

# SSDs: What Every Reseller Needs To Know

Solid state drives are on their way. Resellers need to get ready for this new revenue stream.

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The army of data protection folks out there in customer land just got an upgraded piece of hardware. Their fight to maintain recoverable copies of data just got easier due to the upcoming addition of solid state drive (SSD). Resellers need to get ready for this new revenue stream by taking the time to study, compare, position, and help customers make the shift from disk to SSD.

The original excitement over SSD waned considerably when the price per terabyte matched the cost of a midsize car. The next hit came when SSD's mean time between failure (MTBF) estimates hovered around 9 months. And, now, a large portion of laptops will probably be all SSD within the next couple of years.

Inevitably, lower prices will come to SSDs. Pundits have been praising the disk replacement and near memory speed of SSD, and for good reason. The limitations of disk have been met. Data sizes and movement expectations have reached the nadir of science fiction. Plus, the mechanical metal on metal friction of disk spindles worries folks today, similar to the fret over spinning head damage on linear tape from 10 years ago.

What's this mean for selling data protection solutions and architectures? I believe we're heightening the pyramid of hierarchical storage, which will increase the range of options available for customers. SSD moves to the top of the food chain, and tape moves further down. And, the timing couldn't be any better.

The three data protection categories — backup, archive, and disaster recovery — could all benefit from digital-based storage. No moving parts are a good thing. Data protection needs more automation, and SSD can help.

Copying data in order to preserve versions, meeting time-stamp regulations, and providing replicated safety have all been point-of-failure victims due to the inevitability of data loss from the crustiness of long-term tape and the nicks in magnetic circles of disk.

In our appliance business at STORServer, SSDs slide easily into the top of the storage food bins, getting data to the storage pools faster and with fewer issues due to the increased processing required for deduplication and excessive increases in daily changes from virtual machines and ever-growing

digitizing of information. We've had to be both cautious and inventive about introducing SSD, but there's no more waiting around. SSD is here, and it's only going to grab more of the storage stage.

Of course, the corruptibility and digital hiccup problems will still exist with SSD. The truly 99.999% reliability in MTBF may be as many as three years away. In that time we'll see run-rate revenues from SSD sales that are just as good as disk revenues. That's good news for resellers.

For customers, this means more decisions around technology. The more informed you are as a reseller, the more help you can be. For most customers, SSD may only be viable for niche applications, such as individual users accessing highly critical processing machines. In the data protection world, however, SSD may finally justify deduplication, compression, and complex policies that overtax typical disk implementations. For instance, the extra initial investment made on SSD will be offset as deduplication leads to smaller backups and storage archives.

For some data protection vendors, SSD may be a nightmare because their architecture is not designed for fluid technology changes. For those legacy backup engines designed to make copies to tape, SSD will expect more than emulation on disk. Resellers should watch for the difference between spinning a story on SSD and actual implementations, which take advantage of SSD. The separation of poorly designed backup software and limited backup appliances from the more superior offerings begins over these next several quarters.

Another issue will be the implications for the existing disk and tape storage options. What SSD means for disk drives in data protection is the same thing we saw when disk began to displace tape drives and tape. Slower (tape) will move to very long-term use, and disk will be the new "slow."

Pretty soon we'll be talking about how disks may be slow, but they're less expensive than SSDs. We'll hear about the heat and electrical costs of disks as "not that inexpensive compared to SSD." And, then the arguments that "disk is dead" will start up in real earnest. The really good backup guys will know what to do with disk, just like they do with tape today. ●



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