Storage companies are keeping up with these increasing rates. In fact, innovation is driving the cost per storing a byte of data down, which leads to more data being stored.

Innovation isn’t limited to sheer raw capacity being increased. In fact, when you’re looking at retaining data, you need to consider the many different ways to look at storage capacity.

Advancements in data compression also are part of the picture. Depending on the type of data, compression can help to drive capacity. Video and music files do not compress due to the random nature of the data. But for other types of data, you can take advantage of the LTO technology's 2:1 compression capabilities (2.5:1 compression for LTO-6 drives). The LTO compression algorithm is completely ‘lossless’ and it will compress data by default only if the data can be successfully compressed. For example, the “native” capacity of an LTO-6 tape is 2.5 Terabytes, but it achieves 6 Terabytes with compression.

That’s a big advantage when you compare LTO tape with other technologies. SSD typically provides less than 1 Terabyte of native capacity. That’s expensive when you consider cost per gigabyte. Hard disk drives today can offer up to 3 Terabytes of native storage, but it’s still more expensive when you consider cost and the need to raid your systems for data protection purposes. At just 1.3 cents/gigabyte, LTO tape provides the lowest cost per gigabyte.

Estimates Suggest that Over 95% of Data is Never Accessed After 90 Days

*Source: Government Computer News, “Most network data sits untouched” by Joab Jackson