

No More Paper Chase: Automating the Workflow Process at the California HealthCare Foundation

Prepared by
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About the Foundation

The **California HealthCare Foundation** works as a catalyst to fulfill the promise of better health care for all Californians. We support ideas and innovations that improve quality, increase efficiency, and lower the costs of care. For more information, visit us online at www.chcf.org.

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I. Introduction

Innovative, large-scale IT projects are notorious for their high rate of failure, regardless of the amount of money invested.

THE MISSION OF PHILANTHROPY IS STRAIGHTFORWARD: to promote the public good, most commonly by making grants. But the actual process is anything but straightforward. In fact, so complex is the art and science of grantmaking that professionals in the field have their own professional societies, annual conferences, and MBA programs.

Until recently, grantmaking at the California HealthCare Foundation (CHCF) involved an inelegant process that many of those peers would likely have found familiar. Staff members labored under a bulky hybrid system, partially computerized, partially paper-based. The computerized elements weren't connected to each other, and thus created more work, not less, since the same information had to be entered by hand into multiple programs. The resulting document pileup was so relentless that the paper file for even the simplest grant could swell to several inches thick by the time the project came to an end. With information existing in multiple file cabinets, along with multiple computer databases, pulling together the data necessary for a basic report was a time-consuming chore, one in which mistakes were easy to make and hard to catch.

Today, the situation at CHCF is dramatically different, thanks to a new, entirely computerized workflow system. Information about any grant is as close as the nearest computer terminal; any staff member can look up its current status and component tasks. Reports about Foundation activities are easy to generate; in fact, the system keeps a running tally of key pieces of information, such as the percentage of each program area's budget that has been allocated among grantees. Moving a grant from one step to the next, which used to require routing slips and cover letters, is now accomplished with the click of a mouse. And the elimination of paper files means physical document storage has been dramatically reduced.

The transition required considerable time and resources at CHCF, and the complex process was not without its hiccups. Nonetheless, the new system is considered a solid success. Administrators say it delivers all of the added efficiencies they were hoping for. Staff members who use the system every day are enthusiastic as well, saying it has

eliminated a great deal of drudgery. "There is a lot less paper," said one program assistant. "You can just flip through things electronically. Everything moves a lot faster."

So much faster, in fact, that when a CHCF staff member recently decided to leave the Foundation, two colleagues told their managers that there was no need to hire a replacement. The new system, they explained, was so efficient that two people could now do the work of three.

One might think there would be a dog-bites-man quality to the news that a well-funded nonprofit organization had successfully implemented a new workflow automation system. In truth, projects such as these are notorious for their high rate of failure, regardless of the amount of money invested.

That "reputation for risk" is why so many otherwise innovative philanthropies are still using antiquated, cumbersome, and unpopular grantmaking systems. There is a reluctance to try and change the status quo because of the daunting complexity of the undertaking, or because organizations worry their names will be added to a long list of high-profile debacles with the attendant career casualties.

This case study is intended precisely for such nonprofits. It aims to describe how CHCF made the successful transition from a jerry-built grantmaking system to an efficient, Web-based system - without exorbitant expense or unseemly delays. Every nonprofit is different, and the exact circumstances at CHCF won't be precisely matched anywhere else. Nonetheless, the story of how the Foundation moved to its new system, and what it learned along the way, should demonstrate that a modern, computerized grantmaking system isn't quite the unconquerable Everest it's commonly assumed it to be.

II. Background

LOCATED IN OAKLAND, THE CALIFORNIA HealthCare Foundation is one of two healthrelated philanthropies created in 1997 as part of the conversion of Blue Cross of California, a historically nonprofit company, into the commercial Wellpoint Health Networks. CHCF works as a catalyst to fulfill the promise of better health care for all Californians. It supports ideas and innovations that improve quality, increase efficiency, and lower the costs of care. As of December, 2009, CHCF's endowment was \$700 million, with an annual payout of approximately \$48 million.

Grants at CHCF are made in connection with one of four program areas, which operate under the guidance of an 11-member board. There are currently about 350 active grants, worth over \$65 million. While the Foundation is interested in all aspects of health care, it puts a special emphasis on projects that demonstrate how information technology can improve the practice and delivery of medicine. Typical grants include a study of Internetstyle dental telemedicine for low-income agricultural workers; a detailed examination of the role hospital fees are playing in California health care inflation; and a hands-on clinical look at how to best treat elderly patients suffering from chronic heart disease.

The Foundation employs about 50 people, including 18 working as program staff preparing, approving, and supervising grants. Another five are program assistants, who work in program support roles. They, along with two grants management staff, represent the front line of the foundation's grant administration system, and were the most directly affected by the conversion effort.

Until last year, grants at CHCF were approved and managed using four main components:

- 1) **Approval Tool.** A piece of software known as the "Approval Tool," used during the first phase of a grant's life-cycle when a project is initially being considered. Because CHCF came of age during the Internet era, it was ahead of most other organizations—including many for-profit companies—in adopting Web-based corporate intranets for basic enterprise tasks. The Approval Tool was designed in-house and used by staffers to automate and document the many steps involved in considering a grant.
- 2) **GIFTS.** The GIFTS software sold and supported by MicroEdge. This program, used widely in the foundation world, acted as the main database for information about a grant.
- Customized Excel spreadsheets. These contained grant information pulled from the GIFTS system, and were relied on for generating reports, such as those prepared for the board of directors. In addition, accounting software from Microsoft handled traditional tasks involving payables and other transactions.
- 4) **Paper.** This was the real workhorse of the grant administration process at CHCF. Moving a grant from one step to the next usually involved printing out a report, a cover sheet, an appropriately colored approval form, or a memo. There were 26 different forms and templates in all. Considerable office space was required to house folders connected with active grants. Those

from expired projects were moved to a rented storage facility off-site.

From one point of view, there was nothing strikingly antiquated or inefficient about the process used by CHCF. For example, despite its lack of elegance, the system was highly transparent; external auditors always had all the information they needed to confidently assess the Foundation's work. But for a relatively new organization - not to mention one with an expressed commitment to using technology to improve health care—the system suffered from a number of obvious shortcomings.

Exhibit A on that list was that the individual pieces of software were not linked to each other. Once staff members had finished using the Approval Tool for a grant, the information had to be re-entered by hand into GIFTS, and then again into the accounting software. Similarly, as portions of a grant were paid out, a staff member had to record that fact, by hand, in GIFTS.

Because information was spread piecemeal across so many locations, both online and off, answering even very simple questions often took a great deal of time. And if a staff member had forgotten one step in the process, such as updating an Excel spreadsheet or misfiling a piece of paper, an accurate answer would be impossible to come by. When one program director wanted to know how much had been spent on a specific grant, she thumbed through the grant's folder, pulling out and then totaling the cancelled checks. The reporting process was even more cumbersome and time-consuming for the director of grants administration, the person responsible for producing summaries of everything the Foundation was doing.

Another serious shortcoming was that the system did not provide any form of "workflow automation." Modern business software is designed around an

organization's policies and procedures, and guides staff members via software as they move from steps A to B to C. At CHCF, though, workers had to memorize every step in an often capricious process.

In 2005, officials at the Foundation began contemplating replacing its cobbled-together clunker with a new system that would take advantage of the latest generation of Web-enabled tools and techniques. As they debated whether, and how, to move forward, two somewhat conflicting values became apparent.

On the one hand, there was skepticism about the value of "bleeding edge" technology. Part of this was due to experience; the Foundation had gone through a brief period where seemingly innovative IT projects had been approved with little debate. After many projects failed to deliver the expected benefits, opinion turned sharply against adopting technology for the sole purpose of keeping pace with prevailing fashions and trends. "There has to be a business case," said Craig Ziegler, vice president of finance, administration, and investments. "You can't implement technology for its own sake." Indeed, Susan Southwick, the foundation's new IT director, had been hired on the strength of a resume that revealed extensive experience with no-nonsense IT projects carefully built around specific business needs.

At the same time, one of CHCF's core ideals was that technology, when used judiciously, has enormous potential for improving the health care system. As a result, the Foundation believed it had a responsibility to be a showcase for the intelligent use of appropriate technology. To continue to muddle though with a hybrid system that worked, if barely, would mean not living up to its own principles. Said Sam Karp, vice president for programs, "We wanted to practice what we preached."

Ultimately, the CHCF board balanced those two ideas. The Foundation would adopt a new grants

system. But this time, it wouldn't be custom software developed entirely in-house, as had happened with the Approval Tool. Rather than re-inventing the wheel, the Foundation would use an outside vendor for core technology, one based on Microsoft's .Net architecture.

But which vendor? Officials at the Foundation quickly discovered there were fewer choices than they would have liked.

One possibility was to greatly expand the use of MicroEdge's GIFTS. But staffers decided against this approach after conversations with MicroEdge indicated that the software was evolving in a direction that diverged from CHCF's needs.

Two other packages were evaluated using traditional purchasing criteria: the cost and utility of the program, with the experience and reputation of the company providing it. The Foundation ultimately decided on EasyGrants, a Web-based package provided by Altum Software, then a 50-person company based in Arlington, VA. Even though EasyGrants was the more expensive of the two systems, Foundation staffers believed it had the most to offer and would require the least amount of custom tailoring. The concern that Altum had fewer than a dozen customers was offset by the fact that several of the organizations who did purchase the product were quite large, a vote of confidence that impressed CHCF.

EasyGrants is a type of software known in the industry by the oxymoronic term "custom off-theshelf," or COTS. The core code is prefabricated at Altum, then expanded and adapted to accommodate the specific practices and procedures of the organization that will be using it.

In the case of the CHCF project, an additional layer of custom work was necessary. CHCF officials had decided to continue using their in-house Approval Tool, and asked Altum to rewrite the code necessary to merge it with EasyGrants. While that added to the cost of the project, CHCF believed the Approval Tool has proven its usefulness and was worth preserving.

The ratio of standardized to customized software varies from one COTS project to the next, and can only be determined after extensive discussions and negotiations. The more custom work that is required, of course, the more the project will cost. CHCF and Altum determined that their project would be about 40 percent custom built. With that in mind, in September 2007, the two parties signed an initial contract for a ten-month requirements-gathering phase. That was followed in January 2008 by a second set of contracts calling for the new software to be ready in 12 months.

Other important technology decisions were made at the same time. The most important involved adopting Microsoft's SharePoint package as a backend document repository and publishing system. This affected not only the EasyGrants project, but also the Foundation's external and internal Web sites, which until then had been built with ColdFusion technology. The switch to SharePoint became one of the most important parts of the migration to EasyGrants.

III. The Development Process

CHCF was determined to avoid another phenomenon that plagues IT efforts: Users who continue to use the legacy system even after the new one is in place.

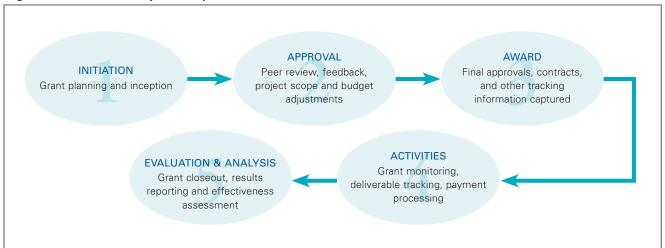
COMMON SENSE DICTATES THAT BEFORE YOU REPLICATE a business operation in a computer program, you should make sure the operation itself is as efficient as possible. CHCF was careful not to overlook this step. Kazumi Taniguchi, a former staff member, was brought in as a part-time project manager for the EasyGrants transition. One of her first tasks was a detailed review all of the steps involved in the Foundation's grantmaking process, to see if any had outlived their usefulness.

She indeed found a few. For example, even the smallest expenditures—the equivalent of petty cash payments—were being treated as major outlays. Since the resources spent tracking these payments exceeded the expenses themselves, those reporting requirements were rewritten to make more sense.

Once the grant process was stripped of such inefficiencies, the next step was to use flow-chart software, with its familiar arrows and boxes, to map it out, step by specific step. The resulting eightpage document became one of the most important in the entire development process; it contained the equivalent of CHCF's DNA. The five major phases of a grant—Initiation, Approval, Award, Activities, and Evaluation & Analysis—were all listed, along with all the tasks and decisions involved in each of them. (See Figure 1 on page 8.) For example, during the payment phase, an accountant gives the chief financial officer a printed check. Is the check for less than \$5,000? If so, the CFO simply signs and returns it to the accountant. If not, it is sent to the CEO for a second signature. These, and hundreds of other contingencies, were spelled out in the precise detail a programmer needs to put something into software.

Before actual coding work began at Altum, Foundation officials made a number of decisions that would prove crucial to the ultimate success of the project. For example, they asked Altum to deliver the project in stages, as each was completed, rather than all at once at the very end. IT director Southwick explained that it is not uncommon for a company to take delivery of a major piece of software at the end of a long and expensive development effort, only to find out—too late—that the program doesn't perform as expected. With Altum,

Figure 1. CHCF Grant Project Lifecycle



there would be nine software shipments, each one representing an opportunity to make sure the effort was on track.

CHCF was determined to avoid another phenomenon that plagues IT efforts: Users who continue to use the legacy system even after the new one is in place. For all of the creakiness of the old process at CHCF, it had the advantage of familiarity, and there was a concern that staff members who had been working with it for many years might never let it go. To prevent that, the Foundation decided that once the new system "went live," the old one would be shut down.

The process of tailoring EasyGrants for CHCF was reasonably straightforward. At the beginning of the process, Altum sent two staff members to Oakland who spent three days at CHCF nailing down details. From then on, the conversations took place over the phone, often using online meeting software so that parties on both coasts could confer while watching the same computer screen. A typical week would see four or five hours of meetings, all of them coordinated on CHCF's end by Project Director Taniguchi.

The typical meeting involved reviewing a "wireframe." These were mock-ups of each EasyGrants screen that Altum designers had created using Excel, and were prepared before any actual code was written. (See Figure 2 on page 9.) CHCF's in-house IT analyst played a key role in this part of the development effort, making sure that the screen described in each wireframe accurately captured the relevant CHCF process. Often, wireframe printouts covered the walls of his office.

While most CHCF staffers weren't involved in the conversion effort, they were kept apprised of its progress—and were able to comment on the emerging product—through a series of informational sessions. The final software was delivered in April, 2009. As part of its contract, Altum ran several days of hands-on training for Foundation staffers at CHCF. Sessions would last from a few hours to two days. The software "went live" a month later; as promised, the old system was switched off at the same time.

Although the software ended up being delivered two months behind schedule, the delay had no significant implications—all adjustments to the timeline were made by mutual agreement during the development process.

Figure 2. Sample Excel "Wireframe"

To view and manage your Personal Tasks, click the task title. For Workgroup Tasks, select an option in the Action drop-down list and click Go.

Options									
Go To My G	rants Portfolio								
Change My	Password								
Personal Ta	aska		-						
Task Creati	ion Date Task	Task Easys		rants ID Organization		Grant Status	Primary Staff		Reassign
8/30/07	Review Brant Agreement		02	Organization 1		Awarded	Smith, John A.		Reassign
7/30/07	7 Raview Grantee Submission		97	Organization 2		Active	Smith, John A.		Reassign
6/14/07	Review Grantee Submission		Organization 3			Active	Ford, Henry		Reassign
6/14/07	Submit Grant Closecut Report 32		21	Organization 4		Closed	Ford, Henry		Reassign
viewing reo	ords 1 - 10 of 50						<< First 10 < Previous	s 10 Next 10 > I	ast 10 >> Show
Workgroup	Tasks								
Action Task Creation Date		Task	Task		Organization	Grant Status		Primary Staf	
Transfer to Personal Tasks W Go 8/10/07			Review Grant	Review Grant Agreement		Organization 7	Awarded		Smith, John A
Transfer to Personal Tasks			Review Grants	Review Grantee Submission		Organization 8	Active		Smith, John A
Transfer to Personal Tasks			Review Grant	Review Grant Agreement		Organization 9	Awarded		Ford, Henry
Transfer to Personal Tasks			Review Grante	Review Grantee Submission		Organization 10	Active		Ford, Henry
Viewing reco	ords 1 - 10 of 50						<< First 10 < Previous	t 10 Next 10 > I	ast 10 >> Show
Planned Pr	plects								
Add									
Project ID	Project Title	Grantee	Total Planned Amount			Probability	Project Status Reassign		Options
456	Health Care Idea	Chronic Care Clinic, TBC	\$1,000,000.00		200	High	Planned	Reassign	Delete
345	Health Care Idea	Healthcare that Works	\$5,000,000.00	3rd Quar	ter 2008	Low	In Approval	Reassign	
234	Health Care Idea	TBO	\$75,000.00	Next Bos	rd Meeting	High	Planned	Reassign	Delete
						High	Request Revision	and the same of th	(MODIFIER)

IV. The New System in Action

THE BEFORE-AND-AFTER PICTURE AT CHCF might be compared to a household adopting Quicken or TurboTax after years of juggling paper receipts, statements, and lengthy pre-printed forms. When users sign into the system via their Web browser, the first thing they see is a list of the tasks they need to perform in order to keep things flowing. (The software, of course, creates these lists automatically.) "Everyone has a home page, and can see the tasks assigned to them," says Lisa Kang, director of grants administration. "People don't need to dig very deeply to find out what it is they are supposed to be doing."

For a program officer, the list of tasks might include reviewing a draft of a report written by a grantee, then clicking the equivalent of an OK button, automatically signaling the accounting software to send the grantee a check for the deliverable. The software enforces every step of the process, and won't allow a Step Four without first making sure that someone performed Step Three.

"It isn't as though the old system was collapsing under its own weight," explains Craig Ziegler, vice president of finance, administration and investments. "It's just that the new system is so much better integrated. Before, all the different parts of the

Tallying the Pluses and Minuses

No organizational change goes off without a hitch—particularly when it involves computer software. As much as CHCF's automation project has simplified the process of making and administering grants, there is still room for improvement.

A program assistant who spends much of her day with the new system says that she is very happy with the way it eliminates many of the tedious and time-consuming parts of her job. She estimates that for most new employees, just a few hours of training would be required before they could begin using the new system on their own, compared to days or even weeks in the past. Full mastery, of course, would take longer.

However, she also notes that while designers built powerful search and sorting functions into the program, some routine, default views of data are poorly thought out. For example, grant lists can include some that were contemplated but never approved, cluttering the roster—a problem that might be solved by giving staffers more control over the structure of their searches.

In a similar vein, CHCF's grants director says that linking Word and Excel documents to a grant is not nearly as automatic as it ought to be; anyone making a change to a template needs to manually reload it, a process that is unnecessarily tedious.

And for all their advantages, computers don't do some things as well as paper. One senior program officer says that when reviewing documents associated with a grant, she will often simply make print outs and then spread them across her desk. It is a process she vastly prefers to flipping back and forth between computer screens.

Finally, there are several important features of the EasyGrants system that CHCF has not yet implemented. For example, grantees have no direct access to the system. Deliverables must be transmitted by email to a Foundation staffer, who manually loads the document into the system for review. Likewise, grant applicants are not able to use the system when submitting a proposal. Those capabilities are expected to be implemented this summer.

process stood alone. Now, the system works from end to end."

For Kang, the difference between the old and new systems is best illustrated by comparing before and after shots from her computer screen. The "before" picture is of a cluttered spreadsheet, whose rows and columns would tax the concentration of even an Excel power user. Actually pulling information out of the spreadsheet requires following instructions reminiscent of a treasure hunt. (Sample step: "Review notes saved in the 'Dummy' record seen here under the dummy organization name of "Budget Allocation Tracking.") By contrast, Kang's screen shots from the new system show a neat page of easy-to-read summaries, all of it generated at the push of a button. "It has been a huge win for us," she says.

Certainly, program directors are pleased that they no longer need to add up cancelled checks by hand to see how their grants are doing. But users also report that the new system has a multitude of other advantages. With the old system, there was no set way to store the many Word files associated with a grant: proposals, deliverables, comments, and the like. Since each staff member had their own electronic files on their personal computer, it was often difficult or even impossible for anyone else to assess where a particular grant stood.

One program director noted that EasyGrants eliminates this problem by keeping a running inventory of all files related to a grant. "It's so much better," she says. (See Figures 3, 4, and 5 for screen images of the new system.)

Figure 3. EasyGrants Login Screen

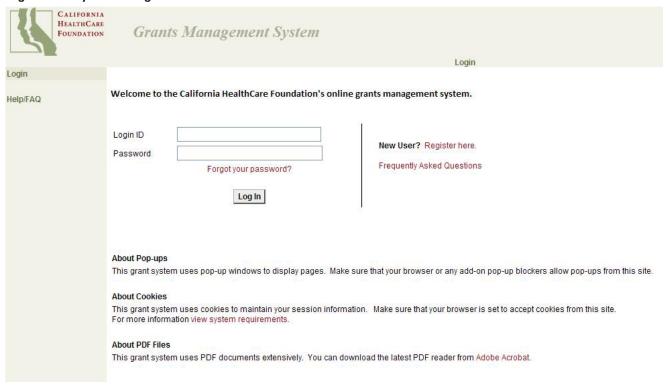


Figure 4. EasyGrants Projects Easylist Screen

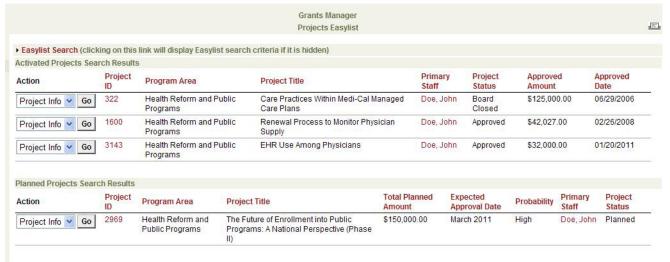
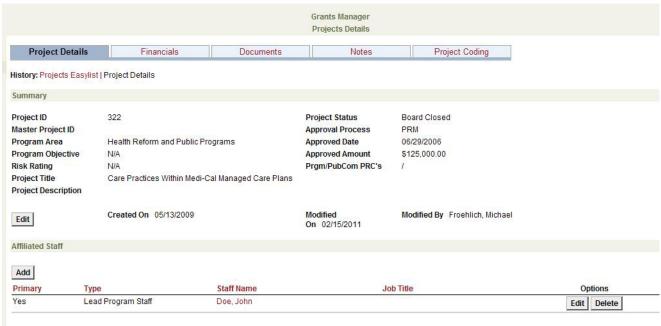


Figure 5. EasyGrants Projects Details Screen



V. Recommendations

The point of a project like this is not necessarily to reduce FTE's. The point is to reduce administration, so we can focus on our program work.

> - CRAIG ZIEGLER VICE PRESIDENT OF FINANCE, ADMINISTRATION AND INVESTMENTS, CHCF

SO IF CHCF HAD TO DO IT OVER AGAIN, WOULD IT proceed the same way? For the most part, its answer is, "Yes."

For starters, Foundation officials say they are pleased with the work Altum performed. IT Director Southwick, a veteran of many similar efforts, said that considering industry norms, the project went smoothly. There were the occasional setbacks; Altum is a relatively small operation, and Foundation staffers saw the company's capacity become severely strained as project deadlines approached. But the two sides speak highly of each other, and CHCF staffers have since recommended Altum to other nonprofits. At the same time, Southwick says that any foundation thinking of replacing its process should spend as much time as it can investigating the possible choices.

CHCF officers say most of the big technical decisions they made turned out to be right. For example, they have no regrets about not doing the project entirely in-house, since its small IT staff could never have handled so large an undertaking. They also are glad to be using a widely-adopted software development system such as .Net, as it is easier to find trained programmers for the inevitable bits of maintenance. And everyone involved in the project had enough discipline to avoid the temptation for "mission creep" by restricting the development effort to a well-defined path.

But they say some minor aspects of the project would be re-done differently. For example, while committed to the basic idea behind delivering the software a piece at a time, the grants director said that nine shipments was simply too many. In retrospect, she would have preferred half as many.

Organizationally, things ended up working as well as they did because the Foundation followed the familiar rules for successful IT projects. Before any computer code was written, business processes were carefully reviewed to make sure they made sense. Staff members were kept aware of the project; their ideas were solicited and, when appropriate, incorporated into the effort. Based on its experience, CHCF strongly advocates having a project manager whose only job is to get everything past the finish line. Managers who want to add the

responsibility to someone's existing workload will end up regretting the false economy, those close to the process warn.

There is another familiar rule for IT projects, one that is repeated so often that it has almost become a platitude: Make sure the project has the support of every major part of the organization, from the board on down. CHCF staffers are unanimous about the importance of heeding this advice. In fact, when asked about the single biggest reason that the conversion project went as well as it did, they say it is because everyone at the Foundation was committed to making it work. The project, said Vice President of Finance, Administration and Investments Craig Ziegler, was not connected with any one executive or a single organizational faction. The entire management team was behind it, and was willing to tolerate the inevitable small delays or extra costs that cropped up along the way.

There is a final recommendation Foundation staffers have to others considering a similar endeavor: to be reasonable in their expectations, and understand that the real impact of a new system is sometimes hard to quantify. A narrow focus on questionable ROI numbers or the possibility of a reduced headcount, says Ziegler, risks missing the real payoff.

"The point of a project like this is not necessarily to reduce FTE's," he said. "The point is reduce administration, so we can focus on our program work."



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