

Data migration

How to avoid losing key business information **Interviewed by Jason Lloyd**

In the ever-changing world of business and data requirements, it is becoming increasingly imperative for companies to have sound data migration strategies.

Business success today demands agility. To remain competitive, more and more businesses are becoming technology-driven. As these companies implement new business systems and technologies, their needs for accessing and reusing corporate data assets are increasing. Well-defined data migration strategies will maximize data reuse, minimize downtime and reduce data-loss risks.

"Data is often the lifeblood of companies," says Candi Randolph, technical project manager for Perpetual Technologies. "Acquiring it, using it, protecting it and preserving it are all necessary for the continuity and growth of the company."

Smart Business spoke with Randolph about sound data migration strategies.

What is data migration?

Data migration can encompass many data-related activities, but central to the effort is the movement of data, usually from a source system or storage device to a target system or storage device. Data migration may involve moving data files from one physical storage location to another, moving data from one storage format to another or moving data from one data structure to another.

The last scenario often involves data transformation and increases the complexity of the data migration effort. Data Extract, Transform, and Load (ETL) solutions are commercially available from vendors such as Informatica and Pervasive.

What drives data migration?

New regulations such as Sarbanes-Oxley and the introduction of new technologies that help reduce costs and increase values are forcing many companies to face increasing numbers of data migrations.

How can factors affect the success of data migration?

Data migrations are rarely independent



Candi Randolph
Technical project manager
Perpetual Technologies

efforts. They occur most often when new application systems or storage technologies are implemented and are often included within the scope of the overall implementation project.

Because the success of the data migration portion can directly affect the overall success of the implementation project, the importance of effectively planning and preparing for the migration should not be undervalued. There are many things that can affect the success of a data migration effort. Some of the critical success factors include:

■ **Developing a migration strategy.** All successful projects begin with a well thought-out and communicated strategy. Before finalizing your strategy, carefully consider your migration options and the cost and risk factors associated with each. Don't assume any risks with your data that your company can't afford to take.

■ **Understanding the data requirements.** Fully understanding the data requirements of the target system and the data implementation of the source system is imperative for a successful data migration, especially when data transformation is required. Data transformation is the restructuring of data to meet new system require-

ments. Failure to meet all the data requirements of the target system usually results in an inoperable or unreliable target system.

■ **Cleansing the data.** Do not assume that the source system data is clean, especially when data transformation is required. Include effort in the project plan to determine the integrity of the source system data and take the time to cleanse it prior to the migration. When determining the integrity of the data, it is important to analyze more than one snapshot of the data. For large migrations, multiple copies of the source data taken at different points in time are often staged in an independent environment so that detailed analysis, and oftentimes restructuring or editing of the data, can be accomplished.

■ **Testing the migration.** Do not overlook the importance of developing and executing detailed test cases and allowing adequate time in the schedule to investigate and resolve all failures. Proceeding with a data migration before identifying and resolving all data discrepancies is taking unnecessary risks and is rarely successful.

■ **Conducting a mock migration.** Conducting mock implementations should be a part of every data migration plan. Mock implementations will help ensure that all aspects of the final data migration will be successful and can be accomplished in the timeframe allocated.

How important is it to get professional help when migrating data?

Experience is tantamount. Size, complexities and risk factors associated with data migrations vary widely, as do the skills of a company's IT staff. Risk avoidance is key to successful data migrations. Outsourcing the data migration effort or augmenting your IT staff with consultants who have proven successes with previous data migrations can significantly reduce overall cost, schedule and risk factors.

CANDI RANDOLPH is the technical project manager for Perpetual Technologies. Reach her at candi.randolph@dfas.mil.

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