

# business to business

## overview

### **What is business-to-business e-commerce?**

It's companies buying from and selling to each other online. But there's more to it than purchasing. It's evolved to encompass supply chain management as more companies outsource parts of their supply chain to their trading partners.

### **I use electronic data interchange. Am I already doing it?**

Yes. And if you're getting value from your EDI investments, there's no reason to abandon them now. But it's a good idea to think about whether any other data exchange methods have a role in your future B2B efforts. EDI has limitations, including an inflexible format that makes it difficult to use for any but the most straightforward transactions. Much of the newer e-commerce software uses XML — grammatical rules for describing data on the Web — as its standard for data exchange. XML allows for more variety in the information companies exchange and was designed for open networks.

### **What are the differences between B2B and business-to-consumer e-commerce?**

There's the obvious difference in who the customers are — companies or individuals. Beyond that, there are two big distinctions:

#### **B2B efforts require negotiation...**

Selling to another business involves haggling over prices, delivery and product specifications. Not so with most consumer sales. That makes it easier for retailers to put a catalog online, and it's why the first B2B applications were for buying finished goods or commodities that are simple to describe and price.

#### **...and integration.**

Retailers don't have to integrate with their consumer customers' systems. Most companies selling to businesses do integrate because their systems have to be able to communicate with those of their customers without human intervention.

### **What are the benefits?**

B2B e-commerce can save or make your company money. Some ways companies have benefited from B2B e-commerce include:

- Managing inventory more efficiently
- Adjusting more quickly to customer demand
- Getting products to market faster
- Cutting the cost of paperwork
- Reigning in rogue purchases
- Obtaining lower prices on some supplies

## **What is a B2B exchange?**

At its most basic, a B2B exchange (also called a marketplace or hub) is a website where many companies can buy from and sell to each other using a common technology platform. Many exchanges also offer additional services, such as payment or logistics services that help members complete a transaction. Exchanges may also support community activities, like distributing industry news, sponsoring online discussions and providing research on customer demand or industry forecasts for components and raw materials.

## **What's the difference between a public B2B exchange and a private one? Which one should my company use?**

Public exchanges are owned by industry consortia or independent investors and have their own boards of directors. Though each exchange sets its own rules, they are generally open, for a fee, to any company that wants to use them. Private exchanges are run by a single company for doing business exclusively with established suppliers and customers (although the systems that support it may be outsourced).

Which one your company uses depends on what you want to do. If you are buying and selling commodity products, public exchanges can be a good venue in which to find low prices or identify new customers. They're also becoming a popular way for a company to unload excess inventory.

## **What's the first step I should take?**

Start with buying so-called indirect supplies like pencils, chairs and copy paper. Most companies start here because it's easier to set up an online catalog of approved office supplies than it is to automate procurement of specially engineered parts and materials. Plus, you're not affecting day-to-day operations while you get your feet wet. While the payoff won't be as big as for more mission-critical purchases (so-called direct materials used to produce the goods or services you sell), it can be significant. The Burlington Northern Santa Fe railroad company lopped an estimated 3 percent to 28 percent off its indirect purchases and saved money internally by automating a manual process for approving purchase orders.

## **What's collaborative B2B e-commerce?**

It's marketing speak for integrating your supply chain, and it's a vision of e-commerce nirvana. You're not just sharing blueprints or your latest sales forecasts; you and your trading partners are giving each other real-time access to your ERP, product design, inventory and other systems. Companies that are doing it say it helps them get new products to market faster, reduce manufacturing time, keep inventory low and adjust more quickly to changes in customer demand.

To collaborate successfully, you and your partners each need up-to-date, functioning systems to serve up whatever data you plan to share, and a way to deliver that information electronically. That can be a big hurdle when many companies still do a lot of business by phone and fax. There's cultural resistance as well. Not every company sees the value of sharing what has been confidential information or trusts its partners with it. Some also fear online collaboration might result in layoffs.

## **Which business units should be involved in a B2B project?**

Definitely the units that do purchasing. B2B e-commerce can drastically change how buyers do their jobs, especially if your company is one that still places orders the old fashioned way. Sales and customer service departments will need to be involved with projects that affect how you receive and process orders from customers. And don't forget the folks who manage your inventory. You may need to get other departments involved, too, depending on the functionality you're building. Also involve your suppliers, distributors and customers, and make sure there's something in the project for them.

## **What kind of software do I need? Is it expensive?**

Exactly what you need depends on whether you're a buyer or seller, whether you're dealing in indirect or direct materials and the extent to which you're integrating your supply chain. Elements of a B2B system may include software for generating purchase orders or requests for quotations (RFQs), processing invoices, building and managing catalogs, responding to RFQs and processing orders.

Cost is also relative. In general, the more elements of your business you want to integrate with trading partners, the more you have to spend. A March 2001 Forrester Research report pegged the cost for buyers to join an online marketplace at between \$5.6 million and \$22.9 million, including operating costs.

## **How long will it take to put B2B systems in place?**

You can set up an online catalog for your customers in a few months. Starting from scratch to build a portal for your suppliers that integrates with your back-end systems may take you more than a year. The most time-consuming aspect of building B2B systems is mapping your business processes to those of your trading partners.

## **What if my trading partners aren't ready to do business online?**

Build your B2B application and your partners will probably come to use it. Some companies have built Web portals that allow partners to place orders, input data and access information from their ERP or other back-end systems without any more investment than Internet access. If your partners have to do some of their own software development to use the application, be sure you offer them a big enough carrot (like the promise of additional business) to make the investment pay off for them.



Companies are increasingly forming and joining B2B exchanges to do business over the Internet. They can offer your company huge opportunities to cut costs, realize efficiencies and enhance competitiveness. But with opportunity comes risk, and one of the biggest risks is the looming specter of antitrust challenges. However, B2B participants are in a strong position to address these concerns. Here's what they should ask regarding potential antitrust problems.

### **1. How red are the antitrust flags?**

Your exchange is more likely to attract antitrust attention if it has significant "market power"—the ability to restrict output, exclude competitors or raise prices. You should feel relatively comfortable if the collective market share of your B2B participants is less than 20 percent in each affected market, a safety zone defined by the government's competitor collaboration guidelines. But the more you move above this zone, the greater

the risk that the government or your competitors will place your exchange under the antitrust microscope.

## **2. Can you identify and prove efficiencies?**

If you participate in an exchange you should be prepared to show that it results in procompetitive benefits for the participants and the market as a whole. Such market benefits, or efficiencies, might include reduced administrative costs, enhanced systems integration or better supply chain management.

## **3. Is the B2B venture the only game in town?**

Exclusivity is an important factor in assessing B2B exchanges' antitrust risks. If B2B collaborations bar participants from leaving, the possible anticompetitive effects may become more tangible and definitive. They may also cause antitrust problems if they block nonparticipants from joining. The challenge is that there may be legitimate, even procompetitive, business reasons for restricting the ability to join and leave B2B marketplaces. The underlying question is whether a B2B collaboration's exclusivity affects the ability of participants and industry players to compete.

## **4. Is the B2B exchange managed independently?**

There are many possible ownership, organizational and managerial frameworks you can use to structure your B2B collaboration. But from an antitrust perspective, there are sound reasons why some frameworks are better than others. You run a higher risk of antitrust problems if you or your partners have contributed significant financial investments to the exchange that might reduce your ability or desire to compete independently. You also face greater antitrust exposure if your B2B venture is jointly organized and governed by participants instead of an independent third party.

## **5. Are B2B participants paying enough attention to these issues?**

With the proliferation of B2B exchanges (approximately 1,300 in the United States and thousands more in development), the reality is that some are ignoring these important questions. Moreover, we're at the beginning of a new frontier of antitrust law, where rules are in flux and potential challenges are abundant. It's critical for exchanges to pay careful attention to their antitrust risks from the business-planning phase onward. Your B2B venture will more likely survive antitrust investigation and possible litigation if you face your antitrust risks head-on, aggressively identifying and addressing problem areas before others do.

## **checklist**

Organizations need to view security as a business enabler that gets the right people to the right resources rather than simply as a means of shutting people out. That approach lets organizations respond to change quickly and make rapidly expanding user populations productive faster. Here are seven tips for making security work for smoother collaboration.

**1. Extend the power.** The more resources that can be safely shared, the more companies can collaborate and act as true extended arms of business.

**2. Automate to collaborate.** Replace manual procedures for creating, managing and terminating accounts with an automated system that maintains security while ensuring that all users receive appropriate access to the resources they need.

**3. Enforce corporate policies.** Develop security and administrative policies before collaboration. Have a system in place that automates workflow processes to ensure all policies are enforced as access rights are created, maintained and terminated.

**4. Delegate administration.** Delegate the authority to maintain user status within business partnerships, allowing verification, approval, audit, reconciliation and modification. For example: "I grant authorization to individuals with role X in organization Y to access resource Z."

**5. Safely open the back door.** For effective collaboration, users need access to data in real-time for resources behind the firewall, such as ERP systems for supply chain collaboration and CRM systems for better customer management.

**6. Know the users.** Have a central repository from which to retrieve data on the individual users accessing back-end applications from outside the firewall, including data on business partner employees.

**7. Protect privacy.** While granting access, be sure to control who goes where in order to protect individual privacy and still satisfy specific government regulations in an auditable fashion.

## buzzwords

### **E-business**

The process of conducting business on the Internet.

### **E-commerce**

The process of selling and buying goods and services on the Internet.

## HOTQUESTIONS

*Thomas Koulopoulos, president and founder of The Delphi Group, a Boston based e-business consultancy answered your questions on the topic of business to business portals.*

### **What are the important considerations for a financing company that wants to develop a portal for its customers and their suppliers?**

You've hit on one of the most underplayed aspects of a vertical portal (Vortal) - that is the formation of a community that provides the business services needed to support B2B transactions. As the velocity of a market increases, the efficiency with which key services such as financing are delivered must also increase. Unfortunately much of this discussion to date has focused on the commoditization of financial services through on-line banks that promise to disintermediate the financing process. That's a short sighted solution. The greatest value play for a financing organization would be to offer a re-intermediated approach to financing. You see this in the B2C segment through services such as Lendingtree.com. The key is to offer a mechanism by which the right lender can be matched with the right transaction. In this sort of market the financing institution may actually create markets by identifying transactions and lenders that never knew each other existed!

## **What industries are the most likely to initially use and benefit the most from B2B portals?**

Those with the most complex value chains, such as manufacturing. The best example today is that of the automotive industry which is the largest B2B deployment to date with the partnering of GM, Ford, DC.

## **What is the difference between the terms vortex, vortal and hub?**

There are many more terms being used to describe the same three basic constructs. So we first need to do a bit of consolidation. Once we do that, the definitions are fairly straightforward, although I agree that there is significant overuse of all of these terms -- becoming the general purpose salve that soothes myriad sources of pain. First, let's agree that each of the definitions I'll propose is based on an assumption that these are all constructs of the web (i.e. the web as a universal platform is a prerequisite for their existence.) A portal is "a single point of personalized and portable access to multiple information, human, organizational, and industry resources." Portals are the high end constructs that allow a user to interface with all B2B solutions. A Vortal/Vortex/Vertex is a Vertical Portal for a specific community. Vortals are used as the basis for the construction of web-based value chains. Within a vortal you could expect to find everything from sourcing, to the transaction infrastructure for an industry, to support services (legal, financing, procurement, etc). These terms are often used to describe e-markets for products and services that are far more sophisticated than those facilitated through the next category - the Hub. Hub/Trading Exchange are general terms used to describe a central point where buyers and sellers can buy and sell parts, commodities, and standardized products. They are effectively catalogs of an industry. These are usual first generation vortals. FreeMarkets is a good example of a Hub.

## **What are the expectations of B2B buyers and sellers?**

The expectations today are relatively shallow. For the most part sellers are happy to find buyers who they would otherwise be able to reach and buyers expect to find better prices through auction or aggregation of purchasing power. But you are right on the money with your observation about second generation B2B solutions. The primary difference between today's trading exchanges and tomorrow's vortals (vertical portals) is the advent of completely integrated support communities for trade.

## **FUTURE TRENDS**

While just 34 percent of businesses consider the Web very important for making purchases, B2B buying continues to grow.

The latest Forrester Report on eBusiness, conducted in June, found that just 34 percent of businesses consider Web purchasing very important or critical to their overall sourcing and procurement strategies, and 34 percent rated the Internet capabilities of their suppliers as "very bad" or "poor." About 29 percent of the 390 respondents reported cost savings through Web purchasing, a 3 percentage-point increase over last quarter.

"I don't think the Net is about universal capabilities for all buyers at all times," says Bruce Temkin, group director at Forrester. "The companies that change their procurement process to make better use of the technology will succeed, not the ones that just use the technology."

Edith Kelly-Green, vice president and chief sourcing officer at FedEx, says integration is more of a change management problem than an IT problem. "There are a lot of stars that have to be lined up to optimize the benefits of online purchasing," she says.

The recent survey shows that adoption is slow, but constant. About half (47.2 percent) of respondents estimated that their companies were less than 5 percent of the way toward full adoption of Internet purchasing. Respondents cited integration as the biggest obstacle to adopting online procurement. This marks a change since the previous survey, conducted in January 2001, when respondents listed the economy as their greatest hurdle.

"Things are a bit on hold," says Kelly-Green. "Integration is an issue; and some respondents are blaming a lack of clarity in terms of expected benefits, but I really think it's the economy. In many cases, you've got to spend some money."

Use of online auctions increased from the January survey, in which 15 percent of respondents participated on B2B auctions. By June, that number had crept up to 20 percent. With spending coming under greater scrutiny, Temkin says, auctions provide a cost-effective way to purchase online.

According to the survey, respondents bought nearly 10 percent of their indirect goods online in the last quarter. Two years ago, Temkin says, that number was close to zero. But, he says, it is doubtful that companies will ever adopt an Internet-exclusive purchasing strategy.

"It takes a lot to really reduce your costs with online buying," says Temkin. "Just a little piece has to do with the Internet itself. At the end of the day, online buying is never more than a piece of a procurement and sourcing strategy."



Aberdeen Group reports that more than 60 percent of suppliers in all industries continue to receive orders via fax or e-mail. And a mere 4.5 percent of all purchasing dollars are transacted through B2B e-commerce, according to a 2002 survey by the Center for Advanced Purchasing Studies. With so few transactions conducted electronically, companies are missing out on the full value of B2B e-commerce.

Louis Columbus, a senior analyst with AMR Research in Boston, says procuring direct materials via phone, fax or e-mail costs between \$160 and \$200 per transaction, while the same activity executed electronically rings up as low as \$40 per transaction—a fivefold savings. Aberdeen Group estimates that automating procurement activities will save midsize companies \$2 million per year. And that's not to say anything of the cost savings resulting from better supply chain collaboration. Indeed, the advantages of B2B e-commerce include savings in administrative costs; decreases in acquisition, purchasing and payment cycles; reductions in errors and product returns; better inventory data; and incremental revenue growth.

## **DISASTER!**

In 1997, an advanced development group—later dubbed e-Citi—came into the world as a standalone incubator for new Internet technology. It had plenty of money to spend and plenty of people to spend it. The initiatives were ambitious—including the Internet-only bank called Citi F/I, a small business website and an electronic commerce marketplace. But the technology creators worked in a vacuum, without specific ties to the business units. Lacking those ties, the technology foundered, and money swirled down the drain. A lot of money. Some reports put the losses in the hundreds of millions of dollars.

When the future of online-only banks began to dim, Citigroup quietly shut down Citi F/I, salvaging what it deemed the best of its functionality for Citibank Online, the existing site for online Citibank accounts. The company also pulled the plug on Finance.com, a consumer site that strayed from Citigroup's business model by offering both Citigroup and competitive products.

After the hemorrhaging stopped, Citigroup was determined not to repeat the mistake of allowing itself to be seduced by dazzling new technologies without considering business needs. So in the spring of 2000, Weill asked Deryck Maughan, a vice chairman of Citigroup, to establish the Internet Operating Group. E-Citi kept its name, trimmed its forces (from 1,200 to 125) and reestablished itself as part of the Internet Operating Group under Maughan. The Internet Operating Group now directs all the company's e-business initiatives and makes sure e-Citi develops technology with the needs of the business units in mind. To that end, it insists that all technology projects fall into one of four buckets: e-consumer, e-business, e-capital markets and e-asset management, though business units themselves must fund the projects. Each business unit reports on its projects' progress to the Internet Operating Group every six months.

## **CASESTUDY**

When managers at the Federal Home Loan Bank of Dallas decided to automate some customer transactions nine years ago, they didn't call it B2B e-commerce. Nancy Parker, senior vice president and CIO, and her team developed an application to let customers—small to midsize banks—automate wire transfers for cash advances. The Internet became the medium, and the program's success yielded some quick lessons.

The bank further developed its program, SecureConnect, to include financial status reports and updated interest rate quotes. Customers, using encrypted passwords, get confirmation of their transactions and account updates in real-time.

The results: Since SecureConnect debuted in 1997, the bank's loan portfolio has grown from \$9 billion to \$32.3 billion as of the end of 2001. Into April, 95.6 percent of the bank's transactions traveled through SecureConnect. Sixty-three percent of the bank's 841 member institutions participate. Meanwhile, the bank's five-member lending staff has remained constant.

How did they get such a high participation level? Parker and Sonia Brown, a senior vice president at the Dallas bank, offer these observations:

**1 Show up at the door.** Over a three-year period, Federal Home Loan Bank sent a team of IS and other staff to visit customer banks in Arkansas, Louisiana, Mississippi, New Mexico and Texas. The bank provided training, software and

networking equipment if necessary—all free of charge. Every site was different and required a different level of support.

**2 Pay a lot for security.** Without disclosing how much Federal Home Loan paid, Parker adds that "we certainly did not spare the cost of making sure the security was as high as it could be." What is clear is that the security measures have to be easy enough for a PC novice to use but strong enough to handle transactions worth millions of dollars every day.

**3 Don't use "Internet time."** While the Dallas bank was an Internet early adopter, the business pursued SecureConnect as a long-term strategy. It took about four years between the decision to create SecureConnect and its rollout.

**4 Offer price breaks.** SecureConnect users get a lower interest rate on loans—as much as one-tenth of an interest point. For customers processing hundreds of transactions a day, that can add up.

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### **CIO E-Business Research Center**

<http://www.cio.com/research/ec/>

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Get the scoop on B2B and B2C with this large collection of Web resources, white papers and articles.

### **Net Market Makers**

<http://www.netmarketmakers.com>

Comprehensive source of news and analysis on business-to-business e-commerce marketplaces. Free resources includes a helpful overview of marketplace basics and technology, plus a glossary.

### **Electronic Check**

<http://www.echeck.org/>

Information on the Financial Services Technology Consortium's electronic check initiative.

### **GlobeSet ecProfessional**

<http://www.globeset.com/Commerce/>

Secure payment vendor's collection of e-commerce related news, legal, banking, and other links. Includes a glossary.

### **Webcentric Central**

<http://www.webcentricman.com/>

Articles on business-to-business and business-to-consumer Web commerce.

\* Taken from Darwin Publications