SANpulse Technologies Migration Practice Solution

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This Industry Trends and Perspective Solution Brief is Compliments of:

SANpulse Technologies

Background and Issues

There is no such thing as a data or information recession. IT organizations are continually faced with adding storage hardware capacity. This capacity is in addition to refreshing and optimizing existing storage resources in order to gain more value or return on investment (ROI) per dollar spent.

Large organizations with multiple data centers, perhaps located in different countries around the world, are faced with the recurring and perpetual task of moving or migrating data. This data migration can be in support of planned technology upgrades or refreshes, changes in suppliers, or retiering for optimization and consolidation.

Common data migration challenges include:
- Project initiation, staffing and familiarization
- Discovery of existing environment
- Workflow management across groups
- Different groups involved on global basis
- Introduction of various tools and processes
- Multiple vendors, technologies and tools
- Intrusive configuration discovery processes
- Cross site configuration remediation
- Keeping knowledge base up to date

In larger and global environments, data migrations are recurring tasks, thus an opportunity for optimization or cost savings. A common issue is loss of site knowledge when a service delivery is completed. In cases where the site knowledge is retained, it often becomes stale and of little use by not being maintained. The result is that acquired knowledge cannot be effectively leveraged for future migrations or other recurring IT Infrastructure Resource Management (IRM) tasks or activities[1].

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[1] IRM focuses on managing resources (servers, storage, and networks) including backup, data protection, re-tiering, security, optimization, provisioning, reporting and capacity planning.

What is needed

A smart data migration software-led solution should reduce the amount of time, errors and complexity associated with data migration. A smart data migration solution is comprised of experienced people and software-led technology to provide automation, proven processes, best practices and an active knowledge base that can be transferred to provide ongoing value.

Such a solution should also provide a positive measureable ROI across IT infrastructures, staffing and services. In addition, such a solution supports point in time (one off) and recurring projects on a local and global basis across different vendors and technologies.

Value Proposition

Business benefits of a smart data migration solution should include or enable:
- Address both operating and capital costs
- Cost advantage improves with scale
- Global consistency of a dedicated staff
- Standardized deliverables and processes
- Enables infrastructures agility and flexibility
- Vendor and technology agnostic
- Combines people, processes and products
- Reduces Mean Time To Migration (MTTM)
  - Reduce project startup / completion time
  - Expedite hardware deployments
  - Increase storage useful time doing work
  - Maximize storage expenditure ROI
  - Knowledge retained for future migrations

The knowledge base and skill sets established during the initial service delivery along with associated tools should also be available for subsequent migration and other recurring IRM activity on a global basis.

Learn more in the book "The Green and Virtual Data Center" (CRC) as well as at www.storageio.com

The Technology

SANpulse Migration Practice solution is based on skilled people, proven processes, cloud-based knowledge powered by SANlogics™ and management tools such as SANatomy™.

At the heart of the solution is the knowledge base powered by SANlogics™ that captures customer specific information and experiences enabling consistent delivery of services across global locations. Once in place, the SANlogics™ powered knowledge base becomes an active repository and analytics engine to expatiate pre-planning and configuration remediation.
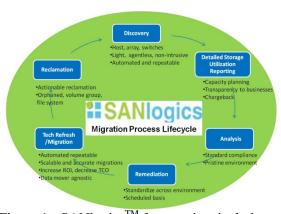

Figure 1 - SANlogics™ focus points include:

- Discovery (servers, storage and SAN)
- Reporting (utilization, capacity planning)
- Analysis (configuration validation)
- Remediation (configuration changes)
- Workflow management and automation
- Reclamation (find unused storage)

In addition to the SANlogics™ powered knowledge base, various pre-configured and custom reports are available pertaining to an environment's configuration, usage and overall effectiveness. While these capabilities aid with initial data migration, they also have added value over time. The added value is that captured knowledge maintained in a central repository that can be leveraged globally for subsequent migrations or recurring IRM tasks.

By leveraging a central global repository, internal and external staff becomes productive faster getting more work done in the same or shorter amount of time. Subsequent data migrations can be done in a shorter amount of time leveraging the global central repository. The business benefit is that new storage can be put into service faster resulting in more time for productive work.

The repository data is also useful for follow-on or recurring IRM tasks, including performance and capacity planning, accounting, usage metering, charge back as well as storage optimization, retiering or configuration validation.

Another component of the SANpulse Migration Practice solution is the SANpulse team and their experience. For each services engagement, a SANpulse storage architect is assigned to meet with clients. The dedicated architect is responsible for working with the client on the design and planning of the migration implementation process and throughout the term of the engagement.

In support of the architect is the SANpulse Center of Excellence. At the SANpulse Center of Excellence there is a dedicated team for each customer that provides support services across time zones and geographies while having access to the customer's knowledgebase. Thus, when it is time for your data migration to occur, you are dealing with the same team who has conducted the discovery and analysis and is fully entrenched in the specific process, providers and tools of your environment.

A typical deployment begins with face to face meetings along with staff allocation followed by process education and information discovery collection. As part of the migration planning process, the created knowledgebase of information is leveraged to enable a smart migration and decisions made.

Strategies and Recommendations

How do you know if you are a candidate for a data migration software-led service?

Do you have a large SAN environment?
Do you have PBytes or more of storage?
Are you doing one or more migrations a year?
Do you have a technology refresh program?
Is your environment geographically dispersed?
Do you need consistency across data centers?
Do you have a mixed technology environment?
Do you need more timely storage metrics?
Do you have 2,000 or more physical servers?
Are you planning storage optimization?
Do you have technology leases soon to expire?
Are you evolving to a virtual environment?
Can you benefit from streamlined workflows?
Are you looking to increase data center agility?

If you answered "yes" to any of the above questions, then you are a candidate for a solution such as the SANpulse Migration Practice solution.

Closing Comment

Consider the mythical man month [2] which shows that simply throwing more people at a problem or project may, in fact, slow it down. This means that instead of throwing more people at a project the better idea is to work smarter. The solution is to work more effectively, intelligently in a smarter manner combining people, processes and products along with a knowledge base, all accessible on a global basis.

With traditional data migration services approaches, once the project is done, the expertise and knowledge base are often recycled for deployment elsewhere. This results in lost opportunity for the client, particularly for large organizations that have recurring data migrations on a global basis involving multiple vendors and technologies.

With the SANpulse Migration Practice solution, once the project is complete, the knowledge base is transferred and available along with associated tools with the additional option to continue to use the SANpulse implementation team from their Center of Excellence. These results in subsequent data migrations or technology refresh as well as storage optimization activities being able to be done in a shorter period of time. For environments that have multiple data migrations per year as part lease expiration or vendor technology refresh, the SANpulse Migration Practice solution provides an additional business ROI.

By preserving the captured experience in the knowledge base along with maintaining data currency, subsequent migrations and other common IRM tasks can occur faster and more efficiently. The net result is a further improvement on ROI while enabling IT agility for customer environments.

Where to learn more

Learn more about the SANpulse Migration Practice solution along with their other technology tools at www.sanpulse.com.

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[2] The Mythical Man-Month: Essays on Software Engineering
By Frederick P. Brooks ISBN-10: 0201835959