In what is called an age of the virtual corporation, companies like Cisco are lauded for using information technology to organize themselves into management nodes for a network of subcontractors. Not surprisingly, government bureaucracies have been challenged to become equally lean and flexible by using IT to transform old bureaucracies into a “virtual state.”

The effects of the information technology revolution on governance are playing out slowly, however, taking perhaps a generation rather than working at the “Internet speed” we’ve come to expect from startups and other private IT companies. Integrating government information systems and processes across agencies is a protracted and difficult process.

Public and Private Networks Are Not the Same

Attempts to build a virtual state can be much more difficult than in the private sector—and sometimes misguided. The problem is not simply that many companies have stumbled or gone bankrupt with the Internet bubble. Networking the public sector around IT is difficult because bureaucracies can be resistant to change; they perform highly complex tasks; and they lack market mechanisms to weed out less competitive forms. Orienting the public sector toward a “bottom line” is also problematic because democratic governance requires resolving difficult questions about accountability, jurisdiction, distribution of power, and equity.

Public officials often face perverse incentives because they may indirectly be punished for implementing more efficient processes. If an agency head introduces systems to streamline its functions, this will rarely prompt politicians to increase its budgets. Having eliminated redundancies, resources are more likely to be cut. Similarly, officials who take the initiative to develop inter-agency and department-wide information systems in collaboration with colleagues are more likely, as a result, to lose discretion than to gain it.

Democratic institutions are also expected to be accountable to the public. High-level government officials take responsibility for supervising their subordinates. Official duties are supposed to be transparent within an established chain of command. Networked relationships with diffuse webs of oversight, however, make such accountability far more difficult.

The government obligation to provide services equitably may also clash with private customer-service strategies. Citizens have a deeper and more value-intensive relationship with government than customers do with firms. In the private sector, the larger and wealthier customers are typically given better treatment than those with little purchasing power. Private firms also seek to satisfy customers who complain more with better service. This market segmentation is critical to private service strategies; but it is unethical for governments.

Information technologies may also produce less dramatic efficiencies in the public sector because they will reduce labor costs less. Automated phone systems and digital archives, for instance, can be profitable because they replace operators and file clerks. But e-government also requires many new and expensive jobs in areas such as training, website maintenance, and data protection. Privacy and data security standards in government exceed those of private industry.

Outsourcing Is Not a Panacea

Contracting is not a cure-all for avoiding higher public-sector costs or jumpstarting agency innovation. The Office of Management and Budget estimates that, while federal investment in government IT spending increased steadily since the year 2000, 80 percent of this spending currently goes to external consultants, indicating a high degree of outsourcing.

Networked governance requires institutional memory and knowledge that must reside in the permanent civil service rather than a plethora of contractors. Governments which place critical strategic knowledge in the hands of contractors are likely to have to pay for this knowledge several times and be unable to use it for internal innovation. And while outsourcing may appear to avoid the political difficulties of integrating back-office or cross-agency functions, it also misses out on the learning and cultural change that organizations gain from internal negotiations. Ultimately, information technology cannot substitute for professionalism and experience in government.

The technical obstacles to using information technology to network government are relatively simple. The more complex and difficult challenges are to address issues of accountability, equity, and democratic process.

Jane E. Fountain is associate professor of public policy at the Kennedy School and a Taubman Center affiliate. As of Fall 2005, she will be professor of political science and public policy at the University of Massachusetts at Amherst, where she will be faculty chair of the Science, Technology and Society Initiative and director of the National Center for Digital Government.