Six key questions to ask before buying storage

Don't let a pushy sales rep trap you into an unwise purchase

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Asking the price and the delivery schedule is just the start – here's a few more questions and topics to build into the discussion. For each question, we've added notes on why it should matter to you.

1. How do I get it up and working? How do I get my existing data onto it? What new skills will I need? How much effort will I have to spend looking after it?

Installation and data migration is a challenge, but automated tools and good support can help a lot. The same goes for administration – look for modern systems that automate as much as possible. For example, there are systems that can automatically adjust storage performance to better meet business needs and expectations, using quality of service (QoS) controls. Modern systems also minimise the need for manual storage tuning, automating much of the provisioning process, and so on.

2. How easy is it to expand the system or will I have to buy a huge box on day one just to "be safe"?

Forklift upgrades, where the only way to upgrade a system that has reached its maximum capacity is to lift it out and replace it with a bigger box, are still common practice. It is one way for storage vendors to segment their product ranges, as it helps discourage large clients from saving money by buying midrange systems designed with limited scalability and priced for SMBs.

Fortunately, this is one area where the midrange suppliers can outflank the giants, undercutting their large systems with highly expandable mainstream storage solutions. This trend continues today, with the best of the mainstream systems offering high levels of future-proofing thanks to scalability in capacity, performance and features.

3. Can I trust AFA for all my data? Can I afford to buy an AFA for all my data? Can I trust de-dupe and compression? Can I even use it in my industry sector or country?

All-Flash Arrays have come down in price significantly. That's thanks in part to the speed of AFA, which makes it practical in many cases to de-duplicate and compress data as it is written to the array, without the application noticing a delay. That in turn means an AFA can store several times its nominal capacity, which reduces its effective cost per GB to the level of spinning disk storage.

However, there are also a few business sectors and regulatory regimes (mainly financial ones) where data reduction is not permitted. In addition, disk is still cheaper for raw capacity, and raw capacity is what matters for some applications and data types. An alternative is to use flash as a performance tier within a mainly disk-based array, a hybrid approach that combines many – though not all – of the advantages of flash and disk.

4. Will it work with my existing data protection tools and processes? How can I improve the way I protect data? How difficult is it to set up DR/HA capabilities – will I have to buy special software and invest in many days or weeks of consultant time? How will we recover if it goes wrong and eats all the company's key data?

Look for systems that include data protection capabilities – in particular, high availability, replication and automated failover capability – as standard, not as chargeable extras. Ideally, they should also automate as much as possible of the process. At the back-end there should be integration with backup appliances and perhaps the cloud too.

5. How do I get support when I need it? How long will you provide a service and support contract? Will my maintenance and support costs escalate after 3 or 4 years?

Some storage companies make a very large chunk of their income from hardware and software maintenance fees. There's nothing inherently wrong with that, if it's good hardware and software – and good support. But if you end up paying an open-ended annual fee just to own something, then it might be the wrong pricing model for you.

Either way, you need to be aware in advance of how long service and support is included for, and what an extension will cost. Then you can factor it into your budget, or else choose a supplier whose pricing is more transparent and up-front.

6. Do you have alternative acquisition models available? Do you have any managed services to help us run this thing?

Smart vendors will offer more than just the chance to buy outright. Whether it's simply financing or leasing, or something more creative such as a pay-as-you-grow scheme where you only pay for the capacity you use, there are plenty of SMB-friendly options. The desire to avoid capital investments should not prevent you from acquiring the on-premises storage that you need to get the job done.

Most of these are questions that any small or midsize business needs answers to. Some though are just as much to do with evaluating how knowledgeable the sales rep is and how complete and compatible their company's solution is. We can't guarantee that this will stop a smooth-talker from selling you a lemon, but let's not make it easy for them!