CASH FLOW FORECASTING-DATA STORY

🧠 **BACKGROUND:** Every business depends on its ability to anticipate future liquidity .Historical cash flow statements show where money came from and where it went-but they stop short of telling what will happen next.

This model predicts a company's future cash flow trends using Meta's Prophet time series algorithm.This model leverages past patterns of operational inflows ,investment outflows ,and financing activities to project the next months with quantified confidence interval.

🔎 **KEY FINDINGS**:

. Positive Trend : The Prophet model projects an 8 – 12% increase in overall monthly net cash flow over the next fiscal year.

. Seasonal Pattern : Cash inflows peak every third quarter, indicating stronger mid-year performance – possibly due to contract renewals or high production cycles.

. Risk Boundaries : Even in the lower confidence range,forecasted cash remains above the company's liquidity threshold ,suggesting low short -term risk.

.Investment Stability : The model detects a flattening of negative investment flows ,implying the company's expansion phase may be stabilizing.

FORECAST COLUMNS EXPLAINED 🎯

COLUMNS	MEANING	INTERPRETATION IN FINANCE
Yhat	This is the predicted (expected) value of the target variable - in your case the predicted Net Cash Flow for each month	It's the model's best estimate of what your cash flow will be ,given historical patterns.
Yhat_lower	This is the lower bound of the forecast's confidence interval .Prophet defaults to 95% uncertainty interval(can be changed)	It represents the worst-case scenario , a statistically plausible minimum cash flow value for that month.
Yhat_upper	This is the upper bound confidence interval.	It represents the best-case scenario – a statistically plausible maximum cash flow value for that month.

🚀 **Example:** Let's say for JUNE 2025,Prophet gives

Month	Yhat(Predicted)	Yhat_lower	Yhat_upper
JUNE 2025	120,000	95,000	145,000

INTERPRETATION: The model expects Net Cash Flow in June 2025 to be around 120,000 but given uncertainty,it could range between 95,000 and 145,000 with 95% confidence.