

Lessons From Y2K For Strategic Management of Information and Communication Technology

Mark P. Haselkorn
National Research Council
Global Interdependencies Project
University of Washington

Abstract

Y2K was a unique event, particularly for any organization that relies on information and communication technology to accomplish its mission and achieve its strategic goals. For large organizations, the response to Y2K generally evolved over a number of years, ultimately involving hundreds if not thousands of people interacting in varying, often non-traditional ways to address perceived risks. Activities involved technology inventories, risk assessments, continuity plans, guidance and support packages, monitoring, certification, configuration management, and version control. There were various impacts on the design, development, and maintenance of systems and applications throughout the organization, as well as various impacts on the roles and responsibilities of people who deal with them. Whatever the state of an organization's strategic management of IT, Y2K stressed existing IT practices in ways they had never been stressed before. The fact that Y2K did not result in widespread catastrophic failures actually makes it a richer potential source of critical lessons for longterm strategic management of information and communication technology. Rather than being a story of fundamental flaws and cascading effects, Y2K is a story of maintenance and modernization, security and dependability, life cycle management of systems and software, functional interdependency and continuity, guidance policies and software certification, and determination of system ownership and responsibility. Y2K tested the management and modernization of information and communication technology. We are now in a position to learn from this "test" and apply those lessons to evolving organizational strategies for managing information and communications. The U.S. National Research Council is in the latter stages of a research project (in cooperation with the U.S. Air Force and the IEEE) to explore the lessons of Y2K for strategic management of IT. While definitive conclusions must wait for the final report (anticipated in October 2000), this presentation explores issues and initial progress in the following five areas: (1) organizational roles and responses; (2) information gathering, use, and value; (3) life cycle management of systems and software; (4) information assurance and critical infrastructure protection; and (5) understanding the relationship between risk and response.