

Part I

The Big Picture

Chapter 1

Introduction

The focus of this chapter

With B2B integration, collaborative e-commerce will truly come to life — moving from the phase of revolutionary idea to becoming a common aspect of business operations.

In this chapter, we will introduce the subject of B2B collaborative e-commerce, differences between B2B and B2C, concepts of B2B integration, formulation of B2Bi strategy, the roadmap to a successful B2B integration strategy and implementation, features of a good B2B integration solution and return on investment on B2Bi implementation.

1.1. Evolution of Next Generation Enterprises

The Center for Research in Electronic Commerce (CREC), at the University of Texas-Austin recently conducted a large study to assess collaborative e-business value in small, medium and large companies across the U.S. and Europe. The study, which included leading manufacturers, retailers, distributors and wholesalers, identified a strong link between e-business drivers such as system integration, customer and supplier oriented processes, financial indicators and operational excellence measures. It reveals that many companies have either not engaged in B2B collaborative e-commerce or just started to move towards it. The study indicates that most companies have only scratched the surface of e-business and have yet to realize the gains in efficiency and productivity that can be achieved through using the Internet.

But a few companies are going through a phase of Internet revolution in terms of restructuring their business processes, providing real-time customer service, integrating their internal applications and supply chain. They are increasing their profitability through digitization and integration of business processes — especially in business-to-business transactions. They are flexible, adaptable and eager to change, and have an unprecedented global market access of 24/7/365. They are utilizing their investments in e-business initiatives to achieve operational excellence. These are a new class of companies, known as Next Generation Enterprises (NGEs) that will dominate tomorrow's markets.

Companies that are not participating in this revolution may not remain competitive and profitable in the future. Becoming the next generation enterprise is not a matter of choice anymore. No modern business, regardless of its size, can survive without digitizing business. Your company can join the race, or get ousted by the competition. It is still not too late — the long-term race has just begun.

1.2. New Rules of Engagement

The e-business world is growing at an unprecedented pace. Businesses all over the world are realizing that future survival and success are dependent upon the collaborative commerce capabilities of the organization and its ability to act at Internet speeds. The new dimensions

of business will involve robot shopping agents, business process coordination, business-to-business exchanges, collaborative networks, online billing, auctions, digital cash, mass customization, markets for trust, cyberization of markets and concepts yet to be invented. Companies in many sectors of the economy will be forced to adapt to these new market realities with improved information technology infrastructures as well as automated and re-engineered business processes.

The new rules of engagement, enforced by the new online economy, require a complete transformation of a legacy company to an e-business driven company. Technology plays a vital role in this transition and transformation and it is changing from a cost of doing business to a way of doing business.

However, companies cannot, and should not abandon the classic concepts of successful business: product, price, promotion and place — or channel synergy — as well as customer service and fulfillment. What is required for survival in the new economy is an appropriate balance between established business practices and the implementation of today's information technology. The next generation enterprises will be successful only through the right integration of technology and business processes.

1.3. B2B E-Commerce

B2B e-commerce is being talked about everywhere. And it is not just jargon — it is the next level in the e-business revolution, when businesses collaborate with business partners in real-time and put management of all their processes online — from supply chain and purchasing to manufacturing and product development — for increased control, rapid response, improved efficiency, global intelligence and unprecedented cost savings. B2B e-commerce is a revolution, similar in magnitude to the Industrial Revolution, that will fundamentally change relationships among business partners — how they exchange information, collaborate, communicate and close transactions.

1.3.1. What is B2B e-commerce?

B2B e-commerce is an acronym for business-to-business, a type of e-commerce involving a transaction from one business to another via

the Internet. Thus, it occurs when systems of two or more businesses exchange information electronically that, directly or indirectly, results in a transaction. Multiple organizations can exchange information as part of a single transaction. A transaction in B2B e-commerce can involve traditional purchases and other related business activities such as request for a quote, setup of new accounts, order management and status information. A transaction generally is real-time, but based on the transaction requirement, the aggregation and distribution of data across companies may not be real-time.

B2B e-commerce can be as basic as a manufacturer putting up a bare-bones Internet site to let distributors securely order a handful of products, or it can be as complex as a distributor offering company-specific pricing and content, complex product configurations and real-time access to inventory levels for its entire product line to thousands of customers.

1.3.2. B2B vs. B2C: Differing strategies

Table 1.1 shows the major differences between B2B and B2C.

1.3.3. Explosive growth in B2B e-commerce

Several fundamental forces have driven the explosive growth of B2B e-commerce. Some of these forces arise from the need for global trade, dynamic business relationships, elimination of price differences, collaboration in new products development, forecasts and replenishments and movement to market-driven economies. Though price and functionality remain critical, customer service and value-added relationships have become the new drivers of commerce and competitive advantage.

Forrester Research has estimated that in the U.S. B2B e-commerce will grow to more than \$2 trillion by 2003, about 10% of business sales overall. According to the Gartner Group, the B2B e-commerce marketplace will exceed \$7 trillion in 2004. North America's share will approach \$2.8 trillion of market revenue; Europe will grow to \$2.3 trillion; Asia will account for \$900 billion; and Latin America will reach \$124 billion.

Table 1.1. Differences between B2B and B2C

	Business to Business (B2B)	Business to Consumer (B2C)
Commerce Activities	<p>Business-to-business encompasses many other types of activities than simply placing orders between businesses (e.g., joint design, development and manufacture). For these issues, there is a need to agree on platforms and/or data interchange standards.</p> <p>Typical activities among companies participating in B2B commerce include collaborative planning and forecasting, order fulfillment, payment execution and status tracking.</p>	<p>For the business-to-consumer, the business only has to be able to support communications via the Internet, phone, fax and e-mail. The focus is on providing services such as product catalogs, ordering and payment and status checking.</p>
Business Models	<p>The business models in B2B are much more defensible than in B2C. B2B is an evolved economy. It is about transformation and evolution of business. In B2B, buyers and suppliers are made more efficient, competitive and profitable.</p>	<p>The B2C models are based on optimizing the ability to directly attract, manage and support the individual customer, thus eliminating the traditional middleman.</p> <p>In B2C, it is a case of new vs. old: it is Amazon vs. Borders. They are fighting for a share of the same customer.</p>
Nature of Transactions	<p>B2B orders are governed by the complex business rules of the different parties (such as buyers, sellers and distributors) involved in the transaction. Each side wants visibility in the transaction from inception to completion.</p>	<p>B2C orders are often impulse or spot transactions with a short life span. There is more leniency in fulfillment of these orders.</p>
Order Size	<p>In most cases, the average order size (in value) in the B2B world is large.</p>	<p>In most cases, the average order size (in value) in the B2C world is small.</p>

Table 1.1 (Continued)

	Business to Business (B2B)	Business to Consumer (B2C)
Flexibility to Change Relationships	The switching costs in B2B are much higher because the companies are much more tightly connected through integration into back office ERP systems. The companies must evolve business processes and develop trust with buyers and suppliers that goes well beyond delivering a product.	B2C relationships are very flexible. Buyers have full flexibility to change their suppliers.
Customer Relationships	Relationships are much more complex, long-term, often contractual and involve bigger dollar amount. They involve intricate procurement models, supply chain automation, engineering and planning collaboration.	B2C relationships are usually one-sided, where businesses define and control the relationship with the consumer.

Companies that have not yet put any resources into developing a comprehensive B2B strategy will most likely face immense pressure, sooner rather than later, either from customers, suppliers or competitors that have started reaping the cost benefits of doing business over the Internet.

1.3.4. What is collaborative e-commerce?

Collaborative e-commerce, also known as c-commerce, allows Internet-enabled companies to share intellectual capital and leverage the core competencies of their trading partners. It promises to deliver significant increases in corporate innovation, productivity and profitability and create new opportunities for dynamic B2B collaboration over the Internet. According to the Gartner Group, by 2005 nearly half of all Web-based commerce will be collaborative in nature.

Collaborative e-commerce is enabled by B2B integration which leads to shared databases, open tracking systems, enhanced inter-enterprise visibility and cooperation, streamlined business processes, new cost efficiencies and an expanded customer base for every collaborative partner — all resulting in a competitive advantage that traditional business models simply cannot duplicate.

1.4. B2B Integration (B2Bi)

B2B integration or B2Bi is basically about the secured coordination of information among businesses and their information systems (see Figure 1.1). B2Bi provides a technology framework for B2B collaborative e-commerce. It promises to dramatically transform the way business is conducted between partners, suppliers and customers. All companies (i.e., large, medium, small and new) can experience increased growth and success through tightly integrated partnerships.

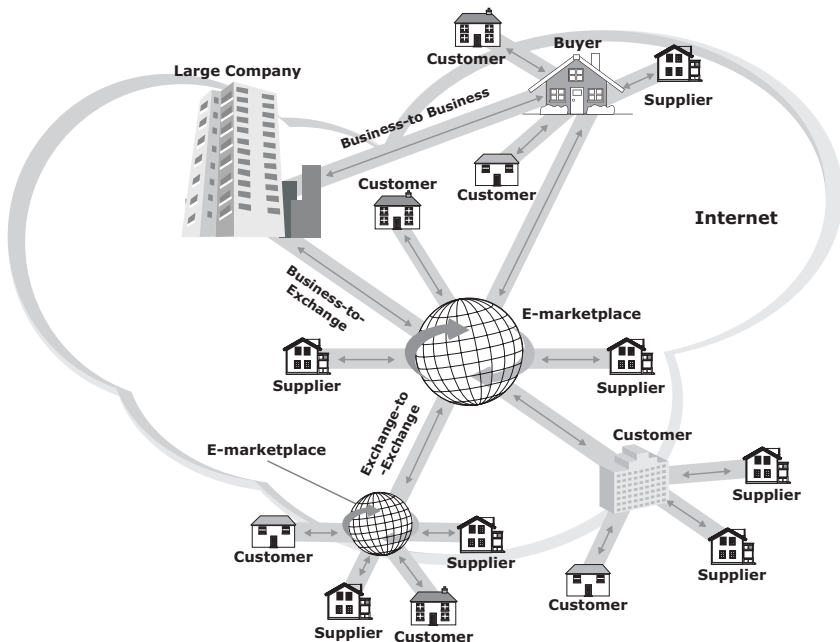


Figure 1.1. — B2B integration at a glance

Companies, from across a variety of industries, from consumer packaged goods, high technology, logistics and pharmaceuticals to chemical, manufacturing and financial services, are embracing B2Bi. They are realizing the enormous competitive advantage of B2Bi, through faster time to market, reduced cycle times and increased customer service. Through integration of business and technical processes, companies are able to strengthen relationships with service partners and customers, achieve seamless integration inside and outside the enterprise, gain real-time views of customer accounts, increase operational efficiencies and reduce costs.

With B2B integration, collaborative e-commerce will truly come to life — moving from the phase of revolutionary idea to become a common aspect of business operations. The future e-commerce landscape is beginning to take shape.

1.4.1. *Integration: The top priority*

Business-to-business integration and enterprise application integration (EAI) are the top priorities of companies these days. B2Bi requires exchange of data and sharing of business processes across multiple trading partners, such as buyers, suppliers and distributors. EAI, on the other hand, requires internal applications, such as CRM, ERP and legacy systems, to interact with each other seamlessly (see Figure 1.2). B2Bi and EAI are accomplished by data, application and business process integration. The integration challenges in both B2Bi and EAI have a lot in common and can be overcome through a single, integrated solution.

In a company today, resolving complex and costly integration issues is more critical than ever before. According to interviews of 50 global firms conducted by Forrester Research, 77% of the interviewees (see Figure 1.3) recognized integration to be critically important for e-commerce strategy. Making application data available to trading partners and customers is also becoming increasingly important to the global companies. But less than one-quarter (24%) (see Figure 1.4) of the firms surveyed for the report have purchased software to enable business-to-business integration.

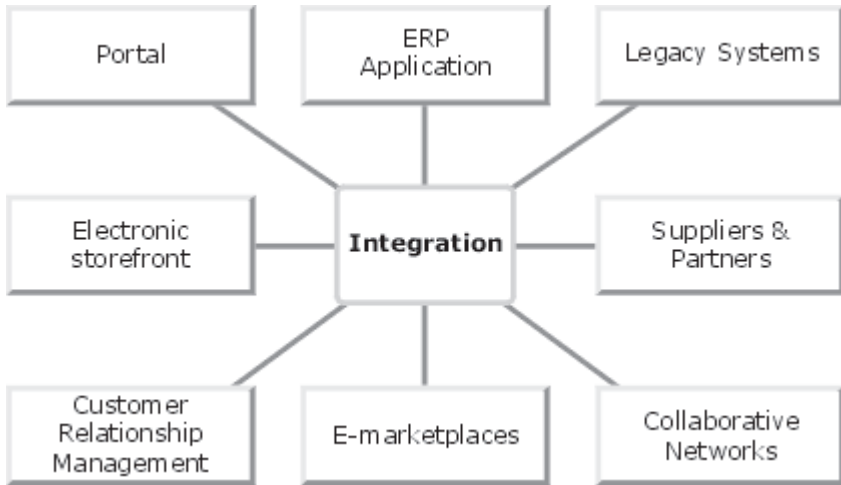
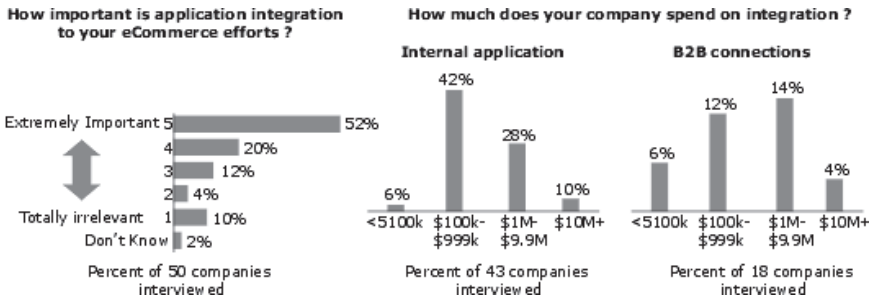


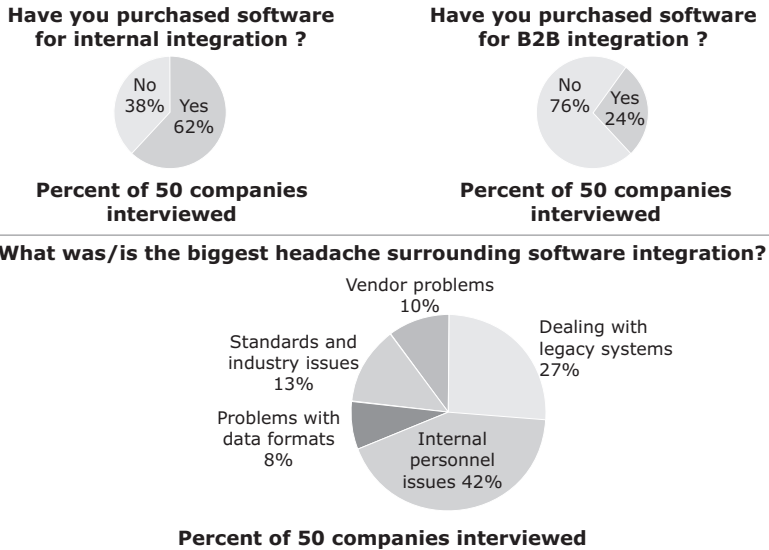
Figure 1.2. — B2Bi and EAI integrate all internal and external applications



Source: Forrester Group

Figure 1.3. — Integration: A critical factor for e-commerce efforts

Many may ask why there is such a big gap between the percentage of the companies that recognize B2Bi as a crucial factor for e-commerce efforts and the fraction that have actually invested any resources towards it. The answer to this question is that the majority of companies want to have a wait-and-see approach. These companies want to assess the B2B collaborative commerce landscape before investing any resources in terms of technology and business process reengineering required to support B2Bi infrastructure. There is also a sentiment that the immense



Source: Forrester Group

Figure 1.4. — Most companies using a wait-and-watch approach for B2B integration

cost associated with implementing a B2Bi solution may come down in the future. A typical B2Bi solution can cost a company any where from \$350,000 to several millions of dollars. Additionally, some companies feel that they are not ready to make the highly difficult design choices that are fundamental to the dynamic nature of B2B application architectures, which have to react to rapid changes in commerce, market, technologies, standards and products.

1.4.2. A daunting effort

One of the key requirements of B2Bi is that, apart from the organization itself, its customers and trading partners have to participate in the integration process. In a hub-and-spoke type relationship, each trading partner has to integrate its applications, such as ERP, SCM and CRM with the corporate hub or marketplace at the center of the trading network.

B2Bi is easier said than done. Integration is a big challenge, especially for global corporations that have hundreds to thousands of trading partners. It is an extremely daunting effort to manage the integration of so many business processes and can turn out to be a time consuming, complex and expensive task. With the advent of new technologies, the potential of disparity further increases and makes the exchange of electronic information even more complicated. To resolve this problem, companies are forced to adopt one or more of the following strategies:

- Limit e-commerce transactions to business partners using compatible systems.
- Enforce proprietary formats on business partners. This is a typical strategy used in a hub-and-spoke type business relationship.
- Stand on the side lines until B2Bi technology and standards are fully developed and used by companies in the same vertical industry.

With the use of such strategies, several companies are not able to reap the benefits of B2B collaborative e-commerce. These are the companies that will have a hard time competing with more nimble companies that have a successful B2Bi implementation in the future.

1.4.3. *Getting beyond the starting line*

There are four main steps involved in building a successful B2Bi solution:

- Plan a B2Bi strategy. The strategy should clearly state the different business processes that can be integrated with the business partners over the Internet, the benefits associated with the migration strategy and the technology and other resources required to achieve this transition. Evaluate and benchmark how other companies are successfully implementing B2Bi. Learn from their successes and failures.
- Determine short-term and long-term integration goals: For a successful implementation, it is very important to identify both short-term and long-term integration goals.
- Leverage existing systems. With B2Bi technology, companies can keep their existing internal systems while extending the information systems to accommodate e-business.

- Choose the right solution and solution provider. With the right B2Bi solution, a company can design architecture that provides easy, secured and reliable integration with trading partners ERP, CRM, legacy systems, portals and databases.

The resulting architecture should represent existing business relationships and have the flexibility to build dynamic relationships. This architecture should lay down a roadmap for the required enterprise application integration along with B2Bi. It should also address Internet security and transaction management issues.

Plan a B2Bi strategy

As it is not possible to manufacture a product without clear instructions of its shape, color and functionality, in a similar way it is not possible to achieve an effective B2Bi without having a clear and visionary B2Bi strategy. The strategy should develop an integrated enterprise from customers to suppliers to distributors to B2B e-marketplaces to financial institutions. B2Bi involves fundamentally rethinking the business model to transform a company into a digitally networked enterprise — an end-to-end integration of systems, data and applications.

The B2Bi strategy should take into consideration the challenges imposed by the constant changes in the field of information technology. Apart from technology, the strategy should also give careful consideration to customer feedback, benchmark data, usage statistics, competitive analysis, current forces and current capabilities.

Determine short-term and long-term integration goals

After planning a strategy, the second step in moving towards an integrated enterprise goal is to examine a company's needs and the needs of partner companies with which it will be integrating. Basically, B2Bi strategy can be classified into two phases: the short- to mid-term plan (the next five years) and the long-term plan (the sixth year and beyond).

Short-term strategy

In the first phase, a company should focus on how integration can reduce the operational costs, increase worker productivity, automate supply chain and improve customer relationships. The implementation of the technology will likely affect almost every aspect of a company's business, for example, customer relationship management (CRM) packages will automate the sales and support process. Apart from providing a real-time, personalized service to the customers, supply chain management (SCM) systems, B2B e-marketplaces and collaborative networks will change procurement, inventory control, order management and tracking processes. It is strategically important for a company to determine the following with respect to its trading partners (i.e., buyers, suppliers and distributors):

- Have its trading partners implemented any B2Bi solution?
- Will they interact with it through existing networks or legacy systems?
- Can they interact with it through various B2B e-commerce channels such as B2B e-marketplaces?
- Which elements (such as order management, procurement and catalog management) of the B2B relationship need integration?

Identifying integration goals is not a single step task. It takes several iterations in architectural design, assessment of internal and external systems and constant evaluation of processes to formalize them. A company has to constantly evaluate factors such as industry standards, standards being used by the B2B e-marketplaces in which it is participating and participation in new collaborative networks in its vertical industry.

Long-term strategy

The second phase of a company's B2Bi strategy is the long-term plan (the sixth year and beyond), which involves envisioning and understanding the company's long-term goals. B2Bi is an asset that can create sustained business value. It is important to look beyond immediate B2Bi needs to obtain this sustained business value.

Companies can use a scenario methodology for long-term planning. In scenario methodology, a company has to imagine a number of possible scenarios, positive and negative, that could evolve in its industry, business relationships and technological advancements. Based on these scenarios and the sequence of events leading to them, a company will have to predict if it is technologically prepared for them. This evaluation can be a very iterative process, but would allow a company to reposition its technology direction in time. With the use of this methodology for long-term planning, B2Bi goals would be a continuously evolving process.

The factors that should be considered in scenario methodology include: situational analysis, technology validation, financial planning and organizational development planning.

Other factors that a company has to constantly consider are:

- How might its B2B relationships evolve in the future?
- What new types of business partners (suppliers, channels) might it have in the future?
- Does the B2Bi infrastructure provide secure, location-independent access points to applications, a necessity for today's mobile workforce and extended corporation?
- Has it taken a holistic approach to e-business networking that provides an infrastructure for an entire e-business enterprise: internal operations, business partners and customers?

The e-business integration goals should serve as a roadmap to ensure that the organization uses its technology and business to realize its full potential.

Leveraging existing systems

B2Bi technology will have a significant impact on business computing and is integral to moving enterprises towards integrated infrastructures. The B2Bi model substantially changes the way corporations plan, design, build, deploy and manage future business applications. The success of this evolution for any company would be determined by these two critical factors: how well it has leveraged existing investments in corporate infrastructure and how well it has ensured flexibility for the

future. Companies that architect their B2Bi implementation strategy based on these two factors and choose a solution that meets these requirements, without compromising security, scalability and performance will be the winners in long run.

Companies charging towards B2B integration have a lot to learn from the old adage “make new friends, but keep the old”. This old maxim is very pertinent in today’s dynamic technology and business environment. Although it is important for the companies to embrace new technology like B2B integration, they still have to retain and effectively use their legacy systems. Over the years, companies have invested several million dollars in building, maintaining and enhancing these core systems which have been supporting the business for decades. It would be absolutely imprudent to throw away these systems and start everything from scratch. With the right transition methodology, implementation tools and smart vision, companies can effectively leverage their legacy systems, implement new integrated e-business solutions and tie them all together.

Legacy extension enables a corporation to use pre-existing applications, like mainframe systems, that contain all the data, business rules and logic and extend their functionality to other applications such as ERP, CRM and B2B type applications. The new B2B applications can build on the proven business logic and processes by just acting like wrappers to the data contained within the legacy systems. In fact, legacy extension systems encapsulate the existing business processes. With this extension, organizations can reduce the overall B2Bi implementation cost, time and effort.

1.4.4. *Selecting the right B2Bi solution*

B2Bi is much more than just planning a strategy and getting applications to communicate with each other. Without the right tools and the right solution, any integration implementation will be doomed. Before a company selects any solution or solution provider and pools all its resources into it, it should consider the following:

- Can the solution evolve with the company, with the industry and with the IT industry?

- Does it offer comprehensive functionality with the flexibility to support third-party software vendors and connect existing and new systems in a common framework?
- Does it work within scalable environments to accommodate customer and trading partner systems as well?
- Does it support open standards?

So, what are the key features that a company should look for before investing in any B2Bi software package?

Any transaction, any time — end-to-end, partner-to-partner

A B2Bi solution should be able to link a company to buyers, sellers, e-marketplaces and collaborative networks automatically in real-time. It should be able to:

- Fully automate real-time exchange of data between disparate applications;
- Integrate customer relationship management, procurement, supply chain management, databases and other legacy applications, regardless of existing technology at either end;
- Provide easy bi-directional connectivity to collaborative networks;
- Easily populate the existing enterprise information systems with the data resulting from B2B business process communications like purchase order, request for quotation and order status at both ends;
- Provide easy integration for dynamic content like catalogs and inventory from the enterprise's systems into each portal's proprietary system;
- Be flexible enough to extend B2Bi links to any trading partner and any B2B exchange as long as they adhere to industry standards for business process communication;
- Enable sharing transaction-based business information with buy-side, sell-side and third party portals and exchanges;
- Provide business objects that are a one-to-one mapping of the most common business processes;
- Provide graphical flow control language for easy integration with business systems;

- Ensure the security, integrity and privacy of each transaction through security features such as encryption and authentication; and
- Provide clustering solutions for load balancing along with robust fail over capabilities.

Conduct all transactions securely

The B2Bi solution should address all types of electronic transactions including, but not limited to:

- Catalog management transactions such as price/sales catalog, product descriptions, product change notification and inventory availability;
- Order management transactions such as quote and order entry, transportation and distribution, returns and finance and product distribution;
- Supply chain management transactions such as purchase orders, collaborative forecasting, inventory allocation and replenishment, inventory reporting and sales reporting;
- Financial transactions such as payment orders, remittance advice, invoices and consolidated invoices; and
- Logistics transactions such as motor carrier bills of loading, logistics service requests and responses and shipment status inquiries.

Flexible

The B2Bi solution that a company chooses should support diverse sets of file formats, protocols, telecommunications and security standards. A company should be able to make a single connection to its B2B integrator and let it take care of all the complex, behind-the-scenes work necessary to bridge the electronic gap between its partners, vendors and customers quickly and painlessly.

The solution should be based on open standards that allow the company and its partners to send transactions using any combination of the following (see Figure 1.5):

- Applications and file formats (SAP, PeopleSoft, Oracle and ANSI X.12, XML, etc.);
- Telecommunications pathway (Internet, VAN, Frame Relay, etc.);

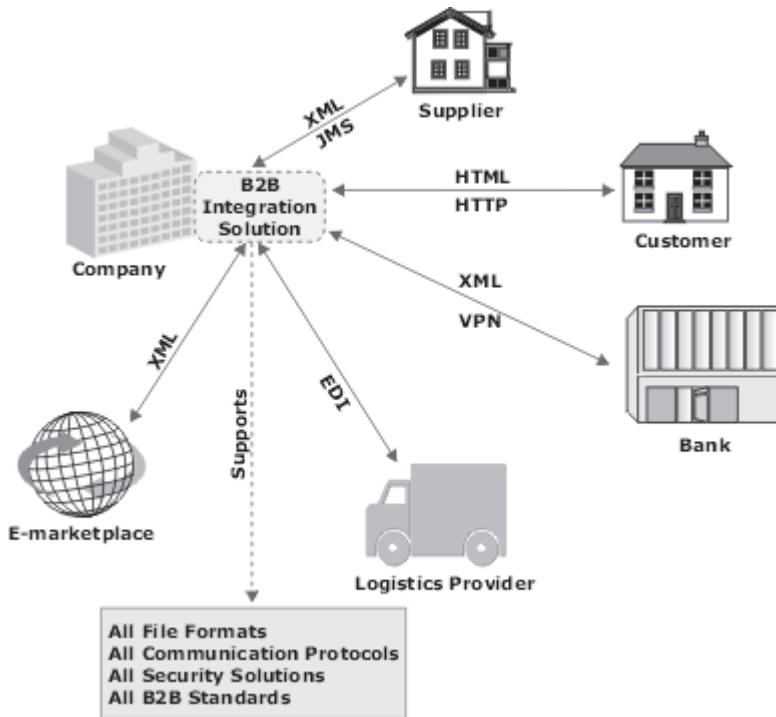


Figure 1.5. — A typical B2B integration solution

- Communication protocol (FTP, HTTP, HTTP/S, etc.);
- Security (digital certificates, Secure Socket Layer, PGP, PKI, etc.);
- Service requirements (archiving options, routing, monitoring, etc.); and
- B2B protocols and standards, including OBI, RosettaNet, OAG, BizTalk and ebXML.

1.5. What is the Return on Investment (ROI) on B2Bi?

Through B2Bi, the integrated companies operate efficiently on a real-time basis, which has a direct impact on their bottom line. The return on investment for B2Bi is extremely high — often 5 to 15 times more,

with a payback period measured in months, not years. The ROI on B2Bi comes from the increased operational efficiency and reduced costs that are achieved by streamlining, automating business processes, reduced cycle time and supply chain automation.

How do you measure the ROI on B2Bi? Well, there is a right way and a wrong way to measure ROI. The wrong way to justify B2B integration is by measuring the time representatives save in reduced paper work, or in revenue the company saves by slicing the need for data entry. The right way is to measure the quantum of reduction in operational and developmental costs.

B2Bi represents opportunities to increase revenues through decreased communication, reduction in operational and development costs and automated supply chain and customer relationship management, resulting in higher profit margins. It dramatically reduces human intervention in business processes for faster, more reliable and more profitable transactions. The benefits of B2Bi, lower costs, reduced inventory levels, faster time to market and better-informed decisions, have a cumulative effect on increasing the productivity of a company. In a recent research report, BCG forecasts that, by 2004, business-to-business integration will generate productivity gains equivalent to 1–2% of sales; by 2010, this figure could grow to 6%, or roughly \$1 trillion.

**Increased Revenue + Decreased Cost + Improved Efficiency =
Higher Profitability**

A company should calculate the implementation and ongoing costs associated with the project including software, hardware, system integration and future production support expenses. These cost estimates should be carefully examined to determine the return on investment (ROI) for the proposed solution. Every company wants to be considered forward thinking, but revenue, not technology, is still the king in the corporate world. Beware of any overly ambitious initiative spearheaded by the IT department.

Though many software vendors claim an out-of-the-box solution to B2B integration, the truth is that implementing a B2Bi solution can often be a laborious, expensive undertaking.

ADAPTEC ACHIEVES AN ROI OF 1500% THROUGH B2Bi

Adaptec is a \$1 billion global manufacturer and supplier of network and I/O connectivity hardware and software products such as board, chips and software to some of the biggest computer vendors — IBM, HP, Compaq, Sun and Dell. It competes in an environment of shrinking product lifecycles, increasing customer demands and decreasing margins. To remain competitive, the company had to reduce its supplier lead-times and reduce overall cycle times from 105 days to 55 days.

Unlike many competitors, Adaptec does not have its own fabrication and assembly facilities and has the additional challenge of coordinating the production of its IC products through several contract-manufacturing partners in Asia. Board-level assembly and final testing is conducted at their own high volume manufacturing facility in Singapore. This process requires tight integration among all the partners in the back-end of the supply chain.

This manufacturing approach removes the need to invest \$1.2 billion in its own fabrication facility, but increases the need to interact seamlessly with Asian partners. Adaptec's previous methods of communication — fax, e-mail, FTP and EDI — had inherent problems that caused delays and increased lead-times, making it less competitive in the market.

Extricity Alliance, a B2Bi solution, enabled Adaptec to connect to its external business partners securely and in real-time over the Internet, streamlined interaction with its global manufacturing partners and facilitated the exchange of information and transactions. The way Extricity Alliance connected business partners was highly flexible, which made it easy to support information exchanges and changing business processes.

Extricity Alliance has enabled Adaptec to create a 'virtual factory' by integrating the back-end of supply chain and automating a wide range of shared business processes — collaborative engineering, WIP updates and forecast sharing. The solution has helped to cut manufacturing cycle times by up to 50%, reduce inventory by 25% and

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greatly improve customer satisfaction — resulting in a significant competitive edge for Adaptec and bottom-line savings of \$2 million per year. The solution is estimated to have an ROI of 1,500%. Other benefits include improved on-time delivery due to better supply chain coordination and increased visibility to manufacturing processes. Taking four weeks off the cycle time resulted in a one-off \$9 million saving for the company.

Source: Condensed from Extricity Software, Solution for Adaptec, EAI Journal

1.6. Conclusion

B2B integration is the pervasive enabler of most current business strategies such as collaborative e-commerce, collaborative networks, supply chain management (SCM) and customer relationship management (CRM) across multiple channels of delivery including wireless devices and the Internet.

B2Bi strategy should be laid out and executed in such a way so as to: have an integrated, real-time application-to-application, system-to-system interaction with all the existing and new trading partners; eliminate all manual steps in business processes; conduct secure and real-time commerce transactions over the Internet; have the flexibility to accommodate the different mode of interactions of each partner; and, finally, have the ability to adapt to change quickly and easily in this dynamic age of B2B collaborative e-commerce. This is what B2Bi is all about — the end-to-end automation and integration of cross-organization business processes, data, applications and systems.