

Making a Digital Government

■Lawrence Brandt's latest job is to get federal agencies to share technology and information.

By P.J. HUFFSTUTTER, TIMES STAFF WRITER

Lawrence Brandt still remembers the day, nearly a decade ago, when he approached a team of University of Illinois students who were working on a software project called Mosaic. The technology offered a revolutionary idea in networked computing--the ability to surf a collection of multimedia images and text stored on remote computers.

Mosaic made the World Wide Web easy to use and ultimately drew millions of people onto the Internet.

Brandt, then a manager with the National Science Foundation, understood that government needed to get on board. Pulling together some grant money for the young developers, Brandt helped coordinate a consortium of government agencies to fund this and other projects evolving out of some of the nation's super computer centers. Among the early recipients: Marc Andreessen, who created Mosaic and later co-founded Netscape Communications Inc.

"I funded Marc for \$5 an hour," said Brandt, now the program director of the Digital Government project, an NSF initiative to forge ties between private research and public agencies. "I should have had him pay us in stock."

Brandt has a knack for spotting early-stage technologies that matter. Over the years, the small cluster of grants funneled to computer researchers has grown to a comfortable \$10 million a year, all geared toward finding new ways to bring government into the digital age.

This week, more than 200 information technology researchers and software engineers involved in the program will gather in Redondo Beach to demonstrate prototype systems that promise to streamline government processes.

Some will succeed. Others, acknowledged Brandt, will fail. Either way, the dream of a truly electronic government has a long way to go.

"A failure means you learn you can't proceed in a certain direction," Brandt said. "In government, it's sometimes more important to avoid making a mistake than it is to make a home run."

Question: Why has government been so slow to get on the high-tech bandwagon?

Answer: It's very careful and risk averse. In business, if you drop \$500 million on a failed technology project, you don't hear about it. In government, it lands you on the front page of the newspapers and launches congressional hearings.

It's also a cultural thing. People in government want to make sure they do the right thing for the public, but there's no clear bottom line. In business, the goal is profitability. In government, you don't have that.

Part of the problem is there are so many pushes and pulls in government. There's Congress looking over their shoulder and wanting one thing. Then, citizens want another. Many citizens don't appreciate what government agencies do. Most of what they do is invisible, and that's the way it should be.

Q: What's the goal of the NSF's Digital Government initiative?

A: The NSF focuses on long-term research and education in all science and engineering disciplines. The goal is to increase our understanding of subjects, even if the research may seem archaic or "out there." Even if a project fails, there is still some sense of success because others won't follow the same path and make the same mistakes.

If a project is a success, it may not be clear why the research matters right now. But it will. In many cases, the practical uses that result from scientific understandings were not apparent at the time the work was being done.

We focus on practical uses. We're funding the academic side of this thing, so that the research community has a chance to work on projects and deal with a scale and type of data they usually wouldn't have access to. These are important problems, some that may not have occurred to them before. We all need practical solutions.

Q: What are some of the key hurdles?

A: Privacy and confidentiality are very big issues that people in government are talking about right now. For many agencies, there's an inherent tension of the job between their mandate to collect data that is considered confidential and their mandate to disseminate some--but not all--of that data to researchers and the general public.

Right now, the way many of them try to maintain confidentiality is to introduce fake data that shows the same statistical trends as the real thing. Obviously, that drives researchers crazy.

We are funding a few Citizen Access projects to try to spark change. I have a person on detail from the U.S. Census who was able to make a really good connection with all the statistical agencies and figure out their needs.

One part of the project with the National Institute of Statistical Analysis is to provide agencies with the tools to better monitor this tension.

Q: How can so many different agencies--both state and federal--have such different goals and restrictions yet still use the same tools?

A: That's the joy of technology. If you're developing mathematical algorithms, they can be applied anywhere. It just needs to be flexible enough for the agencies to customize it to their needs.

We've got one project called [Coplink](#), through the [University of Arizona](#), that's trying to help local law enforcement people share information better. The result is a series of software programs that can be sold to other police departments.

The person in charge of the project already had connections with local agencies. We added base-level funding from the National Institute of Justice. Now, the university and the program manager have created a venture capital firm to spin off the product.

Q: Why wouldn't law enforcement share their information automatically? In light of the Sept. 11 catastrophe, it seems to make sense.

A: The information you hold is your power base. You saw that with Sept. 11 and the FBI's problems. It took someone upstairs to rattle the cage, to say, 'You will take down the barriers and share your information,' to get anything done.

If you talk about sharing the data from Customs and the [Federal Aviation Administration] and the FBI and local agencies, everyone would admit that it was a good thing. Everyone should be able to see the full picture of the elephant, not cling to their own little piece of it.

Part of the problem is that many agencies aren't allowed to share data because of the law. It's the notion of Big Brother. That's obviously a concern for many people. The idea of law enforcement having a unified, composite file on a person's life is a powerful thing. For some people, that's a horror.

On the commercial side, it's not a problem. It would be advertised as a feature.