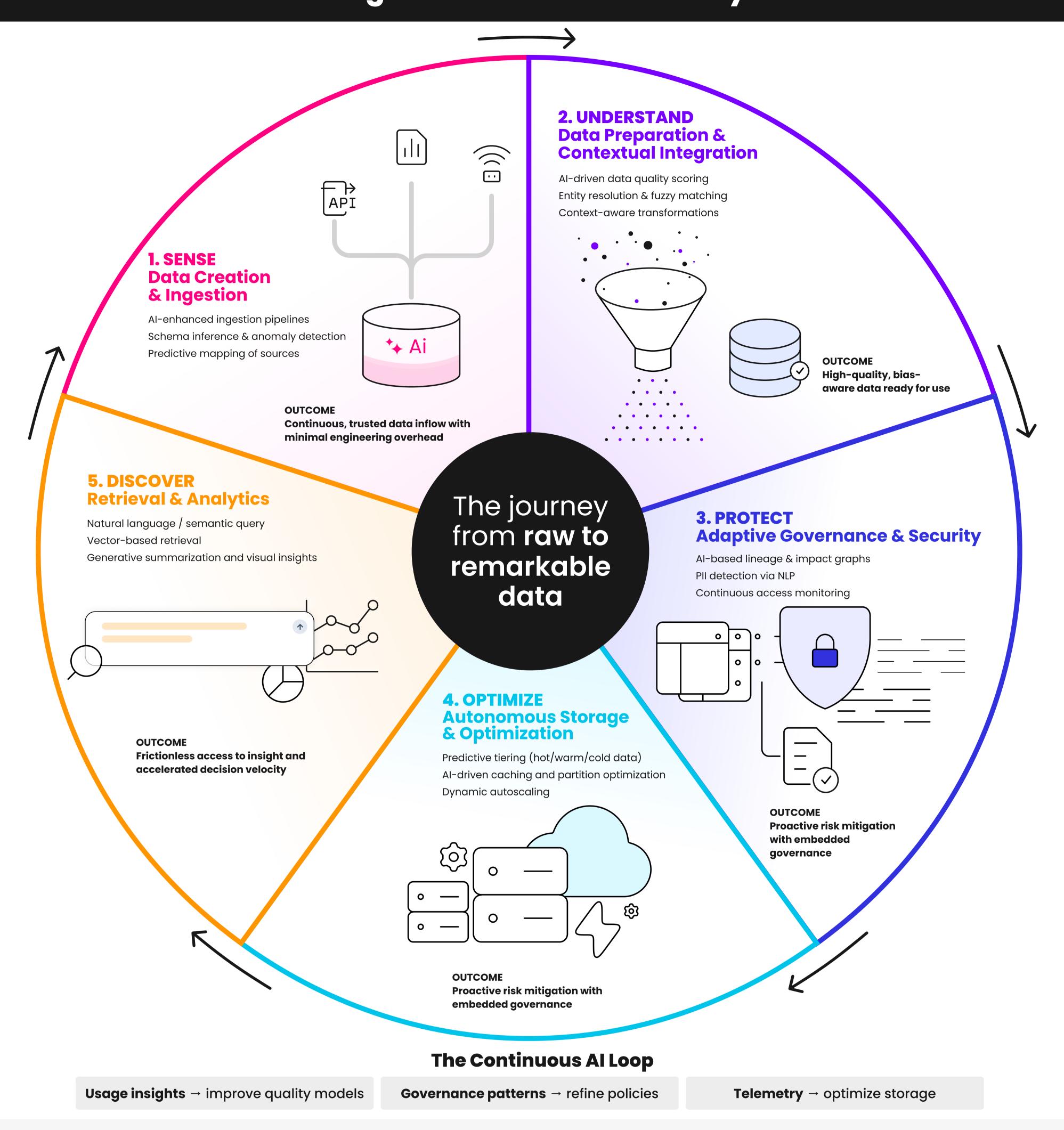
Building an Al-Native Data Ecosystem



The data engineer's workday - powered by Al

SENSE

- Supervise Al-driven ingestion agents
- Review schema drift alerts, resolve anomalous mappings
- Validate new source integration suggestions

UNDERSTAND

- Approve or correct Al-inferred transformations and joins
- Audit data quality score outputs, handle edge-case fallbacks
- Ensure bias mitigation or synthetic augmentation when needed

PROTECT

- Review and fine-tune policy engine decisions
- Validate data lineage and impact graphs for compliance
- Monitor and respond to policy drift or anomalous access events

OPTIMIZE

- Review Al-recommended storage tiers, caching, partitioning
- Validate autoscaling and performance decisions
- Oversee cost/latency tradeoff adjustments

DISCOVER

- Validate semantic search results, relevance, and user satisfaction
- Curate or refine semantic layers and vector embeddings
- Monitor usage feedback, retrain retrieval models as needed

What metrics can you improve?

SENSE

- +40-60% reduction in ingestion maintenance effort
- >90% automated schema mapping accuracy
- Reduced onboarding time for new sources from weeks to hours

UNDERSTAND

- +30-50% improvement in data quality score
- 60–80% reduction in manual data prep time
- >90% coverage of entity resolution & enrichment automation

PROTECT

- 70% faster compliance checks
- 50% fewer access anomalies
- Near-real-time lineage coverage across 100% of datasets

OPTIMIZE

- Up to 40% cost reduction (TCO)
- 30-50% lower query latency
- Improved resource utilization (70–90% target vs. 40–60%)

DISCOVER

- 2-3× faster time-to-insight
- 50% higher analytics adoption
- Significant increase in selfservice query success rates