Contain cloud spend while preserving application performance with automatable cloud cost optimization tools

Challenges
Clients are overspending in the cloud to avoid performance risks.

It’s almost impossible for humans—no matter how skilled in DevOps, SRE or cloud—to continuously determine the exact compute, storage and database configurations for cloud applications to deliver performance at the lowest cost. So, you increase the allocation of cloud infrastructure to avoid application performance risks, and often end up with an unnecessarily high cloud bill.

The IBM Solution
IBM Turbonomic

Using the IBM® Turbonomic® platform’s AI-powered automation and cloud optimization solutions, you can continuously help ensure application performance (both traditional and cloud-native) and optimize costs. The platform’s cloud cost management tools work with public, private, multicloud and hybrid cloud environments and with any major cloud provider. With IBM Turbonomic software, your cloud investments are smarter, automation is easier, and you can finally realize the promise of agility, elasticity and speed to market.

Benefits

With IBM Turbonomic, you leverage software to continuously match real-time app demand to the many cloud configuration options, across compute, storage, Amazon RDS, Amazon EKS, and reserve instances. Key benefits include:

Performance at the lowest cost, continuously
Applications get exactly the resources they need when they need them, continuously and automatically. No guessing, no compromising. Just results.

Quick time to value. Automate for lasting business impact
Take non-disruptive, reversible actions to immediately lower costs, improve performance, and build trust. Automate more actions for big results that last.

You transform the business, software optimizes cost
You can confidently automate our cost optimization, so it can be seamlessly built into transformation, not just an afterthought.

Cloud migration planning
Expedite cloud migration initiatives with accurate, easy-to-use cloud migration planning capabilities.
Why IBM Turbonomic + AWS

The IBM® Turbonomic® platform continuously generates actions that optimize Amazon EC2 instances, Amazon RDS databases and Amazon EBS volumes based on real-time demand. Its prescribed actions help ensure performance while minimizing cost. Additionally, the IBM Turbonomic platform manages your reserve instance (RI) inventory and directs actions that maximize RI utilization and coverage, all through the lens of application performance.

Unified platform delivers optimization across all app resources:

- **Amazon Elastic Compute (EC2)** – Automatically determines the correct EC2 instance type for cloud application workloads. The only solution that simultaneously considers IOPs, RIs and discounts.
- **Amazon Elastic Kubernetes Service (EKS)** – Continuously optimizes for performance and cost via automated container rightsizing, pod moves, cluster scaling and planning.
- **Amazon Elastic Block Storage (EBS)** - Optimizes for performance and cost by analyzing IOPS and throughput to determine when to scale between cloud tiers and size up volumes.
- **Amazon Relational Database Service (RDS)** - Continuously analyzes storage and compute utilization, generating specific scale-up and scale-down actions.

Case Study: Metrostar

**Background**

The Metrostar operations team was mandated to improve the management of their AWS resources and needed to improve application performance while reducing their IT workload.

**Solution**

After deploying IBM Turbonomic, the Metrostar team automated their storage tier on AWS. Since implementing automated IBM Turbonomic optimization, they saw improvements in performance and policy compliance.

**Benefits**

After a 25% reduction in wasted resources and hundreds of hours of manual labor saved, Metrostar was able to take on 12 new customer environments without having to grow their team.

Key Features

- **Full Stack visualizations** - Get complete visualization of your application and infrastructure stack to continuously help ensure performance.
- **AI-powered insights** - Gain real-time insights into the health and performance of your applications.
- **Intelligent automation** - Engage real-time, AI-powered automation to help ensure application performance while minimizing cost.
- **Integrations** - supports a wide range of software and platforms to extend your ecosystem.

SaaS-Exclusive Features

- **Hybrid connectivity** – Manage on prem and cloud workloads from one simplified console.
- **Continuous innovation** – Be the first to receive new features automatically.
- **Reduced maintenance** – Patches & updates automated to ensure security and performance.
- **Cloud migration** – easy-to-use cloud migration planning capabilities.

For more information visit [IBM Turbonomic](https://www.ibm.com/solutions/turbonomic).