

Workflow Works at UH
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Abstract

The University of Houston implemented workflow approval and document imaging for all of its financial transactions in 2005 and 2006. Our goal was to increase the speed and efficiency of processing these transactions, while maintaining adequate internal controls. In addition to increased efficiency, we realized several additional benefits and learned a lesson about managing expectations.

Introduction of the Organization

The University of Houston is a research university with about 35,000 students and 5,000 faculty and staff. In September 2001, UH implemented the PeopleSoft financial system and upgrade it to a web-based version in July 2004.

Statement of the Problem/Initiative

Prior to workflow and document imaging, UH processed and maintained over 200,000 financial transactions (vouchers, journals, requisitions, etc.) a year through the following labor-intensive process:

- Departments created a transaction in the financial system
- Departments printed a coversheet from the financial system that summarized the transaction
- Departments routed the coversheet and backup documents for approval signatures through interoffice mail
- The processing unit (Accounts Payable, General Accounting, Purchasing, etc.) signed the coversheet and approved the transaction in the financial system
- The processing unit put approved documents into boxes and sent them to Records Retention
- Records Retention prepared the documents to be microfilmed (removed paper clips and staples, etc.) and sent them to a microfilming vendor when several boxes had accumulated (three to four months after they were processed)
- When the microfilmed documents were returned, Records Retention entered the reel and frame number of each document into the microfilm database, so the documents could be located on the microfilm reels

- Records Retention stored the original microfilmed documents in a warehouse for about a year after they were microfilmed, at which time they were shredded
- The Finance Department maintained the microfilm reels of approved documents and printed any documents requested by departments or auditors on its microfilm reader/printer

Design

We (the Finance Department) knew that we wanted to implement workflow and document imaging after our upgrade to the web version of PeopleSoft in July 2004, but we did not know exactly what it would look like. Our first step was to determine whether scanning should be centralized or decentralized. We determined that for workflow to be effective at UH, departments should scan their own backup documents, since departments initiated their own transactions.

Representatives from Finance met with each of the 18 college and division administrators, along with their department administrators (there are about 200 at UH), to help them determine the best scanning equipment to use within their college/division. Most departments simply upgraded their copiers to include scanning, while a few purchased individual scanners for certain employees. Each college/division made its decision based on the way they are organized and the location and number of people who process transactions. We provided standards for scanning (black and white; resolution at least 300 dpi x 300 dpi; certain file types: TIF, PDF, RTF, TXT, Word, or Excel) and recommended scanners that would meet their needs.

In addition to document imaging, we had to design electronic workflow for each type of transaction (budget journals, GL journals, vouchers, SC vouchers, and requisitions). We

wanted the approval process to be simple and efficient, easy to maintain from a security point-of-view, and easy to use. We decided to map out the process with the most approvals first – budget journals, with the idea that if we built the longest approval path first we could more easily build shorter approval paths based on this model later. We created standard roles (Initiator, Department Approver, College/Division Approver, Intermediate Approver, and Final Approver) that we could apply to all of the transaction types. Budget journals used all of these roles, while the other transactions used all but the College/Division Approver. We also decided on workflow paths for each transaction. For instance, voucher workflow has five paths, including one directly from the Department Approver to Accounts Payable and four more that pass through different Intermediate Approvers (Scholarships and Financial Aid, Research Division, etc.) on its way to Accounts Payable, depending on the type of payment. Finally, we decided which standard rules we would follow for all workflow processes. For example, if a transaction were “denied” by anyone along the approval path, the transaction would always return to the Initiator’s worklist, so that he/she could modify the transaction and resubmit it through workflow. The person who denied the transaction could enter comments on the Approval page about why it was denied, and these would be permanently retained with a date/time stamp on that transaction along with the approval history. However, only the Initiator could make changes to a transaction (other than enter comments) so we would always know who made any changes to the document.

Implementation

We decided to implement document imaging first using our most common transaction – vouchers, so we could get all of the departments accustomed to scanning as quickly as

possible. Since it would take a while for all departments to upgrade their copiers or purchase scanners and train their staff to use the equipment, we made document imaging for vouchers optional for several months. Documents that were not scanned continued to be microfilmed. In the meantime, we designated a Finance employee to answer scanning questions and assist departments getting started with scanning.

By the time we were ready to roll out workflow for budget journals, our first workflow process, all departments were accustomed to scanning voucher documents, so we implemented document imaging for budget journals at the same time as budget journal workflow. Using budget journal workflow as the model, we developed workflow for all of the other types of transactions and implemented them all within a year. With each type of workflow (GL journals, requisitions, etc.) we implemented document imaging at the same time as workflow, except for vouchers where we implemented document imaging first.

Benefits

UH has been utilizing electronic workflow and document imaging on all of its financial transactions for over a year and has realized several important benefits:

- The routing of transactions from the initiating department to the final approver was reduced from several days to minutes, which meant that more invoices were paid on time and employees were reimbursed much faster; transactions that need correction are returned to the initiator in seconds and can be quickly re-routed through the approval process
- Departments can keep track of their transactions; they are no longer “lost in the mail” or buried in someone’s in-box; departments can run queries to view all

outstanding transactions and see where they are in the approval process and the Approval page for each transaction keeps a permanent record of who approved each transaction and the date and time of approval

- Backup documents, which are stored on the Documents page of each transaction, enable departments and auditors to view or print this information whenever they wish, rather than requesting a copy from the Finance department, which would print the documents from microfilm (or search for them in boxes if they were not microfilmed yet) and mail them to the department
- By using standard approval roles and procedures for workflow and making the document imaging process uniform for all transactions, when someone learned how to do workflow and imaging for one transaction they could easily apply it to other transactions, which reduced confusion and the need for retraining

Retrospect

One thing I learned during this process is to better manage expectations. It took about a year to get all of the departments used to scanning their voucher backup documents.

When budget journal workflow was implemented at end of that year, we waited six months before doing any additional development to see how the process would work.

We made a few changes to the workflow worklist to make it more user friendly and then implemented workflow and document imaging for the other transactions within six months using this model. Therefore, it took about two years from start to finish to implement document imaging and workflow for all financial transactions. Some individuals became impatient when we did not implement in the time frame I discussed earlier in the process. However, in the end everyone was pleased with the results.