MINNESOTA SPENDS AN ESTIMATED $200 MILLION PER YEAR ON INFORMATION TECHNOLOGY

Abstract and Overview: It is estimated that the State of Minnesota spends $200 million per year on information technology. Comparatively, Wisconsin estimated its annual information technology expenses at $220 million. State information systems and their costs have been the focus of controversy, provider complaints and press reports. Cost overruns and the inability to deliver promised services have characterized the Minnesota Medicaid Management Information System (MMIS), and the Statewide Systems Project, now called MnAssist. These two systems combined cost taxpayers more than $42 million. There is, however, a mechanism in place intended to help the state get the best information systems for its money, called the Information Policy Office. This paper reviews the role and direction of the Information Policy Office.

IPO COORDINATES STATE TECHNOLOGY POLICY

According to Minnesota Statutes 16B.41, “The information policy office shall develop and establish a policy and standards for state agencies to follow for the development, purchase, and training for information systems. The purpose of the office is to develop, promote, and coordinate a state technology, architecture, standards and guidelines, information needs analysis techniques, contracts for the purchase of equipment and services, and training of state agency personnel on these issues.” The Information Policy Office (IPO), operates with a 2-year budget of nearly $4 million and 21 employees.

The IPO’s role as coordinator of state technology is intended to avoid duplication of effort and the potential waste of state resources. IPO has the responsibility to review and approve state information resource investments, and to support the work of the Government Information Access Council, GIAC. GIAC is charged with developing policy for electronic access by citizens to information and services. It also reviews governmental entities’ compliance with public policy requirements that relate to information.

There are two divisions in the IPO: The Information Strategies and Planning Division (ISPD) and, the Public Information Policy analysis Division (PIPA). ISPD is directed toward supporting projects that improve the statewide management of investments in information systems. PIPA provides assistance to agencies and private organizations in understanding and complying with the laws that constitute policy decisions about data practices, records management and access to government data.
Since 1987, with the creation of the Information Policy Office, the Legislature has attempted to ensure some standards and policies for agencies' information systems. In July of 1990, the Information System Life Cycle Methodology was published by the Information Policy Office. This document presented a systematic basis for the financial analysis of information system proposals. It states: “The basic concept of the framework is the system life cycle, which characterizes the development and use of an information system over time. . . . The goal was to develop a set of budgetary guidelines for use by state agencies when readying proposals.”

The system life cycle model renders a method to analyze costs, benefits and risks in detail. The analysis focuses on the practical implications of the system life cycle model and illustrates how the concepts may be applied to projects. Further, this model provides an economic evaluation that includes the influence of project size on the use of the life cycle model, and estimates of the useful life of an information system. This process encourages agencies to analyze the interactions and tradeoffs between benefit, cost, and risk.

IPO's strategic direction for managing information resources to accomplish agency objectives, is called Information Resource Management, (IRM). IRM was started in 1994 as an infrastructure for business operations that included data, personnel, funds and information technology. This effort was modeled after effective private sector ventures. IPO expects that Information Resource Management may ease the integration of information management with the mission of the organization. This translates into implementing the vision, information management philosophy, technology goals and business goals that various state agencies have developed. IPO argues that using IRM should allow faster responses to legislative mandates and citizen demands.

In the past, the Minnesota Medicaid Management Information System (MMIS), and the Statewide Systems Project, or MnAssist, have been under pressure to perform at the levels promised to the Legislature and expected by vendors. MMIS has been at the center of controversy, in part because of its alleged inability to pay its vendors in a timely manner. MnAssist has been dogged by the same problem.

In an effort to respond to taxpayers, and to make certain that the state receives the services promised in the contracts it entered for those services, the Legislature combined the services of IPO and the Attorney General's Office. These two departments are asked to monitor agencies' computer systems development projects in order to ensure full performance of contract requirements. If full performance is not achieved, the state will pursue any remedies provided in the contracts for nonperformance or inadequate performance. IPO and the Attorney General will present this report to the Legislature in mid-January 1996. MMIS and MnAssist were two projects specifically mentioned by the Legislature for review.

**IPO PROVIDES FUNDING RECOMMENDATIONS TO THE LEGISLATURE**

Another product of the IPO is the “Information Resource Funding Recommendations.” In 1995, information resource budget requests from state agencies were rated by IPO, according to six critical success factors:

- **Executive leadership and involvement** — Is there a Chief Information Officer, or a given executive, with an information-specific role and responsibilities?

- **Policies, standards, and guidelines** — Is there a developed information management infrastructure?

- **Planning** — Is there a fully developed agency wide implementation plan?

- **High-level resource models** — Is there in place a mechanism that collectively describes agency data, technology and applications resources, including how they support business functions?
Organizational structure — Is there an integrated organizational structure?

Effective skills base — Is the staff appropriately skilled?

Each project received ratings of excellent, good, satisfactory, fair or poor, along with suggestions to improve the potential for success. These recommendations from IPO were provided to finance divisions in the Legislature to foster better decision making on the part of the Legislature, and better design and implementation for the agencies. IPO’s recommendations are optional for an agency, unless specified in law. However, M.S. 16B.41 does not provide any requirements for agency compliance. Even so, from the most recent set of agency requests and IPO recommendations, IPO noted that most agencies did adhere to their recommendations. Very few finance divisions in the House reviewed the recommendations. Some staff members reported that they did not receive the report, or know how it was intended to be used until most of the funding decisions had already been made.

IPO’s recommendations deal largely with agency readiness for a particular information system. It is not a cost benefit analysis. IPO responds to the cost benefit analysis that the agency has prepared. Some have argued that IPO’s review does not provide enough information to produce quality funding decisions. One of the specific issues is, that IPO does not provide a more in-depth look at the long range picture. Since projects are funded on a two-year basis, there is no discussion of future plans for the given information project. Future plans would render information on maintenance and upgrade needs and costs. IPO directs agencies to produce such plans after the agency has already received its rating or assessment, and possibly has received funding from the Legislature.

The Governor proposes a Strategic Information Technology Budget as a part of the FY 98-99 biennial budget recommendations. The Departments of Administration and Finance will jointly prepare this document. The Governor’s Office anticipates that this new budget document will provide information for decision makers that the IPO document does not. It would separate information technology requests just as operating and capital requests are separated. The focus is on expansion of the evaluation process, definition of shortcomings and future needs, and creating a method for allocating limited resources.

**VISIBILITY IS A KEY MATTER OF CONCERN FOR THE IPO**

A key issue surrounding the IPO is whether to leave it within the Department of Administration, or to make it a separate cabinet-level agency. In 1993, the Management Analysis Division of Administration issued a report discussing the case for independence from Administration.

The first issue is the possibility of the office being subject to interference from the commissioner, because IPO is actually regulating its boss.

Secondly, according to Management Analysis, “Administration has not provided sufficient stewardship for the office to play an effective statewide role (such as turnover in leadership, and in recruiting appropriate staff.)” Management Analysis has recognized that because information technology changes so quickly, the agency staffing idea which promotes the hiring and retention of state employees for the long term, (and not on contract) may prevent IPO from attracting skilled workers who can deal with rapidly changing technologies. IPO has noted in recent reports that unemployment in the Twin Cities, in the field of information technology, is less than one half of one percent.

Lastly, the report states that due to the emerging importance of information resources, the office needs better visibility. Visibility is a matter of concern because Management Analysis found that the state’s managers and elected officials have
demonstrated little interest in technology/information issues. Management Analysis is fearful that, because of this lack of interest, the IPO may be "vulnerable to irrelevance."

Although IPO remains in the Department Administration, the report states that, "In the longer run, however, the arguments for removal of the office are stronger. Several state departments and agencies began as units of other departments. They were 'spun off' as they matured and the issues they dealt with grew in priority. The Information Policy Office could follow the same path, maturing as it gains experience in the uncharted waters of information resource management."

YEAR 2000 BRINGS NEW CONCERNS

IPO has begun discussions with agencies about the Year 2000. As the year 2000 approaches, it brings its own set of unique problems. "It is estimated that 90 percent of business applications will fail in the year 2000 if they cannot recognize the new millennium (IPO Update)." Currently for programming purposes, dates are expressed as six digit combinations (for example 01-01-95). Using only two digits to express a year saves considerable computer memory. This is now a problem because the computer entry of “January 1, 2000” would look like this—“01-01-00.” The computer interprets the “00” as “1900,” not “2000.” This industry practice also affects age calculations. A computer subtracts the year in which a person was born from “00.” Although it may seem trivial, experts have stated that this problem may cause 25 percent of American businesses to fail. Computer programmers are going to have to review each bit of data and change each program that references the data. While procedurally straightforward, the process will be extremely time consuming and expensive.

IPO has asked state agencies to review every computer program used to support state functions. The agencies are asked to then form a task force to help determine what needs to be done. There is no cost estimate for Minnesota yet. However, the state of Nebraska has estimated that it will be a $31 million dollar problem for them.

According to a document distributed by IBM, entitled Frequently Asked Questions and Answers on Year 2000 Challenge, making information systems ready for the Year 2000 is a redevelopment project which will include all affected software and applications. Gartner Group consultants have estimated that a typical mid-size company could spend as much as $3 to $4 million in personnel and computer resources to make the changes. They also affirm that large companies or organizations could spend ten times that amount, or more. The October 1995 issue of Government Computer News reports that estimates for the federal government’s costs to address the year 2000 issue ranges from $10 billion to $25 billion. IPO has a request in the supplemental budget for $7.2 million for an impact assessment and contractor procurement to begin information system modifications.

For more information contact: Kim Cousin, Fiscal Analyst, Room 372 S.O.B, 6-4117.
**GLOSSARY**

**GIAC** is the Minnesota Government Information Access Council. This Council is charged with improving public access to government information and services through electronic means.

**IPO** is the Information Policy Office, a division of the Department of Administration charged with approving state information resource investments.

**IRM** is Information Resource Management, IPO’s strategic direction for managing information resources to accomplish agency objectives.

**Information System Life Cycle Methodology** provides a systematic basis for the financial analysis of information system proposals. It is a model that illustrates the relationship between the costs and benefits of a system as it evolves over time.

**MMIS** is the Minnesota Medicaid Management Information System, which reimburses health care providers serving public clients under various state health plans, including Medical Assistance.

**MnAssist**, formerly known as SSP, is the state’s administrative business system. It includes accounting, human resources/payroll and procurement systems.

**Year 2000** is a phenomenon caused by the common practice of using two digits instead of four when writing computer programs.