# From Sentiment to Signals: RAG Redefines Analytics

Report

2025/08/05





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## **Executive Mandate**

"RAG delivers materially better accuracy, auditability and confidence than sentiment or keyword analytics, making it the new baseline for enterprise intelligence."





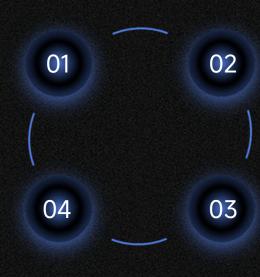
## RAG Outperforms Legacy Analytics

### **Accuracy and Auditability**

RAG combined with semantic tunnelling and narrative signals achieves significantly higher accuracy and better auditability compared to traditional keyword or sentiment-driven systems. This ensures reliable and verifiable insights.

## Reduced Workload and Increased Confidence

Confidence
The adoption of RAG directly reduces false
positives, decreases analyst workload, and
increases decision-making confidence, leading to
more efficient and effective operations.



#### Structured Entries

Every insight generated by RAG is anchored in structured, timestamped, and source-linked entries, eliminating ambiguity and providing a clear provenance for all data points.

### **Enterprise Al Budgets**

Enterprise AI budgets for 2025 are projected to be in the hundreds of billions to trillions, positioning RAG as an essential infrastructure layer for modern organisations.



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## Market Readiness Meets Provenance Demand



## Budget Forecast

GenAl budgets forecast at hundreds of billions to trillions for 2025 demonstrate the market's readiness for RAG-based systems, indicating a significant shift towards advanced analytics.

## Regulatory Expectations

Regulators increasingly expect timestamped and traceable source lineage for compliance, making RAG a critical component for organisations to meet these standards.



## Strategic Pivot

"Organisations must retire legacy sentiment tools and adopt provenance based RAG pipelines by 2026 to stay compliant, efficient and competitive."







### Commit to Provenance

Organisations must commit engineering resources to provenancefirst data pipelines such as the Ragfeed model by Q2 2026 to stay ahead of the curve in analytics.

## Instrumentation for Measurability

Retrieval, reranking, metadata, and citation fidelity must be instrumented to ensure every production change is measurable and reversible, maintaining data integrity.

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### **Critical Evaluation**

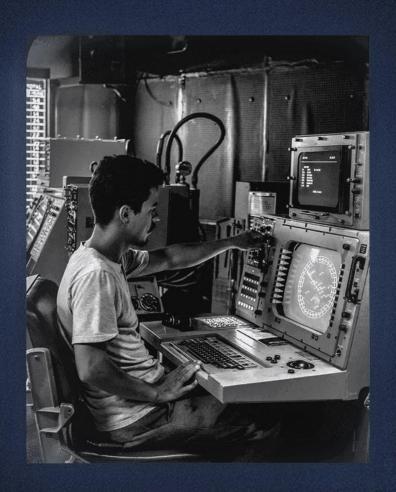
Evaluation and observability should be treated as critical components rather than optional extras, ensuring continuous improvement and compliance readiness.



## Measurable Governance Framework

## Implement Core Metrics

Implement observability and evaluation gating, including OTEL-style tracing, to measure time to first validated signal and citation F1 as core metrics for data governance.





## Market Evidence

"Publication volumes and proxy strength across domains show overwhelming market momentum towards RAG, with applied sectors leading adoption."



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## Publication Heat Map Validates Shift



Applied domains lead with 83 publications, followed by cloud-platform integration at 42 and RAG architecture at 40, indicating strong real-world deployment momentum.

### US Market Dominance

The United States dominates across all major themes, confirming vendor leadership and early adoption, with secondary regions including the UK, Germany, Poland, and Belgium.





## Investment Gaps

Vector-indexing and adoption themes each exceed 20 papers, while governance and memory topics lag at 13, revealing investment gaps and areas for future focus. 44 .....

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Proxy Strength Confirms Investment Priority

01

## RAG Adoption

RAG adoption scores 4.33 average signal strength, vector infrastructure 4.00, and inference economics 4.00, outpacing applied domains at 3.33, indicating strong validation.

02

## Governance and Architecture

Governance and architecture themes cluster at 3.67, while developer tools trail at 3.00, highlighting skills exposure risk and areas for strategic investment.

## Forward Timeline

"By 2026 almost half of enterprise AI endpoints will run on governed RAG stacks as vendors productise grounded answers and provenance features.."





## Forty Percent Governed RAG by 2026

02

#### **Cloud Provider Pricing**

Within the next twelve months, cloud providers will launch pricing tiers for grounded answers, confirming RAG maturity and market readiness.

### Vendor Roadmaps

Vendor roadmaps show sustained investment in managed RAG features, which will become procurement norms, driving further adoption and integration.

03





### **Enterprise AI Endpoints**

By H2 2026, at least forty percent of enterprise AI endpoints will operate through governed RAG stacks, driving widespread adoption.

#### **Standard Metrics**

By 2026, citation and retrieval fidelity metrics such as citation F1 will be standard in continuous integration, ensuring high-quality data governance.





## Quantisation and SLAs

Quantisation will cut memory costs, making decade-long corpora economical. Expect first multimodal RAG SLAs guaranteeing sub-100ms retrieval with 99.9% citation accuracy, creating competitive differentiation.

## Risk Diagnosis

"Legacy analytics create high operational and legal risk, while RAG pipelines reduce false positives and provide the auditability regulators demand."



## Legacy Exposure Is Moderate to High



## **Brittle Keyword Pipelines**

Enterprises using legacy keyword pipelines face moderateto-high exposure due to brittle rules that spike false positives, inflate manual review, and increase legal risk.



## Skills Shortage

A global shortage of retrieval-evaluation talent elevates skills exposure, making it critical to adopt RAG to mitigate these risks and improve operational efficiency. ....







## RAG Migration Reduces Every Risk

Classed False Positives

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Switching to citation-linked RAG collapses false-positive rates by up to 70%, significantly reducing analyst workload and improving data quality.

## **Cost Efficiency**

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Quantised serving and domain-specific small models shrink inference spend, making RAG economically viable and improving ROI.

## Regulatory Compliance

03

Managed platforms compress integration time, and early adopters report legal reserve reductions and faster regulatory sign-off, turning risk into competitive advantage.

## Narrative Signals

"Narrative signal analysis replaces crude polarity scores with six deeper dimensions that detect direction, momentum and consequence in real time."







## Six Dimensions Replace Polarity

01

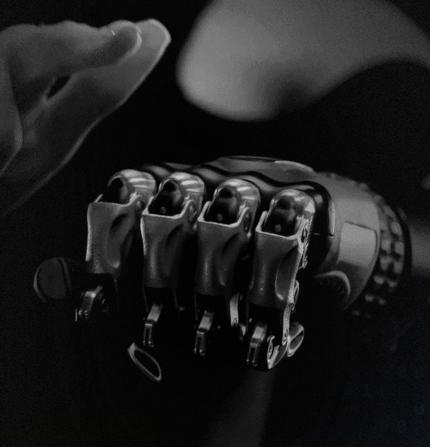
## Narrative Signal Analysis

Narrative signal analysis replaces crude polarity scores with dimensions like recency, novelty, momentum, persistence, direction, and intensity, providing deeper insights.

02

## Timeline-Aware Intelligence

Timeline-aware intelligence converts news into actionable foresight, delivering earlier and more accurate alerts for market, credit, and supply-chain decisions.



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# Semantic Tunnelling Delivers Clean Fuel

### Reconstructed Entries

Semantic tunnelling reconstructs multi-hop chains through timestamped entries, ensuring factual continuity and causal traceability across long time spans.

## Measurable and Auditable

Semantic tunnelling is fully measurable and auditable, aligning with regulator expectations and ensuring compliance readiness.

### Early and Weak Signals

This method surfaces early and weak signals while suppressing hallucination via grounded retrieval, providing more reliable insights.

### Definitive Replacement

Semantic tunnelling is the definitive replacement for keyword and sentiment analytics in high-stakes enterprise workflows, delivering clean and reliable data.

# THANKYOU

"The next generation of analysis belongs to teams who anchor insight in evidence, not polarity.."

**Noah Analytics** 

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