Cost Analysis: AWS vs Microsoft Azure vs Google Cloud Platform (GCP)

Reference link: <https://cast.ai/blog/cloud-pricing-comparison-aws-vs-azure-vs-google-cloud-platform/>

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| --- | --- | --- | --- |
| Cloud Service | Storage (GB/month) | General Purpose Computing (per hr) | Compute Optimized Computing (per hr) |
| AWS | 0.023 | 0.134 | 0.153 |
| Microsoft Azure | 0.021 | 0.166 | 0.169 |
| GCP | 0.023 | 0.151 | 0.235 |
| Oracle | 0.025 | 0.104 | 0.120 |

Table 1: Prices provided by Cloud Services (in $) for US-East Region (Case Study)

Billing Perspective

Major Takeaways:

* Cloud Storage Price: These cloud service providers compete closely with one another and have set similar price ranges for storage services.
* Compute Pricing: Azure and GCP have the most expensive choices for General Purpose and Compute Optimized VM Instances, meanwhile AWS has the median value, with better services than Oracle (cheapest for these situations).
* On-Demand Discounts: General-purpose instances with a 1-year commitment receive quite similar discount rate in **AWS** and **Azure**. Still, AWS offers a cheaper alternative.

Recommended: **AWS,** because of its **breadth and depth of services**. The rich array of tools, including databases, analytics, management, IoT, security, and enterprise applications, makes AWS the right solution for many teams. Cost-wise also it is not that expensive, and it is extremely convenient to use for countries outside India.

AWS EC2 Pricing

Reference link: <https://aws.amazon.com/ec2/pricing/>

<https://calculator.aws/#/createCalculator/ec2-enhancement>

There are three types of EC2 Pricing available:

1. On-Demand Instances: Let you pay for compute capacity by the hour or second with no long-term commitments. Preferred for applications with short-term, spiky, or unpredictable workloads that cannot be interrupted, or being developed or tested on EC2 for the first time.
2. Savings Plan: Flexible pricing model that can help you reduce your bill by up to 72% compared to On-Demand prices, in exchange for a commitment to a consistent amount of usage (measured in $/hour) for a 1- or 3-year term. Preferred for committed and steady-state usage.
3. Spot Instances: Let you take advantage of unused EC2 capacity in the AWS cloud and are available at a discount of up to 90% compared to On-Demand prices. Preferred for applications that have flexible start and end times.

Recommended: On-Demand Instances for Development Phase, and then once app is completely designed, we can shift to Savings Plan.