Strategic Change

Research Note

E-Commerce Networks

Issue Eleven October 11, 2000

e-Market Trust Mechanisms

Susan Cantrell

For several decades, when a business wanted to buy something, a purchasing manager might scratch his head, open his rolodex, and call up a number of known, trusted suppliers. Smooth-talking sales people would woo purchasing agents with gifts and golf dates, plush branch offices and brand would radiate trust and security, and buyers would visit factory floors to "kick the tires" and physically inspect the product. And the more important the product was to the buyer's business, the more important established, long-term relationships were as a way of ensuring that you got what you asked for—top quality goods, on-time, and with little hassle or error.

E-Markets pose a new way of doing business by enabling companies to easily find and trade with organizations that might never have appeared in their trusted rolodexes or golf calendars. But the central question for many is, can I trust a trading partner that I've never done business with before? For most people, the answer seems to be no: few companies are even trading through e-markets, and those that are use them either as spot markets or for conducting trades with already-known partners.

But new mechanisms are being developed which may reduce the risks associated with trading with strangers through open markets. How? By making what was formerly implicit—the trading partner knowledge residing within a purchasing manager's or a sales person's head, or, if you are lucky, within a company's systems—explicit. Think of it as a kind of knowledge management system that spans company boundaries, using the powers of the Internet to codify, aggregate, and disseminate all kinds of information in a standardized and easily useable way. In the end, you may even know your trading partner better—without ever having had a personal experience with the company before.

Here are some of the most recent developments that will enable such information visibility and a corresponding reduction in risk:

1. Verification and authorization. At the most basic level, you want to know that you are trading with whom you think you are trading with, and that you are dealing with a person authorized to make trading decisions. Some e-markets (like SupplierMarket and MetalSite) verify such information after a person registers in the market, but third-party services like those being developed by CommerceNet will provide a scaleable and more reliable solution that crosses market boundaries. Other third-party providers, like Verisign and Identrus, provide digital authorization and certification services.

2. Payment. Traditional financial mechanisms, like letters of credit, are best suited to companies with long-term relationships. And other payment options, like escrow or credit cards, either aren't very scaleable or aren't suitable for large purchases. But new financing mechanisms are being developed by companies like eCredit.com and Tradesafe.com that help take the risk (and friction) out of ad hoc transactions. Such firms will offer realtime financing that is approved and delivered online and customized for each transaction and buyer/seller need. Lenders will be able to assess and adjust risk profiles based on information such as the resale value of the product if the transaction falls apart, credit history, tax status, trading history, and more. Buyers will be able to optimize their purchasing power and cash flow, and sellers will be able to attract business through offering special financing deals.

3. Quality. Testing and inspection services like SGS, Bureau Veritas, and WorldWideTesting.com will make sure that the goods you ask for are the goods you get. No longer will purchasing managers have to travel around the world to "kick the tires," as such organizations will ensure the quality of a good by physically inspecting it and confirming that it adheres to safety, quality, and regulatory requirements.

4. Problem prevention and resolution. New third-party software solutions like those developed by Optika automatically identify and present problem transactions when they occur, and then provide buyers and sellers with all relevant transaction information, and the tools and structured workflow to initiate issue resolution. SquareTrade, an online dispute-resolution provider with over 250 mediators and arbitrators, provides "seals of approval" to those buyers and sellers in a market that both meet its reference checks and agree to obey its dispute resolution process. And WISe (World-wide Insurance e-commerce) has set up a technology and process standards platform that it hopes specific insurance e-markets will join. Not only will specific processes that everyone adheres to reduce the risk of problems occurring in the first place, but WISe's unusual initiative of establishing a legal infrastructure and binding rules will ensure fair problem resolution and handling without the need for detailed and time-consuming contracts to be drawn up for each and every transaction. Other organizations like bolero.net have established a legal and process framework for the complicated area of international trade.

5. Ratings and Community Functions. It used to be that one way of reducing risk was to ask your brother-in-law, or a member of your trade association, about his or her experience with a particular trading partner. Now, you can bring the entire market's collective experience to bear on your decision. Not only can you read other people's opinions on electronic "sticky notes" (as supplied by companies like Third Voice) or through e-market-provided chat rooms (as supplied by companies like Participate.com), but you can even assess the credentials of the person providing his opinion through ratings services like Open Ratings. More important, however, is the ability for companies like Open Ratings to provide real-time, standardized, and aggregated rating information across e-markets to help buyers and sellers reduce the risk of trading with unknown partners. Stan Smith, Open Ratings' CEO, explains "Not only does our service help you choose your suppliers, but it also helps you manage the relationship. For example, if a sudden shift in ratings occurs with a known supplier, you will automatically be notified and either you or your systems can take appropriate action."

6. Insurance and warranties. Insurance firms like AIG and INSUREtrust.com are looking into using the information provided by ratings services like Open Ratings to create risk profiles, which would in turn enable companies to take out surety bonds per transaction to cover any losses that may incur from non-performance. Currently, e-commerce insurance policies are offered for liability (including copyright infringement and privacy violations), extortion (related to electronic data), business interruption (from hacking or viruses), and crisis management (in case of security breaches or other crime or fraud). Moreover, savvy suppliers, encouraged by e-markets, are giving more warranties as assurance that they stand behind their goods.

7. Back-office system integration. Worried about whether or not a particular supplier has the inventory or capacity to handle your order? Or worried that there isn't enough demand for your product? Software and consulting companies are prepared to integrate trading partners' back office systems to e-markets, enabling even further information visibility and a corresponding reduction in risk (see "Integration is an E-Market Imperative," August, 2000).

Increased information and the corresponding reduction in risk is only as good as your ability to make sense of and use the information easily. The following mechanisms fulfill this role:

1. Multi-attribute trading mechanisms. In the future, perhaps only commodity goods will be traded through markets based on price alone. New multi-attribute trading mechanisms and analysis developed by companies like Frictionless Commerce and Perfect will enable buyers to easily compare and make tradeoffs based on any number of criteria, including price, quality of the offering, delivery times, availability and capacity, transportation terms, geography, warranties, product attributes (such as lightness, color, etc.), or any other relevant criteria, like pollution factors. This significantly reduces risk and improves overall fit to purchase requirements.

2. Automatic trade negotiation. Basic multi-attribute trading mechanisms depend on the suppliers to manually create customized offers or on bots to search electronic catalogs. But Perfect, for example, has extended this offering to include automatic trade negotiation as well. By enabling suppliers to enter neled into the appropriate channels of action.

Imagine the future possibilities. Let's say you get a large order from a new customer asking for quick delivery, but you don't have the inventory. Your traditional suppliers have long lead times, so you (or your business-rule-driven system) decide to go through an e-market to find the appropriate unknown trading partner. You (or your system) rank the criteria most important to you: 1) quality, 2) time, and 3) price. Suppliers automatically respond based on their business rules and current conditions (inventory levels, etc.) to create a customized offer and price. The supplier's systems know, for example, that in order to meet the demand, the supplier might have to spend extra time on quality assurance or extra time with the truckers to make sure that it is delivered on time. The suppliers that best meet your needs are then presented to you, and once you (or your system) make the buy decision, the order is automatically fed into both your own and the supplier's ERP systems. Moreover, any special directions (such as the need to spend time on quality assurance and transportation) could be passed to the appropriate channels of action—all electronically and without human intervention.

In conclusion, information visibility and a corresponding reduction in risk could have a significant impact on the way business is conducted. However, we expect that it will be a while before increased trust significantly effects e-market trading volume. For companies will first have to learn to trust the trust mechanisms themselves, and that will only come with experience in using them.

Susan Cantrell is a Research Fellow at the Accenture Institute for Strategic Change. Susan can be reached at (617) 454-8697 or susan.cantrell@accenture.com.