The major difference between Amazon S3 (Simple Storage Service) and block storage lies in their intended use cases and characteristics.

1. Use Case:

- S3: S3 is primarily designed for storing and retrieving large amounts of unstructured data, such as photos, videos, documents, backups, logs, etc. It is ideal for scenarios where you need reliable and durable storage with high scalability and accessibility.

- Block Storage: Block storage is intended for more traditional data storage needs. It provides raw storage that can be formatted and used as a regular hard drive by applications running on virtual machines or servers.

2. Data Structure:

- S3: S3 stores data as objects, where each object consists of the data itself, a unique key, and metadata.

- Block Storage: Block storage divides data into fixed-sized blocks and stores them on specific storage devices.

3. Access Method:

- S3: S3 provides a RESTful API, allowing easy access to stored objects over the internet. It is accessible from anywhere.

- Block Storage: Block storage is typically attached to specific virtual machines or servers and accessed using block-level protocols like iSCSI or Fibre Channel.

4. Durability and Availability:

- S3: S3 offers high durability (11 nines) by automatically replicating objects across multiple data centers. It also provides high availability, ensuring that objects are always accessible.

- Block Storage: Block storage solutions may vary in terms of durability and availability depending on the provider and configuration. Redundancy and backups need to be implemented manually in most cases.

5. Cost:

- S3: S3 pricing is based on the amount of data stored, data transfer, and API requests. It offers different storage classes with varying prices, allowing users to optimize costs based on their needs.

- Block Storage: Block storage pricing typically depends on the provisioned capacity and performance. It may also involve additional costs for data transfer.

In summary, S3 is best suited for storing large amounts of unstructured data with high durability, scalability, and accessibility via a RESTful API. On the other hand, block storage is more suitable for traditional storage needs and is typically attached to specific virtual machines or servers, allowing direct file system access.