

FREE DOWNLOAD · SEAFLUX TECHNOLOGIES

# Is Your Data Stack Ready for Agentic AI?

A 25-Point Self-Assessment for CTOs, Data Engineering Leads & Platform Architects

**25 Checkpoints**

Across 5 critical areas

**Score Your Stack**

Tally results at the end

**~10 Minutes**

To complete honestly

Most data teams believe their pipelines are working. They are – until they aren't. Go through each section honestly. Tick only what is genuinely true today, not aspirational. Use your score at the end to prioritise what to fix first.

 Use the self-assessment to identify the highest-impact gaps in your agentic AI readiness.

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# Pipeline Health, Brittleness & Self-Healing

Assess how resilient your data pipeline is today – from upstream schema changes to automated anomaly detection and recovery.

## 01 · Pipeline Health & Brittleness

- Pipelines handle schema changes upstream without manual intervention
- We can scale data volume 10x without full architecture rework
- Failures surface immediately with clear root cause – not silent corruption
- Team spends less than 20% of time on pipeline maintenance and firefighting
- No single engineer holds tribal knowledge critical to keeping pipelines running

Score: \_\_\_ / 5

## 02 · Self-Healing & Anomaly Detection

- System detects data quality anomalies before they reach downstream consumers
- We monitor schema drift, latency spikes, and consistency patterns continuously
- Corrupted or inconsistent data segments can be isolated automatically
- Alternate data routing paths exist when a primary source fails
- Corrective workflows trigger without human escalation for known failure types

Score: \_\_\_ / 5

# Orchestration & Data Ingestion Readiness

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## 03 · Orchestration & Autonomous Decision-Making

- Orchestration layer responds to real-time conditions, not just fixed schedules
- Workflows can be reprioritised dynamically based on downstream demand signals
- We define pipeline intent (what we need) rather than every individual step
- DAGs or workflow definitions are reviewed and updated at least quarterly
- Execution logic adapts when dependencies become fluid or unavailable

Score: \_\_\_ / 5

## 04 · Data Ingestion Readiness

- Onboarding a new data source takes days – not weeks of connector engineering
- Ingestion layer handles undocumented or inconsistent incoming data structures
- We can normalise data without requiring predefined schemas for every source
- Partial or incomplete data is handled gracefully – not silently dropped
- Transformation logic can be generated or adjusted dynamically as formats evolve

Score: \_\_\_ / 5

# AI-Ready Data Foundation & Your Score

## 05 · AI-Ready Data Foundation

- Data delivered to AI/ML systems is validated, structured, and context-rich
- We maintain full data lineage – every transformation traceable to its source
- Downstream AI models do not require heavy preprocessing before they operate
- Data governance policies are enforced at the infrastructure level, not manually
- Leadership treats data infrastructure investment as a strategic priority

Score: \_\_\_ / 5

1

0-6

**Not Ready**

Foundation gaps limit AI usefulness.

2

7-13

**Needs Work**

Core data capabilities are still developing.

3

14-20

**Partially Ready**

Strong progress, with some critical gaps remaining.

4

21-25

**Agentic Ready**

Data foundation is built for reliable AI execution.



**My Total Score: \_\_\_ / 25** – Find your band above and use it to guide your next steps.

# Not Sure Where to Start?

Most teams know they have gaps — but don't know which ones to fix first or in what order. That is exactly what a Seaflux data stack assessment covers.

## Scored 0–13 · Start Here

Focus on pipeline stability and data quality first. Build self-healing capabilities gradually — anomaly detection before adaptive orchestration.

## Scored 14–20 · Accelerate

You have the foundation. Layer in agentic capabilities starting with ingestion automation. A structured roadmap will get you to production faster.

## Scored 21–25 · Scale

Your stack is ready. Embed agentic capabilities deeper into your AI workflows and build governance frameworks that scale with your data volume.

[Book Your Free 30-Min Assessment](#)

Get an honest review of your current pipeline architecture and a prioritised starting point — no sales pitch.

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