

Introduction

Balancing ease-of-use, functionality and cost is a constant struggle, especially as the types of solutions available increase every year. There are three primary acquisition methods for IT infrastructure: outright purchase, leasing and consumption-based models. The best model is ultimately dependent on your business needs. First, consider the advantages and disadvantages of each model.

The purchase model has the advantage of the greatest control over the infrastructure but the disadvantage of requiring upfront capital investment, which can be significant. Diligent planning is required before making a purchase decision. You will need to understand the capacity that will be required for the lifetime of the infrastructure — this is easy to either underestimate or overestimate. Additionally, if your organization has peak and valley workloads there may be times when you will be underutilizing the infrastructure you've bought.

Unlike the purchase model, the lease model allows your organization to utilize infrastructure only for its useful lifespan, returning it to the lessor when it's no longer needed. This avoids upfront capital expenditure and frees up funds to evolve your infrastructure alongside changes in business needs more easily. Leasing does have similar disadvantages to the purchase model by requiring capacity and usage planning, as well as preparing for underutilization of the infrastructure you are paying for.

The consumption-based model is the most flexible option. This model allows organizations to commit to a baseline of capacity and then scale infrastructure accordingly. This option allows you to increase capacity when needed and scale back resources when not in use. The shift in pricing model means you are paying for what you use and using what you pay for with little to no underutilization.



Find the model that fits your business needs

While there are advantages and disadvantages to each model — it's ultimately your specific business needs that will determine which model works best. The primary consideration when choosing a pricing model is the particular dynamic IT demands that your organization faces. There may be frequent digital transformation initiatives underway, such as developing new products and online services or improving existing offerings with digital enhancements. Another factor is the pace of these transformations.

Critical Elements

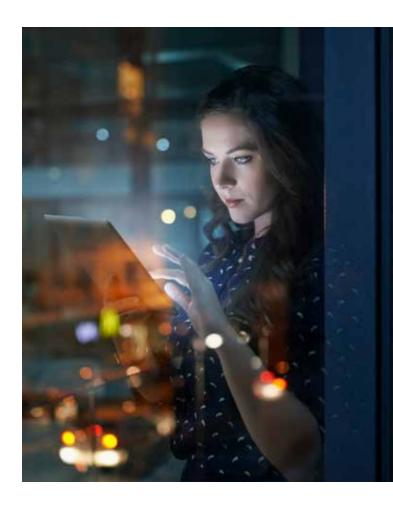
Changing Demands

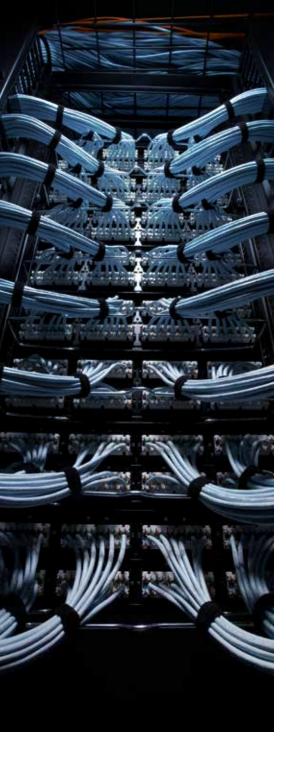
If change is the norm, it may not be clear at any point in time what the demand will be for compute, storage or network infrastructure in the future. This kind of environment requires agile infrastructure that can respond to changes in sectors such as healthcare, government and education, as well as potential business opportunities. Many organizations are trying to establish a presence in emerging markets and technologies and must hold on to existing customers while trying to attract customers from slower moving competitors.



Resiliency

When an organization needs IT resiliency, there is a strong desire for consistent uptime to avoid business service interruptions. Users may count on digital services to always be available, similar to the expectations of home utility or telecom services. Business depends on IT infrastructure to function, and the impact of disruptions grows as digital transformation efforts roll out new products and services.







Capacity and Usage Management

Another critical factor in choosing a purchase model is the time to deploy resources. Lag time from when an organization realizes it will need infrastructure and when it is available can have a large impact on its functionality. This issue is especially problematic when there are constantly changing business requirements.



Storage and Security

Think about how your data needs to be stored, how it moves, what the compliance or security requirements are and what kind of governance is needed. Professional services teams of a managed service provider experienced in information security and regulatory compliance can be particularly helpful in this area.

Limitations on data in the cloud mean on-premises infrastructure is still needed. Organizations and businesses in a variety of sectors have concerns around required adherence to regulatory laws, privacy and compliance — the most sensitive data, such as financial or medical information, needs to stay on-premises. This can add difficulty to what applications and services need access to data in multiple environments.

Maintaining secure access controls and appropriate authorizations across identity management systems is particularly challenging.



Costs

Be careful when estimating storage costs and make sure to include inter-region transfer charges, any charges to access objects in an object store, as well as any other operations that have an associated cost. Many organizations with onpremises storage needs are adopting an operating expense pricing model. With this option, IT services are provided by in-house departments and often offer cloud-like pricing models. However, this removes a key advantage of public cloud services by not being a strictly consumption-based model.

Purchase model pros and cons

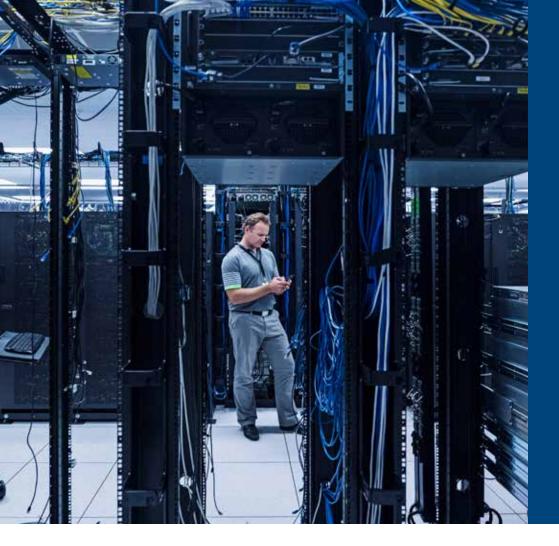
Cost considerations for public cloud deployments must also include meeting demands for low latency storage. By keeping storage close to compute infrastructure, architects and developers can take advantage of fast access to data and avoid longer latencies associated with inter-data center networking. There are also no egress charges with this model. Cloud vendors typically charge whenever data is copied from cloud storage, but this is not the case when a business owns its own storage systems. Purchasing allows you to customize the charge-back model. Since the organization owns its own infrastructure, it has more flexibility to decide how to charge for its services. This can provide an opportunity to be more competitive with cloud providers in terms of the overall cost.

On the con side, on-premises storage infrastructure can require more IT resources to manage, is often underutilized and requires complex capacity planning. Overcoming these hurdles can require investing in tech resources that might be better spent delivering business services and functionality. In general, enterprise consumers are now demanding consumption-based pricing models similar to the ones they have experienced in using cloud services. Purchasing an IT infrastructure often comes with minimum storage capacity requirements, putting further pressure on organizations that may have swings in their storage needs. Lastly, the long procurement cycles associated with the purchase model do not fit with the fast pace of a changing business.





Within the next three years, organizations that purchase their IT upfront will go from buying 69% of their infrastructure mix to 55%.¹





Leasing model pros and cons

The leasing model is similar to purchasing in many ways. Like purchasing, this model includes greater control over the infrastructure, the ability to support low-latency storage and a lack of egress charges. There are however financial advantages over the purchase model, in particular, leasing eliminates upfront costs and lowers the total cost of ownership compared to a purchase since the leased infrastructure can be returned after it has served its useful life cycle. This model also enables the vendor to resell or reuse returned equipment — that lowers the cost for the leasing customer. This model also shares disadvantages with the purchase option. There is still complex capacity planning involved in preparing for the infrastructure, the possibility of underutilization of resources and long procurement cycles.

Consumptionbased model pros and cons

A consumption-based pricing model is quite different from the previous two models. One of the biggest advantages of this pricing model is the access to elastic capacity. With this option, your organization can quickly scale up and down according to demand. The pace at which the business can change its tech stack is always in line with the rate of change in businesses. A consumption-based model leaves room to focus on business-specific applications and not on infrastructure.

A consumption-based pricing model is an ideal option for an agile business environment. It does not lock an organization into a fixed set of resources and admins are able to change infrastructure as needed. You pay for baseline capacity and augment with additional on-demand capacity.

This model is also compatible with cloud migration. Many businesses are already moving some workloads to the cloud. The consumption-based model brings the cloud pricing model in-house, which can help streamline cloud migrations since they have the same approach to costs.

There is a low upfront investment and no capital expenditure required. Smaller incremental purchases are faster to process, and there are no long procurement cycles. Another advantage is the deployment speed offered by the consumption model — new deployments can be finished in 14 days while expansion of existing infrastructure can be done as quickly as five days.

All of this usually adds up to higher user satisfaction. According to a Forbes Insight report, 81% of organizations using consumption-based solutions are satisfied with application and data security performance, compared to only 69% of purchase model clients. Similar satisfaction disparities between purchase and consumption-based models are seen across the field, including in usage costs, ease of access and overall platform adaptability.









More than half of organizations (62%) who have adopted a consumption-based IT approach report revenue growth of more than 5% over the past three years.¹

Implementing your chosen model

Consumption-based models are ideal for the agile business needs common today. The prevalence of cloud service adoption has already prepared many organizations for the consumption-based model. The pricing, ease of use and elastic capacity of the cloud is already being utilized by businesses. Overall, flexible IT infrastructure adoption is increasing, and with good reason. Project management is made easier by experienced professionals who can help create plans, execute plans, and monitor and adapt as needed using the consumption-based model. When it comes to planning and architecture, this model can grant access to consulting on architecture and design questions, as well as help with developing continuous integration and continuous deployment pipelines. You can also learn best practices for monitoring the pipelines from the provided support staff.

In the end, the right pricing model for your organization will depend on your business needs. Whether it's the stability and fast data access of the purchase and lease pricing models or the agility and pricing flexibility of the consumption-based model, there is a good IT infrastructure solution for your specific needs.

Dell Technologies' APEX is a breakthrough portfolio of consumption & as-a-Service offerings that simplify digital transformation by increasing IT agility and control. By aligning payments with usage, APEX ensures that customers only ever pay for exactly what they need and enables organizations to scale resources quickly and efficiently. Additionally, it shifts the burden of monitoring, maintenance and support back to Dell Technologies allowing an organization to redeploy its finite IT resources towards building new business functionality and improving customer experience. Lastly, through on-premise deployment, APEX enables organizations to enjoy optimal application performance through low latency connections while also permitting organizations to comply with data location governance requirements.





1. Based on a Forbes study commissioned by Dell Technologies and Intel, "Delivering On Demand: Momentum Builds Toward Flexible IT" March 2021. Results based on a Forbes Insights global survey of 800 IT decision makers with manager title and above conducted in November and December of 2020. Respondents came from a variety of industries, including retail, financial services, technology, manufacturing and telecommunications. All respondents came from firms with at least 500 employees. Actual results may vary. Full report: https://www.delltechnologies.com/resources/en-us/asset/analyst-reports/solutions/forbes-insights-delivering-on-demand.pdf

