

Case Study: How Real-Time Collaboration Helped the IRS Cut Costs and Improve Productivity

David Mario Smith

Enterprises often undertake e-learning or Web conferencing projects to save money quickly, but these projects can save far more if the enterprise continually improves its virtual environment over several years. The experience of the U.S. Internal Revenue Service (IRS) provides valuable guidance for e-learning and collaboration managers who are leading such initiatives.

Key Findings

- All U.S. government agencies were required to convert as much learning and training as possible to an e-learning format by 2007.
- The IRS chose Centra (now Saba Centra) primarily because it had an inside-the-firewall architecture, allowing the IRS to control and manage the environment.
- In 2007, AT&T upgraded the IRS's backbone network so that it could support e-meetings, voice over IP (VoIP), photo sharing, high-level audio codecs and streaming video in Adobe Flash format.
- The IRS uses its e-learning environment for over 2,500 events per year, of which 1,000 were e-meetings. Some 6,000 to 8,000 people participate in a typical month.

Recommendations

- Foster a good relationship with your vendor. The initial deployment ran into problems with the IRS firewall, and the project team worked closely with Saba Centra to deal with any issues.
- Start small and work out the kinks. A pilot project in one division helped to identify and solve technical problems, it also helped the project team figure out how to win the support of users.
- Make the system easy to use. User adoption is the key to success.

WHAT YOU NEED TO KNOW

E-learning and Web conferencing can save a tremendous amount of money by eliminating travel and face-to-face classroom instruction. These initiatives yield immediate payback, but the big savings come from pursuing a virtual environment over several years and continually upgrading the infrastructure to support new capabilities. The IRS has run such an initiative for 10 years and the agency estimates it saves tens of millions of dollars a year from e-meetings and e-learning. The IRS had strong, clear direction from government leaders; it started with a small pilot project and worked out the kinks; and built an easy-to-use system to attract users.

CASE STUDY

Introduction

Most CIOs, and learning and collaboration managers know that they can save the enterprise lots of money by substituting travel and face-to-face meetings for e-learning and Web conferencing. Indeed, many enterprises tried these technologies during the recent financial crisis. But projects done quickly, under economic pressure may feel unnatural to users and not follow best practices. As a result, e-learning and Web conferencing may not enhance workers' performance as much as expected, and business units may revert to face-to-face meetings when travel budgets recover. By contrast, the IRS, a tax collection agency with over 100,000 employees, has achieved tremendous savings with e-learning and Web conferencing by pursuing this initiative over more than a decade. Now that the economic squeeze has relaxed, CIOs and other IT managers have an opportunity to think long-term about e-learning and Web conferencing. The IRS's experience can help guide their plans.

The Challenge

In 1999, U.S. President Bill Clinton issued Executive Order 13111, whose provisions included a mandate that all federal agencies use software and other new technologies to improve the speed and flexibility of training and to make government employees more productive. All government agencies were required to convert as much learning and training as possible to an e-learning format by 2007. In 2001, the economic slowdown created budget pressures that led the IRS to try to cut the cost of training and meetings. As a result, the IRS required all divisions to use a virtual environment for:

- Technical training.
- Continuing professional education.
- Project meetings.
- Employee meetings.
- Testing for certification and accreditation.

The IRS had to put its e-learning and meeting solution behind the firewall to meet federal security requirements and guidelines.

Approach

In 1999, the IRS's HR department researched collaboration tools and invited vendors to present their solutions, including Microsoft, Centra (now Saba Centra), Interwise (now AT&T Connect), WebEx (now Cisco/WebEx). The IRS chose Saba Centra because it was the only product on the

shortlist with an inside-the-firewall architecture at that time, and the IRS could control and manage the environment. The code was not dependent on other products, and the IRS could build it onto an independent server.

In 2000, one division piloted the e-learning and collaboration environment with 100 Centra licenses and one server, and the division established business processes for the application. The IRS concentrated first on creating training materials by converting knowledge artifacts, such as recordings, to an e-learning format and by working with agents to develop 30-minute to one-hour presentations about a topic such as a particular tool or an auditing methodology. These presentations enabled the IRS to capture and reuse knowledge that it would otherwise lose when the agents left. The project team created dummy events so people can become familiar with the tool.

In 2001, the IRS acquired 150 more licenses and ran 240 training sessions and meetings in the virtual environment; it ran 500 events the following year. The IRS grew the infrastructure and architecture incrementally as demand increased, first moving to five servers, then nine and now 11 servers. As the infrastructure grew, the virtual environment could offer more capabilities. In 2007, AT&T upgraded the IRS's backbone network so that it could support VoIP, photo sharing, high-level audio codecs and streaming video. In 2008, the IRS started using the virtual environment for e-meetings. As users became more familiar with the system, adhoc meetings increased. For example, system administrators use it for server configurations, and internal contractors use it as an application sharing tool. The infrastructure is capable enough to allow anyone to use the system without network delays.

Results

In 2009, the IRS used its e-learning/collaboration environment for over 27,000 events, including training and e-meetings; 116,000 people participated with some 6,000 to 8,000 people participating in a typical month. In January 2010, which saw record usage, 10,000 people participated in 30 to 40 events per day.

The IRS measured the effectiveness of the virtual environment primarily through savings from travel and lost productivity from workers away from their regular duties. The IRS estimates that each person who does not have to travel to training or a meeting saves the enterprise \$800. The IRS said that it saved \$47.6 million in 2009 and that as of October 2010, it has saved \$228 million in total over the nine years of the project. These numbers do not include any productivity gained from holding sessions that were previously cost prohibitive. The IRS believes the use of e-meetings for information sharing and collaboration has made the workforce better informed and that the workforce has become better trained.

Critical Success Factors

Strong direction: The Executive Order gave the project strong backing from the top of the U.S. government for a multiyear effort. Government leaders set a clear and aggressive target of reducing travel for the various agencies to achieve.

Incremental improvement: The IRS built out the architecture and infrastructure of the virtual environment to support more users and give them a better experience, and to allow for high-bandwidth applications. This approach enables the environment to deliver more and more value to users.

Addition of capabilities: Over time, the IRS added new functions and applications to the virtual environment, such as e-meeting, which proved extremely popular. The added capabilities not only deliver more value but also cement workers' allegiance so that the virtual environment becomes one where everyone wants to participate and therefore acts as a forum for

collaboration. Workers also realized that they could stay in their home office to get training and attend meetings without travel adding stress to their family life.

Immediate impact: The project showed immediate results by reducing the need for travel and face-to-face classroom instruction. At first, workers resisted because they missed getting together face-to-face, but the travel savings realized by the division piloting the project saved it.

Lessons Learned

Foster a good relationship with your vendor: The initial deployment ran into problems with the IRS firewall and broke some existing applications. The project team worked with Saba Centra to repair things and make the product fully compliant with government requirements. One of the IRS project leaders belonged to Centra's product advisory group, which helped guide the development of the Saba Centra application. This relationship helped the IRS work out the glitches in the system.

Start small, assess adoption, determine core features and work out the kinks: The IRS ran a pilot project in one division. The pilot helped to:

- Assess adoption rates.
- Identify features that were needed such as being compliant with section 508 of the U.S. Rehabilitation Act of 1973.
- Identify and solve technical problems.

The pilot also helped the project team figure out how to win the support of users who had originally resisted the system. Once the team got users working well on the system, it gradually widened the scope to include other users and divisions. The positive experience of the early adopters helped convince their peers to use the system.

Make the system easy to use: User adoption is the key to success. The IRS already has Microsoft NetMeeting and LiveMeeting, which are easy to use and suitable for small and informal meetings. The e-learning/Web conferencing system support larger meetings and has more extensive learning features, but it also needs to be easy enough to use that people won't defect to simpler tools.

RECOMMENDED READING

"Case Study: 3M Uses Storytelling to Uncover Tacit Knowledge"

"Saba Shows Some Signs of Moving Beyond Learning"

"Magic Quadrant for Corporate Learning Systems"

"Magic Quadrant for Web Conferencing"

"Thriving with Slashed Budgets: E-mail, Web Conferencing, and Instant Messaging"

"Toolkit: Calculating Cost and Carbon Savings From Virtual Meetings"

REGIONAL HEADQUARTERS

Corporate Headquarters

56 Top Gallant Road
Stamford, CT 06902-7700
U.S.A.
+1 203 964 0096

European Headquarters

Tamesis
The Glanty
Egham
Surrey, TW20 9AW
UNITED KINGDOM
+44 1784 431611

Asia/Pacific Headquarters

Gartner Australasia Pty. Ltd.
Level 9, 141 Walker Street
North Sydney
New South Wales 2060
AUSTRALIA
+61 2 9459 4600

Japan Headquarters

Gartner Japan Ltd.
Aobadai Hills, 6F
7-7, Aobadai, 4-chome
Meguro-ku, Tokyo 153-0042
JAPAN
+81 3 3481 3670

Latin America Headquarters

Gartner do Brazil
Av. das Nações Unidas, 12551
9º andar—World Trade Center
04578-903—São Paulo SP
BRAZIL
+55 11 3443 1509