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Digital Cloud Storage: The Best Cloud Drive Analysis for Digital Business Purposes

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A B S T R A C T

The economy has been transforming throughout the years, and internet development has brought something new into the business world. With the rapid grown of technology, the economy and technology are inseparable. E-commerce was an example of an economy and technology. A huge data stream needed to be stored, and make physical storage now is outdated. Cloud storage was the option for storing and securing the company data. It has many benefits for the company for using cloud storage. The research methods in this paper was a literature research journal review. By comparing various cloud storage, it was found that mega cloud storage was a suitable option for many businesses from our related journal and other literature. Mega was encrypted and can store many data stream safely that the company needed.

1. INTRODUCTION

The development of technology in life starts from a simple process in everyday life at the fulfilment level as individuals and social beings (Danuri, 2019). In today's era of progress and development, there are many rapid technological changes. Technology serves as the leading media in the development of industry, transportation, and the economy. This development is undoubtedly influenced by the modern era, one of which is the development in the economic field. Currently, the economy in Indonesia is partly already using digital technology, one of which is in digital business or better known as e-commerce.

The term digital economy has been used since the 1990s. Digital economy definitions evolved beyond the Internet Economy (economic value derived from the Internet) to include economic and social activities resulting from Information and Communication Technology (Budiarta, Ginting, and Simarmata, 2020). E-commerce is one example of the digital economy that is popular today. Many Indonesians are starting to take advantage of this opportunity in doing business online and get quite a lot of benefits. Saretta (2021) said that in Indonesia itself, the development of the e-commerce industry is arguably experiencing very rapid growth. Indonesia is among the ten countries that have the fastest growing e-commerce industry in the world.

An e-commerce company requires enormous storage to store essential data and meet the needs of businesses, one of which is cloud storage. Historically, Cloud Computing is the result of a gradual evaluation. The concept of merging computing resources through a global network is said to have originated in the 1960s along with the emergence of the 'Intergalactic Computer Network' by JCR Licklider and was responsible for the construction of the Advanced Research Projects Agency Network (ARPANET) in 1969. (Unnamed, 2021, page.1).

Information technology has developed to adjust to time. Currently, new technologies have been developed to improve productivity, including data storage. Cloud drive is a service to store documents or files for free or paid, depending on the amount of storage capacity offered by the provider. (Santoso and Kusyanti, 2018, page. 453). Santiko, Rosidi, and Wibawa (2017, page. 138) suggest that Cloud Storage is a metaphor for the internet, as is the storage medium often depicted in computer network diagrams. In addition to being like the cloud in computer network diagrams, Cloud Storage in cloud computing is also an abstraction of the complex infrastructure it hides.

Cloud Storage has many benefits for the company. The delivery helps process data archive and control the company's data not to leak to guarantee security. In addition, Cloud Storage is also designed as environmentally-friendly storage compared to new hard drives or flash drives causing waste, so that Cloud Storage storage is very efficient because it does not require physical storage. Kamalakannan, Sharmila, Shanti, and Devi (2019) said that Cloud storage has enormous potential to develop as a substitute for legacy storage. However, before subscribing to cloud storage, consider security and execution to keep away from any misfortune later on. It will be similarly critical that cloud suppliers.

2. METHODS

This article uses the literature review as a research method by collecting various theories sourced on the internet and studying multiple other sources of information related to writing this article. This method is a research method that requires much activity to read the data and information that has been collected. In addition, the approach of research methods uses qualitative descriptive, which does not use calculations, but rather sees from the point of view of form, function, behaviour, and perception.

Through writing the literacy study, information about various cloud storage such as Google Drive, MEGA, Microsoft One Drive, Dropbox has been obtained. Then from the report is summarized multiple advantages and disadvantages that have and become characteristics of each - each cloud storage.

Google Drive is a natural choice for owners of an android device as it has already integrated. However, users of other platforms may also appreciate the generous free storage (Kannan, dkk, 2019, p. 979). Google Drive has a capacity of 15 GB free for each user . To access Google Drive, users only need a Google account. After the user can be free to upload anything into Google Drive. Agus et al. (2019, p. 26) reveal that Google Drive is built on Google's web-based operating system Chromium and has the benefit of a built-in office plan.

Users can edit documents, spreadsheets, and presentations, even if creating documents in other programs. However, Google Drive can back up files in videos and photos only, so it can not back up files in the format of documents (Subrata, t.t).

Kanna, dkk (2019) revealed that Microsoft One Drive is integrated into Windows 10's file explorer, and it provides 5 GB of free storage for anyone with a Microsoft account. Users can access various files in documents, photos, or videos from a Windows PC or mobile device. OneDrive's greatest strength is working with Microsoft Office applications, such as Word or PowerPoint (Aug. 2019, p. 24). OneDrive works well for the individual, but it limits when some to sharing files will colleagues, and One Drive limits its effectiveness as a project management tool and syncing. There is also a suggestion that some files can get altered when synced or uploaded to OneDrive, but it is unclear how common this problem is.

Dropbox is one of the most in-demand cloud storage because of its ease of configuration. Cheap (in Agus et al., 2019) reveals that Dropbox gives its users plenty of opportunities to get extra storage to upgrade 2GB when they first sign up. However, storage can increase it up to 6 GB free by linking the user Dropbox to social media and referring friends to join the service (Kanna, dkk, 2019, p. 979). In addition, there is no size limit on files uploaded to Dropbox with the desktop or mobile apps, but large files can take several hours to upload, depending on connection speed (Aug. 2019, p. 25). There have been various cases of servers being hacked and information stolen. Thus, one would want any sensitive data stored on Dropbox to remain secure. The encryption used to secure user data on Dropbox is only known to the developers (Acito, 2015).

Mega cloud drive is a file hosting and storage service offered by Mega Limited. Mega has a software application edition for Mac, Windows, and Android OS (Urasa, dkk, 2016.) Mega means "Mega Encrypted Global Access" is cloud storage that provides 50 GB of free storage space for its users. Even if the user wants to add storage space, Mega provides pro services at a relatively low price of $9.5 / month with storage up to 4TB (Estu, 2020). Mega also does not have a Cloud for office document creation. In addition, there is no direct link and can not customize the URL of the address of the file and folder to be shared (Agustine, 2014).

3. RESULT AND DISCUSSION

Digital transformation transforms all aspects of life. Back then, archiving files done initially in the traditional way is now a digital way. Archiving data and files today can be done digitally by utilizing cloud storage. The benefits of cloud computing reduce the maintenance cost like licensed software fee for each system. The purchase of new hardware and software is declined. Access to the application can be done anytime, anywhere provided that they should be connected to the internet, Scalable, Improves Flexibility, Disaster Recovery.

Various types of storage exist, and the most widely used is Google Drive. Google in kompas.com delivers google drive users in 2018 reached 1 billion. Multiple types of storage exist, and the most commonly used is Google Drive. Google in kompas.com had users google drive in 2018 reached 1 billion but google drive only provides free access to storage up to 15 GB. In addition to Google Drive, there is another cloud storage that has more free storage capacity. A growing and running company can produce important archives and cloud storage to be the best answer to storing all crucial files. Storage capacity in the cloud is one of the factors companies determine what could be suitable for the company. Mega cloud drive is a file hosting and storage services offered by Mega Limited. Mega has a software application edition for Mac, Windows and Android OS (Urasa, et al., 2016.) The most striking difference between Mega and various types of storage could be, namely, on the storage size that graphic can see in figure 1.1
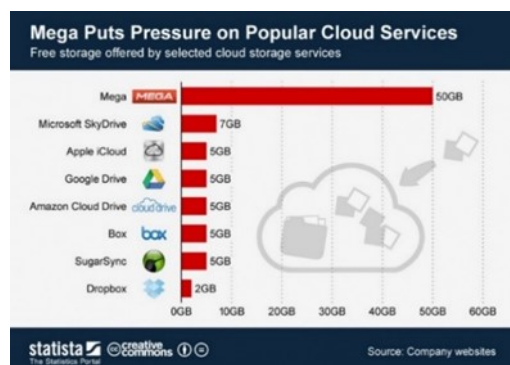

Figure 1.1 Capacity of Cloud Storage

Based on the picture can be seen that could storage that has the most storage capacity is in Mega Could. Mashable team in merdeka.com site, (2013) conducted a trial to find out the speed of the service in Mega, Google Drive,

SkyDrive, DropBox, and SugarSync found results that can be seen in figure 1.2
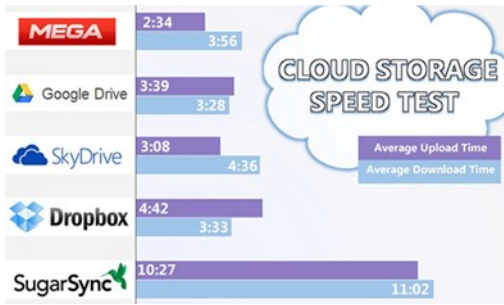

Figure 1.2 Cloud Storage Speed

Based on the data in the picture, it appears that Mega has the fastest upload time than the others, although the downloading speed is still behind Google Drive. The peak of transferring speed is 2.0 Mb/Second for a free account. Mega Cloud has multiple functions such as communication, music video, and sync photo, not just cloud storage. Mega cloud also has a mobile version with well build design and easy to use. The system is fully end-to-end encryption to make sure the file is secured and cannot be breached.

By utilizing these data and information, we knew that mega cloud becomes the best choice in digital storage by providing storage capacity up to 50 GB for free. Muhammad Nizar et al., (2018) Mega Cloud security uses an end-to-end encryption model, which means data is encrypted and decrypted only on the client-side. In web connections, Mega uses TLS 1.2 with 256-bit AES encryption in CBC mode and uses RSA as a key negotiation algorithm.

4. CONCLUSION

using cloud storage. Archiving data and files today can be done digitally by utilizing cloud storage. The benefits of cloud computing reduce the maintenance cost like licensed software fee for each system. The purchase of new hardware and software is decreased. Access to the application can be done anytime, anywhere provided that they should be connected to the internet, Scalable, Improves Flexibility, Disaster Recovery. Some disadvantages can be caused by using cloud storage. When accessing data in the cloud system, we need internet access to see the data we store in cloud storage. If some files need to upload or download a large file, higher internet speed is required. Cloud storage is also vulnerable to hacking because irresponsible people can hijack the files or data stored in cloud storage.

Through writing the literacy study, information about various cloud storage such as Google Drive, MEGA, Microsoft OneDrive, and Dropbox has been obtained. Various types of storage exist, and the most widely used is Google Drive. Google in kompas.com delivers google drive users in 2018 reaching 1 billion. Multiple types of storage exist, and the most commonly used is Google Drive. Google in kompas.com had users google drive in 2018 reached 1 billion but google drive only provides free access to storage up to 15 GB. In addition to Google Drive, there is another cloud storage that has more free storage capacity. A growing and running company can produce important archives and cloud storage to be the best answer to storing all crucial files. Storage capacity in the cloud is one of the factors companies determine what could be suitable for the company. Mega cloud drive is a file hosting and storage service offered by Mega Limited. Mega has a software application edition for Mac, Windows and Android OS (Urasa, et al., 2016.).

After seeing information from several cloud storage service providers above, the mega drive is the most suitable service provider for digital business, both individually and at the same level. In this digital era, the world is developing very fast, that the storage is needed that is bigger, faster, safer and of course at an economical price but has excellent quality. Mega cloud drive is a file hosting and storage service offered by Mega Limited. It has a software application edition for Mac, Windows and Android OS (Urasa, et al., 2016.). This cloud service has the fastest upload time than the others, although the download speed is still behind Google Drive. The peak of transferring speed is 2.0 Mb / Second for a free account. Mega Cloud has multiple functions such as communication, music video, and sync photo, not just cloud storage. Mega cloud also has a mobile version with well build design and easy to use. The system is fully end-to-end encryption to make sure the file is secured and cannot be breached. By utilizing these data and information, we know that mega cloud becomes the best choice in digital storage by providing storage capacity up to 50 GB for free.

In web connections, Mega uses TLS 1.2 with 256-bit AES encryption in CBC mode and uses RSA as a key negotiation algorithm.

In this study, the examiner found a notable amount of evidence to determine the cloud provider name and customer profile details for Google Drive, MEGA, Microsoft OneDrive and Dropbox. The proposed technique will be helpful for the examiners in a cloud storage analysis process for Digital Business Purposes from the initial to ending stage of completion.

5. REFERENCES

Acito, D. (2021, 5 23). *Advantage and Disadvantage of Using Dropbox.* Accessed from: toolbox.com: https://www.toolbox.com/tech/devops/blogs/ advantages-and-disadvantages-of-using-dropbox-07221/

Agus, I. (2019). Comparison of Microsoft Onedrive, Dropbox, and Google Drive Cloud Computing. *Exacta Factor Journal 12*, 20-27.

Agustine, R. (2021, 5 23). *Mega Free Save*. Accessed from: kompasiana.com: https://www.kompasiana.com/rochmahagustine/552faa886ea8347f128b457c/mega-free-store

Anonym. (2021, 5 23). *Jurnal.id*. Accessed from: Cloud Computing: Cari Tahu Definisi dan Sejarah Kehadirannya.: https://www.jurnal.id/id/blog/cloud-computing-cari-tahu-definisi-dan-sejarahkehadirannya/#:~:text=Berdasarkan%20sejarahnya%2C%20Cloud%20Computing%20merupakan,Computer%20Network'%20oleh%20JCR%20Licklider.

Budiarta, K., Ginting, S. M., & Simarmata, J. (2020). *EKONOMI BISNIS DIGITAL.* Medan: Yayasan Kita Menulis.

Danuri, M. (2019). PERKEMBANGAN DAN TRANSFORMASI TEKNOLOGI DIGITAL. *Danuri, M. (2019). PERKEMBANGAN DAN TRANSFORMASI TEKNOLOGI DIGITAL. Jurnal AMIK JTC INFOKAM. 15(2), 116-123. ,* 116-123.

Dwi, A. (2021, 5 24). *[Test] Kecepatan unduh dan unggah Google Drive lebih unggul*. Accessed from: merdeka.com: https://www.merdeka.com/teknologi/test-kecepatan-unduh-dan-unggah-google-drive-lebih-unggul.html

Estu, W. S. (2021, 5 23). *Save Your Data Online with This Cloud, Free!* Accessed from: today.line.me: https://today.line.me/id/v2/article/q9RWeD

Kamalakannan, Sharmila, K., Shanti, C., & Devi. (2019). Study on Cloud Storage and its Issues in Cloud Computing. *International Journal of Management, Technology And Engineering. 9(1)*, 976-981.

Kannan, K. (2019). Study on Cloud Storage and its Issues in Cloud Computing. *nternational Journal of Management, Technology, and engineering IX*, 976 – 981.

Santiko, I., Rosidi, R., & Wibawa, S. A. (2017). PEMANFAATAN PRIVATE CLOUD STORAGE SEBAGAI MEDIA PENYIMPANAN DATA E-LEARNING PADA LEMBAGA PENDIDIKAN. *JURNAL TEKNIK INFORMATIKA 10 (2)*, 137-146.

Santoso, N., & Kusyanti, A. (2018). Trust and Security Concerns of Cloud Storage: An Indonesian Technology Acceptance. *International Journal of Advanced Computer Science and Applications.*, 453-458.

Saretta, I. (2021, 05 23). *Cermati.com*. Accessed from: Mengenal Beragam Jenis E-Commerce, Manfaat, dan Cara Mengelolanya bagi Pebisnis [Online].: https://www.cermati.com/artikel/mengenal-beragam-jenis-e-commerce-manfaat-dan-cara-mengelolanya-bagi-pebisnis-online

Subrata, E. H. (2021, 5 23). *Little-Known Advantages and Disadvantages of Google Drive.* Accessed from: Dosenit.com: https://dosenit.com/software/search-engine/google/kelebihan-dan-kekurangan-google-drive

Urasa, S. (2016). Digital Forensic Analysis of Cloud Storage Data in IDrive and Mega Cloud Drive. *Research gate*, 3-6.

Wahyunada. (2021, 5 24). *Pengguna Google Drive Hampir Tembus 1 Miliar*. Accessed from: kompasiana.com: https://tekno.kompas.com/read/2018/07/27/16104107/pengguna-google-drive-hampir-tembus-1-miliar#:~:text=KOMPAS.com%20%2D%