State of Iowa

IT Return on Investment (ROI) Program

Introduction

Governor Vilsack asked the Iowa Information Technology Department (ITD) to construct a methodology for evaluating the benefits of information technology (IT) projects in Iowa State government. These benefits are those that accrue to Iowa citizens, to State government, or to both. The Governor wanted to know the extent to which IT projects are projected to deliver or actually have delivered a bona-fide "return on investment (ROI)."

This will help the Governor achieve this goal of establishing an independently administered ROI program in State government to verify and validate IT project results. The program will provide a comprehensive oversight function for specified IT projects (before, during, and after implementation).

Background: Private Sector / Public Sector

IT executives from the private sector and from the public sector were contacted and asked to comment about the utilization of ROI methodologies for IT projects in their organizations. The following will summarize the comments from each sector.

Private Sector

IT executives from five large Iowa companies were interviewed. As a condition of the interview, it was agreed that this report would not specifically reference a particular interviewee or company. These executives provided some very interesting comments regarding private sector ROI programs for IT projects.

In general, the following observations were made:

- Accountability, which was generally a non-issue for IT organizations in the past, has become a prominent concern. This is especially true for IT projects, because they have such a profound impact (positive or negative) upon organizational performance.

- Independent verification and validation (IV & V) of IT project outcomes is very desirable, but not common. An IV & V program would be most helpful to upper management. It would insure that the "right" projects got the "right" attention, and funding. An independent certifying entity would improve project results.

- Few companies have a comprehensive ROI program for IT investment. Quantification of results or follow-up is limited. Most ROI efforts, regardless of cost, are performed on an informal, ad hoc basis and are not standardized or institutionalized.

- In varying degrees, the use of cost/benefit analysis is a common means of determining ROI. Cost/benefit analyses are generally prepared by the entity requesting funding, with limited external or independent review. Meaningful cost/benefit analysis standards for IT projects should be established and implemented.

- A review committee, comprised of senior level management (inclusive of senior IT staff), should make final funding decisions regarding proposed IT projects. This committee should also be responsible for reviewing project evaluations after implementation to confirm proposed results.

- "Threshold criteria" should be established concerning which IT projects would be evaluated and presented to the review committee.

- Independent verification and validation of IT results should be as important for government as it is for the private sector because public funds are being expended.

The Public Sector
Executives from the State Information Technology Consortium (SITC) were interviewed. SITC is a non-profit organization and a technical arm of the National Association of State Information Resource Executives (NASIRE). Approximately 30 states are subscribers to SITC, including Iowa. This organization maintains a current knowledge base of IT processes, IT procedures, and IT protocols that are in place throughout all levels of government.

In general, the following observations were made about the Public Sector:

- A comprehensive implementation of the proposed program would be useful in various states. Many state programs have aspects of this proposal, but none (to SITC's knowledge) contains all the elements being proposed by Iowa. Most government IT projects do not include significant evaluation effort from project proposal through project implementation.

- Not every IT project in the public sector equally lends itself to the quantification of benefits. For example, some IT initiatives or activities are undertaken for "political" or "legislative" reasons, while others may be "leap of faith" efforts, and strict ROI ground rules may be more difficult to establish.

- Independent verification and validation of IT project results have generally not been positively received by State agencies or by their respective IT shops. This is especially true for organizations which have been permitted to operate quasi-independently for years.

- In order for the proposed ROI program to be effective, it should be personally endorsed and communicated directly to agency heads by the Governor.

Recommendation:
The comments from the private and public sectors clearly indicate a need for an outcome oriented ROI program for IT projects, especially in government. In both sectors, the independent verification of results was highly desired, but generally not occurring. This absence of attention in both sectors should not deter Iowa from moving forward with an IT project accountability program that focuses on documented, objectively verified and validated, quantifiable results (where applicable).

Accordingly, it is recommended that a program be created in the Enterprise Quality Assurance Office of ITD which would be responsible for ensuring the Governor's vision for ROI is successfully implemented and maintained. According to SITC, Iowa would be the first State to establish such a comprehensive program. Consistent with this vision, the Enterprise Quality Assurance Office, working with the Governor's Office, the CIO, the Information Technology Council, and State agencies, would be responsible for the following:

- Briefing the Governor's ROI vision for IT projects to agency directors and to the enterprise IT community.

- Establishing an agency task force to assist the Enterprise Quality Assurance Office in the development of enterprise, quantitatively based, ROI standards.

- Educating agencies regarding the requirements of the ROI standards for IT projects.
- Establishing an enterprise project funding request process and assisting agencies in assembling ROI based project funding requests.
- Consulting, on a regular basis, with agencies during project implementation.
- Independently verifying and validating project results.
- Creating and maintaining an enterprise database and status reporting system which focuses on quantifying, to the extent possible, project results.