usatoday.com

The sexiest job of the 21st Century? Data Analyst

by CHRIS MORRIS, SPECIAL TO CNBC.COM | JUNE 8, 2013



High demand for data analysts may make it the new sexy career path.(Photo: Thinkstock)

Looking for a career change or a college major that's all but guaranteed to result in a hefty salary with copious benefits? Big data may not seem the obvious choice, but it could be your best.

With more and more companies using big data, the demand for data analytic specialists,—sometimes called data scientists, who know how to manage the tsunami of information, spot patterns within it and draw conclusions and insights—is nearing a frenzy.

"It is one of the [most] sought-after positions," said Rob Bearden, CEO of Hortonworks. "The desire on the enterprise side to find truly qualified data scientists has resulted in almost open headcount. It's probably the biggest imbalance of supply and demand that I've ever seen in my career.... The talent pool is, at best, probably 20% of the demand."

That imbalance is a boon for job seekers. Qualified big data analysts command impressive salaries. Bearden said someone right out of school can earn \$125,000, while someone with a year or two of experience and a demonstrated skill set can easily make double that.

With interest in big data increasing exponentially, many experts fear that U.S. companies will be unable to keep up with international competitors. And workers' awareness of the job's generous salaries and extras makes it more difficult to find truly qualified people.

"People are slapping buzzwords on résumés and looking to get 50 or 100 percent more, and they're getting it," said Scott Gnau, president of Teradata Data Lab. "There are a lot of folks who can spell Hadoop and put it on their résumé and call themselves data scientists, and nothing can be further from the truth. We need, as an industry, to get that term defined."

MORE: Cyberthreats: Welcome to the New Cold War

MORE: Ex-Zynga Employees Tell All on Reddit

MORE: <u>10 Most Innovative Small Businesses</u>

While the "data scientist" title is somewhat all-encompassing now, Gnau expects that three specialty fields will emerge soon: technologists, who write the algorithms and code to transverse the large amounts of data; statisticians and quantification experts; and artist-explorers, creative people who can navigate content and find something others don't see. Each area will require specific training.

"You're going from managing mildly complex data sets and volumes that are very structured [today] to sort of the Wild West of data," Bearden said. "It's high velocity. The volume is extraordinary."

While some universities—including Arizona State, Oklahoma State and the University of Georgia—offer programs with a big data focus, those students won't enter the workforce for several years.

Some labor experts say that could be too long, given the deluge of big data opportunities now as well as on the near-term horizon. Some herald immigration reform as a potential silver bullet, but the issue remains a minefield.

"We're woefully underprepared for what's to come," said John A. Challenger, CEO of Challenger Gray & Christmas, an outplacement

company. "If we were smart, not only would we be focusing on encouraging the best technologists in school to go down this path—with programs designed and incentivized—we would be fighting to become the place where the brainpower of the world wants to come to live. Instead, with our visa programs, we make it difficult."

That need for capable employees is part of the reason Facebook formed a political action committee to lobby Capitol Hill on the issue. But the matter's not likely to be settled soon, so employers in need of data scientists have to search elsewhere.

For many companies that means retraining analytical workers to better understand and parse big data. And in many cases, the quickest way to achieve that is to develop new tool sets.

"We need to expose this data to a larger group of knowledge workers," Gnau said. "There are hundreds of thousands ... who understand traditional tools. If we can demystify big data and make their existing tools work in this, we can increase the supply chain. ... We really don't have a choice."

One company focusing on that area is Tableau Software, which specializes in building tools that let people without background in specialized data analysis search for big data trends.

"With the right tools and right culture, regular people can answer those questions themselves," said Elissa Fink, chief marketing officer at Tableau Software, which has been the tech sector's biggest IPO of 2013, and after an initial public offering price of \$31 has traded as high as \$59."We are becoming a data- driven culture, and saying, from the top down, 'We're going to be data-driven,' is going to be critical."

There is a danger in training existing analysts to parse big data: They immediately become more attractive to recruiters and competitors. It's a corporate catch-22.

"If companies invest heavy dollars in training people when there are too few people for the jobs, they're stuck," Challenger said. "Because there is

so much demand, people walk to other places, and companies are often forced to put in people who are less talented because they have no choice and need to get the work done."

Maybe in the not too distant future, a new breed of big data analysts will figure out a solution to that problem—and get a better job offer as a result.

© <u>CNBC</u> is a USA TODAY content partner offering financial news and commentary. Its content is produced independently of USA TODAY.

Original URL:

http://www.usatoday.com/story/money/business/2013/06/08/sexiest-job-data-analyst/2401315/