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## CLOUD COMPUTING AND IT'S APPLICATIONS: A PREAMBLE

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### ABSTRACT

A cloud service is a service designed and made available to users based on their request by cloud providers through the Internet. Cloud services can make use of applications, development platforms, servers, and storage. Cloud services are infrastructure, platforms, or software that are hosted by third-party providers and made available to users through the internet. This study represents an overview of cloud computing and also illustrates the various applications of cloud computing.

**Keywords:** Cloud Computing, Application, Software.

### Introduction

Cloud services make it easier for user data to move back and forth from front-end clients (such as users' servers, tablets, desktop computers, and laptops) to the provider's systems through the internet. Cloud services encourage the development of cloud-native apps and the adaptability of cloud-based activities. Users only need a computer, an operating system, and an internet connection to utilize cloud services. The SaaS, PaaS, and IaaS models serve as the foundation for cloud services [1]. SaaS services are wise budgetary decisions because they don't require any customer assistance. They automatically got better and got organized. A single SaaS architecture example may be distributed among numerous consumers. With PaaS, we provide non-designers with a space where they can create web apps using the standard point-and-click interface. Some examples include Google's App Engine and Force.com. These resources are provided by IaaS providers upon request from their enormous reservoirs of resources housed in server farms. IaaS enables the cloud provider to profitably and indiscriminately install the infrastructure on the Internet.



## Cloud Computing Applications

Applications for cloud computing are closely related to a user's mobility. This could mean travelling abroad. The user wants services from various locations and devices to work together seamlessly. The user wants to carry the least amount of hardware possible and desires convenience. The loss of physical storage devices could potentially be a problem. Applications that meet these needs therefore have a unique appeal. The adoption of mobile cloud computing applications is most likely to occur in the disaster relief, crowdsourcing, and security sectors. Cloud applications like Apple's iCloud and Google's mobile email service are both offered by Apple and Google. The following are some specifics regarding cloud applications:

### Education

The use of cloud computing in education is growing in popularity. It offers students a range of student data websites and online distance learning platforms [2]. The advantages of cloud computing in education include robust virtual classroom environments, simplicity, secure data storage, scalability, easier accessibility for students, and apps with low hardware requirements. Some of the apps offered by the cloud provider include Google Apps for Education, Chromebooks for Education, Tablets with Google Play for Education, and AWS in Education.

### Image Editing

There are several programmes available today that help us alter images for free. You may edit, resize, crop, apply special effects, and do other operations on images using these cloud computing applications. Moreover, they include a graphic user interface (GUI).

You can also adjust the brightness and contrast with these apps. They also offer high-level, advanced functions that are easy to use. Adobe Creative Cloud and Fotor are a couple of well-known examples.



### **Data Storage**

Cloud computing applications are designed to provide security and ensure that data is safely backed up. PDF, and Excel files are just a few of the file types that can be converted from lost data and recovered. Applications for cloud storage like Box, Jook, Mozy, and Google Suite are top choices [3].

### **Antivirus Software**

This antivirus programme is totally free and is frequently recognised as the top programme for home PCs. With the help of a cloud data centre, this program's primary goal is to detect malware and patch it. Two of the most well-known cloud-based antivirus applications are Kaspersky Endpoint Security Cloud and Sophos Endpoint Protection.

### **Entertainment Software**

Other entertainment apps use a multi-cloud approach to interact with a particular audience. Through cloud computing applications in mobile apps, virtual mobile gaming services are made available. Many online games rely on a fast and stable connection [4]. Project Atlas and Google Stadia are two examples, entertainment sectors that leverage cloud technology to build entertainment applications.

### **URL Conversion Software**

There are several social media applications, one of which is a Twitter-related app that shortens long URLs. A tool like Bit's goal is to reduce the size of long URLs so that the user is redirected back to the original page. In addition to facilitating microblogging, it safeguards the programme against viruses and threats.

### **Meeting Application**

Go-to meeting capabilities like video calls and other virtual meeting tools are also provided by cloud computing applications. These are cloud-based application services that enable you to begin a meeting with high-quality video footage for both private and professional reasons [5]. Meeting connections can be made in a matter of seconds, and other services like sharing desktops and making presentations are



also offered. Users of "GoToMeeting" and "Zoom" get access to all the features required for faultless high-definition video conferencing.

### **Presentation Software**

There is presentation software that enables you to create slides for PowerPoint presentations and import them. Slide rocket is one such tool that helps users create polished presentations. Applications for cloud computing like this are accessible from any place on earth. The software is available in both a free and premium edition.

### **Social Media**

Thanks to numerous social media platforms, a sizable number of people may contact each other every second. Users can connect in real-time using programmes like Twitter, Facebook, LinkedIn, Yammer, and others. You may share videos, pictures, stories, experiences, and more using these apps.

### **GPS Application**

Technology like GPS, another advancement in the public cloud and its applications, benefits users. These programmes help users find destinations on the internet as well as directions from a map. Websites like Yahoo! Maps, Google Maps, and others offer cloud services. Users from all across the world use this free software. Popular cloud service provider Google Maps offers precise geolocation.

### **Accounting Programs**

Accounting software is one of the real-time cloud computing programmes that help management in the accounting department of the company.

One such tool used by larger firms to provide real-time daily accounting is called Outright. It enables you to monitor your expenditures, earnings, capital expenditures, and losses in real time. Other cloud-based accounting software choices include Kash Flow and Zoho Books.



### **Software for Management**

One of the most well-known cloud computing applications is "Evernote." With the help of this tool, users can store and distribute notes in a central location that is always open to them. These might be reachable from anywhere on the planet. Both the free and paid versions of the software are compatible [6]. This programme is a management tool that may be used for both private and professional purposes.

### **e-Commerce Applications**

Another typical application and one of the most important cloud computing services is e-commerce software. Applications for cloud computing make it easier for e-commerce firms' customers to obtain information and run efficient businesses. The ability to track every piece of information for the business, from the customer's purchase to delivery, as well as expenses, reimbursement rates, damage rates, and customer experiences, is made possible by cloud-based e-commerce. Since perfect solutions need less time and effort, most large organisations employ this software. The main advantage of these improvements in cloud services is that there are no up-front expenses involved in managing them. One business that utilises cloud computing services is Amazon.

### **Applications that use SaaS (Software as a Service)**

SaaS is a subset of cloud computing. For information tracking and business management, a number of clouds computing programmes, including Software as a Service (SaaS) apps and others, including FedEx and the postal service, use cloud provider services. Because they provide a wonderful way to track online products, these technologies make it simpler to run a firm.

### **Conclusion**

Cloud computing which is a new technology that is predicted to dramatically lower the cost of existing technologies, is the current development trend in the IT sector. One could consider cloud computing to be a recent phenomenon that will fundamentally alter how we utilise the internet. There are several things to watch out for. The use of cloud computing has both advantages and disadvantages for information security.



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