That's only the first step. You have to keep your priorities straight to get the rest of you inside—and to stay there.

by Ron Rorrer

There's a funny thing you discover early about entering the real world: Industry isn't like college at all. For instance, you don't pay them; they pay you. And projects don't terminate with the semester.

Another fundamental difference is that engineering classes typically focus on technical knowledge with little consideration of written or oral communication. In industry, the order of importance is reversed. It goes oral communication, then written communication, and finally technical expertise. If you are attending one of those colleges that are killing you with either technical writing or, even less common, presentations, you should find the people responsible and thank them. This will be more important to you upon graduation than technical capability.

We are operating under a new world order. Twenty years ago, a competent engineer could expect to work for the same employer for an entire career, if one chose to do so. An engineer entering the profession today may have a new employer every three to five years. As someone once said to me, "If you are an engineer in a company, there is an accountant somewhere trying to put you out of work!"

But before you concern yourself with changing jobs, you need to get the first one.

INTERVIEWING SKILLS

Getting a job starts with an interview. Someone has read your résumé and is interested in seeing you. What should you do now?

First, research the company. Know something about what it does.

Second, dress appropriately. Dressing appropriately usually means dressing slightly above the level of the people with whom you will be interviewing. You have dressed appropriately when your potential peer group is ribbing you about how uncomfortable you must feel.

Expect to interview with your potential direct supervisor and peer working group. Be prepared to state what you want to do and how much you expect to make doing it.

Don't forget to take your senior project to your interview. It lets people see the level of work you have done. I have hired recent graduates based on their senior design projects. On one occasion, I realized that the interviewee could write better than 75 percent of the engineers that I worked with. Not only that, just by flipping through the design project, I realized that the student's logical thinking was probably superior to the majority of engineers in my division.

IT FEELS RIGHT

When an interview leads to a job offer, how do you know whether to accept it or turn it down? Often you can
trust your gut.

Each company has its own character and ethics. It is best to find a match between you and the company. Companies will hire based upon this match. Ignore what the company says in the annual report or in national publications. How do they really operate? If the president is unethical, the company will be unethical. This is the real trickle-down theory.

Companies have a distillation process that occurs over time. A company tries to hire people who will be a good fit and help the company achieve its goals. When you look at employees who have worked at a company for 15 years, realize that they are there because they fit the mold. If you are impressed by these individuals, you will be impressed by the working environment at the company.

Sometimes you feel uneasy about a company. You may not be able to articulate why, but know that you do.

You get a loud warning when you tell friends or relatives about some of the things that a company wants you to agree to and they ask you if you are insane.

While you can actually take a great job with a pay rate below the national average, the majority of the time when someone does that it is a mistake. Often a substandard pay rate is indicative of other issues in the company that do not bode well for your long-term success there. Average starting salaries for engineering graduates vary, but most range around $50,000 a year. The average for mechanical engineers is just over $48,000.

There are other considerations. Reasonable benefits can outweigh differences in pay. Or, you may be faced with a job that pays well, but the work is below the level of your abilities. The mismatch can affect your success in the company and your ability to obtain a better position if you leave in the future.

One thing that I recommend to people is to visualize the work they want to be doing in 10 or 20 years. Then you can evaluate how the offered position contributes to your long-term path. This is slightly different from visualizing yourself working there.

SUCCEEDING IN YOUR JOB

You either need to be motivated or appear to be motivated at work. Show some initiative.

Some people think that they are showing initiative by showing up to work. That is not what I mean here.

Let us examine a hypothetical case. It is your second month on the job and you still don't know what the hell is going on and your boss leaves for a two-week business trip to Europe followed by an additional two weeks with her significant other. You have not been there long enough to figure out what to do to fill your time. You are really not prepared to go a month without having someone tell you what to do and how to do it.

The typical response in this case is to waste the time, call your college friends at their new jobs, surf the Internet, and take very long lunches.

Why don't you consider taking another tack? This is primo time to learn about the company and other people within the company without your boss's bias. The point of this exercise is not to try to prove anything to your boss, but to show some initiative by learning something that you wouldn't typically learn about.

Practice exceeding expectations. Actually exceeding expectations is typically the highest performance rating during the review process. Most people asymptotically approach expected results. Only about 5 percent will exceed, if possible, the set expectations.

THE BOTTOM LINE
What is the most important thing to a company? It is that you contribute to the company's short-term and long-term well-being. It is not important that you are the brightest bulb in the box or anything else unrelated to the company's well-being. A lot of people don't understand that. They look around at others and say, "This person is not as talented as I am. But the company appreciates them more." I have heard managers make these comments.

In the grand scheme of things, if an individual is contributing more to the bottom line than you are, then he is the more valuable employee. Managers are not like your mom. The company has a real simple test: Are you contributing or not?

Here is a list of things that you should consider for your first year on the job: Do not take political sides in the company; soak up everything that you can learn, technical, political, etc.; socialize with the other new hires (After all, if you all go the distance, you and your compadres will be running the show one day), and don't think that the corporate happy hour is the same as your college happy hour.

Another thing: Don't play video games. Let's say you only play for five minutes a day, a minute now, a minute then, and that's all. To the casual observer wandering through your area, it can appear that you play video games all day long. Now that doesn't mean you are less of a screw-off than those people who read magazines or newspapers. But from a distance it's not clear whether they're reading Cosmos or Widgets Are Us. With the video game, it's pretty clear that you're not working. It's funny there are certain things that seem better than others, and video games are not on the list-unless you are working at a computer company and playing video games shows that you just love computers.

It cannot be stated enough that playing well with others is perhaps the most important thing in your job. It actually tops oral and written communication. And, frankly, it is the one thing that most of us have trouble doing. I know I struggle with this at times. Of course, you realize it is always the other person's fault and not yours!

Many people make the mistake, too, of thinking that they have to be a genius to succeed. It hasn't been the case at any place I have ever worked. Actually, most managers are not Einstein and they would probably prefer that you not be. It is too intimidating for them, and I have seen individuals not hired because they mentally intimidated the manager.

You should treat everyone in the company with the same level of respect. The staff assistant deserves the same respect and deference that you show to the vice president. (It typically does you minimal good to suck up to the vice president, anyway. The line can be hundreds of individuals long, and more often than not the vice president doesn't give you anything for it.)

The most probable job opportunity that you will have after your current position is either with another group in your company or with one of your suppliers or customers. If you treat everyone with the same level of respect, you will have a much more enjoyable career and certainly more career options.

Think of work as if you and the other employees were attempting to move a massive block of granite, inch by inch. If you are willing to help everyone else shove this massive block, regardless of whether or not you understand with the direction, you are an asset. However, if you won't do your share, you are a liability. You should contribute to the company's short-term and long-term well-being.

Remember that regardless of your inherent talent, especially technical, if you contribute in a positive way to the company's bottom line, you will be successful.

Starting Salaries for Undergraduate Engineers

<table>
<thead>
<tr>
<th>Degree</th>
<th>Average Starting Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mechanical</td>
<td>$48,578</td>
</tr>
<tr>
<td>Electrical</td>
<td>$51,124</td>
</tr>
</tbody>
</table>
Computer  $51,297  
Chemical  $52,539  
Civil  $42,056  

Source: 2004 Survey by the National Association of Colleges and Employers, Bethlehem, Pennsylvania.

Ron Rorrer is an associate professor of mechanical engineering at the University of Colorado at Denver and Health Sciences Center.