

# A STUDY OF CLOUD STORAGE PROVIDERS FOR PERSONAL AND PROFESSIONAL USE

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## ABSTRACT

**Keywords-** Cloud Computing, Storage, Drive, File Sharing

The global speed of business keeps getting faster, which means that organizations need to find ways to adapt to this pace, stay always connected or risk losing their place. As organizations grow, the data gets larger, and file storage and sharing becomes a pain if not managed properly. We have moved from Bits to Bytes to Mega Bytes to now Giga Bytes. The once famous Disk Drive is although necessary but requires a big brother if global organizations are to be managed. If file storages are not managed, it results in huge cost for a company as well as an individual. Hence comes Cloud computing into the picture. Cloud computing provides easy access, speedy processing and computing of the data. Here is a research where we have analyzed usage behavior of working professionals on their most preferred Cloud Storage provider, be it on the professional or personal front. As needs differ in both environments. In the primary research, we surveyed over 100 professionals from diverse background, different sectors, varied age groups, and summarized cloud storage providers and the preference of people and organizations.

## INTRODUCTION

As enterprises become global, the need arises to stay connected, collaborated and managing the data becomes crucial. Traditional form of communication has been Email, which is also the primary form of sharing files across the organization, whereas Computer Hard Disk the default form of Storage of data. However, as floppies and discs became obsolete due to limitations in holding data, technological advancements resulted in birth of Cloud which can manage this data without a Size restriction.

Users today have different types of data which is stored across various places viz. Office, Home, Phone, Desktop etc. Cloud enables the user to access this data across locations (And its not restricted to specific City State or country) and at any given time 24\*7. Cloud storage hence makes the life of the user easier as it also allows real-time copying, editing, saving of files on its server.

Cloud services have better performance, scalability, lesser storage costs.

In this research, we will see key Cloud storage providers and people's preference of usage of the same.

The major cloud providers are Google Drive, Microsoft OneDrive, Apple Cloud, DropBox.

### OBJECTIVE OF THE STUDY

- To provide an overview of Key Cloud Storage providers
- To understand the preferred medium for sharing of data
- To understand the preferred Cloud Storage providers in Corporate World for official use.
- To understand the preferred Cloud Storage providers for personal use

### CLOUD COMPUTING:

#### Overview:

Cloud Computing is called so because the internet resembles Cloud.

Cloud Computing is a technology by which users can store and access data on cloud via internet and access it via any device, any place, any time. Cloud computing allows users to access its resources, infrastructure, servers, network etc.

#### Types of Cloud:

Clouds are usually classified in two ways, first way of classifying cloud is based on model of deployment, the second way of classifying cloud is on the service offering.

Based on Deployment model, Cloud can be classified as:

- Private
- Public
- Hybrid

Whereas based on service offering, cloud is classified as:

- Platform
- Infrastructure
- Software

When the user selects cloud based on the services offering the selection primarily depends on what the user wants to control and what should be given as responsibility of the cloud hosting provider.

Below are the Options:

- Platform as a Service:  
Also called as PaaS. It consists pre-configured operating system. It also consists web server and database.  
Example: Microsoft Azure
- Infrastructure as a Service:  
Also called as IaaS. User has complete control on the operating system and the configuration. It has a fully operational server.  
Example: Amazon Web Services
- Software as a Service:  
Also called as SaaS. It is basically a plug and play model. The user can upload files and can access the same from anywhere. Pre-configuration is not required for the user to use this type.  
Example: Google Drive

## **OVERVIEW OF CLOUD STORAGE PROVIDERS:**

### **Apple iCloud:**

Operating Platform and Device Support:

### **Microsoft Windows, Apple iOS, Web, Apple Air Tablet, Mac Laptop and Desktop**

Storage available as complimentary: 5 GB

Apple's iCloud can be easily activated it on all devices using Apple ID and it readily give access to the user to his data which includes Music, Photos, Contacts, Notes, Calendar etc.

Apple iOS devices (MacBook, Air, iPhone) auto back up data to iCloud. Files can be seamlessly and easily moved and accessed from these devices to iCloud Drive and can be used for all the above listed iOS devices.

There is also a web version to access iCloud. One of the prominent flip sides of iCloud is have non-compatibility with other operating systems.

### **Google Drive:**

Operating Platform and Device Support:

**Google Android, Microsoft Windows, Apple iOS, Google Chromebook, Web**

Storage available as complimentary: 15 GB

Google Drive is a part of Google suite also known as G suite. The Google Drive storage is shared between the G suite applications like Gmail, Duo, Hangout etc. Google Drive has a clean photo storage experience. It has an easy setup and integration with Google account. Google Drive is hence one of the most popular and widely used cloud services in the world. Google Drive gives the maximum free storage amongst its peers i.e. 15GB.

The Drive app is by default in all Android phones. Being a part of the G Suite Google Drive provides an easy and seamless support for other Google Applications like Sheets, docs , photos etc.

### **Microsoft OneDrive:**

Operating Platform and Device Support:

Google Android, Microsoft Windows, Apple iOS, Windows Surface Tablet, Windows Laptop & Desktop

Storage available as complimentary: 5 GB

Microsoft OneDrive is part of Microsoft Office 365 Subscription. It supports real-time collaboration on Office documents. Most enterprises use Windows or Office 365 and hence, Microsoft OneDrive becomes an obvious choice. OneDrive and Office 365 are designed and very well integrated with the Windows 10 OS. OneDrive by Microsoft is probably one of the most extensive and secure cloud storages platforms, and it supports more than 100 languages.

### **DropBox:**

Operating Platform and Device Support:

Google Android, Microsoft Windows, Apple iOS, Web, Laptop & Desktop

Storage available as complimentary: 2 GB

Unlike Google, Microsoft, Apple, Dropbox doesn't have a platform or device of its own. It can be accessed via App or Website on Android, Mac and Windows. Its basic plan allows the user to access 2 GB of storage for free.

### **Mi Cloud:**

Operating Platform and Device Support:

**Xiaomi Devices, Microsoft Windows, Web and Desktop**

Storage available as complimentary: 5 GB

. Xiaomi is the latest entrant in the Mobile and Computer Manufacturing space and has rapidly grown in this space. The Mi Cloud is one of the default offering in any Xiaomi Device. It offers 5 GB cloud storage for free to its users. It allows the users to easily sync Messages, Call History, Contacts, Photos, notes etc. on the Mi Cloud. They can be later accessed from any device via web.

### **WeTransfer:**

WeTransfer is not a Cloud Storage provider but it's a great tool for sharing large files. It allows its user to share free file up to 2GB. The files get uploaded on the WeTransfer server and then the file link can be sent via email to the receiver. For the free version the user does not require any login credentials hence there is no encryption to the file.

## **RESEARCH METHODOLOGY:**

With a research objective to find out preferred sharing medium, perception of the employee towards cloud service providers. Our major emphasis was on primary research which involved interviewing and surveying respondents across various industries. A questionnaire was developed with close and open-ended questions and was presented to the employees across all levels of experience in IT, Banking, FMCG, Manufacturing industries.

The primary data was collected through a survey. There were a few interviews conducted via phone and via face to face with the employees as well.

Insights for the secondary data were taken from various company websites.

## TARGET RESPONDENTS & SCOPE OF STUDY

A Sample size of 100 + professionals and employees across various sectors were considered as respondents. The scope of the study considered following sectors: IT Services & Consulting, Banking & Finance, Insurance, FMCG, Manufacturing, Oil & Gas, Media, Pharma-Medical, Travel and Education.

The work area of these respondents falls broadly into following categories:

- Finance
- Marketing
- HR
- Technical (Developers, Testers etc.)
- Quality
- Project Management & Operations
- Education

## DATA ANALYSIS & RESULTS

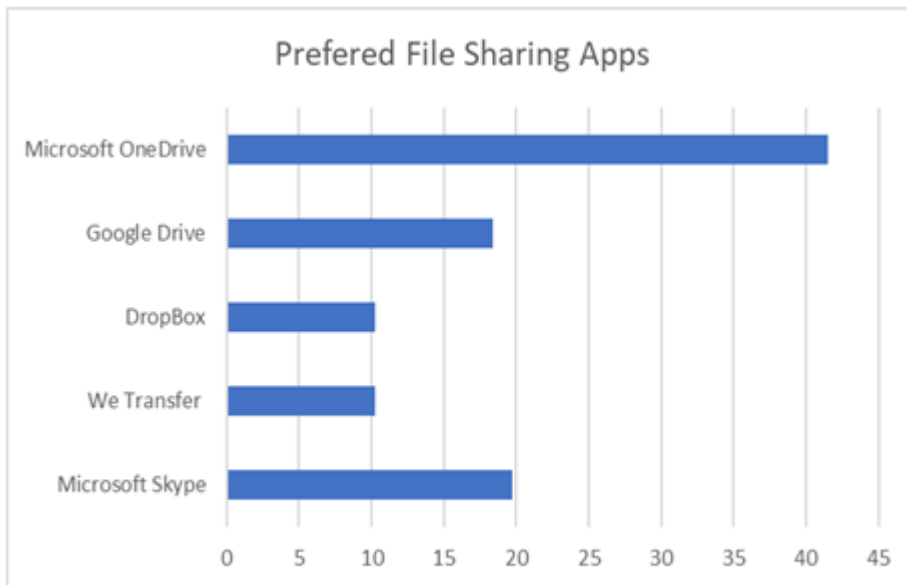
The survey results were indeed interesting and gave a good perspective on preferences of people on usage of applications for file sharing and storage purposes.

### **Preferred File Sharing Application:**

Microsoft completely dominated this space. As 60 % Users (Combined) prefer both Microsoft OneDrive and Microsoft Skype to share large files. The individual split can be seen in the Chart below.

Dropbox is a preferred for 10% users, so is WeTransfer.

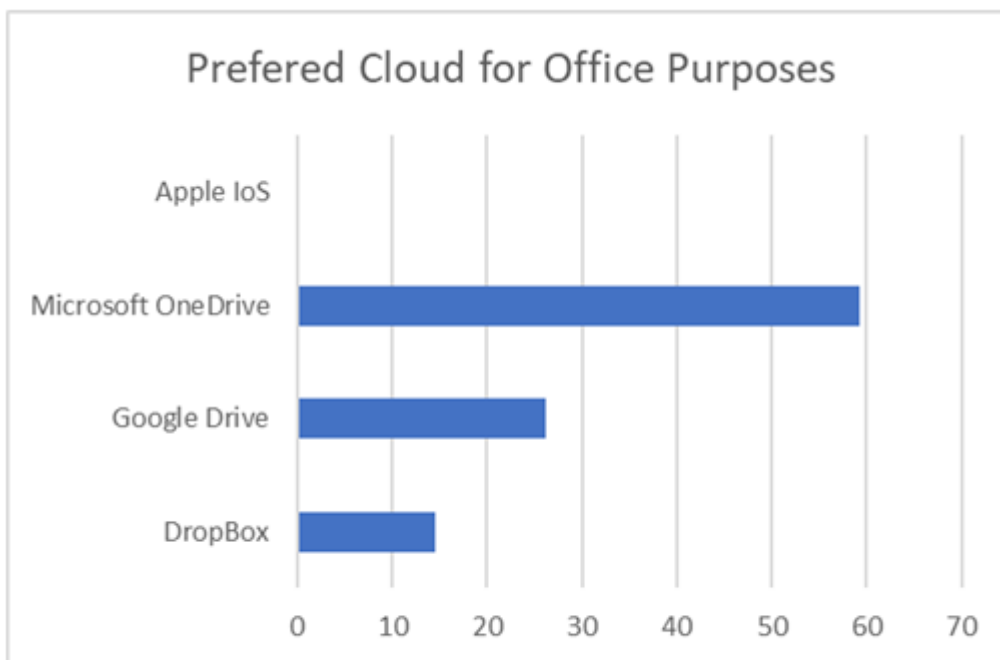
Google comes in second after Microsoft where 18% users prefer it for large file sharing



**Chart 1: Preferred File Sharing Application**

#### Preferred Cloud Storage Provider – Professional Use:

Microsoft One Drive is the most preferred Cloud Storage Provider with 60 % Users. Around 25 % professionals prefer Google Drive.



**Chart 2: Preferred Cloud Storage Provider – Professional Use.**



### Preferred Cloud Storage Provider- Personal Use:

When we interviewed people for their preference for storage of personal data and files, 74 % people preferred Google Drive, whereas 2 % preferred DropBox, 14 % Apple iCloud, 8 % Microsoft OneDrive.

Interestingly, many Apple users mentioned that prefer both Apple iCloud and Google Drive for storage.

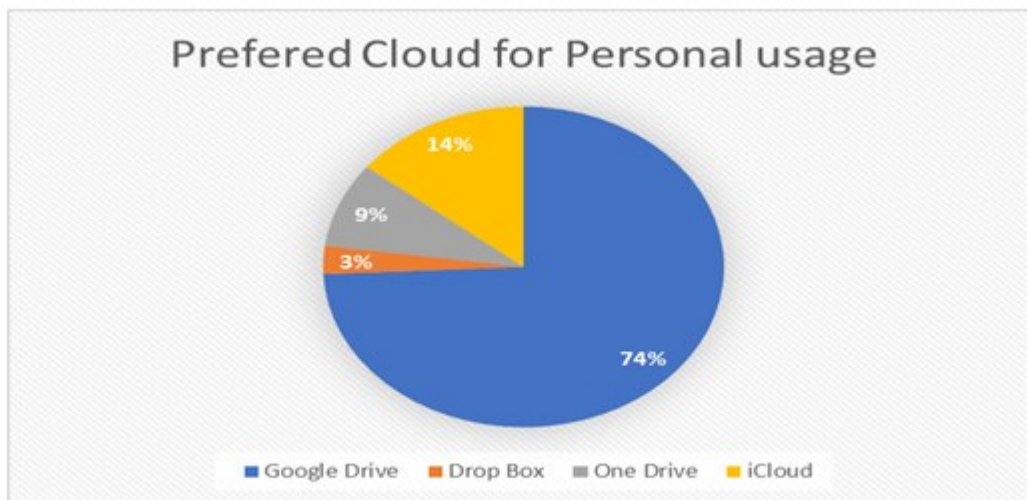


Chart 3: Preferred Cloud Storage Provider – Personal Use.

### ADVANTAGE-DISADVANTAGE OF CLOUD:

#### Advantages:

- **Accessibility:**  
In the Global business environment where businesses are required to be always Online, Cloud services provide an advantage of being available 24\*7 across geographies and across devices.
- **Expenditure Reduction:**  
Implementation of cloud helps business reduce their Capital Expenditure. It saves organization on investing in data centers, servers and other hardware infrastructure. Business pay the cloud provider based on the model selection as per the subscription plan
- **Scalability:**  
Every company has a different need. Cloud services offer scalability and its capacity can be increased or decreased based on need and demand. Hence Cloud services are relevant for organizations whose needs-demands aren't constant. This agility provides edge over competition.

- **Disaster Recovery:**

Physical infrastructure devices-PC, Laptops are prone to damage due to increased wear and tear due to usage or at times even due to viruses and malware. Hence having backup of data is crucial.

When data is stored on cloud, it stays accessible from any other device even if the computer malfunctions. Hence, it's easy to recover data.

- **Security:**

Increasing Cybercrime is one of the risks for enterprises. Cloud computing has various levels of security features like encryption, authentication, access control etc. Hence the data is secured.

- **Carbon Footprint Reduction:**

Cloud computing helps in reducing Carbon Footprint. This is because it helps organizations in reduction in usage of infrastructure, power etc. Thus, helping in reduction of e-waste

#### **Disadvantages:**

- **Internet Bandwidth and Connectivity:**

To stay connected with the data, enterprises should be online and have good internet connectivity. A Lower bandwidth and poor connection results in non-accessing of data or latency.

- **Outage and Downtime:**

Although Cloud servers are supposed to be forever online, due to technical issues it might result in downtime. Server maintenance, power loss might also result in outage and downtime.

## **CONCLUSION**

Cloud is the way ahead and there is no denying that.

The dominance of Microsoft as an operating system provider and Office suite makes Microsoft One Drive the most preferred choice for working professionals. It wins over Google Drive by offering superior software for business use which Google currently lacks.

Google rules the Cellphone market with its Android operating system packed with Google suite, which makes Google Drive the most preferred choice of people for personal usage. It wins over One Drive by its inter-operability and ease of use.

In future the provider who is most seamless, secure and interoperable will stay.

However, for a user the hybrid approach is the best bet, i.e. OneDrive for professional use and Google Drive for personal use.



**LIST OF CHARTS**

**Chart 1:** Preferred File Sharing Application

**Chart 2:** Preferred Cloud Storage Provider – Professional Use.

**Chart 3:** Preferred Cloud Storage Provider – Personal Use.

## REFERENCES

- Google: <https://one.google.com/storage>
- DropBox: <https://www.dropbox.com/individual>
- Microsoft: : <https://products.office.com/en-IN/onedrive-for-business/compare-onedrive-for-business-plans>
- Apple : <https://support.apple.com/en-gb/guide/icloud/mm74e822f6de/icloud>
- Mi Cloud: <https://i.mi.com/learn-more-en.html>