"We were manually reviewing bank statements and paystubs against a scorecard. There's only so much you can see that way. KoraConnect surfaces the things we used to miss entirely: cash advance patterns, income instability, statements that don't add up. That's the stuff that was quietly driving our losses."

Darryl Jackson

President & Founder

AMS Financial Group & Crown Auto Group

Executive Summary

Subprime auto lenders operate in one of the most challenging segments of consumer credit. Borrowers often have "thin" credit files, irregular income, and traditional underwriting metrics, such as legacy credit scores and manual paystubs—that frequently fail to predict repayment behavior.

To address this information gap, Kora worked with Crown Auto Group, a BHPH dealer with several locations in North and South Carolina, to design and implement KoraConnect. By connecting KoraConnect directly to applicants' bank accounts or securely extracting transaction data from uploaded PDF bank statements, Crown can analyze cash-based transaction behavior, including cash flow patterns, income stability, liquidity stress indicators, and document integrity signals, during underwriting. KoraConnect provides a level of behavioral insight and the ability to calculate predictably how much a borrower can afford to pay monthly that traditional credit bureaus cannot replicate. This allows for a precise assessment of an applicant's true ability to pay, ensuring that debt obligations are aligned with actual net surplus income rather than historical repayment data provided by credit bureaus.

This white paper presents results from a real-world implementation of KoraConnect at a regional BHPH auto lender, as part of a portfolio improvement initiative overseen by a large institutional credit fund. The evidence accumulated across multiple monitoring periods is consistent and compelling.

Bottom Line Upfront

Applicants scored using KoraConnect cash flow data consistently outperformed traditional benchmarks, showing at least a 22% reduction in delinquency, with some cohorts improving by as much as 76%. This performance advantage has remained stable across three consecutive monitoring periods and is validated by multiple independent analytical methods. The inaugural KoraConnect cohort (Q3 2025) reached 4.5% origination balance-weighted cumulative 30+ DPD at MOB 5, 37% below the trend-adjusted projection.

The Problem:

Why Traditional Underwriting Falls Short

Subprime auto lenders face a fundamental information asymmetry. A traditional credit score, generated from bureau data reported by Experian, TransUnion, or Equifax, effectively captures an applicant's history of repaying credit obligations. What it cannot reveal is whether that applicant can actually afford a given monthly auto payment, because it ignores current income, existing cash obligations (i.e. debt-to-income), and day-to-day financial behavior. Without bank statement analysis, critical questions go unanswered.

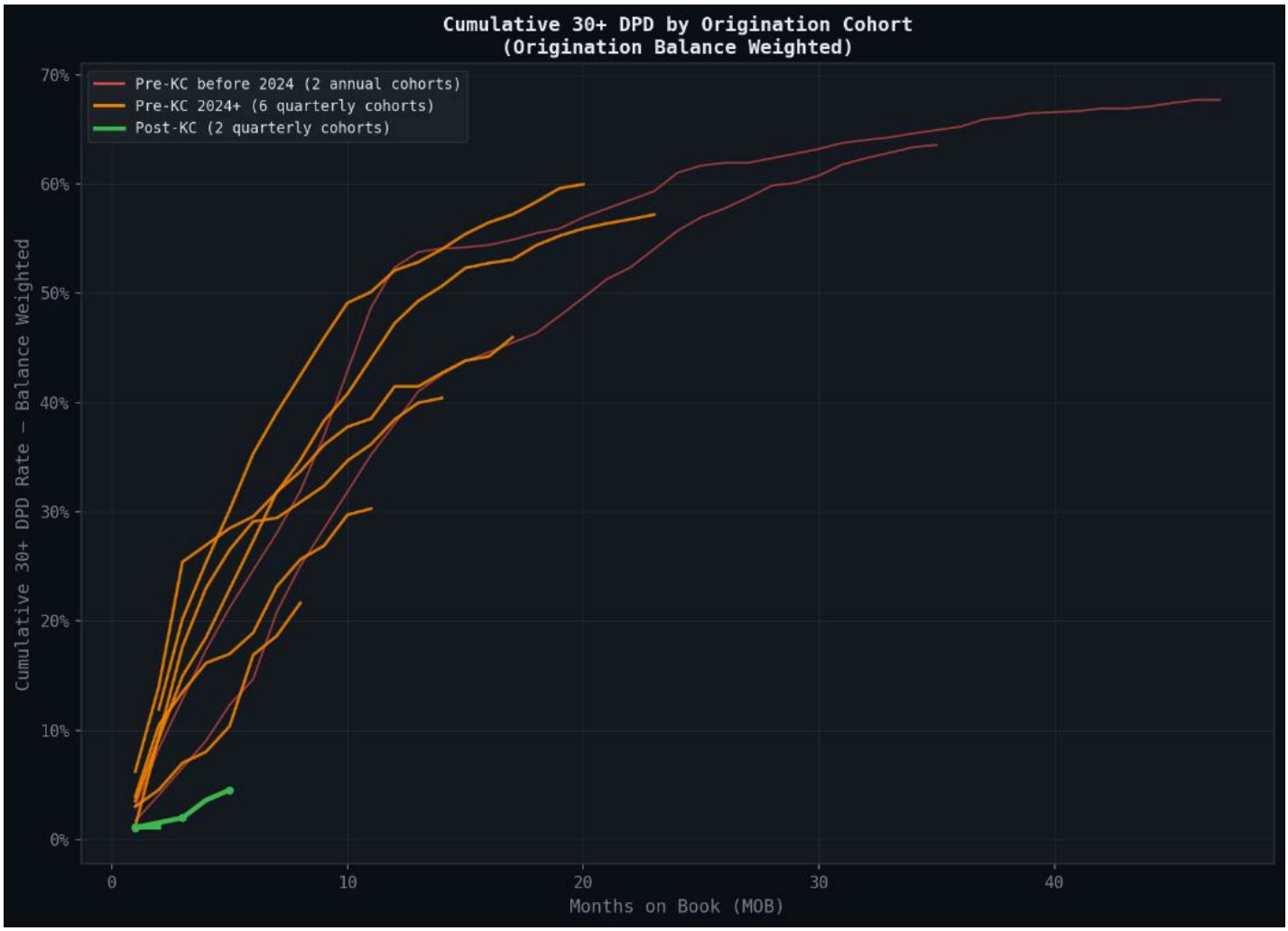
The strongest predictor of an applicant’s ability to pay is behavioral, how a borrower actually manages and allocates money under the day-to-day financial pressure typically experienced by subprime borrowers. By providing unrivaled transparency and categorization, KoraConnect enables informed underwriting decisions with information right from an applicant’s bank transaction history. The signals that matter most are invisible to credit bureaus, cash flow volatility, liquidity stress patterns, income source risk, and document integrity, none of which appear in a credit bureau’s report.

Portfolio Performance:
The Before and After Adoption of Cash Flow Underwriting through Vintage Curve Analysis

The vintage curve chart on the next page takes a longitudinal view, tracking cumulative 30+ DPD rates (including charge-offs weighted by origination balance) across origination vintages by MOB.

- The red lines represent two annual cohorts where the loans were originated during 2022–2023.
- The orange lines represent six quarterly cohorts where the loans were originated during January 2024 – June 2025.
- The green lines represent the two quarterly cohorts where, importantly, they were underwritten using cash flow underwriting powered by KoraConnect and originated during July 2025 through to present.

In all cases, if every borrower made every payment on time, then the “loss curve” would be a flat line running horizontally at 0%. In this case a “loss” is defined as first occurrence of a borrower either being 30+ days past the date the payment was due and or if the loan was charged-off; in all cases the loans are weighted by its origination balance.



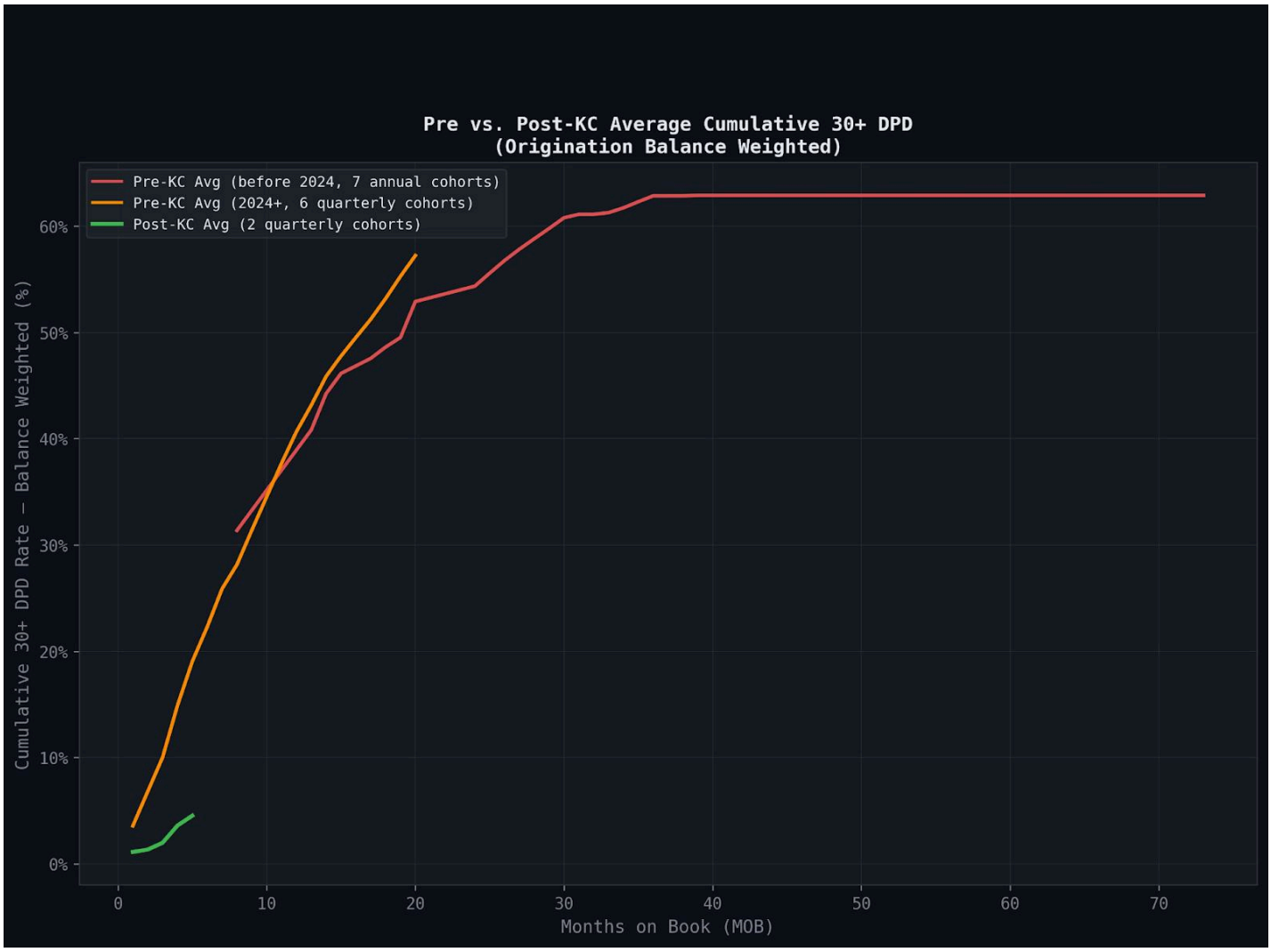
Given that the target days past due and charge-offs threshold is 35% or lower, the chart clearly shows that the pre-cash flow underwriting 2022–2023 annual and 2024+ quarterly cohorts cumulative 30+ days past due curves are consistently greater than the target threshold.

Cohort	Cumulative 30+ DPD @ MOB 5 (Balance Weighted)
Q1 - Q3 avg 2024	~28-30%
Q1 2025	17%
Q2 2025	10.4%
Q3 2025 (first quarter utilizing cash flow underwriting)	4.5%

The Q3 2025 post-cash flow underwriting cohort reached just 4.5% origination balance-weighted cumulative 30+ DPD at MOB 5. To isolate the KoraConnect effect from the lender's own pre-existing improvement trend, a linear regression was fitted to the pre-KC MOB 5 data points, confirming a highly linear pre-KC improvement trajectory. Extrapolating to Q3 2025 projects an expected rate of ~7.1% under organic improvement alone. The actual result of 4.5% is 37% below this projection, a meaningful, defensible improvement that holds even after giving full credit to the lender's own trajectory.

The chart below provides another way to analyze the data: The key takeaway is that the rate of borrowers going late and/or charging off has materially declined post-adoption of cash flow underwriting, as evidenced by the change in the slope of the curves. Admittedly, it is still early, but the signal is positive.

4.5%	37%	22–76%
CUMULATIVE 30+ DPD AT MOB 5	BELOW TREND-ADJUSTED PROJECTION	DELINQUENCY REDUCTION RANGE



Snapshot comparison as of January 2026 across portfolio segments:

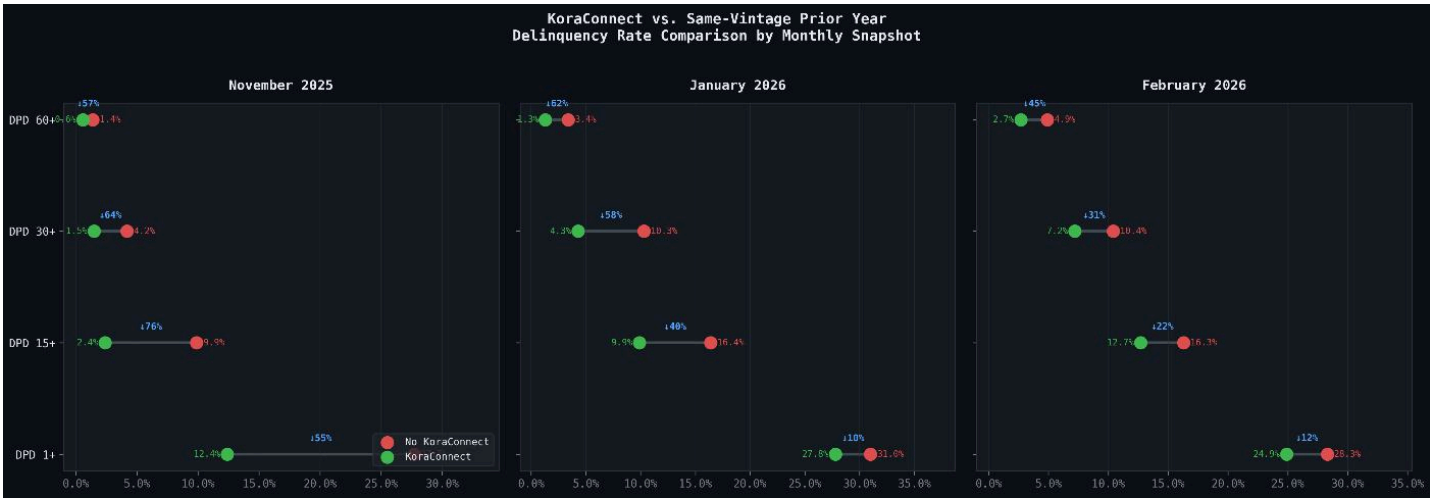
Underwriting Method[1]	Loans	1+DPD	15+DPD	30+DPD	60+DPD	90+DPD	120+DPD
Pre-Cash Flow Underwriting	1,284	41.5% (529)	23.1% (299)	16.4% (212)	11.7% (148)	8.9% (114)	7.3% (94)
Same Period Last Year (No KC)	547	28.3% (155)	16.3% (89)	10.4% (57)	4.9% (27)	8.9% (114)	1.1% (6)
Post-Cash Flow Underwriting	**378**	**24.0% (91)**	**11.6% (46)**	**6.2% (26)**	**1.8% (8)**	**0.6% (2)**	**0.0% (0)**

The improvement is material across every severity tier. Serious delinquency (30+ DPD) is 6.2% for cash flow-underwritten and verified loans versus 16.4% for the pre-adoption portfolio. The 90+ and 120+ DPD buckets, where losses become most likely and most severe, are near zero for loans utilizing cash flow underwriting.

Controlling for Timing:
Same-Vintage Comparison

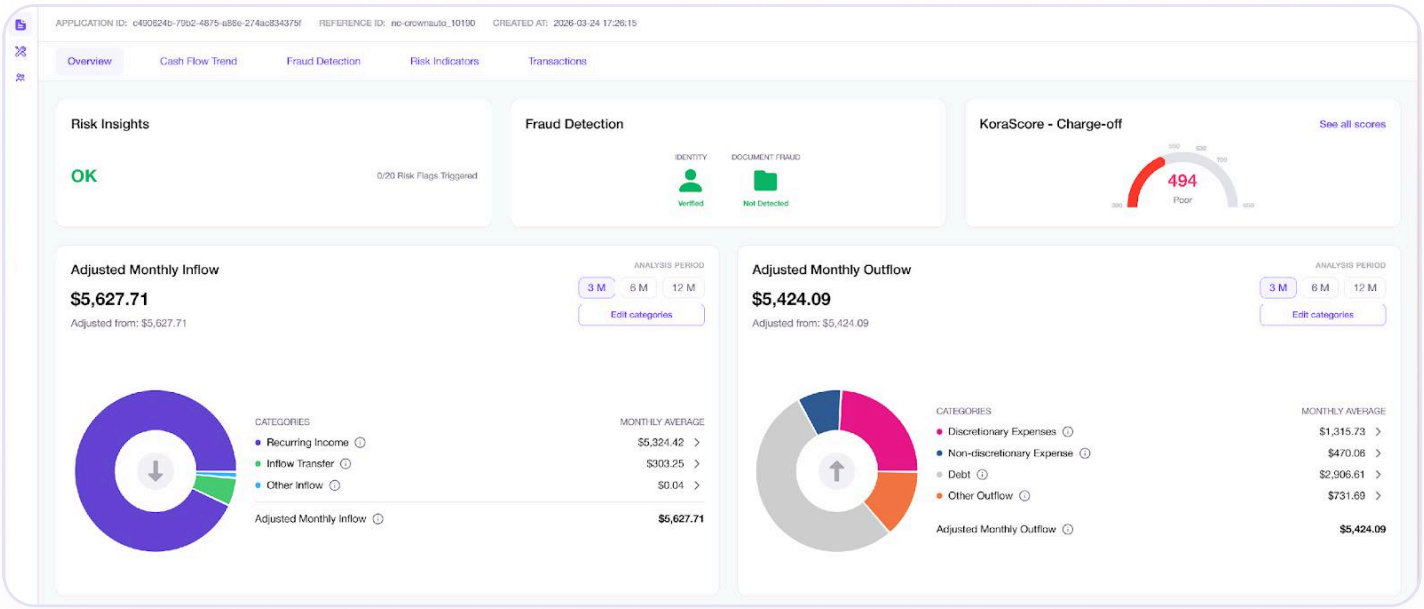
A legitimate question whenever a new underwriting tool shows improved performance is whether results simply reflect timing (i.e. newer loans are younger and haven't had time to go bad yet).

By comparing cash flow-underwritten loans starting in July 2025 onward with loans originated in the same calendar months one year prior, vintage and seasoning effects are controlled for, with both groups observed at equivalent loan ages. This eliminates the maturity advantage that would otherwise favor newer originations because they have had less time to go delinquent. The results are clear and consistent (see chart below[2]),three consecutive months of data showing meaningful delinquency improvements across all three monitoring periods, confirming that the improvement reflects genuine credit quality, not a timing artifact. If cash flow underwriting merely delayed defaults, rates would converge over time. They do not. The persistent gap at 30+ and 60+ DPD (31–64% lower) demonstrates superior borrower repayment capacity that compounds as the portfolio seasons.



How KoraConnect Works to Enable Cash Flow Underwriting

KoraConnect's value derives from its ability to combine existing technology (e.g. data aggregator), which retrieves digital bank statements, with Kora's proprietary approach, developed over nine years of underwriting and lending to borrowers with limited credit histories, and a large data repository of auto loan payment history collected from KoraConnect's auto lender subscribers. The breadth of signals KoraConnect generates via its intuitive platform (see below) enables underwriters to accurately predict a borrower's ability to make payments, drawing on information invisible to the credit bureaus and impossible to construct from application data alone. Moreover, KoraConnect identifies and appropriately categorizes an applicant's cash transactions to determine where and how income is generated and what expenses are paid.



Kora's research and data accumulated from analyzing years of payment behavior enables it to identify the most powerful delinquency predictors in loan portfolios with borrower behavior similar to the lender's. How is a borrower prioritizing payments when they have more expenses than income?

KoraConnect’s transaction analysis identifies patterns that consistently precede default. Kora’s cash flow underwriting tool (along with research, including back-testing of the lender’s portfolio) identified the following areas of focus:

- Unless otherwise stated, 'delinquency' throughout this section refers to 30+ DPD.

Liquidity stress indicators

Borrowers who frequently apply for short-term cash advances across multiple platforms signal that they are regularly running out of money before payday. This pattern, particularly when combined with inconsistent income, is among the most accurate and consistent delinquency predictors in an auto loan portfolio, with observed delinquency rates materially higher than portfolio average when multiple stress indicators coincide.

Income instability

Additionally, borrowers whose payroll deposits are irregular in timing, amount, or frequency demonstrate that their income, while nominally sufficient, cannot reliably support fixed monthly obligations. In the portfolio data, borrowers with the lowest income stability scores have an early 1+ DPD of 23%, with 15% progressing to 30+ DPD, while those with high stability scores default at only 8%.

Income source risk tiering

Not all income types carry equal repayment reliability. The analysis reveals a clear hierarchy: Standard payroll borrowers perform at baseline; government and benefits recipients require additional scrutiny; gig and platform income warrants careful review.

Overdraft and return patterns

Repeated overdrafts, ACH returns, and payment reversals in the months before application indicate a borrower whose account is chronically underfunded, a strong signal that is invisible in credit bureau tradelines but immediately apparent in transaction data.

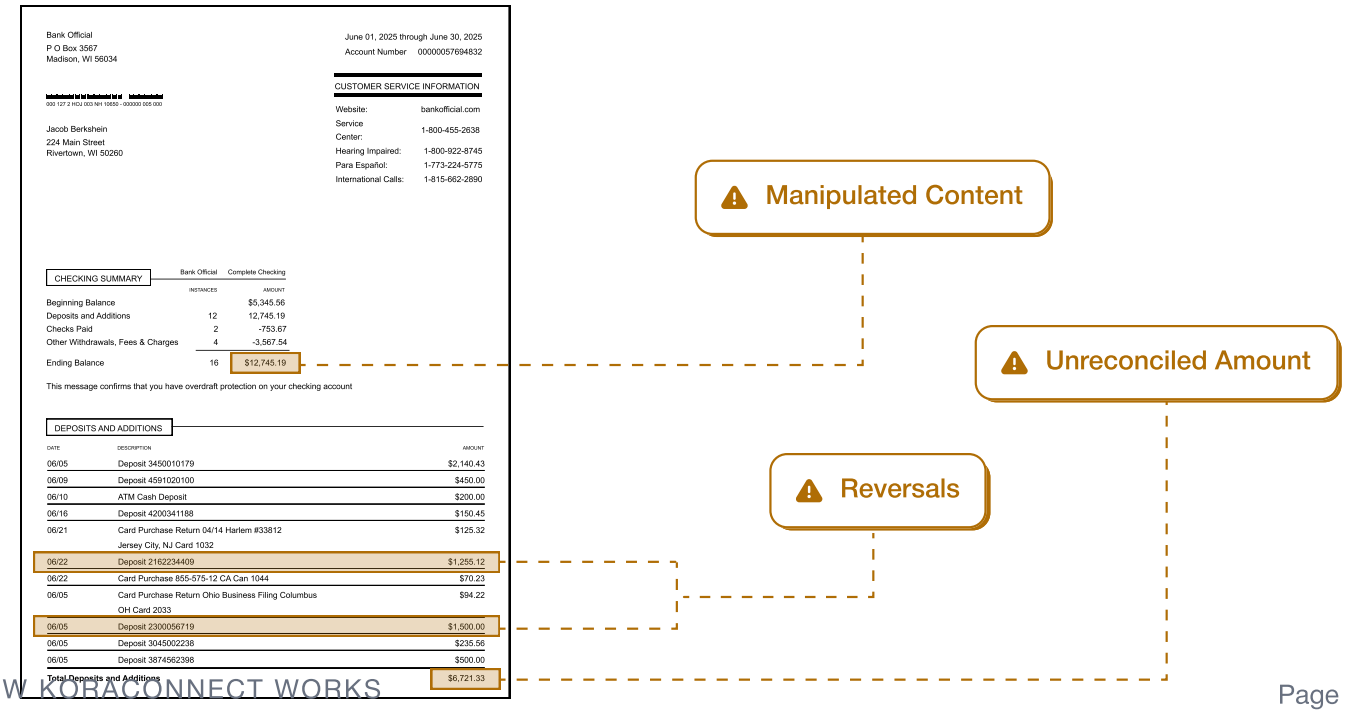
Multi-dimensional financial stress

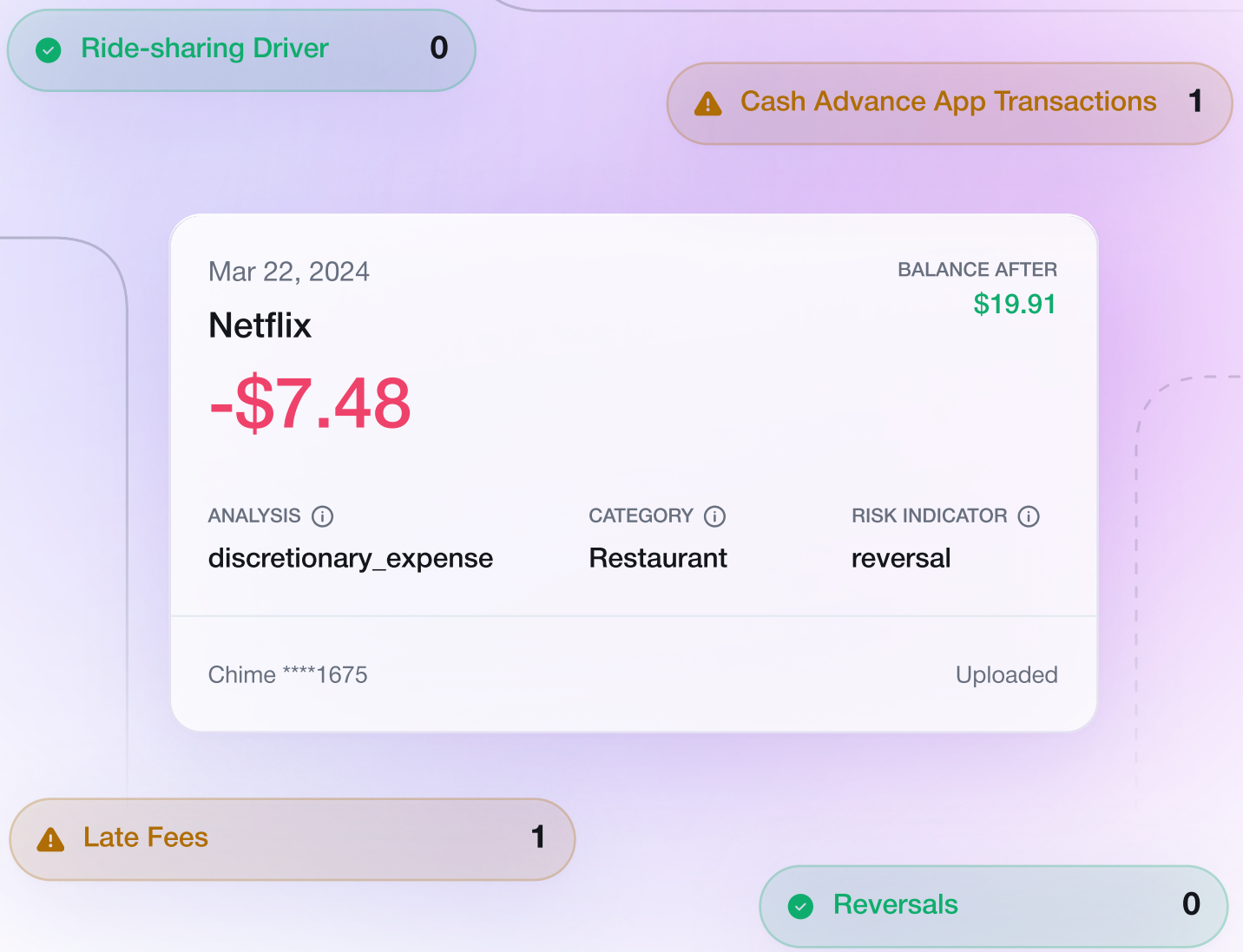
Borrowers simultaneously managing distress across payday repayments, cash advance apps, and irregular income create compounding risk that no single metric can capture. KoraConnect’s bivariate signal combinations identify these cases with significantly higher precision than any individual indicator.

Fraud and Identity Verification – the Silent Enemy

The single largest contributor to poor performance in all lending, and in particular longer-dated amortizing loans like auto, are borrowers who default early. And the single largest contributor to such defaults is fraud perpetrated by the applicant. KoraConnect's fraud module verifies that the bank statements submitted belong to the actual applicant as well as the bank they are reported to bank with. In the portfolio, loans where the applicant's name bears no relationship to the bank statement's owner show 86% delinquency, consistent with stolen or purchased bank statement fraud as observed in consumer credit. (Note: the observed sample of unrelated-name cases is small; the directional signal is strong but the rate should not be treated as a statistically stable estimate.) KoraConnect's name-matching logic catches this category at origination while distinguishing it from benign cases, such as family members sharing accounts, that perform at or near portfolio average.

Beyond name matching, KoraConnect assesses document integrity, and flags applications whose statements show signs of manipulation, metadata inconsistencies, or structural anomalies that suggest tampering (see in the above image "Fraud Detection" section).





Additional Signals: Banking Behavior

The financial platform where a borrower banks is itself a meaningful risk proxy. Portfolio analysis reveals statistically significant performance differences across banking institution types, from traditional banks and credit unions to app-based neobanks. Customers of app-based banking platforms show both higher early delinquency rates and higher conversion to serious delinquency, while traditional bank customers rarely progress to 30+ DPD even after payment delays. KoraConnect surfaces this signal automatically at the point of application.

Decision Rules:
A Living Underwriting Framework

KoraConnect's decision engine and scoring are built on a structured rule hierarchy with three tiers focused on:

Hard declines

When signals indicate a level of risk that no compensating factor can offset, KoraConnect declines the applicant, these decisions are non-negotiable and applied automatically when:

1. Identity mismatch exists as evidenced by the applicant name being unrelated to the account holder (86% 1+ DPD delinquency rate - note: small sample size, strong directional signal but should not be treated as a statistically stable estimate)
2. Cash advance frequency combined with low income stability (34–60% delinquency rate across two cohorts, upgraded from warning based on two months of observed performance) exists, and
3. Frequent unemployment benefit reliance without return-to-work indicators (~57% delinquency) exists.

Warning flags

Where conditions that individually elevate risk but do not warrant automatic decline. Examples include low income stability, elevated cash advance frequency, significant gig income exposure, or document integrity flags.

Documentation requirements

When automated income detection is incomplete or the income picture warrants manual verification, KoraConnect routes cases to a defined documentation workflow. Portfolio evidence underscores that income verification is not optional; automated approval or decline without it significantly elevates portfolio risk.

The framework is refined monthly through portfolio monitoring. As performance data accumulates, signal combinations are validated, thresholds are calibrated, and rules are upgraded or downgraded based on observed delinquency outcomes. This dynamic feedback loop, where real-world results directly inform decision rules. This distinguishes KoraConnect from static scoring models that cannot adapt as a portfolio matures.

Income Stability:
A Predictive Framework for Underwriters

KoraConnect's income stability assessment translates complex transaction patterns into actionable underwriting guidance through a multi-dimensional framework. Each applicant receives an income stability score reflecting the reliability of income patterns, a stability tier, a plain-English continuity description, an income type classification (payroll, gig economy, government benefits, or earned wage access), and a recency indicator for recent payroll activity.

Portfolio analysis confirms a clear hierarchy by stability tier: borrowers in the highest stability tier miss payments at materially lower rates than those in the lowest. Income source matters too: standard payroll recipients perform at baseline, government and benefits recipients require additional scrutiny, and gig or platform income warrants careful review. The framework is continuously updated based on observed portfolio performance.

Income type hierarchy:

Payroll Category	Action	Basis
Unemployment benefits	Proceed with caution	25% miss payments
Gig / platform	Neutral, standard processing	~10% (small sample)
Standard payroll	Standard processing	Baseline, 83% of volume

Underwriting Workflow Integration

KoraConnect integrates with the existing loan application process as a verification and enrichment layer. The workflow is designed to be frictionless for well-qualified applicants while routing risk systematically to the appropriate level of review.

1

Step 1: Applicant Bank Connection

At the point of application, the applicant connects their primary bank account via KoraConnect. The process takes approximately 60 seconds, requires no document uploads, and retrieves up to 12 months of transaction history in real time.

2

Step 2: Automated Signal Extraction

KoraConnect immediately returns an income stability assessment, behavioral risk flags, a fraud and identity verification result, and a KoraConnect charge-off probability score.

3

Step 3: Decision Routing

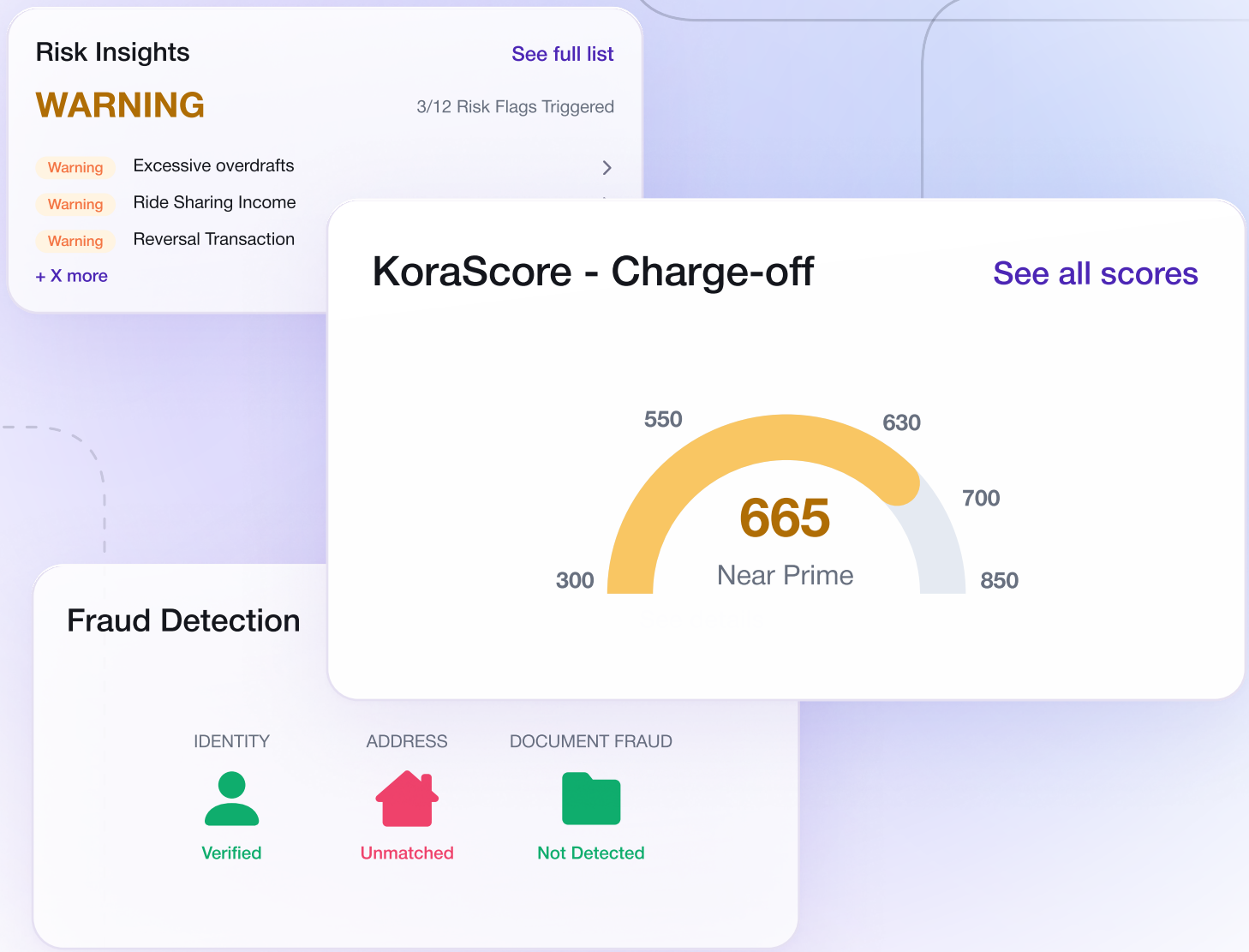
Each application is automatically routed based on signal outputs:

Track	Trigger Condition	Outcome
Clear to proceed	No flags; score above lender threshold	Standard loan closing workflow
Manual review	One or more warning flags; mid-range	Underwriter review before dec
Documentation request	Income incomplete or elevated-risk income source	Applicant provides supp documents
Decline	Hard decline rule triggered	Declined with reason code for ECOA compliance

4

Step 4: Monthly Portfolio Monitoring

KoraConnect delivers monthly monitoring reports covering rule trigger rates and delinquency outcomes, score distribution analysis, vintage-level delinquency tracking, and data-driven threshold and rule adjustment recommendations.



The KoraScore

Based on the totality of the above data, KoraConnect produces a “KoraScore” that indicates charge-off probability, calibrated on observed portfolio outcomes (much like a FICO score, in which a lower score indicates greater risk). As the lender’s portfolio seasons, score performance is tracked month-over-month to assess its predictive accuracy. Current analysis of loans with sufficient seasoning shows a meaningful distinction between borrowers who are paying on time and those who have fallen behind, with delinquent loans clustering in the lower KoraScore range of 420–450, while performing loans concentrate in the 560–600 range (see above screenshot of KoraConnect dashboard). Predictive strength is expected to improve as more loans season and additional default data accumulates.

Conclusion

KoraConnect delivers three things that traditional credit-bureau-only auto loan underwriting cannot provide on its own.

Behavioral visibility

Transaction-level data reveals how borrowers actually manage money, not just what their credit file says about the past. The most predictive delinquency signals in the portfolio are entirely behavioral and completely invisible to credit bureaus.

Fraud protection

Document integrity verification and identity matching catch application fraud before it becomes portfolio losses. Identity-mismatched loans show materially elevated delinquency, and intercepting them at origination, before they become losses, is precisely what KoraConnect's fraud module is designed to do.

A living underwriting system

Decision rules are monitored monthly, validated against real delinquency outcomes, and upgraded as the portfolio matures. Lenders who adopt KoraConnect are not deploying a static model, they are building a credit intelligence infrastructure that compounds in value over time.

The results, a consistent 22–76% delinquency advantage within the same origination vintage, a 37% improvement in early cumulative delinquency versus the trend-extrapolated projection, giving full credit to the lender's own pre-existing improvement trajectory, and near-zero charge-off exposure at 90+ and 120+ DPD, provide the data-driven evidence supporting these conclusions.

For subprime auto lenders seeking to improve portfolio quality without sacrificing volume, cash flow underwriting powered by KoraConnect offers a proven, data-driven path to better loan performance, one that has already earned the confidence of institutional credit investors.

Footnotes

1 Percentages are weighted by outstanding principal balance, not loan count. Each rate reflects the share of total outstanding principal in that segment held by loans in the respective DPD bucket, not the share of individual loans.

2 The “dumbbell” chart shows delinquency rates for cash flow underwritten loans in green versus same-calendar-period prior year cohort loans in red performance across three monthly snapshots. Percentage labels indicate the reduction. Both groups observed at equivalent loan ages.

Stop Guessing. Start Underwriting with Certainty.

Don't let legacy credit scores limit your growth or inflate your delinquency. Join the leading lenders using KoraConnect to identify high-quality borrowers that others miss. Schedule a demo with our team today.

Book a demo