

Data centres are a lot like people. We succumb to those tempting treats, over indulge when we know better, and then struggle to break our bad habits. The result can be a little extra weight around the middle which does nothing for our ego or our physical conditioning. This same thing happens inside the data centre. We deploy that slick new technology that contributes little to the bottom line, and the inertia of our previous decisions keeps us moving down the same well-travelled path. We know that our data centre is not operating at peak performance, but struggle to make the essential changes.

When we reach a tipping point in our personal lives, it's time to take action. A diet may be the answer, but there are hundreds to choose from. We want something that will take the weight off and get us fit. We could try one of the many fad diets or purchase a bottle of new "fat pills" that promises to reduce your weight while you continue to indulge. It would be nice if these diets and pills did the trick, but we all know that the only real way to loose weight is to change our habits by eating sensibly and exercising more.

The storage environment with most data centres is suffering from the same affliction. While technology must be part of the solution, there is no silicon fat pill that will suddenly optimise our resources. CIOs may spend thousands on analysis tools, data compression, and enterprise wide deduplication, but these often address only the symptoms. If we want to make real progress in your data centre, we have to recognize weaknesses and change our habits. We have to do the data centre equivalent of eating less and exercising more. As with our personal diets, this is not what we want to hear. It may not be quick or easy, but it's the only way to achieve significant and lasting cost savings and resource optimisation.

This analogy is particular timely because the current financial climate is forcing organisations to reduce IT acquisition and make do with existing resources. We have to be fit and efficient if we expect to survive. It's time to put the data centre on a diet and exercise regime. Any good program begins by identifying our greatest risk factors and weaknesses. This includes those areas where we're indulging too much, misdirecting our efforts, or spinning our wheels. While it would be inappropriate to conjecture about personal areas of weakness when it comes to someone's diet, risk factors for data centre storage are often pretty universal (although equally as emotional).

Data Centre Dietary Risk Factors

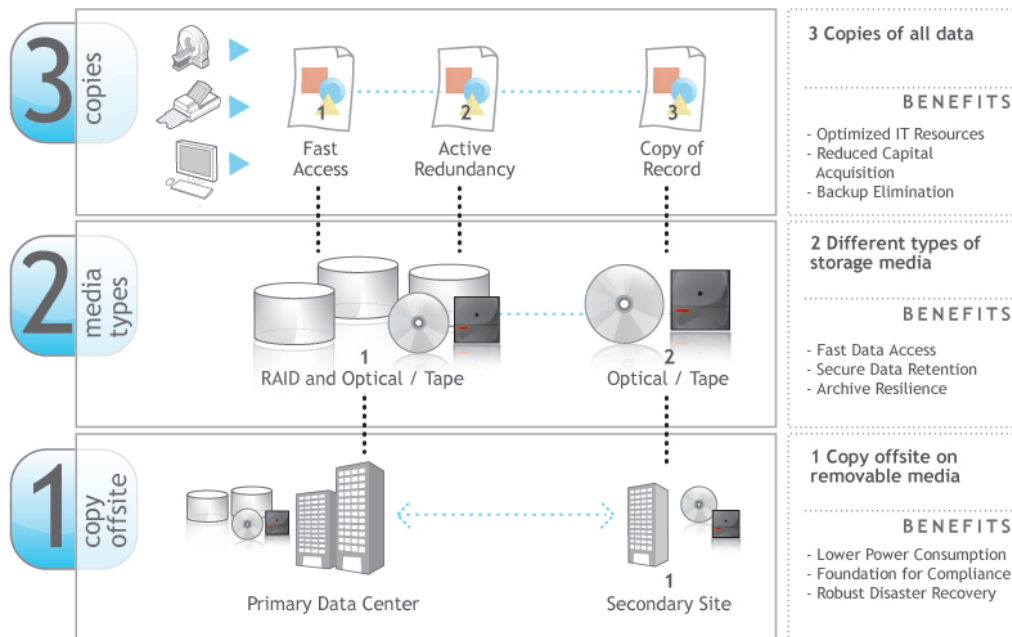
- Over Provisioning
- Backup & Disaster Recovery
- Preservation and Security
- Best Practice & Compliance
- System & Technology Refresh
- Power Consumption

These are the six greatest risk factors to data centre storage obesity. They increase costs, reduce efficiency and consume our limited IT resource. Our standard response is to shovel capacity at our storage problems, resulting in poor utilization and massively expensive Over Provisioning. We become obsessed with operations such as Backup & Disaster Recovery, allocating a disproportionate amount of our limited time and resource. By contrast, the Preservation and Security of our archive data is given very little attention, risking major business disruption. Best Practice & Compliance is frequently mismanaged both technically and operationally with little to show for our efforts. We become too dependent on vender specific products, allowing them to define the agenda for costly System & Technology Refresh cycles. And lastly, we miss the opportunity to reduce Power Consumption and cooling cost savings through the deployment of appropriate storage technologies. We need a diet and exercise plan that helps us cut costs, limit unnecessary indulgences and deploy our resources in an effective way.



Diets are very difficult for many of us because we don't know where to begin and we don't have the framework to maintain the required discipline. Having a well defined and easy to follow plan can make all the difference. For our personal diet we may choose Weight Watchers, for our data centre it's the 3-2-1 Archive and Data Protection Best Practice. 3-2-1 is a simple, yet powerful strategy that can dramatically reduce our data centre dietary risk factors through a very effective weight loss and exercise regime.

The 3-2-1 Best Practice advocates the retention of at least 3 copies of all critical business data, these copies should be kept on 2 different types of storage media, and at least 1 copy should be offsite on removable media. This vendor independent principle creates a highly resilient and cost effective data management framework that addresses the data centre's six greatest risk factors with clear and measurable fitness benefits.



3-2-1 Fitness Benefits

- Delivers robust availability for archive data
- Slows the demand for IT capital acquisition
- Optimizes the use of existing IT infrastructure
- Eliminates backup overhead for archive data
- Reduces dependence on technology vendors
- Lowers power consumption costs and carbon footprint
- Creates a foundation for regulatory compliance

The 3-2-1 diet and fitness plan curbs our hunger for new capital acquisition through better data management and system utilisation. Backup is slashed for all archive data and a more resource appropriate disaster recovery strategy can be defined. Employing the right technologies and management procedures enables very robust and secure long-term data preservation that mitigates risk. The 3-2-1 strategy also provides a natural foundation for effective compliance that meets corporate obligations. Vendor independence means that system and technology refresh cycles are controlled and extended, cutting costs and administration. And the use of energy efficient removable media provides a much greener approach that dramatically reduces power costs. The result is a much healthier and better conditioned storage environment.

A 3-2-1 strategy is clearly not a fad diet or a quick fix pill that will instantly optimise storage resources. Like any good diet, it requires a willingness to admit our risk factors and change our habits. A fundamental understanding of the business and the associated data is also essential to this strategy. 3-2-1 is the "eat sensibly and exercise more" approach to storage optimisation. It requires some hard work and ongoing discipline, but it delivers a leaner, meaner and most cost effective data centre and that will tip the scales in our favour.

To download a full description of 3-2-1, visit the QStar Technologies website at: www.qstar.com/321_bestpractice.html

