



AI-Driven Data Platforms: The Transition from Manual Management to Self-Optimizing Systems



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The Data Explosion Challenge

175ZB

Global Data by 2025

Up from 33ZB in 2018

61%

Annual Growth Rate

Compound annual data growth

30%

Real-time Processing

Portion needing immediate handling

90ZB

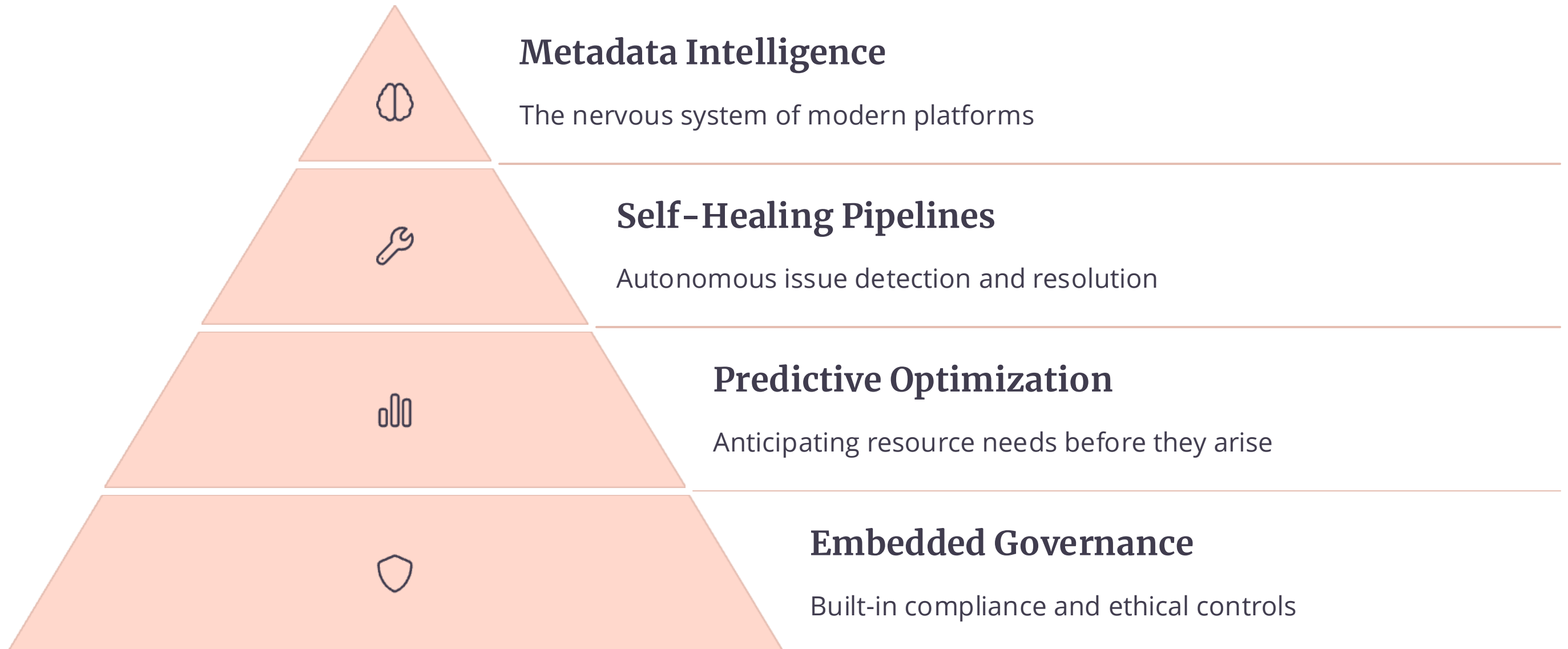
IoT Data Annually

Expected by 2025

Unlock your data's potential



Four Pillars of AI-Driven Data Platforms



Data bloom

Metadata Intelligence: The Nervous System



**62% Faster
Discovery**

Reduced time finding
relevant data assets



**72% Fewer
Quality Issues**

Dramatic reduction in
data quality incidents



**43% Higher
Trust**

Increased business
stakeholder
confidence



**2.7x Faster
Delivery**

Accelerated analytical
project completion

Shop
'AMOR
Collection'

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Case Study: Metadata in E-Commerce



37% Better Search Relevancy

AI-generated metadata dramatically improves product findability.



24% Higher Conversion Rate

Enhanced discovery translates directly to improved sales.



19% Fewer Returns

Better product information leads to better purchase decisions.



29% Larger Order Value

Improved relevancy increases basket size.

Self-Healing Data Pipelines

Detect Anomalies

Continuous monitoring identifies issues before they cause failures.

Adapt to Changes

Autonomous schema evolution handles upstream modifications.

Remediate Problems

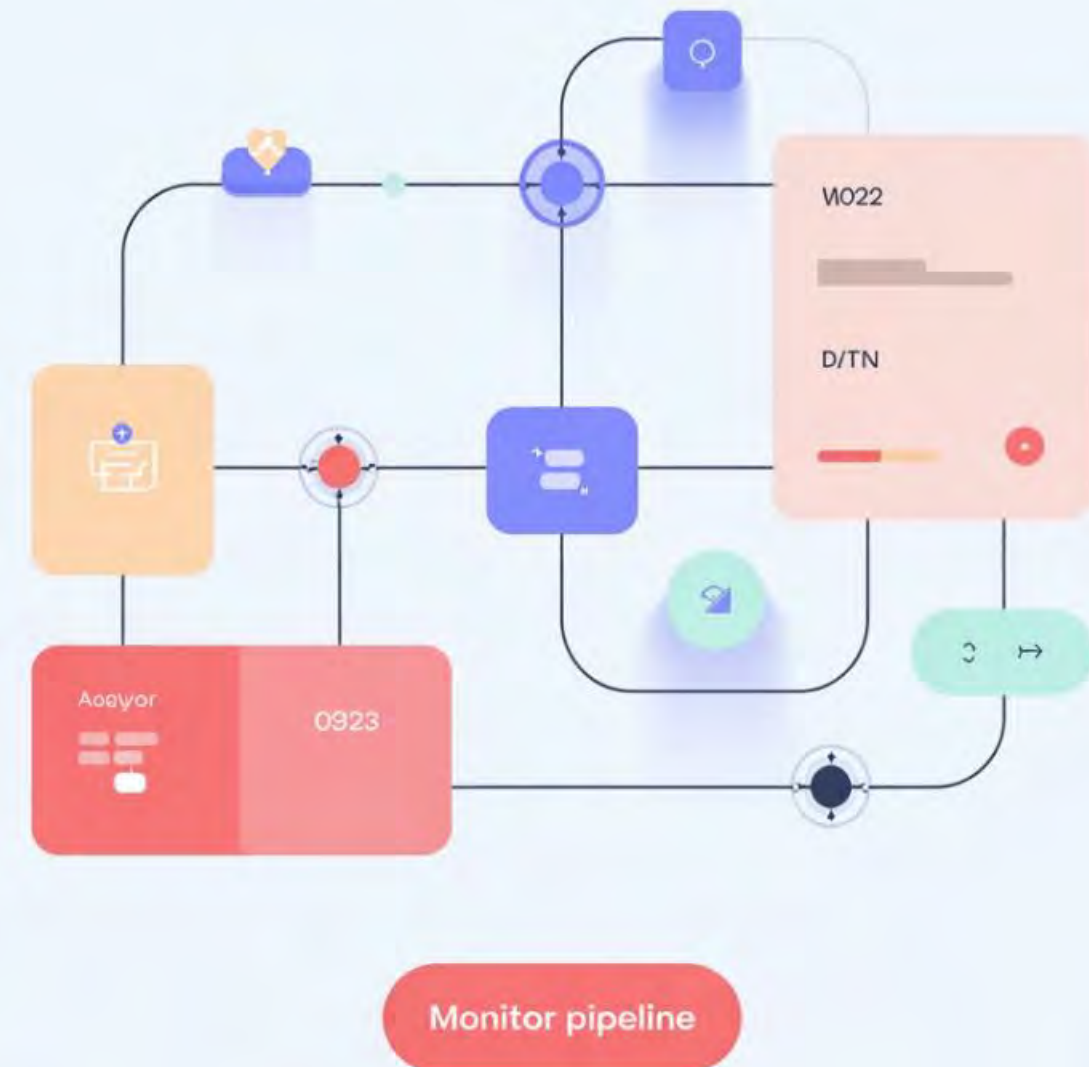
Automatic correction of common failure patterns.

Learn & Improve

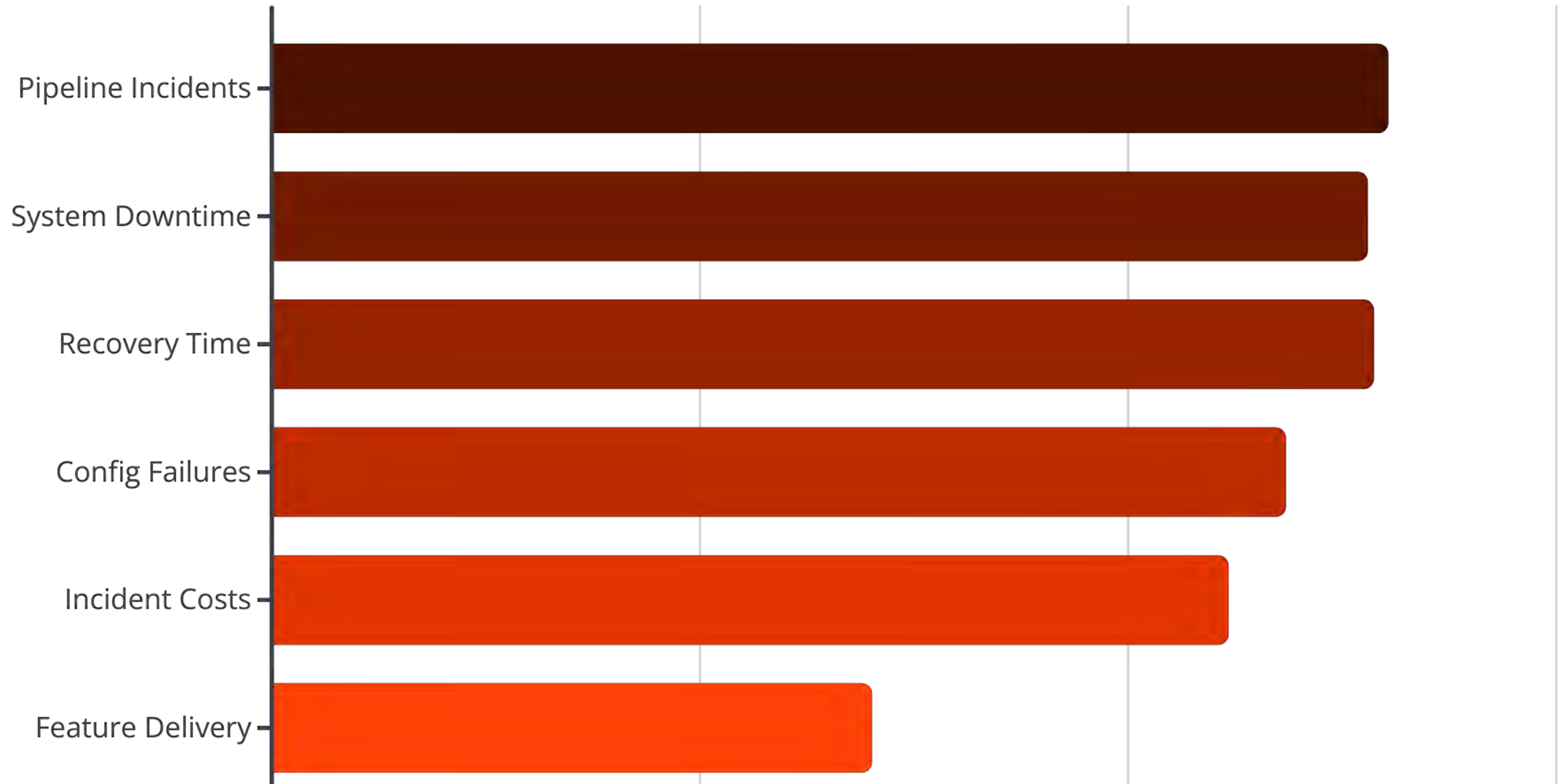
Systems build knowledge from past incidents.

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Automated data pipeline



Operational Impact: Self-Healing Systems



Predictive Resource Optimization

Learn Patterns
ML models analyze historical workloads

Measure Results
Refine models with feedback

Forecast Demand
Anticipate resource needs

Optimize Resources
Proactively adjust capacity



Resource Optimization Results

Utilization Improvement	Cost Reduction	Performance Enhancement
43.8% improvement through ML-based workload forecasting compared to threshold-based scaling.	\$476K average annual savings for mid-sized deployments.	SLA violations reduced by 76.2%.
Overprovisioning reduced from 61% to just 12.3% while maintaining performance.	380% ROI within first year of implementation.	3.2x workload variability handled without degradation.

Embedded Governance & Ethical AI



Automatic Detection

Identify and classify sensitive data



Policy Enforcement

Apply protection based on classification



Continuous Monitoring

Watch for compliance risks



Transparent Decisions

Explain automated actions

Governance as Competitive Advantage

Operational Efficiency

- 67% reduction in audit prep time
- 43% improvement in audit success
- 94.8% sensitive data classification accuracy

Agility & Compliance

- Access requests: 9.4 days → 12 minutes
- New regulation compliance: 97 days → 26 days
- Unauthorized access incidents down 82.4%

Market Trust

- 28% faster regulatory approval
- Customer confidence: 51% → 74%
- 76% fewer legal challenges

Governance, Governance.



Integrated Data Data Platform

Rogueet Dyithens



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The Future is Autonomous

From Documentation to Active Intelligence

Metadata evolves from passive documentation to an active system component.

From Brittle to Self-Healing

Pipelines transform from failure-prone to autonomously resilient.

From Reactive to Predictive

Resource management shifts from responding to problems to preventing them.

From Control to Empowerment

Governance becomes an enabler rather than a bottleneck.

Thank you