

Topic Analysis #4 – Cloud Computing

Cloud computing is delivering computer services through internet and is often managed by IT service providers. Services including servers and software. Some examples of cloud computing are Google Docs, Dropbox, and Microsoft Azure. It is often delivered through public cloud, private cloud, or hybrid cloud.

According to Salesforce, the benefits of cloud computing including but not limit to cost savings, automatic software updates, and sustainability. Cloud computing is cost savings because it is easier for users to access company's data through the cloud, it saves not only time but also money. Since companies no longer need to buy hardware storage to store the information locally. Also, cloud computing provides automatic software updates. This is important because nowadays there are lots of information security occurred every day. For example, Apple release iPhone iOS update about twice a month for security reasons. Therefore, able to automatic update software is an advantage for cloud computing. It will save IT department's time from performing manual update frequently for the company. Cloud computing is also good for the environment, with many services transform to digital ones, it will cut down on paper waste, and improving energy efficiency. Despite all the benefits, cloud computing has some limitations, such as downtime, and security issues. According to cloud academy, in June and July of 2019, lots of companies including Google and Amazon were hit by outages. In cloud computing, every component is online, this exposes potential vulnerabilities as well.

SaaS, PaaS, and IaaS are three different ways of cloud computing. SaaS, which stands for Software as a Service, is software that's totally control by third-party company, some examples are iOS apps and Dropbox. PaaS, which is short of Platform as a Service, is hardware and software tools available online, such as Windows Azure and AWS Lambda. IaaS, which is short of Infrastructure as a Service, gives user the most control, it is for services such as storage, networking, and virtualization. Some examples are GCE (Google Compute Engine) and IBM Cloud.

Two of the major cloud service providers are Amazon Web Services and Microsoft Azure. I haven't used any of them, therefore, the differences mentioned

below are what I found on web. Their basic features are similar. However, they have some differences, from UI to functions. First, according to *Spiceworks*, AWS offers greater ease of use and is good for first-time cloud platform adopters. On the other hand, Azure's documentation and recommendations system is less intuitive and search friendly. Also, when it comes to machine learning modeling, to work with AWS AI tools, one needs to have coding and data science skills. In contrast, Azure ML studio is mainly for codeless experience. It is aim for data analysts that prefer simple interface.

Reference:

[Link: 12 Benefits of Cloud Computing](#)

[Link: Disadvantages of Cloud Computing](#)

[Link: IaaS vs PaaS vs SaaS](#)

[Link: AWS vs. Azure: Understanding the key differences](#)

[Link: What is cloud computing from Microsoft](#)

[Link: What is cloud computing from Amazon](#)