Going Paperless
A Nonprofit’s Migration from Paper to Electronic Processes
Second Edition

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Executive Summary

First Nonprofit Foundation first commissioned this report in 2010–2011 to describe a year in the life of UCAN (formerly Uhlich Children’s Advantage Network) as it began to reduce its paper consumption.

In 2012, as First Nonprofit Foundation prepared to reprint this report, it collected information on how the documented processes had fared one year later. By 2012, most of the processes being developed in the first reporting period had become standard operating procedure, and UCAN had succeeded in cutting its paper use substantially—reducing by an additional 116 feet its annual “skyscraper of paper.” This translates to a decreased consumption of forest products by the equivalent of 42 trees annually. Today, UCAN’s paper consumption is about $10,000 a year less than in 2010. Reducing paper is both good business and good environmental practice.

UCAN, a nonprofit with 515 employees, serves 12,000 clients annually in the Chicago region. Prior to the start of the first edition of this report, UCAN used more than 4 million sheets of paper annually—generating a stack of paper almost as tall as Chicago’s Willis (formerly Sears) Tower. During the course of the first reporting period, its paper use dropped by about 75,000 sheets per month, some of which may be attributed to the process it was undertaking. By 2012, UCAN reported it had reduced its paper consumption by another 29,200 sheets per month. The total reduction since the beginning of this process in 2010 is thus close to 1.25 million sheets of paper annually.

This first edition of the report captured many lessons, summarized below, which may help other organizations seeking to reduce paper consumption. These lessons are unchanged in the second edition.

- Systemic changes require strong centralized project management
- Organizational complexity makes software selection difficult
- Frequent communication improves software implementation
- Differences among software versions create challenges
- Getting development right prior to implementation ultimately saves time
- The process is going to be difficult; expect snags
- Workflow mapping is more complicated than expected
• Investigate vendors thoroughly
• Expect to find work group “outliers” during implementation
• Clarity of vision up front may speed implementation
• Take advantage of new opportunities inherent in software solutions
• Broadscale technology changes can cause other organizational challenges to surface
• Collection of data aids accountability

By 2012, UCAN had implemented all of the major processes except one. The electronic time sheets software, which was to have replaced paper time sheets, was not functional across the organization. The reasons are discussed in the report.

The process of reducing paper use via technology has systemic implications. It not only raises questions about internal systems and resource use, but also reveals much about the external environment in which an organization functions. The findings in this report should prove useful for many organizations, especially those in the human services. Paper use, management, and storage are expensive, consuming funds and time that could otherwise go to direct care.

Human service organizations such as UCAN, which face numerous regulations, have limits on the reductions they can achieve. This is because regulations may require paper trails and hard copy storage for years. UCAN’s growing success at reducing its internal paper requirements contribute to its organizational effectiveness. As this report shows, UCAN has had excellent success at changing internal systems and implementing new software across its complex structure. The organization will no doubt continue to improve its paper use as staff members become more familiar with its new systems. Ultimately, greater reductions will require changes in external policies that govern the agency’s work.

BY THE NUMBERS: A COMPELLING CASE FOR PAPER REDUCTION

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A SKYSCRAPER OF PAPER
UCAN (formerly Uhlich Children’s Advantage Network), a nonprofit youth-serving organization based in Chicago, serves about 12,000 clients annually and has about 515 employees. Its clients have complex needs and most are involved in some state-mandated process. The resulting stew of systems and regulatory requirements generates a massive paper burden. In 2010, UCAN used an average of 338,800 sheets of paper per month, more than 4 million sheets annually. If stacked one upon the other, these sheets would be 1,423 feet tall—just shy of Chicago’s Willis (Sears) Tower.

The associated costs are enormous. In 2010, maintenance of UCAN’s multifunction printers ran $44,000 annually. Paper costs were about $34,000 annually. And these were the costs the organization could track. Other costs are more difficult to estimate: paper must be filed, managed, stored, and destroyed or, in some cases, kept permanently. Clients and caseworkers fill out the documents themselves, and sometimes multiple copies are required and need to be shipped to state agencies.

Burdens of paperwork are a feature of life at UCAN, as at other youth-serving organizations. This report is a snapshot of one year in the life of UCAN as several senior managers worked to shift some paper-based systems to electronic ones. The lessons learned during this year can benefit other organizations, especially human service organizations across the country that struggle under similar paper burdens and seek to shift toward electronic systems.

The context for paper reduction
UCAN works with about 12,000 clients in Illinois each year. Many clients are wards of the state—children and youth who have been removed from their homes for reasons of abuse or neglect. UCAN also works with the families of those children, and some clients participate in multiple UCAN programs. About two-thirds of clients are female. Eighty-five percent are African American. UCAN’s mission is to build strong youth and families. It achieves this mission through a comprehensive assortment of programs, including residential treatment, therapeutic day school, violence prevention, support of pregnant and parenting teens,
counseling, foster care placement, and vocational training and internships. Programs are offered at fourteen sites in six counties. In 2010, UCAN had 515 employees. The organization’s website is www.ucanchicago.org.

UCAN’s clients face complex challenges. Most are minors involved with multiple state programs. UCAN has contractual relationships with public agencies such as the Illinois Department of Children and Family Services, Chicago Housing Authority, Illinois Department of Human Services, and Chicago Public Schools. It also receives federal, state, and private grants. The resulting paperwork and documentation burdens are enormous. In addition, the data collected in so many documents is difficult to standardize, analyze, audit, and maintain.

UCAN’s involvement with state systems creates many demands. For example, the Illinois Department of Children and Family Services has more than 120 computer systems, many of which staff from UCAN must use. Government regulations require that some of these systems maintain paper trails, yet data also must be entered electronically into the state’s various computer networks. Data retention and confidentiality requirements are inconsistent across programs, and individuals may move from one UCAN program to another.

A single individual involved with UCAN over several years accumulates an average of about three feet of paper (eighteen reams). Some of the files must be stored until the client’s 26th birthday, and some must be kept virtually forever. With 12,000 people served annually, the documentation and data storage burden only grows with time. Complicating this is UCAN’s operation of multiple sites in six counties and its growth through mergers, which has resulted in an accumulation of systems and processes.

Strategic value
UCAN’s path toward a more paperless system was strategic and supported by one of its core values: “Excellence derives from knowledge, hard work, and innovation.” UCAN’s executive and senior leadership teams describe paperless systems as a form of innovation related to “working smarter,” yielding benefits such as improved accountability, efficiency, cost savings, and reduced resource and time consumption. Their initial motivation was to remove UCAN’s paper time sheet process, but UCAN also sought to pilot solutions in other areas that would help it test the efficiency of going paperless. (It is interesting to note that the initial motivation—an improved time sheet process—was the one area that was still unresolved as of the second edition of this report.)
In an overview discussion with UCAN in March 2010, the following problems were identified relative to paper documents:

- Document storage and retention
- Repetitive paperwork (filling out the same information in slightly different ways for different state program requirements)
- Decentralized storage of documents
- Inconsistent document maintenance and data standards across the organization
- Tracking hours for different classes of employees and for employees who work in more than one program
- Tracking of restricted funds
- Allocating staff salary and expenses to various grants
- Medicaid billing issues for staff members who work within Medicaid reimbursable programs
- The existence of more than twenty programs, acting somewhat independently, which impairs identification of trends
- Complex program audits

An analysis of printer and copier use during 2010 showed that UCAN was using 338,800 sheets of paper per month. This amounts to 4,065,600 sheets per year, 47,300 pounds of paper, nearly four pounds of paper for each client served, perhaps 480 trees for a year. UCAN stores most of its documents on-site, but beginning in 2008, UCAN also contracted with an offsite storage vendor. The offsite storage costs $12,000 annually, and offsite storage is a minor portion of UCAN’s total storage. UCAN expects this amount to grow as it gradually shifts more documents to commercial storage facilities.

How this report was developed
First Nonprofit Foundation, Chicago, the corporate foundation associated with nonprofit insurer First Nonprofit Insurance Company, provided UCAN with a grant to improve document workflow in 2010. As part of this grant, First Nonprofit hired an external writer to document UCAN’s efforts to reduce its use of paper by shifting to electronic file and document retention when possible. First Nonprofit Foundation recognized that information on the challenges and outcomes of UCAN’s paperless process could benefit other nonprofits. It charged the writer with looking for factors that helped or hindered UCAN in its efforts. UCAN’s own staff contributed many hours to help with the development of this report through interviews and reviews of report drafts.

A team of three UCAN staff members—Walt Grauer, Vice President of Information
Technology; Laura Angelucci, Vice President of Administration; and Tawanna Streater, Foundation Relations Officer—met monthly via teleconference with writer Vincent Hyman to discuss progress on the project. Hyman drafted a diary of the meetings and progress notes each month, which the team reviewed and amended. In addition, the UCAN team kept records via its Microsoft SharePoint software.

The information and conclusions in this report are extracted from the diary and discussions. It describes just some of the domains in which UCAN sought to reduce its use of paper by increasing its use of digital information management. The “lessons learned” described in this report were extracted from the diary and agreed upon by the UCAN team, with the hope that other organizations may benefit from UCAN’s experience. As the first edition of this report was prepared, UCAN’s “paperless” process was not complete. However, enough had occurred by the date this report was drafted to summarize what had been accomplished so that other nonprofits may benefit. For the second edition, all processes were complete except for electronic time sheets, which could not be implemented.
The Process of Going Paperless

At the outset, the “paperless” team stated that going paperless would be a multiyear project. The challenges the team and UCAN hoped to address were described above. The team anticipated the following benefits from this process:

- Cost savings
- Reduction in paper use
- Improved staff accountability
- Improved efficiency
- Improved data access and analysis capacity
- Better readiness to serve new populations
- Better tracking systems that will yield service innovations and improvements
- Improved ability to compete for funders since UCAN will be able to demonstrate its innovations and cost-efficiency

As of the writing of this second edition, UCAN has realized many of these benefits, which are described in the section titled Development and Implementation Events.

The UCAN team anticipated some resistance when asking employees to change procedures and adopt new systems. But it hoped that by reducing time spent on paperwork and redundant forms, one day staff would be more free to care for clients. A member of the team put it this way: “The paperwork is a real problem in our industry. We used to have caseloads of thirty clients, and now we’re seeing only ten or twelve, which sounds like more attention, but it isn’t. We actually see clients less because the expectations around documentation have increased. Just when you think you’re done filling out forms, I promise you, there’s another form to fill out. That’s why we want to get ahead of this paper mountain.”

Though UCAN can’t change the number of forms outside regulators demand, it hoped that electronic documentation would help it more efficiently handle the numerous required forms by improving data storage, improving cross-document indexing, and allowing automated populating of similar data across forms.

The UCAN team began its work by automating the internal systems over which it has control. The list below briefly describes the projects underway at the beginning of this process.
Projects followed from April, 2010 through March, 2011

Paperless purchasing
This project used Microsoft SharePoint workflow to handle purchasing electronically. (Microsoft defines a workflow as “the automated movement of documents or items through a sequence of actions or tasks that are related to a business process.”) In paperless purchasing, purchase requests are submitted for approval via email or a shared file. Quotes, approvals, and invoices are handled via email. The IT department was chosen to pilot this process.

Printer/scanner device “tagging” of documents
This process involved a software addition to most of UCAN’s multifunction scanner/copier/printers. The software requires users to fill out information about a scanned document, thereby indexing the document for later retrieval. This helps alleviate the need for a hard copy of a document and enables electronic storage and searching.

Electronic time sheets
The goal of this project was to replace paper time sheets for staff members with an electronic system. This should save 12,000 to 13,000 imprints annually.

New employee onboarding
A variety of required tasks are associated with the first 90 days of a new employee’s time at UCAN. The goal was to automate those tasks via email alerts and electronic forms to replace the current paper forms.

Accounts payable
The goal of this process was to reduce the amount of paperwork involved in accounts payable (AP) so that invoices can be scanned, submitted, approved, and paid electronically while maintaining adequate segregation of financial tasks. The process used PN3 for Payables, a software product. This also allowed real-time updates to the budget and sped up workflow. The current system was not paper intensive and so only modest paper saving occurred here. Improved budget awareness and faster work were benefits.
Development and Implementation Events

This section highlights some of the processes involved with each of the projects during the time period of this report.

**Paperless purchasing**
The UCAN team chose the information technology (IT) department as the pilot site for paperless purchasing because the people in this department were already comfortable with technology and because the IT department routinely approves purchases of technology equipment for UCAN. IT began using an electronic purchasing process in July 2010. The process works as follows:

1. An email comes into the IT department with a request for a technology item.
2. The IT purchasing agent initiates the quote process for the requested item. Within the body of the email, a note says, “click here to approve.”
3. The IT approver reviews the bids and related detail and then approves the purchase.
4. Once the bill comes in, the AP process takes over. AP scans the invoice and sends it to IT for final approval.
5. IT provides final approval if the purchase was approved.

Besides the paperless workflow, the IT and finance departments noted other benefits of the new approach. Automated email kept the approval processes separated for good fiscal hygiene. For example, if someone attempted to change data in the original form, the system would generate a new automated email approval process, thus double-checking the attempted change and thwarting potential errors or fraud. In addition, an electronic trail of the purchase existed. Only someone with “rights” could approve the purchase. Though not foolproof, the system now does a better job of protecting against internal abuse than the previous manual system of approvals.

**Challenges and successes**
The IT department discovered two challenges when charting the actual steps in the flow of how a purchase request is submitted and approved. First, when a process is handled manually—one person delivering a piece of paper to another—the two can develop immediate solutions to problems. The human interaction allows for
some flexibility. When a system is automated, the steps are fixed and one-time work-around solutions aren’t an option. Analyzing the actual workflow and then creating a set of automated steps that will work across a variety of conditions is more complicated than it appears at the outset.

Second, one workflow often interacts with another. This means that the steps for several workflows may need to be worked out at once and the ways they interact need to be anticipated via discussion with others. For example, the IT purchase approval process overlaps with the AP payment process. The steps need to be coordinated or the chosen solution may wind up with incompatible processes or software systems.

Over the course of 2010 and 2011, IT and AP coordinated their workflows and the purchase project eventually worked smoothly. This has resulted in some minimal paper reductions, as it is no longer necessary to print quotes and obtain written signatures. Benefits include more efficient time use and better protection against errors and abuse than provided by the manual system.

By 2012, the IT department had ceased using paper to track purchasing in its department. Because purchases are made online, the process has also reduced the flow of paper coming in from vendors.

**Printer/scanner device “tagging” of documents**

In 2010, UCAN scanned and printed more than 4 million sheets of paper annually on multifunction printer/copier/scanning devices. UCAN learned that software was available for some of these machines that, in theory, would allow a user to scan in a document and enter index terms. The document then could be stored electronically and searched using these terms. This could save paper and file space and facilitate document retrieval.

UCAN set a goal to use the system when new contracts are scanned in. The process is as follows: A document or contract is uploaded, and the system requires the user to enter “tags” or terms describing the document in fields such as title, name, contract number, effective date, program funder name, program contract name, dollar amount, or fiscal year. As a result, the program contract archive can be sorted by various fields.
The process was functional by the end of the reporting period.

**Challenges and successes**

The software chosen to manage this process is called DocAccel, made by Notable Solutions, Incorporated (NSI). After selecting the software, UCAN discovered problems when using the software with its network. In addition, UCAN ran into troubles structuring the “library” for data retrieval. The design of the data entry is tricky because users must enter data into uniform fields using fixed terms that will facilitate searches. This means the software design must anticipate how people will describe a variety of documents and limit them to just a few terms. A third-party vendor was required to develop this product, and that vendor promised more than it could deliver. Thus, extra time and funds were needed to program the software correctly. A final challenge was that the project did not have a high priority at UCAN, and no single champion pushed it along.

The project was implemented and delivered to a level that met the original requirements. After implementation, a user involved in the process identified how the process could be expanded to meet additional needs of the agency. These needs were not specified in the original project requirements. Moreover, to ensure the contract numbers matched the contract number and naming system in UCAN’s financial system, it was necessary to involve developers familiar with the financial system.

This situation highlights the importance of comprehensive requirements-gathering prior to software selection.

As of 2012, the process was implemented across UCAN. Employees may scan a document, name it, and file it electronically at any appropriately configured scanner across the entire organization. Employees find the process convenient.
Electronic time sheets

With 515 employees, electronic time sheets was projected in 2010 to save at least 13,000 sheets annually. During the course of this study, UCAN interviewed two different software vendors for electronic time sheets and eventually chose a product called Time Matrix. This product could pull data out of UCAN’s existing Microsoft Dynamics GP system without the development of new software bridges between systems.

Challenges and successes

During initial attempts to implement the new software, UCAN often had to readjust expectations. As the reporting period for 2010–2011 wrapped up, the selected software was being tested with a few selected UCAN programs. During this time, continuing issues between UCAN and the vendor were being addressed.

Final rollout was to include multiple trainings with supervisors, who needed to learn how to run reports and other functions, and staff members, who needed to understand how to enter time into the system.

Software selection was difficult for several reasons. UCAN first identified potential vendors of hardware and software, then interviewed them and made a choice based on compatibility with other systems in use. The choice also required upgrading another software system (Microsoft Dynamics GP Software) to make the environment suitable for the chosen time sheet software. In addition, time reporting processes varied greatly across UCAN because different departments have different work procedures. Thus, preparation to select a vendor also required understanding the diverse applications across the organization and figuring out which processes could be made more uniform and which would require work-around solutions. Regardless of vendor, UCAN found that software packages for time sheets lacked the capacity to meet the complex accounting demands nonprofits face. For example, some UCAN staff work in two programs. They may accumulate overtime hours while working in one of the programs, and the programs may have different funders, requiring that expenses be tracked for separate grant reports at a later date.

The system chosen did not fully meet UCAN’s needs. For example, it allowed for only one supervisor per staff person, meaning that an employee who served two different programs wouldn’t fit into the new regime. UCAN decided that in some instances, employees would have an automatic time sheet for their primary program and a manual one for their secondary program. Also, one of the downsides
of this product is its limited standard reports. Special reports will need to be built via Sequel Report Writer, requiring extra steps and training for supervisors.

UCAN described working with the vendor as “a learning process.” UCAN learned that it had to initiate much of the communication, rather than waiting for the vendor. The complexity of time sheets meant that UCAN not only required customization of the software, but also had to make its processes more uniform across programs.

When contacted for the second edition of this report, UCAN stated that electronic time sheets were only available to about 25 percent of staff. The reason for partial implementation was that the software could not support UCAN’s complex time reporting requirements. They felt they had been promised functionality that the software could not deliver. After many efforts by the software consultants to adapt the software for UCAN’s use, UCAN contacted the software manufacturer, which confirmed that the software was never capable of doing what the consultants had said it could do. UCAN has retained new software consultants, but the process of rolling out electronic time sheets through the rest of the organization is stalled as of the preparation of this second edition.

Performance appraisal management system
The employee performance appraisal management system (PerformancePAM by Perryman Software) paperless project was implemented before the start of the 2010–2011 period this report covers, but was discussed several times during the duration of this project. This was upgraded to go paperless several years earlier. The evaluation is done online and stored online. Employees can digitally sign their electronic evaluations. The final step in this paperless project was enabling the online digital signature, which was completed during the year this report was underway. The UCAN team estimated that this has probably reduced 15,000 to 25,000 sheets of paper annually.

New employee onboarding
This process began rollout testing in late January 2011. The system uses Microsoft SharePoint to ensure automatic notification of steps in the orientation of new staff. The supervisor gets an automated notification via email that an employee is starting. The supervisor then writes out and posts the employee’s 90–day goals to ensure that the orientation process is satisfied. As other trigger points occur, the supervisor receives email notices. Supervisor and employee can view progress online via UCAN’s intranet.
Challenges and successes
UCAN faced several challenges in the employee onboarding process, some technical and some process-driven. There were many requests for changes after the pilot phase was launched. UCAN’s IT department responded to some issues as the project moved forward.

As of 2012, the process was completely implemented and in use as intended across the organization. Compliance with the process requires ongoing encouragement. Supervisors who frequently hire new staff adopt the new system, but those who hire infrequently need to be reminded how to use the system.

Accounts payable
In June 2010, the finance department purchased an accounts payable module from the software company PN3 to aid in paperless AP records. “PN3 for Payables” enables scanning an invoice and associating it with a record in Microsoft Dynamics GP Software. When an invoice arrives, an approval notice is sent to the manager responsible for the department making the purchase, and that manager authenticates the invoice online. The finance department allows supervisory approval of the reimbursement or invoice up to a specified amount. For example, supervisor X can approve up to a $5,000 expenditure; above that amount a manager must approve. Once approved, the change goes immediately into the budget, providing a real-time budget update. The benefits of the upgrade include:
• Immediate updates in the financial status of department budgets. Supervisors and managers are more aware of the impact of purchases on their budgets. This should increase accountability and help managers adjust plans quickly to fit changing financial conditions.
• Paperless workflow for accounts payable. UCAN notes that the paper reduction from the process is not large, because most invoices are sent via mail. However, in theory, invoices can be received electronically (or scanned in) and then routed electronically. Furthermore, digital images of the invoice can be retained instead of paper copies, reducing storage costs.
• Ability to handle mileage reimbursements and other expense reimbursements electronically.
• Automation of the AP process. This will reduce the number of steps and people involved.

Challenges and successes
When the first edition of this report was published, UCAN had not fully imple-
mented PN3 for Payables because finance department staff members had been assigned other duties, delaying implementation. At that time, UCAN’s paperless team noted that having a person manage the project would have eased implementation.

Server issues delayed the implementation of PN3 Accounts Payable. The AP system was not running as desired and UCAN was not able to determine the cause. In addition, during the delayed rollout, a new version of PN3 Accounts Payable was released that required an update of the PN3 modules. The vendor needed more of UCAN’s time than UCAN had been prepared for, and the resulting missed calls slowed down implementation.

PN3 offers a large number of account fields, which, in theory, could be useful. Prior to initial implementation, UCAN tested the process with actual users. It learned that multiple account fields were unnecessary. Thus, for implementation, UCAN was able to reduce requirements from four fields of data input to one. This improvement added time to the development phase, but UCAN felt that was worthwhile because it made the process better for end users. Choosing to test and revise the system prior to rollout was a major success for UCAN since it resulted in a simpler system from the users’ perspective.

As of 2012, the system was fully operational. The software purchased required customization in order to get certain functions automated, such as mileage and expense reimbursements. Implementation of these functions saved paper since paper forms are no longer required. UCAN reported that the system has improved staff accountability through the electronic document approval workflow, which ensures that reimbursements and invoices receive proper approval. The system has resulted in better tracking systems.
Lessons Learned

The lessons learned were extracted from the diary, via discussion with the paperless team about surprises and lessons learned during the course of the project, and through discussions of early drafts of this report.

Systemic changes require strong centralized project management
UCAN is a large organization with many interdependent programs and departments. This means that changes in one system will have ramifications for other systems. Some of these ramifications are easy to uncover, but others become apparent only as the process unfolds. Some examples:

- Changes in software wound up requiring changes in the network hardware as well as upgrades to other software.
- Changes to the time sheets required changes to the HR/Payroll process; in some cases, such as deployment of employees to several programs, the complexity required is beyond the capacity of off-the-shelf software, and the cost of developing custom software is prohibitive. (Ultimately, the complexity in this area prevented time sheets from being fully automated.)

These changes ripple through the system. UCAN did not fully anticipate the extent of these ripples. The paperless team noted that while the team approach was excellent, they felt they would have benefited from the appointment of a dedicated project manager to coordinate the process over a limited time of one to two years.

Organizational complexity makes software selection difficult
Basic software solutions are not going to easily fit an organization with a complex structure. Choosing the software becomes a matter of picking a system that will meet most, but not all, needs. This makes comparing software choices difficult. It also means that the organization must be prepared to consider changes to its procedures in order to meet the limitations of available solutions.
Frequent communication improves software implementation
Vendors’ software developers tend to be busy. UCAN had anticipated that some vendors would provide regular updates on the progress of projects, but they did not. UCAN learned that the “squeaky wheel principle” got the best results. Other organizations could benefit from this lesson by recognizing that once they purchase a product, they should take the initiative to seek regular updates from vendors. Equally important, prior to making a purchase, they should seek to communicate with the software company’s programmers, in addition to its salespeople, as it is the developers who take over once the sale is complete.

Differences among software versions create challenges
During implementation, UCAN had problems with NSI DocAccel running well on one server but not another. This turned out to be related to minor differences among versions of software. The introduction of new lines of Microsoft application and server software and of 64-bit versions of Windows complicated the support of software in different environments. Compatibility problems delayed implementation.

Getting development right prior to implementation ultimately saves time
UCAN found that testing out processes with users prior to organization-wide implementation helped ensure that the final rollout was easier for end users. One of the team members noted, “We don’t have quantifiable numbers at this point to say it’s worth it. But if the systems go in right, all this time on the front end is saved at the back end.”

The process is going to be difficult; expect snags
Organizations should anticipate surprising technical problems. Implementation is going to take longer and be more difficult than the most conservative estimate. Said one of the team members, “I’ll tell you, this is just long and painful. It’s nobody’s fault, but it’s the pace at which these things go. The amount of work and time at each step is pretty intense.” Another team member stated, “For every system that goes in, there’s a group of people who feel the pain of getting it ready.
It’s cumbersome because if we make a mistake when we implement, we have to back up, and you get worse in functionality when you do that.” Due diligence, the team member noted, includes hashing through all the exceptions and possibilities before the change is implemented. “The situations that are unlikely WILL happen at some point. That’s why we have to work them out ahead of time.”

**Workflow mapping is more complicated than expected**

Once you begin to chart how a process works and look at all the variables, the process often is revealed to be more complicated than it first appears. Work processes that are handled in person-to-person contact are easily (and subtly) modified while they happen, and the people doing the work may not realize the degree to which they vary a process based on conditions. When such processes are mapped out in a series of steps that are then automated, it’s easy to miss branch points in the workflow. UCAN is now ensuring that a few people on staff become experts in mapping workflow, a good practice for other organizations to follow.

**Investigate vendors thoroughly**

Vendors may make promises they aren’t sure they can meet. Be sure to talk to references and to the people beyond the sales staff who will actually be involved in the work.

**Expect to find work group “outliers” during implementation**

In a large organization, some work groups will not follow standardized processes. The organization will need to determine whether an outlier work group’s processes can be modified cost-effectively to conform to the whole or whether the process is better left untouched. An important factor in the ultimate decision is the effectiveness of the desired system the organization wishes to create.

**Clarity of vision up front may speed implementation**

Going paperless involves many changes to human systems, software, and hardware. The UCAN team stated that (in hindsight) they could have benefited from a clearer vision up front of the overall benefits that could be realized from
this system and a deeper exploration of what would change as a result of the implementation. Major changes will benefit from a committed leadership that evangelizes the value of the change. The technical staff leading the change should help to promote the benefits to those people involved in implementing the change. This might have helped staff think more broadly about the implications of the change for work tasks, which might have sped up some of the process.

**Take advantage of new opportunities inherent in software solutions**

As the organization investigated technological solutions, it uncovered greater possibilities from some software than it had originally sought. For example, the original goal of the scanner/printer/copier portion of this project was to scan in contracts. However, the project grew naturally to include more uses. Generally, one might conclude that when envisioning technology changes, management should ask end users to imagine the impact of changes and should allow them extra time to fully consider how their work will change.

**Broadscale technology changes can cause other organizational challenges to surface**

Previous mergers at UCAN brought in programs that, even after some years, had not fully meshed with the larger organizational culture. Because some software requires standardized work processes, differences came to light that may have been unseen, avoided, or ignored. The solutions developed need to accommodate the central needs of the organization, the needs of its constituents, the way “outlier” work groups function, and the long-term change the organization wishes to create. Though the intention of new technology is not to change the organization’s culture, technology may subtly influence culture.

**Collection of data aids accountability**

Prior to the start of this project, UCAN had difficulty determining how much paper it consumed annually. For example, several different types of contracts existed for different types of multifunction printers. It took time for UCAN to get an accurate count of paper use, a relatively simple measure. UCAN now has an accurate count, which has enabled it to examine its paper use and figure out where to focus on savings. The real-time budget changes as processed invoices show supervisors how purchases impact the budget.
Conclusions and Implications

During the three quarters of 2010–2011 during which the paper reduction effort began (and during which the first edition of the report was being developed), UCAN made significant progress reducing its paper use. In the quarter June–September 2010, use averaged almost 390,000 sheets per month. In the next two quarters, use dropped to 315,000 and 312,000 per month. At that time, the paperless team noted that project-oriented or seasonal variations in use may have had some impact on this trend, but felt that the decrease in use was due in part to the new processes. With another six quarters past, the changes have been confirmed. UCAN used 350,000 fewer sheets of paper for the year September 2011 through August 2012.

In addition to actual paper reductions, the lessons learned will benefit UCAN whenever it engages in other systems improvement efforts. Other nonprofits may also benefit by studying UCAN’s example.

Other benefits to UCAN unfolded as the systems were fully implemented. These include improved document searching and access, better document retention and destruction, improved accountability, and easier program audits. A more subtle layer of benefits may also be accruing. For example, besides the resource savings, the process of going paperless caused UCAN to examine interlocking systems. The process of mapping workflows may yield improvements in work methods. UCAN may realize benefits in improved standardization as it uncovers outliers and brings them closer to the system. And its improved information collection will help improve accountability.

The largest paper- and time-savings opportunity has not yet been touched at UCAN: processes that could improve the documentation workflow surrounding client interactions. But the improvements UCAN has made can be applied to the next steps.

For the first time, UCAN has a good fix on its annual paper use. It can begin to develop a baseline, examine its use patterns, and gain control of its paper. This information could have application to important structural questions such as
central purchasing, allocation of expenses, and creating incentives to reduce consumption. UCAN notes that though it now has better data on paper use and systems that could be used to analyze it, they have not examined use regularly since the project wrapped up.

UCAN’s greatest document and paper management challenges are those over which it has the least control: the documents it must provide state and other funder agencies. Some portion of UCAN is almost always undergoing an audit, as external agencies require proof of compliance. UCAN notes that state agencies increasingly have shifted the legal case management obligations for youth from themselves to local youth-serving organizations, a form of cost-shifting that heightens documentation demands and decreases the time available for clients. As one paperless team member said, “We have a serious violence problem in Chicago. Many of our youth are at risk. It would be nice if we spent less time on paper and more time with them.”

Though the state uses electronic data collection, its systems are not uniform and are rudimentary in their ability to allow the private agencies (which must use them) to retrieve and analyze data. Moreover, regulations require paper trails even though modern electronic storage is safe and efficient. The result is lost capacity and an expensive need to enter data twice—once into the state system, and again into the private agency’s system—if the agency wishes to mine its data for ways to improve service. The paper use and storage burdens are enormous at UCAN but are orders of magnitude greater at the state. This issue thus has implications beyond UCAN’s own challenges and solutions. UCAN bears costs of storage, lost time, diminished capacity to analyze data, and more. No doubt other youth-serving groups and government agencies bear similar burdens.

UCAN began with the easier task of gaining control of the excess paper in its own administrative systems. As this report shows, that in itself is an arduous task. But there are public policy implications for the remaining skyscraper of paper related to client documentation. Perhaps the lessons UCAN has learned could be used, in conjunction with other youth-serving agencies, to help regulatory bodies move toward more efficient systems that would collect data uniformly, permit electronic storage, reduce paper storage, reduce double-entry of data, and even enable deep analysis of data that foster program improvements. As UCAN collects and studies its use patterns, it will uncover new questions and will have better data to support its decisions. What UCAN learns may speed the efforts of other organizations as they shift to paperless systems.
About First Nonprofit Foundation

First Nonprofit Foundation’s mission is to further effective risk management practices and the overall development and advancement of nonprofits through unique, creative initiatives. We seek to create opportunities for nonprofits to develop and advance, improve their risk management skills, and reduce insurance losses and costs. To that end, we:

• Offer educational programs, webinars, and workshops.
• Develop and publish a variety of tools to aid nonprofit organizations, such as our Ten Things series for nonprofit board members and white papers on various nonprofit issues.
• Offer an information-rich website featuring articles that benefit nonprofit leaders and self-guided educational programs.

For further information, contact Trish Shanahan, 312-627-7724, pshanahan@firstnonprofit.org.

About this publication

Going Paperless: A Nonprofit’s Migration from Paper to Electronic Processes describes experiences, barriers, and lessons learned at UCAN, a large youth-serving nonprofit, as it sought to reduce its use of paper and increase its use of electronic systems. First Nonprofit Foundation provided funding to support this change at UCAN, and also funded the development of this publication with the goal that other nonprofits might benefit from understanding the process and benefits UCAN experienced.

We wish to thank UCAN for its participation in the development of this report and for its decades of service to improving the well-being of children and their families. UCAN’s willingness to share information about its internal processes—both successes and struggles—is a gift to other nonprofits and a testament to its forward-thinking leadership.