Azure Storage Accounts

Azure Storage is a cloud-based storage solution provided by Microsoft Azure, which allows users to store and access data objects in the cloud. It offers a variety of storage options for different data types and scenarios, such as blobs, files, tables, and queues. Azure storage accounts mainly consist of 2 types of storage: BLOB or General-Purpose Storage, and Data Lake Gen2 Storage accounts. Each type supports different features and has its own pricing model.

Storage accounts would be chosen based on business needs, budget allocations, Policies levied, type of workload etc., Below are a few key differences between the storage accounts for our reference:

Aspects	BLOB(General Purpose)	Data-lake Gen2
Storage	500 TB	500 TB
Types of Data	unstructured data as blobs (text and binary data, images, videos, and other files) and semi structured	large volumes of data in various formats (Structured, Unstructured)
Data Security	contains security features such as encryption, role-based access control, and shared access signatures	provides strong security and compliance features, including role-based access control and encryption at rest
Accessibility	accessible via a REST API that can be accessed from anywhere	uses a distributed file system to provide parallel access to data.
Integrity	can be easily integrated with other Azure services	with Azure services for big data analytics and machine learning
Storage and Processing	designed to store and process large volumes of data in various formats	designed to store and process large volumes of data in various formats
Data Viewing	Not available	Using Serverless SQL Pool, users will be able to view data inside a file by executing SQL queries
Cost	Blob storage cost is lower.	Data Lake cost is higher due to advanced features and capabilities
Processing	Slower processing and used for backups	Faster processing and used for Analytics
Usage	store backup data for disaster recovery purposes.	storing and processing large volumes of data, fit for big data analytics
Use for Storage	storing application data such as logs, user data, and other files required by the application	store and process data for ML models, providing a scalable and secure repository for training and deployment