TECH COMPANIES AREN'T THE ONLY ONES COMPETING FOR TECH WORKERS

A broad swath of industries are hungry for employees in hot fields

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December 2, 2018

The tech-job openings at companies in the Management Top 250 say a lot about how innovative these businesses are. They also speak volumes about the digital transformation taking place in nearly every nook and cranny of the economy.

Some of the biggest recruiters of people with robotics expertise aren't just tech outfits or manufacturers, for instance, but also banks and real-estate firms. Auto makers and a slew of Silicon Valley firms are hiring autonomous-driving technicians, but so is insurance giant Allstate Corp. And health-care company Johnson & Johnson has been recruiting experts in three-dimensional printing—touted as the next revolution in manufacturing—to develop customized orthopedics and surgical tools.

This year's Management Top 250—a ranking of the most effectively run companies based on the principles of the late management guru Peter Drucker—incorporates a new indicator to arrive at its management scorecard: data from labor-analytics firm Burning Glass Technologies on the number of cutting-edge tech jobs posted at major U.S. companies. These include positions in blockchain, artificial intelligence, augmented reality and other emerging technologies expected to change the way we live and work.

The Drucker Institute, which compiled the ranking, uses the Burning Glass data along with other inputs to gauge how companies measure up in one of five performance metrics: innovation. On its own, the data lays bare how a broad swath of industries—not just high-tech firms—are competing for employees skilled in hot fields, from the so-called Internet of Things to drone technology.

Allstate, for instance, posted more than a dozen jobs related to autonomous-vehicle technology in the 12 months ended in June, according to Burning Glass. The company has a self-driving-car research project with Stanford University, and is also exploring the technology on its own.

Howard Hayes, senior vice president of product innovation at Allstate, says that as self-driving cars move closer to reality, the insurer has a huge stake in understanding their safety and financial-risk implications—and in helping to make them safer—as it builds insurance products around them. To do so, its researchers need computer-vision, engineering and other driverless-car expertise.

"We feel the insurance companies of tomorrow will have to have an engineering relationship with these car makers," says Mr. Hayes, who adds that the insurer's autonomous-vehicle research teams will likely expand as the technology advances.

JPMorgan Chase & Co. advertised hundreds of job openings tied to robotics over the same 12-month period. The bank applied robotics to an AI platform it rolled out last year to

execute trades across its global equities algorithms business, and is using the technology to help automate other processes. American Express Co., which advertised dozens of jobs with robotics know-how, says one of the areas where it's using robotics is in automating some customer-service functions, such as credit-card upgrades and the account-balance and reward-point transfers they require.

Jones Lang LaSalle Inc. the global real-estate firm that now goes by the name JLL, has also posted hundreds of jobs for robotics engineers, technicians and mechanics and people with expertise in the Internet of Things, which enables everyday objects—from heating and lighting systems to household appliances—to be connected to computing devices. Robotics are playing an increasing role in the company's facilities-management business, for instance, helping warehouse operators better utilize floor space and move products to be prepared for shipping, says Doug Sharp, president of JLL's corporate solutions. Wireless sensor networks connected to the internet, meanwhile, can enable clients to consume electricity more efficiently, he says.

"Building engineers used to be walking around with a wrench to investigate problems. Now they are sitting behind a screen, adjusting components," Mr. Sharp says. "I need a new level of engineer who is capturing that data."