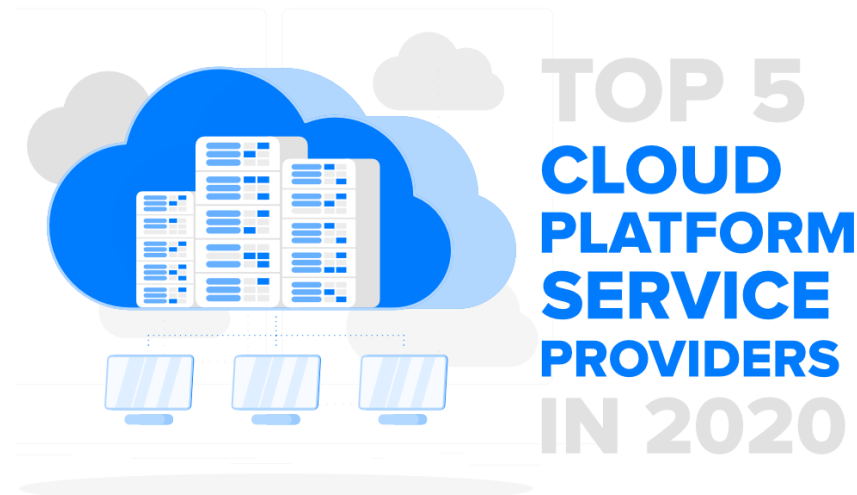


Cloud Service Providers

Cloud Computing is the **latest buzzword** in the IT sector that has changed the way IT solutions are delivered and consumed by the end-users. Earlier people were using hard drives to store their data on a computer but now Cloud Computing services have replaced such hard drive technology. Cloud computing provides services such as storage, databases, servers, processing, memory, networking, and software through the Internet. When you update your Facebook status, you are using cloud computing. When you use net banking, again you are into the cloud. Chances are strong, that you may depend on cloud computing to solve challenges faced by your business. Many companies are investing billions of dollars in cloud migration. A lot of valid reasons given by IT experts shows that cloud services deserve hype around the world. Businesses that are not moving to the cloud are limiting their chances of growth.

By 2020, a corporate “no-cloud” policy will be as rare as a “no-Internet” policy - Gartner



There are so many companies offering cloud services but the best one depends on your **business needs** or application. However, there are some factors you should consider such as your level of expertise, location, cost, reliability, flexibility, security, and of course things which you want to accomplish. A few key trends such as **multi-cloud, data acquisition, support for artificial intelligence, analytics, IoT, edge computing** are emerging for cloud computing in 2020 that have shifted from 2019, 2018, and 2017. Among various cloud service providers, very few offer a range of products to host from a simple static website to complex machine learning applications. Based on these factors and key trends let's discuss some of the top cloud computing vendors in 2020.

1. Amazon Web Service

launched in 2006, AWS is the best cloud service provider **leading in the market**. It becomes a major player in AI, database, machine learning, 5G cloud, multi-cloud and serverless deployments. AWS operates in **20 geographical regions** across the world. The company reported a revenue of **9 billion dollars** in Q3 2019.

- AWS offers **175 fully-featured services** to meet any kind of business requirements. These services are database storage, computing power, networking and many more
- You can virtually host any applications, including networks like firewall, DNS, Load balancing, or even you can have your virtual private cloud.
- AWS applications are scalable, flexible, reliable, secure and trustworthy.
- Easy sign-up and fast deployment. The best thing is there is no upfront cost and you pay for what you use. It also offers a FREE tier for some of their popular services.

2. Microsoft Azure

Microsoft Azure was launched in 2010 as Windows Azure, and later in 2014, it was renamed, Microsoft Azure. It was launched years after the release of AWS and Google cloud but still, it is the fastest-growing cloud and giving tough competition to AWS and other cloud service providers. There is a five-year partnership between Microsoft and **Disney**. In this partnership, the new method will be developed to move production content to the cloud. Azure has **54 data centers** regions across the world available in **140 countries**.

- Azure offers hundreds of services including AI + Machine Learning, Analytics, Blockchain, Compute, Containers, Databases, Developer Tools, DevOps, Identity, Integration, Internet of Things, Management, Media, Microsoft Azure Stack, Migration, Mixed Reality, Mobile, Networking, Security, Storage, Web, and Windows Virtual Desktop.
- Microsoft Azure is available with public or private cloud service or hybrid cloud service consists of both private and public.
- Scalability, consistency, security, flexibility, and cost-effectiveness.
- Azure supports various operating systems, databases, tools, programming languages and frameworks.
- It's easier for users to move their application or framework without any hassle and recoding them again.
- 24/7 cooperative team paying attention to their customers. A free trial version of Microsoft Azure is available for 30 days.

3. Google Cloud

Google cloud is another set of solutions for users to get the benefit of cloud services. If you are serious about latency to build performance-oriented applications then Google cloud is the best choice because it includes **GCP & G Suite**. According to Gardner, the public cloud services market is forecast to grow **17% in 2020 to \$266.4 billion**, up from \$227.8 billion in 2019. Google cloud has a firm grip over the banking and finance sector. **eBay, Snapdeal, and HSBC** are some major clients of Google. In July 2019 **VMWare** also announced a partnership with Google cloud which is the biggest collaboration of last year. As of Q1 2020, Google Cloud Platform is available in **22 regions, 61 zones and 200+ countries**.

- It offers a variety of products and services including AI and Machine Learning, API Management, Compute, Containers, Data Analytics, Databases, Developer Tools, Healthcare and Life Sciences, Hybrid and Multi-cloud, Internet of Things, Management Tools, Media and Gaming, Migration, Networking, Security and Identity, Serverless Computing, and Storage. Google products are also offered in the cloud, including G Suite, Google Maps Platform, Google Hardware, Google Identity, Chrome Enterprise, Android Enterprise, Apigee, Firebase, and Orbitera.
- Security, stability, flexibility, scalability and trustworthy.
- GCP offers the cheapest cloud services in the market. It offers \$300 in credit to be used in 60 days as a free trial.
- Flexible payment plans based on Pay-As-You-Go (PAYG). Also, the cost only applies if the codes given by a user run accurately if not, it doesn't cost any amount.
- Easy migration of data without touching or rewriting any codes.
- Machine learning and the use of API are very easy.

4. IBM Cloud

Developed by IBM, this cloud service offers another set of solutions to the users to deploy their applications on the cloud. It offers IaaS, SaaS, and PaaS services via **public, private, hybrid and multi-cloud** models. IGM generated **5.3 billion dollars** of revenues according to Q3 2019 which is 6.4 percent higher than the previous quarter. IBM cloud offers approximately 170 products and services to meet the customer's business demands. IBM's best bets come in the form of the **Internet of Things, Cognitive Computing and Blockchain**. Recently IBM has **Red Hat**, for the delivery of hybrid solutions efficiently. The cloud service is helping home appliance manufacturers, retailers, and medical supply businesses.

- Computer Network, Storage, Cloud Packs, Management, Security, Database, Analytics, AI, IoT, Mobile, Dev Tools, Blockchain, Integration, Migration, Private Cloud, and VMware are some services offered by IBM cloud.
- Freedom to select and unite the desired tools, data models and delivery models in designing/creating the next-generation services or applications.
- Users can manage their applications in many coding languages such as Java, Python, Swift, Php, etc.
- IBM AI helps with its multifunctional ability such as text to speech, detecting language, machine learning, classification of natural language, etc.
- Costs depends on the usage but free in its lite mode with free access to more than 40 services by IBM Cloud.
- You can incorporate **highly performing cloud communications and services** into your IT environment with the help of **IBM Bluemix** Cloud platform.

5. Oracle Cloud

Oracle Cloud is an **ERP(Enterprise Resource Planning)** based cloud service that helps you to build, deploy, and manage workloads in the cloud or on-premises. Oracle has approximately **4, 30, 000** huge numbers of clients around the world. The total revenue generated by Oracle was around **6.81 billion dollars** in 2019.

- Oracle IaaS offerings are Compute, Storage, Networking, Governance, Database, Load Balancing, DNS Monitoring, Ravello, and FastConnect. IaaS help to run any kind of workload of an Enterprise.
- Oracle PaaS offerings are Data Management, Application Development, Integration, Business Analytics, Security, Management, and Content and Enterprise. PaaS helps developers to develop, connect, secure and share data across the applications.
- Oracle SaaS offerings are CX, HCM, ERP, SCM, EPM, IoT, Analytics, Data, and Blockchain Applications. SaaS provides a complete data-driven and secure cloud environment.
- The best thing about this cloud services provider is its **chatbot** option which can help customers 24/7 whenever they face difficulties.
- Data analytics by users that help decision-makers in planning for the company's financial condition.
- Secure and better visibility to unsanctioned apps and protects against sophisticated cyber attacks.
- Payment according to the usage.