

## Communicating the Engineering Perspective Inside your Organization

We hear from many professionals that ethics must “come from the top” of the organization. While we know that the ethical tone is definitely affected by leadership in an organization, doing the right thing should not rest only with leadership. Leaders don’t see everything that goes on in an organization. So even if you’re not at the top – you have a role in fostering an ethical workplace. How do you make that happen?

The first step may be talking with and listening well to others, particularly those who may disagree or hold different assumptions. Listening well also needs to come from the top, of course: if leadership of an organization has shown itself to be unwilling to listen to the perspectives of engineers, that approach can degrade the engineer’s willingness and courage to speak up. Some organizations essentially silo their engineers and give them little say in how their designs or technologies should be implemented. Involving engineers in the discussion and listening to their concerns about the pressure they are under, the choices they are making, and the messages they are getting from the top might help us avoid another Volkswagen “Dieselgate” incident.

If your firm does give engineers opportunities to voice their concerns, we suggest you follow a few rules of thumb for effectively communicating – especially when communicating with non-engineers:

1. First, go to your own people: find trusted engineers who are likely to understand the problem, and run your situation past them first. Of course, it is important to find people who will keep your conversation confidential, and it is also important to find engineers who are not inclined to tell you what you want to hear: subordinates are not likely to be able to help. Find people who do not report to you if possible. Ask if you’ve missed something or not recognized a possible option that could help. Explain how you considered your options, and get them to think about your explanation: In short, this is a rehearsal and a listening session that hopefully will show you where the holes are in your thinking. Ask your fellow engineers to imagine how others, particularly non-engineers, might view the problem and your thinking about it.
2. When you are ready to go talk with others in the company who are “up the food chain,” be sure that you *listen* in order to *understand those others*, don’t merely pretend to listen while you wait for your chance to speak. Practice finding some common ground or points of agreement with the people with whom you may disagree, and voice that common ground **first** so that you can emphasize your effort to work toward a workable solution. This approach asks you to look at communication as an effort to reach consensus, not an effort to “win the battle.”

3. Avoid sending important concerns and questions around by email, text, or voicemail; have these conversations face-to-face. It is just too easy for misunderstandings to take place when we have no nonverbal cues. Know that once you have documented a serious ethical concern by putting it in email, that can be seen as a shot across the bow by upper management: in other words, it can alienate and irritate the very people you need to have willing to listen.
4. If your immediate supervisor is not listening: Think very carefully before you decide to go over that person's head: have you really given your best effort to communicate? Try going in and saying, "I am having a difficult time just letting this go. I'd really like to understand more about why you and I disagree. I think I have the best interests of this company in mind, just as you do: but we disagree about the best way to serve the company. Can we sit and think through the potential consequences for both of our perspectives on this, considering both short and long-term ramifications?"
5. Your supervisors, if they are not engineers, may not be aware that you have a professional code of ethics that asks you to hold paramount health, safety, and welfare of the public. You might consider taking in your Code and explaining that you have duties to uphold as a professional engineer. Realize, of course, that upper management often feels their primary duty is a fiduciary responsibility to their shareholders. They can be focused on short-term profits because they are required to report quarterly earnings. All of these elements can lead to conflicts with engineers, who are often more focused on long-term consequences and more aware of impacts of their work on the public. In some cases it can be argued that protecting the public is a long-term vision for protecting the shareholder from negative publicity, lawsuits, and ultimately lost marketshare. If your managers care about protecting the shareholder, they should be interested in hearing from their engineers.
6. If you've exhausted your efforts in trying to communicate with your supervisor, before you simply go over that person's head, consider asking them if they would be willing to involve someone else in the discussion (from upper management). You could also ask whether they are comfortable with you talking about the issue to someone else. That approach can certainly be seen as threatening, but it lets them know that you're serious enough to take your concerns over their head.
7. If you're dealing with a serious ethical problem, check the NSPE Board of Ethical Review cases, where you may well find a similar case that will provide you with previous arguments made by distinguished professional engineers. Those arguments may come in handy as you talk with upper management or with your corporate compliance officers. The NSPE Board of Ethical Review cases are online and searchable by year or by topic at

<https://www.nspe.org/resources/ethics/ethics-resources/board-of-ethical-review-cases>

8. While it is important to speak up as an engineer, it is just as important to choose your battles and choose your spots when you communicate up the food chain: too many complaints and conflicts have been known to get some engineers labeled as “trouble-makers,” and words spoken in anger can erode trust and make others less willing to listen when it matters most.