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Authors:

Chandana Gopal
Matthew Marden

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Business Value Highlights

More than

\$4

in business benefits per
\$1 invested*

308%

average ROI*

7.8 months

to payback

75%

less staff time to support
B2B operations

65%

less time for call center
support

\$3 million

per organization in
additional revenue

** over a three-year period*

Driving Strategic Value with IBM Supply Chain Business Network

EXECUTIVE SUMMARY

Digital transformation initiatives and the need for innovation are causing enterprises to rethink their IT landscapes including business-to-business (B2B) integration. Modern B2B integration is critical for enabling enterprises to achieve goals like increasing revenue, speeding up time to market, and improving efficiencies because these outcomes are dependent on having a successful business network. B2B practitioners have two goals — enable critical business initiatives and control costs — and cloud-based B2B services have been successful in helping enterprises achieve both goals.

IDC interviewed eight IBM clients to understand how their use of IBM Supply Chain Business Network, part of the IBM Watson Supply Chain portfolio, has impacted their operations and businesses. These organizations reported achieving strong value with IBM Supply Chain Business Network, and IDC projects that their investment will yield an average three-year return on investment (ROI) of 308%, or more than \$4 in benefits for \$1 invested, by:

- » Serving as a scalable and flexible B2B platform that supports business growth and peak periods of B2B activity, including partner onboarding
- » Enabling B2B staff time savings and efficiencies through increased B2B automation and repeatable processes and having IBM take on B2B-related activities
- » Reducing the frequency of B2B-related downtime and errors
- » Providing a cost-effective platform for B2B operations

The Internet has opened new avenues for connecting to trading networks and supplementing value-added networks (VANs) that continue to be used for trading partner exchange.

Situation Overview

Digital transformation is more than a marketing buzzword. Change and innovation are happening across all industries and businesses of all sizes. Businesses are shifting how they interact with clients and the speed at which they deliver products and services to market. Much of the innovation is driven by enterprises being able to automate and orchestrate business transactions across large end-to-end processes that extend beyond enterprise boundaries. B2B integration connects enterprises with multiple external entities including suppliers, distributors, partners, and clients, and as such, having a modern B2B infrastructure is critical to supporting digital transformation while increasing revenue, improving efficiencies, and reducing costs.

As in many other areas of IT, cloud computing has changed how businesses implement B2B integration. The Internet has opened new avenues for connecting to trading networks and supplementing value-added networks (VANs) that continue to be used for trading partner exchange. Cloud-based B2B integration was by far the fastest-growing segment in horizontal B2B integration in 2016, growing at 6.0% compared with 2.7% for the overall B2B middleware market. As the volume, variety, and velocity of transactional data grow, B2B infrastructure has to be modern and scalable and able to handle Web-scale transaction volumes. In addition, the business imperative for achieving 24 x 7 global and real-time business operations demands a highly available and reliable B2B infrastructure.

This study examines the reasons why enterprises opted for cloud B2B integration and chose IBM Supply Chain Business Network as well as the value obtained from the service. The drivers for why enterprises re-evaluate their B2B infrastructure were fairly consistent among the participants in the study. The most common reasons cited for modernizing B2B integration include:

- » Business expansion into new markets and geographies with existing infrastructure not scaling
- » Mandate to control costs and eliminate variability
- » Existing B2B infrastructure that does not meet requirements, is no longer supported, or is not compliant with new regulations
- » Lack of trained staff to maintain legacy infrastructure
- » Consolidating B2B operations and centralizing all trading partner activities

IBM offers a broad range of B2B products and services and is one of the largest players in the B2B integration middleware category.

Although enterprises chose to outsource B2B for a variety of reasons, more than 85% of the clients responded that a major benefit of using cloud services was their ability to grow their business network, which correlates to an increase in revenue and an expansion of the business. The clients also cited that they had the ability to support far more transaction volumes with fewer people and had better business outcomes as a result of using IBM Supply Chain Business Network.

IBM Supply Chain Business Network

IBM offers a broad range of B2B products and services and is one of the largest players in the B2B integration middleware category. IBM Supply Chain Business Network, part of the IBM Watson Supply Chain portfolio, is a cloud service that enables clients to offload all or part of their B2B integration infrastructure and processes to IBM. Clients can take advantage of the wealth of trading partner information that resides in the platform, thereby significantly reducing onboarding, mapping, and troubleshooting time frames.

IBM Supply Chain Business Network offers the following services to its clients as part of the IBM Supply Chain Business Network Standard Edition:

- » Mapping
- » Translation
- » Community
- » Visibility
- » Infrastructure and communication management
- » Real-time processing

IBM Supply Chain Business Network Premium clients also get B2B process management services and additional transition services, document process management, premium support, integration services, and optional trading partner support.

The Business Value Of IBM Supply Chain Business Network

Study Demographics

IDC interviewed eight IBM clients using IBM Supply Chain Business Network to support their businesses and operations in summer 2015. These interviews were designed and carried out by IDC to elicit both qualitative and quantitative details regarding the impact of IBM Supply Chain Business Network on the organizations' B2B operations. The results of this study are based on information provided to IDC directly by these organizations.

These IBM clients, which range in size from 500 employees to 40,000 employees with an average employee base of 8,200, use IBM Supply Chain Business Network to support substantial B2B operations. On average, these organizations conduct 678,200 B2B transactions per month, with an average supplier and client base of 1,010. These IBM clients represent the experience of a number of industries (see Table 1) but share a common need to have an efficient, cost-effective, and scalable B2B environment to support their businesses and partner ecosystems.

TABLE 1

Firmographics of Interviewed Organizations: IBM Supply Chain Business Network Clients

	Average	Range
Number of employees	8,200	500 to 40,000
Number of IT staff	170	7 to 500
Number of IT users (internal)	7,800	375 to 40,000
Number of B2B transactions per month	678,200	23,800 to 2.3 million
Number of suppliers and clients	1,010	30 to 4,100
Countries	United States, United Kingdom	
Industries	Consumer goods, retail, manufacturing, food products, electronics, higher education	

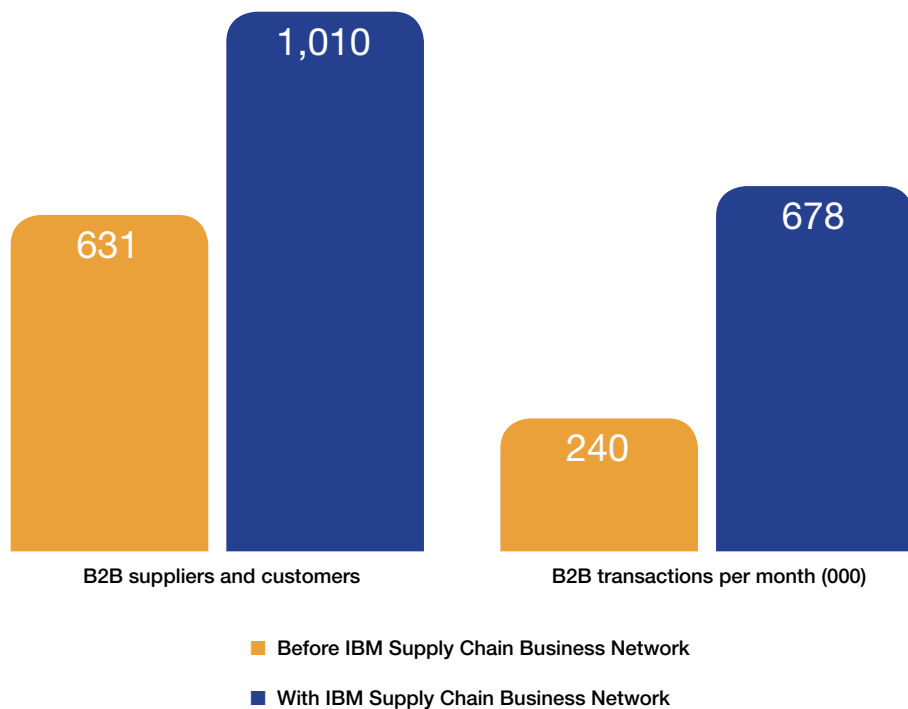
Source: IDC, 2015

Business Value Analysis

IBM's clients cited a number of reasons for migrating their B2B operations to IBM Supply Chain Business Network. Objectives such as reducing the burden on staff of supporting B2B operations, having a scalable B2B platform to support partner ecosystems, and putting in place a uniform process for B2B operations were mentioned by several interviewed organizations. These organizations have grown their B2B environments to a substantial extent on average since moving to IBM Supply Chain Business Network, adding new suppliers and clients (60% more each, respectively), and conducting almost three times as many B2B transactions (182% growth in transaction volume). This growth has made it imperative for these organizations to make their B2B operations as efficient and scalable as possible. Figure 1 shows the growth of B2B operations with IBM Supply Chain Business Network.

FIGURE 1

Growth of B2B Operations with IBM Supply Chain Business Network



Source: IDC, 2015

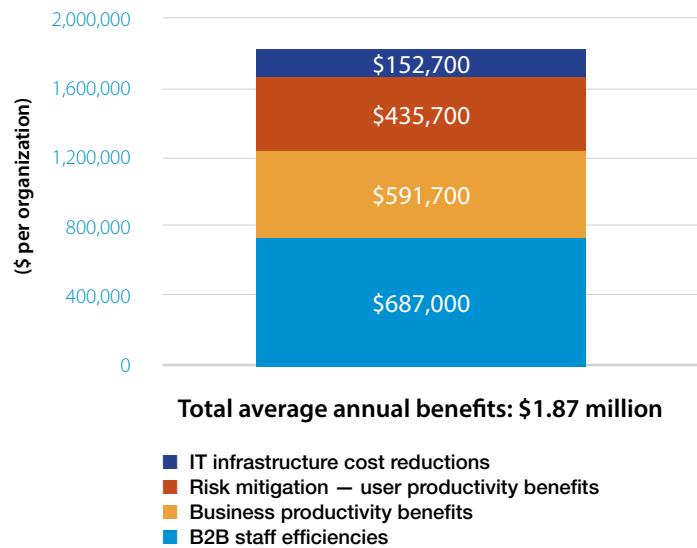
IDC projects that interviewed organizations will achieve average annual benefits worth \$1.87 million (\$2,753 per 1,000 B2B transactions per month) over three years.

Interviewed organizations reported to IDC that they have been able to leverage their use of IBM Supply Chain Business Network to grow their B2B operations in a cost-effective and scalable manner. As a result, they are achieving strong value through operational efficiencies, business growth, and cost reductions with IBM Supply Chain Business Network. IDC projects that interviewed organizations will achieve average annual benefits worth \$1.87 million (\$2,753 per 1,000 B2B transactions per month) over three years in the following areas (see Figure 2):

- » **IT infrastructure cost reductions.** IBM Supply Chain Business Network enables interviewed organizations to avoid costs associated with previous B2B solutions and infrastructure costs associated with supporting on-premises B2B platforms. IDC projects that these cost savings will have an average value of \$152,700 per organization (\$225 per 1,000 B2B transactions per month) per year over three years.
- » **Risk mitigation — user productivity benefits.** IBM Supply Chain Business Network helps organizations reduce the frequency of outages and errors affecting their B2B platforms, thereby saving productive time for employees and increasing their business operational efficiency. IDC puts the value of time savings at \$435,700 per organization (\$643 per 1,000 B2B transactions per month) per year over three years.
- » **Business productivity benefits.** IBM Supply Chain Business Network helps these organizations address additional business opportunities and speed up the recognition of revenue. IDC projects that these organizations will achieve benefits in additional revenue gains of \$591,700 per organization (\$872 per 1,000 B2B transactions per month) per year over three years.
- » **B2B staff efficiencies.** IBM Supply Chain Business Network enables B2B-related staff time savings and also enables growth of B2B environments without the need to invest more staff time in supporting B2B operations. These efficiencies are the result of automation and repeatable processes achieved with IBM Supply Chain Business Network and leveraging IBM's expertise to handle day-to-day operations. IDC calculates that interviewed organizations will see staff time savings and productivity gains worth an average of \$687,000 per organization (\$1,013 per 1,000 B2B transactions per month) per year over three years.

FIGURE 2

Average Annual Benefits per Organization: IBM Supply Chain Business Network



Source: IDC, 2015

IT Staff Efficiencies

IBM clients using IBM Supply Chain Business Network as their B2B solution reported that it has both reduced the amount of staff time needed to support B2B operation and enabled them to expand their B2B operations without adding staff. On average, these organizations reported needing 31% less staff time with IBM Supply Chain Business Network to support their B2B operations and requiring 75% less staff time than they would otherwise need given B2B operations growth (see Figure 3). For these organizations, minimizing the amount of staff time spent on day-to-day B2B operations means that they can reinvest staff time in innovation and supporting the business by focusing on other services and applications.

IBM clients referenced several ways that they are achieving these efficiencies with IBM Supply Chain Business Network:

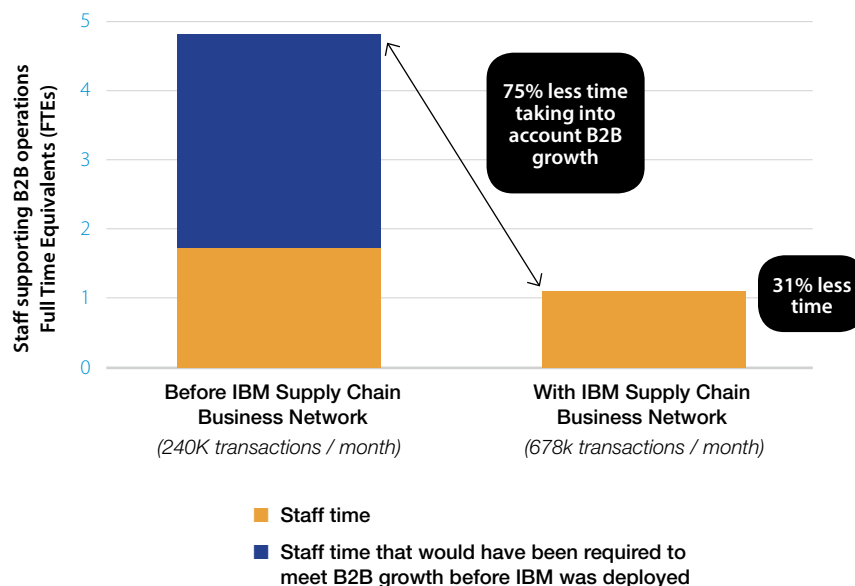
- » **Reduce the time staff spends on technical aspects of B2B operations.** Organizations reported that time savings were especially common with regard to the technical aspects of mapping when onboarding new clients, suppliers, and other business partners. These IBM clients are benefiting from automation and repeatable processes as well as turning over responsibility for the more technical aspects of B2B operations to IBM. One

“We have a uniform B2B process now with IBM Supply Chain Business Network across our 10 facilities. Everyone can go into the common Web services portal that IBM offers in the same way. Before, everybody kind of did their own thing, and now, it’s easier to support each other and coverage as needed, so we’re avoiding staff time.”

interviewed client explained: “IBM Supply Chain Business Network has made us more efficient because we don’t have to worry about the technical parts of mapping — three people are probably saving 20% of their time . . . We’ve been able to use this saved time to take on other roles in the business, such as handling other applications.”

- » **Minimize staff inefficiencies through common processes across business.** Organizations noted that IBM Supply Chain Business Network has helped them instill common B2B practices across disparate organizational locations and use automation to make B2B operations less burdensome. The CIO at Watts Water Technologies, which manufactures water quality products, noted: “We have a uniform B2B process now with IBM Supply Chain Business Network across our 10 facilities. Everyone can go into the common Web services portal that IBM offers in the same way. Before, everybody kind of did their own thing, and now, it’s easier to support each other and coverage as needed, so we’re avoiding staff time.”
- » **Avoid requiring additional staff time during periods of growth.** According to one organization: “There are circumstances where we need to onboard multiple partners at once, and we just send it off to IBM for mapping, and then they go on and do the other one and send it off to IBM for mapping. And given the growth in our B2B operations, we’re probably avoiding hiring a person to support this growth.”

FIGURE 3
B2B Staff Productivity Impact:
IBM Supply Chain Business Network



Source: IDC, 2015

“IBM Supply Chain Business Network [is] very scalable. We can onboard as many trading partners as we can handle basically . . . We onboarded up to 10 times more trading partners with IBM than we could have before using it.”

Business Productivity Benefits

Interviewed organizations reported that their use of IBM Supply Chain Business Network has supported their business growth, enabling them to generate more revenue. IBM clients explained that their businesses — and their partners, including clients and suppliers — require a modern and efficient B2B platform. In addition to the ongoing efficiencies, IBM clients reported benefiting greatly from the scalability of IBM Supply Chain Business Network and their ability to support partner onboarding efforts during periods of strong growth. On average, the IBM clients interviewed attributed \$3 million of additional revenue per year to IBM Supply Chain Business Network (see Table 2). This enabled them to address business opportunities, more efficiently conduct business operations, and reduce delays associated with and speed up the recognition of revenue.

Interviewed organizations provided a number of examples of how IBM Supply Chain Business Network has helped them generate additional revenue, including:

- » **Serving as a B2B platform for growth as new business opportunities arise.** An engineer at The Jordans & Ryvita Company, a food manufacturer, explained that IBM Supply Chain Business Network has reduced the company's time to market in new geographic regions: *“We are much faster to get into new markets with IBM Supply Chain Business Network because IBM helps to simplify a complicated process. I think we make more revenue as a result — there are a lot of factors, but IBM has helped us speed time to market.”*
- » **Offering the scalability needed for B2B operations to keep up with business growth.** An EDI manager at RS Components, which distributes electronic, electrical, and industrial components, explained how IBM Supply Chain Business Network had enabled it to handle a period of strong partner growth: *“IBM Supply Chain Business Network [is] very scalable. We can onboard as many trading partners as we can handle basically . . . We onboarded up to 10 times more trading partners with IBM than we could have before using it.”*
- » **Providing a common platform across business locations.** According to one IBM client, *“It's easier for us to address markets with IBM Supply Chain Business Network because we already have the basic structure in place rather than starting from scratch . . . And that helps us grow because it's eliminating waste; it speeds up time to get information to our vendors, reconcile payments, and handle order management.”*
- » **Enabling new business partnerships.** According to an EDI manager at Brightstar Corp., which distributes mobile phones and other devices, *“We have some big clients that won't even trade with you directly unless they are going through a service such as IBM Supply Chain Business Network — it's a lot of additional sales.”*

“We’re always introducing new products. This is where the big benefit is with IBM Supply Chain Business Network for us. If we took it away, you’d be able to see what the difference is The impact is keeping those products on sale and improving our sales; even if we only do that by a little bit, it’s a big number.”

“As many as 20% of our B2B transactions were producing an error before we began using IBM Supply Chain Business Network. We have fewer errors now — for example, we used to have issues with transfer orders because a client would submit a wrong code, which was painful for our client service team. It happens probably 80% less now because all of that used to be done manually.”

» **Ensuring the availability of goods.** The EDI manager at RS Components credited IBM with helping it maintain business continuity by ensuring the availability of its products: *“We’re always introducing new products. This is where the big benefit is with IBM Supply Chain Business Network for us. If we took it away, you’d be able to see what the difference is The impact is keeping those products on sale and improving our sales; even if we only do that by a little bit, it’s a big number.”*

TABLE 2

Business Impact: IBM Supply Chain Business Network		
	Per Organization	Per 1,000 B2B Transactions per Month
Additional revenue per year — B2B supporting business	\$3.0 million	\$4,336
Additional revenue per year — realizing revenue faster	\$59,800	\$88
Assumed operating margin	15%	15%
Additional operating income per year	\$450,100	\$664

Source: IDC, 2015

Risk Mitigation and Availability

Interviewed organizations have also generated value through their use of IBM Supply Chain Business Network by reducing and minimizing the frequency of productivity- and business-impacting B2B-related problems and errors, even as their B2B transaction volume has grown substantially. Taking into account growth in the B2B environments of these organizations, IDC calculates that in total they are losing 75% less productive time handling B2B-related calls, outages, and errors than previously. For interviewed organizations, these time savings can be reinvested in activities that are more strategic and have more value (see Table 3).

Organizations attributed improved performance to a number of factors, including the ease and reliability of IBM Supply Chain Business Network as well as automation and repeatable processes. One organization explained: *“As many as 20% of our B2B transactions were producing an error before we began using IBM Supply Chain Business Network. We have fewer errors now — for example, we used to have issues with transfer orders because a client would submit a wrong code, which was painful for our client service team. It happens probably 80% less now because all of that used to be done manually.”*

TABLE 3

Risk Mitigation and B2B Support: IBM Supply Chain Business Network				
Partner Support	Before IBM Supply Chain Business Network	With IBM Supply Chain Business Network	Difference	% Benefit
Number of calls per year	1,222	547	675	55
Average time per call (hours)	1.0	0.9	0.1	13
Internal User Support				
Number of calls per year	3,455	1,259	2,196	64
Average time per call (hours)	1.3	1.2	0.1	11
Total hours per year for internal and partner support calls	5,714	2,003	3,711	65
B2B-Related Unplanned Downtime				
Number of instances per year	3.8	1.7	2.1	57
Mean Time To Recover (MTTR) (hours)	4.4	2.3	2.1	48
B2B-Related Errors				
Number of errors per year	5,231	1,377	3,854	74
Mean Time To Recover (MTTR) (hours)	0.9	0.8	0.1	5
Total FTE impact	9.5	2.4	7.1	75

Source: IDC, 2015

We've improved our compliance and can better enforce HIPAA and FERPA rules, which saves us time. We'd have to hire more people if we didn't have this, probably at least several just to deal with all of those issues."

In addition, several IBM clients noted that their use of IBM Supply Chain Business Network has provided benefits in terms of regulatory compliance. As a result of the improved ability to demonstrate compliance with IBM Supply Chain Business Network, these organizations require less staff time to demonstrate compliance and are at lower risk of incurring compliance-related fines or penalties. One higher education organization noted: "We've improved our compliance and can better enforce HIPAA and FERPA rules, which saves us time. We'd have to hire more people if we didn't have this, probably at least several just to deal with all of those issues."

B2B-Related Cost Reductions

IBM Supply Chain Business Network has also helped the interviewed organizations maintain cost-effective B2B operations. Benefits such as retiring servers and avoiding server- and datacenter-related costs result from moving to a cloud-based B2B service, while several interviewed organizations also reported being able to retire previous B2B platforms. IDC calculates that in total, interviewed organizations will achieve three-year cost reductions

Investments go beyond the annual costs of using IBM Supply Chain Business Network and can include additional costs related to the solution, including migration, planning, consulting, configuration or maintenance, and staff or user training.

that will average \$458,100 through their use of IBM Supply Chain Business Network. These cost efficiencies will be concentrated in savings coming from retiring previous B2B solutions (\$232,900 saved over three years), including the solutions themselves and vendor software, as well as costs of additional servers and associated hardware, maintenance, and operational costs (\$203,300 over three years).

ROI Analysis

IDC conducted interviews with organizations using IBM Supply Chain Business Network and recorded their results to inform this study's analysis. IDC used the following three-step method for conducting the ROI analysis:

- 1. Gathered quantitative benefit information during the interviews using a before-and-after assessment.** In this study, the benefits included B2B staff time savings and productivity gains, user productivity increases, increased revenue, and B2B-related cost reductions.
- 2. Created a complete investment (three-year total cost analysis) profile based on the interviews.** Investments go beyond the annual costs of using IBM Supply Chain Business Network and can include additional costs related to the solution, including migration, planning, consulting, configuration or maintenance, and staff or user training.
- 3. Calculated the ROI and payback period.** IDC conducted a depreciated cash flow analysis of the benefits and investments for the organizations' use of IBM Supply Chain Business Network over a three-year period. ROI is the ratio of the net present value (NPV) and the discounted investment. The payback period is the point at which cumulative benefits equal the initial investment.

Table 4 presents IDC's analysis of the average discounted benefits, investment, and return on investment for the IBM clients interviewed for this study. Based on the analysis, IDC calculates that these organizations will invest a discounted average of \$1.07 million per organization (\$1,580 per 1,000 B2B transactions per month) in IBM Supply Chain Business Network over three years, which IDC projects will return benefits worth a discounted average of \$4.37 million per organization (\$6,445 per 1,000 B2B transactions per month). For these organizations, the benefits and investment costs would result in an average three-year ROI of 308% and a payback period of 7.8 months.

TABLE 4

Three-Year ROI Analysis		
	Per Organization	Per 1,000 B2B Transactions per Month
Benefit (discounted)	\$4.37 million	\$6,445
Investment (discounted)	\$1.07 million	\$1,580
Net present value (NPV)	\$3.30 million	\$4,865
Return on investment (ROI)	308%	308%
Payback period	7.8 months	7.8 months
Discount rate	12%	12%

Source: IDC, 2015

Challenges and Opportunities

Clearly, there is significant value to be achieved by using IBM Supply Chain Business Network, and enterprises that have switched from traditional on-premises B2B integration to the cloud have seen tremendous benefits, including improved time to market, better client service, fewer errors, more compliance, reduced downtime, and a healthier business network. Enterprises are generally able to realize these benefits at a lower cost compared with on-premises deployments with similar capabilities.

A majority of enterprises employ a combination of on-premises software, value-added networks, and cloud B2B services as part of their B2B infrastructure. In cases where enterprises make a switch from in-house B2B to an outsourced model for either part or all of their B2B infrastructure, the transition has to be done with care, or enterprises run into challenges. People and processes have to be aligned with the change in ownership of B2B infrastructure. Where internal EDI teams were once in control, day-to-day B2B operations are conducted by a third party, and the terms of engagement have to be clearly understood by all parties involved. Enterprises have to carefully evaluate their trading volumes (current and future), trading partner relations, onboarding activities, and service-level agreements with trading partners to ensure that they fully understand all costs that are involved with outsourcing.

Enterprises moving from an on-premises mindset to a cloud service provider relationship have to address the cultural challenges and negative implications of outsourcing. This transformation often requires cultural sensitivity for the IT staff and business users to operate out of their comfort zone. Laying the groundwork for change in roles and processes is critical

B2B networks such as IBM Supply Chain Business Network operate like B2B social networks, where if a company profile already exists on the network, it does not have to be recreated if a new trading partner integration is required to be set up for that company.

to the success of the project. Managing requirements and clearly outlining expectations and responsibilities will alleviate common pitfalls that clients mentioned in this study.

In spite of the challenges discussed previously, a majority of interviewees said that using B2B Supply Chain Business Network creates business value, drives growth, and frees internal resources to focus on strategic and value-added tasks. Interviewees highlighted that by using IBM Supply Chain Business Network, they were able to support much higher transaction volumes and a larger set of trading partners with far fewer resources. The IBM Supply Chain Business Network team provides expertise that is generated from implementing and running B2B operations for thousands of companies, and clients can leverage that expertise. Clients also repeatedly mentioned that IBM Supply Chain Business Network allowed them to standardize their B2B processes, enable reuse, and reduce errors, which further improved onboarding times. Standardization also helped clients meet compliance requirements because processes were better documented and managed.

Also, clients were able to improve uptime and availability of B2B infrastructure because IBM Supply Chain Business Network operates at Web scale with high availability and reliability. Many clients mentioned that IBM Supply Chain Business Network replaced aging B2B infrastructure that had previously limited growth.

Finally, B2B networks such as IBM Supply Chain Business Network operate like B2B social networks, where if a company profile already exists on the network, it does not have to be recreated if a new trading partner integration is required to be set up for that company. All existing standards and document formats and maps can be leveraged to speed up onboarding. This ultimately provides significant savings in the amount of time required for onboarding, mapping, and testing, which in turn results in a quicker time to market. Clients specifically mentioned that by using IBM Supply Chain Business Network, they were able to “leave mapping to the experts,” allowing them to expand their business much faster.

Summary and Conclusion

Digital transformation initiatives are occurring across all industries and geographies and companies of all sizes. IDC estimates that two-thirds of CEOs of Global 2000 enterprises have digital transformation at the center of their corporate and digital strategies. B2B technology will become a fundamental business resource that will drive growth and innovation and deliver immense value to the business. Mission-critical transactional information flows through B2B infrastructure, and a vibrant business network that includes suppliers, trading partners, distributors, retailers, and clients is extremely important to be successful and remain competitive in the digital economy.

Modern technology such as the cloud and business collaboration networks will increasingly be used like social networks.

IBM Supply Chain Business Network, part of the IBM B2B Cloud Services portfolio, provides a modern cloud-based platform that clients can leverage as part of their B2B infrastructure. To better understand the business value of using IBM Supply Chain Business Network, IDC interviewed eight IBM clients that either transitioned all their B2B operations to IBM or use a hybrid approach with on-premises and cloud operations. Clients reported the following results:

- » More than \$4 in benefits realized for every \$1 spent on IBM Supply Chain Business Network, translating to a 308% average three-year return on investment
- » 75% less staff time to support B2B operations
- » Average of \$3 million in additional annual revenue over a three-year period

More than 85% of clients cited that they have been able to grow their B2B network with lower costs and less time required to support B2B operations. Other benefits reported included better business outcomes, simpler standardization, reduced risk, and increased compliance.

Entire supply chains are being transformed in the digital economy. Modern technology such as the cloud and business collaboration networks will increasingly be used like social networks. Enterprises that operate globally in real time need an “always on” Web-scale B2B infrastructure such as that provided by IBM Supply Chain Business Network. While not the focus of this White Paper, other technologies will also disrupt and transform supply chains. Massive instrumentation of supply chains through IoT, the ability to maintain a shared ledger of key supply chain data across multiple participants through blockchain, and the ability to understand and make predictions on that data through AI, will all ensure that tomorrow’s supply chain looks very different to today’s. Enterprises that have aligned people and processes with modern B2B technology have realized immense value and will emerge as leaders in the digital economy.

Appendix

IDC’s standard ROI methodology was utilized for this project. This methodology is based on gathering data from current users of IBM Supply Chain Business Network as the foundation for the model. Based on these interviews, IDC performs a three-step process to calculate the ROI and payback period:

- » Measure the savings from reduced IT costs (staff, hardware, software, maintenance, and IT support), increased user productivity, and improved revenue over the term of the deployment.
- » Ascertain the investment made in deploying the solution and the associated migration, training, and support costs.
- » Project the costs and savings over a three-year period and calculate the ROI and payback for the deployed solution.

IDC bases the payback period and ROI calculations on a number of assumptions, which are summarized as follows:

- » Time values are multiplied by burdened salary (salary + 28% for benefits and overhead) to quantify efficiency and manager productivity savings.
- » Downtime values are a product of the number of hours of downtime multiplied by the number of users affected.
- » The impact of unplanned downtime is quantified in terms of impaired end-user productivity and lost revenue.
- » Lost productivity is a product of downtime multiplied by burdened salary.
- » Lost revenue is a product of downtime multiplied by the average revenue generated per hour.

Modern technology such as the cloud and business collaboration networks will increasingly be used like social networks. The net present value of the three-year savings is calculated by subtracting the amount that would have been realized by investing the original sum in an instrument yielding a 12% return to allow for the missed opportunity cost. This accounts for both the assumed cost of money and the assumed rate of return.

Because every hour of downtime does not equate to a lost hour of productivity or revenue generation, IDC attributes only a fraction of the result to savings. As part of our assessment, we asked each company what fraction of downtime hours to use in calculating productivity savings and the reduction in lost revenue. IDC then taxes the revenue at that rate.

Further, because IT solutions require a deployment period, the full benefits of the solution are not available during deployment. To capture this reality, IDC prorates the benefits on a monthly basis and then subtracts the deployment time from the first-year savings.

Note: All numbers in this document may not be exact due to rounding.

IDC Global Headquarters

5 Speen Street
Framingham, MA 01701
USA
508.872.8200
Twitter: @IDC
idc-insights-community.com
www.idc.com

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