



From More Than a Day, to Less Than an Hour: *A formula for success in workstation replacement, delivery, and security*

Category: Enterprise IT Management Initiatives
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Executive Summary

Like many state government organizations, the Minnesota Department of Revenue (DOR) had been following a “silo” approach to workstation management. The result?

- Lost worker productivity and down-time was costing the agency approximately \$200 per hour in lost opportunity for audit and collection activities that generate \$.5 billion annually.
- Computers were being funded and procured by individual divisions, instead of purchasing standard computers in bulk to take advantage of deep discounts.
- Standards for purchasing were not implemented, and IT staff were not often consulted. This resulted in higher per unit costs, unused inventories of non-standard equipment, and customer dissatisfaction at less than optimal quality and delays in repairs.
- The Department of Revenue employees process over \$20.2 billion in tax revenues each year, including \$.5 billion in compliance and collection activities. To do this work, it is essential that they have reliable, fast, coordinated, and secure computer support.
- Computers were configured inconsistently, resulting in unique technical issues that took far longer to fix, and more lost productivity.
- Taxpayer data was being stored in unencrypted local storage, which created a huge security risk for the agency, the state and for taxpayers.

All of these issues offered an opportunity to capitalize on continuous process improvements.

The project goals were threefold: to reduce the turnaround time when providing scheduled and emergency computer replacements; standardize computer configurations; and secure taxpayer and agency data.

Rapid turnaround using a consistent and repeatable process was crucial for smooth DOR agency operations. It was important to ensure that tax compliance activities had as little down-time as possible. Down-time translates into lost opportunity for revenue audit and collection activities.

Over the past four years, and as the result of continually improving the process, we have reduced turnaround time from more than a day, to less than an hour; secured the taxpayer data through use of encryption (earning a 97% IRS security rating); and standardized desktop computer configurations.

This project also aligned with Minnesota Governor Mark Dayton’s priorities through the Better Government for a Better Minnesota* effort that sought to “cultivate and support a culture where collaboration and continuous improvement are central,” and is dedicated to “finding ways to save money, reduce waste, and make government work better for the people of Minnesota.”

And it also aligned with the strategic goals* of MN.IT Services to “manage technology investments in a manner that minimizes costs and generates savings dollars for investments in the future. Ensure that government and citizen data is protected and the business of government never stops.” *Source: *MN.IT Master Plan* <http://mn.gov/mnit/about-mnit/strategic-plans.jsp>

Business Problem and Solution Description

The problem:

- The DOR's computers were not consistently configured; were funded and procured within separate divisions; lacked replacement coordination; and held taxpayer data in unsecured (unencrypted) local storage.
- Inconsistent configurations increased the amount of individualized technical support necessary and resulted in long turnaround times for replacement. MN.IT @ Revenue supports approximately 2,500 desktop or laptop computers. The laptops are scheduled for replacement every three years (desktops every 4 years)
- Uncoordinated procurements resulted in excessive and sometimes unused computer inventories, and resulted in dissatisfaction when it came to computer replacement activities.
- Ultimately, DOR was experiencing a reduction in productivity due to computer failures and replacements.
- As computers were critical to all of DOR's operations, something had to be done to correct the situation.

The challenge:

- The challenge was to quickly deliver secure, policy driven, managed computers that met the needs of the diverse population with Department of Revenue employees, and ensured taxpayer data security through the use of hard drive encryption.

The solution:

Working with the Department of Revenue business divisions, MN.IT @ Revenue staff:

- Developed software roles for each division.
- Implemented a process for both scheduled and unscheduled computer replacements.
- Packaged and automated the installation of software.
- Reserved funding for computer purchasing and control.
- Encrypted all workstation and laptop storage drives.

Elements of the solution:

- Cost: there was no hard cost for the project. The team incorporated continuous improvements so that it became part of standard operating procedures.

Significance

Stakeholder groups:

- Department of Revenue employees and business leaders
- MN.IT Services employees and business leaders
- Service Sectors (taxes and revenues)

- Citizens as service customers, citizens as taxpayers

An exercise in transforming traditional state government operations

- Working with the DOR business divisions, MN.IT @ Revenue developed software roles for each division; implemented a process for both scheduled and unscheduled computer replacements; packaged and automated the installation of software; reserved funding for computer purchasing and control; and encrypted all workstation and laptop storage drives.

Alignment with gubernatorial priorities, and MN.IT Services IT strategic plan, and IRS compliance

- This project addressed a concerted effort aimed at continuous process improvements. It aligned with Minnesota Governor Mark Dayton's priorities through the Better Government for a Better Minnesota effort that seeks to "cultivate and support a culture where collaboration and continuous improvement are central," and is dedicated to "finding ways to save money, reduce waste, and make government work better for the people of Minnesota."
- And in the strategic goals of MN.IT Services to "manage technology investments in a manner that minimizes costs and generates savings dollars for investments in the future. Ensure that government and citizen data is protected and the business of government never stops."
- The Department of Revenue now meets compliance requirements of the National Institute of Standards and Technology (NIST) special publication 800-53, and IRS Publication 1075.

Alignment with NASCIO's 2014 State CIO Priorities

- This project promoted and lead cross-boundary collaborative, solutions and relationships by reaching out to the business community on a regular basis to review their business requirements for today and for the future. This collaborative process has strengthened our strategic alliances with key partners by being more aware of the business needs; and the business being more aware of the capabilities, limitations and opportunities of available technology.
- The establishment of standards for hardware, software, configuration, and management of computers, establishes consistency in the implementation of information technology best practices; and provides process and transparency for the innovation and evolution of technology.
- We have used our engagement with the business community to promote and enhance the critical role of information technology and innovation in the business, to the foster the perception that technology is not an "expense" but an "asset."
- The ongoing engagement of our CIO in the strategic direction of our business has been invaluable, and has promoted and strengthened our CIO as a business leader and trusted advisor of information technology.

Benefit of the Project

Financial benefits of regained productivity

- The Department of Revenue's employees process over \$20.2 Billion in tax revenues each year which includes \$.5 Billion in compliance and collection activities. To support this process the agency replaces approximately 800 laptop and desktop computers each year due to age, employee turnover, or failure. It is estimated that Revenue's Audit and Collection employees bring in approximately \$200 per hour.

- By reducing employee down-time for a computer exchange from more than a day, to less than an hour, the auditors and collectors have had over \$2 million in additional potential productivity for tax compliance activities in the past 3 years.

Security risks were minimized or eliminated

- Centralized distribution and management, with enforced computer policies and local encryption has improved overall data security. In May 2014 a Microsoft engagement (PADS) documented that the Department of Revenue and MN.IT @ Revenue's desktop security framework is significantly better than the industry average. This finding was validated in June 2014, when an Internal Revenue Service (IRS) audit of desktop security rated the Department of Revenue and MN.IT @ Revenue at 97% compliance with IRS Publication 1075.
- Repeated and continual attention to the business needs of the agency has resulted in a consistent, supportable and secure desktop that effectively meets the current requirements of National Institute of Standards and Technology (NIST) special publication 800-53, and IRS Publication 1075.
- We regularly run IP360 which identifies security issues so we can address them immediately.

How is this project innovative?

- For those familiar with traditional state government processes, the "silo" effect (divisions and departments within an agency working independently, and often in conflict with one another) can be a daunting barrier to improving operations.
- This computer replacement process, which was implemented in close collaboration with the business community and continually improves with quarterly and annual reviews of their future computing requirements, and has resulted in improved communications and process transparency. The business relationships developed as a result of this project can serve as an encouraging model for other states.
- The standardization and security of computers has resulted in faster resolution of support calls, minimized user downtime, increased productivity, and enhanced customer satisfaction, building trust between business and IT.

Types of benefits and the impact of the benefits

- Operational effectiveness and efficiencies that include accuracy, collaboration, process improvements, productivity, risk and staffing requirements
- Improved management
- Security, privacy

Non-Financial Return on Investment

- One of the most stunning returns cannot be measured in dollars and cents. Before we implemented the improvements, we nearly had to pry the old computer out of users' hands. The exchange process was so painful and fraught with errors and omissions that no one wanted to do it if their computer was still working. Now the users look forward to getting a newer faster computer. And, as shown in the survey comments below, business users are on a first-name basis with our helpful IT staff.
- The executive management is extremely happy with the improvements, making our jobs much easier. Regular survey evaluations are offered to the staff receiving the computers. With ratings from one (not satisfied) to five (very satisfied), the majority of responses are "very satisfied",

Measurement

- Survey results indicate that customer satisfaction with computer exchanges has increased dramatically. These enthusiastic responses are worth their weight in gold:
 - “This was the easiest computer exchange I have ever had. My new computer is working very well so far. Thank you!”
 - “My experience was very positive. I am a telecommuter, and Chris even took the time to explain additional information for me. Even took the time to assist me the day after the delivery. Thank you for your assistance Chris!”
 - “Antonio was especially helpful and I am sure my computer works great because of his efforts-thank you!”
 - “I appreciated the fact they accommodated me to do the exchange on a day that I was in the office so I didn't have to make a special trip. I work from home. Good job in every aspect.”
 - “Very fast, streamlined, easy process. Thank You!”