Heads Up, Ears Perked

There are things they didn’t teach us in school that we need to know if we’re going to survive—or excel—at our jobs.

By Ron Sledje

We’re engineers, and to get through college and all our tough courses, we’ve learned to focus at times like a laser beam. We couldn’t afford to be distracted by other things going on around campus because of the chemistry test that was sure to be a killer.

Some of us still hold on to this type of focus, which we equate to a strong work ethic. Yes, this complete focus is good while working on a task. In today’s world, however, we can’t afford to let this focus prevent us from being aware of what is going on around us.

Over the past couple of decades, I’ve had many conversations with engineers and technicians about our relationship to the workplace and what makes us strong contributors. I have talked about marketable skills, beyond technical know-how, that will keep us employed and valued by our companies. Some nodded in understanding and agreement, but too many stared blankly at me as if I was teaching a communication seminar.

In order to excel at our jobs—perhaps even to continue in them—we have to know the answers to some important questions: What is going on with the company? Is it making money? Is the stock up or down? Are the sales at budget, growing, or shrinking? Is the specific project that I work on, or the department where I work, making money? Is the company in a hiring mode, in a freeze mode, or in a layoff mode? What will keep me busy and valuable to the company tomorrow? What measurements are used as the vital signs of the business and projects?

We must get to know and understand these questions, and to think in these terms. We have to ask and learn how our work can influence the company’s key measures of performance.

For example, if you are working on a project in which the marketing director looks to the project sales dollars as a key performance indicator, or KPI, then you should make it a point to understand what the numbers are. An intermediate indicator that you could

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track to meet this KPI might be the number of installs that you perform within this project.

You should go further, and confirm this with the marketing director. He is in a better position to understand what drives this KPI, and should be able to coach and advise you. Somewhere, there is a link that exists between what you do and the key performance indicators, or else the company would not keep you employed. You must understand this link, and any links in between.

Keep your head up and your ears perked to hear what may be going on. You can probably put most of the important questions about the state of the business to your boss and to others who may know. Listen attentively to gather information. Some of this information may be hard to gather for engineers at some companies. Yet it is as basic and important as knowing which way the wind is blowing during a sailing trip.

In addition to being in the know with what is going on at the company, we need to make sure we are thinking on the next level. That is, how does the boss see our jobs, and us? All too often I have seen engineers and technicians go to their supervisors with problems—and with nothing else.

Of course, we are always running into problems in our jobs. After all, companies hire engineers to be problem solvers. Many we solve as part of the job, such as determining why that intermittent software bug is really occurring, or why that timing belt keeps jumping a tooth on that pulley.

Other problems are probably serious enough that they should be brought to the boss’s attention. Usually anything out of the ordinary when dealing with a customer is a problem your boss would want to know about, or any problem that may affect an important project schedule. In general, it is any “big” problem or situation, or something that could easily lead to one. This may seem obvious, but I have seen seasoned engineers neglect to inform their boss of a problem or situation only to leave the boss completely blind-sided when the problem surfaces. No one likes to be surprised, and discernment is critical in deciding when you alert your boss and when you don’t.

But are problems the only thing we take to the boss? What about solutions? And what about opportunities that could benefit a project, or perhaps an entire company? Look at each and every problem as an opportunity to showcase your skills and improve the process of how you and your company work.

How do you deal with problems or opportunities that your boss should know about? Do you have an internal decision-making process that develops and empowers you, or one that is reactive and shallow that can tend to annoy your supervisor? Here is a simple outline of how you can better deal with situations to help you grow and stretch to think on the next level.

Clarify and clearly define the problem or opportunity.

Gather information on possible root causes of the problem, or the nature of the opportunity.

Brainstorm to develop possible options and solutions, and involve peers when helpful. Don’t stop at simply solving the problem at hand, but look at the root cause of the problem, and see what controlling procedures could prevent this in the future.

Evaluate options by looking at the probability of success, cost versus benefit, risk versus reward, and other criteria that may be important to your boss.

At this point, if you feel the situation is something you are expected to handle on your own, then implement the best option.

If you feel you should involve your boss, then go one step further, and think on her level. Ask yourself what questions she will ask, and what information she will need to make a decision with you. Strive to understand the bigger picture, and based on previous conversations with her, what she may be thinking in consideration of larger goals.

After this preparation, go to your boss with everything you’ve prepared, and calmly yet confidently present this information and your recommendation.

Handling problems this way will demonstrate that you have the capacity to deal with problems and situations with a logical, well-thought-out process. It will also show your ability and your desire to understand the larger concerns of the business and how your role ties into them.

Showing this capability, or even an interest and tendency towards this capability, coupled with initiative will position you as well as possible for any promotion opportunities, or avoidance of a layoff. Your boss will grow to appreciate that you show up at her door prepared to discuss problems rather than to dump them at her feet.

My experiences from two decades as an engineer and as a manager led me to put together the Engineering Survival Guide, a book of three-dozen pages aimed at helping engineers in their careers.

In a very brief form, these are the survival skills that every engineer, perhaps everyone who works for a living, needs to develop:

Don’t stick your head in the sand.
Keep your head up at work and be in the know. Understand how well the
Think on the next level. Challenge yourself constantly to understand what is important to your boss and to his boss (all the way up to the CEO). This will help develop you and make you an ideal, promotable employee.

Work hard and work smart. A company is a money-making entity and you'd better be part of that money-making value every day—and show it—or you risk your job.

Develop your business skills. You don't need to get your MBA (although that would definitely help) but you do need to understand the bigger picture and how your company operates.

Keep your résumé current. This is a no-brainer, yet you'd be surprised at how many people don't take this simple step to prepare. Don't miss an unexpected opportunity because you aren't prepared.

Always look for jobs. You might think this crosses the line for a loyal employee. Don't allow yourself to feel this way, and be sure to understand the difference between passive and active looking. Regularly scanning for available jobs sharpens your understanding of opportunities that are out there, and of the skills and experiences you would need to take advantage of them.

Never stop developing yourself. This is the next logical step after scanning the job market. Understand which skills you would need to get another job, or your next job, or even your dream job, and begin working on developing them.

Always develop your network. Of all the ideas presented in this booklet, developing your network is probably the most neglected by engineers—both young and old. Yet it is one of the most important. Make developing your network a regular part of what you constantly do, rather than only when you are out of work.

Don't be naive. Don't think that you don't need to do these things. Do these to protect yourself (and your family if they are dependent on you). Following these principles successfully allows you to feel secure in yourself, regardless of your company situation, and this is empowering when times get tough.

Engineers and the companies they work for should embrace the points presented in the Engineering Survival Guide. This book is not about encouraging engineers to leave their companies. It is about always being at your strongest, most-marketable position, which gives you the ability to contribute the most you can to your company. This also forces your company to be at its best to retain you by developing you and presenting you with growth and opportunity.

People development should be high on any corporate list of goals. It is often stated that a company's most important asset is its people. Just as you should give your best to your company each and every day, your employer too should return that respect to you. It is a mutually beneficial relationship for two independent entities that choose to be together each day.