CLOUD COMPUTING SERVICE PROVIDER

Cloud computing is a type of distributed computing, which refers to the process of decomposing huge data computing processing programs into countless small programs through the network called "cloud", and the data is then processed and analyzed through a system composed of multiple servers. The server gets the result and returns it to the user. Through this technology, tens of thousands of data can be processed in a short period to achieve powerful network services.

The concept of cloud computing is to make the Internet as the center, providing fast and safe cloud computing services and data storage on the website, so that everyone who uses the services will have a chance of using the huge computing resources and making the process simpler and effective.

Source: https://thumbor.forbes.com/thumbor/960x0/https%3A%2F%2Fspecials-images.forbesimg.com%2Fimageserve%2F5f9fa9e815da35da1356a28b%2FThe-5-Biggest-Cloud-Computing-Trends-In-2021%2F960x0.jpg%3Ffit%3Dscale

Panda Cloud Antivirus

It supports most of the common operating systems and even workstations including servers and virtual machine. It can protect the security of the organization's devices and can be able to monitor all networks from one device. Usually, it is used by large organization to defense against unauthorized access and DDoS attack.

Microsoft Azure

Microsoft Azure is a public cloud computing platform developed by Microsoft. One of the most popular uses for Microsoft Azure is running virtual machines in the cloud. It is also frequently used as a platform for hosting databases in the cloud. Furthermore, many organizations use Azure as cloud storage to backup important data and disaster recovery. Moreover, some organizations choose to run partially or fully of their business in Azure as it can be a data center.

COMPARISON AMONG CLOUD COMPUTING SERVICE PROVIDERS

Alibaba Cloud (AC)

AC provides cloud storage with unlimited storage and data will be protected by multi-level security, DDoS protection, monitoring logging access, and so on. AC also uses a pay-as-you-go basis on their services such as storage space, number of requests processed, and network traffic.

Google Cloud Platform

Google Cloud Platform is a cloud computing service offered by Google and it runs internally alongside with other Google's products such as Gmail, Google Drive, and Google Calendar. This platform mainly focuses on small-medium businesses. It offers fewer services but its advanced technical capabilities put it in ahead of the other competitors. The users will pay only for what they use. For instance, in Google Maps Platform, users only have to pay the monthly cost based on the usage of the Maps APIs. It also provides free tier resources for those only use some basic services.

Dropbox

Dropbox is a cloud storage service that developed by Dropbox, Inc. It provides cloud storage that enable users store their files in cloud and can be used at anywhere, as long as their devices linked to their account. The files will always update automatically if the user has made any changes to the files.

1. Strength

Both Microsoft Azure and Alibaba Cloud offer IaaS and PaaS to allow users to manage hardware and software over the internet. While Dropbox is a cloud storage service that allows users to store data in the cloud. Furthermore, Google Cloud Platform offers Big Data and AI analytic to let users do data analysis from a different perspectives. Lastly, Panda Cloud Antivirus provides protection to users from being attacked by viruses and able to scan the devices remotely.

2. Market Share

Dropbox is leading among other providers with a 21% market share in 2021. The second is Microsoft Azure, which has a 20% market share. While Google Cloud Platform shares about 7% in the market, followed closely by Alibaba Cloud, which has 6% market share. Panda Cloud Antivirus has the least market share which has 3.6% only.

3. Pricing

Microsoft Azure, Google Cloud Platform, and Alibaba Cloud offer a pay-as-you-go basis. So the pricing varies which depends on the usage of the users. But Google offers $300 in free credits and 20+ free products with limitations to new users to test or set up their workloads. Next, Dropbox and Panda Cloud Antivirus introduce monthly or yearly payments for users and the prices are different depending on what services that users want to use. The range of the prices is from $9.99 to $19.99 for Dropbox and around $59.90 to $87.83 for Panda Cloud Antivirus. Users can also contact the vendor for more detail if they want other protection.

How cloud computing helps human life

In my opinion, cloud computing has helped people a lot especially in businesses or organizations. Let's take a look, Microsoft Azure can be a data center that allows humans to run their business in the cloud. Cloud computing may seem complicated, but compared to other infrastructures, it actually has a lot fewer problems. Humans are free from complicated procedures in traditional operating methods. Since the business of an organization can be run on a cloud computing server, its main job is to make the applications in cloud computing more perfect, so it is usually more reliable than operated by the organization itself. Furthermore, maybe people have made the mistake of forgetting important documents at work. Maybe the file was not saved, or the email was accidentally deleted. If working in the cloud, workers don't have to rush all the way back to the office to get files from the server. Cloud computing always runs online, so as long as there is an Internet connection, people can get the files from anywhere. In addition, cloud computing has higher security than local servers. If unfortunately, the organization suffers from a hacker's attack or computer malfunction, organizations that adopt cloud computing do not need to worry about losing critical data and business applications. As cloud computing always backup important files to other remote servers, so the data can be easily restored in anytime.

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Industrial Talk by
Dr. Qusay Al-Maatouk from APU

Things you need to know about Cloud Computing

Source: https://medium.com/featurepreneur/what-is-cloud-computing-290520365d48

Quick view:

This is an era where we are going through the Industrial Revolution 4.0. Regardless working in the retail industry or the real estate industry, the data and business you are exposed to are extremely relying on safe and trustable applications that meet one's personal need. Amazon Web Services (AWS) provides a complete set of cloud computing services as a storage, processor, database and IT resource accessed through the Internet to help us to create and run these applications. Through this technology, tens of thousands of data can be processed in a a few seconds to achieve powerful network services.

A little thought...

Frankly speaking, the occurrence of pandemic COVID-19 has inevitably transformed most of the company from working physically to digitally. Majority of the traditional companies are looking for a better and safer option to ensure all the data of company can be stored well without distressing the financial status. In fact, we can see that a lot of organizations nowadays are subscribing the cloud services provided by Internet companies. One of the examples is that Maxis company has helped the Brickfields Asia College to migrate its websites and mobile applications to AWS. We believe that cloud computing should be invested by all the entrepreneurs and companies out there, not only because of its trending usage, but also the potential growth of this technology. It's our duty to enhance the technology by participating the modern challenge.

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Why Choose Cloud Computing?

If a company is planning to have its own server system, it's not only time and money consuming to prepare a server room, power supply, network connection and other equipment, but also heavily depending on the technical support from professionals. This is quite impractical and not an ideal way for a small entrepreneurs to maintain server costs by paying rental and massive electricity bills.

Therefore, AWS provides a solution, which is a virtual server. AWS provides high-endurance storage services, low-latency databases, a set of application development tools and only requires pay-per-use fee. This allows the user's organization to obtain the IT resources immediately without a large amount of capital investment.

"Issues discussed

In the traditional computing model, you need professionals to configure the server system that you need to run your application. However, the cloud computing provided by AWS has achieved economies of scale with low operating costs and powerful resources such as the ability to flexibly add and remove capacity. This constantly allows our application to be expanded to meet customer needs or even to be quickly scaled down to save costs. This service makes capacity planning easier and reduces the risks of launching a new application in traditional data centers, allowing a company to possess own server system without consuming huge money and time.
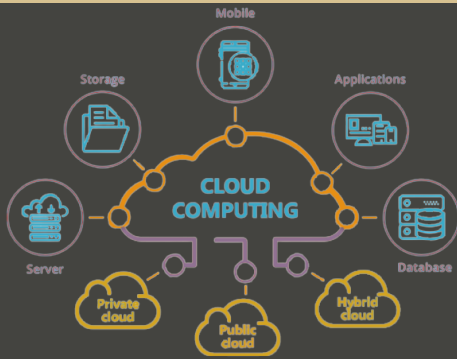
The Public Cloud provided by AWS integrates computing, storage, and network resources into a cloud virtual resource pool as allow users to allocate resources on demand and share platform architecture, cloud storage and other infrastructure. However, some companies need to run large-scale business IT systems and security, independence and privacy are easily restricted by Public Clouds, so there is a Private Cloud that had customized enterprise-level cloud computing solutions for users. When a Private Cloud environment is connected to a Public Cloud, a Hybrid Cloud is produced. It enables users to call resources to enhance the scalability of a cloud computing service model.

If you don't have foundation to rent a server room, power supply, network connection and other equipment, Amazon Website Services as a shelter liberty will provide you with the computing infrastructure, and you only need to install your own operating system on this infrastructure. We call it infrastructure as a service (IAAS). Besides, when we compile our code into .exe or .DLL file and upload these binaries directly to these servers, Amazon Service Website will use the right load and the right amount of calculation to call your application at the right time, so that your application can run as provide business services to the outside world. We call it as Platform as a service (PAAS).

Sometimes, as users, we don't really tend to bother about maintenance and we want to pay for the services provide by sellers due to our "laziness", its a typical stereotype of urban people, we prefer paying for professional services. We know that the more we worry about it, the easier it is to make mistakes. We don't want to worry about the operating system and software framework and we just want a mailbox server to be available and all this is condoned by Amazon Service Website. This service is called software as a service (SAAS). We don't need to worry about what operating system the server is running on, where, when and what configuration it is running on. It can be used at the right time, the right opportunity and the right computing resources.

In conclusion, cloud computing has caused a large number of enterprises to successfully deal with the technical problems of their huge data. They can use the vigilance of cloud computing to predict customer needs, develop new products and services. As an important supporting service, cloud computing not only helps entrepreneurs save more time, but also provides customers with a better experience.

OZEL

INDUSTRIAL TALK 4 BY OZEL SDN BHD

27 November 2021

source:https://www.aver.com/AVerExpert/augmented-reality-and-the-classroom

Speaker
Dr Ruzimi Mohamed

Summary

Augmented reality (AR) is a technology that superimposes information such as sounds, images, and text on the world we see. In this industrial talk, Dr. Ruzimi bin Mohamed @ Mahmood, the founder of OZEL SDN BHD has introduced the current trends of Augmented Reality in the industry. This talk included the introduction and discussion on a few topics related to AR. First is the introduction of IR 4.0 and 9 technologies in IR 4.0. Next is the discussion on the future of AR like the expected revenue generated by AR in different industries. Besides that, there are 10 use cases of AR in different fields such as education, healthcare, fashion, and others that are extremely useful to people in life. In addition, the 3 types of AR are marker-based, projection-based, and superimposition-based. Furthermore, the 10 skills for future jobs in IR 4.0 and the 6 common positions in AR work are also discussed. Lastly, the speaker has shared the 3 key areas where humans beat machines and 5 things to consider when choosing our career.

The issues discussed in the talk

Industrial revolution 4.0 is the digital transformation of manufacturing and related industries and value creation processes. There are 9 technologies in IR 4.0. For instance, augmented reality, big data analytic, and cybersecurity.

World economic forum 2015 had made some predictions by 2025 like 90% of people in the world will own a smartphone and have internet access. This shows that people are entering the technological era. A lot of new technologies are developed to improve people's lifestyles like AR. Many industries have a high expectation of AR. This can show by the expected revenue generated by video games industries by AR up to 11.6 billion dollars. Snapchat and Instagram also will be the biggest user of AR as they predict that they will have 3.5 million users of AR by 2022.

There are 10 awesome use cases of AR. For instance, AR can use in the education field because AR can improve the learning experience for students. AR allows students to inspect a 3D hologram from different angles and this can help the student to more understand certain concepts in the topics like biology and anatomy. In addition, AR allows people to see how the products look on them. For instance, clothes, shoes, and jackets.

There are 3 types of AR introduced in the talk. Firstly, marker-based AR is an AR that works by scanning a marker using software and triggers an augmented experience. Secondly, projection-based AR is described as a video projection technique that can produce images on the surface of 3D objects or space. Thirdly, superimposition-based AR uses object recognition to replace the original image with an augmented image that can replace the original image either fully or partially.

In the talk given, skills mentioned that are highly sought by future job employers are complex problem solving, critical thinking, creativity, judgment and decision making, coordinating with others, negotiation, and people management. Common positions in AR work include AR/VR content developer, content strategist, project manager, user experience designer, and animator. Areas that are irreplaceable in the global job scope are creative endeavor, social interaction, and physical dexterity and mobility. In the meantime, we can look for the following aspects when choosing and securing a job. To list them out, we can focus on the job that involves creativity and interaction with humans, enroll ourselves in the job of data science, have a solid practical knowledge of computer literacy, and keep in touch with the demanding jobs.

source:https://www.forbes.com/sites/bernardmarr/2019/07/19/the-important-difference-between-virtual-reality-augmented-reality-and-mixed-reality/?sh=4cd5ffd35d34

Reflection

After completing attend the talk "Current trends of Augmented Reality(AR) in the industry", we were completely amazed by the future potential of AR in increasing engagement and enhancing user experience. Ever since the emergence of digital transformation in Industry 4.0, the revenue generated by this industry has skyrocketed especially in the field of video games such as Pokémon Go that takes AR to the next level. According to some of the interesting predictions mentioned by the World Economics Forum 2015, 10% of people will be wearing clothes connected to the internet and more than 50% of home appliances will be connected to the internet. It is no more a fantasy when IKEA has already taken its lead in using AR to develop an interior decoration application using superimposition-based AR. In short, with the introduction and ubiquity of AR, we believe AR will be the next dominant technology due to its highly interactive and with the inclusion of AR within the digital universe of the "metaverse" announced by the founder of Facebook, Mark Zuckerberg.

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