The need to understand and control cloud costs for modern applications

Controlling cloud costs is crucial for businesses to optimize expenses, manage budgets effectively and ensure a positive return on investment. However, optimizing cloud cost continues to be the top initiative that challenges businesses today. The complexity of pricing models offered by cloud service providers makes it difficult for businesses to understand and manage costs. With various options like pay-as-you-go, reserved instances and spot instances, businesses need to carefully analyze and choose the most cost-effective option based on their workload requirements. Additionally, lack of visibility into cloud spending poses a challenge. With dynamic resource provisioning and deprovisioning, businesses often struggle to have complete visibility into their cloud costs. This can result in surprises in billing and overspending. Manually correlating cloud costs in the absence of robust monitoring tools and processes adds to the challenge. Without proper tools, businesses find it difficult to track and analyze cloud costs, identify optimization opportunities, and stay within budget.

Cisco Full-Stack Observability application cost and resource optimization

Cisco is enhancing modern application monitoring practices by enabling organizations to address cloud cost and workload optimization use cases with the Kubernetes Cost and Workload Profiler, Cost Insights and Application Resource Optimizer modules. Built on the Cisco FSO Platform, they capture cloud cost, correlate utilization and efficiency data and business functions, and leverage AI/ML algorithms to deliver detailed cost analysis and optimization recommendations. Technology
teams gain real-time visibility into cloud usage, insights to make data-driven decisions and recommendations to reduce cloud costs while ensuring the performance and reliability of business-critical applications.

The Kubernetes Cost and Workload Profiler module delivers the initial capabilities required to integrate application optimization within established modern application monitoring practices. It continuously analyzes workloads to provide visibility into the efficiency, risk and resource usage of Kubernetes workloads running in cloud and cloud native environments.

The Cost Insights module seamlessly integrates detailed cost data of Kubernetes workloads into established modern application monitoring practices to address hybrid cost optimization. It analyzes and generates detailed cost data for the workloads running on cloud and cloud native infrastructures. It enables organizations to gain deeper visibility into their cloud spend, including the cost of idle resources.

The Application Resource Optimizer module seamlessly integrates into established modern application monitoring practices to address application resource optimization. The module uses AI/ML algorithms with active learning models to analyze cloud infrastructure performance, health and metrics in real-time and deliver insights to make data-driven decisions and recommendations based on testing that is beyond human scale to develop, that reduce cloud costs while ensuring the performance and reliability of business-critical applications.

Understand and take control of your cloud spend

Application cost and resource optimization modules for Cisco Cloud Native Application Observability delivers the visibility, insights and actions required to understand and take control of your cloud spend:

- Quickly identify workloads that are overprovisioned and carrying excess cost, and those that are under provisioned and at risk of jeopardizing customer digital experiences.
- Gain insights into the full fiscal impact of current workloads and make data-driven decisions on workload priority and future technology investments.
- Reduce excess cloud costs and ensure optimal application performance and reliability by eliminating unused cloud resources and optimizing resource allocation based on user experience.