

Lock The System

A Structural Liquidity Framework for Intraday XAU/USD

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Abstract

This executive, CV-ready summary presents a structural liquidity framework for intraday XAU/USD. The model evaluates directional bias only when four dimensions—structure, liquidity, time, and volume—converge. The objective is to reduce discretionary variability through a hierarchical, conditional alignment process. Diagrams and a conceptual session-volatility plot are embedded to illustrate the mechanics.

1 Framework Overview

Intraday price action often appears noisy when viewed via isolated signals. XAU/USD exhibits recurring sequences around structural transitions, liquidity interaction, and session-driven volatility. This framework imposes a layered decision architecture that prioritizes omission unless conditions align.

2 Core Model Dimensions

2.1 Structure

External structure defines directional context via major swing sequences; internal structure captures short-term corrections. The separation avoids misclassifying retracements as reversals.

2.2 Liquidity

Prior highs/lows and consolidation boundaries concentrate orders. Interaction with these zones provides context but requires confirmed displacement to infer direction.

2.3 Time

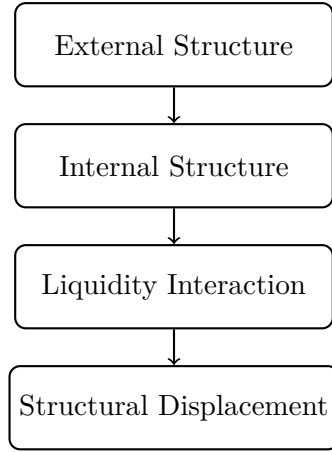
Volatility and participation vary by session. Asian trading is typically range-bound; European and U.S. sessions more often generate displacement. Time acts as a reliability filter rather than a predictor.

2.4 Volume

Volume validates movement by comparing effort and result. Rising volume during expansion supports continuation; high volume with limited progress implies absorption; declining volume during retracement suggests corrective behaviour.

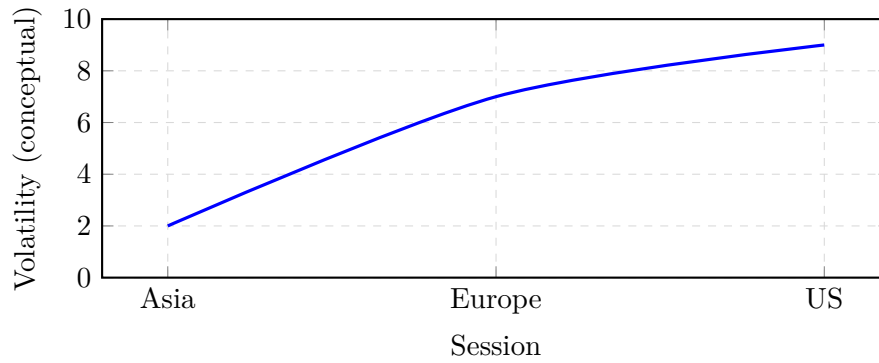
3 Structural Hierarchy Model

The hierarchy proceeds through: (1) external structure, (2) internal structure, (3) liquidity interaction, and (4) structural displacement. The TikZ diagram below places the components in sequence.



4 Time-Based Volatility Model

Session timing acts as an activation filter. The PGFPlots figure below visualizes a conceptual volatility profile across major sessions.



5 Volume Integration

Volume helps distinguish continuation (expansion with rising volume), absorption (high volume, limited progress), and corrective phases (declining volume in retracement). Volume is never treated as a standalone signal.

6 Conditional Alignment Model

Execution is considered only when five conditions align: (1) external bias, (2) liquidity interaction, (3) confirmed displacement, (4) favourable session timing, and (5) supportive volume behaviour. When any layer fails, the default stance is non-participation.

7 Model Limitations

The framework is conceptual and currently tailored to XAU/USD. Structural identification can be partially discretionary without rule encoding, and macro shocks may invalidate conditions. Future work includes statistical validation, rule parametrization, and automation.