CLOUD 101

Understanding How Cloud & Cloud Consumption Works

What is cloud computing?

Cloud computing allows organizations to innovate faster, offering unmatched flexibility and efficiency by providing access to IT resources online.

This provides organizations with reliable infrastructure while offering cost savings as the cloud service providers maintain the data centers and servers. With on-demand services, organizations are also able to easily scale up or down depending on needs.

Top Cloud Service Providers

- Amazon Web Services
- Oracle Cloud Infrastucture
- Microsoft Azure
- Google Cloud

Types of Cloud Services

Software-as-a-Service (SaaS)

Provides services and software applications over the internet.

Infrastructure-as-a-Service (IaaS)

Provides on-demand access to computing resources such as storage, networking, and virtualization.

Platform-as-a-Service (PaaS)

Provide on-demand access to hardware and software, allowing an easier path for companies to build, run, and manage their applications.

Accenture Federal Services

How do cloud computing costs work?

FORMULA

Service You Select (S)
Unit Price You Pay (P)
× Volume You Use (V)
Total Cloud Cost (TC)

Compute

Metered hourly based on the number of virtual machines and additional components you utilize

Network

All data that passed through a cloud's network is measured and billing is based on the total bandwidth consumed based on the data transferred every month

Storage

All data that is stored in the cloud is metered at regular intervals and calculated monthly based on the capacity consumed.

Typical Cloud Pricing Options

Pay-As-You-Go

Purchase cloud resources on-demand without any long-term commitments and no upfront payments.

Commitment-Based Usage

You can get discounts for committing to use a fixed amount of resources per hour for a designated time period. You can also get discounted pricing allowing you to pay less when you use more services, allowing you to benefit from cost savings when you need to scale up.

Steps to Take to Understand Costs

1. Data Ingestion

Gather and integrate date showing your current cloud maturity with costs per provider and usage data.

2. Allocation

Define how cloud costs should be separated, and which part of the business is responsible for which costs as well as which costs should come from a shared element.

3. Reporting & Analytics

Gain insights into the cloud data to summarize, categorize, and compare cloud data usage across the organization. This is one of the most important FinOps capabilities.

4. Anomaly Detection

Understand how to detect, identify, provide alerts, and managed unexpected cloud costs to minimize impact on usage and costs.

Other Cloud Considerations:

- Workforce (knowledge, skills, expertise, costs)
- Software (licenses, marketplace purchases, etc.)
- Governance