Azure Cost Reduction Case Study: Auxis Helps Client Reduce Cloud Fees

Client Profile

Our Swiss-based, private equity-backed client owns and manages the world's largest fleet of 145,000+ unit load devices (ULDs) for the aviation industry. It also owns and operates a leading global network for the maintenance and repair of ULDs and inflight foodservice equipment. Overall, its 650+ employees provide management, repair, short-term leasing, and digitalization solutions to more than 90 airlines through a network of 550 airports, 18 regional offices, and 50 certified repair stations.

Business Challenge

Microsoft Azure cloud adoption can significantly reduce the cost and overhead of managing IT infrastructure. But the cloud doesn't automatically improve spending and performance – and there is great potential for waste, inefficiencies, and overruns without an effective cost management strategy.

Like most organizations consumed by running day-to-day operations, our client counted on Auxis to drive the effort to look for potential savings in the cloud spend:

- With so many competing priorities, the Client's Applications team wasn't sure about the utilization of some of their **cloud servers** – making it difficult to judge whether they were properly sized or not. They also **didn't have availability to the server metrics that provided visibility into performance.**

- The application's team had some **experience with Azure's native tools and services.** As a result, they lacked insight into potential savings opportunities and the complex, fast-changing payment plans that cloud platforms offer.

- There was not much information about how long certain servers were going to be utilized for. This could have been weeks, months or years.

- As long as cloud costs fell within budget, there was **little time or incentive to prioritize Azure cost reductions.** While business leaders did care about reducing costs, they were **unaware possible savings existed.**

The client's challenges are not uncommon. Nearly 65% of IT leaders cite "cost management and containment" as the biggest **pain point** to running cloud technologies and applications. For the sixth year in a row, organizations ranked optimizing their existing cloud use for cost savings as their top cloud initiative in Flexera's 2022 State of the Cloud Report.

That ranking is hardly surprising, given that most enterprises waste about 32% of cloud spend, the report found. The average organization also exceeds its cloud budget by 13% - and cloud spend is expected to increase by 29% next year.

Accessing experts in FinOps, or cloud financial management, has become vitally important for controlling cloud costs. FinOps teams are skilled at helping organizations take advantage of all cloud provider discounts and eliminating waste and inefficiencies.

Auxis had supported the client's migration to the Azure cloud platform two years before and continued to provide infrastructure management services. **As part of its value as a managed service provider, Auxis used its FinOps expertise to identify significant Azure cost reduction opportunities that had emerged since the migration and approached the client with a plan to optimize expenses.**

Solution & Approach

A 2021 **Forrester Consulting study** found that organizations can achieve average Azure cost reductions of 20-34% by taking advantage of Azure's Cost Management + Billing tool suite and best practices.

Auxis estimated that its cloud cost management proposal could deliver savings of at least 30% in per-server fees alone. Since the client maintained a multicloud strategy, the Auxis plan also included cost optimizations for the client's AWS cloud platform, which Auxis supported with migration and infrastructure management services as well.

Auxis implemented two key initiatives to create cloud cost optimizations for the client:

1. **Pricing optimization through Azure Reservations and the AWS Savings Plan.**
   The client utilized pay-as-you-go plans for instances running on its Azure and AWS environments. These payment plans can deliver cost savings by only charging for resources that are used.

   However, both cloud platforms also offer heavy price discounts for committing to a predetermined spend and/or capacity for a specified time. But there is a big caveat: you can only earn a substantial reduction on your cloud bills if you don't overcommit – and most organizations lack the expertise to strike the right balance.

With deep experience managing cloud infrastructure for an array of clients and a robust mechanism for tracking metrics, Auxis teams analyzed performance data and reservation recommendations from the cloud providers to help the client prebook appropriate usage and lower its monthly fees.

- The client reserved **one year of capacity on multiple instances with no upfront payment in Azure Reservations.** Auxis guided the client toward a year commitment instead of a longer term because it provided enough savings while maintaining flexibility for fluctuating server workloads. In addition, the client did not want to disburse cash upfront – opting for monthly payments since they delivered similar end results.

- Auxis helped the client make a **one-year Azure SQL Database Reservation.**

- Auxis also guided the client toward a **one-year commitment with no upfront payment to the AWS Savings Plan.** This plan requires a commitment to a specific instance family but doesn't factor in size.

2. **Resource optimization through right-sizing.**
   Right-sizing your cloud configuration is the process of upgrading, downgrading, or terminating cloud resources based on utilization metrics and other factors. Ensuring the configuration you pay for is the right fit is key to effectively managing cloud costs – preventing overprovisioning that leads to idle instances or underprovisioning that impacts performance.

   Organizations can correctly size cloud resources by matching instance types and sizes to their workload capacity and performance requirements, ideally every quarter. But the process can be quite challenging, considering the daunting array of choices cloud providers offer and ever-evolving resource needs.

   Auxis monitors cloud performance to identify idle and underutilized resources as part of its infrastructure management services, analyzing potential usage inefficiencies and modification recommendations from cloud tools like the Azure Cost Management + Billing suite. To assess if a real opportunity exists for reducing instances and lowering per-server fees, Auxis also weighs business impact - considering factors like instance purpose, hours of operation, and whether the application it serves involves constant processing or activity spikes.

   The Auxis team identified more than 40 instances as good candidates for downsizing.

Other best practices Auxis has implemented to achieve Azure cost reductions for the client include:

✓ Monitoring and analyzing Azure bills with the Azure Cost Management + Billing tool.

✓ Monitoring Azure Advisor best practice recommendations for potential cost savings.

✓ Estimating costs for Azure projects using the Azure pricing calculator and the Total Cost of Ownership (TCO) calculator.

✓ Taking advantage of savings opportunities provided by Azure offers and licensing terms, such as paying in advance for predictable workloads.

✓ Mitigating cloud spending risks by implementing cost management governance best practices using the Microsoft Cloud Adoption Framework for Azure.

Results

Within six weeks, Auxis had successfully measured, analyzed, and implemented an effective cost management strategy. Key benefits include:

12% Reduction in Overall Monthly Cloud Infrastructure Costs
After identifying and carefully analyzing potential cost optimization opportunities, Auxis achieved significant monthly cost savings for the client that exceeded its initial estimates by tens of thousands of dollars.

55%+ Reduction in Monthly Server Fees
By identifying and resizing idle and underutilized resources, Auxis was able to surpass its original cost savings estimate - significantly optimizing costs and improving efficiency for the client.
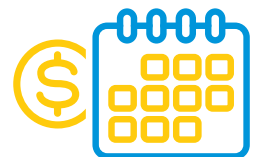
Optimized Cloud Ownership Costs

Cloud computing is a proven method for reducing IT infrastructure costs – if it's monitored and managed properly. But lack of insight and expertise can have considerable financial consequences, including unexpected spikes in cost, overpaying for unused resources, and inadequate cloud performance.
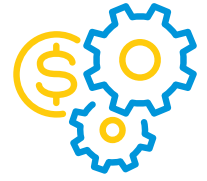
As a Microsoft Azure Gold Partner and AWS Advanced Partner, Auxis continuously utilizes best practices to maximize the value of the client's cloud computing investment and optimize its total cost of ownership. With cloud infrastructure management as the core competency of Auxis teams, they are dedicated to staying up to date with the latest tools and services that can identify mismanaged resources, eliminate waste, reserve capacity for higher discounts, and right-size computing services.