



LIVE\_ENGINE\_V4

STREAM\_SYNC:  
87MS

# NETFLIX

## EVENT\_COMMAND

STANDARD\_VIEW



NEXT\_COMMERCIAL\_SPIKE

3:29

EXPORT\_REPORT

### LIVE CORRELATION PROTOCOL

REAL-TIME ATTRIBUTION SYNCHRONIZATION FOR HIGH-VOLUME BROADCAST EVENTS. THIS SYSTEM ANSWERS: 'DID THIS TV AD ACTUALLY CAUSE THESE CONVERSIONS?'

#### OPERATIONAL LOGIC

The system employs a non-linear time-decay kernel to resolve 'Second Screen' spikes. It assumes a 15-second primary window for TV-to-Mobile intent transfer, based on Nielsen research showing peak mobile activity 8-12 seconds post-exposure.

#### USE CASE CONTEXT

Measures the TRUE incremental lift of live halftime spots versus organic social trending. Separates correlation from causation - not all traffic during an ad is caused by the ad.

#### TECHNICAL ENGINE

Proprietary mSPRT (Mixture Sequential Probability Ratio Test) running on a distributed event loop with sub-100ms lag ingestion. Bayesian inference with Dirichlet priors for uncertainty quantification.

LIVE AUDIENCE  
METRIC\_STABLE



18.4M

+12.2%

INCREMENTAL ROI  
METRIC\_STABLE



3.14x

OPTIMAL

CAUSAL GAP  
METRIC\_STABLE



4.2s

STABLE

MODEL HEALTH  
METRIC\_STABLE



98.2%

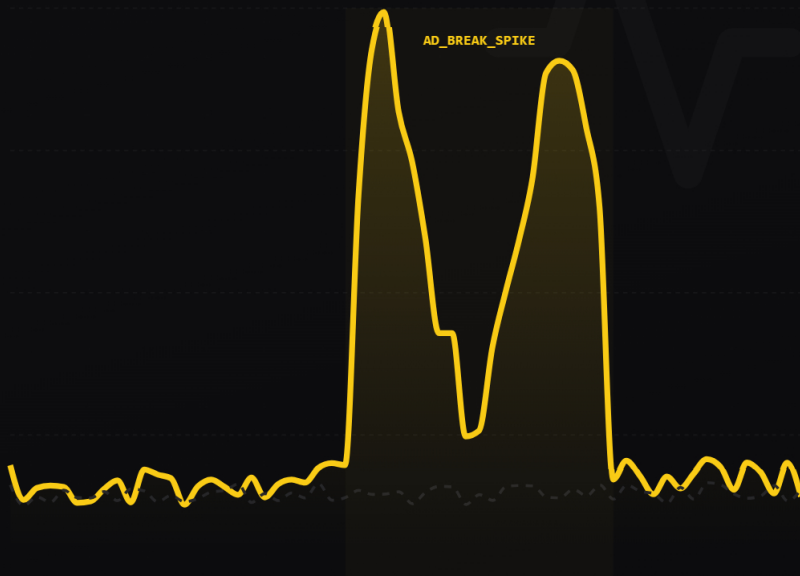
ACTIVE

### CONVERSION VELOCITY

CAUSAL\_ANALYSIS::ACTIVE

IMPACT\_SPIKE

BASELINE\_NOISE



94.2

PEAK CONV/SEC

4,247

INCREMENTAL CONV

99.8%

CONFIDENCE

UNDERSTANDING THIS CHART



### STREAM\_INTEGRITY

INGEST\_CLUSTER\_09

SYSTEM LOAD

67%



THROUGHPUT

14.2K

eps

LATENCY

12

ms

ACCURACY

99.9%

UPTIME

99.99%

INGEST LOAD

14.2K eps

CLUSTER SYNC

99.9%

BUFFER DEPTH

12ms

Why this matters: Pipeline health = attribution accuracy. Dropped events mean understated ROI.

REGIONAL MATRIX

THIS CHART SEPARATES 'CORRELATION' FROM 'CAUSATION' - THE FUNDAMENTAL CHALLENGE IN TV ATTRIBUTION.

OPERATIONAL LOGIC

The yellow area shows real conversion events. The dashed baseline shows what would have happened WITHOUT the TV ad. The shaded 'AD\_BREAK\_SPIKE' region is where we attribute conversions TO the TV ad.

USE CASE CONTEXT

When conversions spike above baseline during/after your ad, that's incremental lift. The area BETWEEN the yellow line and baseline = money your ad actually generated.

TECHNICAL ENGINE

Uses Dynamic Poisson modeling with adaptive latent parameters. Baseline calculated via 5-min rolling average with outlier rejection. Spike detection via 3-sigma threshold.



REGIONAL AFFIX  
GEOGRAPHIC DISTRIBUTION

US-EAST

42% traffic 23ms latency

OPTIMAL

US-WEST

28% traffic 45ms latency

OPTIMAL

EU-WEST

18% traffic 89ms latency

GOOD

APAC

12% traffic 142ms latency

ELEVATED

GLOBAL COVERAGE

4 Regions



TELEMETRY\_STREAM  
REAL-TIME EVENT LOG

20:41:02

TV\_DETECTION

Ad Spot: WWE\_HALFTIME\_PRIME

20:41:08

INGEST\_SPIKE

Mobile Traffic Ingest +240% in US-East

20:41:45

ATTR\_LINK

Resolved 4.2k causal links via Time-Decay

20:42:15

MODEL\_UPDATE

mSPRT boundaries stable (p=0.002)

LOCKED

0 ALERTS

QUICK ACTIONS

REFRESH DATA

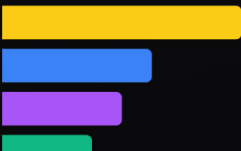
EXPORT CSV

VIEW LOGS

ALERTS



CHANNEL DISTRIBUTION  
ATTRIBUTION BY SOURCE



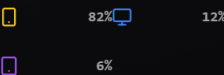
MSPRT CONVERGENCE  
STATISTICAL VALIDITY

1.02

R-HAT OPTIMAL



DEVICE COMPOSITION  
PLATFORM BREAKDOWN



GLOBAL DEPLOYMENT  
INFRASTRUCTURE STATUS



VIEW REGIONS

