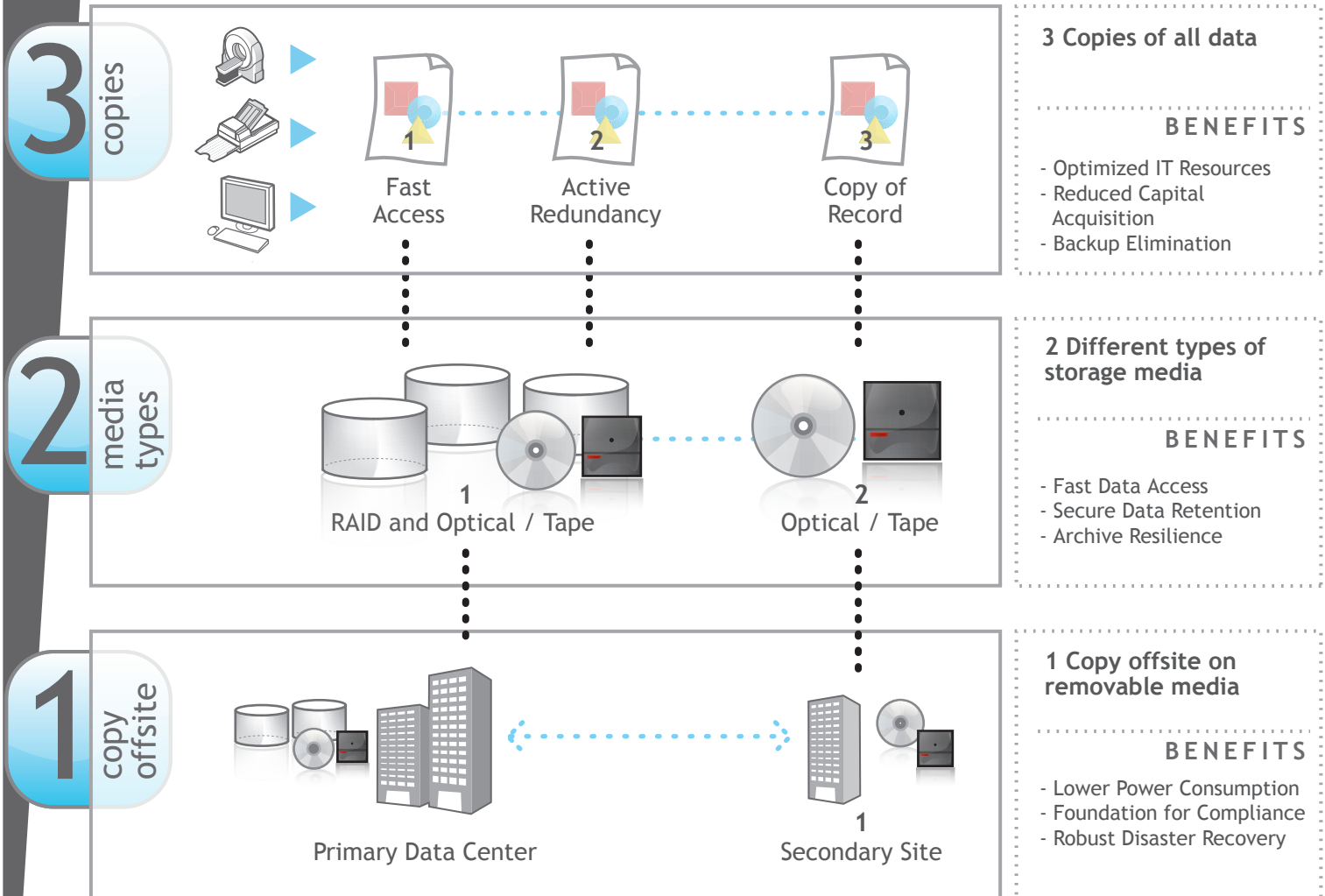


**"The 3-2-1 Archiving Best Practice provides a very pragmatic approach to safeguard and retain electronic information assets in an intelligent and cost-effective way. Archiving 3 copies of all critical data provides a good balance between redundancy and resource provisioning. The use of 2 different media types protects against technology failure, and with 1 copy offsite on removable media it enables a robust and economical archive strategy."**

*Jon Toigo, CEO of Toigo Partners International LLC\**

# 3-2-1 Archiving and Data Protection Best Practice



One of the data center's biggest challenges is protecting digital archive assets without adding greater burdens to an already over stretched IT staff and budget. In fact, most CIOs today are being asked to do more with less. Budgets are being cut while demands for ever more sophisticated IT requirements continue unabated. These new economic realities are forcing a major rethink across the IT industry as senior level professionals search for ways to increase efficiencies through the optimization of their existing resources.

In these trying times, it's prudent to go back to basics and review the foundation of a sound IT strategy. This is exactly what the 3-2-1 Best Practice approach is all about. Endorsed by leading storage industry analysts, 3-2-1 provides a very a simple, yet reliable approach to securing data for the long term though the efficient optimization of IT resources.

**In short, the 3-2-1 Archiving and Data Protection Best Practice advocates that a minimum of 3 copies of all business critical data be retained, these copies should be kept on 2 different types of storage media, and at least one copy should be offsite on removable media.**

## 3-2-1 Archiving and Data Protection Best Practice



The 3-2-1 Best Practice approach provides a very solid foundation for a robust archive architecture without demanding proprietary hardware or infrastructure. When properly deployed, 3-2-1 makes very effective use of IT resources, reducing the excessive level of hardware over provisioning that exists within many data centers. 3-2-1 also delivers a level of structural redundancy that completely eliminates the need for archive backup.

In the current economic climate, financial objectives must be met without compromising business requirements. An archive based on 3-2-1 enables CIOs to make effective use of their hardware infrastructure, reducing the need for capital acquisition and lowering power consumption. The intrinsic redundancy of 3-2-1 slashes the administrative and resource burden of backup, saving time and money. All this can be achieved while meeting essential business requirements for long term data availability, and creating a framework for regulatory compliance.

### 3-2-1 Archive Benefits

- Reduce the demand for IT capital acquisition
- Optimize the use of existing IT infrastructure
- Eliminate backup overhead for archive data
- Lower power consumption costs and carbon footprint
- Deliver robust availability for archive data
- Create a foundation for regulatory compliance

### QStar Technologies

QStar has been providing global businesses with archive and data management solutions for more than 20 years. A corporate philosophy of hardware and operating system independence makes QStar uniquely positioned to help companies deploy a 3-2-1 archive in order to realize the financial and business benefits of this compelling Best Practice approach. QStar's extensive experience with enterprise data management is matched only by the impressive range of system support and advanced security, mirroring and offline media management applications. QStar offers the advice, solutions, and services to make a 3-2-1 archive as easy as 1-2-3.

**\*Jon Toigo** is the Founder and CEO of Toigo Partners International and is one of the storage industry's leading independent analysts and consultants ([www.toigopartners.com](http://www.toigopartners.com)). His unique insights into data management can be found in multiple books and technology columns published in both print and online media. Jon's popular storage and data management blog is [www.drunkendata.com](http://www.drunkendata.com)