AI Model Validation Report Template (ML-VAL-001)

Model Name: [Model Version, e.g., NexaCore-TSM v1.2]
Feature: [e.g., Predictive AI Workflow Trigger (PAWT)]
Validation Date: [YYYY-MM-DD]
Data Scientist: [Data Scientist Name]

1. Validation Setup

Parameter	Value
Validation Dataset Size	[X, e.g., 5,000 real-world prediction windows]
Validation Period	[e.g., Last 3 months of production data]
Primary Metric	[e.g., True Positive Rate (TPR)]
Secondary Metric	[e.g., Precision, F1 Score]

2. Core Metric Results

Metric	Threshold	Result	Status	Notes
True Positive Rate (TPR)		[Result]%	[Pass/Fail]	Measures success in predicting an actual spike.
False Positive Rate (FPR)		[Result]%	[Pass/Fail]	Measures successful prediction of spikes that did not occur (wasted scaling).
Precision		[Result]%	[Pass/Fail]	High precision is required to

				avoid unnecessary system triggers.
Inference Latency ()		[Result]	[Pass/Fail]	Required for real-time responsiveness.

3. Data Drift and Bias Check

- **Finding (Drift):** Has the model's performance on the latest 30 days of data dropped below the historical average? [Y/N]
  - *If Yes, quantify the drop:* [e.g., drop in TPR due to new workflow type not present in the training set.]
- **Finding (Bias):** Check for performance disparity across different client segments (e.g., Region A vs. Region B). [Result]
  - *If disparity exists:* [e.g., Prediction is less accurate for KSA clients due to low data volume.]

4. Conclusion and Next Steps

Overall Validation Status: [Pass / Pass with Caveats / Fail]

Recommendation: [e.g., The model is stable and meets the PAWT Beta criteria. Proceed to closed beta deployment. OR: The model failed the FPR threshold; R&D must refine the features used for prediction and retrain.]

Next Retrain Date: [Mandatory next date, e.g., 2026-01-15]