CHAPTER **10**

HOW NEW GRADUATES CAN SUCCESSFULLY TRANSITION INTO INDUSTRY

If you recently graduated from college and joined a company, everything may seem quite different and not at all what you expected the industry job would be like. You may find it difficult to comprehend how your new company does business and what exactly your job is. If you are experiencing this, don't panic—you are not alone. Nearly every new graduate experiences this. The underlying reason for this is the fact that a university has a different set of operating rules than industry. And consequently the change in going from the university to industry is accompanied by learning a new set of rules, which often results in culture shock for a new graduate. The objective of this chapter is to share actions a new graduate can take to successfully leap into industry ahead of others.

HOW THE RULES OF THE GAME CHANGE IN INDUSTRY

The basic rule books for the university and industry are very different as Figure 10-1 suggests. To illustrate the point, let's look and compare some of the basic rules that govern university and industry and show the differences and how you need to adapt.

The first rule in industry is that your boss is not your advisor. Many students enter industry under the assumption that the boss is there for them just like their university advisor was. Don't assume the boss will be there looking out for your career and interests just like your university advisor did. This is simply not the case. The boss does not have time to guide and support your career like the university professors did. The boss is not there to make you successful, that responsibility is primarily yours.

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FIGURE 10-1 University and industry rule books are different.

Career Tip. Be prepared to learn a completely new operating system during your first years in industry.

The primary focus of a boss is to ensure products get developed and the company makes a profit doing it. If you are unable to perform, the boss should provide guidance and support to assist you. If you are still not successful, the boss is there to terminate your employment and get someone who can perform.

A critical change in going from the university to industry is how differently each operates. The analogy is similar to a computer operating system. The engineering knowledge you learned at the university is stored on your hard drive (mass memory) by the university operating system. University operates on a set of rules that dictate how you access the information and share it with others: how to register for classes, take tests, complete assignments, and which classes to take to obtain a degree.

The first thing industry does is replace your university operating system with a new industry operating system. Hopefully in doing so, the technical engineering information is not erased but only shows how you access this information differently. Industry has quite a different operating system with new commands and windows, most of which you have never seen before. Industry's goal is to get you quickly transitioned from the university operating system to the industry operating system. The faster you change over and become efficient with the industry operating system, the more you grow and your assignment becomes more challenging in nature.

Another very significant rule change between the university and industry is how work is accomplished. Most of the work in industry is done by teams of

engineers and not individual efforts like at the university. This means in industry you rely on others to be successful, to perform tasks, so the whole team is successful. An analogy to illustrate the difference is to consider how an industry team would take a final exam. At the university, every student is required to complete a final exam solely on their own. In industry, the team would meet first and discuss the questions, then assign questions to members of the team to complete. If a person becomes stuck on a particular question, they would be expected to seek out graduate students to quickly help get the answer and report back. The team would complete the final exam together by sharing input from all members.

Another striking difference between how the university and how industry operates is how final grades are determined. In industry everyone on the team would receive a final grade equivalent to the lowest score of any individual of the team. In industry, if the team fails to deliver a good product and the company cannot sell it at a profit, the product and the entire team's effort will be considered a failure and everyone would receive a failing mark. This is equivalent to everyone in a university class getting the grade of the lowest test score in the class. One student may ace the final exam, however if other students failed, the student who aced the exam would still get a failing grade. In industry, the analogy would be one part of the product can be very successful, but if another part fails, then the whole product is considered a failure. For example, the electrical design of an IPOD may be outstanding but if the battery fails, the product is still considered a failure without a good battery. All team members must be successful in industry for the team and the product to be considered a success.

Career Tip. Learn what it takes to be a good team player and how work gets done on teams.

In industry, sharing is rewarded and helping others is encouraged. To illustrate this point, let's compare what happens to a student who runs into a problem in a final exam at the university and a problem in industry. If the student is taking a final exam and does not know the answer to one of the problems, what would happen if during the exam, the student leaned over to a classmate in the middle of the exam and asked how they got the answer? Well, the university would probably expel the student from the class.

In industry, just the opposite is done. Industry rewards students who ask for help in order to get something done correctly and quickly. In industry, time is money. The sooner you get something done and correctly the first time, the less it costs. So getting help and correctly fixing problems is often rewarded in industry.

Another important difference to consider is that in industry, no one tells you the rules or exactly what should be done. At the university, the professor usually identifies for the students the number of quizzes, mid-term, final, and homework assignments required. A class syllabus is distributed showing the text and chapters to be covered. A class time and location is published. Nearly everything necessary to successfully complete the class is given in advance and the student needs only show up for class, study, complete the assignments, and pass the tests. In addition, student help is provided when problems arise.

Career Tip. Learn the industry rules and what is expected of you.

Compare this to industry where the rules for completing an assignment are in constant flux and the engineer must determine what needs to be done to successfully complete assignments. Industry is a highly dynamic environment and the engineer must be able to successfully complete assignments while in a constant state of change.

As a boss once put it, "If I have to tell you what has to be done then I have the wrong person for the job. It is your job to figure what has to be done and get it completed successfully."

Other very significant differences between the university and industry, which new graduates often have a tough time handling, are the lack of feedback on performance and the long time for rewards or recognition to occur. In industry, employees receive very little feedback on their performance when compared to the feedback given by the university. Each week students receive feedback on their performance via quizzes and tests. Final examinations are often graded within a day, and several days later the final grades are posted. The reward or recognition for taking the course is given within days of completion and always before the next class is taken.

Compare this to industry where feedback on job performance is given usually once a year and sometimes even longer. The success of a project is not realized until the product has gone to market and is a great money maker for the company. This is often months after the product design was completed. Company rewards are usually given 6 to 8 months after completing the assignment. Can you imagine what students would do if they found out the grade for their class 8 months after completing the final? Or what would students do if they received feedback on how they were doing in classes only once a year? When a new graduate comes into industry, they usually expect weekly feedback and rewards immediately.

WHAT TO DO YOUR FIRST YEARS IN INDUSTRY TO GET AHEAD QUICKER

The first realization you must come to grips with is that you are no longer at the university and nearly all the rules have changed. You no longer have university professors and advisors helping you out and the burden for your success rests solely on your shoulders. You must take control of your career and develop a plan. Here are some survival tips for your first years in industry [1,2].

The very first day or week on the new job, ask your boss or lead engineer for a "Buddy." A "Buddy" is a coworker who you can go to when you need help, it is NOT your boss. Since everything is so new and different you will be asking questions most employees have figured out the answer to many years ago or seem obviously simple. You do not want to ask your boss these types of questions; it may not give the right impression.

Having a buddy to go to allows you to ask simple questions. The buddy should guide you through the rules and processes of the company similar to what the university advisors did.

Career Tip. Ask for a "Buddy" or Human Resources department to help you learn the company rules.

The next major task is to meet all the people you can. You should meet at least all the people in your workgroup. These are people who you will be working with on a daily basis and who will be providing feedback to the boss on your performance. Find out what their job functions are and what tasks they are responsible to accomplish. Learn what is important to the department and how performance is measured.

The next step is to network at all the meetings you attend. Meet and greet everyone in the meeting. Make sure you introduce yourself and spend as much time as possible learning about what they do in the company. Let these people know you are new and appreciate any help or advice they might have. If necessary, follow up with key people after the meeting to learn more. Make sure you get a company business card and pass them out. Ask people for their business card or contact information, so you have a means of following up in case you have questions. Remember to make notes on the back of their card to remember them by.

Career Tip. Meet and network with as many people as you can!

Make sure you visit your Human Resources department and complete all forms necessary for your benefits. If you don't understand how the benefit packages work, don't hesitate to ask. They're your benefits!

Go to lunch with your team members and others. Get to know the people you work with and what their interests are. Sit with different people at lunch so you meet more people every day. Two of the biggest career killers are going to lunch with the same people everyday or sitting at your desk during lunch and surfing the Internet. **Career Tip.** Eating lunch at your desk and surfing the Internet are two of the biggest career wasters.

One of the most important actions for one to take is finding out exactly what is required of you to successfully complete your job assignments. Your supervisor is a very busy person and will assume that if you have no questions you understand everything that is expected of you. This leads to misunderstandings and missed expectations about job performance. Spend a few minutes each week making sure your supervisor and you have a common understanding of your tasks for the week: what the order of tasks to be completed is, when the tasks are expected to be completed, and what is to be completed for a given task.

• Career Tip. Clarify and get agreement on your job tasks each week!

When clarifying your job assignments make sure to also clearly identify what expectations the boss has; this reduces misunderstandings and should help get your assignments done quicker than planned. This gets us to the next recommended action.

Get your assignments done sooner than expected. This is an indication to your boss that you are improving and ready to handle more complex assignments. One hard fact most new graduates fail to realize is that most assignments given to them could easily be accomplished by the boss or senior engineers in about one quarter the time. The assignments are designed to be easy and help the new engineer "learn the ropes" as they say. Therefore, when you complete tasks ahead of schedule it reveals your skill level is improving and you are becoming a more valuable asset to the organization. Correspondingly, if you are not able to complete the assignment in the time planned, it is usually an indication that you are not ready to take on more challenging assignments and may need special coaching. Something most supervisors do not have the time for nor want to do.

Career Tip. Complete tasks ahead of schedule and ask for more work. Make sure your completed assignments are of high quality.

Another very good career action for a new graduate is to volunteer for assignments or committees. These may be technical in nature or more social like United Way or the company picnic. In either case, this provides you with an excellent opportunity to network and meet more people in the company. Working with people who are not in your department is beneficial since it can give you insight into other departments in the organization and possibly future promotion opportunities.

Learn the business your company is in. How does the company make money and what are the products? What are the key departments and what products do they develop? Visit the company websites and learn about the products they offer. Learn about their history, the good and bad times. Who were the past leaders and what their accomplishments were. How is the company stock doing? Review the annual report. Get a hold of an organization chart and identify the key departments in the company and their job functions. To put it simply, learn everything you can about the company.

SUMMARY

The rule book changes when you leave the university and leap into industry for your first job. Be aware of the changes and adapt to the new rules. Working in industry requires significantly more teamwork and the rules for rewards are quite different. Rewards are given to those who ask for help, share information, and help others become successful. Don't expect the immediate feedback and rewards you received while attending the university; industry moves much slower.

Your successful leap into industry requires you take control of your career and not wait for others to tell you what to do. Ask for a "Buddy" to help you learn the ropes and meet all the people you can. Get your assignments completed early and with high quality. Clarify your job assignments and make sure you know exactly what is expected of you and when. Learn everything you can about your company and its products. Determine how your department fits into the company organization. Finally, making the transition to industry is not an insurmountable task. Graduating from the university with a degree is much harder and you have already shown you are capable of that. Following the tips in this chapter should enable you to successfully leap into industry and hit the road running well ahead of others.

Have you identified any career actions you want to take as a result of reading this chapter? If so, please make sure to capture these ideas before you forget by recording them in the notes section at the back of the book.

ASSIGNMENTS AND DISCUSSION TOPICS

- 1 Why is it so important to get clarification on the expectations of your assignments?
- 2 What is the best thing to do when you run into problems on your assignment?

REFERENCES

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