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## **What is AI in cloud computing?**

Artificial intelligence (AI) in cloud computing is a mix of Cloud computing with the capabilities of artificial intelligence systems that allow for intuitive, linked experiences. Users may make purchases, set a smart thermostat, or listen to a favorite song quickly using cloud computing tools, which combine a smooth flow of artificial intelligence technology with cloud-based computing resources.

# How has AI evolved Cloud Computing?

Artificial Intelligence is already having an impact on the new-age Cloud Computing structure, which is an exciting transition given the presence of transformative technologies like the Internet of Things (IoT). IoT and mobile capabilities develop as extensions to present Cloud capabilities when it comes to producing Cloud innovation.

In contrast to the IoT and mobile models, applications that rely on AI require a dedicated run-time developed for GPU (Graphics Processing Units) focused AI solutions, as well as enhanced backend services. When data, AI, and Cloud innovation are combined, both humans and AI will have the option of looking at massive amounts of data. They'd acquire more knowledge than they'd ever gotten before. A combination of these improvements means that a large amount of data must be managed in a shorter amount of time.

# Pros of AI in Cloud Computing-

**#1 Lower expenses:** One of the biggest benefits of cloud computing is that it removes on-site data center expenditures like hardware and maintenance. With AI projects, those upfront expenses might be exorbitant, but in the cloud, businesses can quickly use these technologies for a monthly subscription, making R&D costs more reasonable. Furthermore, AI systems can extract insights from data and evaluate it without the need for human participation.

**#2 Advantages of Analytics:** Implementing AI in the cloud can provide significant analytical benefits. To obtain relevant and useful insights, many teams may be required to evaluate statistics for analytics. With the analytics advantage, adopting AI in the cloud may assist in relieving a load of human labor in completing such jobs, as well as saving expenses for highly skilled and specialized analysts. Overall, AI might produce superior results and at far cheaper costs than analysts.



**#4 Deeper insights:** In large data sets, AI can spot patterns and trends. It analyses previous data to the most recent data to deliver well-informed, data-backed information to IT teams. Furthermore, the data can be analyzed quickly with a system incorporated with AI, allowing businesses to respond to client requests and concerns in a timely and more efficient manner. AI capabilities provide useful insights and guidance, resulting in faster and more accurate results.

**#5 Improved data management:** Artificial intelligence (AI) plays an important role in the processing, management, and organizing of data. AI can dramatically enhance marketing, customer engagement, and management of supply chain data with more reliable analytics into real-time data. AI technologies make it easier to acquire, modify, and manage data. IT departments may, for example, integrate AI technologies with Cloud Stream analytics to receive real-time personalization, identify abnormalities, and anticipate maintenance scenarios.

**#6 Increased security:** Intelligent data security is becoming increasingly important as businesses deploy more cloud-based apps. To watch and analyze network traffic, IT teams might employ AI-powered network

# Cons of AI in Cloud Computing-

While merging AI with cloud computing has many advantages, it also has certain disadvantages which are enlisted below:

**#1 Data privacy:** AI applications need a vast quantity of data, which might include information on customers and vendors. When employing AI in cloud computing, businesses utilize a lot of sensitive data that might be targeted by hackers. As a result, businesses must set privacy rules and safeguard all data.

**#2 Connectivity concerns:** Consistent internet access is required for cloud-based machine learning systems. IT departments utilize the internet to transfer raw data to the cloud and get processed data. The benefits of cloud-based machine learning algorithms might be hampered by poor internet connectivity.

# **Conclusion-**

It is now obvious that Artificial Intelligence is the way of the future, with Cloud Computing continuing to reign supreme. The integration of AI with Cloud Computing, according to major Cloud Computing providers, will change the current state of the Technology industry. Public Cloud providers will continue to invest in AI research and development, culminating in a suitable group of end-users for this technology.