Cloud computing is a model for delivering on-demand computing services, including servers, storage, databases, networking, software, analytics, and more, over the internet. The three key components of cloud computing are infrastructure as a service (IaaS), platform as a service (PaaS), and software as a service (SaaS).

Infrastructure as a service (IaaS) is the most basic level of cloud computing, providing users with access to virtualized computing resources such as servers, storage, and networking. With IaaS, users can create and manage their own virtual machines, install their own operating systems and applications, and have full control over their computing infrastructure.This allows organizations to quickly and easily scale their infrastructure up or down as needed, without having to invest in costly hardware and maintenance. Examples of IaaS providers include Amazon Web Services, Microsoft Azure, and Google Cloud Platform.

Platform as a service (PaaS) is a higher level of cloud computing, providing users with a complete development and deployment environment for their applications. With PaaS, users can develop, test, and deploy their applications without having to worry about the underlying infrastructure. The platform provider manages the infrastructure, operating system, and middleware, while the user focuses on developing and deploying their application. Examples of PaaS providers include Heroku, Google App Engine, and Microsoft Azure App Service.

Software as a service (SaaS) is the highest level of cloud computing, providing users with access to fully functional software applications over the internet. With SaaS, users do not need to install or maintain any software on their own devices. Instead, they can access the software through a web browser or mobile app, and the provider manages all aspects of the software, including maintenance, upgrades, and security.Examples of SaaS applications include Salesforce, Google Workspace, and Zoom.

In summary, cloud computing provides users with flexible, scalable, and cost-effective computing resources, with IaaS providing basic infrastructure, PaaS providing a complete development and deployment environment, and SaaS providing fully functional software applications. SaaS is a subset of cloud computing that provides users with access to software applications over the internet. With SaaS, users do not need to install or maintain any software on their own devices. Instead, they can access the software through a web browser or mobile app, and The cloud-computing model provides users with flexible, scalable, and cost-effective computing resources. In the past few years, adoption of cloud computing has skyrocketed because of its many benefits: