

MASTER'S NOTEBOOK

Navigating Work Force Trends in the Human Age

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The job market today is much different than it was a decade ago, and employers and job candidates need to be aware of the work force trends affecting society. This is particularly true for statisticians, because we see an increasing demand for individuals with data analysis skills.

Despite high unemployment, there is a pervasive talent mismatch, and employers cannot find people with the skills for mission-critical positions. This puts the issue of talent at center stage as we enter what we are calling the Human Age—an era in which people with the right talents and skills are critical to business success. Understanding how to navigate work force trends is vital for employers and job seekers alike.

Many years ago, when I was a graduate student, I enjoyed the big parties that Trilogy Consulting hosted at ASA meetings. I was just entering the job market and, besides the free food, I was interested in the networking opportunities these gatherings provided. Today, Trilogy is known as Experis, and I play a key role in the Business Analytics Practice. We still place statisticians, statistical programmers, and other professionals in our centers of excellence and with clients across the United States, but today's job market is definitely not the same.

From staffing to IT to professional occupations to management, there are four trends that affect how individuals and employers make hiring decisions. ManpowerGroup has identified these as technological revolutions, individual choice, the rise of customer sophistication, and a demographics/talent mismatch.

Technological Revolutions

It is clear that our tools, communication channels, and information access are rapidly evolving as the JSM 2012 theme—Statistics: Growing to Serve a Data-Dependent Society—shows. I'm chairing a session titled "Remote Statistical Consulting," in which 'remote' is becoming less meaningful every year.

Individual Choice

The 'fight' for talent is intensifying. Attitudes about work are shifting, and the rules are being rewritten. Individuals have greater choice in where they work, which puts the pressure on employers to consider employees as individuals in order to attract, engage, and motivate.

Rise of Customer Sophistication

With customers having greater and immediate access to information, businesses must deliver greater value for less. How often have we heard that? This rise pushes employers to consider new approaches to work force management and to instill a culture of innovation.

Demographics/Talent Mismatch

These trends give rise to a mismatch between what employers are looking for and what talents are available. Emerging markets, aging populations, and antiquated educational and training programs have made talent harder to find and the key differentiator.

Our world of work differentiates itself from previous eras because the current ability to optimize human potential is a key competitive factor. Also, talent is scarcer than ever. Some facts to consider include the following:

1. According to ManpowerGroup, the demand for labor will outstrip supply by almost 18 million people by 2020.
2. Ninety percent of employers experience difficulties filling mission-critical roles because of candidates' lack of necessary skills and experience, insufficient qualifications, or a lack of soft skills, according to ManpowerGroup.
3. In the U.S., employees eligible for retirement are outnumbering their teenage counterparts for the first time in more than 60 years, according to a July 2008 *TIME* article.
4. According to the Pew Research Center, 10,000 baby boomers began turning 65 every day starting in 2011, and this trend will continue for the next 19 years.
5. Eighty-four percent of employees are actively seeking a new position, according to a 2010 Right Management survey.

These facts are broader than our particular profession, but they are just as true. It's an exciting time to be a statistician. As other Master's Notebook columns have shown, there are many opportunities in many fields, and that's true even if you're not a statistician. Maybe you're a marketing scientist, data scientist, analytics engineer, or analytics developer.

These are some of the nonstandard titles that our Business Analytics Practice is seeing.

Now, add to that excitement the reality of the Human Age and what do you have? The Bureau of Labor Statistics projects the number of employed statisticians (ignoring the other titles, it seems) will grow by almost 3,000 between 2008 and 2018. Most of these statisticians will have a master's degree. Is that good or bad for us as employees? Given the facts above, particularly with so many people retiring, it means the job market is very good. It's very good today, too.

CareerBuilder.com defines labor pressure as a "ratio used to estimate the difficulty in acquiring talent by comparing the supply and demand for the position. ... [A] lower number indicates that there is less supply to satisfy the demand." For the title "statistician," they calculate the labor pressure over the last six months, roughly July 2011 to January 2012, to be 0.2, which makes it difficult for employers to find the right candidates. (This number includes some, but not all, positions related to statistician such as biostatistician, senior statistician, statistical analysis manager, and even the ever-popular "ultimate hoops statistician.")

If you're a master's statistician and trying to find a job, what does all this mean for you? It means your prospects are very good, especially if you're willing to be flexible. Because of the rise of

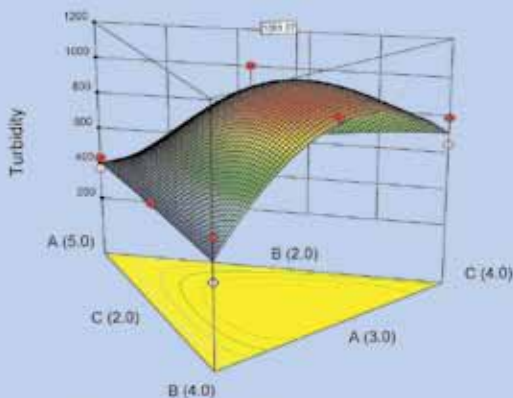
customer sophistication, employers have to be more selective in who they hire. Erin Tanenbaum's interview in the July 2010 issue gives some insight into what two hiring managers look for. The National Association of Colleges and Employers tells us that employers want analytical, computer, problemsolving, and technical skills, all of which we statisticians can easily provide. They also want strong communication skills and work ethic, teamwork, initiative, flexibility/adaptability, and interpersonal skills. As statisticians, we also have to be able to understand and communicate with the business we are supporting. The Individual Choice trend shows us that we have more power in finding the right fit. We just have to realize it's a two-way street.

Sometimes, that flexibility is geographic, as Beth Elston tells us in the November 2011 Master's Notebook. Technological Revolutions make it much easier to telecommute today, but companies often want that only for their experienced employees.

Demographics/Talent Shortage emphasizes that the difficulty for employers is finding the right people with the right skills in the right location for the right salary. With the career outlook we have, a little bit of flexibility and preparation will put you in that right fit.

If you would like more information about the Human Age, please visit <http://manpowergroup.com/humanage>. ■

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