



Federal CIO Council Workforce and Human Capital for IT Committee

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Update: Implementation of the Federal IT Workforce Challenge Recommendations

Background

For the past several years, the Federal Chief Information Officer (CIO) Council's Workforce and Human Capital for Information Technology (IT) Committee has addressed the Federal Government's ongoing demand for highly skilled IT workers, which continues to exceed supply despite the dot-com shakeout and economic slowdown.

The Committee is the Government's key advocate for strategies to develop and maintain an effective Federal IT workforce. The Committee's broad agenda encompasses the full employment life cycle: workforce planning, recruitment and retention, and career development. Due to successful partnerships with key Federal agencies, private sector organizations, and individuals, many of the ideas and strategies recommended two to three years ago have been implemented as Governmentwide policies and programs that have produced significant results.

In June 1999, the Committee released the report "Meeting the Federal IT Workforce Challenge." In 2000 and 2001, the Committee issued mid-year and end-of-year status reports, highlighting areas where the report's recommendations had been successfully implemented. This mid-year update for 2002 highlights the Committee's recent accomplishments, as well as plans for the upcoming months.

The two co-chairs of the CIO Council Workforce and Human Capital for IT Committee are committed to spreading the word about the Federal Government's IT workforce challenge and the actions being taken by the Committee in response to this challenge. The Committee also maintains an active Website at <http://www.cio.gov>. The Web site includes presentations given by the Committee co-chairs as well as by other members of the Committee in the areas of IT workforce improvement. As part of its outreach effort, the Committee maintains close contact with officials at the Office of Management and Budget (OMB), the Office of Personnel Management (OPM) and other Federal agencies.

Recommendation Areas

Workforce Planning and Management

- The Committee continues to investigate how the Federal Government can best attract and retain IT talent. In cooperation with the Administrative Office of the U.S. Courts, the Federal CIO Council supported a study by the National Academy of Public Administration (NAPA) related to IT workforce issues. NAPA conducted an independent and comprehensive analysis of the Federal IT workforce and recommended some necessary steps to ensure optimal service to the citizens. The first product of this effort, a research report describing innovations and best practices by Federal, state and local governments, the private and non-profit sectors, and international institutions and governments, was issued at the Association for Federal Information Resources Management (AFFIRM)/Federal Office Systems Exposition (FOSE) breakfast on March 22, 2001.

During the summer of 2001, a Project Leadership Committee (PLC), chartered by the CIO Council, supervised the NAPA research and participated in honing the analysis of the NAPA panel. The PLC included Federal Government CIOs, Human Resources executives, and representatives of the Industry Advisory Council (IAC), Armed Forces Communications and Electronics Association (AFCEA) and the Information Technology Association of America (ITAA). The PLC worked closely with a top-notch team of NAPA executives to ensure the success of the effort.

The final report of the NAPA panel was released at the General Services Administration (GSA) sponsored Interagency Resources Management Conference (IRMCO) on September 5, 2001. The report, entitled “The Transforming Power of Information Technology: Making the Federal Government an Employer of Choice for IT Employees,” identified several specific barriers to the recruitment and development of top IT talent in the Federal government. Specifically, the report concluded that:

- There is an acute shortage of qualified IT professionals.
- The Federal workforce is aging and turnover is problematic.
- There is a significant pay gap between the private and public sectors.
- Government cannot compete for talent under its existing recruitment system.
- Motivational tools are inadequate.
- Government human resources policies are overly focused on internal equity.
- There is too little investment in continuous learning.
- The Government's job classification system is expensive, inflexible, and out of date.

NAPA recommended four strategies for addressing the above issues and transforming the Federal IT workforce:

A Market Solution to a Market Challenge

Conduct market surveys of pay levels at least twice a year and baseline pay from those surveys. Raise the cap on pay for IT executives to the level of pay of the organization's Vice President. Differentiate pay to reflect the value of specialties within the IT occupation. Uncouple any linkage of pay to non-related occupations. Eliminate annual across-the-board pay increases.

A Premium for Performance

Eliminate ten professional pay grades, ten steps within each grade, and five levels of the Senior Executive Service (105 specific pay levels), in favor of four broad pay bands. Pay levels within these bands should be based on individual performance, competency, and the achievement of organizational objectives. Base a significant amount of expert and executive pay on the achievement of organizational performance goals.

A Balanced Work/Life Program

Consider factors beyond pay. Increase the emphasis on continuous learning to bring the Federal Government more in line with the private sector. Provide competitive benefits. Improve the recruitment and hiring process.

A Rational Transition

Recognize that many of the proposed changes challenge the existing culture of Federal management. Identify champions in agencies who will lead. Work with Congress and the Administration to craft implementation strategies and approaches.

Give managers the freedom to manage, but hold them accountable for their decisions through peer reviews, program reviews, and budget controls. Encourage disproportionate rewards for top performers, to distinguish them from average achievers. Include all new hires in the market-based pay system, and allow current employees to opt in or out of the system.

Since the issuance of the NAPA report, there has been considerable discussion about the study. Representatives of the CIO Council have conducted outreach sessions at a number of conferences and have met with trade associations and other interested parties, including OPM, ITAA, OMB, the General Accounting Office (GAO), Congressional committee staff, the Council of Excellence in Government, and others. On October 4, 2001, the House Government Reform Committee's Subcommittee on Technology and Procurement Policy held hearings on the report at which GAO, OMB, OPM, IBM, and NAPA testified. On February 19, 2002, the CIO Council issued a statement in support of the NAPA study, supporting its conclusions and broad themes. The statement can be viewed at:
<<http://www.cio.gov/Documents/federal%5Fcioc%5Fstatement%5Fnapa%2Ehtml>>

More information about the NAPA study and its implications for the future of IT in the Federal Government can be found on the CIO Council Website at:

<http://www.cio.gov/Documents/federal%5Fcioc%5Fstatement%5Fnapa%2Ehtml>

This link provides access to a Web micro-site where one can download the full NAPA report and track the progress in implementing its principles. The micro-site (sponsored by NAPA and the CIO Council) also provides visitors with an opportunity to express their support, concerns, or ideas for improvements to attract and retain top IT talent in key Government positions.

- In 2001, OPM issued the GS-2200 Information Technology Job Family Position Classification Standard. The standard recognizes the significance of the IT occupation by establishing the first new classification group since the creation of the General Schedule position classification system. The standard introduces modern titles, uses up-to-date terms, and reflects the dramatic changes affecting work performed by IT employees. The GS-2210 IT Management standard completely replaces the GS-334 Computer Specialist standard and brings credibility to the criteria used to assign grades to IT Specialist positions. The new GS-2210 standard was written largely in consultation with and through the support of the CIO Council. OPM will work with the CIO Council to ensure that the standard is updated periodically to keep pace with the rapidly evolving developments in the IT field.
- The new IT competency-based job profile, which will serve as the foundation for the qualification standards for IT Specialists, was developed from a Governmentwide IT study initiated in 2000. The profile includes a number of new and innovative tools and strategies for recruiting high quality applicants, including Web-based assessment tools. The job profile was pilot tested in several agencies with favorable results during 2001. This spring, OPM, in cooperation with the Workforce and Human Capital for IT Committee, plans to use the Web-based tools and associated IT competencies to conduct a National virtual IT job fair.
- In 2001, the OPM approved special pay rates for IT Specialists, Computer Engineers, and Computer Scientists in General Schedule grades from GS-5 through GS-12. These special pay rates provide Federal IT managers with an effective tool to fight significant problems in recruiting high quality entry-level and developmental-level Federal IT workers with the latest skills. Complete pay tables for this year's special IT rates are available on the OPM web site at:
<http://opm.gov/oca/02tables/SSR/index.htm>

Recruitment and Retention

- At the House Subcommittee on Technology and Procurement Policy hearing on NAPA's IT workforce report, Subcommittee Chairman Representative Tom Davis (R-VA) noted that a slowing economy, the failure of many "dot-coms," and the economic effect of the September 11th tragedies have left many talented IT employees without jobs. Representative Davis suggested that the Federal

Government has a unique opportunity to upgrade its IT workforce while helping the Nation's economy to recover. Since then, the Committee has been working in partnership with OPM and various Federal agencies to lay the groundwork for a Virtual IT Job Fair. This activity comes in response to Congressional interest in IT workforce issues

This Virtual IT Job Fair is intended to save agencies time and money in recruitment while widening the doors of Federal employment to top IT talent. For this event, OPM has developed a specialized application and assessment process. Employees hired through this effort will be GS-2210 IT Specialists in various parenthetical specialty areas at grade levels ranging from GS-7 through GS-13. The applicant evaluation method will use a blend of competency based testing, technical skills self-certification, and USA Jobs Staffing services to expeditiously assess candidates and identify those who meet specific agency needs. The actual Virtual IT Job Fair will take place in the spring of 2002 and will be advertised and promoted Nationwide.

- ❑ In November 2000, colleges and universities were invited to submit grant proposals to the National Science Foundation (NSF) for the Federal Cyber Service (FCS) Scholarship for Service (SFS) initiative. The primary goal of the SFS program is to pay students for two years of undergraduate or graduate education in an information security program in return for a two-year commitment to Government service. Students who participate in the SFS program will be evaluated against a set of qualification standards to ensure they have acquired the competencies necessary to successfully perform information security work. Over 30 students enrolled in the fall 2001 semester of the program and over 20 students have enrolled in the spring 2002 semester. Both sets of SFS students will serve internships at various Federal agencies during the summer 2002.
- ❑ The Committee has been tracking closely the activities of the Access Board, GSA, and other agencies in their efforts to implement the requirements of Section 508 of the Rehabilitation Act of 1973. Section 508 requires that all Federal agencies procure, develop, maintain, and use electronic and information technology which is accessible to individuals with disabilities. The Committee considers Section 508 of primary importance, since disabled individuals now and in the future will make up a valuable segment of the Federal IT workforce. Further information on this important legislation, as well as free on-line training and resources for government buyers of IT is available at: <<http://www.section508.gov>>
- ❑ The Committee's High School Outreach Team (HOT-IT) sponsored a very successful Groundhog Job Shadow Day on February 1, 2002. The Groundhog Job Shadow Day, an annual event, provides an opportunity for high school students interested in IT to meet IT professionals in Government agencies. Over 100 students participated in this year's event, a 300% increase in student participation from 2001. The students, representing schools in Maryland, Virginia and the District of Columbia, visited with professionals from six Federal agencies. A protégé from the CIO Council Mentoring Program assisted the HOT-IT team in coordinating this year's effort.

The HOT-IT Team will be continuing its work throughout 2002. As a follow-on to Groundhog Job Shadow Day, the team is encouraging the agencies that participated in this year's event to provide summer internships for interested students. In addition, the team is developing a Memorandum of Understanding (MOU) with the National Academy Foundation's (NAF) IT Career Academy Program. Through this MOU, the CIO Council and NAF will form an alliance to promote and foster programs that combine school-based learning and work-based experiences in IT professions.

- ❑ OPM continues to encourage agencies to use existing incentives (e.g., recruitment bonuses, retention allowances, and relocation bonuses) to enhance efforts to attract new workers into the Federal service and to retain current employees who have critical IT skills. Further information on these incentives is available from OPM's Web site: <<http://www.opm.gov/oca/pay/HTML/Q&ARRR.HTM>>
- ❑ OPM's Federal Career Intern Program continues to provide opportunities for individuals to pursue careers in the IT arena. The program, which provides 2-year internships, is designed to attract exceptional candidates into a variety of occupations, including IT positions. The program is intended to fill positions at the GS-5, GS-7, and GS-9 levels for which the agency has a formal training program in place. Upon successful completion of the internships, interns may be eligible for permanent placement within an agency. Further information on this program can be obtained from agency human resources management offices or from OPM's program Web site: <<http://www.opm.gov/careerintern>>
- ❑ The Federal Student Loan Repayment Program, which took effect on April 12, 2001, offers incentives for IT professionals to consider Federal Government employment. This program authorizes Federal agencies to repay Federally insured student loans as a recruitment or retention incentive for both job candidates and current employees. As a recruitment tool, agencies can offer student loan repayments once they have made an offer of employment. A service agreement to continue in Federal employment for a minimum of 3 years must be signed by the employee to participate in the loan repayment program. As a retention tool, loan repayments can be offered to current employees. Agencies may repay up to \$6,000 per year per individual, up to a maximum of \$40,000 per employee overall. Agencies are authorized to set up and administer their own loan repayment programs in order to recruit or retain highly qualified professional, technical, or administrative personnel. Further information on this program can be obtained from agency human resources offices or OPM's Web site at: <<http://www.opm.gov/studentloan>>

Career Development

- ❑ The Committee continues to champion the use of the Clinger-Cohen Competencies by the Federal Government. The Clinger-Cohen Competencies assist agencies in complying with Section 5125(C)(3) of the Clinger Cohen Act by identifying the baseline competencies that an organization should possess to effectively utilize and

manage information technologies. The Competencies are widely used by the private sector, public universities and Federal agencies for educational, retention and recruiting purposes. The Competencies are a living document and are updated biennially to reflect the constant changes in the field of IT and its management.

The Committee is currently in the process of reviewing and updating the September 2000 Clinger-Cohen Competencies. The review process entails the coordination of input from various Federal agencies, academia, and the private sector. Approval of the revised Competencies is planned for September 2002.

- ❑ Under the IT Roadmap initiative, the IT Career Planning Tool and accompanying Career Planning Guide will serve as a core component for Federal agencies' IT workforce development programs. The tool is an interactive database application that enables workers to assess their own proficiency for the GS-2210 IT Management Specialist positions. The tool enables IT workers to manage their careers by analyzing where skill gaps exist, facilitating the design of a tailored strategy to help achieve proficiency in needed areas, and encouraging development of a Career Progression Plan that can be shared with or approved by the individual's supervisor or mentor. The accompanying Career Planning Guide serves as a users' guide for the tool and provides information about the career development process, including career options, education and experience opportunities, and competency requirements for Federal IT specialists. Through the application of best practices and the power of the Web, members of the IT workforce will have a roadmap for ensuring they remain competent, current, and proficient in a dynamic environment.
- ❑ The goal of the Department of State's IT Skills Incentive Pilot Program is to retain employees with critical IT skills and increase the expertise and stability of the IT workforce through financial recognition. IT professionals receive up to a 15 percent retention allowance for completing formal certification in certain technical areas. The program, in existence for more than 2 years, has met or exceeded its goals -- professional certifications have grown by almost 800% and attrition rates are stable.
- ❑ The Department of State's IT Career Development Model includes career paths, competencies, a 360-degree assessment tool, learning maps, and development plans. The model has been converted into an interactive Web-enabled career development tool, allowing State's IT employees to perform career assessment and planning at their desktops via the Department's Intranet. A pilot is currently being conducted to introduce the application to new hires via train-the-trainer sessions and scheduled presentations.
- ❑ The Department of the Navy's "Career Path Guide for Managing Technology, Information, and Knowledge" outlines a process for employees to use in planning their careers. It describes the general and technical competencies that are key to job success, and gives employees and their supervisors a tool for enabling employees to excel in current and future jobs. The automated Career Planning Tool is based on the Career Path Guide and provides employees with a means to assess their proficiency, develop a plan to achieve needed competencies, and maintain a

developmental history for Information Management, Knowledge Management, Computer and Information Systems /Engineering, Information Assurance, and Telecommunications career areas.

- The CIO Council-sponsored CIO University program is a consortium of universities that offer graduate level courses related to the Clinger-Cohen Core Competencies. The CIO University serves to improve Government by enhancing the skills of top Federal executives. The program is administered by GSA.

In July 2001, the CIO University issued certificates to its second graduating class. Over 200 individuals have enrolled in courses offered by the CIO University's four academic partners: Carnegie Mellon University, George Mason University, George Washington University, and the University of Maryland University College. The third graduating class is scheduled to receive certificates in June 2002.

After the revised Clinger-Cohen Competencies were issued in September 2000, over 100 experts from Government, industry, and academia participated in focus groups to produce a corresponding revised set of learning objectives. These learning objectives were folded into a Request for Information, released in spring 2001, which was used to solicit responses from potential new university partners. Subsequently, Syracuse University and LaSalle University were identified as two new academic partners for the CIO University. Students are beginning to enroll in these offerings.

- The Strategic and Tactical Advocates for Results (STAR) program is a graduate-level curriculum designed to advance effective strategic planning and coordination while achieving Clinger-Cohen results-based management. Created under the auspices of GSA and the CIO Council, STAR has graduated six classes and almost 150 students.

The STAR program includes a business case exercise designed to integrate various aspects of the curriculum with each participant's "real world" agency or organizational problems. The exercise results in a business solution that provides an immediate return for each participant, sponsoring executive and sponsoring agency. GSA continues to analyze the outcomes of the classes and make enhancements to the curriculum.

For more information about the activities of the Federal CIO Council's Workforce and Human Capital for IT Committee, please refer to the Committee's Web site: <<http://www.cio.gov/>>