

For the IRS There's No EZ Fix

By assembling a star-studded team of vendors, the IRS thought its \$8 billion modernization project would manage itself. The IRS thought wrong. Now the agency's ability to collect revenue, conduct audits and go after tax evaders has been severely compromised.

BY ELANA VARON

Executive Summary

The IRS's \$8 billion modernization program, launched in 1999 to upgrade the agency's IT infrastructure and more than 100 business applications, has stumbled badly. The first of multiple software releases planned for a new taxpayer database is nearly three years late and \$36.8 million over budget. Eight other major projects have missed deployment deadlines, and costs have ballooned by \$200 million. This case study illustrates what can go wrong when a complex project overwhelms management capabilities of both vendor and client. The IRS did not follow its own procedures for developing the new systems and failed to give consistent direction and oversight to prime contractor CSC. Longtime managers resistant to change undercut the vendor as well as the private-sector IT executives hired to oversee the program. IRS execs and its oversight board say CSC failed to grasp the complexity of the assignment. To turn things around, the IRS has barred CSC from starting new projects and changed the terms of its agreement with CSC so that most of the work on modernization will be done at a fixed price. The agency has scaled back its project portfolio, and CSC has brought in more people at both management and staff levels who understand the tax business.

THE INTERNAL REVENUE SERVICE'S Master File is an accident waiting to happen. A legacy of the Kennedy administration, this database stores the taxpaying histories of 227 million individuals and corporations, including every transaction between taxpayers and the IRS for the past 40 years. The Master File is used to determine if you've paid what you owe, and without it the government would have no way to flag returns for audits, pursue tax evaders or even know how much money is or should be flowing into its coffers.

Yet the system still runs code from 1962, written in an archaic programming language almost no one alive understands. Every year, programmers, some who have worked at the IRS for decades, add new code to the Master File to reflect new rules passed by Congress. As a result, the system has become a high-tech Rube Goldberg machine. Those familiar with the Master File say it is poised for a fatal crash that would shut the government down.

Congress and the IRS had hoped that by this tax season, this fragile system would be partially replaced by a centralized database that could provide both IRS agents and individual taxpayers with daily updates of taxpayer accounts, just as credit card companies and banks do, enabling speedier refunds and more timely customer service. This new Customer Account Data Engine, or CADE, is part of a massive \$8 billion modernization program launched by the IRS in 1999 to upgrade its IT infrastructure and more than 100 business applications.

But the program, called Business Systems Modernization, has stumbled badly, running into serious delays and substantial cost overruns. The first of multiple

software releases planned for the new database (which would enable faster processing of returns and faster refunds for 6 million out of the 21.5 million people who file the 1040EZ form) is nearly three years late and \$36.8 million over budget. Eight other major projects have missed deployment deadlines by at least three months, and costs have ballooned by more than \$200 million, according to the U.S. General Accounting Office and the congressionally chartered IRS Oversight Board, an independent panel of tax industry and technology experts who advise the IRS and Congress.

Those familiar with the program say the fault lies largely with the IRS's entrenched bureaucracy. The agency did not follow its own procedures for developing the new systems and failed to give consistent direction and oversight to Computer Sciences Corp. (CSC), the vendor it hired to do the work. Longtime managers resistant to change undercut CSC and the private-sector IT executives who were hired to oversee the program, according to Mark Forman, who, as associate director for IT and e-government at the Office of Management and Budget, oversaw the government's major IT initiatives from June 2001 until last summer. Three CIOs have come and gone in the seven years since planning began for Business Systems Modernization.

For their part, IRS executives, as well as the IRS Oversight Board, say CSC was overwhelmed and underqualified. They complain that CSC didn't fully understand the tax collection business or grasp the complexity of the assignment, an assessment the company does not dispute. "I have never encountered a program of the size and complexity as the Business Systems Modernization program at the IRS," Paul Cofoni, president of CSC's Federal Sector business, told the U.S. House Ways and Means Oversight Subcommittee at a recent hearing.

More than once, the IRS considered firing CSC. Each time, officials decided against it, although in February, IRS Commissioner Mark Everson barred CSC from taking on any new projects unless it meets deadlines for delivering work in progress. Charles Rossotti, who was IRS commissioner from the launch of the program until the end of 2002, now says it was a mistake to think that CSC, or any vendor for that matter, could manage such a huge undertaking without heavy input from the IRS. "We really thought we were going to have a very, very thin IRS team managing this," recalls Rossotti, who is now a senior adviser to The Carlyle Group.

Indeed, Business Systems Modernization provides a case study for almost everything that can go wrong managing a large, complex IT portfolio. At stake in this bungled implementation is the IRS's very ability to conduct timely audits and go after tax evaders, not to mention its long-term goal of delivering customer service on par with private-sector financial institutions. If the Master File crashes, the government would not be able to collect its \$2 trillion in revenue or pay for anything, whether it's Social Security benefits or the bill for new weapons systems. Meanwhile, the cost of collecting \$1 of revenue—45 cents in 2002, the last year for which statistics are available—has not appreciably declined in two decades. Modernization "is crucial to delivering better service to taxpayers and increasing

the agency's efficiency and productivity," said Larry Levitan, a member (and former chairman) of the IRS Oversight Board, at the House Ways and Means hearing.

A Legacy of Failure

The IRS has twice before failed to modernize. In the late 1970s, President Carter put the kibosh on a project to replace the aging Master File when an external review questioned whether the agency could adequately protect taxpayer privacy. Almost two decades later, in 1995, Congress pulled the plug on a second modernization program after the IRS spent 10 years and \$2 billion with little to show for it.

At that time, it was clear to the IRS's congressional overseers what had gone wrong. Projects didn't have business sponsors. Contracts with vendors didn't have clear deliverables. And no one, either within the IRS or among its dozens of contractors, was held accountable for results. (For more about past IRS project management problems and the early stages of Business Systems Modernization, see ["The Taxman's Burden."](#))

To prevent those problems from recurring, the IRS and Congress tried to apply textbook IT management wisdom. In 1996, the IRS hired a new CIO, Arthur Gross, who had directed the modernization of New York state's tax systems, to craft a strategy for updating the agency's IT infrastructure and systems. A year later, President Clinton appointed IRS Commissioner Rossotti, an entrepreneur whose company, American Management Systems, developed accounting systems for financial services and government clients. As the first IRS commissioner who was a businessman—not a tax expert—Rossotti was selected to champion change.

With Congress's blessing, the agency made plans to outsource Business Systems Modernization to a prime contractor. The contractor would bear the burden of program management and systems integration. The vendor was supposed to be a "thought leader," bringing in fresh ideas for how IT could transform the agency's business processes.

Around the same time, Congress passed a law reforming IRS management and raising salaries for key managers, including the CIO, to attract talent from the private sector. The IRS Reform and Restructuring Act also mandated a reorganization of the IRS bureaucracy from a set of geographically based fiefdoms to a structure organized by business function. For instance, the Wage and Investment Division is responsible for dealing with individual taxpayers and their returns, while other divisions serve different types of businesses.

As part of this realignment, Rossotti put the CIO in charge of the entire IS budget and staff, large portions of which had been dispersed among the old geographic units. The modernization team morphed into a new Business Systems Modernization Office, or BSMO (pronounced "Bizmo"), reporting to Rossotti and the CIO. When Gross quit a few months into Rossotti's tenure (the two didn't get along), Rossotti hired Paul Cosgrave, a consultant with more than two decades of

private-sector experience. By the end of 1998, the IRS had chosen CSC over Lockheed Martin to lead a team of elite vendors, including IBM, Lucent, Northrop Grumman, Science Applications International and Unisys. Rossotti wanted a roster of heavy hitters with large project experience. The team CSC put together (called Prime) had a long history of working with the IRS on its legacy systems.

The IRS and CSC would spend most of the next year planning. Even today, some of these early steps are praised by the program's critics. "They had a good plan and a good strategy, and I think they still do," says former IRS Oversight Board Chairman Levitan. "The problem was they didn't execute it."

In fact, the threads that held Business Systems Modernization together began to unravel almost immediately.

The Enemy Within

Despite the fact that the IRS and CSC had agreed that CSC would make most project-related decisions, midlevel IRS managers never bought into the concept. They were used to doing things themselves, their way.

Within the agency's IS department, resentment seethed between what one CIO called the "fair-haired folk" who worked on modernization and the rest of the 8,500-strong technology workforce that kept the existing systems running. Despite the fact that the modernized systems would eventually replace the legacy applications and infrastructure, managers operating those systems were frequently left out of the loop when the new systems were being discussed. The thinly staffed Bizmo either didn't have the time, or didn't make the time, to educate their peers. Nor, in the IRS's view, did CSC make much effort to reach out to those legacy managers. As a result, designs for new systems often lacked important requirements, and this empowered the managers of the legacy systems to push for customizations that did not conform to new enterprise standards.

In fact, no one, not even the CIO, had enough stature within the agency to champion the business process changes that modernization required. Business managers were involved in approving plans, making deployment decisions and resolving problems, but only as members of large committees—not as accountable individuals. Scoping out requirements and getting the projects done was considered IS's responsibility, and business unit leaders were not held accountable for ensuring that new systems were delivered. "That was probably the single biggest issue," says Levitan.

When Cosgrave resigned as CIO early in 2001 (ostensibly because of the financial restrictions of being a public official), John Reece, who had recently retired as CIO of Time Warner, was offered the job. He says he was so disturbed during his interviews by "the body language and the comments people made" about Bizmo and IS operations that he told Rossotti over dinner that he had to have control over both modernization and operations to bring them together. Rossotti agreed.

Fixing Too Little, Too Late

Reece was no stranger to big projects, bureaucratic foot-dragging or the need to ride herd on vendors. At Time Warner, he had overseen the installation of numerous enterprisewide systems. A large part of that was corralling diverse business divisions that "were almost at war with each other."

But soon after Reece sat down at his government-issued desk in March 2001, he realized that the problems facing Business Systems Modernization were bigger than he had thought. Of the first set of projects that were scheduled for deployment, most were late and over budget. A system for routing taxpayer inquiries to the IRS call center was fielded only after several sleepless days of testing and frantic calls to suppliers for help tuning equipment. Two other projects—an application to make audits more efficient and online services for tax preparers—suffered from scope creep. The Customer Account Data Engine, scheduled to launch in May 2002, was also about to derail.

Neither Bizmo nor CSC had developed a full set of procedures to follow. Nor were they following the procedures they had established. As the treasury inspector general for tax administration would later report, among CSC's lapses was its failure to properly measure project costs, adequately define requirements and fully assess project risks. "The estimates that were done early on were built on such fragile knowledge that they were useless," says Reece. He was incensed, and he let CSC know it. He even broached the idea of firing CSC, but became convinced it wouldn't be practical. For one thing, no one was ready to declare the effort a failure. The issue became "how to fix Prime's warts and turn them into the Prince Charming we need them to be," says Reece. The IRS had already forced out one general manager that CSC had put in charge of Prime. Reece would go through two more.

Vendor executives involved with Prime concede that the team needed more experienced managers with deeper understanding of the tax administration business. But the IRS wasn't doing its job either. According to the inspector general, Bizmo had allowed the audit application to go forward without having CSC define its security requirements and without resolving whether it would be integrated with other IRS applications. Officials added last-minute requirements to the online services project. And in the rush to deploy the call center application, the IRS gave the green light without proof it had passed testing.

There were other hassles. According to Reece and industry sources, it took weeks to get approval for something as simple as purchasing equipment. As the delays mounted, so did the costs.

Even before Reece came aboard, it was clear that the IRS needed a bigger, more experienced staff to oversee Prime and make sure it was following procedures. Levitan wanted to hire more outsiders who had done large, complicated projects. But Reece faced internal grumbling over the higher salaries set aside for outside hires. He took the expedient route and filled some of the positions with insiders

who could start the job right away, even though they didn't have all the qualifications he was looking for. In hindsight, says W. Todd Grams, who was the CFO at the time and would eventually replace Reece as CIO, the agency made a mistake in thinking that its "superstars" from operations could be successful without additional help from outsiders.

The White Flag Flies

By the beginning of 2002, it became clear that CSC and its subcontractor, IBM, would not be able to deliver the Customer Account Data Engine on time. A few months before the software was due, CSC's program manager delivered a progress report indicating that CADE would not be delivered on time, a report that "Fred [Forman, the Bizmo manager] and I sort of threw up all over," Reece recalls.

The missed deadline came as a shock to Reece, who hadn't known the extent to which the project was in trouble. "There was a tremendous fear in the organization" about delivering bad news on the part of both Prime and the IRS, he says now. "They were afraid they were going to lose their jobs, that Congress is going to stop the funding" because of past failures. At a tense "come to God" meeting in February 2002 that Reece, Forman, Rossotti and Levitan held with CSC CEO Van Honeycutt and the company's COO, "we said, Either you guys shape up or ship out," Reece recalls. The IRS capped the cost of the project at \$97 million—the latest budget estimate—so that any new delays would occur on the vendors' dime.

The source of the trouble was that CSC and IBM had let slide a critical and complicated piece of middleware, called "balance, control and reconciliation," that was needed to ensure that the data processed by CADE was updated in the Master File, which contains taxpayers' complete account records. "They had identified the need to do the code but hadn't immediately committed a staff to do it," Reece says.

Though the IRS faults its vendors for the screwup, the agency also contributed to the mess. A report on the project by the inspector general found that IRS executives approved CADE for development even though CSC had not completed its design work on the balance, control and reconciliation code. Meanwhile, both the agency and CSC neglected to get input from the staff that runs the Master File at the IRS data center in Martinsburg, W.Va.—who would ultimately run CADE—about how to integrate the two systems. When the Martinsburg staff members finally did weigh in, the information they gave CSC conflicted with the information CSC had from Bizmo. Rather than working out the differences, CSC ignored both groups and came up with its own solution altogether.

By early 2003, Reece had had enough. Rossotti, whose five-year term expired in November 2002, had been a lame duck for months. Without Rossotti to back him up, Reece was "a typical CIO caught in the middle," observes Mark Forman, the former OMB official. "[Reece] tried," says an industry executive familiar with the situation. "It's tough for an outsider to come in to the IRS."

Reece says he decided that the new commissioner coming on board should have "a steady, permanent hand to take [modernization] the rest of the course.

"I've spent 43 years of my life running projects, and I'm very good at it, thank you very much," says Reece. "It's almost mind-boggling how difficult [this] was to do."

Reece left the agency in April 2003 and now works as a consultant a couple of miles from IRS headquarters.

Can This Project Be Saved?

Mark Everson, a former corporate executive who was President Bush's deputy director for management at OMB, was appointed IRS commissioner in May 2003. Three weeks later, he named Grams, the agency's CFO, to the CIO job. By the end of the year, Everson and Grams had devised a plan based on the recommendations of consultants. In December, the IRS Oversight Board made a media splash with its report detailing a litany of management screwups by both the IRS and CSC, but, Grams says, "there was nothing in these studies that shocked us."

Among its recommendations, the Oversight Board suggested that IRS business unit leaders take ownership of the various modernization projects, and that the agency put CSC on a short leash. In response, the IRS changed the terms of its agreement with CSC so that most of the work on modernization would be done at a fixed price, a step Grams thinks should have been taken at the outset. The agency has also scaled back its project portfolio by 25 percent.

In addition, the agency has identified business unit leaders to champion specific projects. John Duder, the deputy commissioner of the Wage and Investment Division, which will be the major user of the CADE system, now spends around 75 percent of his time on the project. CSC delivered the CADE software to the IRS shortly before the new year, and it's being tested. Deployment is expected later this year. Grams says he has also decided to colocate more IRS staff with Prime staff to improve teamwork. He is in the process of hiring more project managers with experience building big, complicated systems.

At CSC, Jim Sheaffer, the fourth and current general manager of Prime, says he has brought in more people at both management and staff levels who understand the tax business or have worked on public-sector projects. "There's now a collection of people on both sides who understand better how we work together than there was three or four years ago," he says. Sheaffer adds that his team has learned from its mistakes and improved its ability to estimate project costs and schedules.

Yet in February, CSC missed another deadline—to deliver the first phase of an internal accounting system—prompting Everson to bar the company from working on two upcoming projects. Grams says firing the company if it misses another deadline is among the IRS's options. At a House hearing, CSC Federal Sector

President Cofoni argued that future success depends on "an increased role in requirements definition and transition planning" by the IRS.

CSC officials say they have succeeded with similarly complex projects. The company recently completed the first phase of a four-year project with the U.S. Army Materiel Command to decommission dozens of systems used for managing logistics and replace them with a single instance of SAP. That project had some of the hallmarks of IRS modernization: decades-old technology and business processes; a workforce set in its ways. But the Army's project managers got the job done by relentlessly courting end users and by insisting that CSC would not get paid unless it met an exhaustive set of performance metrics. In other words, the Army actively managed the project, which is something the IRS failed to do.

Can this project be saved? "People ask, Is modernization going to fail?" says Levitan. "I say we can't let it fail. This program must succeed for the welfare of the entire federal government."

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