Application for

Larry L. Sautter Award
Innovation in Information Technology

Retirement Process Project
University of California

Abstract

The Human Resources and Benefits department at the University of California Office of the President administers a wide variety of programs, including the University of California Retirement Plan (UCRP). By 1999, UCRP membership had increased by 47% in ten years, from 108,000 to 159,000 and the pension administration office was making annual disbursements of over $650 million to retirees and survivors. The number of annual retirements and lump sum cashouts had jumped from 678 in 1992 to 1,863 in 2000. With the anticipated addition of 3,000 new faculty in the next ten years, the ability to efficiently administer the Plan and maintain employee confidence would be severely challenged, and indeed, was already at the breaking point.

The retirement process was bureaucratic, paper-based, densely layered, and relied on manual calculations. The complex rules and multiple forms confused employees and they needed more counseling than could be provided. Employees were advised to submit retirement applications 120 days in advance of their expected retirement date and, still, processing delays caused disruptions of income and insurance coverage for some retirees.

Since superior benefits and retirement programs are an essential component of UC's recruitment and retention strategy, its efficient and sensitive administration is a matter of primary concern for the University of California Regents, faculty and staff. Although the pension administration staff had become increasingly frustrated with their inability to increase efficiency, hiring additional administrators was seen as an ineffective response. New processes and a technology-based solution were needed. However, the computer system supporting UCRP was based on 1970's architecture, did not incorporate Plan rules, and was difficult to modify and maintain. A conversion to DB2 was underway, but completion was not scheduled for several years. Off-the-shelf software solutions that would address both the unique Plan regulations and the sheer size of the population did not exist. A further obstacle was that any technical solution would need to serve benefits counselors and employees located at 19 different sites throughout California and New Mexico, as well as at the pension administration offices located in Oakland, CA.

The challenge, then, was to re-engineer the retirement process and develop supporting technology that would simplify and shorten the retirement process for a rapidly increasing population. Further, the solution would need to guide employees through a maze of complex choices so they could make the most informed retirement decisions. Finally, the solution would have to be cost-effective. In the long term, a successful solution would serve as a model for fostering a climate of change in a huge bureaucracy, immersed in rules and procedures and resistant to change.

Project Description

Methodology

Rather than take the traditional first step of hiring external process review consultants to study the current process and propose solutions, we began the Retirement Process Project by engaging an in-house UC consultant to teach a process review methodology to HR-Benefits staff. We created two cross-functional teams made up of the best and brightest in the department. Each team member committed a minimum of 50% time to the project and most dedicated 100% time. To break down preconceptions about how processes were "supposed to" work, team members were asked to bring with them their knowledge and experience in their field of expertise but to leave behind allegiance to their area. The project required a strong commitment from management due to the extensive investment of internal staff time.

Once the teams were in place, they quickly were trained in the basic principles of data gathering and immediately started using their new skills by participating in one or more of the four parts of the data gathering phase described below. The only rule - and it turned out to be a challenging one to follow - was not to jump to proposing solutions along the way. Instead, a multi-day offsite retreat was scheduled at the end of the data gathering phase to "vision" the newly improved process based on all the information that had been collected.

The four parts of the Data Gathering phase were:

Customer Voice

- *Tasks*
  - Understand what customers require and expect
  - Find out what customers think

- *Tools*
  - Focus groups
  - Surveys

Best Practices

- *Tasks*
  - Obtain ideas from peers and other industries
  - Find out what others do

- *Tools*
  - Phone interviews
  - Product research
  - Web searches

Mapping

- *Tasks*
  - Clearly understand process steps and improvement potential
  - Find out what the process is

- *Tools*
  - "Staple" yourself to a transaction from beginning to end
  - Map all activities/steps

Problem Analysis

- *Tasks*
  - Identify types and number of errors and problems
  - Find out where the bottlenecks are
  - Identify their root causes

- *Tools*
  - Collect error data

Old Retirement Process

The retirement process begins when an employee meets with a Benefits Counselor at the employee's campus, medical center or laboratory HR-Benefits Office. Since retirement is a key life event, employees expect and deserve to receive counseling that provides them with accurate calculations and comprehensive information on the benefits that will transition with them from employment to retirement. Unfortunately, due to its complicated and manual nature, the old retirement process did not allow Benefits Counselors to provide much counseling.

Forms, manual calculations and delays dominated the old retirement process. The steps involved were:

- Benefits Counselors provided the employee with general retirement information and a form requesting retirement estimates to be submitted to the pension administration office.
- After the employee returned the form, pension administration staff began manually reviewing service years and calculating salaries to derive retirement estimates.
- Once complete, retirement estimates were mailed to the employee, along with a myriad of forms (retirement election, insurance continuation, tax withholding and funds distribution, to name a very few) to be completed to finalize the retirement process.
- If the employee decided to continue with the retirement process, he returned all the forms to the pension administration office for further processing.
- Once the election paperwork was deemed complete for a retirement, the retirement was entered into the record-keeping system and retirement payments and insurance coverage commenced.

Problems with the old retirement process included:

- **Too many forms and manual processes**
  - Because so many forms were required, and could be submitted at different points in time, a staff member was designated to track the status of each one. Often a form was missing or completed incorrectly or the employee would call or write to request retirement estimates with a different retirement date or option. Any change resulted in considerable re-working by internal staff and required the employee to resubmit paperwork. Because of the manual nature of the reviews, retirements frequently were backlogged.

- **Delays**
  - Re-working was commonplace, and with this in mind, employees were advised to start the process 120 days before their desired retirement date. Employees starting the process less than 120 days before retirement often experienced an interruption of their income stream from employment to retirement and a disruption in their insurance coverage. Since this lag time was the norm, interim steps were added at the pension administration office to send acknowledgement postcards for each form received. Nevertheless, concerned employees frequently contacted their Benefits Counselor or the pension administration office for status updates. Because all files were kept in paper form, resolving each phone call was a cumbersome task requiring intervention by multiple internal staff members.

- **"False" retirement requests**
  - Although 1,500 retirement estimate requests were submitted annually, only 1,200 retirements commenced each year. We learned that employees were requesting retirement estimates as information only in order to better plan for their future retirement. Since Benefits Counselors did not have tools to provide retirement estimates, the requests were submitted to the pension administration office as though they were actual retirements, which further clogged the overburdened system.

- **Duplicate data-tracking**
  - Throughout the retirement estimate phase, information was collected from other record-keeping systems and, as the retirement process was completed, pension administration staff had to re-enter data to create records in the payment and insurance systems.

New Retirement Process

As before, the retirement process begins when an employee meets with a Benefits Counselor at the employee's campus, medical center or laboratory HR-Benefits Office. Previously, the first meeting consisted only of the counselor giving the employee general retirement information and a form requesting retirement estimates to complete and send to the pension administration office. Now, however, the counselor uses an automated Retirement Calculator web tool to provide meaningful retirement estimates, which allow counseling to the employee to begin with that very first session.

In re-engineering the retirement process, five key steps were identified:

1. Employee Expresses an Interest in Retiring

During the employee's initial meeting with a Benefits Counselor, the counselor uses the web tool, which is described technically in the next section, to produce a Personal Retirement Profile for the employee. The counselor needs only three pieces of information – the employee's identification number, the proposed retirement date and the proposed separation date – to create this document. The profile consists of five sections:

- Retirement plan data used to determine benefit eligibility and calculations
- Retirement date and personal information provided by the employee and the resulting benefit calculations
- Other retirement plan monies that may be withdrawn upon retirement
- Health continuation eligibility and costs

- Estimated retirement income (net of taxes and employee contributions to heath continuation)

The profile also indicates if any additional paperwork (e.g., birth evidence) must be gathered for submission with the Retirement Election or if there are data issues that must be reviewed by pension administration staff.

Using the profile, the Benefits Counselor is able to perform the core function of counseling the employee on this key life event. The document also provides the employee with the opportunity to identify possible discrepancies in data and with the information necessary to make a knowledgeable decision about electing retirement.

Each time a Personal Retirement Profile is created, the retirement date and personal information provided by the employee are saved in Sybase tables. This makes it easy for a Benefits Counselor to provide benefit calculation comparisons if the employee later proposes an alternate retirement date. To ensure that each profile reflects the most accurate information available, data such as salary rate and health plan enrollments are gathered from payroll and retirement system databases each time a Personal Retirement Profile is generated.

2. Employee Elects to Retire

After deciding to retire, the employee returns to the Benefits Counselor to have a Retirement Election prepared. During this meeting, the Benefits Counselor asks the employee a series of questions related to retirement (e.g., tax withholding preference, whether health insurance should be continued, where the monthly retirement check should be deposited, etc.) and enters the responses using the web tool. The web tool returns an error message when an invalid entry is made so that errors are caught immediately rather than delaying the retirement process further down the line.

Once the responses are entered, the web tool produces a Retirement Election document, which summarizes the decisions made, describes the terms and conditions of retirement, and includes signature lines for the employee and the employee's spouse (if applicable). This single, concise election document takes the place of the multiple forms the employee had to complete and sign as part of the old retirement process.

As with the Personal Retirement Profile, each time a Retirement Election is generated, the data is saved in Sybase tables so that no redundant data entry is needed if the employee decides to elect a different retirement date.

3. Retirement is Processed

Upon receipt of the Retirement Election, pension administration staff images the document, which systematically creates a work item in a retirement processing FileNet Visual Workflo queue. While in the past paper files were passed from desk to desk, the new process is paperless and driven by workflow.

Imaging the Retirement Election also triggers an entry into another new web application, the Event Tracker. The Event Tracker was developed to help Benefits Counselors and pension administration staff identify significant events that occur on an employee's record. The application requires no manual entries; rather, it reads "events" from the imaging system and from transactional databases.

During the retirement processing step, pension administration staff re-computes retirement benefits using a Visual Basic application that offers more flexibility than the Retirement

Calculator web tool, allowing computation of unusual retirement scenarios. The Visual Basic application uses the same Sybase stored procedures that are deployed by the web application so, with the exception of special cases, the calculation results are expected to be the same. The results are audited before the retirement is approved for payment.

4. Retirement Confirmation Statement is Produced

Upon completion of the audit, a Retirement Confirmation Statement is generated systematically from the Visual Basic application. The statement reiterates some of the Retirement Election document information, notifies the employee that the retirement process is complete, and specifies the date on which the first retirement check will be issued. The statement is automatically imaged and, again, an entry is created in the Event Tracker.

5. Retirement Payment and Annuitant Health Coverage Commence

The workflow system interfaces with core pension administration mainframe record-keeping systems. Approved retirements are uploaded systematically to trigger retirement payment and insurance continuation without requiring any data entry by pension administration staff.

Technological Innovations

The redesign of the Retirement Process Project integrated many different technologies and was the first HR & Benefits office project to utilize so many different tools in the same application. Technologies used in the process include:

1. Web, Visual Basic, Imaging and Mainframe Applications

The Retirement Process uses four different application environments, each suited to particular purpose:

- Web applications, using Edify EWF (Electronic Work Force), for "intranet" users outside of the pension administration offices, specifically campus, medical center and national laboratory Benefit Counselors
- Visual Basic applications for users in the pension administration offices, these applications are more robust applications than could be developed for the Web, allowing computation of unusual retirement scenarios
- Imaging/Workflow applications to handle process flow and the handling of imaged documents
- Mainframe COBOL applications to distribute accumulations, produce retirement checks and provide insurance enrollments.

2. Reusable Stored Procedures

Eleven different Sybase Stored Procedures were developed for the Retirement Process. These procedures define the retirement income calculations, determine eligibility, and produce a net retirement income estimate. They are used by both the "External Calculator", the web-based (Edify) tool and the "Internal Calculator", i.e., the Visual Basic application. This technique ensures that both processes perform the exact same calculations.

Researching and coding the calculation rules was, under the old process, a lengthy and complex process, as this calculation had never been automated before. An enormous database of every employee's earning history was created to support this calculation which now replaces hours of manual research, which often was performed using historical fiche files, to determine a retiree's income.

The stored procedures also generate up to eighty different types of messages as it screens the employee's eligibility. These messages appear on the employee's Retirement Election document to alert pension administration staff about any data issues that need to be resolved before the retirement becomes final.

3. Imaging and Workflow

Though the employee submits the Retirement Election in paper form, the internal retirement process is completely paperless. As soon as the election form and supporting documentation are received, they are imaged and work items are established in the workflow queue. The work items are then "pushed" to pension administration staff, which reviews the elections and the supporting documentation through FileNet Image viewing and Visual Basic applications.

4. Mainframe Interfaces

Interfaces with the mainframe payroll, Membership, Annuitant, and Insurance systems not only added functionality which didn't exist prior to this system's implementation, but also eliminated data entry into these systems.

An interface with the payroll system(s) data enabled Health and Welfare enrollments to be continued seamlessly. Another interface with the payroll system(s) enabled monthly direct deposit of income to be continued from active employment into retirement.

Interfaces from the workflow system provide all the necessary input to the core mainframe systems. The interface to the Annuitant payment system populates the necessary data to begin retirement checks and the interface to the Insurance system automatically enrolls the retiree in health, dental, and legal plans. The interface with the Membership system moves monies from the retiree's account to the "reserve" account and distributes a retiree's capital accumulation provision balance.

5. Automated Document Generation

The retirement application generates custom statements tailored to each individual. The system generates bookmarks and data with an MS Word template to produce these custom documents.

The tools/technologies involved with this process are:

- Remote web server AIX 4.3.3 and Netscape 3.62
- Edify Electronic Workforce 5.2
- Microsoft NT 4.0 – runs EWF
- Javascript 1.2
- Sybase 11.9.2 running on AIS 4.3
- Microsoft Visual Basic 5.0
- Apex Software Controls 5.0
- Filenet Visual Workflo 2.0
- Filenet Imaging Management Services 3.4.2
- OS/390 version 2.7
- Microsoft Word 97
- Powerbuilder 5.0
- Filenet's Powerlibraries for interfacing with Filenet's Imaging Management Services
- ADO – Active X Data Objects
- Sybase Open Client 11.9.2
- Intersolv OLE DB provider 2.0

Customer Satisfaction and Benchmarking Data

The University of California retirement process is dramatically improved as a result of the policy, procedural and technological innovations proposed and implemented by the Retirement Process Project, which was implemented in January 1999. The new retirement process has handled an ever-growing retirement workload over the past two years. Most importantly, the project benefited the two key constituencies of the retirement process: prospective retirees and the administrative staff that counsels them and processes their retirements. Prospective retirees experience a quick, efficient, and informative retirement counseling session and a reliably smooth transition from active employment to retirement. Benefits counselors and the pension administration staff can dedicate more time to their core functions - counseling prospective retirees and completing retirement processes on time, respectively - as opposed to spending most of their time performing manual calculations, filling out forms and tracking paper.

The University of California, along with other educational institutions across the country, is facing an aging workforce-spurred surge of staff and faculty retirements in the coming years. Given this demographic reality, implementation of the speedier and more accurate retirement process happened just in time for both prospective employees and administrative staff. An additional benefit is that implementation of this sophisticated, automated retirement process allowed deployment of staff to the critical area of employee recruitment and retention.

Quantifiable advantages of the new process over the old process include:

Old Process	**New Process**
• 100+ retirements a month	• spikes of 300+ retirements a month
• retirement requests had to originate at least 120 days prior to retirement date	• retirement requests can be submitted as late as 30 days prior to retirement date
• even with the 120 day lead time, there was a persistent backlog of incomplete retirement processes	• even with the much shorter 30 day lead time, there is no backlog of incomplete retirement processes
• a retiree's income stream and insurance coverage often was disrupted	• continuous stream of income and insurance coverage from active status into retirement
• all retirement requests were processed manually	• 90% of retirement requests are automated
• multiple, complex forms	• no forms; all processing is completed online
• increasing costs for staff, overtime, printing and mailing	• savings in overtime, printing and mailing costs and ability to handle increased workload without increasing staff costs
• not a best practice	• continually cited by campus and lab benefits offices and internal departments as a best practice; used as the model for solutions in other HR & Benefits areas.

In the University of California's 1998-99 Annual Financial Report, the Senior Vice President of Business and Finance cited this project as one of the innovative business practices credited with streamlining University systems, resulting in improved customer service and significant cost savings. The success of this project helped propel five other process redesign projects within

the HR & Benefits department at UC Office of the President and all of the employees who served on the project received Incentive Awards recognizing their contributions. This project was awarded the Systems and Computing Technology Corporation (SCT) Award by the College and University Professional Association for Human Resources (CUPA-HR).

Finally and perhaps most significantly in the long run, the inclusive nature of this project and its ultimate success helped overcome the natural resistance to change and made the department believe both that change **can** happen and that it can be to the benefit of all.

Submitted by:

Bruce James, Manager Maintenance, IS&C
Michael Baptista, Acting Director, ISS, HRB