VENDOR NEEDS AND STRATEGIES

Storage Service Please: SSPs Start to Make Progress, Again

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IDC OPINION

Once a high-flying market opportunity, the storage service provider market went out of vogue when a key customer segment, the dot-coms, went belly-up. However, there is a resurgence with the advent of utility services and an increased focus on disaster recovery and business continuance strategies. Renewed interest is driven by, among other factors:

- ?? The ever-increasing volumes of data being captured by organizations, and the desire to utilize the data in a constructive manner to create opportunities and competitive advantages.

- ?? Increased focus on regulatory compliance and ensuring that data is stored on the most efficient media and in the most cost effective manner.

- ?? Improved levels of security by way of intrusion detection appliances, encryption technologies and virtual private networks, which raises the confidence levels within prospective organizations when considering outsourcing storage.

IDC Canada believes that there is an opportunity for infrastructure vendors to partner with, or purchase, SSPs (Storage Service Providers) in order to round out their product offerings, and fulfill customer demands for cost efficient, integrated solutions. Vendors and/or SSPs need to emphasize the cost benefits and security associated with an outsourced storage solution to prospective customers. For SSPs and outsourced storage to make it's mark in the market, end user organizations must overcome the notion that all data is core and should remain under control in-house, and subscribe to the theory that it may be more efficient and effective to engage SSPs to concentrate on managing backup processes, if not all storage administration.

IN THIS STUDY

This IDC study examines the demand in the market for outsourced storage services, and the drivers and inhibitors affecting demand. In addition to analyzing demand-side perceptions on the storage outsourcing market, the study presents a snapshot of two Canadian companies that are active in the storage outsourcing, or storage service provider market – Global Data Vaulting and Asigra Inc. This study provides insight into the opportunities and challenges that these vendors, as well as their competition, will encounter in this market space.

SITUATION OVERVIEW

Introduction

Data storage requirements continue to increase while organizations struggle to balance the quantity, availability and value of data with costs. External factors such as regulatory compliance to acts such as Sarbanes Oxley, PIPEDA and Bill 198 (Ontario's equivalent to Sarbanes), and increasing security concerns are forcing companies to rethink their storage strategies. Networked storage (such as Storage Area Networks (SAN) and/or Networked Attached Storage (NAS)) solutions are gaining acceptance in the market as storage vendors offer a broad range of networked storage products, aided by the declining price of disk systems and the improved storage management tools inherent in today's storage solutions. IDC Canada research bears out that effective management of primary storage is considered as critical to the success of the business, and is therefore, typically deployed and managed internally. Organizations have shown a greater willingness to engage a third party to administer secondary, or backup, storage and related tasks such as disaster recovery and business continuance. As information lifecycle management (ILM) - a holistic view of storage media and policies - becomes more prevalent as a storage architecture strategy, the execution of backup services becomes an important input into a successful implementation.

SSP Market Dynamics

Definition

In this study, a SSP is any organization whose core business is to deliver storage utility or storage-on-demand services. The accepted IDC definition for market sizing purposes counts only companies that offer *primary* storage utility services. SSP/storage utility services include managed storage capacity where the provider owns and manages the storage infrastructure. Capacity is typically located at a location remote to the customer and accessed over a network.

However, IDC Canada sees momentum in the market skewed towards backup storage service providers, which speaks to the fact that backup or disaster recovery is not a core competence of many corporations.

Market Demand

As outsourcing tasks or business processes gains visibility in the Canadian market, it is a major change in organization strategy or personnel that is the precipitating factor for entering into an outsourcing engagement, as seen in Figure 1.

FIGURE 1

Drivers of Outsourcing Engagements in Canada

Question: What event ultimately prompted – or would prove to be the determining factor – in your organization's decision to outsource an IT process or activity? (Select one)
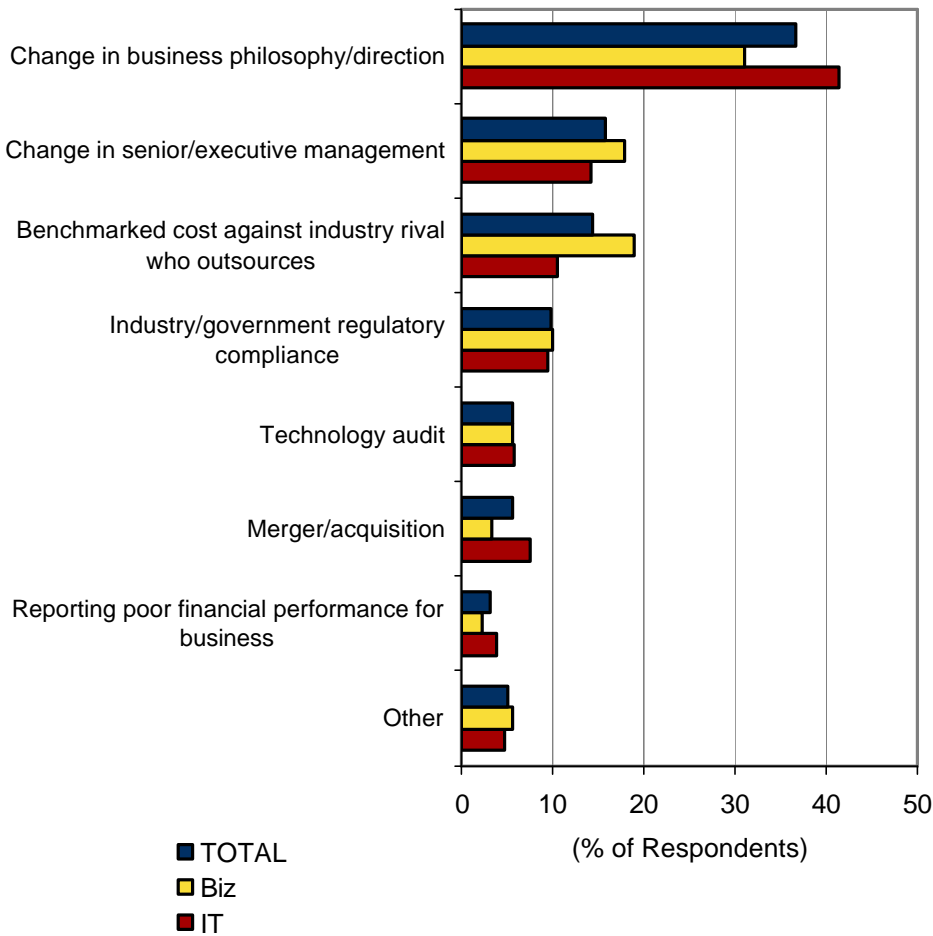
N=196

Source: IDC Canada, iPanel Q4 2003

Storage outsourcing is being considered because IT administrators are unsatisfied with the level of backup-and-restore solutions currently in place. Past decisions to engage a SSP were often based on ROI (return on investment) calculations, and in

some cases is made in haste after an unsuccessful internally orchestrated "restore". In today's environment, organizations are taking a more holistic view of storage, and viewing data as a key resource. Hence, there is momentum on the supply-side, as well as a corresponding build-up of interest among organizations to increase data availability and complying with regulations while improving the efficiency of data centre processes.

With respect to what network components are likely to be outsourced, storage ranks fourth as seen in Figure 2, but that placement is misleading as storage systems and data management are key components of both disaster recovery and business continuance. The importance of storage management in improving operational efficiency and availability is one of the drivers behind IDC Canada's positive view of the prospects for the SSP market.

FIGURE 2

Outsourcing Network Components

Question: Which of the following LAN components are/will be part of the outsourcing package? /
If you would outsource these services, which of the following LAN components would you
be willing to outsource?
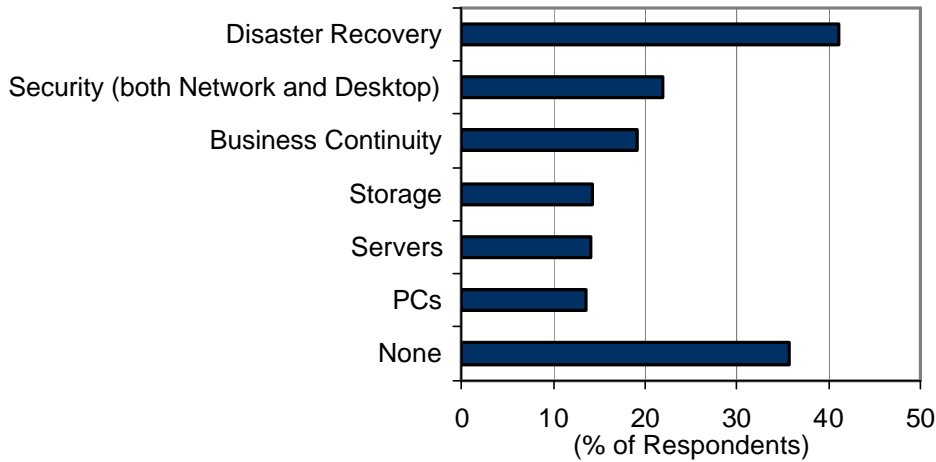
N=497

Source: IDC Canada, ePanel Q4 2004

When specifically asking about storage, the overwhelming majority of large and medium sized organizations responded that they did not plan to employ an outsourcing solution in 2004, as seen in Figure 3. Organizations remain unconvinced of the benefits of changing their storage resourcing structure of their hardware. There is a slightly higher propensity to outsource storage resources in larger business (>500 employees) than in medium businesses (100 – 499 employees). Large organizations have been quicker to focus on compliance issues and can realize significant savings, especially in a de-centralized organization, with a well-architected internal or

outsourced backup and recovery process. That said, IDC Canada believes that the biggest opportunity lies in the small and medium business (SMB) segments for utility storage services. Limited capital expenditure budgets, in conjunction with the need to extract the most value from their IT, storage and human resources, makes the SMB market ideally suited to a pay-per-use storage solution. The challenge for vendors, partners and SSPs alike is two-fold:

?? ??Targeting the market segments that have elevated storage requirements and who put a high value on records management.

?? ??Instilling confidence in the quality, reliability and cost certainty of a storage service solution.

?? ??Helping organizations overcome the perceived loss of control when dealing with an outsourcing arrangement.

FIGURE 3

Likelihood of Outsourcing Storage in 2004

Question: Using a scale of 1 to 5 where 1 is not at all likely and 5 is most likely, please rate how likely your organization will Outsource storage in the next 12 months?

(% of Respondents)

■ MED
■ LRG
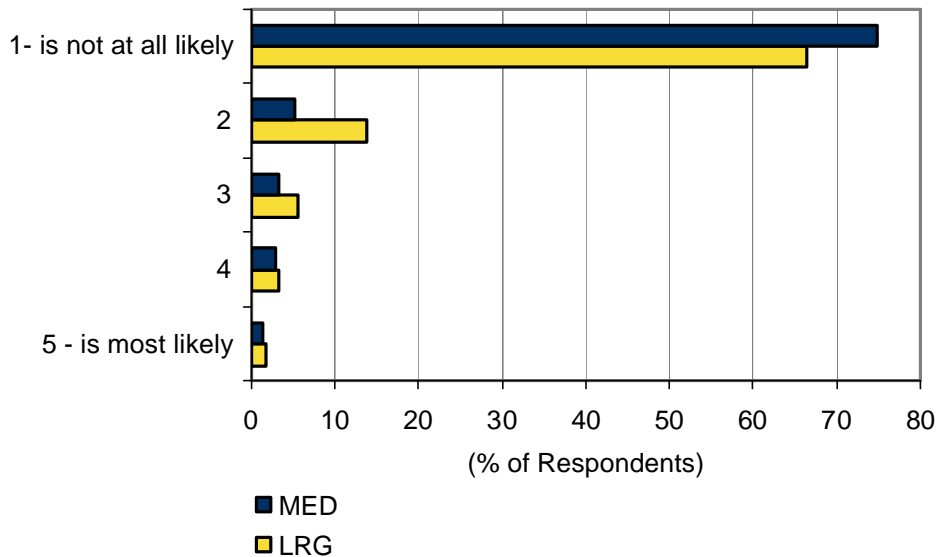
N=433

Source: IDC Canada, ePanel Q1 2004

There is some momentum in the backup and recovery market as mainstream vendors begin to enter the market. To that end, EMC recently purchased Dantz, a data backup and recovery software company for approximately US$50 million, as it sees the demand in the market place for safe and efficient secondary storage management. Movement to storage outsourcing is the next phase with increased

numbers and improved performance of offerings from all of the major storage vendors.

Market Inhibitors

The market for SSPs is relatively small as organizations have some issues to overcome to adopt the storage utility model as a standard operating model. The more critical issues revolve around the perceived loss of control of data by contracting the management to a third-party. Growth in the storage service provider market is dependent on SSPs and storage vendors adequately addressing the following concerns:

- ?? Loss of control – customers must feel secure in the knowledge that they will be able to access their data whenever, and for whatever reason, it is required.

- ?? Security concerns – from the network joining SSPs to their clients, to the security of the physical location of the disks or tape, customers have to feel as if the data is *more secure* at the SSPs location than it would be in-house.

- ?? Declining price of disk and tape storage - From a customer perspective total costs from the outsourced storage service must promise to be lower than an internal solution as customers need incentive to change business processes.

COMPANY SNAPSHOTS

Two companies participating in the storage backup services market include Global Data Vaulting and Asigra Inc. The companies employ different strategies, providing choice in the market for organizations looking to reliably and efficiently handle their storage backup requirements.

Global Data Vaulting Inc.

A private company, based in Toronto, ON, Global Data Vaulting (GDV) offers a set of fully managed backup and restore services, as well as professional services.

GDV was created and partnered with a Toronto based accounting firm, in 2002 to provide backup capabilities for their office and clients. Understanding the needs of the accounting firm, and their clients, GDV developed services that are relevant and realistic for the target market, which is small and medium business. Offering products and services since 2003, the company has been expanding its customer base and now services approximately 45 companies, with less than half of the clients associated with the accounting firm.

GDV's short-term goal is to further develop a client base in and around the Greater Toronto Area (GTA), then create a network of marketing partners in locations throughout Canada, i.e. Calgary, and then expand into the U.S. Having multiple locations and data centers is important as IDC Canada believes that customers are much more apt to consider storage outsourcing when the service company is within the region. Organizations want to have relative quick access to the service provider if there is a technical or service level agreement issue. It's a virtual world these days,

but face-to-face relationships still go a long way to instilling confidence in both service provider and end-user organizations.

F I G U R E 4

Global Data Vaulting Inc.

Source: Global Data Vaulting, 2005

Tivoli Backbone

GDV uses Tivoli as its storage management application. A powerful storage management tool, GDV views the flexibility and reporting capabilities of Tivoli as a critical component of its services offering. GDV has been designated an xSP licensee from IBM which means that they "must provide significant value or function for the end user over and above that of the eligible product (Tivoli Storage Manager)". In return, GDV is expected to deliver value to IBM by way of increased number of licenses, entry into new accounts, and working as a vehicle to deliver greater exposure of Tivoli in the Canadian SMB market.

Selected storage outsourcers utilize Tivoli as well, but with a different licensing agreement. Other SSPs purchase the Tivoli license and then transfer ownership to their clients. GDV owns the Tivoli licenses. GDV maintains that this arrangement is yet another way of providing value by handling the administration and support of the

license on behalf of its client. IDC Canada sees this covenant as congruent with the fully managed service positioning.

The Tivoli client is a flexible tool that permits scheduled incremental backup, while reducing time and network traffic commitments. In addition to Tivoli, GDV utilizes IBM xSeries servers and StorageTek tape libraries to power its solution.

Major Services Offerings

The principal offerings GDV provides businesses with services, products and resources to assist with risk management and business continuity issues. One key service offering is Secure Managed Backup, an on-line data backup and recovery service that restores lost data quickly, saving their clients both time and money. Secure Managed Backup is 100% managed by GDV, with no customer action needed – a scenario that GDV feels is a major differentiator from its competitors. Some competitive products require organizations to provide varied levels of input and administration. IDC Canada believes that Secure Managed Backup is primarily targeted to small and medium businesses that don't have the resources to address storage management. To address large business or more complex organizations, GDV can also implement a solution with on-site backup and management capabilities with immediate offsite backups and monitoring fulfilled at GDV's data centre.

GDV bills its customers on a compressed capacity utilization basis, with prices hovering around C$20/Gb. Set up of the account is included in the capacity charges, and most new customers can be connected in less than half a day. A typical client of GDV has nightly backups of close to 400 Mb/night. The backup process runs about 90 minutes elapsed. Total capacity per client is approximately 10-100 Gb

Partnerships and Alliances

In order to show significant growth, GDV is engaging in marketing and advertising campaigns, but is quite reliant on IBM to create demand for storage back-up and management in the market. GDV is also working with IBM to promote its services within IBM's large partner community. Be it white-labeling the GDV service, or offering a partner-branded service, it is imperative that GDV becomes a preferred solution provider in order to reach critical mass.

Besides the relationship with IBM, GDV is working with distributors to attempt to get penetration and exposure. A program currently in the works would see a major distributor placing a GDV icon on desktops.

To further penetrate its initial target market, GDV is setting up licensees in Ontario to gain exposure and let them take the business model out to a wider audience. GDV will manage the back-ups of customers who sign-on as a result of connection with a licensee. In addition, GDV is in the midst of a significant marketing initiative with accounting firms in the U.S. and Canada, communicating the value proposition of its services.

However, there is a significant challenge in working with VARs, distributors and even infrastructure vendors – the adoption of GDV's services leads to a decrease in the hardware component of sales. On the other hand, as more distributors and VARs

create new SMB initiatives, offerings such as GDV's Secure Managed Backup can be used to lure new clients, resulting in increased opportunities for the channel partner. Thus, the vendor or partner must understand the long-term relationship benefit that can accrue from matching products and services with customer organizations core competencies, budgets and business and technological pain points. It is incumbent upon GDV to ensure that its service offering and service levels are appropriate for targeted organizations or both its customers and channel partners will align themselves with another storage outsourcing outfit.

IDC Canada believes that a fully managed service may indeed create an advantage for GDV. According to IDC Canada research, fully managed service would be most preferred by small and medium businesses, who don't have the resources to address storage management, and who comprise a market that presents a significant opportunity for SSPs.

Asigra Inc.

A software products company, founded 1986 in Toronto, Asigra has focused on providing software based solutions for multi-site backup requirements since inception. Asigra is a privately held company that has approximately 45 employees, and claims to be profitable with a strong balance sheet. Currently, Asigra software protects well over 2 Petabytes of data across more than twenty backup service providers around the world (three in Canada).

Instead of acting as a storage service provider to enterprises, Asigra's key customer segments are the pure-play SSPs and integrated providers such as Internet Service Providers (ISPs) and telecommunication companies. With the focus on enabling the SSPs, Asigra was more formidably positioned when the storage service provider first experienced a decline in fortunes. Relationships with IT outsourcers and telecom companies enabled Asigra to continue to grow while helping these service providers round out their backup services offerings.

Asigra's strategy of utilizing SSPs, and other channel partners, enables the end user organization to engage a local provider, using a rebranded solution from Asigra that best suits the eventual customers' requirements. Asigra's service providers channel partners target a range of different customers, from very small companies to very large organizations with multiple sites and terabytes of storage to backup. Telecommunications providers have the advantage of being intimately familiar with the small business segment, a sector that large storage vendors have trouble capturing and that small firms struggle to gain credibility in. Small business is a key prospective market in the storage utility market, and with experienced partners, Asigra is poised to make a name for itself in that market.

Interoperability Lab

In September 2004, Asigra opened an interoperability lab at its headquarters in Toronto. The Asigra Interoperability Assurance Lab offers proof-of-concept for third party hardware and software providers. IDC Canada believes that actively managing interoperability issues, discovering potential system disruptions and bottlenecks in advance will not only strengthen Asigra's relationship with its partners, but will also

result in higher customer satisfaction levels, with both the carrier and enterprise customers.

Major Product Offerings

Asigra's flagship product, Televaulting DS, is agentless multi-site backup and recovery software that provides utility service provisioning to facilitate simplified, cost effective backup in a distributed environment. Televaulting DS is comprised of two main software components: DS-Client installed on one system at the client site, and DS-System installed at the SSPs datacentre.The DS-Client software collects data, optimizes the volumes of data for the WAN by removing duplicate data, then compresses, encrypts and transmits the data to the SSP site. For security conscious organizations, it should be noted that Asigra claims the DS-Client never transmits the encryption key to the DS-System vault software. This "non-escrow of encryption keys" is to ensure that the customers' data is kept confidential, even from the SSP.

The agentless feature necessitates that organizations install client software on only one node on the premises, regardless of the number of clients/servers that are sending data to the backup appliance on site. The agentless architecture is a benefit to SSPs as the cost of installing, diagnosing, troubleshooting and upgrading software at customer sites is much less expensive than a traditional agent-based solution. Billing is done according to total volumes of data, not the number of clients. Organizations are encouraged to capture the most important files from an unlimited number of clients. The DS-Client appliance is an industry-standard server running Windows or Linux that attaches to the LAN and it identifies the connected PCs and servers for backup. See Figure 5 for a schematic of the Televaulting DS-System Architecture.

FIGURE 5

Asigra's Televaulting DS-System Architecture
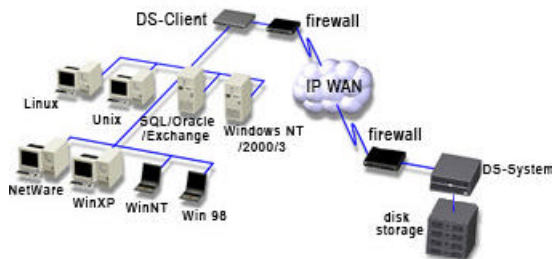
Source: Asigra Inc., 2005

Besides being agentless, Asigra's Televaulting DS-System offers multi-tiered storage billing capabilities. Reports can be exported from the Asigra Televaulting storage billing system into service providers or end user organizations current billing infrastructure. This simplifies the billing process, but also allows for detailed utility-based charge backs and reporting. There is also a web portal that enables

customers to see usage reports and sign up for service on-line, a convenience that Asigra sees as a competitive advantage.

Asigra's licensing model is based on a one-time perpetual license based on the compressed capacity of the DS-System vault system, designed to help SSPs provide effective and competitive service quotes.

BLM: Adding Structure to Backup

In the fall of 2004, Asigra announced the launch of its BLM, or Backup Lifecycle Management, software suite. Similar to Infrastructure Lifecycle Management (ILM), the BLM strategy forces organizations to analyze the usage requirements and value associated with backup files. Offering tools to facilitate the process, backup data is then allocated to the appropriate resources, ensuring the most cost effective and capacity efficient solution across all levels of data storage. The main engine of Asigra's BLM is the BLM Archiver, which can be controlled and accessed through a dedicated Java-based GUI, and can manage the data coming from any of the clients connected on the LAN.

IDC views the Interoperability Lab as helpful to Asigra's success in building strong relationships with storage service providers and telecommunication companies, ensuring a competent, simplified solution. Asigra's challenge is to work with its partners to convey the security and cost benefits that accrue from well managed backup and recovery solutions. Akin to banks managing customer's money, SSPs need to educate end user organizations on understanding the difference between access and custody. Customers can walk into a bank and take or move their money, similar to contacting your backup service provider and retrieving your data.

FUTURE OUTLOOK

Opportunities

Skyrocketing storage capacity demands are forcing organizations to reconsider their data retention strategies and policies. Management, regulatory compliance and security are all key inputs in to the architecture of organization's data infrastructure.

The forecast for storage service providers is listed below in Table 1. A respectable 4-year CAGR of 26% belies the small nature of the market place. However, it should be noted that due to IDC services taxonomy, only spending with firms that offer utility services for *primary* data is included in the derivation of the spending model. The amount of money spent in the Canadian market for secondary storage services will most likely far-outstrip spending for primary storage outsourcing. IDC Canada believes that the majority of the opportunity for outsourced backup is higher than for primary storage as the comfort level of client organizations is the highest.

TABLE 1

Canadian Storage Service Provider Spending Forecast, 2003-2008 (C$M)

	2003	2004	2005	2006	2007	2008	CAGR 2004-2008
Storage Service Provider	$9	$13	$18	$23	$28	$33	26%

Note: Data reflects spending with providers who offer utility services of PRIMARY storage only.

Source: IDC Canada, 2005

Characteristics for Success

The success of the primary and backup storage outsourcing markets is dependent on communicating the value proposition, which highlights the ability of storage service providers to manage data more efficiently and effectively than end users can internally.

The value proposition for storage utility services is built around reduced costs and improved availability via secure, off-site locations. Benefits of storage outsourcing services that resonate among potential customers include:

?? Reduction of capital expenditures for storage and, in most cases, networking hardware.

?? Lowering of the administration burden, especially with fully-managed storage services.

?? Utility pricing process speaks to efficiency and greater cost certainty.

?? Advanced storage utility solutions include the capability to allocate costs per usage within client organizations, allowing for granular accounting control.

?? First-class storage service providers have their storage resources located in a secure off-site location, protecting organizations from losing all of their data in catastrophic event.

IDC Canada believes that growth in the storage outsourcing market is dependent upon how successful the storage vendor, SSP, or channel partner is in communicating the benefits of storage outsourcing to end user organizations. This is not a market that is going to be developed solely from customer demand; the suppliers must generate the need.

ESSENTIAL GUIDANCE

IDC Canada believes that the time is ripe for infrastructure vendors to partner with, or purchase, a storage service provider in order to offer a turnkey ILM solution. This strategy is not limited to niche storage players, but is starting to take hold in mainstream vendors as well.

Vendors and partners need to target those organizations with large storage requirements such as media, health care, utilities, telecommunication and financial markets. In addition, strong market potential exists in sectors that have a pressing need to comply with regulation such as PIPEDA, HIPAA, Sarbanex Oxley etc.

In addition, IDC Canada believes that vendors will be able to further develop their relationships, and inhibit intrusion by competing vendors, by adding significant value and management expertise associated with a storage outsourcing or utility solution.

Actions To Consider

Challenges for storage vendors and SSPs include:

?? Engaging the channel

   ?? Selecting the most appropriate channel partner with respect to alignment with the SSPs target market, as well as sales and technical expertise

   ?? Balancing the difficult relationship between SSPs and channel partners due to internal competition with in-house services, and more importantly, the motivation of a partner who is most likely to see reduced hardware revenues by selling the storage outsourcing service

?? Overcoming traditional organizational behaviour that advocates maintaining control of all corporate resources.

?? Continue to build market momentum by working with channel partners and end-user organizations to highlight success or testimonials

Guidance

IDC Canada believes a significant opportunity to penetrate the SMB market exists for storage vendors by way of storage and data management services. A quick and efficient entry strategy to this market is to partner with SSPs and their partners either by way of an alliance or acquisition. Organizations are looking for simplified infrastructure solutions, both in terms of installation and management, and with respect to the number of vendors they have to deal with. Offering a storage management solution enables vendors to position themselves as trusted advisors,

aiming to provide its customers with a reliable and available solution, at the best economics.

From the other perspective, alliances with larger infrastructure vendors enables SSPs to capitalize on established relationships and trust that will more effectively allow organizations to overcome any trepidation of outsourcing their valuable corporate data. However, rapidly declining price of disk and tape storage is a benefit to an organization, but a hindrance to SSP penetration. IDC Canada purports that SSPs, or channel partners selling the service, must address the declining cost issue, and must present a compelling case, based on a compilation of price and service levels that negates the benefit of purchasing and managing both primary and secondary storage internally.

Companies such as Global Data Vaulting and Asigra are making inroads as both storage vendors and end user organizations realize that there is increasing value in a more creative and strategic approach to data and storage management.

LEARN MORE

Related Research

?? Canadian Systems Infrastructure Service Provisioning (SISP) Forecast Update, 2004-2008 (IDC#CA087OIL, October 2004)

?? Canadian Systems Infrastructure Service Provisioning Forecast, 2004-2008 (IDC #CA084OIL, March, 2004)

?? Canadian Server and Storage Market Forecast Update – Strong Momentum (IDC#CA227IHL, Dec. 2004)

Synopsis

This IDC study investigates customer perceptions and behaviours when considering outsourcing backup and recovery services. The storage service provider market is being driven by such factors as regulatory compliance and business continuance, but is challenged by organizations need for control and worry about security. According to Alan Freedman, Research Manager at IDC Canada, "Storage vendors need to emphasize the cost benefits and security associated with an outsourced storage solution. Vendors to need to work with SSPs to make a mark in the market, communicating to end user organizations the notion that not all data is core and should remain under control in-house."

Two Canadian companies participating in the storage outsourcing market – Global Data Vaulting Inc. and Asigra Inc. are profiled in the study. Discussion of the two vendors revolves around value proposition, go-to-market strategy and challenges.