

ADVANTAGES OF CLOUD COMPUTING: 5 BENEFITS



Cloud computing empowers organizations of all sizes and industry verticals to focus their resources on product development and innovation while third-party cloud vendors take care of the infrastructure. The IT service is available at an affordable subscription-based pricing that allows organizations to get started with their first prototype build and testing, or scaling business into new markets in testing the success rates before committing resources over the long term. The advantages range from cost benefits to technology innovation and business process improvement to security improvements when done right. Here's a list of five key benefits of cloud computing for your organization:

1. Cost Variability: Trading CapEx with OpEx

Organizations operating on limited financial resources leverage cloud technologies to transition from a capital expense model to an operational expense pricing model. By sourcing IT services from the cloud, organizations can focus their investments on building HR capital, business growth, product development and improvements, marketing and customer support, among other expensive business needs. For a fast-growing organization, the cost component of IT infrastructure can grow exponentially. The expenses associated with deployment, management and security of a complex

IT infrastructure can overwhelm and limit the agility of organizations in response to fast changing market requirement.

Organizations that heavily rely on IT infrastructure to power their business services also have to consider the hidden costs associated with running on premise data centers. For instance, failure to avoid data center downtime can lead to unprecedented financial losses, lawsuits and damages to the brand reputation. By leveraging cloud computing services however, vendors are committed to deliver reliable, secure and available services as per the SLA agreements. Developing the same capabilities in house may be beyond the financial limitations of most organization, and yet the cost of not employing these capabilities can potentially lead to business failure.

2. Optimizing DevOps

Cloud computing and [DevOps](#) are the two important interlinked components driving [digital transformation](#) in modern software organizations. DevOps dictates the process framework that employees follow individually and collectively, while cloud computing enables the necessary technology solutions. Without cloud computing, organizations must deploy and manage all necessary infrastructure on premise, invest in software licensing, take care of software updates and security. These limitations may force organizations to compromise their DevOps transformation goals and instead rely on traditional software development lifestyle practices by trading off the inherent benefits of DevOps such as faster product development lifecycles and agile business operations. Cloud computing is a paradigm that enables practices such as continuous integration, delivery, deployment and release, and cloud ensures on-demand availability of the tooling necessary to fulfil these DevOps processes.

3. Reduces Complexity

Many organizations that rely on advanced and complex datacenter systems to operate at scale are challenged with the ongoing management and security needs of complex IT infrastructure. Executives are forced to invest resources in areas focused on keeping the systems running instead of scaling business operations in broader markets or in research and development toward innovative solutions. Cloud computing helps alleviate these concerns by transferring the responsibility of IT infrastructure management, security and the associated operations to cloud vendors. As a result, customers of cloud computing are able to free up resources and make them available toward investments that translate into business development, growth and customer experience improvement. Vendors are committed to fulfil the SLA agreements that limit the total annual downtime, service performance levels and security measures. The same level of commitment would require average organizations an unprecedented level of resource investment that overwhelms their budget limitations.

Additionally, cloud computing has enabled a range of technology solutions through SaaS offerings that make it easier for employees to perform their daily business operations. The SaaS enterprise IT market segment is growing at unprecedent rates, with vendors producing innovative new solutions at affordable subscription-based pricing, all of which make cloud computing a viable model for business organizations to consume new technology solutions.

4. Improved Security and Compliance

Tightly regulated industries face stringent compliance requirements associated with the security, availability and performance of datacenter technologies. Organizations handling sensitive financial, healthcare or other private information of customers are often required to deploy strong mechanisms to protect customer data. These requirements present challenges for new as well as established organizations in regulated industries to focus their efforts on developing compliant infrastructure and resources instead of dedicating investment toward breakthrough solutions, inventions and innovation.

Cloud vendors market their services for niche segments within tightly regulated industries such as pharmaceutical and healthcare, defense and governments organizations, and are therefore required to fulfill the necessary compliance requirements associated with specific industry verticals. Cloud service providers typically operate at a large scale and deploy enterprise-grade security, performance and availability systems that incur significant capital and operational expenses.

Many executives are concerned over the transfer of mission-critical apps and sensitive business information to third-party off-site datacenters. However, it's important for organizations to compare their internal security mechanism and control with vendors dedicated significant CapEx to develop advanced security capabilities and thereby earning the certifications necessary for stringent global compliance.

5. Business Future-Proofing

The technology industry segment is fast moving, agile and responsive to changing market situations. Pioneers and industry leading organizations lead the competition from the front and respond to market changes proactively. The agility is easier to realize when the necessary technology resources are at their disposal. Traditional technology models such as on-premise datacenters tend to limit this agility as organizations first need to deploy new infrastructure before scaling the business. This slow approach to scaling business is replaced by the agility of a modern cloud computing service model, which allows organizations to scale resources on a whim, at a fraction of expense in operational cost to test new business expansion strategies.

Additionally, vendors are responsible to upgrade the datacenter systems and offer a variety of high-spec technology packages. As a result, organizations can simply switch workloads to faster resources when high performance computing is needed, and roll back these expansive server resources in response to lower market demands to cut the cost on cloud services.