The Ethical Dimension

David Alan Grier

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Their story was exciting, and they were so happy with their success that I was willing to push my doubts to the darker corners of my character. Deepak, Rohit, and Sanjay were bouncing on their toes as they stood outside the auditorium that was hosting the Indian eGovernance awards. The three young men had just won a major award and were thrilled with the recognition.

Indeed, the three had ample reason to be proud of their accomplishment. They had created a contract management system that seemed to have uncovered and corrected substantial corruption in their state. Less than six months after they deployed the system, half of the state contractors had cut their bills by 70 percent, and five contractors had quietly vanished. All assumed that these firms had been defrauding the government under the old system.

The three young men were involved in a process that might be called eAdministration. It’s the hard, dirty, and detailed work that makes government programs function. Governments might be founded on the just consent of their citizenry, but they rise and fall on their ability to administer their programs. Without due diligence, taxes aren’t collected, police are deployed without weapons, too many friends of the mayor receive government contracts, and garbage isn’t removed on time.

We can too easily claim that governments fail because individuals don’t follow administrative rules. Under this reasoning, we can improve government by recruiting a small legion of Deepaks, Rohits, and Sanjays to embed such rules in proper eGovernance systems and then deploying those systems in the relevant administrative offices. Problem identified, addressed, and solved.

Yet, such a claim overlooks a fundamental fact: all administrative decisions can be factored into two different kinds of elements—factual and ethical. According to the scholar Herbert Simon, the factual elements “may be tested to determine if they are true or false.” The ethical elements can’t because they describe how the world ought to be. They “choose one future state of affairs in preference to another,” explained Simon, “and direct behavior towards the chosen goal.”

By our nature, software engineers are better at addressing factual rather than ethical issues. We analyze problems, verify the solution’s individual elements, and test the completed system to ensure that it meets the original specification. The closest we come to ethical analysis is when we’re trying to write a system’s specifications. Even then, we often rely on others to solve the ethical issues—describing how the future ought to be.

Other professional groups are often better trained in this kind of ethics. They wade into a debate between rival warring factions and try to extract a description of the intended future. Though we often think they work solely with designs, they often seem happiest when facing contention.

The entities that architects must face can be terribly contentious—historical review boards, neighborhood councils, planning commissions, zoning boards. All of these entities invite controversy. The best architects can seem oddly calm in the midst of a debate that places them in between angry and completely irreconcilable groups. From the chaos, they seem to be able to reach a consensus. They’ll extract ideas from the twists and turns of argument until they’ve crafted a solution that will be acceptable to the bulk of the community.

If our profession is to be a dominant force in eGovernance, we’ll need to understand how to resolve public contention. We’ll always need our Deepaks, Rohits, and Sanjays, and we’ll rejoice in their success. However, the architects of eGovernance will need to have political and technical skills in equal measure if they’re to move beyond the factual problems and solve the ethical dilemmas.

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