keyva

Implementing cost saving measures to enhance return on value

Cost Optimization

In a rapidly evolving technology landscape, organizations are facing the ongoing challenge of keeping pace. This leads to the use of numerous solutions and deployment architectures. The resulting complexity, coupled with macroeconomic uncertainties, often leads to errors in managing resources efficiently. Unchecked, this can result in unexpected bills for underused or over-provisioned resources.

The opportunity lies in implementing cost-efficient practices and automation. By monitoring project and resource costs against set budgets through automated shut-off, infrastructure-as-code, and notification mechanisms, organizations can mitigate risks of unforeseen expenses.

Our Approach

At Keyva, we have identified the factors to consider when implementing a cost optimization program within your IT environment:

- **Remove or Retire Unused Resources:** Identify resources that are not in active use or necessary for ongoing efforts. This involves a meticulous review of each line item in the billing statement or each resource tracked for cost purposes. Once this is complete you can free up capacity by either removing these resources or archiving them until a final decision is made.

- **Over Provisioning or Under Provisioning:** Optimize expenses by adjusting resource capacities to actual needs. By right-sizing resources, significant cost efficiencies can be achieved. This process typically involves collaboration across infrastructure, application, and database teams.

- **Performance Monitoring:** Utilize key performance metrics to monitor and remediate resources for an efficient infrastructure deployment strategy.

- **Cohesive Asset Management Strategy:** Leverage Configuration Management Databases (CMDBs) as a single source of truth, facilitating accountability and scheduled reporting to reduce wasteful spending. Scheduled reporting on identified metrics can highlight changes in usage of certain resources, and help plan for intentional changes.

- **Security:** Embed security into automation frameworks, ensuring compliance and avoiding costly penalties by controlling access to critical resources. Non-compliant systems typically enhance the risk for failing SLAs.

- **Automation:** Implement infrastructure-as-code pipeline automation, GitOps and other automated frameworks to manage resource lifecycles efficiently, automatically un-provisioning after intended use in development and test environments. This will help you achieve both cost and maintenance efficiencies.

- **Training and Knowledge Transfer:** Facilitate the adoption of new practices through training and knowledge transfer, enabling teams to work with agile methodologies and infrastructure-as-code as part of their daily activities.

How We Can Help

As the size of cloud workloads grow, Keyva emphasizes the importance of monitoring and analyzing overall infrastructure costs. We address the common issue of manual resource management, providing expertise in infrastructure-as-code pipelines to prevent unnecessary costs and security risks.

> **Case Study:** A client was running their workloads in Azure. Their management team decided to perform a cost assessment review. They had a spend of approximately $180,000 per month across eight subscriptions. The Keyva team used tags to break down cost allocations for their development, test, and production environments. Implementation of Keyva recommendations for cost savings, including right-sizing of overprovisioned resources, automation of resource lifecycle management, bundling of licensing, and budget-based alarms, saved the client $20,000 a month.

Outcomes

- Cost Inefficiency Identification: Conduct cost optimization studies to identify and rectify cost inefficiencies.

- Visibility of Individual Resource Costs: Analyze IT spend with visibility at an individual resource level.

- Resource Usage Awareness: Implement cost-efficient protocols based on resource usage awareness to achieve cost transparency.

Keyva is committed to delivering tangible results, ensuring our clients achieve optimal cost management in their IT environments.