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Demystifying the Maze: A Guide to Shared Services Cost Allocation in the Cloud

Venkata Sasidhar (Sasi) Kanumuri

USA

ABSTRACT

Organizations may greatly benefit from utilizing shared services in cloud-based settings, including increased operational effectiveness and cost savings. Nevertheless, efficiently allocating the costs related to these shared services can take time and effort. This article strives to navigate the complex world of cloud resource management alongside asserting the significance of understanding the notion of Shared Services Cost Allocation, or SSCA. It examines the many benefits of implementing a clear SSCA model, highlighting how it may promote better cost transparency, increase team accountability, and enable data-driven decision-making throughout the company. This article also explores other approaches to cost allocation, including equal split, proportionate allocation based on utilization, and proportional allocation based on other factors, outlining the benefits and drawbacks of each in different situations. It also highlights how crucial cooperation is between various stakeholders, such as finance, IT, and individual teams, in creating and sustaining an effective and long-lasting SSCA model. The paper highlights the critical role that efficient SSCA plays in optimizing cloud service ROI and advancing businesses toward their strategic objectives.

***Corresponding author**

Venkata Sasidhar (Sasi) Kanumuri, USA.

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Introduction

Although the cloud has many business advantages, efficiently managing costs can take time and effort. This is particularly valid for shared services and resources several departments or teams use. Effective cloud resource management requires fair and transparent allocation of the cost of these shared services. Within cloud computing, shared services are resources several teams or departments use in a company. These services, like databases, SaaS applications, and Kubernetes clusters, offer essential features that facilitate a range of cloud-based operations. Although shared services are very advantageous in cost-effectiveness and convenience, their cost allocation presents unique challenges.

Shared services cost allocation (SSCA) refers to fairly and explicitly splitting up costs related to shared services among the various departments and teams that use them. It is a key component of any FinOps practice, enabling cost transparency, accountability, and equitable cost allocation. The following lists the benefits of SSCA for efficient cloud cost management, allowing organizations to:

• **Gain Insights into Cost Drivers:** By understanding their proportionate share of shared service costs, departments can identify areas for potential cost optimization.

• **Promote Accountability:** Holding teams accountable for their share of costs encourages responsible resource utilization and reduces wasteful spending.

• **Make Informed Decisions:** Leaders can leverage the insights gained from SSCA to make data-driven decisions regarding cloud services, resource allocation, and future investments.

Therefore, implementing a well-defined SSCA model is essential for maximizing the value of cloud services and ensuring efficient resource management within an organization.

Understanding Shared Services Costs

Several teams or departments within shared services consume and share many cloud-based resources. Here are a few typical instances:

• **Infrastructure Services:** These include resources like Kubernetes clusters, databases (e.g., RDS), and load balancers. These services provide foundational functionalities that support various cloud workloads across the organization.

• **Software as a Service (SaaS) Applications:** Many organizations leverage centrally purchased SaaS applications like project management tools or customer relationship management (CRM) platforms, which various teams share and access.

• **Marketplace Services:** Cloud platforms often offer marketplaces where organizations can subscribe to pre-configured services or tools tailored to specific needs. These services can be shared and utilized by multiple teams within the organization.

It is important to understand that not all shared service costs can be directly attributed to specific teams through tagging.

Tagging involves assigning labels or identifiers to cloud resources to track ownership and usage. This allows for granular cost allocation based on specific teams or projects utilizing the resource. However, shared service costs, such as support fees, taxes, or committed use discounts, are not directly associated with individual resources and cannot be easily tagged. These require alternative allocation strategies, such as proportional allocation based on overall cloud spending or other relevant metrics.

Distinguishing between taggable and non-taggable shared service costs is crucial for establishing a comprehensive and accurate SSCA model.

Building a Successful SSCA Model

Developing an effective shared services cost allocation (SSCA) model requires careful consideration of various factors. Here are some key steps involved:

Identify Shared Cloud Costs

This first step requires you to thoroughly grasp how much your company spends on cloud services. This involves thoroughly analyzing your cloud bill to identify the primary cost drivers associated with shared services. Common cost drivers include:

- Infrastructure services like Kubernetes clusters and databases
- SaaS applications or marketplace services subscribed to centrally
- Support fees, taxes, and committed use discounts

By analyzing your cloud bill, you can gain valuable insights into the overall breakdown of your cloud expenses and identify the specific shared services that contribute significantly to the cost.

Determine the Cost Allocation Methodology

After determining your shared cloud expenses, you must select the best cost allocation strategy. Numerous approaches are available, each with unique benefits and drawbacks:

- **Even Split:** Regardless of each department's unique consumption, this approach equally splits the overall cost of shared services. While simple to implement, it can be unfair if some departments utilize shared services significantly more than others.
- **Proportional Allocation Based on Usage:** This method allocates shared service costs based on each department's resource usage. This can be achieved through tagging, where resources are assigned labels reflecting the specific teams or projects utilizing them. This method provides a fairer cost distribution but requires a robust tagging strategy for accurate tracking.
- **Proportional Allocation Based on Other Factors:** In cases where tagging is not feasible, alternative metrics can be used for proportional allocation. These may include factors like headcount, department size, or overall cloud spending.

The choice of cost allocation methodology depends on your specific needs and the nature of your shared services. For instance, proportional allocation based on usage is ideal for services like databases where specific teams can be identified through tagging. However, proportional allocation based on overall cloud spending may be more appropriate for shared costs like support fees.

It is crucial to emphasize the importance of a proper tagging strategy for accurate proportional allocation. Implementing a well-defined and standardized tagging system ensures consistent and reliable cost allocation based on actual resource usage.

Communicate Effectively and Transparently

Clear communication with all stakeholders is vital throughout the SSCA process. This includes:

- Explaining the chosen cost allocation methodology and the rationale behind it.
- Providing transparent cost allocation details to all departments.
- Addressing any concerns or questions stakeholders may have.

Effective communication fosters transparency and trust among departments, reducing confusion and promoting understanding of individual cost responsibilities.

Continuously Monitor and Modify

An effective SSCA model is not static. Resource consumption patterns may alter, and new services may be offered as your organization's needs change. Monitoring and modifying your SSCA model regularly is critical to ensure it stays accurate and reflects the realities of modern business. This may involve:

- Regularly reviewing cost allocation reports and identifying any discrepancies.
- Adjusting the chosen cost allocation methodology or metrics as needed.
- Re-evaluating and updating the tagging strategy based on changes in cloud resource usage.

By continuously monitoring and modifying your SSCA model, you can ensure it accurately reflects your evolving cloud environment and provides valuable insights for informed decision-making.

Specific Scenarios and Cost Allocation Strategies

Shared service costs can be broadly categorized into taggable and non-taggable. While tagging enables us to directly attribute costs to specific teams or projects for certain resources, other shared costs present unique allocation challenges. Here, we explore strategies for handling these distinct scenarios:

Taxes, Support Fees and Credits

The Cloud Service Provider (CSP) typically applies these costs at the account level, meaning they are not inherently tied to specific resources or teams. Allocating these costs fairly requires alternative strategies due to their non-resource-specific nature.

Even Split Allocation: The even split method is a straightforward way to allocate shared service costs. It involves dividing the total cost equally among all departments or teams, regardless of their usage.

Pros

- **Simplicity:** Easy to implement and understand, requiring minimal setup or ongoing maintenance.
- **Transparency:** All departments are aware of their share upfront.
- **Fairness (sometimes):** If usage is relatively balanced, it can be considered equitable.

Cons

- **Potential Unfairness:** Departments with lower usage subsidize those with higher usage, potentially demotivating optimization efforts.
- **Limited Cost Control:** This doesn't incentivize departments to identify and reduce unnecessary usage.

Suitability of Even Split

- **Limited Scope:** Temporary situations or small-scale shared services.
- **Balanced Usage:** When departments utilize shared services roughly equally.

• **Cost as a Minor Expense:** When shared service costs are a minor component of departmental budgets.
• **Strong Cost-Consciousness:** When a collaborative culture exists with strong cost awareness across the organization.

Proportional Split Method: This approach distributes shared costs based on each team's overall cloud spending percentage. The underlying assumption is that teams utilizing more cloud resources proportionally contribute more to these shared expenses.

Here's the formula for a proportional split:
Cost Allocation per Team = Shared Cost * (Team's Cloud Spend / Total Cloud Spend)
Example:
Shared Support Fee: $1,000
Team A's Cloud Spend: $5,000
Team B's Cloud Spend: $3,000
Cost Allocation for Team A: $1,000 * (5,000 / 8,000) = $625
Cost Allocation for Team B: $1,000 * (3,000 / 8,000) = $375

Shared Services like RDS and K8s
Chargeback models for Relational Database Services (RDS) and Kubernetes (K8s) can be intricate due to each team's varying workloads. These services often serve multiple teams, making it crucial to identify relevant metrics to attribute their costs accurately.

Identifying Relevant Metrics
• **Data-Intensive Workloads:** Metrics like storage used and network IOPS (Input/Output Operations Per Second) can be employed to measure data storage and transfer activities. This helps gauge the proportional resource consumption by different teams.
• **Compute-Intensive Workloads:** When working on tasks requiring a lot of processing power, measurements like CPU (central processing unit) and memory utilization are quintessential factors that cannot be forgotten. These indicators clearly and accurately depict each team's usage of computational resources.

Combining Metrics
Since different workloads prioritize different resource types, more than a single metric might be required for fair cost allocation. Therefore, a weighted combination of relevant metrics is often employed to distribute resource costs proportionally. This involves assigning weights to each metric based on its relative importance in reflecting a team's resource usage.

Here's a simplified example formula for combining metrics:
Cost Allocation per Team = Shared Cost * ((Metric1_Weight * Metric1_Value) + (Metric2_Weight * Metric2_Value) + ...)
Example:
Shared K8s Cost: $15,000
Team A:
Average CPU utilization: 50%
Average Memory utilization: 30%
Team B:
Average CPU utilization: 30%
Average Memory utilization: 70%

Assuming equal weights (0.5) for both CPU and memory utilization:
Cost Allocation for Team A: $15,000 * ((0.5 * 0.5) + (0.5 * 0.3)) = $6,750
Cost Allocation for Team B: $15,000 * ((0.5 * 0.3) + (0.5 * 0.7)) = $8,250

It is crucial to remember that these are merely simplified examples and that the weights assigned to the various metrics may change based on the particulars of each task and the business's expectations. Consulting with cloud cost management tools and cloud service provider documentation can provide further guidance on cost allocation calculations specific to your platform and services.

Benefits of Effective Shared Services Cost Allocation (SSCA)
Implementing a well-defined SSCA model offers many benefits for organizations leveraging cloud services. Here, we explore some of the key advantages:

Improved Cost Transparency
A well-defined SSCA model provides a window into the often-opaque world of cloud billing, providing individual departments with a clear understanding of their cost drivers. By identifying their proportionate share of shared service costs, departments gain valuable insights into how their activities contribute to overall cloud expenses. This transparency fosters:
• **Awareness:** Departments become aware of their cloud resource usage patterns and the associated costs.
• **Ownership:** Teams gain a sense of ownership over their cloud spending, encouraging them to identify potential areas for cost optimization.

Enhanced Accountability
Effective SSCA fosters a sense of accountability within organizations. By holding departments responsible for their share of shared service costs, the model incentivizes:
• **Responsible Resource Utilization:** Departments are urged to use cloud resources effectively to reduce their portion of shared expenses.
• **Decreased Waste:** When departments are held responsible for the related expenses, they are less likely to squander resources.

This shift in mindset can significantly impact overall cloud spending and optimize resource allocation across the organization.

Informed Decision-Making
Strong SSCA models provide leaders with the facts and insights needed to make well-informed decisions about:
• **Cost Optimization:** Leaders can find ways to cut costs by analyzing how departments use various cloud services and the costs associated with each one.
• **Resources Allocation:** Leaders can make well-informed decisions about resource allocation by thoroughly understanding how different departments use shared services, ensuring that funds are targeted to the most valuable areas.
• **Service Selection:** Leaders can use cost allocation data to evaluate various cloud services and select the most affordable solutions based on their requirements.

Fostering Collaboration and Team Work
Building and maintaining an effective SSCA model often necessitates collaboration between various stakeholders within an organization, including:
• **Finance:** Provides expertise in cost allocation methodologies and reporting.
• **IT:** Offers technical knowledge about cloud services and resource consumption patterns.
• **Individual Teams:** Contribute insights into their specific resource usage and needs.

This collaborative approach fosters transparency, trust, and a shared understanding of cost ownership, ultimately leading to better cooperation and alignment between departments in managing cloud resources effectively.

Improved ROI and Business Value

Effective SSCA directly contributes to a higher return on investment (ROI) for cloud services by promoting:

• **Cost Transparency:** Enables cost optimization and reduces unnecessary spending.

• **Accountability:** Encourages responsible resource utilization.

• **Informed Decision-Making:** Allows for the choice of cost-effective services and the strategic allocation of resources.

Businesses can maximize the benefits of adopting cloud computing by selecting cloud services wisely and guaranteeing effective use of available resources. Over time, this leads to increased corporate value and a stronger competitive advantage. A clear shared services cost allocation model must be implemented to optimize the advantages of cloud services and guarantee effective resource management in an enterprise. Effective SSCA enables firms to maximize cloud investment, enhance business value, and accomplish their strategic goals by promoting accountability, transparency, and well-informed decision-making.

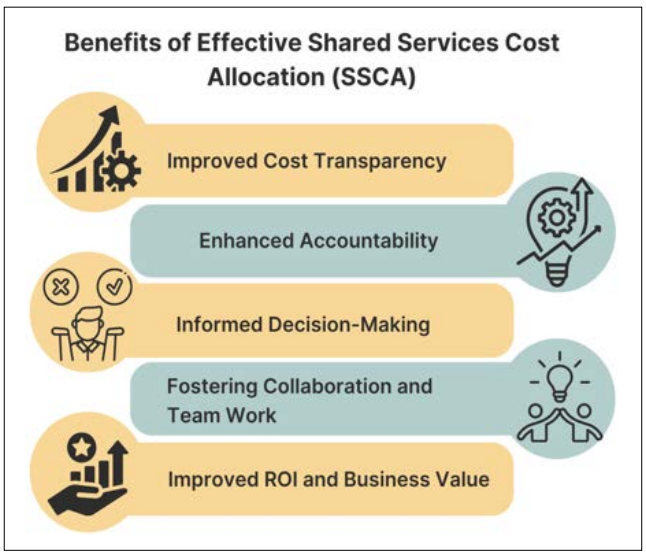

Figure 1: Benefits of Effective Shared Services Cost Allocation

Conclusion

While cloud-based enterprises can benefit greatly from shared services, allocating their costs can be difficult. A clear Shared Services Cost Allocation (SSCA) model should be implemented to help you navigate this complex environment. Through promoting openness, responsibility, and well-informed choices, efficient SSCA enables institutions to:

• **Gain Control Over Cloud Spending:** Precise cost allocation empowers departments to understand their resource usage and identify opportunities for optimization.

• **Drive Responsible Resource Utilization:** Holding teams accountable for their share of costs incentivizes efficient resource usage and minimizes waste.

• **Make Data-driven Decisions:** Leaders gain valuable insights to make informed choices regarding cloud services, resource allocation, and future investments.

Ultimately, a robust SSCA model unlocks the true potential of shared services, maximizing the value of cloud adoption and propelling your organization toward its strategic goals. Clear communication, collaboration, and continuous adaptation are crucial to maintaining an effective SSCA model that evolves alongside your organization's needs [1-5].

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