Microsoft's $6 billion purchase of a major online advertising company announced yesterday underscores a core moneymaking strategy of the digital economy: watching you.

The deal would give Microsoft the ability to place ads on sites other than its own, as well as evaluate whether the ads are effective. It also would enhance Microsoft's ability to target advertising based on users' Web-surfing habits.

"I can sell the ad inventory for more because of the knowledge I have of users and their behavior on the Internet," said Yusuf Mehdi, Microsoft's senior vice president and chief ad strategist.

The deal would be the software giant's largest purchase, with Microsoft agreeing to pay an 85 percent premium over aQuantive's most recent share price. The deal caps a month of consolidation in the online ad market, which is expected to double in spending in the next five years, analysts say. Last month, online search titan Google announced a $3.1 billion purchase of DoubleClick, another major online ad software firm. Yahoo followed with the news that it was completing a $680 million takeover of the online ad company Right Media.

Microsoft, like Google and Yahoo, is betting that it can transform billions of clicks that reflect online user behavior into a revenue stream that was not imaginable a generation ago. Interactive advertising is a departure from traditional media like newspapers and television, which can only loosely gauge how many people have seen the ad.

"This acquisition validates the fact that targeted advertising is the wave of the future," said Curt Viebranz, chief executive of Tacoda, a behavioral-targeting advertising firm that is not involved with any of the deals.

Online ad targeting is an evolving science, and different firms use different methods. What they share, though, is a desire to make the ads that are served up more relevant to users, whether it's the right kind of car, airline ticket or baby clothes. Using Internet "cookies," unique alphanumeric strings of characters that identify a user's browser, online ad firms can track people's digital journeys as they go from site to site or click on advertisements.

Some consumer and privacy advocates say the growing ability to collect information online is eroding privacy. Companies such as Google, Microsoft and Yahoo already collect data about users through their e-mail accounts, search queries and online calendars. With their latest acquisitions, advocates worry, these Internet giants might be able to combine their data with the rich click streams gathered by ad firms to create detailed dossiers on Internet users that could be improperly used by the government or by merchants seeking...
to discriminate among customers.

Advertisers counter that the data are anonymous. DoubleClick and aQuantive say they give users the ability to opt out of having data collected about them, though privacy experts argue that few people know they have that option.

Viebranz said that the deals are not just about acquiring new advertising networks but that "a significant impetus is . . . to build a repository of data."

Tacoda, for instance, collects data on 145 million computer users in the United States who surf on the 4,500 Web sites that belong to Tacoda's advertising network. Using cookies, he said, "we're collecting a data point on every single page on all 4,500 of those sites. We're literally collecting 10 billion behaviors a day."

The aim of behavioral targeting is to prevent users from "getting bammed with direct-response ads for crummy products," said Scott Howe, president of DrivePM, an aQuantive subsidiary that helps 1,000 advertisers target ads across a network of 250 top Web sites.

DrivePM, for example, runs a successful campaign for a hotel chain that tracks users who visit the chain's Web site but don't book a room.

"Those are prime candidates for us to get back in front of and ratchet up an even more compelling offer," like discounts on price, he said. So if a user returns to any site in DrivePM's network in a three-day period, Drive serves an ad offering 10 percent off the next booking. Because so many people have then booked rooms through the site, he said, the advertiser's average cost for each reservation has plummeted.

The same goes for cars.

"We definitely know that people are likely to click over to a marketer's site as a result of behavioral targeting," said Anna Papadopoulos, interactive media director for Euro RSCG 4D, a digital ad agency with clients including Volvo.

Say an online shopper visits Yahoo Autos and looks at a Volvo XC90 sport-utility vehicle, she said. The shopper leaves the page, checks Yahoo e-mail, Yahoo Sports and Yahoo stock quotes and logs off. All his visits are tracked by a cookie, she said. Ten minutes or a day or a week later, when the cookie signals that he is back on Yahoo Sports, Yahoo's proprietary behavioral-targeting platform can serve an ad for the SUV on that site.

A typical advertising network has thousands of Web site clients. What aQuantive and other ad firms do is segment their Web site partners' audiences into categories of users: car buyers, health-food buyers, camping-gear enthusiasts. Advertisers can also segment further, based on geography, sex and other criteria.

DoubleClick allows advertisers to gauge the effectiveness of ads by seeing how many clicks were made on an ad of a specific size in a specific corner of a Web site in a specific hour.

In 1999, DoubleClick drew criticism when it announced plans to merge a massive offline database of consumer records with its online user-history database. The ensuing uproar and a 2000 Federal Trade Commission complaint led DoubleClick to cancel the plan.

Last month, the Electronic Privacy Information Center, the Center for Digital Democracy and the U.S.
Public Interest Research Group asked the FTC to investigate Google's data-retention policies in light of its proposed acquisition of DoubleClick.

Staff researcher Richard Drezen contributed to this report.