Embracing 5G in Enterprise Data Storage

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5G, the fifth-generation cellular network, is on the cusp of becoming the primary data provider. Differing from its predecessors, 5G harnesses super-high-frequency airwaves that increase the rate of data transfer and decrease latency, allowing for upwards of 10 to 20 times quicker uploads and downloads than existing networks. However, transmission towers have far less range than their antecedents, resulting in the need for increased physical infrastructure for mass usage.

Accordingly, the transition to 5G normalcy will be gradual. Not only will the populous need to upgrade their phones to newer editions capable of receiving 5G, but service providers will also need to deploy transmission towers outside of urban hubs, so rural users will receive a better reception than the current, weaker versions accessible to them.

Thankfully, as these tasks take time, it allows enterprise leaders the unique opportunity to fully prepare for the dawn of a 5G era. First, companies need to critically evaluate the degree to which 5G will alter their personal Data Governance plans. For some brick-and-mortar businesses, this may be minimal; however, many companies rely on cell waves in some capacity. Use cases include tracking driving habits, streaming, strengthening Wi-Fi with 5G access points or using hotspots, retail and online shopping, or the innocuous email sent from a mobile device. Moreover, 5G is also deployed in devices far less ubiquitous as cell phones, such as to power AI learning devices or to control unmanned machinery.

Companies ought to shift accordingly to brace the stress that will come from their existing systems attempting to meet the increased data ingestion, aggregation, and archiving processes as they attempt to handle the wealth of incoming data. While not all companies are equally reliant on cell data, everyone can benefit from making proactive changes to improve their Data Governance policies.

Improve Scalability

Data repositories are constantly in growth as companies gather new information at faster rates than they currently defensibly delete old data. Companies need to prepare as the influx of data will only increase over time, be it by increasing the server count on their on-premises storage or leveraging the innate elastic scalability of the cloud.

Clean Up Existing Data

While there are numerous regulations, depending on the industry, that penalize the deletion of sensitive information, companies are still capable of reducing their current data burdens by arranging governance plans that allow for defensible deletion. Namely, enterprises can seek to reach data singularity, culling and deleting duplicate files and other redundant, outdated, and trivial (ROT) data.

Conform Data Management Policies

Expanding on governance policies, it is crucial for organizations to structure their policies uniformly so that each office, department, storage platform, and individual treats their data with the same respect. Inconsistent storage policies lead to future headaches when trying to search and decipher data.

Prioritize Important Data

With troves of incoming data, not all are equal — nor should they be treated thusly. Countless artificial intelligence programs exist which can be used to leverage automated categorization of data to distinguish between sensitive and unimportant information — thereby allowing corporations to tier their data storage, placing non-critical data in slower servers to save on resources.

Unify Data Storage

Many organizations store their data across multiple geographic locations, corporate entities, applications, and legacy repositories. While this storage by convenience is practical in the short-term, if organizations do not find ways to consolidate and unify their data, they may be left overwhelmed when trying to isolate information and insights. However, finding methods or services that can de-silo and virtually merge data can alleviate the time-consuming and resource-draining task of manually navigating multiple data repositories.

Embracing digital transformations, such as 5G, does not need to be cumbersome. Often simple changes, dictated by CIOs and IT leaders, allow for the most monumental results. Notably, honing and leveraging existing data is crucial for future data ingestion and storage: The clearest path to a company’s technological future is reliant on managing its past.