America's First CTO

In a country so dependent on technology for its standing in the world, it's amazing that the United States doesn't have a cabinet-level position for a chief technology officer (CTO). We have department heads for agriculture, transportation, and public parklands. We have cybersecurity czars and a Department of National Intelligence, but not since the demise of the Office of Technology Assessment (OTA) has there been a centralized tech intelligence group available to the President and Congress.

OTA was a "nonpartisan analytical agency [that] assisted Congress with the complex and highly technical issues that increasingly affect our society." Created in 1972 and unfortunately defunded by the 104th Congress in 1995, the OTA produced 750 technical studies at the request of lawmakers and other agencies over its 23 years. The studies are still available at http://fas.org/ota.

In an interview on FastCompany.TV, Stanford Cyber Law Professor Lawrence Lessig lauded President-elect Barack Obama's promise to create a national CTO. Lessig says there's an extraordinary opportunity for technology to make government work better. By setting standards across all departments, technology could create efficiency, transparency, privacy, and accountability. Today, he explains, when lawmakers need technical expertise, they are too likely to turn to a familiar telecomm or pharmaceutical or other lobbyist. It would make much more sense to turn the lawmakers back in the direction of scientists and engineers whose sole motivation would be the accuracy of their science.

According to the new administration, some of the responsibilities of America's first CTO will be "To ensure that our government and all its agencies have the right infrastructure, policies and services for the 21st century. The CTO will ensure the safety of networks."

With a focus on transparency, the CTO will ensure "that each arm of the federal government makes its records open and accessible as the E-Government Act requires."

Lawrence Lessig

"The CTO will also ensure technological interoperability of key government functions. For example, the CTO will oversee the development of a national, interoperable wireless network for local, state, and federal first responders as the 9/11 Commission recommended."

There's been a lot of speculation about the first CTO. On the short list, those mentioned include Eric Schmidt (Google CEO), Julius Genachowski (senior executive at IAC/InterActiveCorp), Ray Kurzweil (inventor/futurist), Bruce Schneier (international security expert), Vinod Khosla (cofounder of Sun Microsystems), Jeffrey Bezos (Amazon.com), Ed Felten (professor of Computer Science and Public Affairs, Princeton), and Lawrence Lessig (founder of Stanford's Center for Internet and Society and founding board member of Creative Commons).

Whoever receives the call, creating a smart power grid in Washington will require some estimable talent. ■