

## How Hot Is E-Commerce?

### Depends On Where You're Standing

**There's no shortage of e-commerce product and service providers. But can they measure up to all the hype?**

By Neil J. Morse

If you listen to the purveyors of e-commerce services, business is hot as a pistol. But research seems to shoot down that boast - or at least bring it down to earth.

Despite the fashionable penchant for affixing an "e" to their names and products, mortgage industry firms may be reaping far less revenue thus far from electronic sources than they had hoped.

Few borrowers are actually applying for loans over the Internet. Although surveys have found that more than 50% of the people who take out mortgages use the Web to research prices and terms, only 1% apply online.

Security concerns and difficulty in making the transaction electronically are the two main reasons given for this dramatic disconnect between initial contact and electronic follow-through.

Another previous stumbling block, the refusal of some states to accept electronic signatures as binding in online transactions, is being surmounted with a new federal law that takes effect Oct. 1 (see related story in Market Insight section).

That's not to say there is no money changing hands in the online milieu.

According to an e-commerce study published by Business Communications Co., Inc., the worldwide e-commerce market equaled \$208 billion in 1999. Growing at an average annual rate of 82%, the market is expected to total nearly \$4.3 trillion by 2004.

Overall e-commerce expenditures in the U.S. will increase from \$164 billion in 1999 to \$3,169.4 billion in 2004, representing an average annual growth rate of 80.8% for the period.

The most significant use of the Internet for business purposes has been the "B2B," business-to-business aspect of e-commerce.

Expenditures by companies who buy materials and services from other companies over the Internet is becoming well accepted and such expenditures in the U.S. will increase from \$142 billion in 1999 to \$3,012 billion in 2004, resulting in an annual average growth rate of 84.2%.

#### Who's watching?

Notwithstanding these robust growth forecasts, the public's concern about privacy is real. The central worry is about who will ultimately view personal information once transmitted electronically.

Online mortgage lenders say that they have resolved the matter of safely and securely transmitting loan application information over the Internet, thanks to encrypting - or descrambling - technology called Secure Socket Layer (SSL).

"SSL encryption is more than adequate for protecting a mortgage application during transmission," says John Tomko, senior vice

president of Internet development at Mortgage.com, Plantation, Fla.

He says financial information scrambled at a borrower's PC using SSL software built into the 1003 form can be descrambled only at the mortgage center. "128-bit encryption is so difficult to break, it is easier for a thief to rummage for receipts in a garbage can," Tomko says.

Bill Crane, vice president of engineering at E-Loan Inc., Dublin, Calif., admits that 128-bit encryption may seem like overkill, but it is necessary for online lenders to make clear to prospective borrowers that the technology is more than adequate to meet borrower concerns about safety and security.

According to Crane, a company called Verisign, Mountain View, Calif., spun off from security industry leader RSA Security, features a security program where the company comes in and verifies an online lender is who it says it is, and that the online lender is indeed employing the most elaborate security encryption devices to protect online borrowers. The online site can then display the Verisign emblem on its Web page as a reward.

Yet, hackers or disgruntled employees with a score to settle against the company still could steal the information off the server once it arrives at the mortgage center.

"It's easier for hackers to steal from a Web server than from an online transmission source," insists Tim Matthews, director of product marketing at RSA Security, San Mateo, Calif.

Peripheral protection using a firewall is imperative, he says, because it is the first and best line of protection for Web servers. They are put in front of Web servers to detect, intercept and shut down any illegal activity, and every server should have a firewall.

When information comes in from outside lines, he says, it is inspected using programming methods written into the firewalls such as those sold by Cisco Systems Inc., San Jose, Calif., including specific algorithms and authorized codes of people entitled to enter.

These lists also can help shut down spamming by keeping random, unauthorized e-mails from entering the server. The recent denial-of-service cases against several Web sites may have been due, in part, to unauthorized hits to the server, which caused it to shut

down rather than permitting infiltration.

#### Keep encryption

But beyond firewall protection, Matthews recommends keeping the information encrypted on the server. "If the firewall should get broken into, the information will still be encrypted," he says. This would protect against those from inside the company without authorization getting hold of the information.

Giving loan officers information they are entitled to while also keeping it out of the hands of employees not authorized to process loans, is often the responsibility of the network administrator running the computer room, says Carl Reese, vice president at Quickenloans.com, Mountain View, Calif.

Network administrators could provide passwords to loan officers at their desktops, which only they can use, he suggests. Passwords would be changed ever 30 to 60 days.

Access to computer rooms where sensitive data is stored must be limited, he continues. Network administrators need to know who is entitled access to these computer rooms. In some cases, he says 24-hour security guards and company badges with picture I Ds are needed for network administrators or loan officers to keep computer rooms secure.

#### System support

To draw more business from the Internet, First Union Bank has turned to technology from Xpede to "marry self-service with high-touch customer service," a company spokesperson says, adding that the system supports the bank's multiple channels, including consumer, retail and wholesale.

It provides instant lending decisions and "serves as a way to enhance customer relationships by capturing all the data on an individual online and servicing his/her needs based on that data," the spokesperson says.

Leveraging the new technology, First Union was able to develop this system, but under their own brand, so that "consumers feel confident that they are working with their trusted institution," the spokesperson says.

#### Meets specific needs

Another effort to "fully leverage emerging technologies" is being made by INTERLINQ Software Corporation, Bellevue, Wash. The company is expediting a major development effort, Project IQ, that will result in a series of flexible lending systems aligned with specific business needs.

As part of Project IQ, INTERLINQ will migrate its MortgageWare lending system to a new architectural platform that the company has been developing in anticipation of the emergence of e-commerce within the mortgage industry.

Jiri Nechleba, president and chief executive officer, says the company plans to spend \$3 million in the next year to speed the development effort.

"While we continue to evolve our current platform to facilitate the industry's emerging e-commerce capabilities these capabilities create a new set of demands," says Nechleba.

Mortgage lending is becoming less dependent on data entry and more driven by electronic data collection. Project IQ will allow us to meet lenders' needs for applications tailored to their business that provide standardized access to the information resources needed to complete a mortgage."

INTERLINQ is already working with Fannie Mae's and Freddie Mac's new Web-based systems, which enable lenders to electronically collect much of the supporting information required to close a loan.

**But not everyone is sanguine about "the e-commerce revolution." Russell A. Straub, co-founder and president of LoanBright, a new Dartmouth, Mass. Internet venture, says it has yet to exert its influence on the "labor-intensive and tedious mortgage origination process."**

**Straub says mortgage consumers can shop effectively online for interest rates and terms, but back office operations tend to be "highly fragmented and less automated."**

**LoanBright is marketing "Workflow Hub," which it hopes will bring together mortgage industry's participants to exchange information, conduct business, improve productivity and ultimately facilitate electronic fulfillment.**

**"By bringing together all of the players in the mortgage origination process, we can effectively provide mortgage brokers one-click access to the products and services offered by wholesale lenders, appraisers, mortgage insurance, title, and credit companies," says Straub.**

**In the future, Straub says LoanBright will pull together lenders, appraisers, title companies, credit companies and other industry vendors, to enable the local mortgage broker to process loans more efficiently and with greater accuracy.**

Another dissident voice is Matt Chapman's, chairman of Concentrex Inc., Portland, Ore., who contends that the financial community does not understand the risks posed by the dot-com revolution. "The risks represent extremely serious exposure to monetary loss as well as reputation," warns Chapman.

Concentrex provides access to insurance programs that manage risk through its Intelliportal Network.

(Ed. Note: Free-lance writer Doug Finlay contributed to this story.)