

WHAT ARE THE HIDDEN COSTS OF CLOUD ADOPTION?



Conventional wisdom suggests that cloud computing, with its promise to trade high infrastructure [CapEx with affordable ongoing OpEx](#) is a financially viable alternative for small and midsize businesses that cannot afford to deploy and maintain their own data centers. In order to analyze the true cost of cloud computing, the monthly subscription fee alone doesn't portray a complete picture. Organizations must evaluate the associated expenses, pricing with respect to the actual service consumption that may be unpredictable and the unforeseen expenses incurred due to vendor policies or usage situation. The most common hidden costs of cloud computing are described as follow:

The Hidden Cost of Under-Optimized Resource Management

Vendors make it easy for new customers to adopt cloud solutions. However, customers often fail to manage resources for cost, usage and performance optimization. As a result, they end up paying more than they should have, for choices that were made at their own discretion. The common hidden costs include:

- *Under-Optimized Provisioning:* Spinning too many server instances that never get used is an obvious hidden cost. Under-provisioning also incurs unnecessary expenses in terms of degraded application performance or unexpected overages that may compromise the overall budget strategy.
- *Unused Resources:* When the unused resources are not de-provisioned, the bill keeps adding up. Lack of communication between users, infrequent auditing and lack of automated cloud

de-provisioning capability causes the service to remain available, subscribed and billed to the organization.

- *Under-Optimized Cost:* Large vendors offer cloud services with an array of purchase options suitable for a diverse set of businesses and use cases. Organizations that fail to identify the best pricing option and service package for their specific use cases, budget and business requirements may be unable to opt for the most financially viable option. It is important to evaluate exactly which cloud appliance is most suitable for the specific business needs and offer the ability to translate into cost savings for the organization.

The Hidden Cost of Vendor Tactics

Vendors are not always transparent regarding their pricing tactics. As a result, unsuspecting customers succumb to the pricing strategies designed to benefit vendors at their own expense by making the wrong purchase choices. These hidden costs include:

- *Freemium:* An initial trial or service doesn't mean it's entirely free. Vendors tend to limit the free option for certain service thresholds that users tend to exceed without noticing. Other limitations around usage and expiration date may also turn a free trial into a paid service. Users should also watch out for automated subscription renewals to ensure that they are not charged once a free trial is over, if needed.
- *Vendor Lock-In:* The cloud may be free to enter but it can cost to leave. Vendors may keep this cost large enough that the cost of switching to another vendor may be orders of magnitude higher than the resulting cost savings.

The Hidden Cost of Service Quality

Vendors are expected to deliver the services as per the agreed SLAs. In the real-world however, the vendor may be unable to meet these standards and at best, only refund the cost of undelivered service levels. For customers, an underperforming cloud solution may cause costly service disruption as well as regulatory and security concerns. These hidden costs include:

- *Support:* Even with large cloud vendors, immediate support service may not be an option for all customers due to their workforce limitations and a growing customer-base. The waiting time for issue resolution may incur costs in the form of lost productivity and inability to serve end-users. Furthermore, customers don't have adequate visibility and control into the cloud infrastructure to evaluate the issue and perform a fix from their end, which means waiting for vendor response is their only option.
- *Reliability and Performance:* SLAs guarantee certain performance levels. However, the impact of reliability and performance lapses may vary between customers and the time of downtime incidents. As a result, organizations need to invest in redundant systems and set up disaster recovery services to reduce the cost of data center downtime.
- *Security and Data Loss:* Despite the best measures in place by vendors, [cybersecurity](#) risks may compromise some customers. The resulting data loss or service outage may translate into financial losses, costly lawsuits for failure to protect sensitive end-user information and damages to brand reputation.

The Hidden Cost of Making Cloud Work

Cloud computing is advertised as a viable solution for organizations of all sizes and industry verticals. The enterprise IT industry is rife with diverse set of solutions for many use cases. Yet, every organization tends to have unique requirements that may necessitate customization or a mix-and-match of the available solutions. This results in two common hidden costs:

- *Complexity and Customization:* Organizations may require specific changes into the cloud solution to ensure a better integration with existing systems. As the infrastructure and usage grows, organizations aren't always able to maintain optimum performance levels with a customized IT environment. Infrastructure complexity tends to magnify as organizations scale their deployments, forcing them to invest in additional resources to maintain desired operations and performance levels.
- *IT Expertise:* When dealing with a sprawling infrastructure that consists of a diverse and hybrid mix of IT services from multiple vendors, organizations can never have enough skills in-house to make everything work, 100 percent of the time. As a result, they must tap into the external pool of expertise in the form of consultants, new hires and vendor support. This adds to the expenses, which are not always apparent or predictable beforehand.

When devising an IT budget, these hidden costs should be carefully evaluated, expected and planned for. The only consistent and predictable parameter within the cloud strategy should be the change – change in usage, pricing, vendor support, market needs, performance requirements and security posture, among other aspects of cloud computing.

Having said that, there's a little caveat, in favor of cloud computing.

Traditional on-premise IT infrastructure deployments aren't immune to any of these costs either! In fact, organizations increasingly turn to cloud alternatives because the traditional datacenter solutions are too difficult or resource-intensive to optimize for performance, cost, security, vendor flexibility and scalability, among other aspects of the IT strategy. And through the decades, cloud computing has consistently emerged as a more popular and better performing solution for small and midsize business firms across all those fronts.