Document Imaging and Automated Retrieval System:
Harnessing the Power of Technology to Manage and Protect Client and Other Vital Records

Noel Panelo

EXECUTIVE SUMMARY

Records Management is defined as the field of management responsible for the efficient and systematic control of the creation, receipt, maintenance, use and disposition of records. A record is defined as information created, received and maintained as evidence and information by an organization or person, in pursuance of legal obligations or in the transaction of business. Traditionally, a record refers to a piece of paper containing pertinent information. The introduction of document imaging technology has redefined this traditional view of a record.

The counties of Alameda and Contra Costa have recognized the importance of harnessing the power of document imaging and automated document retrieval technology in managing and protecting client and other vital records.

The Human Services Agency of the City and County of San Francisco would meet the following needs with the implementation of a document imaging and automated retrieval system:

- The need to have a system to protect and recover client and other vital records in case of a disaster.
- The need to support the planned Food Stamps Service Call Center.
- The need to resolve diminishing onsite storage space.
- The need to control increasing offsite storage costs.

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Introduction

The International Organization for Standardization (ISO) defines Records Management as the field of management responsible for the efficient and systematic control of the creation, receipt, maintenance, use and disposition of records. ISO defines a record as information created, received and maintained as evidence and information by an organization or person, in pursuance of legal obligations or in the transaction of business.

Traditionally, a record refers to a piece of paper containing pertinent information. The advent of various electronic means of communication and information transfer, and the introduction of document imaging technology, has altered how records are defined.

During its annual conference, July 23–30, 1999, the National Conference of Commissioners on Uniform State Laws approved and recommended the enactment of the Uniform Electronic Transactions Act (UETA). The UETA provides a legal framework for electronic transactions. It gives electronic signatures and records the same validity and enforceability as manual signatures and paper-based transactions.

The State of California has adopted UETA in its Civil Code Section 1633.1–1633.17.

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Alameda County

The Alameda County Social Services Agency (SSA) maintains over 100,000 active client case records in any given year. These active client case records translate to over 10 million pages of client information, costing SSA over $280,000 annually to store and maintain. SSA recognized that maintaining, managing and tracking hard copy client case records of this volume, in the best of circumstances, is very challenging. The fact that these client case records were created at any one of the four client contact facilities and subsequently transported to other sites for processing and retention added complexity to this issue. Timely processing of client applications depended heavily on the expeditious and accurate handling of these client records.

In August 2004, SSA submitted a recommendation to the Board of Supervisors to authorize the President of the Board to execute a purchase agreement with IKON Office Systems to procure software that will allow SSA to convert hard copy client case records into an electronic format. In its recommendation, the following benefits to clients and to SSA staff were identified:

- Elimination of the need to transport hard copy case records;
- Reduction of misfiled and/or lost documents thereby avoiding legal penalties;
- Reduction in expenses related to transport and management of hard copy case records;

- Ability to provide SSA staff with ready access to client files from multiple sites
- Speedier service to clients since case records are online and available at all points of client contact; and
- Seamless integration with CalWIN, CWS/CMS, and One-E-App systems.

To date, the Alameda County SSA has imaged over 10 million documents using IKON's Disc Image software. SSA has used over 6 terabytes of server storage space and is in the process of expanding its storage capacity. SSA employs 24 fulltime document scanners and indexers, supervised by two fulltime supervisors. These document scanners and indexers are located in a central imaging facility. According to the SSA's productivity reports, an individual clerk can scan and index up to 2200 images per day.

Best Practices and Lessons Learned from Alameda County

The Alameda County SSA Electronic Client Files project management team offers the following suggestions:

- Let business needs drive technology; do not let technology drive business processes;
- Allow sufficient time in planning;
- Work with an experienced and reputable vendor that has the capacity to handle the volume of case records in your county;
- Centralize document scanning and indexing operation;
- Leverage current technology;
- Keep things easy for staff; do not change current business processes too drastically; and
- Select effective workers to be part of the imaging team;

Contra Costa County

The Employment and Human Services Department (EHSD) of Contra Costa County realized the need to have a system that would allow the automated processing of case records to support changes in business processes. Such changes in business processes were necessitated by the planned creation of a centralized Medi-Cal Service Call Center and the planned implementation of CalWIN.

On December 20, 2004, EHSD published a Request for Proposal to design what has become the Case Stored Text Automated Retrieval (CaseSTAR) system. On May 15, 2005, the system design for CaseSTAR was completed. Between June 13, 2005 and August 15, 2005, CaseSTAR was implemented in five district regions. By August 22, 2005, CaseSTAR was fully operational. To date, the following EHSD Programs use the CaseSTAR system: TANF Cash Assistance, Food Stamps, Medi-Cal Eligibility, Foster Care, General Assistance, Refugee Assistance, and Adoption Assistance.

The successful implementation and continued operation of the CaseSTAR system are dependent on the major components: hosted services, scanning workstations, and active case conversion.

Hosted Services. IKON BSS West provides a server network that stores all of the electronic case records. IKON also provides hardware and network maintenance for the CaseSTAR system. The services provided by IKON are fully integrated with the EHSD intranet. The system in place is compatible with Microsoft applications and has the ability to handle large scale imaging and indexing of documents. The system enables a central administration group to maintain user profiles allowing easy access to stored imaged files while maintaining needed confidentiality and security.

Scanning Workstations. EHSD has installed 110 scanner workstations to digitally image incoming documents into CaseSTAR. These workstations are located in reception areas, mailrooms, and intake and field clerical posts all throughout EHSD. The proliferation of these workstations ensures that assigned case workers have access to their respective cases in a timely manner.

Active Case Conversion. Not only was there a need to scan new incoming cases but to digitally image all existing active cases as well. EHSD worked with IKON to digitize paper copies of all active cases in three months. This process required a delicate balancing between the need to digitize active cases

and the need for case workers to have access to their assigned case records at all times. EHSD made it a requirement for IKON to provide a highly efficient onsite team to purge and prepare case records for scanning. The scanning of case records was done in the Sacramento IKON Scanning Center. By August 22, 2005, the last day of the active case conversion process, 50,878 case records were digitized and a total of 8,846,890 pages were scanned.

EHSD is planning the introduction of Centralized Scanning. This process will require EHSD staff to prep case records and IKON staff to scan and index documents. The implementation of this process aims to increase production to 110,000 scanned document pages per month. Another proposed enhancement is the bar-coding of forms. This will allow the automatic indexing of forms and the automatic storage of such forms in the appropriate client case.

Best Practices and Lessons Learned from Contra Costa County

The Contra Costa County EHSD CaseSTAR project management team offers the following suggestions:

- Allow sufficient time to prepare and launch project;
- Go with a centralized scanning model but be cognizant of agency culture;
- Have vendor image back-file cases.
- Scan back-file cases using existing case folder flaps rather than resorting documents according to CalWIN window queue;
- Do not image closed cases; and
- Beware of vendor deals on hardware bundles; if it seems too good to be true, it probably is;

Proposed Applications in San Francisco County

The document imaging and automated retrieval technology can be used to address these current needs in the Human Services Agency (HSA) of the City and County of San Francisco.

1 The Need to Have a System to Recover Client and Other Vital Records in Case of a Disaster.

Vital records are those that contain information critical to the continuation or survival of an organization and its clientele during or immediately following a disaster. The massive destruction caused by hurricane Katrina has put the spotlight on the necessity of protecting and recovering vital records. Events other than natural disasters can also wreak havoc with an organization's vital records. Pat Moore, a certified business continuity professional and a fellow of the Business Continuity Institute, provided the following examples of recent vital records disasters in her article entitled "Vital Records Protection Issues":

- On October 26, 1996, fire heavily damaged the Brambles Information Management Center in Chicago, IL. This resulted in the destruction of over 220,000 boxes of archival and vital records.
- On March 7th, 17th, and 19th in 1997, three separate disastrous fires that were believed to be deliberately set by arsonists destroyed nearly one million boxes of paper records stored at the Iron Mountain Record Centers in South Brunswick, NJ. This incident impacted 200 different companies.
- On May 6, 1997, fire completely destroyed the storage facility at the Diversified Records Services Center near Scranton, PA. Paper documents and microfilm stacked 45 feet high from floor to ceiling inside a steel building the size of a football field, burned to the ground.

Cognizant that similar events can occur, the San Francisco Department of Emergency Management (DEM) is requiring all City and County agencies to include in their Emergency Preparedness and Business Continuity plans the protection and recovery of vital records. As of now, HSA does not have any system in place that would protect and allow for the subsequent recovery of vital records in case of a disaster. The electronic imaging and archival of client case and other vital records would provide HSA with such a system.

2 The Need to Support the Planned Food Stamps Service Call Center

The Food Stamps Program is in the planning and design phase of creating a centralized service call center. Successful implementation and operation of this service call center necessitates easy and timely

access to client case records by service call center staff members. The current decentralized storage of case records prevents such access. The implementation of document scanning and automated retrieval system would allow service call center staff members easy and immediate access to client case records.

3 The Need to Resolve Diminishing Onsite Storage Space

Because of the continuing increases in caseloads, HSA is experiencing a shortage of onsite storage space for client case records. The current practice is to store all recently closed cases (i.e. cases that are closed within the last three years) at an onsite central location and store all active cases with assigned case workers.

4 The Need to Control Increasing Offsite Storage Costs

There are currently 18,000 boxes of case records stored at an offsite storage facility. Because of the shortage of onsite storage space in HSA facilities, more case records are being sent to the offsite storage vendor.

Next Steps for San Francisco County

To facilitate the implementation of a document scanning and automated retrieval system in HSA, I recommend the following next steps:

- **Develop Project Charter:** Convene a task force to (1) review and validate the business needs as outlined above, (2) document how the implementation of this project will satisfy these business needs, and (3) seek approval from Executive Staff to embark on this project.
- **Develop Preliminary Project Scope:** Utilize the task force to produce a high-level definition of the boundaries of the project. This includes preliminary definition of project deliverables, product requirements, and methods of user acceptance.
- **Develop Project Management Plan:** Establish a project management team who will prepare the project management plan. The project management plan will be the primary and definitive source of information on how the project will be planned, executed, monitored, controlled, and closed.
- **Finalize Project Scope:** Using the preliminary project scope as a reference, the project management team will develop a more detailed and final project scope.
- **Develop Work Plan:** The project management team will identify specific activities that are necessary to produce the defined project deliverables. This includes identifying key personnel who will be participating in such activities and defining the timelines for completing such activities.
- **Resource and Cost Estimating:** Using the work plan as a guide, the project management team will estimate project cost, both in human resource and financial terms.
- **Provide Risk Analysis and Management:** The project management team will identify potential risks and develop strategies to eliminate or reduce such risks.
- **Implement Project Management Plan:** The project management team will work with assigned key personnel to implement project activities as defined in the work plan.
- **Implement Pilot:** If necessary, identify a group within the agency that can pilot the project. This will allow end users to test the project. This will also allow the project management team to validate if all project deliverables are completed satisfactorily.