JEFIS
Lessons Learned

Introduction

JEFIS started in one county for the Special Civil Part in March 1999. The Special Civil Part (DC docket) was chosen for electronic filing due to its high volume, a small collection bar, short life cycle, smaller case files and straightforward processing of defaulted cases. Prior to JEFIS, there were only typewriters, 3270 terminals and mounds of paper on the desks of staff who had limited or no computer skills. An entire infrastructure needed to be built to support electronic filing.

JEFIS is a set of electronic filing and imaging applications that enable the Judiciary to do more with fewer resources. For example, the Judiciary has been able to manage a 40% increase in filings with 30% less staff in the Special Civil Part. It was not until September 2007 that our final county was implemented with the imaging component and all documents for the Special Civil Part (DC docket) were processed and stored electronically in all 21 counties. Ten years later, what were some of the lessons learned?

Electronic Filing is a Business Solution

Much of the discussion regarding JEFIS or electronic filing revolves around information technology. This makes sense as information technology is integral to the development of new initiatives and can be viewed as the basis for electronic filing. However, to many in the Judiciary, the JEFIS project is primarily a technology project run by the central office. This perception must change as we move forward and expand our electronic filing and document management initiatives. The development of an electronic filing system is a business solution, not a technology solution.

Missed Opportunities

The design of JEFIS was focused on developing semi-automated functions that aligned with or overlaid existing court processes and the utilization of the legacy case management system. In essence, develop a solution that is minimally disruptive to existing court operations and workflow. This approach worked well in terms of implementation and the resources available at that time. When resources were allocated for the rollout of the JEFIS imaging and scanning operations, 18 counties were implemented in 36 months. However, by only overlaying existing processes, opportunities were missed to redefine court operations and to align the Judiciary for far greater benefits then previously envisioned. There should be a comprehensive plan that addresses key workflow, document management and staffing issues up front. This should include a detailed architectural plan that will support the Judiciary's vision in electronic filing over the long term yet allow for incremental and evolutionary progress with short term initiatives.

Communication is Key

During the beginning of the JEFIS project, there were numerous meetings and presentations to advisory committees, Special Civil Part users, judges, attorneys, local and state bar associations and others. As the project progressed, there were also many implementation and kickoff meetings in the counties to communicate the project timelines and deliverables. At times, this communication effort occupied much of our resources but cannot be overemphasized, since the success of the implementation hinged on effective communication and a clear understanding of what needed to be done. Throughout the project, continued effort was made to articulate our business case for electronic filing in business terms. Civil Practice and ATCSU proved to be invaluable in this role during the JEFIS project. Technical details are important, but understanding and support from our users is more readily available when the business case is easily understood.

Communication must occur at the front end of the project to inform all key stakeholders of the project's scope and to elicit their buy-in. Representatives from all of the vicinages must participate to ensure that it is not viewed as a central office solution. The marketing of the project to key stakeholders is critical as is the need to continually apprise everyone on the overall development progress of the project.

Governance

Governance of the project should be defined to clarify the structure, roles, and responsibilities, the authority and decision making boundaries, and the reporting needs of the project. A key function of governance is to tie the court's business objectives and technology together. Steering committees and the JEFIS Interdivisional Group made up of key AOC staff and JEFIS users were very useful in this area.

Now that JEFIS is in place statewide, there are various divergent opinions on possible electronic filing solutions that can deliver greater results within the Judiciary, e.g., expand JEFIS, buy an electronic filing system, copy another state's solution, use the federal CM/ECF system, etc. A consensus must be marshaled together and a single shared vision of electronic filing defined. As we move forward, our long-term strategic goals must be kept front and center. Short-term plans must align with core long-term strategies; otherwise the project could be sidetracked. For example, after the first county was implemented, it took four and one half years to implement the second county with the JEFIS imaging component.

There are No Blueprints

The JEFIS project can serve as a guide, but there are no blueprints for integrated electronic filing in the courts. There are many similarities amongst case management and

electronic filing systems. However, obtaining a consensus on what an electronic filing system should provide to the attorneys and courts is very difficult. If you were to ask ten knowledgeable persons on the subject you would get ten different answers. Even with an agreement, much of the design, development and implementation of a system are dependant upon the internal requirements, workflow, court rules, purchasing regulations, leadership, budgetary constraints, technical standards and available resources. In addition, the courts legacy systems must typically be modified or upgraded for it to be used in the project.

Some electronic filing vendors develop solutions that only drop off the document at the court's door step providing little more than an electronic delivery system. True benefits are only realized when the electronic documents and data are integrated within the court's workflow. In many regards the ultimate test is if the judges are using the system.

Demonstrate Value

During the design of JEFIS, court personnel from Monmouth County, especially those expected to use and support the system, were heavily involved from the start. Other counties, both small and large, were also canvassed to determine their needs. During development, many sessions were conducted to prototype the system and to demonstrate its value. These sessions helped to obtain buy-in from management and mitigated staff's concerns over what the new type of work they will be doing.

Commitment

Once the system was operational in several counties and the benefits of the system were quite evident, there was limited resistance to JEFIS in the remaining counties. That's not to say there weren't any problems or issues. The court's business leaders were able to counteract the many obstacles, e.g., locating a training room, getting staff to training, resolving budget issues, obtaining local tech support, coordinating county electricians, etc., that were presented during the project. For example, in our first pilot county, Judge Lawson was an invaluable help in mitigating the personnel issues and promoting acceptance of the changes to workflow. The highest levels of management within the Judiciary must ensure that all units are committed to the success of the project.

The First Year is Difficult

Most counties when migrating from the manual processing of paper documents to the electronic processing of documents will undergo a difficult transition during the first year. The counties are essentially maintaining two systems, the paper and electronic, and are adapting their workflow to the new system. JEFIS requires up-front clerical work, e.g., getting documents ready for scanning, which is offset by a reduction in

clerical work as the case progresses. It takes about one year for the volume of filings for paper cases to significantly diminish and for the county to fully adjust to the new way of processing cases.

A High Filing Volume is Required

Electronic filing systems provide a return in investment only if the volume processed is sufficient for the court's expectations and expenditures. Many electronic filing projects in other jurisdictions have started with a flourish and then literally withered on the vine as the expected volumes were not attained.   The Achilles heel of electronic filing projects has been the inability to generate enough volume to warrant the overall cost of implementing and supporting an electronic filing system. The initial expectations of an electronic filing project are typically very optimistic but in most cases the volume of electronic filings received are initially very low. A common theme has been that attorneys are reluctant to electronically file and change their practices. Very few projects have been able to sustain the initial fanfare and continue beyond several years.

Our current volume in JEFIS is 54% of the caseload for the DC docket type. However, many firms have decided to register but are not filing on a regular basis or not at all. Mandatory electronic filing may be the only way to get them on board and increase the volume of cases electronically filed.

Continuous Improvement

There is always a continuous quest to advance and improve the system. However, you will never get to point when you are finally done. The JEFIS project has implemented hundreds of changes to the system over the years, i.e., major enhancements, cosmetic changes, bug fixes, architectural upgrades, periodic maintenance, etc. Many improvements to the JEFIS system were typically requested by our court user community. Regularly scheduled JEFIS user group meetings were imperative for the feedback and direction required to develop these ongoing changes to the system.

Business Process Change

The manual handling of paper is an inherently expensive proposition when compared to an electronic document. Electronic filing requires fundamental changes by the courts and attorney firms in their organizational structure, operations, management and resource utilization. Both entities, courts and law firms, must assess their environment and weigh the implications of converting from paper-based to electronic-based filing. Understanding what the change means to those involved and the associated costs results in a smoother transition. Outdated business processes that inhibit productivity must be analyzed and improved.

Standards and XML

XML (eXtensible Markup Language) improves data sharing between disparate systems and the standardized exchange of data between organizations, companies and computer systems. In the past, these data exchanges were hand-coded one by one, mapping each system to the other, creating an expensive ad hoc point-to-point integration project for each data exchange. By providing standardized XML tags around each data element, attorney firms, the courts and vendors, can exchange information more readily for less cost.

The LegalXML Electronic Court Filing Technical Committee, which belongs to OASIS (Organization for the Advancement of Structured Information Standards,) consists of representatives from the private sector and various courts. Under the purview of the LegalXML committee, an XML based standard, called the Electronic Court Filing (ECF) standard, for judicial electronic filing has been developed.

The JEFIS project is implementing new XML standards for the exchange of data based upon the LegalXML standards as well as court specific XML tags required for our internal processes. But, technical standards are constantly evolving and do not last forever. As with all technology, they must be re-evaluated over time.

Attorney Support

Electronic filing must be as easy and simple as possible to reduce attorney support issues. The time we spent with attorney firms during the design of the JEFIS electronic filing application proved to be very useful as we were able to address the electronic filing needs of solo practitioners up to large volume filers.

From time to time, law firms have requested assistance beyond the scope of the electronic filing application. In addition, the staff of a law firm may not have the requisite skill sets in the software or technology that is in use in their own office or even in the legal terminology used for basic filing. Some law firms need far greater assistance than what the Judiciary can provide. There may be opportunities for 3rd party vendors to provide additional services and fill this void.

Moving to mandatory electronic filing and other docket types will present greater challenges and a much larger user base. Better communication channels and methods are needed to educate attorney firms and the general public on the progress and benefits of electronic filing as well as to receive feedback on the project, e.g., web pages, publications, newsletters, forums, FAQs, seminars, etc.

Additionally, some of the high volume attorney firms are addressing their own automation and technology improvement issues by hiring or contracting the IT skills

required to build customized computer systems, or by utilizing solutions from vendors. Future plans should consider the impact of these participants. Overall, we will also need to increase our knowledge of attorney firms and how they manage their cases.

Workflow

What is essential is that any document received, either through scanning or electronically filed, must be integrated with the downstream business processes, (e.g., docketing). Understanding the life cycle of documents and data, from the attorneys' office, through docketing and case management, the judge's chambers, case disposition, judgments and archiving is critical for developing a system that can be integrated into court operations. With JEFIS, considerable emphasis was placed on learning the life cycle of a document and ensuring that system functionality will support current workflow standards.

Depending on our initial analysis of the proposed case type, a formal structured workflow system, either developed internally or purchased separately, may need to be examined and considered.

Applications must be Flexible

The JEFIS code base was customized specifically for the DC docket type but there are tradeoffs between highly customized code and flexible code. Highly customized code cannot be easily expanded for new functionality or document types. Steps have been taken to improve JEFIS and make it more flexible by using re-usable components and XML.

Case Management Integration

A central point of discussion and possibly the greatest hurdle is integration with our legacy case management system, ACMS. Our current solution is primarily based upon 3270 emulation and the screen scraping of data with ACMS. JEFIS relies heavily upon the data standards of the case management system (ACMS) and the processing requirements of the document being filed.

Currently, ACMS data requirements are utilized within the JEFIS Electronic filing interface that the attorney uses. In essence, the attorney is entering the data based upon case management data rules and the validated data is joined with the document being filed. The degree of automation depends upon these rules and the ability of the attorney firms to comply with them. Defining, maintaining and supporting these rules become easier using XML and are central to any electronic filing expansion discussion. In order to streamline processes and improve workflow further integration with ACMS is required.

Scanner technology

The initial scanner hardware utilized in the counties (i.e., Fujitsu 3099s and Bell and Howell 2020s) was problematic and balky with issues centering on the reliability and the ongoing maintenance and repair of the scanners. Thankfully, the scanner technology has greatly improved and the newer scanners (i.e., Fujitsu 5650c) require much less maintenance than the older models. The types of paper the scanner was required to scan ranged from carbon/tissue paper to heavy stock paper and post cards. The early scanners we used had a curved paper path that caused numerous paper jams. Today's scanners utilize a straight paper path that is much more reliable and they thus have less frequent jamming and require minimal servicing.

Scanning incurs a heavy upfront cost

The scanning function -- which includes the amount of time to sort, unclip and scan -- has been treated as an additional burden since the project started, even though the time that previously was spent on filing, retrieving files and purging/archiving has been eliminated.

The differences between a typical production scanning operation vs. an ad-hoc scanning operation should also be noted. A production scanning operation utilizes personnel dedicated to do the scanning function. An ad-hoc scanning operation relies on various staff to perform the scanning function as needed, which spreads the scanning workload across the department. This requires the training and due diligence of all personnel who scan.

Each county has at least two production high-speed scanners (up to 55 pages per minute) that were provided at the time of implementation. These scanners are rated for 15,000 pages per day. Scanners are sensitive machines with roller mechanisms that can be damaged by paper clips and staples left in the documents. Training, proper care and regular maintenance need to be conducted to maintain scanner reliability.

Technological Change

The JEFIS system is integrated with multiple components that involve databases, content management, security, operating systems, Internet protocols, word processing, document viewers and email. JEFIS has been continuously upgraded over the years to keep up with the technological changes to the products it uses as well as new technologies. Most of these changes were implemented with minimal disruptions to court operations and were transparent to the user community. Some of the changes included migrating to a new electronic document management system, converting databases, replacing messaging and security systems, and upgrading the development environment.

However, software vendors, including Microsoft and IBM, are not perfect and the full expectations of the product are often not met. In addition, a vendor may implement some degree of planned obsolescence to compel a technical upgrade even though the product is viable, e.g., Microsoft no longer supports the Windows 2000 operating system. As new and upgraded products were incorporated within JEFIS, numerous bugs, inconsistencies, 3rd party product incompatibilities and idiosyncrasies appeared. Many times, we have had to work with the software engineers from the companies to correct problems with their products or code around these problems.

Judges

The initial JEFIS application only allowed judges to sign specific documents.   A provision was made in the JEFIS security and application to accommodate other users designated by the judge (i.e., law clerk and judge's secretary) to sign the document on behalf of the judge. In addition, judges have to process increasing volumes and more complex cases. Changes were made to the judges workflow to avoid extra steps to work on the documents in WIP but more work needs to be done in this area. The JEFIS application was modified to work with software that is used a blind judge to read pleadings.

Centralize the Training Room

Because we did not have a centralized training room with equipment dedicated to training, members of the JEFIS team had to coordinate with each county's IT group to establish a local training room and to furnish the appropriate PCs, printers, and scanners from the equipment that had been ordered for that county. After determining the location, we had to travel to the county and work with local IT to setup all training PCs and scanners (printers were there own responsibility). This process generally took several days, and in some cases, even longer as local IT was not always sufficiently prepared. Most of the training rooms did not have telephones, as well, thus further hindering our progress.

After training was completed, we had to assist the counties to break down the training room, and setup the PCs for the staff to whom they were assigned. Additionally, we had to setup the scanners again for the production environment. It should be noted, however, that this was a shortcoming of the Kofax software.

Centralizing the training room would have established a facility that could be setup once, then reused over and over for each county's personnel.

Training should be Close to the Production Date

As with most applications, training is required for anyone who is not familiar with the application and new processes. JEFIS training was supplied by the Automated Trial Court Systems Unit (ATCSU). The ATCSU team provided analysis on each county's workflow and delivered JEFIS training to all SCP clerical personnel, management, judges, and chambers staff as part of the implementation of JEFIS in each county.

Based on the limited number of trainers and the number of personnel to be trained, training was occasionally delivered too far in advance of production dates for optimal retention, especially in the larger counties. This resulted in some students not having the opportunity to put their training into practice, and thus forgetting what they learned in class. If we have had more trainers and larger training facilities, we could have trained users closer to the actual implementation dates. To gain optimal benefit of the new applications being developed they must be implemented as quickly as possible.

Use Local Support

New employees must be properly trained to understand the court process and how to use JEFIS. For example, JEFIS does not allow staff to hide or delete documents once the documents are scanned or electronically filed into the system. As such, problems caused by untrained staff in scanning and/or docketing will remain in the system until a supervisor or manager addresses them.

Most users prefer individual, just-in-time training – either at or right before they begin using the system. However, one-on-one training is labor intensive. Some counties utilized their local JEFIS coordinator to train and support staff and judges as needed. This has been effective, particularly as new staff and judges are added.