

WHITE PAPER

Dell Takes Holistic Approach to the Secondary Storage Market with Its Intelligent Data Management Solutions

Sponsored by: Dell

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IN THIS IDC WHITE PAPER

In this white paper, sponsored by Dell, IDC analyzes the market opportunity for Dell's new data protection appliance, the PowerVault DL2000 product. In addition, IDC explores Dell's offering in the context of the secondary storage and disk-based backup market.

SITUATION OVERVIEW

Today, customers are under enormous pressure to economically meet their ever-growing data storage requirements and grapple with regulations that dictate the need for long-term retention and archiving of their data. Additionally, in today's competitive business environment, more value is placed on the ability to optimize and restore critical information that businesses need for search and discovery. The current set of data protection practices and products falls woefully short of addressing the multitude of data management needs customers have today.

In the current paradigm, customers employ disk and tape solutions with no set of cohesive tools to help them manage their data in the long term. Moreover, data management tools do exist today; however, they are expensive and difficult to implement without the help of integrators or consultants. The current set of data management solutions is appropriate for larger companies that have expertise and budget allocated to implement data management tools. However, small and medium-sized customers are not well-served with these tools. Even small companies doing work in the medical industry must comply with HIPAA regulations that require them to manage their data for very long periods of time.

THE DATA PROTECTION AND DATA MANAGEMENT CHALLENGE

IDC has found that small and medium-sized customers use a multitude of technologies for data protection and data management. Traditionally, data was sent directly to physical tape; however, the ever-increasing growth of data has created significant bottlenecks in performance and time associated with backups and, more important, restore. In addition, the ability to do search and discovery is very limited. Today, the increased use of disk alleviates shrinking backup windows, bottlenecks, and subpar performance of tape. Many firms are now keeping up to 30 days of backup data on disk before migrating it to physical tape in order to meet the recovery time requirements and support the need for archiving.

IDC has found the need for faster backups and restore times has become a significant customer pain point. In addition, customers are looking for data protection solutions that are cost-effective and easily integrated into existing IT environments. IDC research indicates that over the past several years, the drivers for using integrated solutions for data protection and backup are a result of the following needs:

- ☒ Meet compressing backup windows
- ☒ Provide faster restore and recovery times
- ☒ Improve performance and utilization of backup and secondary storage resources
- ☒ Support disaster recovery strategies that include removable media

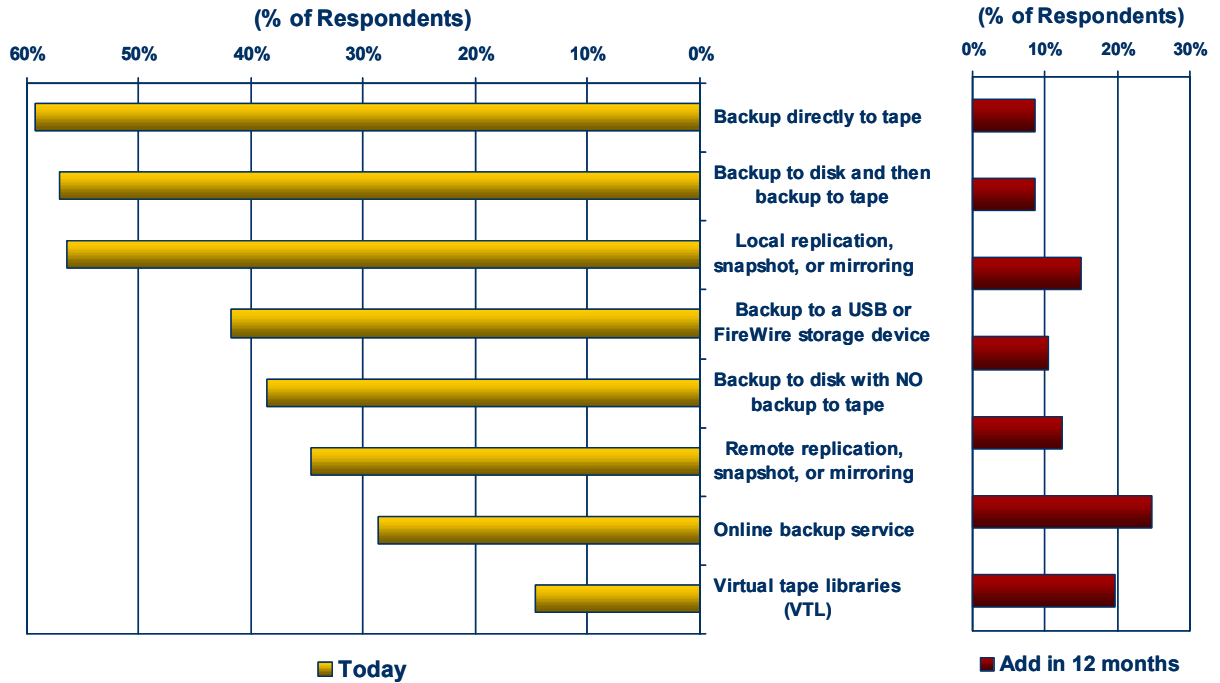
Data protection and data management continue to evolve and become more sophisticated, especially for recovery and archiving. IDC has found that customer priorities for data management are focused in two areas: operational efficiencies and disaster recovery. Operational efficiencies include adding more capacity and optimizing storage resources such as using data deduplication. Optimized storage allows customers to do search and discovery more easily and efficiently in order to perform ediscovery queries. In addition, faster access to information would aid R&D efforts to mine critical information or historical data.

Disaster recovery primarily is reducing recovery and restore times as well as reducing the backup window. Our research has discovered that customers are putting more emphasis on disk-based solutions that are scalable, efficient, and optimized, especially when they are considering the purchase of a data protection solution. However, many of the existing solutions do not fully incorporate the tools necessary for data management, data protection, long-term archive, and retention (see Figure 1).

FIGURE 1

Tape Usage Still Very Prevalent for Backup

Q. Please indicate which of the following approaches to data protection is currently used or will be within the next 12 months.



n = 316

Source: IDC's U.S. SMB Survey on Data Protection, 2008

DELL'S INTELLIGENT DATA MANAGEMENT STRATEGY

Small and medium-sized businesses (SMBs) continue to grapple with the ever-increasing storage requirements and the need to manage their critical data for longer periods of time. In addition, the cost and the complexity of managing data continue to grow at an unabated pace. More problematic is that the current set of data storage and management solutions today is largely focused on enterprise customers that have significant IT budgets and expertise to implement these solutions. Dell recognizes the multitude of IT management needs that SMBs and small and medium-sized enterprises (SMEs) have today and the dearth of products to truly address their needs.

Dell's new initiative is to simplify IT infrastructure with products, services, and partnerships designed to make it easier and cost-effective for SMBs and SMEs to manage their critical information from cradle to grave. Dell calls this new approach Intelligent Data Management (IDM). With this approach, Dell is offering a cohesive set

of data storage hardware, software, and management tools (delivered under its TierDisk architecture of products) intended to enable its customers to create and maintain their digital assets by reducing cost and complexity. Dell's IDM solutions will enable SMBs and SMEs to retain, retrieve, and safeguard their data based on the business value associated with that data. This new framework Dell is offering can provide customers with enhanced disaster recovery and management solutions, allowing them to archive and protect data for compliance and ediscovery requirements. The current set of data management solutions is point product oriented and cost-effective for SMB and SME customers.

Dell's IDM offerings are designed to mitigate customer pain points associated with storage management functions such as backup, replication, archiving, compliance, and tiered storage. Dell and its strategic partners offer a unique combination of scalable disk products and enhanced software to allow customers to gain greater control of and access to their data. We believe Dell's hallmarks of strong brand recognition and large market access will allow customers to have data management solutions they would never have had access to in the past.

THE DELL OPPORTUNITY

IDC believes that Dell's market opportunity for its current and future IDM offerings is expansive. IDM solutions will cover a broad set of storage hardware, tape, and optical systems as well as software and services. IDC estimates that the total worldwide market for all these components is in excess of \$80 billion (see Table 1). We expect Dell's IDM solutions can garner share from multiple market segments. Hardware products are commodity driven, and value is shifting to software and service offerings.

The current worldwide economic crisis not only has impacted the storage market directly and negatively but also has the potential to forestall customer spending that could impact long-term storage demand. However, customers are still focused on the desire for storage efficiency (e.g., deduplication), lower power and cooling costs, and more advanced and consolidated storage environments. We believe that regardless of the current economic environment, solutions that reduce cost and complexity will add definable value and play well in the current market conditions.

We expect that Dell's IDM strategy will add customer value by offering a cohesive set of storage, storage management, and optimized solutions that will enable customers to lower their IT costs while helping them manage their data more effectively.

TABLE 1

Worldwide Storage Systems Hardware, Software, and Services Customer Revenue, 2007–2011 (\$B)

	2007	2008	2009	2010	2011
Disk storage systems	28.21	29.31	30.72	32.04	33.27
Storage network	4.11	4.26	4.17	3.7	3.47
Tape automation	1.77	1.69	1.6	1.5	1.4
Optical automation	0.05	0.05	0.05	0.04	0.04
Storage services	30.11	31.41	32.7	33.98	35.27
Storage software	10.93	12.17	13.53	14.98	16.6
Total	75.18	78.08	82.75	86.34	90.05

Source: *Worldwide Disk Storage Systems 2008–2012 Forecast*, IDC #212177, May 2008

THE DELL POWERVAULT DL2000

One of Dell's initial TierDisk products is the PowerVault DL2000. This is Dell's first disk-based backup and recovery solution with integrated data management. The DL2000 is based on Dell's TierDisk architecture and is offered in two versions with preinstalled software. Dell's PowerVault DL2000 solutions come with factory-installed CommVault® Simpana® or Symantec Backup Exec™ software that has integrated tools to aid customers with setup and deployment. The PowerVault DL2000 is designed to provide SMBs and SMEs with a turnkey tiered disk storage solution for backup and disaster recovery. The PowerVault DL2000 comes with a centralized management interface, and customers are able to integrate additional features such as archive and replication. Furthermore, it is designed to automate and simplify the setup and management of disk-to-disk backup, enabling customers to optimize resources through a tiered storage strategy.

The Dell PowerVault DL2000 is scalable from 3TB up to 144TB of usable disk capacity and is aimed at SMBs as well as branch offices of larger organizations looking for a cost-effective, scalable data protection solution for backup and disaster recovery. The DL2000 allows customers to automatically provision and configure the disk resources for immediate use. There is no need for customers to configure RAID or allocate Logical Unit Numbers (LUNs) to their backup storage software. Additional storage capacity can be added without requiring customers to reconfigure or set up the device. In addition, the PowerVault DL2000 offers integrated support for tape with

Dell's PowerVault TL2000, TL4000, or ML6000 automated tape libraries, providing an extra measure of security by supporting removable media that can be vaulted offsite for archiving and disaster recovery.

The PowerVault DL2000 arrives factory installed with either CommVault Simpana software or Symantec Backup Exec. The version powered by CommVault features deduplication capabilities that store files only once, distributed protection of branch offices, continuous protection of data, one-step individual recovery, and synthetic full backups. The Symantec Backup Exec version offers patent-pending Granular Recovery technology for speedy restores; continuous data protection for Exchange; low-cost, easy protection for VMware™ Virtual Machines; and protection for desktops and laptops.

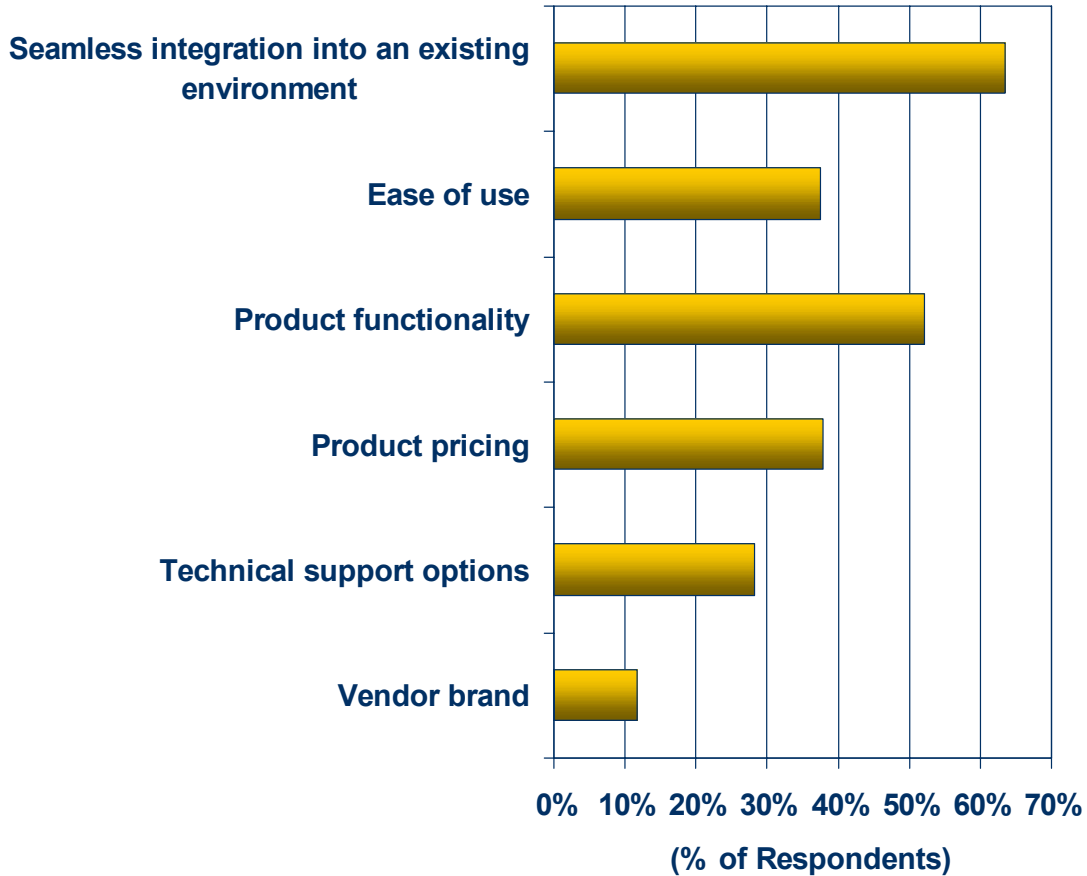
Dell will support the DL2000 through its ProSupport service that provides 24 x 7 direct access to Dell Expert Centers, fast-track dispatch for Dell-certified technicians, and escalation management through Dell's Global Command Centers. In addition, Dell has introduced services that help analyze a customer's environment and develop action plans using a tool-based approach designed to improve data recovery capabilities.

IDC has discovered that SMB customers value seamless integration when considering the purchase of a new data protection solution. Additionally, IDC's annual *U.S. SMB Survey on Data Protection* found that SMB customers' buying criteria for data protection solutions are heavily influenced by product functionality, ease of use, and pricing. IDC asked those same United States-based SMBs which approaches to data protection they use today and will likely use 12 months from now. Currently, tape usage is very prevalent, as well as backing up to disk then migrating to tape. In addition, a high proportion of SMBs are using local replication, snapshots, and mirroring. However, in the coming year, more of those SMB customers will be forgoing tape altogether and using solely disk-based storage solutions for data protection (see Figure 2).

FIGURE 2

Buying Criteria for Secondary Storage

Q. *What are the most important criteria for your organization when considering purchasing a data protection solution?*



Source: IDC's *U.S. SMB Survey on Data Protection*, 2008

CHALLENGES/OPPORTUNITIES

Dell's biggest challenge will be educating its current and potential customers that its IDM offerings will bring measurable cost reductions in their IT infrastructure and operations. Also, Dell needs to provide proof points that demonstrate its commitment to integrated solutions that will help customers retain, discover, and recover their valuable digital assets. IDC believes that Dell must reposition its messaging to incorporate its IDM solutions and be thought of as a solution provider rather than a commodity-driven storage and system vendor. We believe Dell's strong brand recognition and well-developed channel will enable it to sell its IDM solutions beyond its current set of customers.

Dell's PowerVault DL2000 disk backup appliance is at the junction of a number of data protection markets. We expect that it will garner share from second-tier disk and a host of products and vendors not limited to primary disk storage, tape hardware, storage management software, and data deduplication. IDC believes this is a doubled-edged market strategy. In fact, Dell will be vying against well-entrenched vendors in both the data protection hardware and software markets. We believe that Dell needs to define its IDM strategy and clearly communicate the value proposition for tightly coupled, easy-to-use, and easy-to-deploy products. Dell must educate its customers about the potential value an integrated solution will bring to their environment. IDC believes that Dell's ProSupport consulting services will help communicate that value considerably.

CONCLUSION

Dell's strategy to move beyond its industry-standard storage offerings marks a departure from its commodity-oriented products. Dell's new emphasis on helping its SMB customers grapple with unabated data growth and long-term management of their digital content represents a sea change. Many of Dell's customers need comprehensive data management for their critical data for compliance, disaster recovery, regulatory compliance, long-term access, and optimization. In short, many customers need to manage their digital content from cradle to grave.

We believe that Dell's core message of reducing the cost and complexity of data protection solutions will resonate well with its customers. IDC expects Dell will continue to refine and enhance the DL2000 product set as well as evolve its integrated disk-based storage strategy. The PowerVault DL2000 is Dell's first attempt at working with strategic partners to bring an integrated storage solution to market. Furthermore, we expect that Dell will look beyond its strategic suppliers to bring a richer set of capabilities, particularly with regard to optimization and data deduplication.

We foresee Dell using the DL2000 and its TierDisk architecture as a building block for larger deployments of secondary storage solutions. We believe that the PowerVault DL2000 marks a departure from Dell's reliance on industry-standard, point-product solutions. Furthermore, the introduction of the DL2000 is a watershed event for Dell. This effort will allow Dell to couple its strong brand and distribution model to offer integrated storage solutions that would normally be out of the reach of its customers.

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