

## CapEx Versus OpEx Cloud Cost Models: What IT Leaders Need to Know

### Introduction

Organizations of all sizes are scaling their use of the cloud. Startups leverage the cloud for the speed-to-market and flexibility it provides, while more mature enterprise companies look to the cloud to help revamp their business operations and better serve their customers.

As a result, finding ways to make the most of the cloud is a key consideration among IT leaders—from CIOs charged with creating long-term cloud strategies, to infrastructure team leaders tasked with managing complex environments. And as technology has evolved, so have the ways in which organizations budget and pay for it.

Read this white paper for an overview of cloud computing and the ways in which it can be leveraged, as well as for an explanation of how cloud funding models differ from traditional hardware and software products.



### Cloud Types: Public, Private, and Hybrid

Cloud computing is the delivery of hosted services over the internet. It's the on-demand delivery of compute power, database, storage, applications, and other IT resources through an internet-reachable services platform. Leveraging the cloud helps organizations gain a competitive edge by innovating faster and at less cost than with traditional IT technologies

With cloud computing, there is no need to build and maintain an in-house IT infrastructure. And with cloud automation and flexible billing, organizations can scale at their own pace and only pay for what they use.

Cloud types include:

#### Public Cloud

Public cloud refers to infrastructure and services that are available for use by anyone who has a network connection and can pay for the service. It's an off-premises solution that provides services to multiple clients using the same shared infrastructure.

#### Private Cloud

Private cloud is an infrastructure solution where resources are dedicated and isolated, or “single-tenant.” In some cases it is built by an organization, hosted onsite at that organization, and run by the same organization's in-house team. However, to fully leverage the benefits of cloud, most IT teams choose a solution that is built, operated and managed by a third-party service provider.

#### Hybrid Cloud

A hybrid cloud connects cloud infrastructure with existing resources in a company's data center. By using a hybrid approach, organizations maintain the control and security they need for workloads that they want to keep on premises, as well as the ability to leverage the cloud.



## Cloud Deployment Models

Common cloud deployment models include infrastructure as a service (IaaS), platform as a service (PaaS), and software as a service (SaaS). All three provide some level of virtualized computing resources such as servers, network, operating systems, and storage via the Internet.

IaaS is perhaps the most flexible of the three models. With IaaS, an organization can consume cloud resources on-demand and scale them as needed. There is no need to

maintain and manage physical hardware.

IaaS solutions can be deployed in a private or public model. Thus, deciding which option is right for your organization is often the first step in the process of choosing an IaaS solution and selecting a provider.

Learn more about what to consider when selecting a cloud solution [here](#).

## Classifying the Costs of Cloud Expenses

A key difference between a cloud IaaS solution and traditional data center technology project are the ways in which the expense is classified.

With IaaS, an organization can license technology resources and pay for them on an ongoing basis instead of buying and paying for the infrastructure up front. In accounting terms, paying-as-you-go is an operating expenditure (or OpEx) and paying upfront is a capital expenditure (or CapEx).

Operating expenditures (OpEx) are current expenses for goods and services that will be utilized within a time period, such as a fiscal quarter or year. An OpEx expense is fully deducted in the year it is incurred. Examples include compensation and benefits, legal fees or office supplies.

Capital expenditures (CapEx) are planned expenses that are expected to yield benefits in the future. Examples include office equipment, facilities or patents and licenses. CapEx assets have a useful life beyond the tax year, which means the cost of the asset can't be fully deducted in the year it is incurred. Instead, it is capitalized and depreciated over its useful life.

For IT teams, the process of gaining approval and budget for a project can be dependent on whether it will be an OpEx or a CapEx expense. For finance teams, the decision of how to fund various expenses often comes down to the tax impact of the expense on the organization.

Traditionally, IT purchases have been CapEx due to the longer-term depreciation opportunities they present. With the rise of the cloud, and the shift away from the procuring and managing of on-premises data center infrastructure, more IT projects are now OpEx in nature. OpEx cost models can reduce the financial risk associated with testing and maintaining new technologies as it reduces the size of the upfront financial investment.

## Shifting to OpEx from CapEx: Opportunities and Obsacles

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### The Ability to Unlock Investment Capital

A key benefit of this shift in budget allocation is the ability to unlock some of the investment capital currently tied up in on-premises data centers. Instead of purchasing technology based on long-term projections decided years ago, organizations can quickly onboard new cloud services and applications and pay only for what is needed when it is needed, as well as scale usage up and down on demand.

### Finding Ways to Leverage Existing Investments

If your organization has recently made a significant CapEx investment in data center hardware, convincing them to approve an additional OpEx expense to fund a cloud migration can be a difficult task. Include in your business case ways to make the most of existing investments. For example, choosing a cloud provider that uses the same tools and technologies that you do in your data center eliminates the time and expense of training or hiring new staff.

## Comparing Cost Models: OpEx vs. CapEx

OpEx		CapEx	
+	-	+	-
Manageable ongoing fees	Competes for budget with other short-term of ongoing projects	Longer term depreciation opportunities	Significant up-front expense
Little-to-no upfront expense	Difficult to estimate on a per-quarter basis	Potential to use existing budget	Technology lock-in

Two of the most common cloud use cases that demonstrate the benefits of an OpEx spending model are data center extension and data center replacement.

## Data Center Extension

Organizations with seasonal or periodic peak traffic periods that don't quite justify permanently scaling up an on-premises data center, or in need of a more flexible test environment, can extend to the cloud and pay only for the resources they need. This way, they save the time and complexity of building out more resources, more rack space, and more IT professionals. Extending a data center to the cloud saves time and CapEx.

## Data Center Replacement

The need to "lift and shift" workloads from the data center to a cloud solution is sometimes essential in order to comply with new business realities. These include merger or acquisitions, data center consolidation initiatives, cost-reduction exercises, or hardware end-of-life projects.

## Cloud Migration Strategies for Success Start with OVHcloud

Digital innovation has transformed how organizations operate and opened up new opportunities to generate revenue. At the same time, it has created new obstacles for IT teams—obstacles that the cloud can help overcome.

OVHcloud provides bare metal servers, and private and public clouds that are tailored to individual IT infrastructure application needs and industry requirements.

Business solutions include Disaster Recovery, Data Center Extension and Data Center Replacement.

Our proven products support customers worldwide, including Fortune 500 companies and top educational institutions that rely on us for uninterrupted access to their services and workloads.

Learn more at [OVHcloud.com](https://www.ovhcloud.com).