UNIVERSITI TEKNOLOGI MALAYSIA

SECP1513 - SECTION 04

ASSIGNMENT: NEWSLETTER

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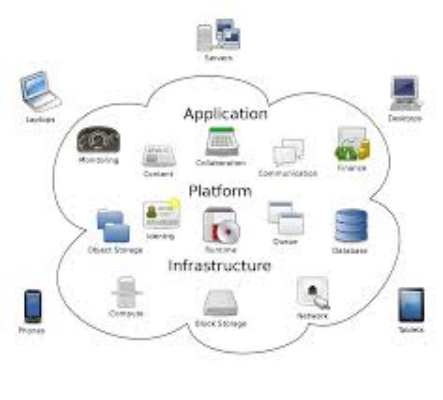
NOVEMBER 2021 | GROUP 2

CLOUD COMPUTING SERVICE PROVIDER

27 NOVEMBER 2021



WHAT IS CLOUD COMPUTING SERVICE PROVIDER

Nowadays, there are many companies exist in this market compete with each other to become the main provider in cloud computing. They actually serve us computing resources such as virtual machines, databases, processing, memory, services, storage, messaging, events and pay-as-you-go. All the services mainly focus in businesses and individuals need as a medium that will ease our work. Earlier the data was stored in hard drive compared to nowadays all data can be stored in the cloud that obviously we can rely on that. There are three categories based on cloud computing which are Software as a Service (SaaS), Platform as a Service (PaaS) and Infrastructure as a Service (IaaS).

1. **Software as a Service (SaaS) - This service supply variety of business technologies such as productivity suites, customer relationship management software, human resources management software and data management software, which all of this provides over the internet. So, no need to download the applications as we can use the utilities through the web browser.**
2. **Platform as a Service (PaaS) - From this service, users can utilize cloud infrastructure and services to complete a variety of tasks. For developer, it is a framework where they can construct an application that customizes a previously developed application. This products are commonly used in software development.**
3. **Infrastructure as a Service (IaaS) - This service offer customers infrastructure components such as data storage (cloud storage), servers, networking and virtualization. In IaaS, instead purchasing expensive and difficult hardware to maintain, they may purchase resources on demand.**

TYPE OF CLOUD COMPUTING SERVICE PROVIDER

There are many Cloud Service providers that competing in the market right now to serve the best for their customers. There are 5 examples of companies that run Cloud Computing Services:-

1.Microsoft Azure

Microsoft Azure is a cloud computing platform that may be used to develop, test, deploy, and manage applications. This procedure is carried out in a Microsoft-managed data center's worldwide network. It is both a private and a public cloud platform.

2.Google Cloud Platform

Google Cloud Platform is one of most well-known cloud computing services which provide by Google itself and it operates within the same infrastructures as Google's end-user products. Some of services that offered by them which are data analysis, machine learning and data storage. It is easily for us to access and definitely the system is secured by Google strongly.

3.IBM Cloud Services

This company offers customer platform as a service and infrastructure as a service. With the aid of the internet, this cloud business may install and access its resources such as storage, networking, and computational power. Several technologies are available to assist customers in gaining access to extensive industry knowledge.

4.Adobe Creative Cloud

Adobe Creative Cloud offer the great experience for customer in apps service design photography and web. It also show us some useful tutorials and templates that suit for the beginner out there to use and access it. As a customer, you can use it anywhere because Adobe Creative Cloud allow user to use it in any devices since the files can be save in the cloud and can be access anytime.

5.ServerSpace Cloud Server

These cloud servers working with Windows and Linux OS. Users can choose their own custom settings, start their virtual machine in 40 seconds, alter it at any moment and pay as you go. This company has free of charge 24/7 technical support and unlimited traffic. It is a high performance server because it based on the latest 2nd Gen Intel Scalable CPUs with 3.1 GHz frequency and fast speed solid-state drives. So, the data can be stored 3 times faster with no lag.

overview & comparison

Based on these 5 examples of company that competing in Cloud Computing services, they have their own target customer. So, customer must do some research in the first place before they choose the best company for them to use their facilities that suit well. The companies exist offer different opportunity to users based what they focused on. For examples, Adobe Creative Cloud was focused on users that want to access the services that relate on photography and design. If customer want to run their business they can take the opportunity that offered by ServerSpace because they have fast speed services, so your business will run smoothly and if you have any problem you can contact their customer service for 24/7 every day. For developers, they can look into Microsoft Azure because all the useful utilities that been offered by them such as they have many virtual machines that can run many operating systems. Google Cloud platform is one of the friendly user cloud service because most of us are familiar with Google interface and it is so easy to access with a strong security.

Summary

As customer, we must brilliant to decide what type of cloud service that we must choose based on what business that we want to run because each cloud computing provider offer different type of facilities. Users must evaluate the potential cloud service provides based on cost, tools and features, reliability and security. It will help them when they access it and run their businesses. So it is very important for user to decide the provider they need based on their requirement.

Reflection

Cloud computing is proving to be extremely beneficial to businesses of all sizes. These Cloud Service Providers businesses offer storage, database servers, networking, and software to help businesses grow. Few cloud service providers limit their services to small enterprises, consumers, and mid-sized organizations, depending on their criteria. So as customers, we must take these opportunities given and utilize it in a good way that benefits us. Cloud Computing give a lot of benefits in running some businesses to make it smooth and it is suits with our generation which is more to online phase and technologies dependance.

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NEWSLETTER

AMAZON WEB SERVICES

SUMMARY

Amazon Web Services (AWS) is a secure cloud platform that offers a road set of global cloud-based products. It also provides the users with on-demand access to compute, storage, network, database, and other IT recources and management tools. AWS offers flexibility as the users pay only for the individual services that the user need, for as long as we use them. AWS services work together like building blocks. A web service is any piece of software that makes itself available over the internet and uses a standardized format - such as Extensible Markup Language (XML) or JavaScript Object Notation (JSON) - for the request and the response of an application programming interface (API) interaction.

ADVANTAGES OF AWS

The realization of the true nature of the 4th Industrial Revolution in our country which is Malaysia, many implementations are related to the uses of technology, Amazon Web Services (AWS) is one of the platforms for citizens to improve their pieces of knowledge in the technology field. One of the advantages of AWS provides services that enable end-users to trade capital expense for variable expense as it acts as the data center investment based on forecast and pays only for the amount.

Other than that, it provides massive economies of scale because of aggregate usage from all customers, AWS can achieve higher economies of scale and pass savings on to customers as it provides cloud services and it tells the pieces of information regarding the transactions that we made.

Furthermore, as one of the end-users, we can stop guessing the capacity of the servers that AWS provides. For example, if we want to use the server that is provided by the Amazon Web Service, we can stop worrying that the capacity will be too small or too big for our programs to fit in since AWS knows the best for its users.

Other than that, the advantage of cloud computing is to increase speed and agility. This means that we can reduce the amount time we take to find resources that we need because all the information is just at the tip of our fingers.

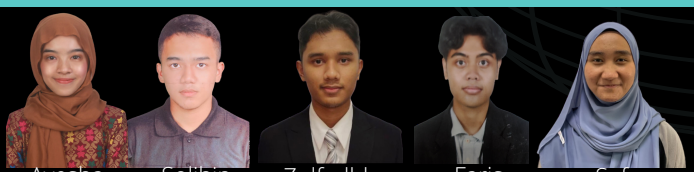
Next, cloud computing can ensure that we stop spending money on running and maintaining data centers. This is due to the how everything that we need is through software and not hardware. Everything is just maintained through cloud. With this advantage, businesses can focus more on their customers need and improve their infrastructures.

Finally, the benefits of cloud computing is users can go global in just a few minutes. AWS has servers all around the world. Thus, we can adjust our servers according to regions based on customers which will give customers a better experience.

REFLECTION

Based on the industry talk, it is proven that AWS has been and will be contributing a lot to the current generation of users. By implementing the use of AWS, users can be more efficient workers as there are so many services that users can explore and try to adapt themselves with. I also think that, if we don't push ourselves to learn and explore about AWS, it will be such a waste especially when we take into consideration that everything is modernized.

Other than that, AWS provides the end users in our society the informations that we need in order to support the 4th Industrial Revolutions and guides us on how can we improve the knowledges that are related to the cloud computing. Furthermore, I also think that this kind of knowledge is very important in order for us to survive in the digital market.



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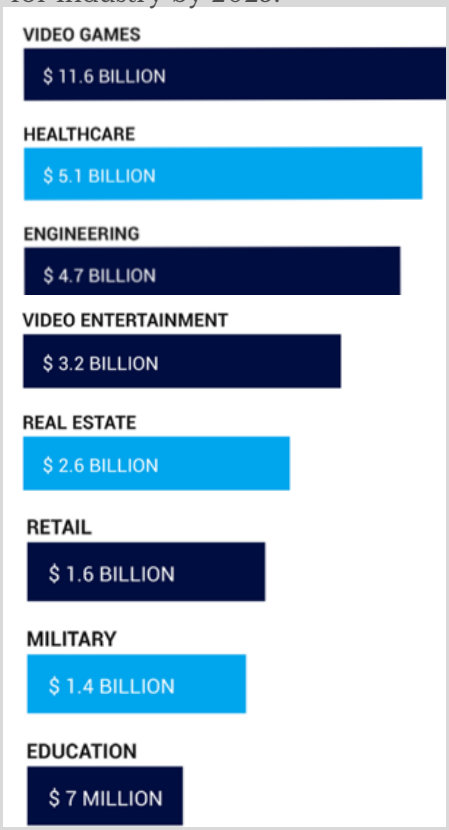
ARGUMENTED REALITY

FUTURE OF AUGMENTED REALITY

These are some expected revenue for industry by 2025.



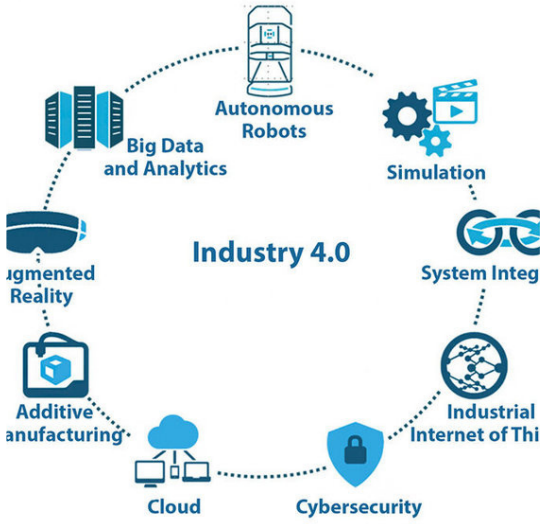
https://lumusvisions.com/augmented-reality-trends-infographic/

INDUSTRIAL REVOLUTION IS MOVING FOWARD

1760 to 1830 - This is the period where the first industrial revolution take place. It is basically about industrial production based on machines powered by water and steam.

1870 - When the power of electricity was used widely in industry. It started a mass production using assembly line and start the Industrial revolution 2.0. Now, the mass production in our industry become even faster than before.

1970 - Industrial revolution 3.0 started when invention of computer and automation become common to industrial scene. In this era, the usage of robot can be has been use to perform some human task.



https://aethon.com/mobile-robots-and-industry4-0/

2000 and onwards - The 4th IR has become our latest priority in the industry. It is all about being connected in term of service and data. This Industrial revolution involve many technology such as augmented reality and system integration.

6 COMMON POSITIONS IN AR WORK

ARGUMENTED REALITY

Most of the augmented reality jobs available today are best described as existing job titles with an AR descriptor. Common positions include:
AR/VR content developer
AR/VR content strategist
AR/VR user experience designer
Designer, animator or sound artist specializing in AR & VR
AR/VR community manager
AR/VR project manager

https://research.fb.com/category/augmented-reality-virtual-reality/

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https://towardsdatascience.com/augmented-reality-ar-trends-the-past-present-future-predictions-for-2019-8e1148345304?gi=605b408a3b87

TYPES OF AR

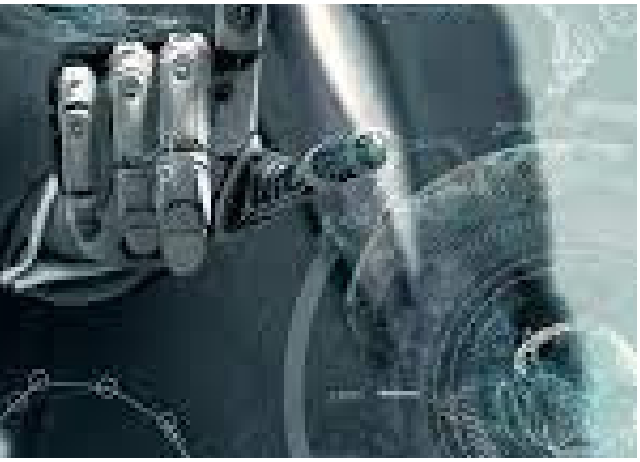
- **MARKER BASED**. An augmented reality marker is an image or item that can be identified by an AR-enabled smartphone app and can be used to activate AR capabilities. Markers should be used on level surfaces for DIY projects since bumpy, uneven, or rounded surfaces warp marker pictures.
- **PROJECTION BASED**. Projection-based AR is a video projection technique that can extend and reinforce visual data by projecting images on the surface of 3D objects or space; it comes under the category of Spatial Augmented Reality in a wide sense.
- **SUPERIMPOSITION BASED.** Object recognition is used in superimposition-based augmented reality. The augmented image partially or completely replaces the source image. In the medical field, this sort of AR is routinely used to superimpose an X-ray onto a patient's body. It can also be utilised to make a historical trip more interesting.

THE FUTURE OF AR IN SOME CASES

widely use

- ·EDUCATION – visual focused learning, benefit from at- home learning
- ·APPLIANCES, FURNITURE & OTHER LARGE PRODUCTION-can see how appliances and furniture looking at their home. For example: Shopify AR apps.
- ·CLOTHING & FASHION- to see how a product might look at them. Can use smartphone, smart glass and wearable devices.
- ·JARVIS (LIKE VIRTUAL ASSISTANT)- developing AR lenses with micro CED displays inside wearer eyes.
- ·OUTDOOR & INDOOR NAVIGATIONS-indoor (a line overlay ground & guide towards a destination. Outdoor (point to a location & direction will pop up automatic.
- ·HEALTHCARE- providing visual demonstration and simulation. For example, use virtual simulation to demonstrate the positive effect of drug.
- ·SPORTING EVENT- AR delivery in a virtual space can be accomplished with greater degree of accuracy.

> *“providing visual demonstration and simulation”*



https://theconversation.com/the-future-of-work-will-still-include-plenty-of-jobs-122825

10 SKILL FOR FUTURE JOBS - IR 4.0

- Complex problem solving
- Critical thinking
- Creativity
- People management
- Coordinating with others
- Emotional intelligence
- Judgement and decision making
- Service orientation
- Negotiation
- Cognitive flexibility

AR | 21 NOVEMBER 2021

ARGUMENTED REALITY

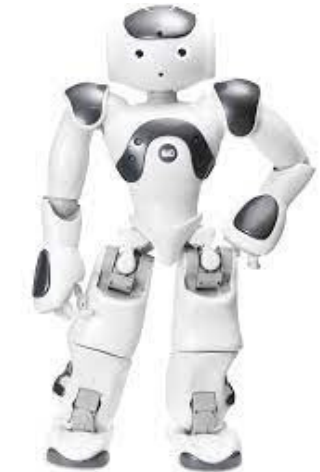
CURRENT TRENDS OF AR IN INDUSTRY

https://www.weforum.org/agenda/2018/01/how-to-make-the-rise-of-the-machines-work-for-humans/

3 key areas where humans beat machines that are key to future job creation

- Scientific discovery, creative writing, and entrepreneurship are all examples of creative endeavours.
- Social contact - machines lack the emotional intelligence that humans possess.
- Physical dexterity and mobility - millennia of mountain trekking, lake swimming, and dancing practise have endowed humans with amazing agility and physical dexterity.

https://www.thestar.com.my/tech/tech-news/2020/03/30/google-ar-brings-3d-animals-into-users-homes



REFLECTION (STUDENT & SOCIETY)

- AR can enable teachers to present virtual illustrations of topics and incorporate game features to provide textbook material assistance, making classroom teaching more spectacular and interactive. Students will be able to learn and memorise information more quickly as a result of this. Visuals are difficult to forget in the human memory.

- Digital information may be superimposed and merged into our physical surroundings using Augmented Reality (AR). With so many of us at home due to a global epidemic, augmented reality is a technology that can help us turn our local surroundings into learning, work, and leisure areas.