ethics

Who benefits from ethics support?

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"You say it's still too buggy, but this project has slipped its schedule by more than 13 months and we just can't afford to keep tinkering with it. The penalty clause is killing us. We're shipping it tomorrow!"

How should Tom Robinson, project engineer in charge of the development of Electro-Health's new patient monitoring system, respond to this announcement from his boss? Judging from the rate at which design faults and programming errors are currently being found, Tom thinks that deploying the system now in hospital intensive care units would expose people to serious harm. He carefully explains the situation to his boss, but is told that the decision to release the system immediately is final. Now he is in a real bind. If Tom refuses to sign off on the release, he faces retaliation from his employer that could easily include being fired.

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SQUARING OFF. Rather than pursue this hypothetical — but realistic — case further by exploring various options and possible developments, let us step back and look at the situation in general terms. We have here a dispute between an engineer trying to do a good job and abide by an important engineering ethics rule — to avoid endangering people — and a manager who puts more weight on short-term financial considerations. Usually, when the issues are clear, such matters are resolved within the organization in a civilized manner. But not always. Unfortunately, there are organizations and individual managers willing to risk other people's lives to protect what they perceive as their own interests. In such cases, an individual engineer pitted against an organization is at a great disadvantage.

Here is where the IEEE comes in. After promulgating an ethics code that members are expected to abide by, the IEEE developed mechanisms for helping those whose careers are jeopardized as a result of such compliance. Such support might take the form of an investigation and published report, or an amicus curiae brief where legal proceedings are involved. Other forms of assistance, such as an ethics support fund, are being considered. The benefit to immediate recipients of such aid is clear. Less obvious, but perhaps even more important, are benefits to others.

IEEE INTERVENTION. That a prestigious organization such as the IEEE may intervene, even in a low key manner, to support ethical behavior may deter some individuals or organizations from trying to bully engineers such as Tom Robinson. Thus all engineers (and other professionals in the fields encompassed by the IEEE) are less likely to be faced with choices between career damage and acquiescence in unethical acts. This group of course includes all IEEE members.

Engineering managers are themselves often targets of the kinds of pressures discussed here. Thus they may be direct recipients of IEEE support, and they profit indirectly through the deterrent effects of such support. For example, when pressured by their managers to order subordinates to cut corners improperly, they can point out that this could trigger IEEE involvement.
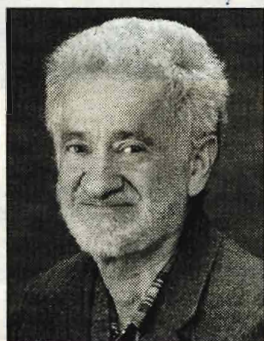
Most employers of engineers, including top level people in all kinds of organizations, whether or not they themselves are engineers, do not want to harm people or to behave dishonestly. But sometimes they feel pressure from unscrupulous competitors to behave improperly. Thus, to the extent that IEEE ethics support raises the level of moral behavior in general, they benefit through a reduction in this pressure. In recognition of the desirability of raising ethical standards, many of the largest corporations employ ethics officers and support a body called the Ethics Officers Association.

Of course, the general public benefits when engineers are enabled to practice more ethically, since they are more likely to encounter safer, higher quality technical products and services. Finally, the IEEE itself will profit because it will be perceived by the engineering community as a champion of good professional practice.

This is likely to have a positive impact on membership, particularly student membership.

More information on this subject can be found on the Web site of the IEEE Ethics Committee at "www.ieee.org/committee/ethics".

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