

INFORMATION TECHNOLOGY R&D AND U.S. INNOVATION

- Advances in information technology are transforming all aspects of our lives: commerce, education, employment, health care, manufacturing, government, national security, communications, entertainment, science, and engineering.
- Advances in information technology also drive our economy both directly (the growth of the IT sector itself) and in productivity gains across the economy. Advances in computing are enabling innovation in all fields.
- The history of innovation in computing is impressive, but the future opportunities are even more compelling: the future of networking, revolutionizing transportation, personalized education, powering the smart grid, empowering the developing world, improving health care, enabling advanced manufacturing, driving advances in all fields of science and engineering.

It's impossible to imagine a field with greater opportunity to change the world.

- The IT R&D ecosystem is crucial to continued innovation in IT, and federal support is at the heart of that ecosystem. Essentially every aspect of IT upon which we rely today bears the stamp of federal support.

"In order to sustain and improve our quality of life, it is crucial that the United States continue to innovate more rapidly and more creatively than other countries in important areas of IT. Only by continuing to invest in core IT science and technology will we continue to reap such enormous societal benefits in the decades to come."

- President's Council of Advisors for Science and Technology (in Designing a Digital Future, December 2010)