

ECONOMIC SCENE

The Internet is lowering the cost of advertising and searching for jobs.

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If you considered changing jobs lately, chances are good that you consulted the Internet to explore job opportunities.

The Internet is rapidly changing the way workers search for jobs and employers recruit workers. The resulting speed and ease of filling jobs have significant implications for unemployment, pay and productivity.

Internet job boards took off after Monster.com and HotJobs.com advertised during the 1999 Super Bowl. There are an estimated 30,000 job boards worldwide, ranging from Monster.com, which says it has 3.9 million resumes and 397,000 job postings, to more specialized job boards, like Accounting.Com and utah-jobs.com.

The arcane field of economics known as "search theory" is well suited for considering the economic impact of e-cruiting. The key concept is the "matching function," which governs the speed at which workers fill vacancies. Search costs slow down job matching, which contributes to unemployment and job vacancies.

Think of a game of musical chairs. Lower search costs are akin to playing the music faster, which enables players to find their chairs sooner.

The typical job board posts help-wanted ads or collects resumes; some do both. The cost of placing an ad on a job board is about 5 percent as much as the cost of placing a classified ad in a major newspaper for 30 days, and the reach can be as great or greater. Other advantages are that ads can be searched for listings in any desired occupation or location, and employers can continuously update and edit ads.

Job seekers can often apply for jobs simply by pressing a button that instantly zaps their resume to prospective employers. Some job boards match job seekers to job vacancies with computer algorithms, and automatically notify workers of potential matches via e-mail each morning.

Many employers, including Sprint, also find it advantageous to screen job candidates by administering employment tests directly on line, with the assistance of companies like eTest.net, a unit of the Management Psychology Group of Atlanta.

The bottom line is lower job search costs for both employees and employers, and less time required to fill a vacancy or find a job -- trends that are expected to continue.

Job boards are in part substituting for help-wanted ads placed in newspapers. The number of such ads usually increases when the unemployment rate declines, yet the Conference Board finds that newspaper help-wanted advertising fell last year, when unemployment reached its lowest level in 30 years. And the volume of help-wanted ads has been flat throughout the booming 1990's.

Unemployed workers were two-thirds as likely to surf the Internet to search for work as to look at traditional help-wanted ads, according to a new study of the December 1998 Current Population Survey by the economists Peter Kuhn

of the University of California at Santa Barbara and Mikal Skuterud of McMaster University in Hamilton, Ontario.

Who uses the Internet to search for work? Professors Kuhn and Skuterud found that 15 percent of unemployed job seekers and 7 percent of employed workers regularly used the Internet to search for a job. Among those with access to the Web from home, these numbers swelled to half of the unemployed and 15 percent of the employed.

The study also found a digital divide: 16 percent of white unemployed job seekers used the Internet to search for work, compared with just 7 percent of Hispanics and 9 percent of blacks. Among those with Internet access, however, blacks and Hispanics are more likely than whites to use the Internet for job searches.

More than a third of professional, managerial and technical unemployed workers used the Internet to search for work, compared with 5 percent of manual workers.

Surprisingly, although the Internet allows for faster and cheaper job searches, this might not lower unemployment. If workers can search for jobs more easily, they may become choosier and may require a higher salary before they will accept a job. Likewise, employers may become choosier and search until they find a more productive employee.

Implications for worker turnover are also ambiguous. On the one hand, many workers will be induced to enter the job market and switch jobs more often. On the other hand, if workers and employers invest more in learning about each other, presumably the quality of worker-job matches will improve, and resignations and firings will decline. Because many job boards are aimed at passive job seekers -- those who are not sure they want to move and who are not actively looking -- the former effect is likely to dominate.

One prediction is unambiguous: Productivity should increase as a result of lower search costs. This is good news because the labor market is dynamic, with more than 30 million workers and jobs turning over each year. The increased productivity would be divided by employees and employers in the form of higher pay and profit.

Although average pay is expected to rise, not all paychecks are expected to rise equally. Workers who settled for jobs paying less than they could get elsewhere should get a raise. Also, greater access to salary information over the Web should lead to more uniformity in pay. But Daron Acemoglu, an economics professor at the Massachusetts Institute of Technology, expects that a wider electronic job market will enable employers to replace less skilled workers who previously were hired because it was too costly to search for more qualified workers.

Professor Kuhn raises another concern: lower search costs could reduce the prevalence of long-term implicit contracts, which tend to spread risks and reduce wage dispersion.

Perhaps most important, those who lack access to the Internet job bazaar will suffer restricted job opportunities. The digital divide has been hard to bridge, and efforts to provide Internet access and search assistance are increasingly critical. One new effort that may play a valuable role is America's One-Stop Career Center System, the central focus of the Labor Department's employment and training network.