EBOOK

Riverbed AI Assurance: Operating Enterprise AI with Confidence and Accountability

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The Enterprise AI Challenge: Adoption Is Outpacing Control

AI is now in production.

It is embedded in workflows, influencing decisions, automating tasks, and powering business critical processes. When it works, the impact is meaningful. When it fails, the consequences are immediate: lost productivity, higher costs, and erosion of trust.

At the same time, AI adoption is accelerating faster
than enterprises can control.

Usage grows quickly and invisibly across teams.
Costs scale without clear ownership. New tools appear outside approved platforms. And failures are often difficult to detect and even harder to diagnose.

Together, these forces create unmanaged business, financial, and compliance risk.

The problem is not AI itself. The problem is the growing gap between how quickly AI is adopted and how little operational control most organizations have over it.

Traditional Operations Is Not Built for AI

Most AI failures aren't just model failures.
They are operational failures.

AI depends on data quality, system performance, and network conditions across hybrid environments. When those foundations break down, AI breaks with them.

Enterprises experience this breakdown in familiar ways:

- Poor or incomplete data leads to faulty AI decisions
- Blind spots prevent teams from understanding real world behavior
- Siloed tools make end-to-end diagnosis impossible
- Costs rise faster than business value
- Governance is applied inconsistently or too late

Questions Abound

As AI scales, these issues compound.

Without visibility, governance, and control, organizations cannot reliably answer basic operational questions:

- Where is AI being used, and by whom?
- Is Shadow AI present in our environment?
- How are AI agents performing inside enterprise applications and workflows?
- What is AI costing us and are we over- or under-spending?
- Where does AI introduce operational or compliance risk?

These are fundamental questions for running any production system. Today, most enterprises do not have clear answers to these questions.

AI Requires a New Operating Model

AI introduces a fundamentally different operational reality. It spans systems. It changes continuously. It depends on quality data. And it directly affects business outcomes. Managing AI effectively requires a new operating model, one built for scale, accountability, and control. That model rests on three principles:

Operate AI as a Production Workload

AI must be treated with the same discipline as any other mission-critical system.

This means verifying AI performance inside real workflows, correlating AI behavior with applications, networks, and user experience, and detecting issues before they disrupt the business.

Make AI Usage and Value Measurable

Enterprises must be able to see how AI is being used.

That includes tracking adoption, understanding efficiency, correlating performance with outcomes, and identifying waste or under utilized investments. Without this visibility, AI value cannot be proven or improved.

Govern AI Consistently at Scale

As AI spreads across tools and teams, governance cannot be manual or fragmented.

Organizations need consistent visibility into where AI is used, how it evolves, and how operational and compliance risk is introduced—especially as Shadow AI emerges beyond approved platforms.

This operating model is the foundation of disciplined AI.

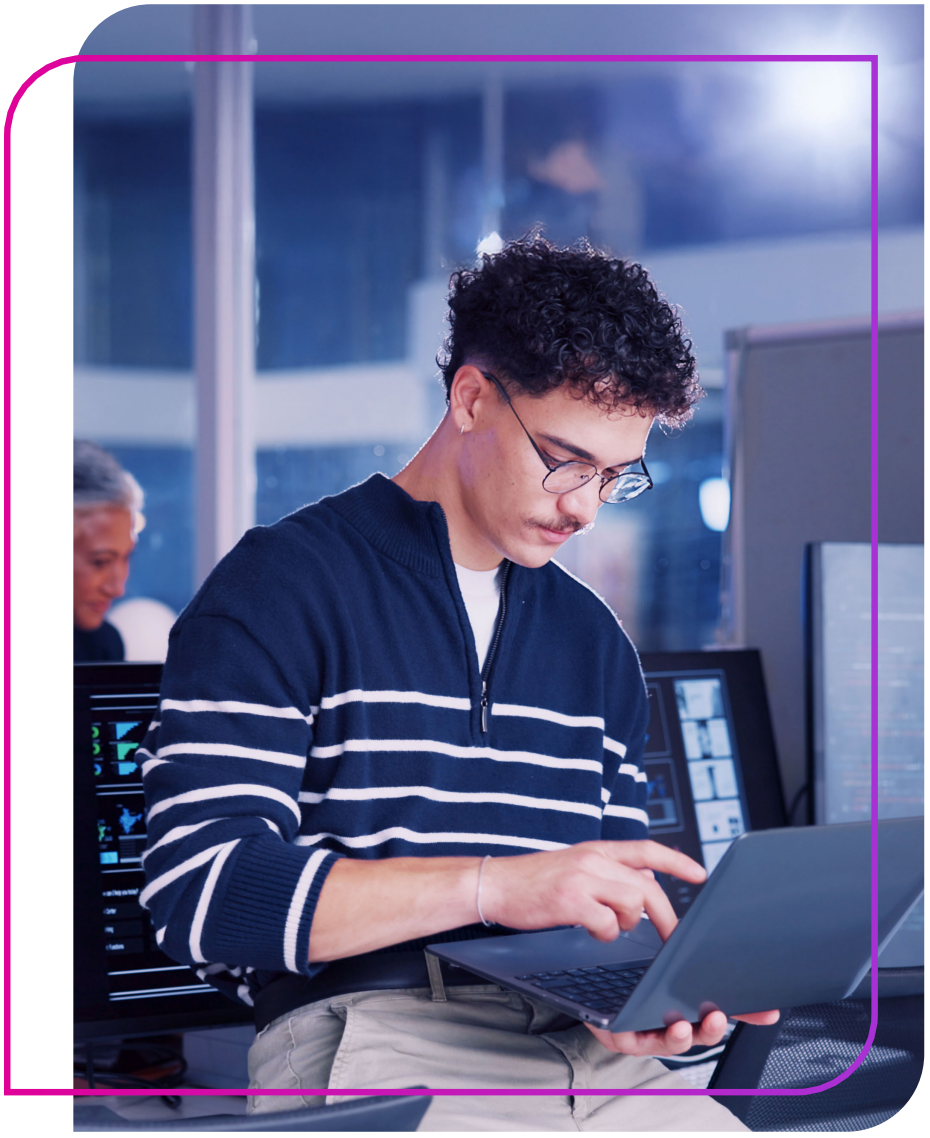
A Practical Approach to AI Service Management

Riverbed AI Assurance was devised to address this reality.

IT extends Riverbed's proven observability into generative AI, LLM driven, and agentic systems, to bring visibility to how AI behaves in production.

As organizations deploy AI assistants—and increasingly autonomous systems—AI Assurance provides a unified way to understand how AI is being adopted, how it is performing, and whether it is delivering measurable value, while also ensuring reliability as scale and complexity increase.

With that context, IT can diagnose issues faster, optimize usage and cost, and take action, to ensure AI systems remain reliable, governed, and effective as they scale.



Three Core Operational Capabilities

Riverbed AI Assurance turns AI visibility into operational control.

It connects how AI is used, how it performs, and what it costs, giving IT a clear, actionable view across the entire AI ecosystem.

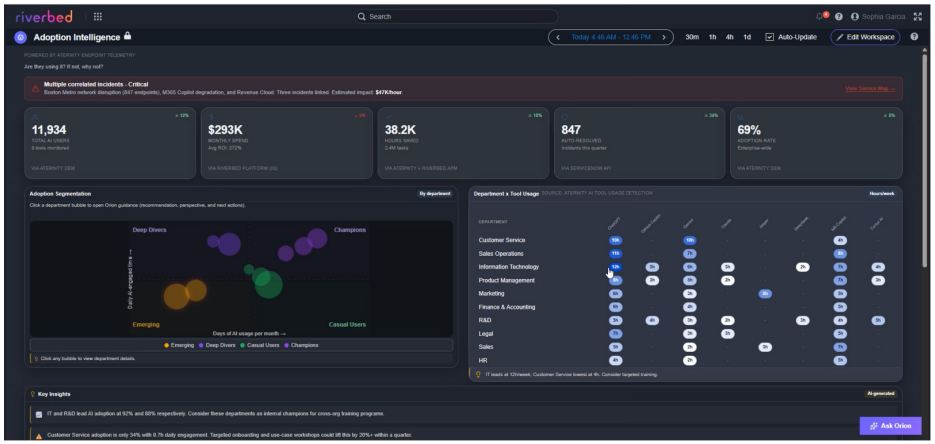
With that foundation, teams can move from pilot to production, tracking adoption, optimizing performance, and ensuring AI delivers measurable value without introducing risk or inefficiency.

AI Assurance delivers this through three core operational capabilities:

1. AI Adoption

AI Adoption makes AI usage visible across the enterprise.

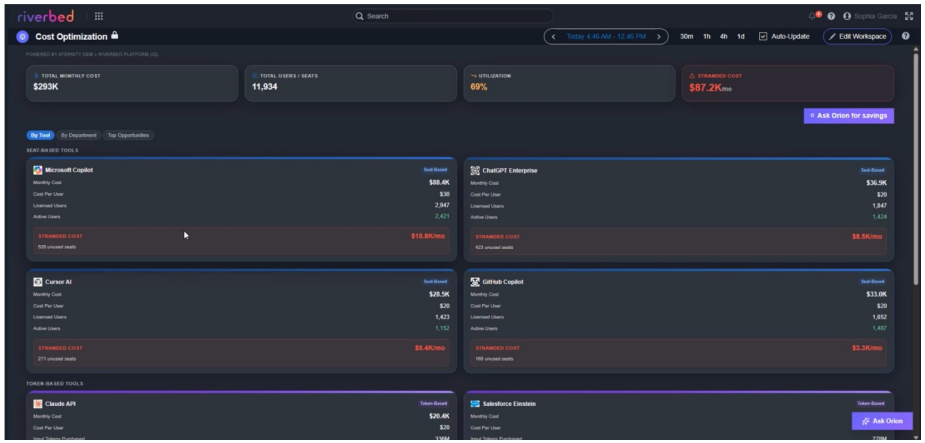
It shows which AI tools are being used, how often, by whom, and where adoption is stalling or accelerating. This visibility allows leaders to identify Shadow AI, understand gaps between enablement and real usage, and clearly see where AI is driving value—or where it needs support.



The Adoption Intelligence screen shows total number of users and users by department, users of Shadow AI, and identifies your champions versus those who may need more training.

2. AI Cost

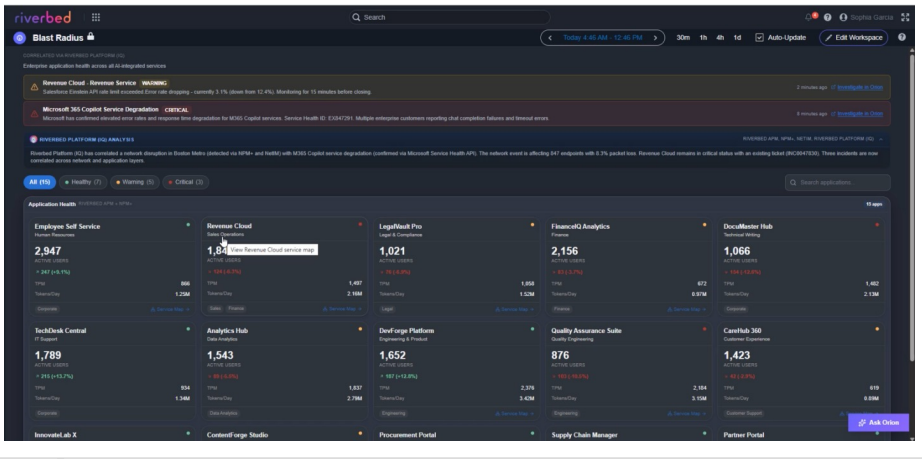
AI Cost connects usage, performance, and outcomes to spending. By correlating AI consumption with business impact, AI Assurance surfaces stranded costs, under utilized tokens, seats or credits, and misalignment between spend and value. This turns AI investment decisions from assumptions into measurable, defensible choices.



The Cost Optimization dashboard identifies the percentage of seats used, stranded costs due to unused seats, and can make recommendations where to recover costs.

3. AI Observability

AI Observability enables teams to operate AI agents and AI driven applications as accountable production systems. It provides end to end visibility into AI behavior across workflows, correlates anomalies with root cause and blast radius, and shortens time to resolution—from detection to diagnosis to action. As agentic AI becomes more autonomous, this capability is what makes AI trustworthy at scale.



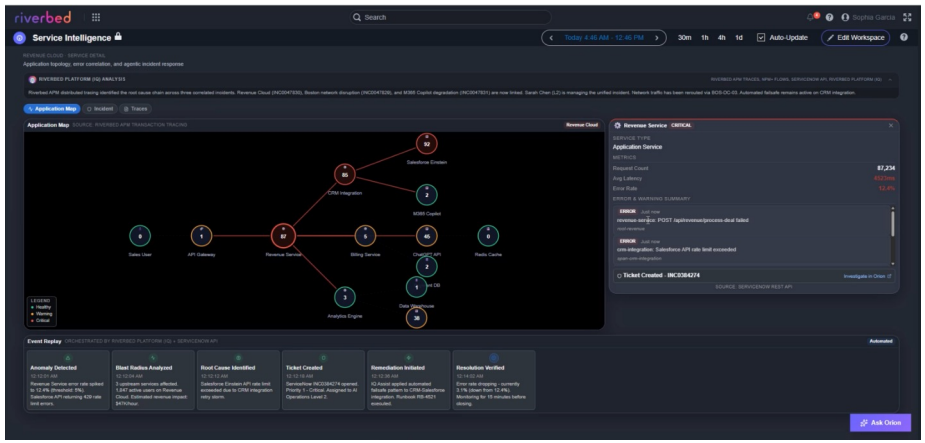
The Blast Radius view shows the health of all enterprise applications running AI services, identifying and prioritizing incidents and surfacing the details teams need for rapid remediation.

Turning Insight Into Action with Q

Visibility alone is not enough. Teams also need help interpreting what they see and deciding what to do next.

Riverbed Q, an interactive agentic chatbot, allows users to interact directly with AI Assurance using natural language. Instead of navigating dashboards or stitching signals together across tools, users can ask questions, analyze AI behavior, and explore patterns across adoption, cost, and performance in context.

Q also goes a step further—helping teams understand likely causes, assess impact, and generate remediation suggestions. This closes the gap between insight and action, enabling faster decisions and more confident operations as AI issues emerge and evolve.



Service Intelligence detects anomalous behavior, identifies impacted services, and automatically opens an incident. It diagnoses the issue, recommends—and can take—corrective action, then closes the ticket. The event replay below shows the full sequence, with resolution, was achieved in under two minutes.

From Fragmented AI to Disciplined Operations

Most organizations manage AI in fragments.

Visibility is limited. Context is missing. Cost and impact are difficult to measure. Governance is inconsistent.

Riverbed AI Assurance changes that.

It treats AI as a complete system—unifying adoption, observability, cost, experience, and operational context. It correlates behavior across endpoints, applications, networks, and users, and applies consistent control as AI scales and evolves.

This is the shift from experimentation to discipline.

Bring order to AI with enterprise-grade operations

Building Trust in Enterprise AI

AI will continue to expand its role in enterprise operations. As AI becomes more deeply embedded in critical workflows, the consequences of operating it without discipline increase.

Experience shows that AI success depends less on how quickly it is deployed, and more on how well it is understood, governed, and operated over time. Without a clear operational foundation:

- AI without visibility increases uncertainty
- AI without operational intelligence introduces unmanaged risk
- AI without measurable outcomes slows adoption

Riverbed AI Assurance provides the foundation organizations need to operate AI with confidence, aligning performance, cost, and outcomes while protecting business continuity.

Riverbed is committed to helping organizations move from AI experimentation to disciplined AI operations, enabling measurable value, minimizing disruption, and supporting the responsible use of AI at enterprise scale.

Schedule your demo today!

About Riverbed

Riverbed, the leader in AI observability, helps organizations optimize their users' experiences by leveraging AI automation for the prevention, identification, and resolution of IT issues. With over 20 years of experience in data collection and AI and machine learning, Riverbed's open and AI-powered observability platform and solutions optimize digital experiences and greatly improve IT efficiency. Riverbed also offers industry-leading Acceleration solutions that provide fast, agile, secure acceleration of any app, over any network, to users anywhere. Together with our thousands of market-leading customers globally – including 95% of the FORTUNE 100 – we are empowering next-generation digital experiences. Learn more at riverbed.com.