Fabric Optimization Case Study

How a Leading B2B Retailer Eliminated Performance Issues Without Capacity Upgrades

Executive Summary

When a leading Australasian B2B retailer faced crippling performance issues in their Microsoft Fabric environment, their options seemed limited to another costly capacity upgrade – doubling their monthly costs from $18,000 to $36,000 AUD. Despite a recent upgrade just six months prior, their critical month-end reporting processes were forcing finance staff to work weekends, while senior developers were constantly pulled away from strategic projects to firefight performance issues.

Within just one month of implementing ADAICO's Fabric Health Check & Optimization Service, the company:

- Eliminated all throttling events without requiring a capacity upgrade

- Reduced peak capacity utilization from >150% to <75%

- Avoided $18,000 AUD in monthly infrastructure costs by eliminating the need for a capacity upgrade

- Returned all month-end processing to normal business hours

- Freed senior developers to focus on strategic initiatives

Most importantly, what started as a performance crisis has transformed into a strategic advantage. The company now has a clear roadmap for sustainable growth and innovation in their Fabric environment, with the confidence to adopt new features without the constant threat of performance issues or mounting costs.

The service achieved these transformative results with minimal disruption to the organization's operations. Our team handles all the complex implementation work behind the scenes, delivering a seamless setup experience for clients. The process requires no access to sensitive business data, addressing common security concerns. This case study details how ADAICO's specialized service turned what appeared to be an inevitable and expensive capacity upgrade into an opportunity for optimization and innovation, delivering immediate ROI while establishing a foundation for long-term success.

Client Background

A leading Australasian B2B retailer with nationwide operations and billion-dollar annual revenue. They serve tens of thousands of business customers and rank among the country's largest B2B enterprises.

BI & Analytics Environment

- 15 Power BI developers across business units

- 1,000+ report consumers

- 250 actively used reports across 45 workspaces

- Heavy utilization of Gen 1 dataflows (50% of capacity resources consumed)

- Recently migrated from Power BI Premium P2 to Fabric F128

- Monthly Fabric costs of approximately $18,000 AUD

The Challenge: A Perfect Storm of Issues

Performance Crisis

- Severe report performance issues during high-use, month-end periods, impacting board reporting, sales performance monitoring, and other critical business processes

- Finance and sales staff forced to access critical reports outside normal business hours (evenings and weekends) when capacity load was lower

- Monthly financial close processes frequently delayed, creating downstream impacts across the business
- Senior management began questioning whether Fabric was the right strategic platform choice, putting at risk the organization's substantial investment in Power BI infrastructure and expertise

Mounting Costs

- Recent Capacity upgrade from P1 to P2 doubled costs from $9000 to $18,000 AUD monthly
- Company was facing another potential upgrade to F256 ($36,000/month)
- Strong resistance to additional cost increases
- Concern about continuous upgrade cycle
- Resolving each performance incident required, on average, one week of senior developer time ($4K per incident) in unplanned costs

Resource Allocation Challenge

- Most skilled and expensive BI developers regularly pulled away from strategic projects to reactively fire-fight acute capacity performance issues
- Increasing stress and frustration as highly skilled developers forced to abandon planned work to troubleshoot performance issues - an area outside their core expertise and interests
- Constant context switching reducing productivity
- Limited optimization expertise
- Unsustainable support model creating risk of staff burnout and attrition

Governance and Control Analysis

- Absence of structured release management:
  - No performance testing gates before production deployment
  - No review of resource impact for new reports or artifacts
  - Reports moving directly from development to production without adequate optimization checks
- Limited control over self-service report design: While business users leveraged centralized Semantic Models for data consistency, they retained complete freedom to create their own report designs and DAX calculations. This freedom, while valuable for business agility, led to the proliferation of non-performant design patterns that significantly impacted capacity performance. The organization lacked the tools and processes to identify and rectify these issues before they affected the broader user base.
- Growing number of poorly performing reports impacting overall capacity performance and critical business processes
- Lacked a "big picture" view that linked governance to performance and ultimately cost management

ADAICO's Monthly Fabric Health Check and Optimisation Service

ADAICO's Fabric Health Check Service provides continuous monitoring and optimization of your Fabric environment. This ongoing service ensures performance improvements are maintained while proactively identifying and addressing new challenges as they emerge. The service combines automated analysis with expert consultation to deliver both immediate and long-term value.

Service components include:

- Comprehensive capacity utilization analysis

- Resource consumption monitoring

- Performance bottleneck detection

- Optimization recommendations

- Expert consulting support and fix implementation

- Training and enablement for client

Results and Benefits

Immediate Technical Impact

These improvements weren't just technical metrics - each translated directly to business value:

- CU utilization reduced from >150% to <75%, creating headroom for growth and adoption of new Fabric features – such as CoPilot

- Complete elimination of throttling events, ensuring uninterrupted access to critical business information

- $18,000 AUD monthly savings by preventing a capacity upgrade, improving the ROI of the existing Fabric investment

Operational Improvements

- Almost complete elimination in performance-related support tickets

- Eliminated weekend emergency response

- Returned month-end processing to normal business hours

- Enhanced development standards and practices

Project Benefits

Cost Savings
Avoided unecessary Capacity upgrades.

Performance Improvements
Enhanced staff productivity. Restores work-life balance.

Developer Time Reclaimed
Developers can refocus on strategic initiatives.

Reduced Capacity Utilization
Decreases risk of throttling. Provides scope to adopt new Fabric workloads.

Operational Efficiency
Less support tickets for Operations team. Can refocus on proactive initiatives

Stakeholder Perspectives

Executive Leadership: Strategic Platform Investment

Facing mounting infrastructure costs and performance challenges, the CIO found that optimization provided a better path forward than continuous upgrades:

"We were facing another expensive capacity upgrade, just 6 months after our last one. The optimization service not only eliminated that need but has given us confidence that we can adopt new Fabric features without constantly increasing our spend. The ROI has been significant."

Chief Information Officer

Finance Team: Operational Efficiency

The impact on financial operations and team morale was immediate and significant:

"The change has been dramatic. Previously, I had team members logging in during weekends to complete month-end reporting. Now everything runs smoothly during business hours. This has had a real impact on team morale and work-life balance."

Finance Manager

Operations Team: Transforming Service Delivery

The Operations Team, previously caught in a cycle of constant performance firefighting, experienced a fundamental shift in their ability to deliver value. Instead of managing user complaints and emergency fixes, they could focus on strategic improvements:

"Before this service, we were constantly firefighting performance issues. Every month-end was stressful, with multiple support tickets and frustrated users. Now we can focus on proactive improvements rather than crisis management. The reduction in after-hours support calls has been particularly welcome."

Operations Team Lead

Strategic Roadmap

Building on the immediate performance improvements, ADAICO worked with the client to develop a comprehensive strategy that would ensure sustained success. This roadmap balanced quick wins with longer-term strategic initiatives to maximize the value of their Fabric investment.

Month 1: Quick Wins

- Service implementation completed in under 60 minutes

- Key DAX optimization patterns identified and implemented

- Immediate reduction in capacity usage

- Elimination of throttling

- Return to normal business hours for month-end processing

Future Initiatives

1. Capacity Architecture Optimization

- Evaluate multi-capacity strategy (Two x F64 rather than single F128)

- Consider an isolated capacity for protection of critical content

- Separate development/testing environment

2. Release Management Enhancement

- Implement Fabric deployment pipelines

- Automated performance testing gates- using Best Practice Analyser (BPA) and Semantic Link

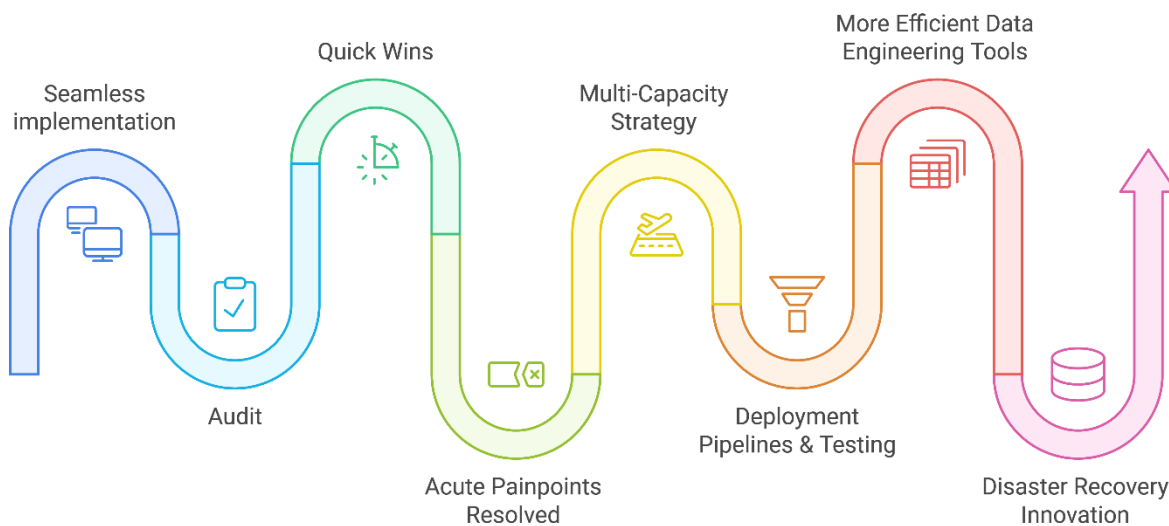- Version control and rollback plans

3. Data Processing Modernization

- Migrate to Gen 2 Dataflows

- Follow design patterns to ensure query folding

- Evaluate PySpark (5-10X efficiency potential)

4. Disaster Recovery Innovation

- "Backup Capacity" with pre-loaded critical reports for ultimate protection

- Near-instant failover capability

- Pay-as-you-use model, means near zero cost overhead

Roadmap

Seamless implementation · Quick Wins · Multi-Capacity Strategy · More Efficient Data Engineering Tools · Audit · Acute Painpoints Resolved · Deployment Pipelines & Testing · Disaster Recovery Innovation

Is Your Organization Experiencing Similar Challenges?

- Frequent capacity throttling issues?

- Rising Fabric/Power BI infrastructure costs?

- Developers spending time firefighting performance issues?

- Critical reports unavailable during peak periods?

- Unclear whether you have the right-sized capacity?

- Uncertainty about adopting new Fabric features?

Why Act Now?

Every month of sub-optimal Fabric performance has real costs:

- Unnecessary infrastructure spending

- Lost productivity from performance issues

- Delayed strategic initiatives

- Staff frustration and burnout

- Missed opportunities for innovation

Don't wait for performance issues to force your hand - proactive optimization delivers better results at lower cost.

Capacity Performance Risk Assessment

Book your consultation now for a Capacity Performance Risk Assessment

One of our experts will:

- **Assess Your Current Processes:** Examine your workflows, release procedures, and testing protocols to identify areas that may lead to capacity performance issues.

- **Identify Potential Risks:** Analyse factors like manual release processes and the absence of automated testing to pinpoint vulnerabilities affecting efficiency and scalability.

- **Provide Actionable Insights:** Offer tailored recommendations to enhance your systems, reduce risks, and improve overall performance.

- **Deliver a Comprehensive Report:** Receive a detailed report outlining our findings and suggestions

Choose Your Fabric Health Check Service Level

Fabric Health Check

- One-time comprehensive assessment of your environment

- Detailed analysis of current state and challenges

- Specific recommendations for improvement

- Ideal for organizations wanting to understand their optimization potential

Fabric Health Check Optimization Service

- Ongoing monthly monitoring and optimization

- Optimization consultant dedicated to your company

- Monthly consultant hours included

- Proactive issue identification and resolution

- Continuous improvement of performance and cost efficiency

- Strategic guidance for capacity planning and feature adoption

Service Level Comparison

Features	Fabric Health Check	Health Check Optimization Service
Comprehensive assessment	✓	✓
Detailed analysis and recommendations	✓	✓
Ongoing monthly monitoring	—	✓
Dedicated optimization consultant	—	✓
Proactive issue resolution	—	✓
Strategic capacity planning	—	✓
Ideal for	One-time insights	Continuous improvement seekers

Health Check Service Implementation

Quick and Secure Setup

Seamless implementation process handled by our expert team, with minimal access requirements:

- "Viewer" role on Fabric Capacity Metrics workspace
- "Contributor" role on single workspace for analysis

Security-first approach:

- Only analyses performance metadata
- No access to sensitive business data
- No disruption to operations
- Start seeing results within the first month

Contact Us

Ready to transform your Fabric performance and eliminate costly inefficiencies? Take the first step toward optimizing your environment today.

📧 **Email**: sales@adaico.ai – Reach out to us for more details or to schedule your Capacity Performance Risk Assessment.

🌐 **Visit**: adaico.ai – Discover more about our services, case studies, and how we've helped other organizations achieve unparalleled performance and cost efficiency.

Don't let performance issues hold you back. Join the growing number of businesses that have turned their Fabric challenges into strategic advantages. Contact us now and start seeing results in as little as one month!