

# HOW TO THINK ABOUT TECHNOLOGY IN THE WORK OF GOVERNMENT

THE KEY TO PERFORMANCE IS INFORMATION THAT MAKES WORK ACCOUNTABLE, PROVIDES GUIDANCE, COORDINATES OVER DISTANCE AND SEEKS OUT INNOVATION

by Jerry Mechling

**W**e may be living in the Information Age, but, ironically, we rarely think carefully about how information might improve how we work. Instead, we tend to think about the technology itself, about how the features and power of what we're about to buy are arguably better than whatever we're presently using.

This tends to miss the real value of information that gives us feedback to learn how our systems work. When feedback is quick and clear, the learning is easier and we typically get good results. That's why most of us find it easy to learn to ride a bicycle. But learning to "ride" the work of government is harder because feedback is often slow and obscure.

To make better choices about technology and how to use it, and to improve the work of government, we need better judgment about the impacts of information availability and feedback. Government managers would make substantially better choices if reasonably careful assessments were made on four common ways that information is used to improve work.

## **MAKING WORK VISIBLE AND ACCOUNTABLE**

We need to learn what we are actually doing and measure its results. For this, digital data collection and analysis are enormously cost-effective. According to recent IBM studies, more than 90 percent of all of the information ever collected and presently available has been gathered in the past two years. In education, for example, it is now possible to get not only aggregate annual measures of school performance, but also daily feedback on the work of individual students and teachers. More information collection and analysis can make other activities similarly visible. Of course, we need good judgment about tradeoffs between work performance and other concerns,

such as equity and privacy. But, we should take more advantage of the recently created ability of information to make work visible and accountable.

## **MAKING GUIDANCE ACCESSIBLE AND "READY TO HAND"**

Performance usually improves when we have access to good advice relevant to the challenges we are facing. Mobile smartphones and tablets are making it possible to offer context-sensitive and relevant information to government workers even when they are away from their desks and need to make decisions. Firefighters, for example, can know the layouts and contents of the buildings they must enter in emergencies, and doctors can use video on a tablet to explain medical recommendations to their patients. We should take more advantage of the ability of technology to make information and guidance always accessible.

## **MAKING IT EASIER TO TAP THE BENEFITS OF DISTANCE, SPECIALIZATION AND SCALE**

Thousands of years ago, everyone lived in very small groups with very limited divisions of labor. Over time, as transportation and communication improved, we have invented larger and much more complex divisions of labor. Information enables the coordination of the larger, more specialized and more distant communities we have generated – not only allowing singers to reach distant listeners, but teachers to reach distant students, doctors to reach distant patients, and tax collectors to reach taxpayers. We need to take greater advantage of the ability of information to tap the benefits of distance, specialization and scale. For example, we might take more consistent advantage of the ability to support distant and dispersed populations with remotely provided medical care, education, human

services, environmental monitoring and regulation.

## **MAKING IT EASIER TO FIND AND ADOPT INNOVATIVE WAYS OF WORKING**

Only a little over a 100 years ago, we lived roughly half as long as we do today. Increases in life expectancy have been entirely due to knowledge gained about health care and its application to medical practice. So it is in almost everything we see in government and elsewhere. To diffuse new approaches, we have benefited not so much from "in-channel" command-and-control flows of information, but rather from "out-of-channel" and "cross-boundary" voluntary collaboration. Networks have thus boosted government innovation – from fundamental scientific research to the kinds of experimentation and diffusion of innovation that led to the Internet. We should be taking more advantage of information technology's ability to encourage crowdsourcing and other network-based approaches to innovation.

What we need isn't merely better technology. What we need is better ways of working, and the key for that is in how we use the information better technology can create.

---

*This article is from Governing.com, dated June 6, 2013. Written by Jerry Mechling who is a research vice president at Gartner Inc.*