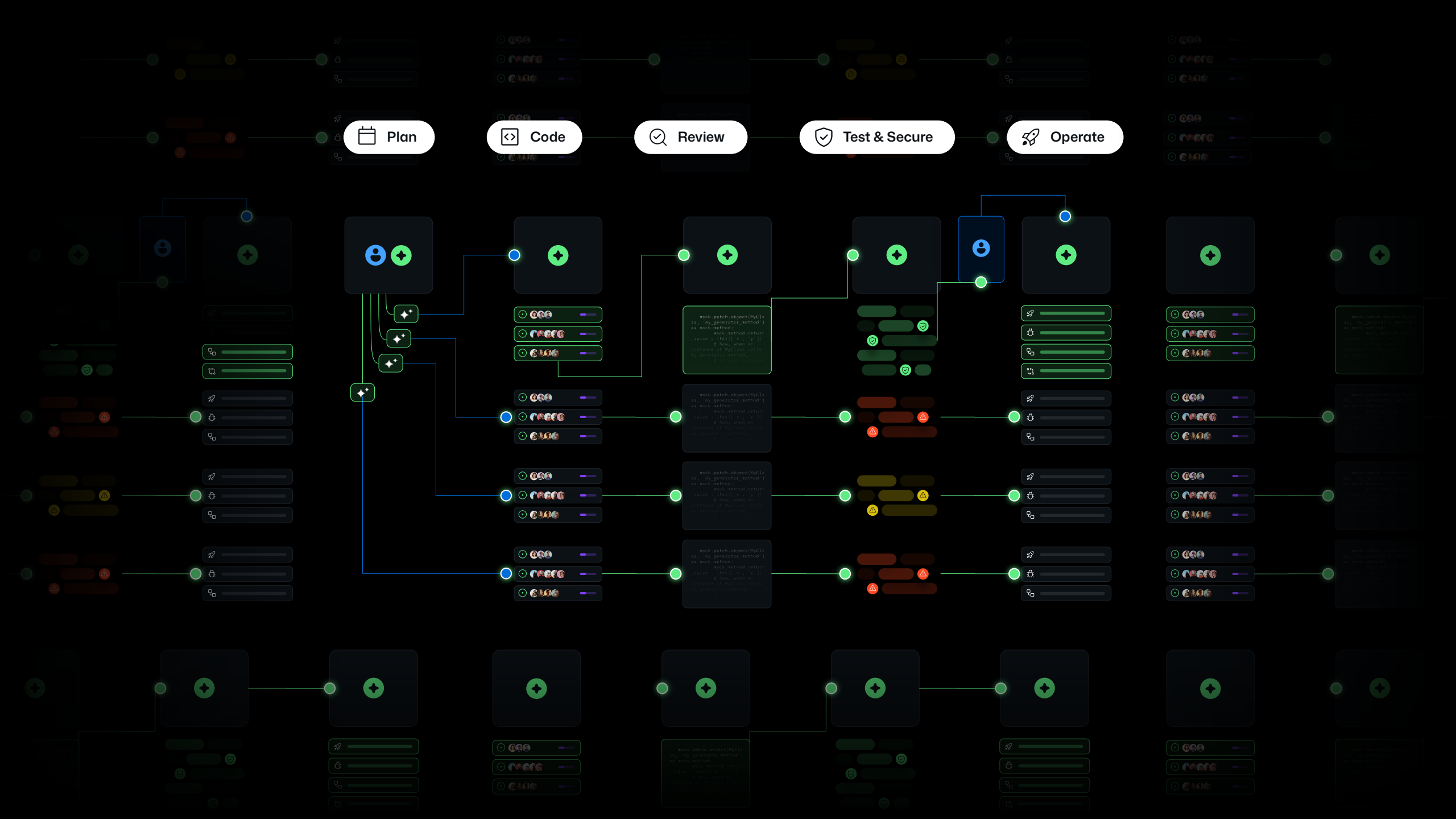
From DAGS to Insights

3.0

Tala Karadsheh - GitHub

What do *billions* of events a day tell us about developer behavior?


Plan
Code
Review
Test & Secure
Operate

Business Superpower

GitHub

150M+
Developers

4M+
Organizations

5B+
Annual Contributions

Orchestration is how we turn potential into action

“

Airflow is our lifeline

GitHub Engineer

June 2025

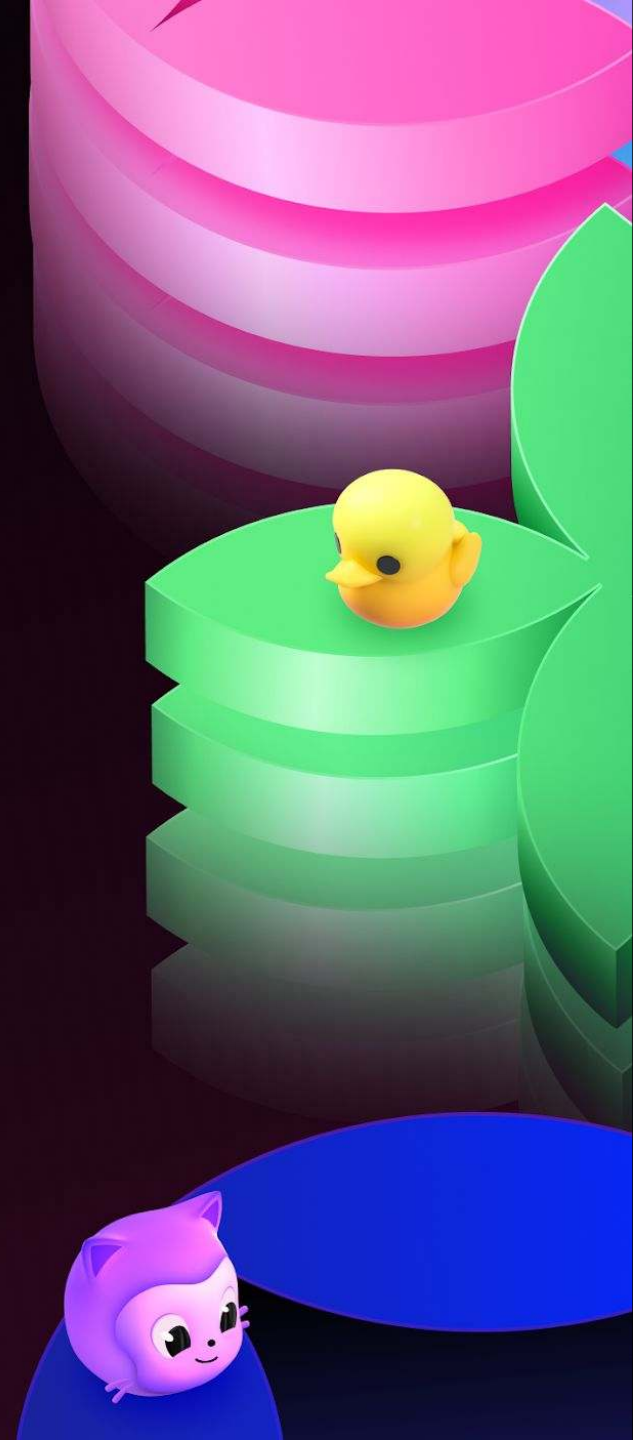
“

Airflow is sacred

GitHub Product Manager

September 2025

Orchestration drives business impact

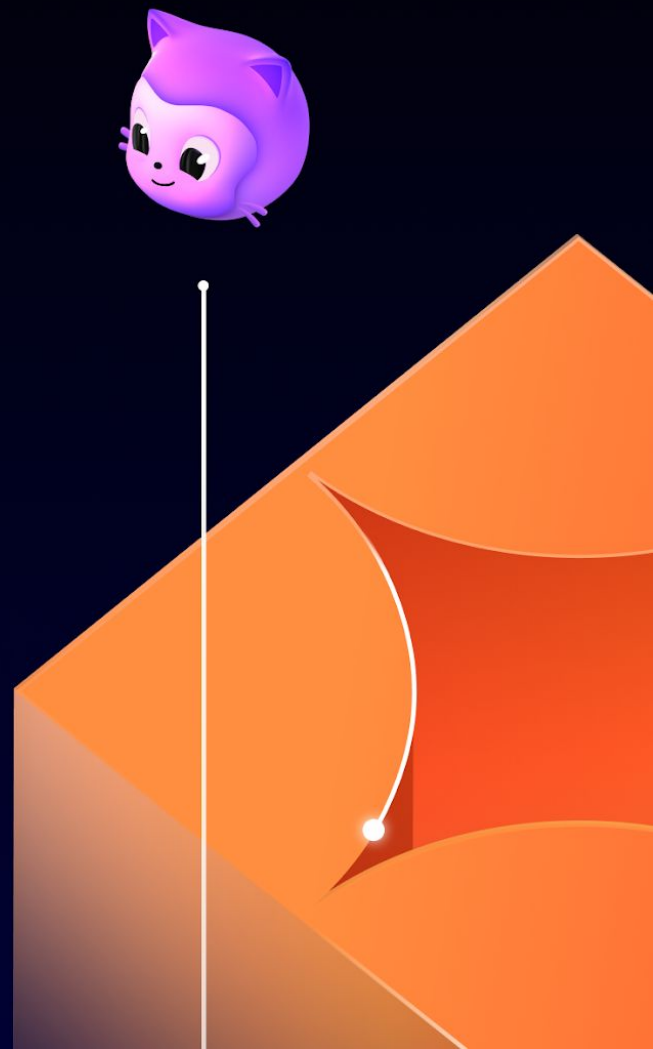


GitHub Business Use Cases

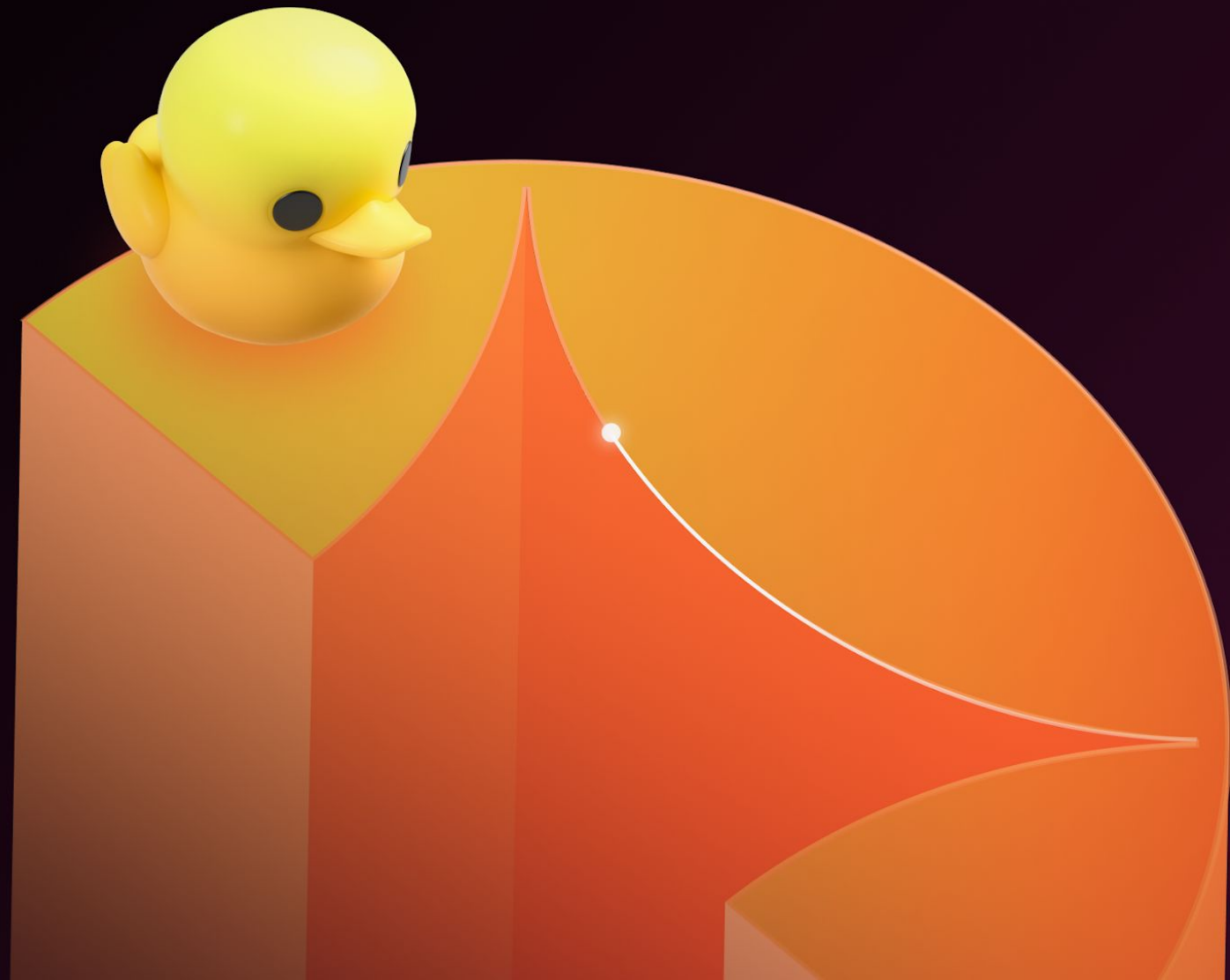
Open Source Health Metrics

Customer Success Signals

GitHub Copilot



Open Source Health Metrics



Airflow’s Value

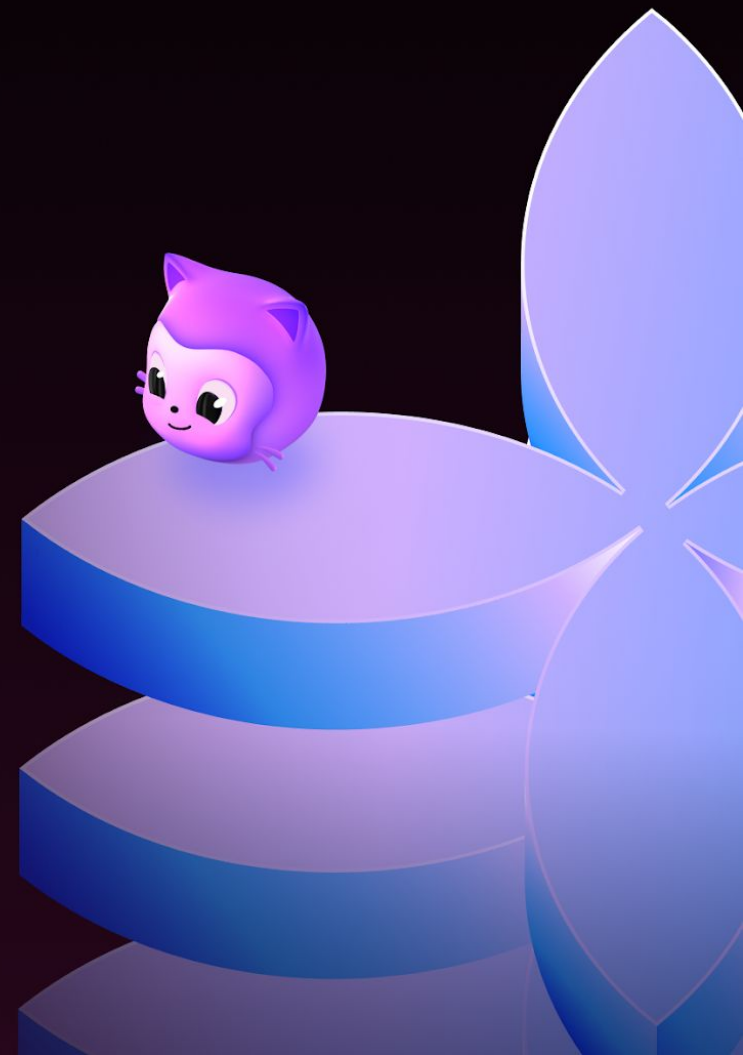
Daily metrics
Backfills for redefinitions
Lineage for audit

Key Takeaway

Healthy maintainers means a healthy ecosystem - orchestration keeps that visible

Customer Success Signals

Onboarded → Adopted → Engaged → Growing



Airflow’s Value

Sensors for speed
Anomaly detection
Custom operators
DAGs

Key Takeaway

When signals trigger plays, customer see value faster - and orchestration makes that loop real

GitHub Copilot

GitHub's AI Developer Platform

Policy & Governance

Plan

- Brainstorming Agent
- Issues
- Planning Agent
- Spaces

Code

- Agent Mode
- Coding Agent
- Loops
- Spark Workbench

Review

- Coding Agent
- Coding Review
- Playwright
- Pull Requests

Test & Secure

- Actions
- Autofix
- Code Quality
- Spark Runtime

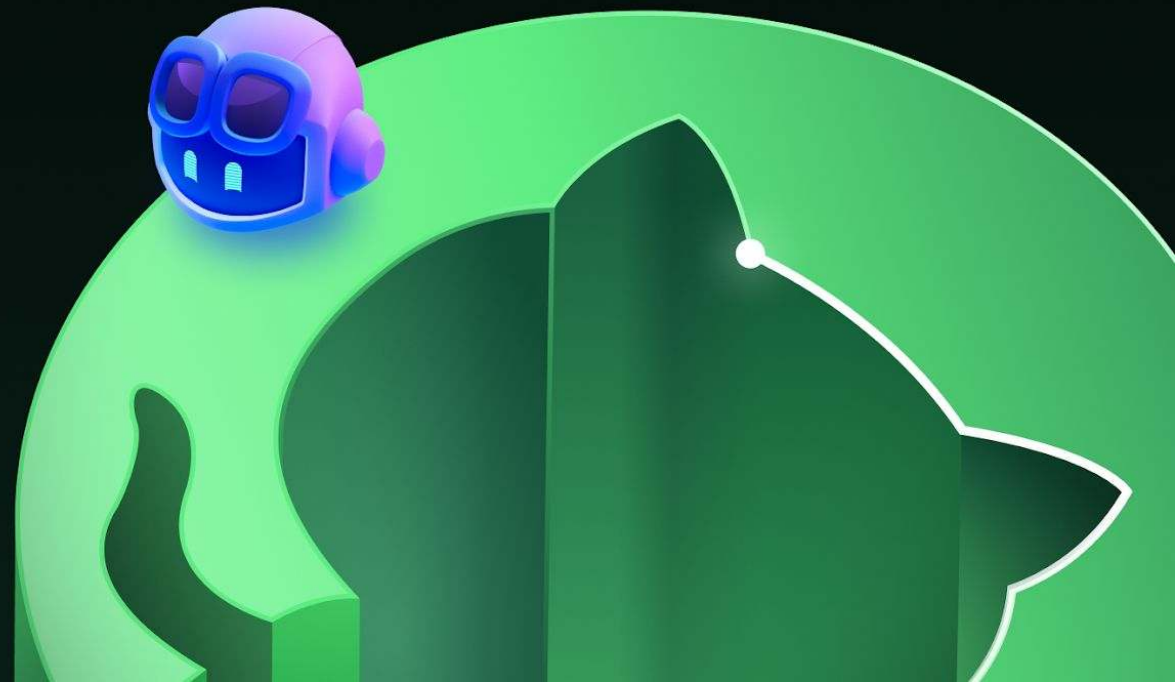
Operate

- Metrics
- Models
- Spark Runtime
- SRE Agent

Integrations & MCP

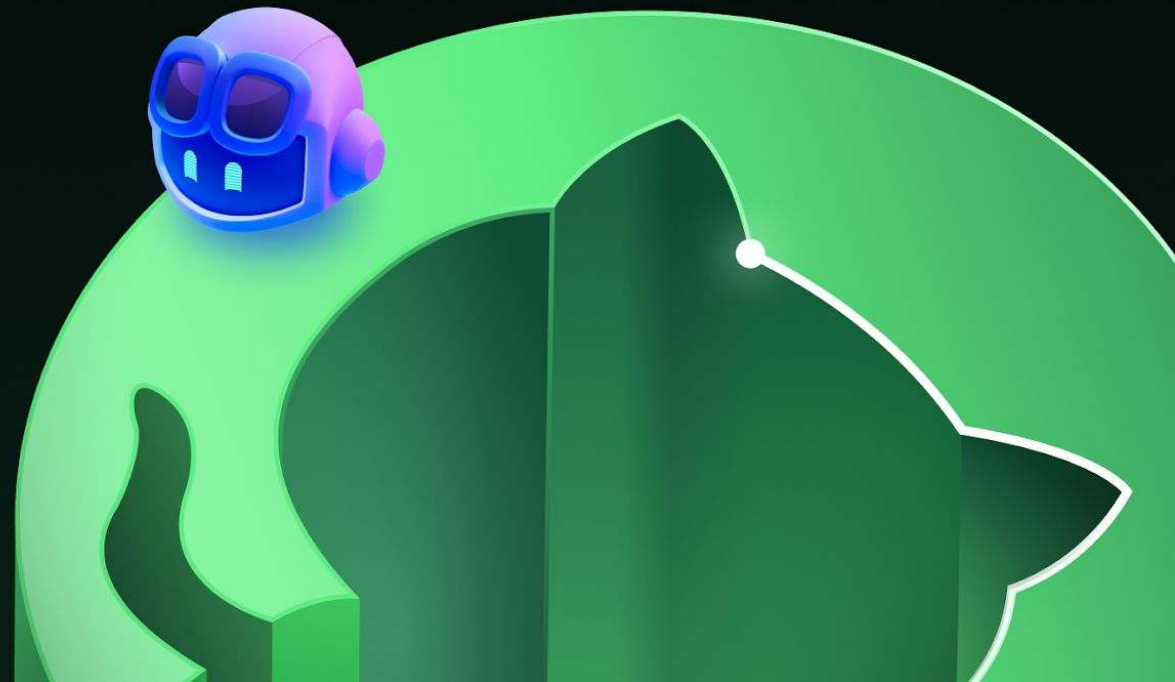
Airflow’s Value

Sensors
Validation
Custom operators
Safe



Key Takeaway

Usage plus feedback equals better design - and Airflow makes that loop safe, fast and reliable

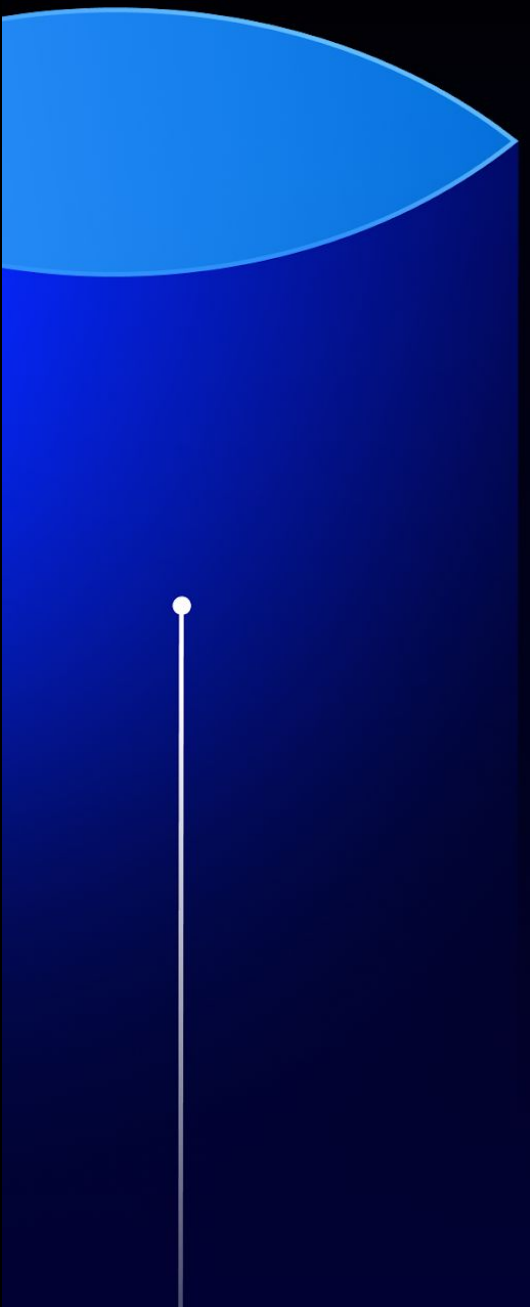


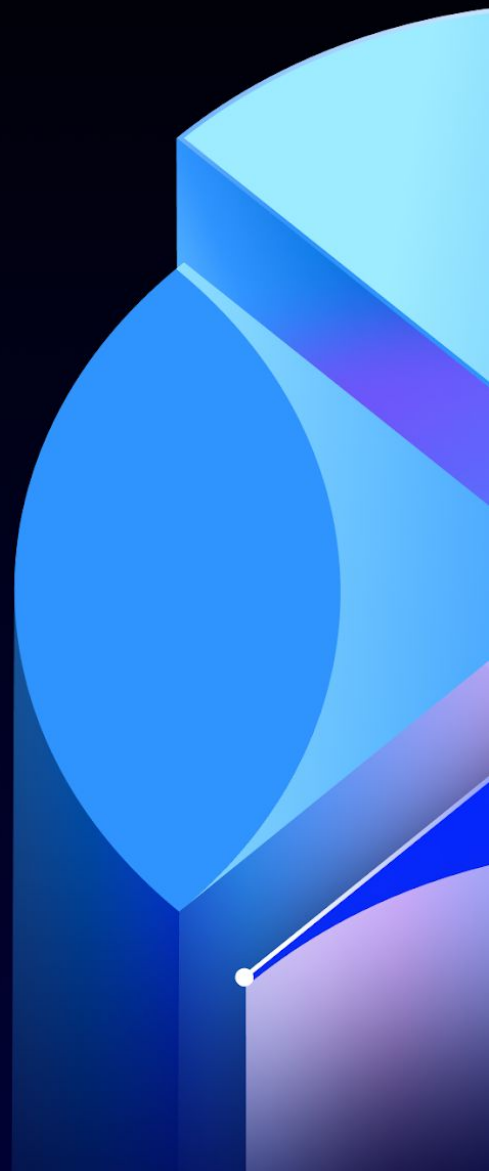
Return on Investment

Time Saved

Speed to Decision

The cost of not investing in data





Best Practices

Start Small, Scale Fast

Treat DAGs Like Product

Invest in Observability Early

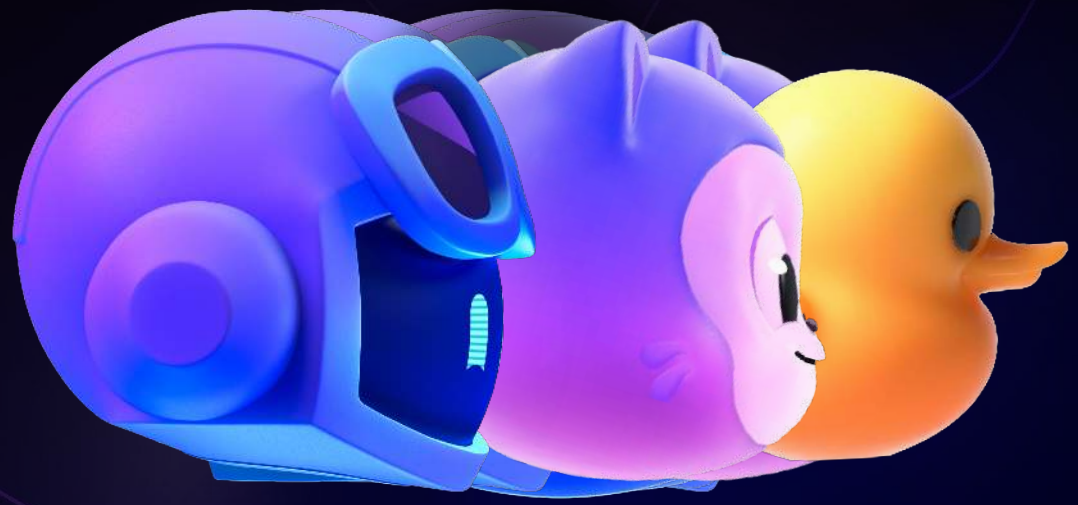
Backfills are Your BFF

We orchestrate the questions we care about, and the answers change what we do.

Version our definitions

Backfill our truth

Ship decisions we can defend



Orchestration fuels insights

Let’s build the future, together.