

# REPORT ON ELECTRONIC COMMERCE™

From the editors of  
Telecommunications Reports



Online Business, Financial, and Consumer Strategies and Trends

Vol. 8, No. 1

January 16, 2001

## Inside This Issue:

Investing Sites Urged To Improve Information .....	3
Most Online Fraud Occurs On Internet Auction Sites .....	4
Standards/Protocols	
RosettaNet RNIF Enhances Online Business Messages .....	5
S2ML Initiative Gains Wide Industry Support .....	6
M-Commerce, T-Commerce Options Abound at CES .....	8
Items of Interest .....	11
Mergers and Acquisitions .....	12
Earnings	
Few E-Commerce Stocks Experienced Holiday Joy .....	14
REC Monthly Stock Index .....	15
Studies Say Banner Ads Increase Site Awareness .....	17
REC Calendar .....	18

VISIT US ON THE WORLD WIDE WEB  
AT [HTTP://WWW.TR.COM](http://www.tr.com)

## E-Marketplace Infrastructure Spending Expected at \$80.9 Billion by 2004

**C**ompanies in the United States providing technological services for business-to-business (B2B) Internet marketplaces should prosper over the next few years as more physical stores move their supply chains online, according to a new report by Jupiter Research.

Jupiter's "MarketAccess Report on Net Market Infrastructure" concludes that B2B Internet (Net) market infrastructure spending in the United States will skyrocket from \$2.1 billion in 2000 to \$80.9 billion by 2005. Burgeoning private Net markets will drive much of the future spending on technology and services required to integrate an enterprise's business partners into a collaborative commerce environment, the report adds.

"The shift toward Net markets by many brick-and-mortar businesses brings to light many significant back-end integration issues," said Marc Harrison, research director of Jupiter's custom strategy and research group. "This translates to huge revenue opportunities for technology and services enablers, something we will see even more of as these marketplaces reach the next level of maturity."

The report estimates revenues for six technology and services categories sold into Net markets – trading systems, marketing systems, collaboration systems, decision support services/business intelligence applications, enterprise resource planning (ERP) and customer relationship management (CRM) applications, and systems integration/application service providers. It also identifies three phases of development that are common for all Net markets:

- Buy side aggregation – Buyers require relevant content.
- Real-time availability – Focus shifts to supply side integration and advanced functionality.

Transaction Processing • Security & Encryption • EDI • EFT  
Regulation & Taxation • Standards • Applications • Digital Cash

## HOUSE COMMERCE PANELS RESHUFFLED; NEW CHAIRMEN NAMED

Under a Republican reorganization plan announced Jan. 11, the House Commerce Committee's former telecommunications, trade, and consumer protection subcommittee will be split into the telecommunications subcommittee and the commerce, trade, and consumer protection subcommittee. Rep. Fred Upton (R-MI) will chair the telecommunications panel, while Rep. Cliff Stearns (R-FL) has been tapped by new Commerce Committee Chairman Rep. W.J. "Billy" Tauzin (R-LA) to be chairman of the consumer protection subcommittee.

"Under this proposal, we will have an opportunity to showcase the diversity and talent on our committee," Tauzin said Jan. 11 in announcing his choices for subcommittee chairmen. Committee Republicans are expected to vote on his recommendations when Congress reconvenes later this month.

For Stearns, who had hoped to take the telecommunications panel gavel, the GOP sweetened his "consolation prize" by moving Internet and medical privacy issues under the purview of his subcommittee. The new commerce, trade, and consumer protection panel also will have jurisdiction over interstate and foreign commerce, consumer affairs issues and "regulation of commercial practices [the Federal Trade Commission]," the Commerce Committee said.

Rather than return to his former post as chairman of the Commerce oversight and investigations subcommittee, Upton made a late push for the gavel on the higher-profile telecommunications subcommittee, sources said. "The issues the subcommittee faces are the wave of the future and will have a direct impact on the daily lives of every American," Upton said. "I'm excited to work on issues like technology in the classroom and telemedicine."

Meanwhile, a new committee assignment plan unveiled by Senate leadership would expand the Commerce, Science, and Transportation Committee by two seats, to 22 sitting members. Eleven Republicans and nine Democrats sat on the Commerce Committee during the 106th Congress.

The Democratic party will pick up two additional seats on the Commerce Committee, thanks to a "power sharing" plan that calls for an even 50-50 split on all Senate committees in the 107th Congress. New committee Democrats are Sens. Barbara Boxer (CA), John Edwards (NC) and Jean Carnahan (MO). Former Commerce Committee Democrat Richard Bryan (NV) retired last year. The Democratic committee assignments are expected to be ratified by the full Democratic Caucus later this month, Senate Democratic leader Thomas Daschle (SD) said.

The Republican party had to fill four Commerce Committee seats because of three election casualties and the departure of Bill Frist (TN) from the committee. The new GOP members are Sens. Gordon Smith (OR), Peter Fitzgerald (IL), and freshmen Sens. John Ensign (NV) and George Allen (VA). Subcommittee assignments and chairmen selections are expected "in the near future," the Commerce Committee said.

- Value-added transactions – Decision support systems and new revenue sources are critical to long-term viability and success.

While the current economic downturn has been deadly for many dot.com companies, it could serve as a boon for Net market services. "During an economic slowdown, businesses look to increase efficiency through shortened product development cycles, collaboration and lowered product costs through better planning," Harrison said. "Net markets provide businesses the vehicle to create these efficiencies by forming closer, more realistic relationships with their trading partners."

The report states that in the early days of Net markets, technology service vendors created packaged software to power these marketplaces.

However, today's Net markets demand new functionality and technology service companies are trying to predict what Net markets will want in the longer term, Jupiter Research adds.

### Consider the Whole Network

Another key consideration for B2B e-marketplaces going forward will be adding services other than the usual supply chain participants. A new report by Forrester Research BV emphasizes the importance of what it calls "network supply chains (NSCs)."

"Companies are struggling with outdated information and planning discontinuities across their supply chain," said Charles Homs, senior analyst  
See E-MARKETPLACES, p. 10

## Investing Sites Urged To Improve Information

When it rains, it pours. While e-commerce stock prices have tumbled over the past several months (see story, p. 14), online investing Web sites have lost much of their following as well. However, much of the dissatisfaction stems from the absence of critical, up-to-date financial information for investors from these sites, according to a new report from cPulse LLC.

While 16 percent of users said they were loyal to a particular investing content-based site last summer, that rate dipped to 10 percent by the end of September, the report states. In addition, 40 percent of users were "extremely satisfied" with the online investing sites at the beginning of the third quarter, while less than 32 percent said they were "extremely satisfied" by the end of the quarter.

"It appears that swings in the market over the last three quarters have caused consumers to be even hungrier for up-to-date, fact-rich research that could help guide their financial decision-making," said Eric Rudich, analyst for cPulse. "We noticed that as the market worsened, consumers became increasingly critical of the sites they relied on for financial support."

The cPulse study cited irrelevant information as the leading cause of customer dissatisfaction, followed by poor content organization and difficult navigation. Loyalists to an investment site most often seek fresh updates, complete historical information and relevant content.

"As the bubble broke in the high-tech arena and in overvalued stocks in general, consumers flocked to certain financial sites in increasing numbers," added Jody Dodson, executive vice president for cPulse. "Apparently consumers were demanding more and more of their financial sites, and they became more than just a place to check stock quotes or make purchases. Those sites not keeping up with consumer demands by providing rich research and up-to-the-minute advice and content received poor scores from consumer investors."

### GETTING IN TOUCH

Contact Editor Jerry Ashworth  
by e-mail at [jashworth@tr.com](mailto:jashworth@tr.com).

Dodson told REC that although many investors are dissatisfied with their usual investment sites, few have switched to another one because they are "trapped." "There's this trapped phenomenon where they are not in love with the content, but they don't think there is anything else to go to," he said. "The number of defectors was stagnant. The door is wide open for an existing company to deliver relevant information and win an enormous portion of the market share."

cPulse analysts recommend investing content sites offer as much historical content online as is available offline; offer more analyst-level perspective including frequently asked questions (FAQs), comprehensive performance analysis and news coverage; and offer tutorial resources that teach investors how to use the information they provide.

## Mutual Fund Investors Go Online

In another online investing study, American Century Investments concludes that 22 percent of investors who have visited a mutual fund company's Web site received investment advice and 8 percent opened a new account online last year. Moreover, 15 percent of all mutual fund investors who have or have not yet visited a company's Web site, but who have Internet access, expect to receive online investment advice this year and another 8 percent plan to open a new account.

Investors could begin opening new mutual fund accounts online late last year after Congress and the White House signed the Electronic Signatures in Global and National Commerce Act (E-SIGN) into law, granting electronic signatures the same legal standing as handwritten signatures (REC, July 18, 2000, p. 3).

"Electronic signatures offer the capability to open accounts online, making total online financial relationships a reality and delivering on the promise of the Internet to provide customers with ease of use," said Dave McCalley, vice president of electronic commerce at American Century. "Customers now can choose to interact with us in whichever way they choose: online, by mail, in person, by phone and through third-party investment advisors."

Among mutual fund investors who expect to get online advice in the next year, nearly 40 percent would use it for mutual fund recommendations, 36 percent for stock recommendations and 31 percent for mutual fund portfolio evaluations,

## REPORT ON ELECTRONIC COMMERCE

Published by  
Telecommunications  
Reports International,  
Inc., a member of the  
Business & Finance  
Group of  
CCH INCORPORATED.

Editorial Offices:  
1333 H St., N.W.  
Suite 100-East  
Washington, D.C.  
20005  
Tel: 202/312-6100  
Fax: 202/842-1875

Editor:  
Jerry Ashworth  
[jashworth@tr.com](mailto:jashworth@tr.com)

Managing Editor:  
Amy L. Fickling

Senior  
Contributing Editor:  
Gary H. Arlen

Editor in Chief:  
Victoria A. Mason

Publisher:  
Stephen P. Munro

Customer Service:  
800/822-6338  
202/312-6100  
or send e-mail to  
[customerservice@tr.com](mailto:customerservice@tr.com)  
For reprints and  
photocopying  
permission, contact  
Customer Service at  
[customerservice@tr.com](mailto:customerservice@tr.com).

Report on Electronic  
Commerce is  
published biweekly,  
US \$745 per year,  
US \$910 outside  
North America.  
In Canada, add  
7% GST (GST Reg  
No. 127304988).  
D.C. residents add  
5.75% sales tax.

©2001 Telecommuni-  
cations Reports Inter-  
national, Inc. Federal  
copyright law prohibits  
duplication or repro-  
duction in any form,  
including electronic,  
without permission of  
the publisher.

according to the “American Century Investments 2000 Internet Adoption Study.”

“Gone are the days where you could put a site on the Internet and be happy with a certain number of ‘eyeballs’ viewing your site,” McCalley said. “With today’s technology-savvy investors, it’s necessary for companies to have Web sites that offer investors effective tools and innovative capabilities.”

Some 37 million mutual fund investors (60 percent of all investors) accessed the Web in the past year. These users have more experience with the Internet than ever before, as more than 70 percent of those surveyed have been online for more than two years. “This translates into a fund shareholder who has overcome an Internet learning curve, understands what the Internet has to offer and is willing to take the time to discover the best tools and information available online,” McCalley added.

While 42 percent of the 250 investors participating in the study accessed a mutual fund company’s Web site last year, and 68 percent own individual stocks, only 20 percent used the Internet to make investment transactions such as buying, exchanging or selling stocks or mutual funds, the American Century report states. Security/privacy – at 39 percent – was the main concern about making online mutual fund transactions, although this percentage was down from 68 percent in 1996.

cPulse: <http://www.cpulse.com>

American Century:  
<http://www.americancentury.com>

## Most Online Fraud Occurs On Internet Auction Sites

If it sounds too good to be true, it quite likely is – at least on some online auction sites. A new report by Internet market research firm eMarketer concludes that 87 percent of all online fraud committed last year can be attributed to Internet auction sites.

Moreover, Generation X Web users in their 20s and 30s, as well as Baby Boomers in their 40s and 50s, are falling victim to online scams as much as the very young and the elderly, states “The ePrivacy & Security Report.” The study evaluates Internet privacy and security issues,

ranging from personal information piracy, credit card security, hacking into corporate networks, denial-of-service attacks and computer viruses.

“For most Internet users, the protection of personal information is a real and valid concern,” said eMarketer analyst Rob Janes. “Offerings of free services and promises of wealth lure participants into binding contracts or unbelievably great deals enticing consumers to buy products that never arrive or don’t meet the quality promised.”

Because online auction sites such as eBay Inc. conduct massive transaction volumes, the potential for fraud in this sector is high. “Given that 16 million unique users may visit eBay in a given month, it’s no surprise that auctions consistently rank as the most fraud-prone online activity,” he said.

The report also concludes that:

- The Federal Bureau of Investigation’s Computer Emergency Response Team (CERT) registered 17,672 incidents of hacking last year – up from less than 10,000 in 1999.
- Visa International and MasterCard International recorded credit card fraud in 1999 at 0.09 percent of their total credit card transactions, whether online or off. The two card associations said 22 million fraudulent credit card transactions occurred out of about 25 billion combined transactions.
- While about two-thirds of Internet users have steered clear of online fraud, a little more than a third have been victims of a privacy/security breach. Fraud costs consumers and the industry about \$600 per victim, which is more than the average consumer spends online.
- Children are the most willing sector to share personal information about themselves for goods and services.
- The majority of Internet users who refuse to buy online are afraid of hidden costs, leery of fraud and question companies’ ethics.
- The “Love Bug,” ExploreZip” and “Melissa” viruses are the most widely spread and damaging computer viruses to date. More than half of the top 20 viruses originated from outside the United States. So far, the “Love Bug” virus has caused the most financial loss, topping the “Melissa” virus by more than \$4 billion.

## Warning Letter to AGs

In another privacy matter, the Competitive Enterprise Institute (CEI) this month sent a letter to all 50 state attorneys general warning that extreme measures they endorsed that would regulate online privacy policies could hinder Internet business.

“While uncertainty surrounding new information technologies such as the Internet provides a strong impulse to regulate consumer privacy, market-based solutions and likely unintended consequences argue strongly against the position endorsed by the state attorneys general,” said CEI policy analyst Jessica Melugin.

The recommendations stem from a recent National Association of Attorneys General (NAAG) report, which recommends increasing government control of privacy policies. While CEI agreed consumers are concerned about their

privacy and how personal information is used, it said the NAAG report “fails to appreciate the advantages of a customer-driven approach” and calls for more “centralized, bureaucratic rules.”

“Businesses use information about their customers for assessing credit risk, targeted marketing, just-in-time inventory control, product design, the customization of goods [and] improvements to customer service,” the CEI letter states. “The economy as a whole makes uses of information that are too subtle and fast changing for central authorities to grasp. The privacy issue is an opportunity for legislators to show leadership and humility – to begin again by asking deeper questions and calling for real analysis instead of polling data.”

eMarketer: <http://www.emarketer.com>

Competitive Enterprise Institute:  
<http://www.cei.org>

---

## Standards/Protocols

---

### RosettaNet RNIF Enhances Online Business Messages

E-commerce companies now can send even more complex business messages to their Internet supply chain partners under the newest version of the RosettaNet Implementation Framework (RNIF). RNIF Version 2.0 supports intermediaries such as e-marketplaces and exchanges, and contains additional provisions for security, privacy and nonrepudiation.

“We had a tremendous amount of implementation experience and feedback from our partners in developing the second version of the RosettaNet Implementation Framework core specification,” said Jennifer Hamilton, chief executive officer of RosettaNet. “Consortium partners have implemented the framework in real-world e-business scenarios and have shared their experience in making the latest version of the framework even more robust and better specified. We’ve also aligned it with many proven industry standards to ensure maximum industry interoperability.”

The new implementation framework enables companies to send a supporting file, such as a “.pdf,” “.gif” or other binary documents with their

extensible markup language (XML)-based RosettaNet business messages. They also can use digital signatures and payload encryption by using the S/MIME (Secure Multipurpose Internet Mail Extensions) specification, which replaces RosettaNet’s previous format and keeps the RNIF closely aligned with other cross-industry implementation frameworks.

The new framework accommodates e-marketplaces, exchanges, portals and other intermediaries that route information on behalf of buyers and sellers by specifying what information to add to message headers to enable these intermediaries to route the business messages to their final destinations.

Some of the partner companies committing significant resources to developing RNIF v2.0 include: Agilent Technologies Inc., Arrow Electronics Inc., Commerce One Inc., Compaq Computer Corp., Dun & Bradstreet Corp., Edifecs Commerce, Intel Corp., Microsoft Corp., Netfish Technologies Inc., Sterling Commerce Inc., Syncra Systems Inc., Tibco Software Inc. and webMethods Inc.

High-tech e-marketplace Converge Inc. has processed RosettaNet transactions successfully

with Compaq using the earlier version of the RNIF. "RNIF 2.0 will provide Converge with enhanced communication among buyers and sellers, along with greater time and cost savings in conducting transactions," said John O'Connor, executive vice president of business services and operations at Converge.

In other matters on standards, seven technology companies have achieved mutual interoperability by passing the first business-to-business (B2B) AS2 conformance validation test issued by the Uniform Code Council (UCC) and Drummond Group. The draft standard allows vendor applications to communicate electronic data interchange (EDI) over the Internet securely.

The companies and their products are: bTrade.com – SecureAccess2000, EDIINT engine v1.38; Compaq Computer Corp. – Compaq ASx Transport Service (CATS) v2.0; Cyclone Commerce Inc. – Cyclone Interchange v3.1; IPNet Solutions Inc. – eBizness Transact v3.3; Netfish Technologies – XDI Product Suite v4.2; Sterling Commerce – E-Marketplace Enabling Services v3.3; and webMethods – webMethods B2B v3.6.

"AS2 gives a company the ability to exchange data in real time in a secure manner over the Internet to other AS2 interoperable companies," said Rik Drummond, chief executive officer of the Drummond Group and manager of the testing process.

"Using this technology gives a high return on investment to a company. It will greatly decrease the cost of doing business in EDI and one can expect savings of 60 percent or more over traditional [value-added network] costs," added Drummond.

Concerning financial specifications, more than 1,000 global financial institutions have implemented the Open Financial Exchange (OFX) specification, enabling the seamless exchange of financial information over the Internet. The latest version, the 6-month-old, XML-compliant OFX 2.0, is gaining support from financial institutions, technology solution providers and payroll companies.

"TD Waterhouse is committed to making the financial lives of its customers easier," said Stuart Rubinstein, senior vice president for electronic commerce at TD Waterhouse Group Inc. "OFX 2.0 enables our customers to download their TD

Waterhouse 1099 information directly into their tax preparation software, including this year with Quicken TurboTax, significantly reducing a time-consuming and tedious process."

OFX enables financial institutions, technology solutions providers and financial software and Web services companies to create products and services that work together more effectively. Using OFX 2.0, Enterprise Engineering Inc.'s Enterprise FTX solution enables Prudential Retirement Services to deliver 401(k) services to personal financial management software, such as Intuit Inc.'s Quicken, over the Internet.

"Since it was first released, OFX 2.0 has continued to gain momentum as more and more financial institutions seek to implement a common communication infrastructure for the delivery of Web-based financial services," said Anthony Piniella, vice president of marketing for Enterprise Engineering. "With the added capabilities of retirement services and tax reporting, and support for XML, OFX can now enable financial institutions to deliver truly integrated financial services."

RosettaNet: <http://www.rosettanet.org>

Drummond Group:  
<http://www.drummondgroup.com>

OFX: <http://www.ofx.net>

## S2ML Initiative Gains Wide Industry Support

More than 200 companies representing the e-commerce, security and financial sectors have joined the Security Services Markup Language (S2ML) initiative to promote S2ML as the standard for enabling secure e-commerce transactions using extensible markup language (XML) (REC, Dec. 19, 2000, p. 15).

The companies are participating on an Organization for the Advancement of Structured Industry Standards (OASIS) technical committee on XML-based security services to develop a specification based on S2ML.

"The goal of S2ML is to create an open industry standard that will enable secure inter-site e-business transactions," said Barry Bycoff, chairman and chief executive officer of Netegrity. "We are pleased to see such widespread support

### ASSOCIATION DEVELOPS B2B E-COMMERCE DISPUTE STANDARDS

An e-commerce dispute-management protocol unveiled this month by the American Arbitration Association has gained initial support from 15 companies and legal firms. The dispute resolution group, which developed the standards with key industry leaders, said its goal is to help companies avoid lengthy litigation that could disrupt the Internet business-to-business (B2B) market.

The B2B principles advocate: fundamental fairness in managing disputes, including access to neutral dispute resolution providers; isolation of disputes to avoid disrupting unrelated transactions; identification of clear dispute management policies; variety in methods used so that disputes may be resolved quickly; and the use of appropriate technology to manage disputes swiftly and economically.

William Slate III, president and chief executive officer of the association, said disputes are inevitable as more companies continue to enter this burgeoning market, which recorded about \$1.2 trillion in sales last year. The group soon will introduce a new e-dispute management service to ensure the continuity of the B2B supply chain, he added.

"This protocol is an educational wake-up call," Slate said. "Setting a global standard will give practitioners the necessary confidence and trust in online transactions to be successful in B2B e-commerce."

American Arbitration Association: Contact Debi Miller Moore. Phone: (704) 905-1488. <http://www.adr.org>

for this initiative from both the vendor and end-user communities. We're looking forward to working with all interested companies as part of OASIS to provide an industrywide standard for secure e-commerce."

S2ML allows companies to securely exchange authentication, authorization and profile information between their customers, partners or suppliers, regardless of the security systems or e-commerce platforms they now have in place. S2ML promotes the interoperability between disparate security systems, providing the framework for secure business-to-business (B2B) and business-to-consumer (B2C) transactions.

Kathleen Hayes, vice president of business development at Epicentric Inc., said her company is "committed to supporting industry standards like S2ML to bring heightened security and ease of interoperability to networked business communities. Epicentric is excited to take part in the ongoing efforts to standardize secure e-commerce transactions using XML."

Added Bob Bickel, vice president at Bluestone Software Inc.: "Now that Internet connectivity has become so widespread, with increasing volumes of data, materials and equipment being exchanged via collaborative commerce channels, it is even more important to explore and develop standardized and efficient methods of securing that information. We believe that XML and

Java are the fundamental components of such a solution and that XML standards like S2ML will foster a standardized approach to federated security services."

In another XML matter, Zona Research has issued a report evaluating the success of XML and its importance in e-business. The report "XML: The Dash for Dot.com Interoperability," summarizes companies that are deploying XML-based solutions or plan to do so this year.

The study finds that while 72 percent of these companies now use electronic data interchange (EDI), seven out of eight of these plan to convert EDI data to XML data in applications. It also notes areas where XML excels compared to EDI and extended intranets, and how XML changes the speed and cost of doing business.

"The problem of 'islands of computing' has been around for decades, but without a universally recognized means of converting data while retaining its richness, developers have been left with a hodge-podge of one-off, point-to-point conversions," said Martin Marshall, managing director of Zona Research.

"With XML, Web applications have the ability not just to bridge static forms, but also to separate and standardize the business processes that various industries will use to act upon that data," Marshall continued.

Marshall said XML also brings “political gains.” “To get the most out of XML, vertical industries will have to agree to standardize processes and definitions, a process which itself will be a potentially great leap forward,” he added.

Netegrity: Contact Jennifer Biggar.  
Phone: (781) 663-7384. <http://www.netegrity.com>

Zona Research: Contact Susan Billheimer.  
Phone: (650) 298-4042.  
<http://www.zonaresearch.com>



Gary Arlen

## M-Commerce, T-Commerce Options Abound at CES

By Gary H. Arlen  
Senior Contributing Editor

With computers and home electronics products representing some 35 percent of consumer online purchasing volume, the potential for e-commerce definitely was on the minds of attendees at the Consumer Electronics Show (CES) Jan. 5-9 in Las Vegas, Nev. At the same time, the annual extravaganza was loaded with Internet appliances and other new interactive gadgets intended, among other things, to facilitate access to e-commerce in all its forms.

In addition, a growing number of online customer support providers popped up at CES, showcasing functions that let retailers and manufacturers provide Web-based equipment set-up and customer service advice.

Online sales represent only a fraction of the multibillion-dollar market for TV sets, video recorders, DVD and audio equipment, plus all the other hardware in the vast consumer electronics sector. Yet the category is being pursued hotly by vendors such as 800.com Inc., GetPlugged.com Inc. and e-Town, plus the growing brick-and-click presence of Best Buy Inc., RadioShack Inc. and Circuit City Stores Inc. There also is a business-to-business (B2B) component, as companies such as BuyLink Corp., Redtagbiz.com and RetailExchange.com Inc. provide marketplaces for retailers to handle online procurement as well as facilitate deals for unloading surplus merchandise.

In other words, e-commerce's role at the show has risen extensively, even though the topic itself often was buried by the glitz about digital recording, wireless devices and home networking. Not to mention Microsoft Corp.'s Bill Gates' opening keynote address, in which he showed the X-Box video game for the first time.

Nonetheless, various approaches to e-commerce permeated the endless exhibit halls,

conference rooms and demonstration suites. The second day's "Workstyle" keynoter, Palm Inc. Chief Executive Officer Carl Yankowski, introduced the concept of "ME-commerce," an amalgam of "mobile" and "electronic" commerce, centered on the role of the Palm Pilot as an "e-wallet" that will enable shopping anywhere.

He unveiled a partnership with Visa International, Groupe Ingenico and VeriFone Inc. that will allow future Palm devices to store credit card information, which will be accessible through a personal identification number for in-store purchasing. Customers can point the Palm at an Ingenico point-of-sale terminal and beam their credit card data into the purchasing system. Itemized bills will be mailed to customers as well as stored in the Palm unit for reference.

Yankowski predicted that the Internet will "bend" to suit the needs of hand-held customers, citing the new Palm Portal, a partnership with Sprint PCS that provides relevant Internet content to Palm users.

These kinds of dramatic demonstrations and visionary statements lend excitement to CES, but the guts of the event are the progress reports from companies building e-commerce businesses.

### Not-So-Simple E-Shopping Today

For example, at an opening-day session themed "Shopping Made Simple," vendors and merchants concluded that moving beyond e-commerce into TV-based (T-commerce) and mobile selling (M-commerce) is an evolutionary process.

Mark Ebel, director of digital solutions for BestBuy.com (the online subsidiary of the nation's largest electronics retailer), said the financial models for these new businesses still are a work in progress. For example, in today's M-commerce, "everyone sees problems with the stand-alone mobile products [plan] based on monthly fees" for access, he said. Ebel cited carriers who want upfront money – per-month fees plus up to 15 percent commissions on transactions conducted

through their facilities – as an unacceptable burden that will slow down M-commerce deployment.

“That doesn’t work,” Ebel said, adding that communications carriers have toned down their demands in this regard over the past year.

Rob Solomon, director of production for Yahoo! Inc. Shopping agreed. “There is not enough room for each player in the chain to participate in transactions, to reap the rewards from transactions that occur,” he said. “Those who add the most value to the proposition, those who control the most eyeballs and the retailers who actually sell the products are going to reap the most rewards. And the carriers will be there in some way.” He added, however, that technology providers will have a really tough time capturing a piece of the action from mobile transactions.

Ebel added, “People are asking, [but it] doesn’t mean they’re going to get it.”

On the other hand, T-commerce will have to share its revenues with its carriers – mainly the cable TV operators, according to Joaquin Fernandez-Silva, vice president of business development for RespondTV Inc. “The margins can be thin, but still be a very substantial business,” he said, because of the scale of T-commerce.

That prompted Susan Fullman, vice president of Motorola Direct, a sales unit of Motorola Corp., to add: “M-commerce and T-commerce business models are going to be very different. I don’t see advertising in a big way on M-commerce. It’s too real-time, too disruptive to the individual.” But she conceded that integrated advertising will play a major role on T-commerce, just as it does today on personal computer (PC)-based e-commerce.

The panelists agreed with Fullman’s view that the next wave of electronic selling will be centered around “contextual marketing.” Fernandez-Silva pointed out that much of RespondTV’s approach to T-commerce is based around putting the right sales offer into the right programming environment – a basic function of direct marketing.

In response to a question from the audience about cannibalization of sales, the panelist said online commerce is drawing customers from many sources. “We absolutely expect some cannibalization,” said BestBuy.com’s Ebel. “Our research indicates it is probably not a

significant number. We’re reaching new customers who have never come into the store. We know that we’ll lose people [customers], but we frankly hope to get more customers because it will be easier.”

Ebel added that about 10 percent to 20 percent of current online customers order from the Web site, but then come to the store to buy and pick up the product. In some cases, the customers either don’t trust delivery services or online payments, or else they want to get the product right away. He cited customers who order online at lunch, then pick up the products on their way home from work that night.

Ebel stressed the importance of “the whole integration factor,” citing situations in which the selling process begins with a visit to the store followed by an online or M-commerce purchase transaction at a later time. He focused on the value of keeping customers within the store framework.

Martti Granberg, director of business development for Nokia Mobile Phones Ltd., added that M-commerce also is based on the “element of expanding markets.” New consumption is based on pent-up desire to purchase from any location, he said.

Fernandez-Silva predicted a five- to eight-year transition phase before businesses switch from conventional venues to the T-commerce realm. The early steps involve increasing transaction rates on systems now available, he said.

The panel agreed repeatedly that privacy will play a major role in rolling out M-commerce and T-commerce services, and that there are major differences between these versions of e-commerce. Solomon forecast that the “killer

#### COPYRIGHT NOTICE

Federal copyright law (Title 17 of the U.S. Code) makes it illegal to reproduce this newsletter in whole or part by any means and for any purpose, unless you have written permission. Federal law provides severe statutory and criminal penalties for the unauthorized reproduction or distribution – whether in print or electronically – of copyrighted newsletters. Copyright infringement carries a statutory fine of up to \$100,000 per violation. We offer a reward of \$2,000 for information that leads to the successful prosecution of copyright violators. To report a violation, or if you would like additional subscriptions or an electronic site license, call (800) 822-6338. For reprint information, call Customer Service at (800) 822-6338.

categories” for M-commerce will be local services and entertainment (such as pizza ordering and movie tickets), while Granberg said he expects more games and financial services to be at the core of M-commerce’s growth.

That led to a discussion of measuring success in this new environment. Granberg urged the industry to develop qualitative factors to complement the quantitative measures. He cited mobile financial transactions, saying it might be more useful to gauge development in terms of how behavior is changing, not just the volume of transactions or revenue.

Ebel agreed, saying BestBuy.com is “actively monitoring sales,” but the company also is trying to assess how comfortable customers are during the shopping and purchasing process. He said the company uses “an average shopping basket” and the number of times customers visit the site, but is exploring other ways to measure value.

As for future developments, Granberg predicted that carriers will become involved in billing for small transactions. He pointed out that many customers do not have credit cards or don’t want to put small charges onto cards. Hence, mobile carriers’ billing systems will be used to take care of such transactions.

The panel also discussed ways to facilitate customer relationships, such as minimizing repetitive data entry. Solomon pointed out that Yahoo!’s persistent shopping cart and wallet accomplish such goals, while Fullman and Granberg identified similar capabilities on mobile systems. RespondTV also has a consistent ordering process, which is aimed at the same customer-ease factor, Fernandez-Silva said. Nonetheless, Ebel expects “a fight” as each provider tries to establish its format as a common arrangement.

“I don’t think you’re going to see standards on that for a time,” Ebel added.

The panel agreed M-commerce and T-commerce developers soon will create applications for brick-and-click activities.

“The different forms of e-business are primarily complementary, not fighting with each other or trying to get turf from each other,” said Nokia’s Granberg. He noted that there are “different places where E-, T- and M-commerce” make sense. “All of these different areas will best

be developed according to the characteristics of the usage itself,” he added.

## Online Customer Service

A new range of providers also was on hand to support electronics purchases, whether made through brick or click retailers. How2TV.com, a Los Angeles, Calif.-based company, showed its capacity for handling installation or service questions, including streaming video presentations that demonstrate product characteristics. Among its first clients are Yamaha Corp. and several home networking companies. The How2TV.com-produced content is accessed through the customer support button on the manufacturer’s or merchant’s Web site.

LiveManuals.com offers a similar array of customer support services. For example, Zenith Electronics Inc. has begun to screen-print the LiveManuals uniform resource locator (<http://www.livemanuals.com>) onto some products, reminding customers they can go directly to the Web site to obtain support advice on how to handle routine functions.

Online services such as these were reminders of the ways in which Internet services are weaving their way throughout the consumer electronics experience. In a sector where the sales and service are so intertwined with the products being sold, CES remains a gauge of how quickly these e-businesses are emerging.

---

## E-MARKETPLACES, from p. 2

---

at Forrester’s European headquarters in Amsterdam, Netherlands. “With more partners, increased reach through the Internet and a 24-hour economy, companies must gear up for continuous real-time adjustments in their supply chain.

“A supply chain consists of more than just suppliers, manufacturers and logistics – design, sales and marketing also influence the chain of events. By including all the business functions in an NSC, partners will take ownership to resolve product discrepancies swiftly. With NSCs in place, companies will decrease the chances of potential liability claims and improve intercompany collaboration,” Homs added.

However, Forrester states that transitioning to an NSC environment takes time, usually occurring

in three phases. Firms first must communicate production and sales plans online with their suppliers through extensible markup language (XML). Then they must synchronize planning and production schedules. Last, e-marketplaces must install high-quality advanced planning and scheduling (APS) solutions to handle planning data from multiple participants and to allow users to shield data securely from other participants.

“NSCs will be in full swing once e-marketplaces become the information hub for all business processes,” Homs added. “But large corporations will still require internal planning, for which they will run an in-house planning system. To achieve true benefits from collaboration, all steps of the supply chain – from concept design through after-sales service – must become one integrated flow of information. To facilitate that process, NSCs must offer a full-blown service of enterprise applications,” from CRM to ERP.

In the report, “Network Supply Chains Emerge,” Forrester urged firms planning to invest in NSC initiatives to gauge software providers’ solutions and evaluate their own risks, adding that a manufacturing company will make software investments of up to £4 million (US\$5.95 million), with ongoing annual maintenance of up to £400,000 (US\$595,000).

In another B2B e-commerce study, International Data Corp. (IDC) states that the value of

goods and services sold through dynamic pricing sites will increase more rapidly than overall B2B sales. “Dynamic” worldwide B2B e-commerce will jump from 5 percent this year to 13 percent in 2004, with dynamic pricing representing 20 percent of U.S. B2B e-commerce in 2004.

“Although dynamic pricing is on the rise worldwide, geographic and cultural factors play crucial roles in determining the extent to which it catches on,” said Rob Rosenthal, research analyst for IDC’s Internet Economy program. “In Europe, where venture capital is sometimes difficult to obtain, localization and reaching potential customers could slow dynamic pricing activity. In Japan, where business relationships are most important, the use of dynamic pricing for e-commerce will most certainly lag behind that of both the United States and Western Europe.”

In its study, “Dynamic Pricing in e-Marketplaces: A Definition and Forecast,” IDC states that negotiated pricing systems best enable companies to buy and sell based on their overall value propositions, rather than simple price. However, many e-marketplaces need to build a clientele and formulate their transactional models before dynamic pricing can play an important role in e-business solutions.

Jupiter Research: <http://www.jup.com>

Forrester Research: <http://www.forrester.com>

IDC: <http://www.idc.com>

---

## Items of Interest

---

- An e-commerce company’s profits should not be taxed in a country just because it has a Web site accessible there, or because its Web site is hosted on a server located there, according to an agreement by the Organization for Economic Cooperation and Development’s (OECD’s) Committee on Fiscal Affairs. The committee also is in consensus that except in “very unusual circumstances,” a foreign e-commerce company’s use of an Internet service provider in a country doesn’t constitute a permanent establishment in that country. A country that signs the OECD’s Model Tax Convention agrees not to tax the profits of a foreign company unless it carries on business through a “permanent establishment” within its borders. The agreement among the 29 member nations of OECD’s tax

forum is reflected in amendments to a document interpreting the tax convention, which allows for bilateral agreements among countries. OECD: <http://www.oecd.org>

- Verio Inc. has asked the U.S. Court of Appeals for the Second Circuit in New York to reverse a lower court’s injunction barring the company from accessing a database to target Internet domain name registrar Register.com’s customers with unsolicited commercial e-mail, direct mail and telemarketing activity. The federal district court in Manhattan had granted a preliminary injunction against Verio last month. Verio told the appeals court it lawfully had been accessing and using Register.com’s “Whois” database. It said the lower court’s ruling “threatens

the fundamental intent of public access to the Whois databases of domain name registrars." Verio also said it has filed a petition asking the Internet Corporation for Assigned Names and Numbers (ICANN) to terminate Register.com's accreditation as a domain name registrar. Verio said Register.com's refusal to give Verio bulk access to its Whois database violates an ICANN requirement. Verio: <http://www.verio.com>

- An initial investigation by Kroll Associates into a recent security breach at Egghead.com Inc. found no credit card information had been stolen, company officials said. The investigation "has uncovered evidence that suggests that Egghead.com's existing security system interrupted this intrusion while it was in progress," said Egghead.com Chief Executive Officer Jeff Sheahan, adding that some two-tenths of 1 percent of the credit card accounts at the time of the attack showed some ink of suspected fraudulent activity. "It is possible that this activity may be related to credit card theft elsewhere. The evidence Kroll Associates and our team have gathered to date suggests that neither these, nor any other credit card numbers, were obtained from our site." Egghead.com: <http://www.egghead.com>

- Open Market Inc. has signed a customer financing agreement with IBM Global Financing. The alliance enables Open Market

to provide new and existing customers with the option to finance hardware, software, maintenance, training and service associated with implementing e-business solutions through IBM Global Financing. "IBM Global Financing brings a unique approach to financing that is tailored to meet our customers' particular needs, helping them make the IT investments they require to remain competitive," said Joe Alwan, senior vice president of marketing at Open Market. "This excellent opportunity adds to the many benefits our strong relationship with IBM provides for our customers." Open Market, contact Annmarie Russell, (781) 758-5804. <http://www.openmarket.com>

- The Worldwide Automated Transaction Clearing House (WATCH) has selected Belgium-based Society for Worldwide Interbank Financial Telecommunications s.c.r.l. (SWIFT) to provide the payment processing engine of the WATCH system. "WATCH selected SWIFT because of its pre-eminent position in electronically delivering payment messages to financial institutions worldwide and its reputation for service delivery," said Brian Mecklem, chairman of WATCH and general manager of global payments systems at National Australia Bank. "Choosing SWIFT gives WATCH certainty that its project will proceed on schedule and on budget." WATCH: <http://www.globalach.org>

---

## Mergers and Acquisitions

---

- i2 Technologies Inc.'s Infinite Content business unit has signed a definitive agreement to acquire Trade Services Holdings subsidiaries Trade Services Corp. and ec-Content Inc., expanding its business-to-business marketplace content solutions. i2 will acquire all of the outstanding capital stock for the two companies in a purchase transaction for \$5 million in cash and about 2.3 million shares of i2 common stock. "We believe the true value of e-marketplaces is predicated on the richness of information content within them and the scope of choices and services offered," said Tom Leisman, executive vice president and general manager for Infinite Content. i2 Technologies, contact Sue LaDow, (469) 357-3027. <http://www.i2.com>

- Internet.com Corp. has signed a definitive asset purchase agreement to acquire

14 Web sites and 18 e-mail newsletters from EarthWeb Inc. All of these properties are focused on content for the information technology (IT) and Internet industries. "This acquisition provides Internet.com with tremendous business growth opportunities by adding high-quality IT traffic, content, resources and advertising options to our network," said Alan Meckler, chairman and chief executive officer of Internet.com. "These Web sites and e-mail newsletters have built a loyal following among IT and Internet professionals and have a rock solid reputation throughout the industry as leading resources for news and analysis." Internet.com, contact Mary Ann Boland, (212) 547-7939. <http://www.internet.com>

- Trintech Group has completed the acquisition of the primary assets of secure e-payment and infrastructure services provider

Globeset Inc. The total consideration of about \$31 million is being effected through \$10 million in stock and the remainder in cash and the assumption of liabilities subject to final adjustment of the amount of assumed indebtedness. Trintech: <http://www.trintech.com>

- Network Commerce Inc. has acquired Internet Domain Registrars Corp. (IDR), operator of Registrars.com. Under terms of the agreement, Network Commerce will pay \$750,000 in cash and 8.25 million shares of Network Commerce common stock. IDR shareholders and employees also can receive 3.5 million more shares of Network Commerce stock based on earn-out provisions over the next two years. "Since we expect our domain registration business to be a cash flow-positive business by the second quarter of 2001, we fully expect the addition of IDR to provide a new and significant revenue and cash flow stream to the company," said Dwayne Walker, chairman and chief executive officer of Network Commerce. "We also believe this will be another avenue for expanding our database of registered customers." Network Commerce, contact Stephen Smith, (877) 430-0131. <http://www.networkcommerce.com>

- DoubleClick Inc. has elected not to match an offer from an unrelated third party that has proposed to acquire all of the outstanding shares of NetCreations Inc. As a result, DoubleClick will end the merger agreement with NetCreations originally signed in October (REC, Oct. 17, 2000, p. 11). NetCreations is required to pay to DoubleClick a breakup fee of \$8.6 million plus expenses following the termination. "We are disappointed that NetCreations won't be a part of our success, but considering NetCreations' recently announced operating results and our own internal progress on e-mail, we have decided not to raise our existing offer," said Stephen Collins, chief financial officer of DoubleClick. "Going forward, we will continue to aggressively pursue opportunities to grow our e-mail business both organically and through acquisitions." DoubleClick, contact Bruce Dalziel, (212) 683-0001. <http://www.doubleclick.net>

- Converge Inc. and VerticalNet Inc. have signed a definitive agreement for Converge to acquire NECX, a wholly owned subsidiary of VerticalNet. VerticalNet will receive a 19.9 percent equity interest in Converge and a seat on its board. "The acquisition of NECX establishes Converge as the global trading leader, making

markets in more than 180 product families, with logistics and operational capability to buy, sell and move products around the world," said Robert Lewis, chief executive officer of Converge. "NECX brings 20 years of domain expertise and is a trusted intermediary for the thousands of high-technology companies worldwide." Converge: <http://www.converge.com>

- Microsoft Corp. has reached agreement to acquire Great Plains Software Inc. The acquisition is structured as a stock purchase and is valued at about \$1.1 billion. Each share of Great Plains common stock will be exchanged for 1.1 shares of Microsoft common stock. "The combination of our two companies will accelerate small and medium business efficiency and agility by offering software solutions for automating interconnected business processes," said Jeff Raikes, vice president of Microsoft's productivity and business services group. "Together we will bridge the gap between on-premise software and next-generation software and services." Microsoft: <http://www.microsoft.com>

- First Data Corp. will acquire a 25 percent equity interest in Ireland-based payment services provider FEXCO. FEXCO next spring will provide a range of processing services to First Data and its customers that range from FEXCO's existing multi-currency platform and its new e-commerce payment platform. "We have given ourselves a considerable edge by investing in companies that have complementary competencies, strong operating track records and a depth of local knowledge and relationships," said Charlie Fote, president and chief operating officer of First Data. First Data: <http://www.firstdata.com>

- GenesisIntermedia.com Inc. (GENI), operator of the Centerlinq advertising network, has acquired a 7 percent interest in the common stock of Fashionmall.com. GENI also has sent an offer to the board of directors of Fashionmall.com to acquire all of its remaining shares in a transaction valued at \$7 per share. "The merging of Centerlinq and Fashionmall will create one of the largest networks to serve both the brick-and-mortar world and the Internet," said Ramy El-Batrawi, chief executive officer of GENI. "We will also enjoy numerous opportunities to cross-promote Fashionmall partners to Centerlinq members and shoppers in the growing number of malls, and Centerlinq advertisers to Fashionmall users" on the Internet. GENI: <http://www.genesisintermedia.com>

# Earnings

## Few E-Commerce Stocks Experienced Holiday Joy

The December holiday season was not very jolly for many of the 48 e-commerce firms on the REC Index. Twenty companies suffered stock losses of 14 percent or more for the month as the stock markets continued to reel from an economic slowdown and as technology firms prepared for lower-than-expected revenues.

The REC Index dropped 3.6 percent from November, which means it fared better than the 4.9 percent dip in the NASDAQ Composite, yet lagged behind the 3.5 percent gain by the Dow Jones Industrial Average and the 0.4 percent increase by the Standard & Poor's 500. The REC Index's 41 percent year-over-year plummet also compared poorly to the other major indices, as it was worse than the same comparison for the NASDAQ Composite (down 39 percent), Standard & Poor's 500 (down 10 percent) and the Dow Jones Industrial Average (down 6 percent).

Leading the list of gainers in December was Schlumberger Ltd., which has services in e-commerce, smart cards, utilities and oil. Enhancing the company's stock price, which increased 29 percent to \$79.94 per share, was the high

demand for oil, but Schlumberger also has signed key smart card pacts. Its smart card manufacturing and personalization center in Mexico City, Mexico, received Proton World International's certification for the personalization of Proton-based smart cards.

"The Proton World certification is an important milestone in the development of our local service offering and in the advancement of our relationship with Mexican and Latin American businesses," said Othon Gonzalez, operations manager for Schlumberger Mexico. "Schlumberger continues to demonstrate that it has world-class operation centers and can provide quick delivery of high volumes of smart cards for our customers worldwide."

Ranking second on the list of monthly gainers was RSA Security Inc., whose stock price rose 23 percent to \$52.88 per share. The company signed several partnership contracts in December with firms including Nokia, Symantec Corp., ClearCommerce Corp. and Datakey Inc. It also partnered with Aladdin Knowledge Systems to use RSA Security's RSA Keon digital certificate management system with Aladdin's eToken.

"The RSA Keon [public key infrastructure] family offers customers a secure means of

REC TOP 10 GAINERS FOR THE MONTH  
November 2000 to December 2000

Company	Current Month	vs. Month Ago
Schlumberger Ltd.	\$79.94	29%
RSA Security Inc.	\$52.88	23%
Peregrine Systems Inc.	\$19.75	22%
Sabre Group Holdings Inc.	\$43.13	21%
Rockwell International Corp.	\$47.63	18%
Diebold Inc.	\$33.38	18%
Wells Fargo & Co.	\$55.69	17%
New BankAmerica Corp.	\$45.88	15%
Dun & Bradstreet Corp.	\$25.88	12%
Electronic Data Systems Corp.	\$57.75	9%

REC TOP 10 DECLINERS FOR THE MONTH  
November 2000 to December 2000

Company	Current Month	vs. Month Ago
Network Associates Inc.	\$4.19	-67%
Peapod Inc.	\$0.78	-63%
MessageMedia Inc.	\$0.44	-61%
V-ONE Corp.	\$0.63	-50%
BroadVision Inc.	\$11.81	-48%
CyberCash Inc.	\$0.81	-46%
Onsale Inc.	\$0.59	-44%
EarthWeb Inc.	\$7.38	-39%
Amazon.com Inc.	\$15.56	-37%
Compaq Computer Corp.	\$15.05	-30%

## REC STOCK INDEX

Company	Closing Price December 2000	Change Since November 2000	Change Since December 1999
Amazon.com Inc.	\$15.56	-37%	-80%
America Online Inc.	\$34.80	-14%	-54%
AT&T Corp.	\$17.25	-11%	-66%
BCE Emergis Inc.	\$44.10	3%	-43%
BroadVision Inc.	\$11.81	-48%	-79%
CheckFree Corp.	\$42.50	-19%	-59%
Cisco Systems Inc.	\$38.25	-20%	-29%
Citigroup Inc.	\$51.06	2%	22%
Compaq Computer Corp.	\$15.05	-30%	-44%
Concentrex Inc.	\$6.94	0%	N/A
CyberCash Inc.	\$0.81	-46%	-91%
Dell Computer Corp.	\$17.44	-9%	-66%
Diebold Inc.	\$33.38	18%	45%
Dun & Bradstreet Corp.	\$25.88	12%	79%
EarthWeb Inc.	\$7.38	-39%	-85%
Electronic Data Systems Corp.	\$57.75	9%	-13%
E*Trade Group Inc.	\$7.38	-8%	-72%
Ebay Inc.	\$33.00	-4%	-47%
First Data Corp.	\$52.69	-3%	7%
General Electric Co.	\$47.94	-3%	-6%
GTE Corp.	\$62.25	0%	-12%
Hewlett-Packard Co.	\$31.56	0%	-44%
Hyperfeed Technologies Inc.	\$1.56	-11%	-66%
IBM Corp.	\$85.00	-9%	-21%
InteliData Technologies Corp.	\$2.59	-8%	-38%
Internet Commerce Corp. (Infosafe)	\$13.31	0%	N/A
Intuit Inc.	\$39.44	-13%	-34%
MessageMedia Inc.	\$0.44	-61%	-97%
Microsoft Corp.	\$43.38	-24%	-63%
Microtouch Systems Inc.	\$20.89	1%	65%
Network Associates Inc.	\$4.19	-67%	-84%
New BankAmerica Corp.	\$45.88	15%	-4%
NTN Communications Inc.	\$0.63	-22%	-83%
Onsale Inc.	\$0.59	-44%	-96%
Open Market Inc.	\$1.09	-23%	-98%
Peapod Inc.	\$0.78	-63%	-91%
Peregrine Systems Inc.	\$19.75	22%	-53%
Rockwell International Corp.	\$47.63	18%	2%
RSA Security Inc.	\$52.88	23%	-32%
Sabre Group Holdings Inc.	\$43.13	21%	-16%
Schlumberger Ltd.	\$79.94	29%	44%
Sterling Commerce Inc.	\$44.13	0%	N/A
Sun Microsystems Inc.	\$27.88	-27%	44%
TheGlobe.com Inc.	\$0.28	-26%	-97%
V-ONE Corp.	\$0.63	-50%	-89%
Wave Systems Corp./Class A	\$4.50	-16%	-62%
Wells Fargo & Co.	\$55.69	17%	41%
Yahoo! Inc.	\$30.06	-24%	-86%
REC Index	\$1,348.93	-4%	-41%

N/A = was not trading publicly in December 1999

REC TOP 9 (AND ONLY) GAINERS  
SINCE A YEAR AGO  
December 1999 to December 2000

Company	Current Month	vs. Year Ago
Dun & Bradstreet Corp.	\$25.88	75%
Microtouch Systems Inc.	\$20.89	65%
Diebold Inc.	\$33.38	45%
Schlumberger Ltd.	\$79.94	44%
Sun Microsystems Inc.	\$27.88	44%
Wells Fargo & Co.	\$55.69	41%
Citigroup Inc.	\$51.06	22%
First Data Corp.	\$52.69	7%
Rockwell International Corp.	\$47.63	2%

REC TOP 10 DECLINERS SINCE A YEAR AGO  
December 1999 to December 2000

Company	Current Month	vs. Year Ago
Open Market Inc.	\$1.09	-98%
TheGlobe.com Inc.	\$0.28	-97%
MessageMedia Inc.	\$0.44	-97%
Onsale Inc.	\$0.59	-96%
CyberCash Inc.	\$0.81	-91%
Peapod Inc.	\$0.78	-91%
V-ONE Corp.	\$0.63	-89%
Yahoo! Inc.	\$30.06	-86%
EarthWeb Inc.	\$7.38	-85%
NTN Communications Inc.	\$0.63	-83%

conducting e-business using secure digital certificates," said Bob Pritchard, vice president of partner and corporate development at RSA Security. "By working together as part of the eToken Technology Partnership program, Aladdin and RSA Security can offer customers the ability to securely store their digital credentials on a mobile device and access them to conduct e-business transactions wherever they are."

Network Associates Inc. led the list of monthly losers, as its stock price dropped 67 percent in December to \$4.19 per share. The company said it expects to report this month a net loss of \$130 million to \$140 million for the fourth quarter of 2000. The company's revised expectations are due to the decision of key distributors to reduce their inventory levels dramatically and to the overall slowing of the economy.

"The company further believes that the lower fourth-quarter demand is not related to the general competitiveness of its products, but is due to concerns about the state of the economy from

the customer base," Network Associates said in a release. It also recently unveiled several senior management changes, including Bill Larson, who will step down as president and chief executive officer.

Other companies suffering leading monthly losses were Peapod Inc. (down 63 percent), MessageMedia Inc. (down 61 percent) and V-ONE Corp. (down 50 percent). MessageMedia last month unveiled a cost-reduction program designed to save the company \$3.5 million to \$4 million per quarter. These steps include reducing staff by about 100 positions in the United States, cuts in operating expenses and reducing inventory in certain product areas such as wireless and online customer care.

#### Dun & Bradstreet Has Good Year

Dun & Bradstreet Corp. (D&B) ranked first on the list of year-over-year gainers, with a 75 percent increase in stock price compared to December 1999. The company said it completed the first

COMPARISON WITH MAJOR INDICES  
November 2000 to December 2000

Index	December 2000	vs. November 2000	vs. December 1999
REC Index	1348.93	-3.6%	-41%
NASDAQ Composite	2470.52	-4.9%	-39%
Standard & Poor's 500	1320.28	0.4%	-10%
Dow Jones Industrial Average	10787.99	3.5%	-6%

phase of its financial flexibility program begun in October as part of its "Blueprint for Growth" strategy (REC, Oct. 17, 2000, p. 14). The plans include globalizing administrative functions, streamlining data collection and fulfillment, rationalizing sales and marketing functions, and simplifying technology.

"With the effective implementation of Phase 1 of our financial flexibility program, we are building the financial resources we need to invest in growth initiatives," said Allan Loren, chairman and chief executive officer of D&B. "Some of our financial flexibility will be selectively invested in our new [business-to-business] B2B strategy as we work to become an important player in B2B e-commerce." Other key year-over-year gainers were Microtouch Systems Inc. (up 65 percent) and Diebold Inc. (up 45 percent).

Leading the list of year-over-year losers was Open Market Inc., whose stock price plummeted 98 percent from December 1999. The company last month named Harland LaVigne its new chairman of the board of directors, president and chief executive officer. "I believe Open Market has significant potential," LaVigne said. "I intend to tap those strengths while infusing the company with new business practices and policies to better position us for market growth and profitability."

Other leading year-over-year losers were TheGlobe.com Inc. (down 97 percent), MessageMedia Inc. (down 97 percent) and Onsale Inc. (down 96 percent). TheGlobe.com also had a change in a key executive position as David Stonehill has become the new vice president of business and legal affairs.

---

## Studies Say Banner Ads Increase Site Awareness

While some industry analysts have scoffed at the effectiveness of banner ads due to low click-through rates, don't count this marketing option out completely. A recent study has determined that consumers are treating banner ads as something of an online billboard – they will see the ad and later will visit the advertiser's Web site directly.

Seattle, Wash.-based digital marketing firm Avenue A Inc., as part of its Digital Marketing Insights program, concludes that this type of indirect consumer conversions are called "awareness conversions," which can build brand awareness and woo customers.

In a pilot study with an online and offline marketer, Avenue A concludes that a client's online advertising campaign was directly accountable for driving a 10 percent increase in conversions. It adds that 80 percent of these conversions were from customers who did not click on banner ads, but rather converted later on the client's site.

"We believe this is a breakthrough study, providing confirmation for those marketers who have reaped the benefits of online advertising for the last few years, and offering proof of the medium's effectiveness for those who are considering it for the first time," said Diane McCowin, vice president of analytics for Avenue A.

Avenue A designated one test group to receive banner ads from the client, while a control group received ads completely unrelated to the client. It then counted the number of customers in each group that converted on the client's Web site, concluding that the online campaign drew more customers to the client's site.

## Search Sites Not a Big Draw

In a second study on online marketing, WebSideStory Inc. states that search sites refer only a small percentage of traffic to Web sites worldwide. The company's StatMarket service concludes that search sites accounted for only 6.86 percent of global referrals, while direct navigation and bookmarks together accounted for 47.01 percent of referrals, and Internet links drew 46.13 percent.

"This data shows two things: That most people already know where they want to go on the Web, and that Internet links, such as banner advertising and affiliates, still remain a very viable way to attract customers," said Geoff Johnston, vice president of product marketing for StatMarket. "This information may cause businesses to rethink the ways in which they acquire new visitors."

Avenue A: <http://www.avenuea.com>

WebSideStory: Contact Erik Bratt.  
Phone: (858) 546-0040, ext. 365.  
<http://www.websidestory.com>

## REC CALENDAR

- Jan. 17-19, Xtreme Wireless Technology, San Jose, Calif. Contact: Wireless Communications Association International, 1140 Connecticut Ave. NW, Suite 810, Washington, DC 20036. Phone: (202) 452-7823. <http://www.wcai.com>
- Jan. 21-24, EC 2001, San Francisco, Calif. Contact: EC2001 Registrar, c/o NACHA, P.O. Box 64193, Baltimore, MD 21264. Phone: (800) 487-9180. <http://www.nacha.org>
- Jan. 22-24, Mobile Commerce World Scandinavia, Stockholm, Sweden. Contact: Terrapinn Ltd., 2nd Floor, 100 Hatton Garden, London, EC1N 8NX, UK Phone: +44 0 20-7242-2324. <http://www.mobilecommerceworld.com>
- Jan. 29-Feb. 1, COMNET Conference and Expo, Washington, D.C. Contact: COMNET, P.O. Box 3884, Boston, MA 02241. Fax: (508) 759-4552. <http://www.comnetexpo.com>
- Jan. 29-Feb.1, Electronic Procurement, Tysons Corner, Va. Contact: I.T. Direct Inc., 11501 Sunset Hills Road, Suite 250, Reston, VA 20190. Phone: (703) 471-8520. <http://www.e-gov.com>
- Feb. 1-2, Cyberspace Law School, New York, N.Y. Contact: Glasser LegalWorks, 150 Clove Road, Little Falls, NJ 07424. Phone: (800) 308-1700. <http://www.glasserlegalworks.com>
- Feb. 12-13, Mobile Commerce Conference, San Jose, Calif. Contact: Key3Media Events Inc., 300 First Ave., Needham, MA 02494. Phone: (800) 325-8850. <http://www.key3media.com>
- Feb. 22-23, Cyberspace Law School, Santa Clara, Calif. Contact: Glasser LegalWorks, 150 Clove Road, Little Falls, NJ 07424. Phone: (800) 308-1700. <http://www.glasserlegalworks.com>
- March 6-9, CFP2001: The 11th Conference on Computers, Freedom and Privacy, Cambridge, Mass. <http://www.cfp2001.org>
- March 12-15, Web-Enabled E-Government, Tysons Corner, Va. Contact: I.T. Direct Inc., 11501 Sunset Hills Road, Suite 250, Reston, VA 20190. Phone: (703) 471-8520. <http://www.e-gov.com>
- March 19-20, Cyberspace Law School, Washington, D.C. Contact: Glasser LegalWorks, 150 Clove Road, Little Falls, NJ 07424. Phone: (800) 308-1700. <http://www.glasserlegalworks.com>
- March 20-22, FOSE 2001, Washington, D.C. Contact: Post Newsweek Tech Media Group, 850 Leesburg Pike, Suite 7500, Vienna, VA 22182. Phone: (800) 791-3673. <http://www.fose.com>
- April 2-4, Internet and E-Business Conference and Exposition, New York, N.Y. Contact: Gartner Group, 56 Top Gallant Road, Stamford, CT 06904. Phone: (203) 316-1111. <http://www.gartner.com>
- April 22-25, Payments 2001, Washington, D.C. Contact: NACHA Conference Registrar, P.O. Box 64193, Baltimore, MD 21264. Phone: (703) 561-1100. <http://www.nacha.org/conferences>
- May 7-10, Customer 360 Conference and Expo, Washington, D.C. Contact: Key3Media Events Inc., 300 First Ave., Needham MA 02494. Phone: (800) 325-8850. <http://www.key3media.com>
- May 14-17, CardTech/SecurTech 2001, Las Vegas, Nev. Contact: CardTech/SecurTech. Phone: (301) 654-0551. <http://www.ctst.com>
- June 4-8, JavaOne Conference, San Francisco, Calif. Contact: Key3Media Events Inc., 300 First Ave., Needham MA 02494. Phone: (800) 325-8850. <http://www.key3media.com>
- July 9-12, E-Gov 2001, Washington, D.C. Contact: I.T. Direct Inc., 11501 Sunset Hills Road, Suite 250, Reston, VA 20190. Phone: (703) 471-8520. <http://www.e-gov.com>
- Aug. 8-9, NetExpo Washington 2001, Washington, D.C. <http://www.netexpowashington.com>
- Sept. 10-11, Information Assurance, Washington, D.C. Contact: I.T. Direct Inc., 11501 Sunset Hills Road, Suite 250, Reston, VA 20190. Phone: (703) 471-8520. <http://www.e-gov.com>

Please send your conference information to Editor Jerry Ashworth by e-mail at [jashworth@tr.com](mailto:jashworth@tr.com) or by fax at (202) 842-1875.



### REPORT ON ELECTRONIC COMMERCE

1333 H Street NW, Suite 100-East • Washington, DC 20005-4707 • (202) 312-6100

**YES!** I want to subscribe to **REPORT ON ELECTRONIC COMMERCE**. Please send me 23 issues at \$745 a year U.S., \$910 outside North America. Include applicable taxes of 5.75% in D.C. or 7% in Canada.

Name \_\_\_\_\_

Organization \_\_\_\_\_

Street address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ ZIP+4 \_\_\_\_\_

Phone \_\_\_\_\_ Fax \_\_\_\_\_ E-mail \_\_\_\_\_

- Payment enclosed
- Bill my company
- Purchase order enclosed  
Purchase order no. \_\_\_\_\_
- Charge my credit card:  
 VISA    MasterCard    American Express
- Account no. \_\_\_\_\_ Exp. \_\_\_\_\_

Signature \_\_\_\_\_

To subscribe to **REPORT ON ELECTRONIC COMMERCE** call us toll-free at (800) 822-6338, fax your order to (202) 842-3023, fill out and return this coupon to the above address, or send electronic mail to [customerservice@tr.com](mailto:customerservice@tr.com). IREC