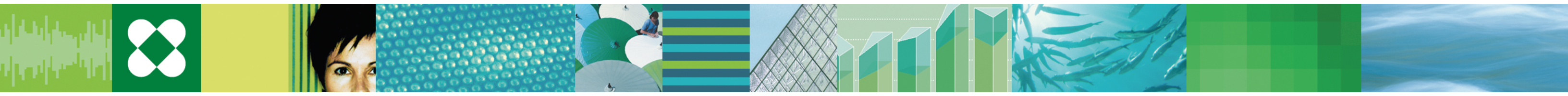
Enterprise Data Management Solutions
Executive brief
March 2008

IBM Information Management software

Mergers and acquisitions: Data management strategies that support business growth



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Mergers and acquisitions – On the rise

As technology advances, the demand for new products and services changes and expands, making competition in the marketplace more intense. Seasoned market-leading companies look for ways to sustain business growth and retain a forward-thinking competitive advantage. Emerging companies vie for position in existing markets or create new markets. In either case, the goal is to provide competing and often complementary products and services, while striving to implement business strategies that help them stay alive. Although every scenario is slightly different, Darwin's theory of survival of the fittest still holds true.

According to FORTUNE magazine, 2007 "saw the biggest buyout frenzy since 2000, as 42 FORTUNE 1,000 corporations were acquired."[1] The magazine reports acquisitions across industries, in rank order based on the value of the deals, with technology in the lead followed by energy, healthcare, financials, consumer cyclicals, consumer staples, utilities, basic materials and capital goods. The value the largest deals range from $85.6 billion to $9 billion.

Whether an organization wants to reduce costs, eliminate a competitor, expand market share or acquire new intellectual property, the business environment continues to be rich with opportunities for mergers and acquisitions (M&As). However, one thing is certain; every merger and acquisition doubles the Information Technology (IT) infrastructure that must be managed and maintained to support the new organization. The total data management responsibility is enormous. Without an effective enterprise data management strategy and early IT involvement to plan for integration challenges, the merger or acquisition may be doomed to failure.

How do M&As create IT challenges?

Mergers and acquisitions represent an exciting and challenging time, not only from a business perspective, but more importantly from IT perspective. Forrester Research has identified the following four basic approaches that drive IT integration requirements necessary to support the success of M&A activities: Coexistence, Absorption, Best-of-Breed and Transformation.[2]

For example, the Coexistence approach aligns two companies that have clearly different lines of business to increase market share. Because these companies are significantly different, this approach offers limited opportunities for IT integration and it makes sense to run their operations independently. Although this approach can be completed quickly and at low cost, it may offer muted benefits from IT integration.

In contrast, the Absorption approach aligns two companies within the same industry to eliminate competition and reduce costs. This common approach offers the most opportunities for IT integration and can be completed quickly, at low risk. The new company can realize significant savings from either consolidating or retiring redundant applications. However, this approach typically involves choosing one company's systems, infrastructure and platforms over the other, which, if done arbitrarily, may not always provide the best integrated IT support for the new organization.

Next, the Best-of-Breed approach aligns small companies, typically in the same industry, to increase market share. Longer integration timelines and increased complexity translate into higher risks and costs. However, this approach usually involves reviewing the systems, infrastructure and platforms of both companies and choosing the best to support the IT demands of the new organization.

Lastly, the Transformation approach aligns small companies in the same industry, or in a supplier/customer relationship, to acquire a new technology and create new products. In this least common approach, the systems, infrastructure and platforms of both companies are typically retired in favor of implementing new application suites. IT integration timelines are usually long, risky and expensive; however, acquiring new technology can facilitate bringing new products to market in less time.

Based on these different approaches, it is clear that IT integration is key to the success of any M&A activities. There are many issues to consider and IT must be involved as early as possible in the M&A process.

Why is early IT involvement essential?

In general, IT organizations are not invited to participate early enough in the M&A process. Although companies are very aware of the business aspects of merging business units and employees, they often fail to understand the role that IT integration plays in M&A success or failure. IT is responsible for determining optimal procedures that improve operational efficiencies and defining the associated success metrics. Long before the merger or acquisition is final, IT must be involved and must work closely with the business units to ensure success.

A recent CIO Insight article revealed, "From our vantage point, viewing numerous integrations across industries, it is clear that senior management still tends to approach IT integration in a perfunctory, arms-length manner. This both tempts fate and misses out on the very real benefits a well-planned and effectively executed IT integration plan can bring."[3]

The CIO Insight article goes on to explain the primary reasons for IT integration failures, which focus on time and money. Companies need IT to provide more accurate estimates of the time required to achieve IT-enabled synergies. "These longer-term efforts include standardizing and converging enterprise data and application platforms, such as ERP and supply chain, as well as de-layering or eliminating organization duplication and complexity."

"The second reason management fails to embrace IT integration is that it usually requires a significant investment — potentially hundreds of millions of dollars — in areas such as rationalizing application portfolios, migrating customers and products, and building new capabilities that combine the best of both companies."

Ironically, "15 percent of the synergy to be captured from a merger comes directly from savings on IT operations. With another 25 percent stemming from business operations where savings are dependent upon IT, the simple fact is this: $2 of every $5 in merger synergy comes in some way from IT."[4]

To illustrate the complexities of post-merger IT integration, when DHL merged with Airborne, the companies had different business models, as well as different IT assets and outsourcing strategies. The decision was to take the best from both and make them work together.[5]

The Airborne IT infrastructure emphasized reliability and low processing costs, while managing huge volumes of transactions. In contrast, the DHL infrastructure and applications managed the complexity of international shipping.

"DHL and Airborne had custom-built software to run vital functions, such as pickup and delivery, shipping, import/export control, and billing and receivables applications. Airport IT operations in Seattle were mainframe-centric, running on IBM® software, such as IBM CICS®, IBM IMS™, and mainframe versions of the IBM DB2® database. The core of DHL Express Americas, the U.S. branch with IT operations in Scottsdale, ran on the Hewlett-Packard servers using HP-UX® Unix and IBM Informix® and Oracle® databases."[6] The sheer diversity and complexity of the IT infrastructure presented many challenges.

The IT integration was planned in three phases. Phase 1 focused on consolidating operations. The goal of Phase II was to consolidate IT systems using as much of DHL's infrastructure as possible and selecting the best from Airborne's 400 applications and DHL's 200 applications. Phase III allowed IT to review the application portfolio to decide which to enhance, reengineer or retire. Clearly, this example illustrates that IT involvement is essential to ensure the success of integrating complex technologies and business processes.

What are IT strategies for M&A success?

According to Forrester Research, "CIOs must make clear decisions about all three dimensions of synergies — applications, infrastructure technology and business processes — to make M&A successful."[7]

With regard to applications and infrastructure technology, consolidating technologies makes it possible to achieve easy savings. This strategy applies to "consolidating data centers, rationalizing vendor contracts and renegotiating software licenses for a larger base."[8] Rationalizing application portfolios after a merger or acquisition is critical because redundancy increases costs and because integrating business processes to improve operational efficiencies requires a single application set.

It is beneficial to adopt an enterprise data management solution with comprehensive capabilities that simplify your IT infrastructure. Implementing an enterprise data management solution with capabilities that archive and preserve application data in its business context make it possible to consolidate or retire redundant applications and even migrate data to more efficient platforms to improve operations and reduce costs.

Lastly, unifying processes, such as customer service, procurement, security and software development, must be standardized and consistent to ensure stability. The ideal enterprise data management solution would also enable your new organization to apply a consistent methodology and processing capabilities that can be tailored to your specific business policies and processing requirements.

What are the IT integration issues to consider?

In the process of merging business assets, operations and cultures, both parties in the merger will have applications and data residing in multiple production and non-production environments across the new enterprise. Multiplying the amounts of application data across the organization increases IT challenges for integrating and managing this data across different databases, operating systems and hardware platforms.

Across the two merging organizations, there may be inconsistencies in how data is managed on different long-term storage devices, making data retention compliance more difficult. In spite of this diversity, the IT staff must ensure that business users have access to the information they need when they needed it.

Adding to the complexity, IT organizations face the challenges of deciding whether to upgrade, consolidate or retire redundant CRM and ERP applications, databases, operating systems and hardware platforms. Although time consuming, unless business users and IT work together to review the entire application portfolio, less than optimal decisions may be made.

For example, in an effort to get the merged entity operational quickly, companies may choose to maintain multiple enterprise applications and databases as a "temporary" solution. More often than not, these temporary "fixes" become permanent. The result is a mixed environment with redundant applications and technologies, co-existing in a fragmented IT infrastructure that only increases operational costs.

How does Enterprise Data Management support IT integration initiatives?
Effective enterprise data management helps align the technology and methods for managing application data with business objectives of the newly merged entity. Capabilities that allow you to set appropriate levels of performance and availability lead to improved operational efficiencies. By implementing enterprise data management strategies, your new organization will be better positioned to address strategic business and technical issues, such as:

- Managing data growth that is an inevitable result of a merger or acquisition. Consistent archiving and test data management capabilities allow for managing enterprise application data in both production and non-production environments and can simplify and improve your overall IT infrastructure.

- Retiring or consolidating redundant applications that may not deliver business value after a merger. Capabilities for archiving historical data or migrating active data from redundant applications allow you to select and standardize on the applications that provide the most business value to your new organization.

In addition, you retain access to archived historical data long after the originating application is retired.

- Migrating data from disparate applications may be necessary to support faster processing requirements. Capabilities for managing and migrating application data across operating systems and hardware platforms allow you to scale enterprise data management initiatives as your merged organization grows.
- Protecting data privacy and managing data across non-production environments, such as development, testing and training environments. Capabilities for de-identifying personal data prevent data breaches and support compliance initiatives, while promoting customer loyalty, especially important to a newly merged organization.
- Supporting data retention and e-discovery compliance initiatives can become even more complex after a merger. Capabilities for managing historical data and retention periods can prevent data from becoming a liability or being accidentally destroyed.
- Upgrading vital ERP, CRM and other essential business applications after a merger provides access to new functionality. Capabilities for archiving historical data prior to an upgrade reduce the time, risk and costs associated with the upgrade process. Application upgrades can ensure a competitive advantage to support your new business operations.
- Maintaining and developing application functionality after a merger or acquisition. Comprehensive test data management capabilities, for example to subset, mask, browse and edit test data and compare test results, support application development and quality assurance initiatives. Improving the management of data in non-production environments enables the deployment of new application functionality in less time and at a lower cost, without sacrificing quality.

- Storing data based on its business value and access requirements. In addition to doubled data growth after a merger, companies face increased costs associated with storage requirements — Capabilities for archiving and storing data on a variety of media enable cost-effective tiered storage strategies that support short- and long-term data retention requirements and reduce costs throughout the data lifecycle.
- Implementing business continuity initiatives after a merger — Capabilities for archiving historical data reduce the amount of data to backup and recover in the event of a business disruption or disaster. Streamlining backup and recovery operations improves the efficiency of IT maintenance tasks and ensures faster recovery to support business continuity objectives.

With an effective enterprise data management solution that provides both database archiving and test data management capabilities, you can deploy IT resources fluidly as your business and industry evolve, while mitigating risk and taking control of your IT budgets. And most importantly, you can add more business value to your enterprise bottom line.

What benefits does enterprise data management deliver?
Enterprise data management delivers benefits across the new organization in improving application service levels, lowering costs and mitigating risk. For example, as current and historical application data accumulates and is duplicated across the new organization, the storage and maintenance costs increase proportionally. In addition, application performance and availability can suffer.

This “multiplier effect” also increases capacity requirements and limits the amount of space available for further growth or emergencies. Unless companies can find ways to streamline the source copies of the data, expenses will quickly become prohibitive. Enterprise data management allows you to take a proactive approach that addresses the data growth challenges of the multiplier effect, in both production and non-production environments, without diverting additional resources from IT business initiatives.

As a recognized best practice, database archiving makes it possible to segregate current from historical transactions and move the data out of the production database to a secure archive, so you can effectively maintain application databases at a manageable size. In addition, using test data management and subsetting capabilities creates “right-sized” test and development databases, reducing the multiplier effect even further.

Once you establish the data management policies for your production and non-production environments, much of the required processing can be automated. Routine archiving provides consistent results for managing the impact of the multiplier effect across your new enterprise. Along with improved data management in production and non-production environments, you can also support all the IT integration initiatives that must be addressed to ensure the future success of the new organization.

What should you look for in an enterprise data management solution?

The ideal enterprise data management solution should provide a consistent technology and methodology that can be scaled across diverse applications, databases, operating systems and hardware platforms. Find a solution that provides proven archiving and test data management capabilities for addressing the critical IT issues that accompany mergers and acquisitions.

Managing data in production environments. Focus on archiving capabilities that ensure the integrity of the data in its complete business context. The ideal enterprise data management solution must have the capability to capture complete business objects. For example, archiving a complete "paycheck" would include time and labor transaction details, as well as the employee master data needed to fulfill reporting requirements without ties to production data. You should also have capabilities that allow you to selectively retrieve archived transaction records, restore to production or restore to an alternate target environment.

Determine whether to store archives in a database, in a file or perhaps in different formats at different points in time. Each alternative offers benefits. For example, when you begin an archiving project, your staff can probably manage the archive database easily. However, as time progresses, the archive database can balloon to the size of the original production environment, forcing you to archive that database as well. Any potential storage savings are erased, and project management efforts quickly become burdensome.

In contrast, compressed file formats require a smaller footprint, so you can maximize storage savings. Compressed files can also be indexed, enabling rapid retrieval of archived data. Most importantly, managing archives in a file format offers the broadest range of access methods *over the life of the archive.*

Typical alternatives for accessing archived data include native (application-based) access and application-independent access. Some archive solutions provide only one access method or the other, but few provide both. You need to weigh the advantages of each method for meeting your specific access requirements.

For example, native access allows you to interact with archived data through the original application interface. This method allows users to access the information they need, using familiar formats and processes. However, if you plan on retiring an application and still want to retain access to your archives, application-independent access may be the better alternative.

Application-independent access provides the most flexible range of access alternatives over the life of the archive. This approach enables authorized users to interact with archives using industry standard methods and report writers. You can use a variety of industry standard access methods, like ODBC/JDBC, XML and SQL, and reporting tools, like Business Objects™, Cognos® or even Microsoft® Excel. Leveraging this access path, you "future proof" your archives because you retain access long after the originating application has been upgraded, changed or even retired.

Next, focus on capabilities for managing archives and retention periods cost-effectively and consistently over the full lifespan of your data. Capabilities for saving archives on a variety of storage media allow you to future-proof methods for managing data, based on its business value and access requirements. Keep business records accessible until legal retention periods expire and archives can be deleted either manually or by means of automated disposal of expired transaction records.

Managing data in non-production environments. Look for test data management and subsetting capabilities that capture precise sets of realistic test data to create smaller testing environments. Subsetting capabilities must preserve the referential integrity of the data and allow for creating "right-sized" test environments that are easier to maintain and refresh. Other capabilities allow for creating and editing targeted test scenarios and comparing "before" and "after" test results.

Capabilities for de-identifying confidential data protect privacy, while still providing the necessary "realistic" test data to developers and quality assurance staff. The results of the data transformation have to be appropriate in the context of the application. That is, the results have to respect the business logic of the application and make sense to the person reviewing the test results. For example, data that contains alphabetic characters should be substituted with other alphabetic characters, in the appropriate pattern. In addition, the transformed data must be within the range of permissible values.

IBM Optim supports your M&A initiatives

A successful IT integration will help bring value to any future M&A deals. "The importance of data is one constant. Data provides the key to understanding how each organizational structure is designed and executed, how corporate cultural issues are handled and how customers are managed."[9]

IBM® Optim™ provides comprehensive capabilities for aligning application data management with your business objectives to address M&A integration challenges. With a single, scalable solution, you can manage, retain and control mission-critical application data throughout the information lifecycle to deliver measurable benefits across your new enterprise.

When companies implement Optim to archive, store and manage structured data during a merger or acquisition, the overall costs to implement the integration of new IT infrastructure will be much less than planned. Implementing ongoing archiving for the newly "standardized" applications allows for managing continued data growth and performance gains. Business users will appreciate faster query and reporting response time, while IT can improve operational efficiencies support expected SLAs for daily activities, maintenance and business continuity objectives.

In addition, Optim can help simplify the IT infrastructure by retiring older applications and systems. Migrating historical reference data to immutable devices makes the new entity better prepared for compliance or e-discovery considerations that comes its way. Finally, Optim's capabilities for improving test data management allow the new organization to protect privacy in non-production environments and speed the deployment of new application functionality, without sacrificing quality.

About IBM Optim

IBM® Optim™ enterprise data management solutions focus on critical business issues, such as data growth management, data privacy compliance, test data management, e-discovery, application upgrades, migrations and retirements. Optim aligns application data management with business objectives to help optimize performance, mitigate risk and control costs, while delivering capabilities that scale across enterprise applications, databases and platforms. Today, Optim helps companies across industries worldwide capitalize on the business value of their enterprise applications and databases, with the power to manage enterprise application data through every stage of its lifecycle.

For more information

To learn more about IBM Optim enterprise data management solutions, contact your IBM sales representative or visit: **www.optimsolution.com**

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Produced in the United States of America
03-08

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