

Get Ready for More Features and Still Lower All-flash Array Storage Prices

While the overall economy and even the broader technology sector largely boom, the enterprise storage space is feeling the pinch. As storage revenues level off and even drop, many people with whom I spoke at this past week's HPE Discover 2017 event shared their thoughts as to what is causing this situation. The short answer: there does not appear to be a single reason for the pullback in storage revenue but rather a perfect storm of events that is contributing to this situation. The good news is that this retrenching should ultimately benefit end-users.

I had a chance to stop by the [HPE Discover 2017](#) event this past week in Las Vegas to catch up with many of the individuals in the industry that I know to get their "boots-on-the-ground" perspective on what they are hearing and seeing. Here are some of the thoughts they had to share:

1. ***Too many all-flash storage players.*** The number of companies selling enterprise flash storage products is staggering. Aside from the "big" names in the technology space such as [Dell EMC](#), [HDS](#), [HPE](#), [IBM](#), and [NetApp](#) offering flash storage solutions, there are many others including [Tegile](#), [Kaminario](#), [Pure Storage](#), [iXsystems](#), [StorTrends](#), [Fujitsu](#), [NEC](#), [Nimbus Data](#), [Tintri](#), and [Nexsan](#), just to name a few. Further, that list does not include the ones that were recently acquired ([Nimble Storage](#) and [Solidfire](#)) nor does it fully take into account the multiple lines of all-flash arrays from the big technology players. For example, HPE has all-flash arrays in its XP, 3PAR StoreServ, [StoreVirtual](#), Nimble Storage and [MSA](#) product lines.

2. ***A race to the bottom.*** This much competition with so many product lines inevitably leads to price erosion. The cloud storage market (Amazon S3, Google Drive, Microsoft Azure) are not the only ones experiencing the race to the bottom in the per GB pricing model. This number of all-flash array competitors is causing similar downward pricing pressure in all-flash arrays.
3. ***Inability to differentiate.*** Keeping track of the large number of vendors coupled with the large number of all-flash array models can challenge even the most astute technologist. Now try to explain how they differ and what advantages that one offers over the other. For instance, I was uncertain as to exactly why HPE was so interested in acquiring Nimble Storage when it already had multiple storage lines. Turns out, it was Nimble's [Infosight](#) technology, its advanced integration with [Docker](#), and its [Cloud Volumes](#) feature that piqued HPE's interest in acquiring Nimble Storage. Now HPE just needs to communicate those differentiators to the market place and adopt that technology across its other product lines.
4. ***Growth of hyperconverged infrastructure and software-defined storage technologies.*** One of the more difficult factors to measure is to what degree hyperconverged infrastructure and software-defined storage solutions are impacting traditional storage sales. Even now, storage vendors tell me that they rarely encounter vendors of these products in their sales process. However, as these technologies get a foothold in organizations and take root, are they robbing storage vendors of future storage sales? My gut tells me yes but this is largely anecdotal evidence.

The primary factor working against lower all-flash arrays prices is a tight supply of flash. While not cited as a major contributor, individuals did share with me that some storage shipments have slipped due to tight supplies of flash. As

such, product sales that vendors expected to make in a specific quarter get pushed out due to the unavailability or late deliveries of flash components. These same individuals stress that they are working with their suppliers to get this situation corrected and no one cited any specific supplier as the cause of the problem (*possibly because they want to stay on their good side.*) However, the fact that I heard this as a contributing factor to the storage sales slowdown from multiple sources seems to suggest that until suppliers increase their flash production levels, it may negatively impact their enterprise storage sales and cause higher prices for end-users.

This combination of factors among others is having a cumulative effect of slowing storage sales and eroding prices. However, end-users may and probably should view these factors as huge positives and ultimately working in their favor. While they may not relish the confusion and the time it takes to sort through products to find the right all-flash array for them nor delays in receiving products they order, those that take the time to compare products and get competitive bids will likely be able to obtain a model that very closely matches their needs and get it at a price that meets or comes in below budget.