



Scaling Your Data Infrastructure Without Unnecessary Cloud Costs





In this Data Matas Season 2 premiere, Aaron Phethean speaks with AWS expert Jon Hammant about mastering cloud costs while scaling data operations.

The Data Matas podcast brings you conversations with industry leaders that deliver practical, implementable insights for your business.

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Introduction

Cloud data infrastructure is the backbone of modern analytics and AI-driven decision-making. Yet, as businesses scale their data operations, cloud costs often spiral out of control. Many organisations unknowingly overpay for ETL processes, inefficient data syncing, and vendor lock-in—traps that quietly erode budgets while limiting agility.

With the rise of AI-driven analytics and real-time data processing, businesses face a growing challenge: how to scale efficiently without being crippled by rising cloud costs. Hidden inefficiencies, outdated pricing models, and unchecked data movement are among the biggest contributors to waste.

In this article, we explore insights from Jon Hammant, Head of AWS Specialist UK & Ireland, on how businesses can optimise data costs, improve infrastructure scalability, and avoid vendor pricing traps.





What You'll Learn

- ✓ Why businesses unknowingly overspend on cloud data management.
- ✓ How to optimise ETL and data processing costs without performance trade-offs.
- ✓ Strategies for breaking free from vendor lock-in and building a cost-efficient, AI-ready data architecture.

By the end of this article, you'll have clear, actionable steps to reduce data costs while scaling efficiently.

"AI adoption is moving faster than controls," explains Jon Hammant, UK & Ireland Lead for AWS Specialist Team, in a recent Data Matas podcast. *"It compares to the early days of mobile adoption, where organisations rushed to integrate new technology before fully understanding its risks and costs."*

This rapid adoption creates a pressing challenge that demands practical solutions. The answers lie in understanding where waste happens, implementing smarter scheduling, avoiding vendor lock-in, and leveraging AI itself to reduce costs.



Meet Jon Hammant:

Cloud Expert with a Unique Perspective

Jon Hammant leads the UK & Ireland AWS Specialist Team, overseeing technical and sales strategies across AI, Compute, Data Modernisation, and Cloud Infrastructure. With extensive experience in high-performance computing and cloud optimisation, Jon has guided some of the world's largest enterprises through the complexities of cost management while enabling innovation.

"What I find fascinating is how cloud is fundamentally changing business models across industries," Jon shares. His blend of technical expertise and commercial acumen gives him exceptional insight into how businesses can optimise spending while driving innovation.

The Hidden Cost Crisis in Cloud Data

Most businesses today face a troubling reality: their cloud costs are spiralling. *"Cloud spending is like an out-of-control subscription model,"* Jon observes. *"Many businesses pay for cloud resources they never use, just like people forgetting to cancel streaming services they no longer watch."*

This challenge is exacerbated by the shift to real-time data processing. *"Real-time data is the new normal, but it comes at a price,"* Jon explains. Companies moving from batch processing to real-time analytics often experience unexpected cost surges that quickly derail budgets.

The problem isn't just about data volume; it's about inefficient infrastructure design. Many organisations maintain always-on data pipelines even when real-time processing isn't necessary. They provision excessive compute resources "just in case" and store redundant data across multiple systems.





1. Audit your cloud spend to identify waste

Rethinking the Approach

From "cloud costs are unpredictable" to "cloud costs can be systematically optimised through regular auditing."

Most organisations are shocked when they discover how much waste exists in their cloud environments. Unused storage, idle compute resources, and unnecessary data transfers often account for 30-40% of total cloud spend.

"The first step is always discovery," Jon emphasises. *"You can't optimise what you can't see."* A comprehensive audit helps identify resources that aren't delivering value.

Implementation Steps

- 1 Use AWS Cost Explorer or third-party monitoring tools to gain visibility into spending patterns
- 2 Identify resources with low utilisation rates (less than 20% is a red flag)
- 3 Look for storage volumes that haven't been accessed in 30-60 days
- 4 Analyse data transfer costs, which often go unnoticed but can be substantial

By conducting regular cloud spend audits, businesses typically reduce their infrastructure costs by 20-30% without impacting performance, significant savings that can be reinvested in innovation.



2. Move from always-on syncing to smart scheduling

Rethinking the Approach

From "all data needs real-time processing" to "different data requires different processing schedules based on business value."

One of the most common cloud cost pitfalls is maintaining always-on data synchronisation when unnecessary. *"Businesses still default to 24/7 data syncing, even when real-time processing isn't always needed,"* Jon points out.

Only a fraction of business data requires real-time processing. By categorising data based on time-sensitivity and business impact, organisations can implement more efficient processing schedules.

Implementation Steps

1

Categorise your data pipelines based on time-sensitivity (real-time, near real-time, daily, weekly)

2

Implement scheduled syncs for non-critical workloads using AWS EventBridge or similar services

3

Configure auto-scaling for pipelines that experience predictable usage patterns

4

Use serverless architectures for intermittent processing tasks

Smart scheduling typically reduces data processing costs by 40-60% while maintaining data freshness for critical operations. *"The goal isn't just to process data less frequently,"* Jon explains. *"It's about processing the right data at the right time with the right resources."*



3. Avoid vendor lock-in with a flexible pricing strategy

Rethinking the Approach

From "long-term contracts provide stability" to "usage-based pricing provides flexibility and aligns costs with actual value."

Many businesses sign multi-year contracts with cloud providers, believing they're securing the best rates. However, these contracts often lock organisations into rigid pricing models that don't adapt to changing needs.

"The cloud market is incredibly dynamic," Jon points out. *"What seems like a good deal today might be overpriced six months from now."* Flexible, usage-based pricing allows organisations to take advantage of market dynamics while ensuring they only pay for what they actually use.

Implementation Steps

1

Review existing cloud contracts and identify opportunities for more flexible arrangements

2

Negotiate usage-based pricing models with clear volume discounts

3

Implement tagging strategies to allocate costs to specific projects or departments

4

Use reserved instances for predictable workloads while maintaining pay-as-you-go for variable workloads

A flexible pricing strategy typically reduces overall cloud costs by 15-25% while providing greater agility to scale as business needs change.



4. Use AI to reduce manual data management costs

Rethinking the Approach

From "AI is a cost driver" to "AI can be a cost reducer when applied to infrastructure management."

While AI adoption is often seen as increasing infrastructure costs, it can actually play a crucial role in reducing them. AI-powered automation can replace costly manual data engineering tasks, improving pipeline efficiency while lowering operational expenses.

"The best metric isn't more dashboards, it's better decisions," Jon emphasises. *"Businesses are drowning in data but struggling to turn insights into action"*. AI can help by automating routine data management tasks and ensuring that infrastructure is built for decision-making, not just reporting.

Implementation Steps

- 1 Identify data engineering tasks that consume significant human time and resources
- 2 Implement AWS AI-driven automation tools to streamline these processes
- 3 Use machine learning to predict resource needs and optimise capacity planning
- 4 Apply anomaly detection to identify unusual spending patterns

Organisations that successfully implement AI-driven automation typically reduce their data management operational costs by 30-50% while improving data quality and reducing time-to-insight.



Your Optimisation Roadmap

Implementing these insights requires a structured approach. Jon recommends starting with a comprehensive audit to identify quick wins, then implementing smart scheduling for non-critical workloads, followed by vendor contract optimisation and AI-driven automation.

"The sequencing matters," Jon advises. *"Start with visibility, then move to optimisation, and finally to automation."* This approach ensures that each step builds on the previous one, creating a cycle of continuous improvement.

A realistic timeline spans 3-4 months

Month 1: Audit and implement initial quick wins

Month 2: Design and implement smart scheduling

Month 3: Renegotiate vendor contracts

Month 4: Implement AI-driven automation



Next Steps

Cloud cost optimisation isn't just an IT issue, it's a strategic business imperative that directly impacts your ability to innovate. Begin by conducting a thorough audit of your current cloud spend, then implement smart scheduling, renegotiate vendor contracts, and explore AI-driven automation tools.

"If you tell employees not to use AI, they will just do it on their phones anyway. Businesses need to stop blocking innovation and start enabling it with the right guardrails," Jon concludes.

Resources to Get Started

- ✓ [AWS Cost Explorer](#) – Track and analyse your cloud spend.
- ✓ [Matatika Cost Comparison Tool](#) – Find out how much you could save with usage-based pricing. Book a call with Aaron
- ✓ [Data Efficiency Blueprint](#) – An 8-point strategic framework for identifying cost-cutting opportunities, optimising data operations, and delivering measurable ROI from your data infrastructure.