

# AMAZON TAKES ON IBM, ORACLE, AND HP

The Web retailer is offering its vast computing power to corporations—and big names are starting to sign up

By Peter Burrows

Jeff Bezos made a fortune building Amazon.com into one of the top players in online retailing. Now he's looking for new ways to cash in on the company's capabilities. One of the most intriguing, he thinks, is to move into the \$1.7 billion corporate computing market, where the Web's biggest bookstore aims to compete with IBM, Hewlett-Packard, Oracle, and Microsoft. "That's exactly what we're doing," says Bezos. "And it's working."

His approach is as unconventional as his strategy was when he started Amazon in 1995. The company won't be making computers or selling software to corporations. Instead it's offering companies the ability to tap into the

vast computing capabilities of Amazon's own data centers, in a manner almost as easy as buying the latest best-seller. Companies pay only for the computing they need, avoiding the cost of buying and operating their own gear. Amazon began the effort six years ago with startups and individual programmers, and more than 300,000 clients have signed on. Now, Bezos is pulling in larger customers, such as New York Times Co. and the Nasdaq stock exchange. "A lot of big companies are starting to believe," says analyst Sean Hackett of market researcher IDC.

The industry calls this approach "cloud computing." The idea is that tech capabilities should hover over everything, available whenever a user wants. Amazon offers a number of pay-as-you-go services, including computing power and data storage. Prices start at 20c an hour for the computing juice to, say, manage a small Web site.

Amazon is far from alone in the market. IBM, Hewlett-Packard, and Sun Microsystems have long offered cloud-like services. And on Apr. 7, Google took the first step toward opening its infrastructure to others. The company's AppEngine will let software developers create new programs and run them on Google's computers. The price will be tough for any rival to match: free. "Lots of developers say they spend 20% of their time [taking

care of their computers]," says product manager Tom Stocky. "It's a problem we've addressed inside Google, so we figured we might as well offer it up to the world." Google is one of the favorites to become a powerhouse in cloud computing because it already runs some of the largest, most sophisticated data centers.

All the activity may help cloud computing take off. As the economy slides, tech buyers are looking for lower-cost ways to get projects done. Amazon has made its service as-easy as possible so customers never have to contact a salesperson if they don't want to. "Our goal is that no one has to talk to us," says Amazon Vice-President Adam Selipsky. "For many companies, that's a very attractive thing."

Amazon still has work to do. It can't yet deliver the 99.999% reliability most big companies require for their most important tech needs. (Amazon promises 99.9% reliability for its storage service.) And brief outages, like one that took place on Apr. 7, don't help. "I'm not seeing anyone bet the farm on mission-critical applications yet," says Reuven Cohen, CEO of Enomaly, which uses Amazon's computing power to offer tech services to corporate customers. Amazon won't reveal its cloud-computing revenues, but one analyst pegs them at less than \$50 million.

Still, large customers are beginning to uncover the potential of Amazon's venture. At Nasdaq, researcher Charles Courbois wanted to offer the exchange's customers the ability to look back at historical trading data and dissect the information millisecond by millisecond. He figured it would have cost him hundreds of thousands of dollars to build the capability in-house. Instead he used Amazon—and has spent less than \$500. He has few customers so far, but he likes that Nasdaq doesn't have to worry about surging demand in the future. "Even if we have 100,000 users tomorrow, I'm confident Amazon can handle it," he says. **BW**

