WHITE PAPER

Business Value of IBM Sterling B2B Integration Services

Sponsored by: IBM

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EXECUTIVE SUMMARY

Increasing cost controls and unpredictable cost increases are leading many enterprises to rethink how they support their business-to-business (B2B) operations. As a result, many enterprises are choosing to outsource B2B integration by partnering with a managed services provider.

In the second quarter of 2009, IDC began working with a cross sample of IBM Sterling B2B Integration Services customers to determine the return on investment (ROI) from their shift to a managed services offering for B2B integration. Through interviews with 11 customers across company sizes and geographies, we found the shift paid for itself in less than 12 months.

On average, for every $1.0 invested in Sterling B2B Integration Services, the companies in this study realized $3.57 in reduced costs, increased productivity, and other business benefits (see Table 1). Included in the findings are obvious savings benefits, including lower labor cost tied to cost avoidance as the volume of documents and the number of trading partners increased. In addition, customers also found they were able to improve their reliability, disaster recovery, and overall business readiness of their B2B operations as a by-product of their shift to Sterling B2B Integration Services.

TABLE 1

Three-Year ROI Analysis of Customers Studied

Benefit	$1,760,770
Investment	$493,162
NPV	$1,267,607
ROI	257%
Payback	9.4 months
Discount rate	12%

Source: IDC, August 2009

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SITUATION OVERVIEW

Many enterprises are driving down the cost of B2B integration by increasing the number of trading partners with which they exchange documents electronically. They are also increasing the number of automated document types. This automation allows them to decrease manual entry staff costs, improve visibility and as a consequence accuracy rates, and increase the overall responsiveness of B2B collaboration.

As buyers increase their level of trading partner automation, suppliers are facing unpredictable cost increases as they step up to meet the new requirements. Meanwhile, staff shortages and the need to support greater globalization as well as internal compliance and business continuity requirements combine to raise the cost of an enterprise's B2B processes.

This juxtaposition of increasing cost controls and unpredictable cost increases is leading many enterprises to rethink how they support their B2B operations. As a result, whether a buyer is increasing its level of automation or a supplier is responding to requirements, many enterprises are choosing to outsource part or all of their B2B integration operations.

More than 90% of the customers interviewed made a decision to outsource because of costs. While cost is not a surprising reason why an organization would choose to outsource, the customers involved with this study were more concerned with improving the speed and responsiveness of their B2B operations with their existing staff, preparing for retirement, or replacing staff with outsourced services as employees move to other parts of the organization. Many customers discussed the shrinking pool of skilled talent able to support EDI integration.

Another important reason for the shift to Sterling B2B Integration Services was business risk, which was described broadly by customers. In some cases, customers realized that they needed to improve their disaster recovery as they increased their B2B automation, and in other cases, customers realized that they needed to improve the speed of supporting business by reducing the time it took to onboard new trading partners.

Figure 1 outlines the key reasons why IBM customers shifted to a managed services offering. Most customers provided multiple responses to questions around this topic.

Customers choose to outsource for a variety of reasons, but the benefits Sterling B2B Integration Services customers cited include:

- Lower costs and better cost predictability
- Better and more consistent use of staff resources
- Improved time to revenue through faster trading partner onboarding
- Cost-effective disaster recovery and ability to scale infrastructure
- Ability to scale B2B processes as needed in response to changing business requirements

FIGURE 1

Top Reasons for Switching to Managed Services for B2B Integration

Note: Multiple reasons were selected.

Source: IDC, August 2009

While enterprises continue supporting integration of trading partner transactions on their end, working with a managed services provider significantly reduces the impact of integration variability across the different partners. Customers no longer have to support multiple transport and security protocols and format types and can instead choose a single set of internal standards.

IBM Sterling B2B Integration Services

IBM is one of the largest global providers of B2B software and services. Its Sterling B2B Integration Services consists of two levels of service: IBM Sterling B2B Integration Services Basic & IBM Sterling B2B Integration Services Plus.

Sterling B2B Integration Services Basic transitions clients and their trading partners into the integration cloud platform and provides ongoing management of the B2B infrastructure which includes:

- Mapping services
- Translation
- Community services
- Visibility services
- Infrastructure and communication management

Sterling B2B Integration Services Plus builds on the capabilities of Sterling B2B Integration Services Basic by providing:

- B2B process management
- Additional transition services
- Document process management
- Premium support
- Integration services
- Optional trading partner support

Sterling B2B integration Services Business Value

The purpose of this study is to quantify the benefits Sterling B2B Integration Services customers accrued when they shifted from an on-premise offering to a managed services offering. In all cases, customers were already exchanging documents electronically, using commercial software and at least one value-added network (VAN).

Table 2 shows the demographics of the study group. The companies, which are located in North America and Europe, vary in size and are involved in manufacturing, retail, or distribution. Most are business units of larger companies.

TABLE 2

Respondent Demographics

Demographics	Average
Companies	11
Regions	North America, Europe
Locations with B2B operations	205
Partners	77
Transactions per month	1,085,827

Source: IDC, August 2009

There are many factors that contribute to the cost of B2B operations and resulting savings by shifting to a managed services offering. In Table 3, two scenarios — a midsize company and a large enterprise — show characteristics of the respective companies' B2B operations and the ROI from shifting to Sterling B2B Integration Services. This data is based on composite results from our model.

In the midsize scenario, the investment is paid back in roughly 12 months, while the large enterprise payback is roughly 9 months. The differences in payback stem from the staff involved with B2B operations before and after the shift, in addition to the number of partners managed and the number of locations that are supported. We found, through this research, that the larger and more complex B2B operations are, the greater the benefit of shifting to a managed services model. At the same time, we also found that customers with as few as 10 trading partners had positive returns in roughly a year.

Many of the customers interviewed for this study are in either midsize or large business units of a large enterprise. One pattern we found in the interviews is a decision to roll up B2B integration across different business units into the organization partnering with Sterling B2B Integration Services. In the large enterprise scenario in Table 3, the relatively large number of new partners to be onboarded during a year reflects that pattern.

TABLE 3

Three-Year ROI Scenarios by Customer Size

	Midmarket	Large
Employees	700	20,000
B2B trading partners	51 (51 locations)	90 (175 locations)
Documents exchanged annually	542,600	415,000
Additional trading partners enabled annually	6	25
B2B locations	51	1,100
B2B staff	2	8
Return on investment		
Benefit	$827,400	$3,600,000
Investment	$283,300	$683,900
NPV	$544,200	$2,900,000
ROI	192%	418%
Payback	12.3 months	8.7 months
Discount rate	12%	12%

Source: IDC, August 2009

Costs Savings and Benefits

Companies involved with this study selected IBM to further reduce the costs of their B2B operations or to provide a cost-effective level of expertise in B2B and EDI operations necessary to grow their business. Benefits were recognized in three major areas: cost reduction, staff productivity, and other business benefits.

Cost Reduction

The overall cost of B2B operations was cut by 56%. The most significant elements of the cost decrease were IT and B2B staff savings from staff reduction and avoided staff growth associated with business growth (37%); reduction in IT infrastructure to support B2B operations (9%); reduction in B2B operations costs such as paper, compliance, backup and recovery, and business continuity (8%); and reduction in services costs associated with consolidating B2B communications, such as VANs and other third-party support (21%).

Staff Productivity

By shifting responsibility for B2B operations to Sterling B2B Integration Services, companies in the study were able to reduce the burden of day-to-day activities and use their B2B and associated IT staff in initiatives tied to business growth and customer satisfaction (20%).

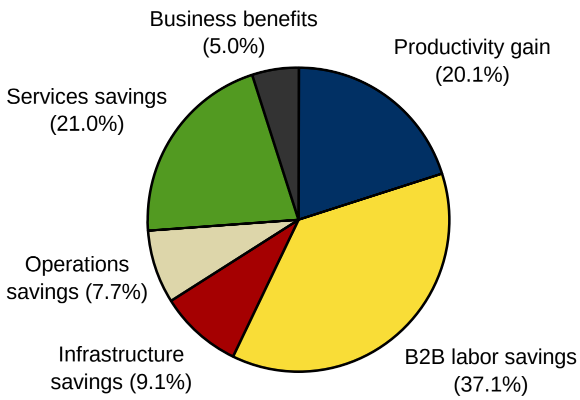
Other Business Benefits

Using Sterling B2B Integration Services, B2B operations directly generated positive impacts on revenue recognition, such as reducing time to market and order to cash cycle and reduced negative impacts on revenue such as performance penalties. Although only 5% of the total, these benefits reflect improved operations, which will support long-term efficiency, customer loyalty, and business growth.

Figure 2 breaks out the average annual benefit per partner for customers participating in this study.

FIGURE 2

Average Annual Benefit per Partner



Source: IDC, August 2009

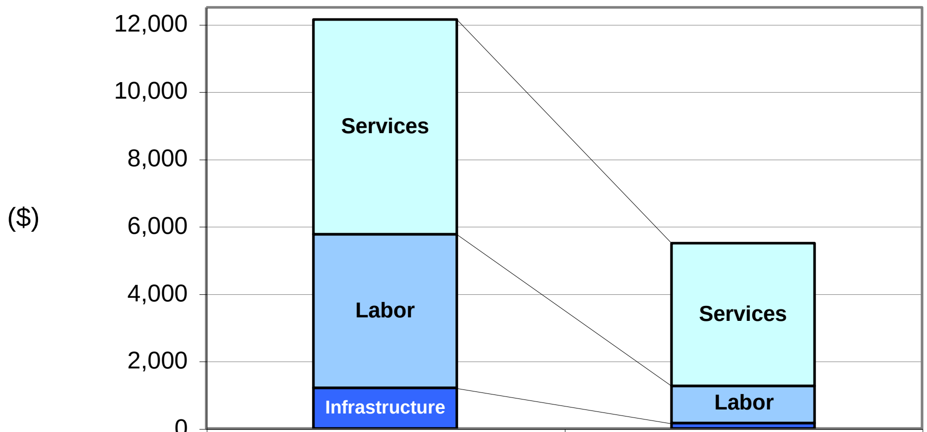
121% Reduction in Cost to Support Partners for B2B Integration

All the companies in the study experienced benefits exceeding costs to migrate their B2B operations to Sterling B2B Integration Services. A key finding is the strong relationship between the number of trading partners enabled and cost.

Figure 3 shows that costs per partner decreased 121% following a shift to Sterling B2B Integration Services, from $12,135 in-house to $5,496 outsourced. The cost of labor declined 315% to $1,098. The most significant decline was in the cost of infrastructure, which decreased 634% to $165 per partner. This means that moving to Sterling B2B Integration Services reduced capital costs an average of $1,044 per partner. In the current economic environment with the extreme limitations on the availability of capital, companies looking to expand their B2B business or start a B2B business should definitely consider Sterling B2B Integration Services as an avenue.

FIGURE 3

Annual Total Cost of Ownership per Partner



	Inhouse	Sterling Commerce
Services	$6,372	$4,233
Labor	$4,554	$1,098
Infrastructure	$1,209	$165

Source: IDC, 2009

B2B and IT Staff Productivity

The benefits of Sterling B2B Integration Services are primarily centered on increasing B2B operations labor productivity through moving the partner onboarding, document handling, and service desk operations to a service model. These labor benefits are recognized through outright reductions in B2B and supporting IT staff, enabling the growth of B2B operations without adding staff. In this study, partners and document flow increased annually by 17% and 13%, respectively, with no additional headcount. This freed up staff time for higher-value activities while also providing a more consistent and reliable service agreement with internal customers.

Customers noted that they spent less time in annual budgeting while also staying on budget because costs and SLAs are outlined in the Sterling B2B Integration Services agreement. In addition, they were able to bring new trading partners on board in a more consistent and reliable time frame.

In addition to reducing overall labor associated with supporting B2B operations, the shift to Sterling B2B Integration Services enabled companies to free up staff time in several key areas:

- **Trading partner management.** Companies in the study were able to reduce B2B time spent in all phases of the trading relationship to include new partner onboarding, map creation and maintenance, change management, document process management, exceptions management, and customer service.

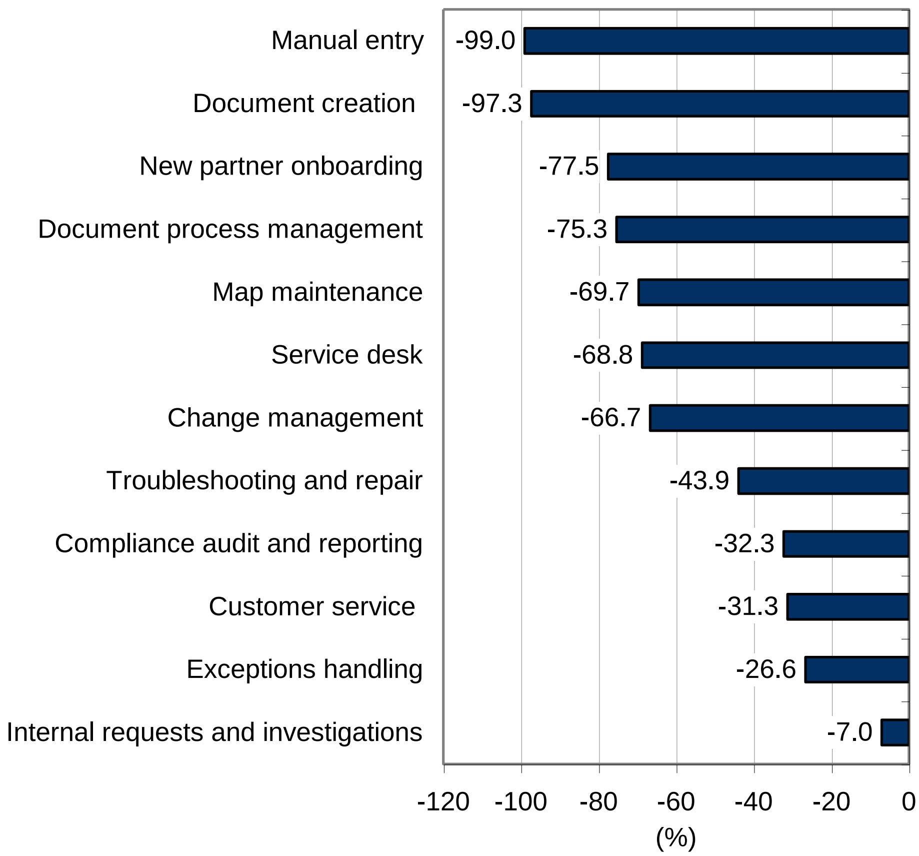
- **Document handling.** Costs related to document creation, manual entry, and document management were nearly eliminated.

- **Managing the environment.** All participants in the study experienced a decrease in error rates and time lost due to handling problems. A key benefit is that it provides a complete integrated service desk across the partner environment and optimizes staffing time spent on service desk support and troubleshooting.

Figure 4 shows the percentage of staff time reduced per task associated with B2B integration when customers in this study shifted to Sterling B2B Integration Services.

FIGURE 4

B2B Staff Time Reduction by Task



Source: IDC, August 2009

Business Benefits Include $387 Increased Profitability per Partner

Most of the companies in the study moved to Sterling B2B Integration Services to reduce costs or dependence on their B2B staff. However, some of the participants realized that to appeal to new partners and grow their business, they needed a more reliable, scalable platform for conducting B2B operations. These companies were especially cognizant of business benefits realized beyond reducing costs and streamlining operations. In total, customers experienced $387 on average in annual increased profitability per partner:

- **Faster time to market (onboarding).** Six of the 11 companies in the study were able to identify a revenue benefit from faster onboarding of new partners. On average, companies were able to speed up new partner onboarding from 93 hours per partner to 21 hours (70% improvement). Faster onboarding meant an additional nine days of revenue per new partner, resulting in $295 in increased profitability per partner.

- **Cash cycle improvement.** Automated electronic invoicing provides better visibility. It eliminates the errors inherent in the paper system and establishes firm receipt dates. One company focusing on upstream — or customer-oriented — process improvements by onboarding customers estimated a 30-day reduction of receivables outstanding, accounting for $20,000 in additional annual revenue. Within the study group, speeding up revenue recognition added an average of $57 annually in increased profits per partner.

  There are similar purchase-to-pay improvements to the cash cycle for enterprises focused on improving downstream automation through supplier onboarding.

- **Reduced penalties.** Only companies dealing with retailers experienced penalties for errors in document transactions that resulted in a negative impact on revenue. These penalties were levied in the form of chargebacks and were annually costing companies as much as $136 per partner. Switching to Sterling B2B Integration Services eliminated penalties altogether, adding $26 annually in increased profits per partner.

- **Reduced delayed revenue.** Again visibility is the key. When operating in-house, companies were not immediately aware that orders had been received and thus there was a day or two delay in fulfillment and extension to the A/R cycle. More significantly, sometimes companies were not aware of point-of-sale (POS) receipt until one to three days later. Sterling B2B Integration Services eliminated all delays in revenue recognition, adding $9 annually to the bottom line per each partner.

- We did not model the business value of redirecting IT staff to focus on higher-value activities, but that should also be counted as a business benefit.

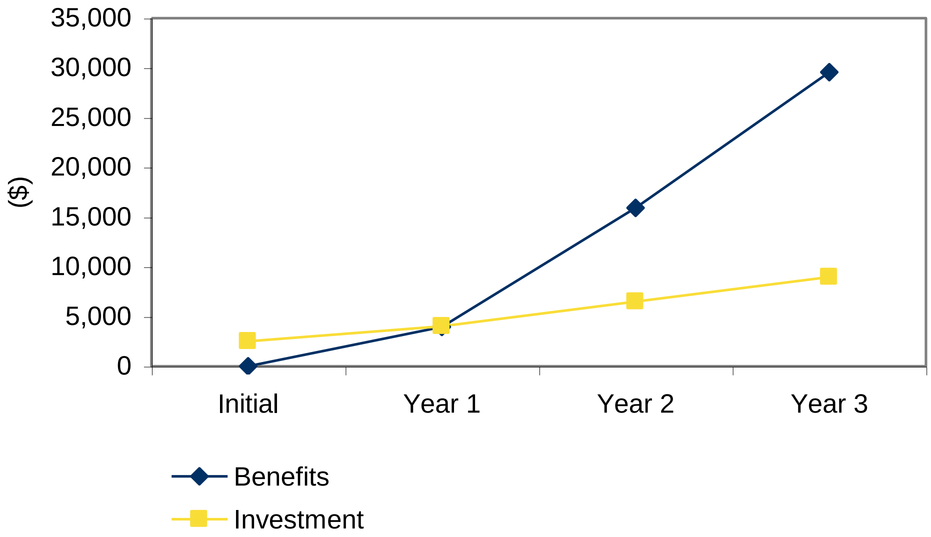
257% Return on Investment

Total benefits of Sterling B2B Integration Services compared with managing B2B operations in-house over a three-year period averaged $29,570 per partner. This benefit was compared with the average costs to migrate in-house B2B operations to Sterling B2B Integration Services ($2,511 per partner) and use it over three years ($2,157 per partner annually). Total three-year costs were $8,981 per partner. Using a 12% discount rate yields an average ROI of 257% and a payback period of 9.4 months. See the IDC

Business Value Methodology section for further information. Figure 5 shows the three-year cash flow analysis for the study group.

FIGURE 5

Sterling B2B Integration Services Cash Flow Analysis



Source: IDC, August 2009

CASE STUDY

Growth in Trading Partners Causes Master Lock to Rethink Its Approach to B2B Integration

Master Lock was founded in 1927 and is the leading manufacturer of padlocks. The company is a unit of Fortune Brands, an $8 billion key brands holding company that also includes Moen faucets, MasterBrand Cabinets, and Therma-Tru doors as well as distilled spirits and golf equipment.

Several circumstances contributed to Master Lock's conclusion that handling its trading partners' integration requirements was not and should not be one of its core competencies. Armed with that decision in early 2008, the company began looking for a managed services partner.

Predicted Staffing Shortage Created Opportunity to Change B2B Model

In early 2008, Master Lock's trading network included 92 partners, consisting of big-box retailers, such as Lowe's and Home Depot, in addition to an industrial customer base. Master Lock used IBM Sterling Gentran 4.0 on premise and IBM Sterling B2B Collaboration Network for B2B integration.

Master Lock's trading network grew from 92 to 98 partners in 2008, and the company anticipated that the number would reach 108 in 2010 and exceed 120 within three years. While the number of trading partners continued to grow, transaction volumes were not growing at the same pace because of the economic downturn. The B2B staff was reduced from two full-time employees to 1.5 full-time employees.

Because of the increasing need to bring new partners on board, Master Lock was faced with the need to hire one full-time person. The company was reluctant to hire, however, because mapping requires skills and high salaries. Meanwhile, the time spent on onboarding is not consistent through the year. Therefore, any person the company hired would have to take on additional responsibilities, and those responsibilities would get in the way of rapidly bringing partners on board.

Managed Services Would Fix Skills Gap Problem

In other words, Master Lock faced a problem of scale. It didn't have a high enough volume of partners to manage to engage a person full time, but it had more partner management responsibilities than the available staff could handle.

The team knew it needed to shift to an outsourcing model to:

- Gain access to B2B skills
- Cost-effectively support growth in the number of new partners it needed to bring on board and manage
- Add new partners in a consistent manner

Once Master Lock made the outsourcing decision, it looked at other B2B managed service providers but chose IBM because of the existing longstanding, reliable relationship. Following a six-month migration plan to Sterling B2B Integration Services that was completed in August 2008, Master Lock continues to manage customer relationships while IBM handles the activities around accurate and reliable document exchange.

Key Activities Handled by Master Lock

Turning over partner integration to Sterling B2B Integration Services did not remove the need to plan, negotiate, and support partners internally. Master Lock currently handles 13 EDI document types and roughly 50,000 transactions each month. Of the 13 document types, four are integrated directly with Master Lock's ERP Oracle e-Business Suite. The remainder are automatically routed via email to the appropriate contact.

As part of the migration planning, Master Lock sorted out what responsibilities it would control and what it would turn over to IBM. The following activities are managed by Master Lock staff:

- Determining whether to agree to trade electronically with a partner based on a financial analysis of profitability
- Negotiating with the partner when there are custom requirements

- Documenting customization requirements and working with the interface and ERP teams to implement
- Working with Sterling B2B Integration Services to test maps and support partner testing
- Managing automated forwarding of nonintegrated documents to stakeholders
- Exception monitoring that includes aggregating log files from Sterling B2B Integration Services with its own internal processes
- Document auditing and reconciliation

Key Activities Handled by IBM

- Execution of map building activities and partner onboarding
- Managing integration testing between Master Lock and its trading partners
- Ongoing, runtime translation
- Ensuring documents are sent and received against an SLA and proactively working with Master Lock to resolve document process issues
- Monitoring, reporting, and exception management

Results

Since Master Lock went live with Sterling B2B Integration Services, it has been able to bring partners on board faster. This puts Master Lock in a better position with its customers without the need to add staff. Using IBM to handle the mapping takes a few weeks out of the onboarding process and the timeline is more consistent. Prior to the shift, Master Lock would experience scheduling delays when staff members who could do the mapping were working on other projects.

Other efficiency benefits include:

- Shifting customer document status inquiries from IT staff to lower-cost customer service staff who use IBM self-service capabilities to track the status of a document
- Shifting internal business user inquiries to self-service
- EDI staff no longer spends time on security certificate management with trading partners because this task is handled by Sterling B2B Integration Services

Next Steps

Master Lock parent Fortune Brands is in the process of consolidating business units. Part of the consolidation involves using the Master Lock team to migrate a sister business unit to Sterling B2B Integration Services.

CHALLENGES/OPPORTUNITIES

As this document shows, enterprises are experiencing strong ROI within the first year of shifting from in-house B2B integration to Sterling B2B Integration Services. There are significant opportunities in better supporting customers, simplifying internal B2B processes, reducing error rates, reducing exceptions and the impact of exceptions, and providing more people in an organization with access to information about the status of transactions.

In other words, customers are able to do more for their business at a lower cost when they successfully partner with a managed services provider.

Businesses run into challenges when they fail to take into account how important partnering is for successful B2B integration. The managed service provider is a partner, with clearly separated roles and responsibilities, as illustrated by Master Lock. There will continue to be a need to manage the internal technology aspects of trading partner relationships to ensure integration with internal systems.

Under-resourcing following the migration will cause delays in the benefits of outsourcing. Therefore, one challenge is being careful to fully understand this separation of roles and responsibilities and adequately staff for the work that will continue to be managed by the enterprise.

Another challenge is rolling out self-service to a broader constituency. Some organizations continue to keep this information internal to the EDI team. While they gain benefit in rapidly accessing status information, there is a stronger financial benefit when a broader set of people in the organization have direct access to self-service monitoring and reporting and can bypass the EDI team entirely.

Even with the challenges outlined, these negatives tend to weigh down the full possibility of an ROI rather than cause the return to be negative.

Project teams that have successfully migrated to managed services consistently recommend that careful planning should go into roles and responsibilities for both exceptions and day-to-day operations.

Finally, organizations continue to be challenged with supporting governance requirements around security and auditability. As this study shows, enterprises were able to comply with governance requirements involving B2B integration by moving to a managed services offering.

IDC BUSINESS VALUE METHODOLOGY

This methodology is based on gathering data through interviews with current users of the technology as the foundation for the model. Based on these interviews, IDC performs a three-step process to calculate the ROI and payback period:

1. Measure the savings from reduced operations costs (consolidation of hardware and software, avoided staff hired), increased operations efficiency, increased revenue, and improved user productivity

2. Ascertain the investment made in deploying the solution and the associated training and support costs

3. Project the costs and savings over a three-year period and calculate the ROI and payback for the deployed solution

IDC uses the net present value (NPV) of the savings over three years in calculating the ROI and payback period for the deployment. The NPV of the savings is determined by subtracting the discounted three-year investments from the discounted three-year benefits. IDC uses a 12% discount factor to allow for the missed opportunity cost that could have been realized using that capital.

IDC uses the following assumptions in its calculations:

1. To quantify savings from IT efficiency, IDC multiplies time values by burdened salary (salary + 40% for benefits and overhead).

2. Because the full benefits of the solution are not available during the deployment period, IDC prorates the benefits on a monthly basis and subtracts the appropriate amount for the deployment time from the first-year savings.