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Budget Hacks: Smart Tactics to Slash Cloud Technology Costs

The ubiquity of cloud computing has fundamentally transformed the way organizations manage their digital assets. As a result of cloud technology, businesses have achieved better agility, greater scalability, and lower infrastructure costs. However, while cloud computing is considered a cost-effective technology platform because an initial expenditure on physical hardware isn't required, expenses can mount quickly.

Typically, cloud computing costs are based on three main factors: the amount of processing power, memory, and storage needed to run workloads efficiently; the volume of data transferred out of a cloud service, into a cloud service, or both; and the size and type of storage. In addition to these costs, there are often hidden charges for data transfer and retrieval services, as well as technical support. Opaque and complex cloud pricing models and add-on fees can wreak havoc on an organization's IT budget if there is no strategy in place for cost containment.

According to Gartner, IT spending on public cloud services continues to rise. For 2024 alone, global spending on public cloud services is predicted to grow to $679 billion and projected to exceed $1 trillion in 2027. These financial realities notwithstanding, organizations must adopt cloud technology in order to modernize business operations and remain competitive.

> A key obstacle for cloud-deploying organizations today is the ability to control costs for the platform while ensuring that data is impervious to cyber threats. Implementing best practices for optimizing cloud expenditures can help organizations balance technology costs with efficiency, security, and resiliency.

This white paper discusses strategies for mitigating cloud technology costs without compromising security and performance.

CHALLENGES SURROUNDING SECURE CLOUD COST OPTIMIZATION

Optimizing cloud costs involves strategically deploying resources to reduce spending while still maintaining robust data safeguards and operational efficiency. Cloud environments are complex both in size and scope, which presents organizations with several issues to navigate in the management of costs.

These challenges include:
- Lack of visibility and control in cloud spending
- Overprovisioning and underutilization of resources
- Rightsizing and autoscaling
- Complying with government and industry regulations.

However, by continuously tracking performance, costs, and compliance using detailed metrics, analytics, and automation tools, organizations can ensure cloud expenditures are optimized and aligned with their business requirements.

Lacking Visibility and Control in Cloud Spending

Maintaining visibility and control over cloud spending can be problematic for organizations due to the dynamic and distributed nature of cloud environments. Without strong monitoring and reporting mechanisms, organizations may be unable to track resource usage accurately. This lack of spending transparency can quickly result in budget overages and inefficiencies. This opaqueness also makes it difficult to identify and eliminate idle resources or unused services.

When cloud utilization is accurately tracked, metrics surrounding the utilization of processing, memory, storage, and networks provide valuable insight into how efficiently resources are being utilized on the platform. Metrics are tracked over time to identify trends and patterns, which then provide budgetary guidance to organizations for planning future expenditures on cloud services.

Overprovisioning and Underutilization of Resources

Without a comprehensive roadmap for managing their cloud platform, some organizations may overestimate their resource needs and overprovision the infrastructure to ensure consistent performance. Overprovisioning is the practice of reserving more resources—such as processing power, memory, storage, or network bandwidth—than are, in reality, required for workloads.

> Overprovisioning can lead to wasted capacity. In addition, it can cause poor performance and increased costs. A recent Gartner report estimated that 70% of cloud costs are wasted. By identifying idle resources and merging them with utilized ones, organizations can eliminate waste and reduce costs.

Rightsizing and Autoscaling Resources

When it is necessary to adjust capacity, organizations can leverage built-in cloud features such as rightsizing and autoscaling. In the cloud environment, rightsizing involves provisioning the right number of resources to run applications and workloads efficiently and cost-effectively. It requires the analysis of utilization data to determine both the best mix of cloud services and the appropriate size of resources to eliminate any over-provisioning. Rightsizing ensures resources are not underutilized by streamlining operational efficiencies and saving money.

Autoscaling is another important aspect of cloud spending management. In contrast to rightsizing, which involves analytics and constant monitoring, autoscaling is an automated process that responds to changes in demand for resources in real time. The automated nature of autoscaling ensures that an organization's resources can be dynamically adjusted based on the current traffic load to maximize resources for optimal performance during spikes in activities. Whereas, rightsizing is important for tweaking the cloud infrastructure to optimize operational and cost efficiencies, **autoscaling is the answer to overprovisioning** in that it allocates the right number of resources at all times.

Complying with Government and Industry Regulations

Organizations in the healthcare, finance, and government sectors are required to comply with various regulatory guidelines—including HIPAA, PCI DSS, and SOC2, among others—to protect sensitive information and mitigate risks. Regardless of the industry, compliance failures lead to data breaches, massive fines and lawsuits, and brand damage. In 2023, the average cost of a data breach was $4.45 million; this figure doesn't include the collateral costs related to rebuilding trust and relationships with the public and with financial stakeholders.

> Service Organization Control Type 2 (SOC2): a cybersecurity compliance framework developed by the American Institute of Certified Public Accountants (AICPA): is the standard many organizations rely on to evaluate their current security posture.

SOC2 is based on the five trust principles of security, availability, processing integrity, confidentiality, and privacy. SOC2 audits assess an organization's security program over the long term to provide a 360-degree view of its security landscape and identify opportunities to improve cybersecurity utilizing best practices. Ensuring compliance with SOC2 guidelines requires a comprehensive approach that combines robust frameworks, thorough assessments, and the right set of tools.

Partner with a Trusted Service Provider to Optimize Cloud Expenditures

Cloud cost optimization solutions offer a flexible architecture that can be customized to meet an organization's most complex cloud management and cybersecurity needs, especially as the organization seeks to respond agilely to evolving industry risks, regulations, and SOC2 requirements.

Service providers are well versed in specialized tools, insights, and industry best practices to help organizations effectively navigate the intricacies of cloud cost optimization. By leveraging their expertise, organizations can streamline their cloud spending, maximize cost savings, and ensure that their cloud resources are aligned with their business objectives. Furthermore, partnering helps organizations stay compliant and secure, allowing them to unlock the full potential of their cloud investments without sacrificing vital functions.

CONCLUSION

Secure cloud cost optimization is a critical exercise for organizations seeking to balance cost efficiency with cloud security and performance. By understanding the financial challenges, recognizing obstacles to deployment, and implementing best practices and technologies, organizations can achieve significant cost savings while safeguarding critical assets.

In a landscape where every penny counts and cybersecurity reigns supreme, the value of partnering with an experienced cloud service provider who takes a holistic approach to integrating cost optimization with robust security measures is essential for long-term success and cannot be overstated.

ABOUT SDG

SDG is a leading provider of technology, consulting, and managed services that enable organizations to confidently execute cloud, cybersecurity, identity, and risk management solutions to mitigate risk, protect assets, and grow securely.

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