

How is Working in Industry Different than Working in Academia?

Learn what habits bring success in the 'Real World'!

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Tools for Building a Rewarding Technical Career

If you want to ace a job interview for that perfect private sector job, you need to understand what bring success in that environment. Armed with the right information, you can tell stories about your experience that will convince a hiring manger you have what they need!

Here are 5 critical ways that working in industry is different than the academic world of research. Master these points, and incorporate them into your daily habits, and you will be on your way to an awesome career in the private sector!

| | What matters in academia: | What matters in industry: |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Creating Knowledge Research is all about creating new knowledge. This is clearly seen in the primary metric for a research professor, the number of journal publications they produce. This is considered a measure of how much new knowledge they have created. | Creating Profit Companies exist to make money. Behind every company are investors looking for a return. Making sure your work always improves the bottom line by either increasing revenue or reducing costs is the best approach to job security. |
| 2 | Achieving Complete Understanding When you are creating new knowledge, it is important to fully understand what you have discovered. If you are a graduate student defending a thesis, your committee will want to see that you fully understand the problem you claim to have solved. Journal referees look for similar evidence of understanding. | Achieving Fast Results In industry, results are what matter most. Results lead to revenue, which leads to profit. Because earnings are so important, results are tracked with project schedules and intermediate milestones that need to be met on time. Detailed project plans of this sort are far less common in an academic setting. |

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| 3 | <p>Demonstrating Thoroughness</p> <p>In academia, understanding is necessary, but not sufficient. There is also a clear expectation that you have covered all of the relevant aspects of the problem, or at least that you will in the near future.</p> | <p>Demonstrating Efficiency</p> <p>In industry, any effort beyond what it takes to achieve the desired result is wasted time and money. Results are clearly defined by specifications so that the development team knows what is 'good enough' and when to move on to the next task.</p> |
| 4 | <p>Being the Expert</p> <p>Success in academia is about building a career around a particular research area and becoming an expert in this field. This is clearly seen by considering the Nobel Prize, considered by most to be the pinnacle of an academic research career. This prize is awarded to researchers who have developed an expertise over a long period of time and stand out in a field.</p> | <p>Building a Team of Experts</p> <p>Building expertise is slow, so being an expert is not as valued in industry. Fast results require finding others who already know what you need, and building a team to work together towards a result. Also, companies will frequently pivot into a new technology area where new expertise is needed. Being skilled at finding experts is a much more scalable skill than simply being an expert.</p> |
| 5 | <p>Proving with Enough Data</p> <p>Research is about proving theories with sufficient data to be certain of the results. Having enough data is an essential aspect of the scientific method, but it is time consuming. This is one of the reasons that science research proceeds slowly. Speed is traded for certainty, but certainty is the goal.</p> | <p>Making Good Decisions with Limited Data</p> <p>In industry, projects must stay on schedule to ensure customers are satisfied and earnings are met. Leadership in this environment often requires a decision to be made without the luxury of having time to collect all the data one might like to have. People who can make decisions on limited information are the ones who move up to leadership roles. You will never have as much information as you would like, so learn to decide and move on. I recommend early career professionals learn to 'Just make a decision, and then work to make that the right decision'!</p> |

If you are thinking there must be more to it than these short descriptions, you are right! I give a seminar with the same title where I elaborate on these 5 points and include lots of stories to make them much more accessible.

If you are interested in having me come speak to your university or group, contact me at dgiltner@TurningScience.com, or visit my website <http://TurningScience.com> for more details.