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Data & AI

AI Model Monitoring, Drift Management & Incident Response Playbook

Catching a model's silent performance decline before the business impact becomes obvious

- Practitioner
- Intermediate
- Template Included

- Administrator
- 12 September 2018
- 3 minute(s)

Overview

A framework for AI model monitoring, drift management, and incident response — continuous performance tracking, drift detection thresholds, and defined incident response protocols — addressing the specific risk of AI model performance degrading silently over time without the monitoring infrastructure to catch it before significant business impact occurs.

Why would a well-validated AI model's performance degrade after

deployment without any change to the model itself? Model performance can degrade due to distribution shift — the production data the model encounters gradually differing from its

training data characteristics — even without any change to the model itself, making ongoing monitoring essential rather than treating initial validation as sufficient indefinitely.

What should an AI incident response protocol specifically

address, beyond typical IT incident response? Model-specific concerns like rollback to a previous model version, retraining triggers, and stakeholder communication about AI-specific failure modes (biased output, hallucination) that differ from typical software incident categories.

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