Understanding model decisions using Explainable AI (SHAP)

Top 10 Drivers of Fraud Risk

Feature	Mean ABS_SHAP
v14	2.29
v4	1.86
v12	1.38
v3	0.93
v11	0.81
v10	0.81
v8	0.74
v26	0.54
time	0.53
v1	0.51
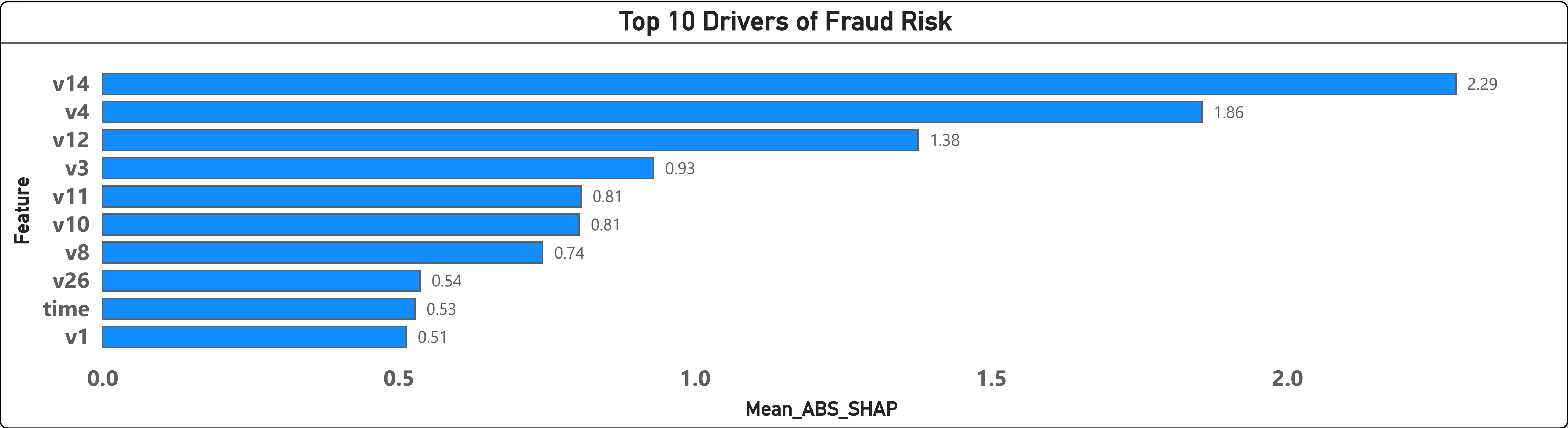
Feature-Level Contribution to Fraud Predictions

This report explains how the fraud detection model makes decisions. SHAP (SHapley Additive Explanations) measures the contribution of each feature to the model's fraud prediction. Features with higher SHAP values have a stronger influence on fraud risk, enabling transparency, trust, and regulatory compliance.

Key Takeaway: A small set of features consistently drives fraud risk, allowing targeted monitoring, better controls, and explainable decision-making

Model explainability is critical for responsible AI adoption, audit readiness, and regulatory compliance in financial systems.