

## Stage

## What happens

## Why it matters

Ingest

Schema validation and format checks

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Structural defects caught here cannot corrupt downstream profiling, validation, or model training.

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Profile

Statistical summaries per dataset

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Baselines established here make drift detectable at the validate stage.

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Validate

Rule-based and ML-driven quality checks

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Both known patterns and novel defects are checked before any record reaches a model or agent.

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Cleanse

Correction or flagging of defective records

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Records corrected or flagged here cannot reach models or agents in an unresolved state.

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Serve

Delivery of quality-verified data

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Every downstream AI system starts from inputs that have cleared all prior gates.

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Monitor

Continuous quality metric tracking with alerts

Degradation caught here feeds back into validation rules before it compounds across decisions.