New Year, New Projects. Same Old Ethics?

Volkswagen's emissions scandal spotlights the engineer's dilemma

LATE LAST YEAR, I SPENT AN AFTERNOON taking IEEE's online training in compliance and ethics, a program designed to make sure its staff and volunteers understand the laws, regulations, and policies that govern the organization in its operations around the world. The classes cover rules against bribery, how to recognize conflicts of interest, what constitutes data privacy and security, and employee law in the workplace. I was impressed by the number and variety of issues surveyed.

Since the 1970s or so, codes of conduct, ethics, and compliance have flourished in corporations and organizations around the globe.

Volkswagen, maker of "the people's car"—and of the people's latest diesel-emissions scandal—has a robust code of conduct. It also has a dedicated compliance ombudsman system that allows employees to report wrongdoing anonymously. So what went wrong?

The automotive industry is no stranger to business skullduggery, but what was startling was VW's big bet—a gamble that the deliberate manipulation of emissions-testing results, by algorithm and by hand, would never be discovered. And it almost wasn't.

We can all make reasonable guesses as to how VW's best intentions met defeat while we wait for the facts of the matter to be revealed. Growth-driven insanity? Groupthink overriding reason? Maybe it was a boardroom-level decision to do a little cheating now to buy time to deal with the problem of balancing emissions and good performance later. Some of *Spectrum*'s online commenters think it's much ado about nothing; others see it as a dangerous criminal act. Almost all believe that the engineers involved will be the fall guys for managerial malfeasance. It's starting to look as though they already have.

I spoke with Stephen Unger, professor emeritus of computer science and electrical engineering at Columbia University, one of the founders of IEEE's Society on Social Implications of Technology and author of *Controlling Technology: Ethics and the Responsible Engineer* (Wiley, 1994), about the VW situation.

He thinks it's pretty obvious why any engineers who may have been involved have not come forward to date. For one thing, anyone who does stand up will most likely be swept aside. For another, while engineers are a professional class, they are, by and large, employees, and these days, often temporary employees. Confronted with questionable orders or restrictions, they find themselves in the untenable situation of having to do something unethical—which includes going along with it and remaining silent—or face career damage.

And yet, if you look at any Gallup poll from the last decade in which people are asked to rank the professions they think are most honest and ethical, engineers are always somewhere in the top 10. They are responsible for the marvelous new technology we show you in this issue.

And that, according to Unger, is the dilemma of engineers: how to live up to professional expectations when they're creating and applying technology but don't have an opportunity to weigh in on how, in the end, that technology is used.

All the compliance training and whistle-blowing in the world couldn't save VW from itself.

Perhaps our best bet is to assume that any system that involves humans and technology and power and money will inevitably experience an ethical meltdown. What steps can we take to recover from the fallout quickly and apply any lessons learned to new techno-ethical predicaments just now materializing on the horizon? —SUSAN HASSLER

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