

Anatomies of Electronic Commerce

Restrictive "e-commerce" definitions no longer apply.

What this paper covers: Insights on marketing via the Internet, particularly to business customers and prospects. A review of key concepts/topics from the February 23, 1998 meeting of the ISBM Business Marketing Web Consortium.

Overall idea: "Electronic commerce" spans a wide spectrum of customer contacts, not just online selling, members of the ISBM Business Marketing Web Consortium concluded in their open forum February 27, 1998. As one participant succinctly put it, "Electronic commerce is anything the customer wants it to be."

Yet, a generally poor understanding of the definition and scope of electronic commerce inhibits senior management support for marketing via the Web, participants agreed. Were definitions less narrow, return on investment metrics more robust, and corporate cultures more receptive, Web-based marketing would face fewer obstacles.

Consortium members met at the American Airlines Training Center in Dallas, redefining "e-commerce" and pondering issues such as performance measurement, securing corporate resources, interacting with customers, and devising strategies for marketing online. Executives from meeting host Sabre Group, an American Airlines sister company, reported how a seasoned marketer with extensive online experience serves travel agents, corporate travel departments, and consumers.

Members also heard from guest presenters:

- IntelliQuest sales manager Soren Kirchner reported overall Web usage statistics tracked regularly by the research firm.
- *Net Marketing* editor Brian Reilly revealed background to the publication's selection of the 200 best business-to-business Web sites.
- ichat, Inc.'s Dean Cruse, vice president of marketing, explained the variety of applications served by his market-leading user-interactive software.

Key points and comment:

Open Forum Discussion

Defining electronic commerce: Everything businesses are doing on the Web is a big electronic commerce experiment.

The amount of cash actually coming into a Web site is irrelevant. But management holds e-commerce to that test, and scrutinizes the medium more than it does other marketing communications tools.

Customers now demand online ordering capability, be it via the Web, extranets, EDI, etc.

Some "e-commerce" applications:

- Customer information searches (even if they place orders by other means);
- Linking members of the supply chain through extranets;
- Making the Web site more customer focused and less company focused;
- Interactive communications that differentiate otherwise look-alike offerings;
- Warning customers about inappropriate ordering choices;
- "Recommendation engines" (e.g. provided by Amazon.com) suggesting additional purchases and information.

Channel conflict and disintermediation concerns were discussed:

- Solution: several members are exploring ways to provide information to their customer's customer—the ultimate consumer—to instigate pull-through demand.
- This way, they don't compete with the channel, but at the same time ensure that they capture their share of direct sales.

"Cute" is not the goal of a business-to-business Web site. Rather, keep it fresh with new information and capabilities.

E-commerce invites customers into organizations, rather than simply pushing information out.

Web ROI metrics: Systematic review of the processes served by the Web reveals cost savings. **Key Idea:** Analyze the total value chain of traditional customer communication transactions—how information moves from your firm to decision-makers(e.g. the total value-chain of a piece of direct mail)—and compare that to a Web approach.

- Ordering information provided on the Web cuts back-end customer service and wrong order costs, and the number of fax orders to be rekeyed.
- Diagnostic information on the Web cuts warranty returns.
- Product information on the Web cuts mail fulfillment costs. As reported at an earlier Consortium meeting, Texas Instruments saves \$6 in paper and postage per Web inquiry compared to mail fulfillment. TI customers downloaded 1.5 million TI documents last year for a \$9 million savings.
- TI also saves on technical assistance. Inbound support calls, growing 25 percent a year before TI launched its site, dropped by 20 percent beginning six months after the launch.
- Not shipping the wrong documents to customers contributes savings.

Do not think of the Web as *replacing* other costs; it's not a matter of substitution. The Web is another marketing tool to *add* to the mix.

How does one put a price tag on fast response to information requests over the Web?

Web site strategies: Industry needs an overarching Web communications strategy rather than a string of project justifications.

The Web has gone as far as it's going to go if it's driven strictly from a technology viewpoint. It now has to be driven from an applied technology standard, applied to business issues."

Challenge: diversified firms creating single sites for disparate businesses, some with their own Web sites, coordinating them, and supporting them.

Challenge: keeping the site fresh so visitors return.

Challenge: making a site with 7,800 pages—selling everything from consumer products to half-million dollar machines—more customer friendly.

Securing corporate resources: Three things people want are money now, safety and security, and making life easy. Position e-commerce to management as an immediate return on investment, a safe thing to enter and exit without embarrassment, and an easy thing to do.

Pet management projects, such as ramping up SAP systems, soak up IS developers' time, leaving little resource for Web site construction.

Use this Biblical quotation when asking for a budget: "One man gives freely yet gains even more. Another withholds unduly but comes to poverty." (*Proverbs 11:34*)

Challenging corporate cultures: "Until recently, the title Web master had been one level above grave robber."

Challenge: shifting control of the Web site from the "propeller heads to the marketing people." Right now, technology can provide a short-term Web site competitive advantage. But in the long run, marketing will provide advantage.

Web marketing involves a different group of stakeholders. The Web crosses cultural and political lines in the organization. Those who had owned the customer relationship now must recognize how the Web is changing the frequency, the content, and the form of the customer engagement.

Asking for corporate resources, "You're given a level of forgiveness for a while, but at some point you have to demonstrate value."

Accepting Internet as a new marcom tool becomes difficult for some internal clients comfortable with traditional media.

Starting too big a Web project and failing to get everyone to buy in shakes organizational and cultural roots, scaring people and challenging their turf. Successful sites start small and build upon an existing community of practice.

You'd better have your measurements in place to challenge a culture and move sales from traditional channels to the Web. "If you don't have good data, you're killed every time."

Managing customer interaction: When customers get together in a "virtual community" and you're not there but your competitors are, that's one of the "Web Wild Cards" John Sviokla of Harvard spoke of at our last Consortium meeting.

Auto makers reportedly scan incoming e-mail looking for key words—like "lemon"—and respond right away. Rapid response builds goodwill with the otherwise disaffected customer.

Services are available ("Hotbot" was one name mentioned) that monitor the Internet and inform clients about what's being said about them and competitors.

Being able to spot customers talking with each other, even creating that sort of discussion, will be the next big piece of Web action for marketers.

One big ROI possibility: design products with customers on the Web. As reported at an earlier Consortium meeting, TI designed calculators with help of an online panel of educators. The software industry has been involving users for a long time. Such communities communicate very aggressively.

Create a research site to supplement telephone studies.

No response is worse than a hollow response. But acknowledging that you received the customer's complaint and saying you're working on it is not a hollow response.

Extranets and intranets: The "dreaded security issue" leads to corporate policies against customer interactivity on an intranet, inside the firewall.

A big question is prioritization. People want to post information to our site for external and internal use. Internally, demand has increased substantially.

Web site redesign: Among meeting participants responding to the question, one company is completing its first redesign, three are on their second redesign, six on their third, and one is redesigning its site for the fourth time.

Some sites undergo a constant redesign responding to the market. "The more things we talk to customers about, the more they want."

A leading personal computer maker reportedly said that key customers most value extranets with e-mail links back to individual company contacts.

One company's usage research finds that search is the most popular and demanded feature. "They go to the box that says search and type in what they're looking for."

We need e-mail filters that managers can control, to select which inquirers they want to talk with.

Recognize site vulnerability, to electricity outages, for example.

Training resources: Right now there are no governing bodies or licensing criteria for the training industry, to certify the best trainers in any field, including Web marketing.

The sharing of ideas in meetings and groups such as this keep people abreast of a fast-changing field in which advice quickly becomes outdated.

The training goal should be getting people to think about the Web strategically, not as nuts and bolts.

ISBM is looking closely at the need and could develop a Web marketing education program covering, among other topics:

- technology underpinnings
- the nature of market transactions and how they are changing;
- management implications;
- legal issues.

Sabre in Cyberspace

Jim Poage, vice president of customer marketing for Sabre Travel Information Network: Sabre Group started as the reservations arm of American Airlines (both are owned by AMR Corp.), but assumed an independent identity serving travel agents via terminals off Sabre's mainframe. It expanded to personal computers linked to Sabre's server, and now Sabre has moved to the World Wide Web with services for travel agents (148,000 terminals at 40,000 locations in 102 countries), corporate travel departments through its Business Travel Solutions (BTS) unit, and consumers directly at the Travelocity Web site.

Sabre Electronic Travel Distribution Services handles:

- more than 5,000 transactions per second;
- \$6 billion annual travel billing, including 45 percent of the U.S. market;
- \$1.2 billion annual revenue
- booking information for 700 airlines, 35,000 hotels, car rental companies, and about 70 percent of cruise lines cabins.

Sabre hosts more than 10,000 travel agency Web sites. Its February 1998 joint venture with the Abacus network in Asia makes Sabre the world's largest travel information provider.

Terrell B. Jones, Sabre Group chief information officer, and president of Sabre Interactive: Sabre's Information Technology Solutions Group (outsourcing and software, including Travelocity) has \$1 billion annual sales.

Channel relations. According to Harvard's John Sviokla, the old "physical value chain" (Exhibit 1) is yielding to the "virtual value chain" (Exhibit 2), where price visibility creates price pressure on suppliers and empowers consumers.

Instead of widely expected disintermediation because of the Web, we will have more intermediaries, Sviokla predicts, because consumers expect faster service and intelligent agents will create new information channels.

Companies moving to the Web that have not competed on price will have to change. There will only be a few big players in most categories because of economies of scale.

Sabre's new Web-enabled system will continue to include travel agents because the price-sensitive leisure travel market still needs

consolidators to handle multi-product purchases such as vacations. Many customers gather information online and then book through agents. Agents do not see us as competition. We drive traffic to them.

But agents depending on delivering a paper ticket to a defined geographical area are toast; 50 percent of our volume now is electronic ticketing. Sabre cannot ignore growing amounts of direct customer bookings.

Consumer site promotion. We position Sabre as one-stop destination, shopping, and vacation planning source.

Publicity has been strong; the Web is a hot topic with editors. Sabre technological innovations—such as flight paging (automatic notification of plane delays) and booking capability over the AT&T Web Phone—also drive print and broadcast coverage.

Advertising:

- Online, buying search engine key words.
- Print, because consumers trust sites that advertise in print.
- Online banner ads touting destinations do not work well.
- Price appeal advertising—e.g. "click here for the lowest fares on the Net"—do work well.
- Email to Travelocity site registrants works well.

Cobranding with ISPs, travel suppliers, and niche travel markets (e.g. official site for online Comdex travel booking) drives more traffic.

Consumer behavior online. Bookings drivers:

- Broad content;
- Trust in the system promoted as the one used by more airlines and travel agents.

Biggest e-commerce problem: "Too many lookers and not enough bookers." They browse the Web but buy through traditional channels, fearing nonexistent credit card fraud and fearing they are not getting the lowest price. Phone, not other travel information services, is our biggest competitor.

We combat misperceptions with transaction security technology, price promotion, posting reference prices, and providing services not available over the phone:

- Flight paging;
- FareWatcher e-mail notification of price changes greater than \$25;
- NetsAAsaver informs customers by e-mail of unused American Airlines seats available at deep discount.

Chat services did not work on Travelocity site because of poor integration with content. We will try chat again, however.

The feedback on cookies is always negative. We use them some, but not much.

Peter J. Stevens, Sabre BTS director of marketing: Technology allows travel suppliers to work closer with corporate travel departments, where managers want a complete travel and expense-management solution. But poor coordination between company policy, individual traveler preference, and travel information databases plague conventional back-end systems.

Our early operational errors: We launched a Windows-based server product for corporate intranets, putting us in the software distribution business. But some companies do not want to manage travel systems on their servers. We learned we needed Web capability to meet the fast growth of intranets.

The ROI for the corporate travel manager is staff reductions and paperwork savings. Systems allow users to book travel directly. We pulled costs out of travel management, and also provided traveler satisfaction.

Differing needs. User adoption is our "second sale." (Revenue depends on bookings.) The service had to be better than the phone-based agent; otherwise there is no reason to change. But we still need agents in the system, to handle last-minute flight changes over the phone, for instance.

Different user types:

- "Romans" travel back and forth to same city, and want destination information;
- "Road warriors" are frequent travelers;
- "Vikings" visit lots of cities for short time periods, and want comfort enroute;
- Travel arrangers book for others.

We keep users engaged by overcompensating on service and support.

New added-value features include Java applets. Java is a big question. The overall system must work with the lowest common denominator browser used in the Fortune 1000. We are testing add-on applets on Internet Explorer 4.0. Our goal: enable user to book air, car, and hotel in less than five minutes.

We have to migrate customers from the agency-based environment, but 100 percent electronic transactions will not happen soon because of the way people book.

Field Intelligence from IntelliQuest

Soren Kirchner, IntelliQuest sales director:

IntelliQuest Worldwide Internet Tracking Service (random-dial household telephone surveys) finds:

- More than 65 million users online globally (first quarter '98 estimate);
- 30% of U.S. population is on line;
- 59% of them actually shop;
- 29% of them make purchases.

Business-to-business commerce represents the big opportunity online; online penetration of market is much deeper. For example, 72 percent of electrical engineers are online.

Where users access online information; see Exhibit 3.

Consumer usage segments; see Exhibit 4.

Response rates. When surveying business users:

- Provide surprise gifts as incentives, e.g. puzzles, screen savers, and games for engineers. Engineers like to solve problems. A silverware cleaning strip worked well too.
- Send follow-up questionnaires to help desk users right after they've called for support.
- Instead of asking the respondent if someone else is the "decision maker," thus implying the respondent is not important enough to make decisions, ask, "Who do you discuss this decision with?"
- IntelliQuest conducts client surveys via telephone, online, and via mailed diskettes. We get 40 percent response rates on mailed diskette surveys; around 30 percent for Web surveys.

Product support conflict. Quality vs. cost reduction.

- Help desk staff turnover averages 33 percent a year, according to the Help Desk Institute.
- Fifteen percent of the cost of PC support could be saved through self-help online, according to the Gartner Group.
- The cost of providing in-house support is three times the cost of PCs themselves, according to the Gartner Group.
- The percentage of employees dedicated to customer support has doubled in the last six years, according to Dataquest.
- By 1998, more than half of all support transactions will be online, according to Dataquest.
- A typical vendor spends ten percent of revenue on customer support, according to Dataquest.
- In 1997 we had 200 million calls costing \$20 each.

Survey response rate Q&A highlights. One participant reports 10% response rates on "warm call" surveys via e-mail to customers and prospects.

Another claims 60 percent response with pre-qualified e-mail, and says that money incentives don't work with professionals.

Unpublished academic research found that with engineers, response rates were low with no incentive, rose with a dollar or two for an incentive, but declined in the \$5-\$10 or more range, because engineers consider larger sums an insulting attempt to "buy" their time. Cutesy cover letters do not work; what does were letters emphasizing, "Why it is in your interest to respond."

The Top 200 Business-to-Business Web Sites

Brian Reilly, executive editor, Business Marketing and NetMarketing magazines: Business-to-business e-commerce will account for \$200 billion in transactions in 2000, predicts IDG, and 12 percent of all business-to-business transactions will take place on the Web.

We picked the top 200 sites, for the first time in 1997, to benchmark best practices. Exhibit 5 lists the winners.

Table stakes. The functional criteria used in judging, some already becoming standard features on all sites (percentages indicate the proportion of Top 50 sites offering the feature):

- Accept orders and payments (48%);
- Accept orders but not payments (50%);
- Generate customer leads and potential business partners (96%);

- Cut costs of traditional marketing programs, e.g. printing, mailing (92%);
- Distribute product information, software (78%);
- Enhance traditional marketing and advertising (100%);
- Site is part of intranet or extranet (42%);
- Provide customer service and support (100%).

Winners. Dell Computer and AMP (maker of electrical connectors) have the best cross-cultural sites among the winners. People like to use sites in their own languages.

AMP's "Customer University" develops Web sites for others.

Cisco Systems has been marketing on the Web the longest, for five years.

How the Top 50 Web marketers promote their sites:

- 97 percent on product packaging and collateral;
- 91 percent in traditional product and company ads;
- 88 percent online (although some think that having a site is itself online promotion);
- 64 percent run site-specific promotions in traditional media.

Top 50 sites have undergone from zero to eight redesigns. Their Web staffs range from two to more than 300 people.

The winner. On the top-rated site of electronics distributor Marshall Industries, El Monte, Calif., customers can do virtually anything they can do in any other channel:

- Search site by part number, manufacturer, or product description;
- Order and pay;
- Track order status;
- Expedite shipping by linking to freight forwarder;
- Participate in live engineering seminars with video and audio;
- Get live online support from the voice-equipped all-hours help desk.

Marshall Industries spends \$2 million a year on its Web site, and generates 8 million page views a month by an average of 33,000 visitors.

Marshall has a uniquely "relaxed attitude" toward site ROI: "We don't see the Internet as a P&L center. It's an integral part of our enterprise design," said Rob Rodin, CEO. "We don't have an ROI on every piece of literature, sales call, or customer. We haven't been consumed by applying these issues to it."

Lessons we learned. Among the leaders, the Internet is in the early stages of its third phase as a business tool.

- First phase: technophiles build site.
- Second phase, where most companies are: site moves toward marketing and replicates marketing department structure of the firm.
- Third phase: "Instead of posting vertical slices down the marketing stovepipe, smart companies transform sites into horizontal cross-sections of their entire business operation." Marketing leads the enterprise-wide transition to a customer-centric focus. Transaction-enabled sites will build phase three growth.

Most leading business marketers on the Web:

- Avoid flashy front-end graphics;
- Integrate sites with back-end customer databases and other business information systems, expanding their lead as operating system and bandwidth limitations disappear;
- Ask visitors to register, to they can reconcile sales in other channels with interest generated on the Web;
- Consider personalization and customization the Next Big Things.

A Chat with ichat

Dean Cruse, ichat, Inc. vice president of marketing: Chat technology combines the interactivity of telephone and the recorded text of electronic mail, creating business applications that are more efficient than traditional methods.

Chat provides a large portion of online service revenues, because users to stay on line three times longer than the average online user. ichat was launched 1995 to provide chat server software to large Web sites wishing to build communities of users, for competitive reasons and

because chat drives significant ad revenue. Ichat is now the Internet chat software market leader, with 33 percent market share.

The market.

- Major destination sites like Yahoo. Using Ichat software, Yahoo hosts about 100,000 chat customers daily, and 20,000 simultaneously at the Friday night peak.
- small niche-oriented sites, each with a community of shared interest.

Major site chat installations are a relatively flat market. Growth is in interactive customer service over the Internet and extranets, and internal corporate communication via intranets.

The applications. Business-to-business applications are especially attractive. Chat is particularly useful for urgent communications in corporate organizations where:

- Phone use is already high;
- Employees are heavy computer users;
- People and departments are geographically dispersed;
- Interactivity and content are important; and
- A record of the conversation might be needed.

Chat capability provides:

- Real-time discussions with a high level of urgency;
- Real-time large scale meetings and presentations brought to the desktop by integrating intranet and live communication globally.

The main Ichat products for corporate servers:

- Help centers integrating self-help and real-time support;
- Chat rooms capable of handling up to 50,000 users simultaneously;
- Message boards;
- Instant user-to-user messaging;
- Instant paging capability.

Interactive support. Three million telephone agents work at more than 70,000 formal call centers in the U.S. handling 200 billion of goods and services, according to Brean Murray Institutional Research. The number of call centers is growing 10 percent a year, the number of agent seats grows 20 percent, and the spending on call centers climbs 30 percent per year.

Forrester Research predicts 25 percent of telephone-based customer interaction will move to the Web within four years, particularly for early adopters in financial services and technology markets. The volume of Web-based customer support will exceed \$1 billion by 2001 (Exhibit 6).

Today's customer interaction must balance self-service and human support, and basic vs. premium content, to avoid the extremes of ineffective service and inefficient service (Exhibit 7). Today's approaches via phone or Internet suffer from limited abilities, high personnel turnover and training costs, and mediocre customer satisfaction.

- About 25-30 percent of customers are dissatisfied when leaving call centers because of hold times, delayed responses, and tedious interfaces.
- Call center personnel do not have background information about the customer's problem, and 80 percent of the calls they receive are routine inquiries, often about accounting matters. Each call requires a one-to-one interaction with support staff, creating communication bottlenecks.
- Conventional Internet-based help is not integrated with call centers, companies find themselves deluged with e-mail, and Web sites heavy with "brochureware" cannot communicate interactively.
- The Ichat WebCenter integrates the Web site and call center, saving human interaction for the hard problems. Customers search a company's Web site while being just a mouse click away from interactive human support via text-based chat, internet voice, or a live phone call. Service representatives can see where the customer has browsed. One representative can handle several online inquirers simultaneously.
- Typical Ichat WebCenter metrics achieved by customers: 43 percent reduction in the cost per customer contact because of 20 percent fewer calls to service representatives and 12.5 percent smaller staff requirements. WebCenter users report total call center savings of \$750,000 to \$1.25 million.
- A leading personal computer maker saves 50 percent in customer support training costs with Ichat WebCenter. Total estimated cost savings in training, self-service and live help costs total \$1,750,000, allowing payback on the investment in three months.
- WebCenter software pricing starts at \$50,000.

Other successful applications.

- ichat WebCenter also hosts live online moderated events with integrated audio and video broadcast over the Internet. IBM, for example, used the system to launch a new computer model globally. Customers worldwide addressed key IBM executives in real-time.
- Merrill Lynch uses ichat Pager to notify clients of sudden market developments requiring attention, summoning them to the broker's Web site
- Pristine Capital uses ichat Rooms to provide trading information forums for registered users paying nearly \$600 a month for the service. #

—summary by Bob Donath