

Interim Report on 2005-06 Extended MyInfoVault Pilot

About This Report

This interim report summarizes the status of the project to implement a faculty merit and promotion system for the UC Davis campus. An overview of the project's background, timeline, goals, and governance structure is provided. Also included are key findings from the 2004-05 pilot as well as a brief description of functional and technical enhancements made to date. Feedback about this report is encouraged (miv-project@ucdavis.edu).

About MyInfoVault

The MyInfoVault application was originally developed by the School of Medicine where it has been used for several years for entering faculty data and creating CVs and NIH biosketches. It is a Web-based application that provides an online storage repository in database form for professional information. Once data is entered, users have the ability to automatically generate various documents for the merit, promotion, and appraisal process, along with generating a professional CV.

MyInfoVault Program Timeline & Background

Jan. 2004:

- Vice Provosts Barbara Horwitz (Academic Personnel) and John Bruno (Information and Educational Technology) appointed the Academic Merit and Promotion Oversight Committee to review technology that would facilitate the campus' academic merit and promotion processes and lessen the associated workload.

Fall 2004:

- In broad consultation with potential users, administrators, campus groups (including CCFIT), and technicians, and after evaluating several options, the Academic Merit and Promotion Oversight Committee recommended proceeding with a campus pilot implementation of MyInfoVault for the 2004-2005 academic year. The pilot was initiated shortly thereafter.
- To understand the architecture and design of the MIV application, IET technical staff began working with technical staff from the School of Medicine.
- In anticipation of the transfer of responsibility, an analysis was conducted to determine the architectural changes needed to integrate the application into the campus infrastructure for deployment as a campus-wide application maintained at the Data Center.

Winter-Summer 2005:

- Jan. 2005: IET began providing support for the campus pilot implementation by coordinating the technical work needed for maintenance and modifications. Work began on the campus version of MIV to incorporate all of the integration changes and a process to identify and prioritize needed functional enhancements.
- August 31, 2005: The 2004-05 pilot concluded.
- Prior to Sept. 2005: A significant amount of the integration work and a significant number of the prioritized functional enhancements for the campus version of MIV were completed, in time for the next deployment phase of MIV. (See Appendix A for a description of the needed re-write work and the status of these enhancements.)

Fall 2005:

- Sept. 2005: The extended 2005-06 pilot was launched.
- Modifications to the MIV application were completed, and the system was transitioned from the Health System to campus servers at the Data Center.
- Load testing is in progress to test and verify performance for the expected production user population.
- Remaining enhancements were prioritized; several have been completed, others are in development.
- A communication approach is under development; a project Web site will be launched in mid-December.

About the MyInfoVault Pilot Program

Guiding Principles

The campus effort to develop an electronic dossier system, including this MIV pilot effort, has been based on the philosophical position that MIV will be accepted by the campus only if it reduces, and is perceived to reduce, department staff workload. To ensure success and user “buy-in”, MIV must be a “bottom-up” system, i.e., it must be a system that is, and is perceived to be, useful to department staff.

Pilot Oversight

A MyInfoVault Oversight Committee was established in October 2004 to guide the development of the pilot program, to provide coordination of the various unit efforts, and to recommend enhancements to the MyInfoVault system. The Oversight Committee is co-chaired by the vice provosts for Academic Personnel and Information and Educational Technology.

In January 2005, technical and functional oversight for MIV was transferred to the Vice Provost – Information and Educational Technology (IET) and the Vice Provost – Academic Personnel, respectively.

A joint functional/technical Pilot Implementation Workgroup with user representatives from each participating school and college has been meeting bi-weekly to review and make recommendations on functional enhancements and technical improvements.

Pilot Goals

- 2004-05 Pilot Program: The primary goal was to assess the Health System MyInfoVault application’s overall fit as a potential campus academic merit and promotion system. To meet this goal, the project team recruited and trained pilot participants, established a campus user group to determine functional and technical needs, and completed an analysis of the functionality desired in a campuswide faculty merit and promotion system.
- 2005-06 Extended Pilot: The primary goal for this academic year is to test the system with various departments through at least one merit and promotion cycle and to finalize technical and functional enhancements to the MIV application prior to campuswide deployment. Included in this phase is additional consultation with users and campus groups (including the Academic Senate and Academic Federation), and the development of an implementation framework --including communication, training, and support modules -- in preparation for campuswide deployment.

Pilot Participation

A broad cross-section of the campus community, representing 75+ departments and ~2,000 individual accounts, is participating in the MIV program.

Included are the following schools and colleges:

- School of Medicine (25 depts)
- School of Veterinary Medicine (10 depts)
- College of Agricultural & Environmental Sciences (14 depts)
- College of Biological Sciences (6 depts)

The following units participated on a limited basis during Spring Quarter 2005:

- College of Letters and Science (10 depts)
- Education (3 depts)
- Engineering (6 depts)

Training

Eighteen training sessions in computer laboratories and four individual group sessions were conducted to teach staff how to enter data and how to produce both dossiers for faculty advancement and NIH biographical sketches using the MIV database. A total of 87 staff received training in computer labs on the campus and 102 staff at the SOM.

User and Campus Input

In addition to working very closely with pilot users and the Pilot Implementation Workgroup, a number of campus groups, units, and departments have been consulted since the very early stages of the faculty merit and promotion project. Recent highlights from this consultation process follow.

- Throughout the spring of 2005 demonstrations of the MIV Program were made to the Academic Senate Executive Committees in CA&ES, Engineering, Letters and Science, Education, Law, Graduate School of Management and DBS. Responses from the executive committee members were mixed, ranging from mild interest to very enthusiastic support.
- A demonstration to members of the Committee on Academic Personnel was held on June 29, 2005. Participants commented on both the potential benefits of on-line review (can be done any time day or night, or from remote locations such as while traveling) as well as concerns about security (see "Suggestions for Functional Enhancements" section in this document).
- This past year, the MIV program also attracted attention from other campuses. A demonstration was given on May 6 to representatives of the University of California Office of the President, UC Irvine, UC Merced and UC San Diego in response to interest shown by the Office of the President and those campuses to develop a system wide MIV program or individual programs for use at other campuses. User accounts were provided to those campuses as well. UC San Diego and UC Irvine have both shown significant interest, and were provided with the code.
- The faculty merit and promotion system was discussed on several occasions in 2003-04 with members of the Campus Council for Information Technology (CCFIT). In June 2004, the Council recommended the adoption of the MIV application as a campuswide system, and in March 2005 an update was provided to Council members regarding the project's timeframe and progress.
- The project team consulted the UC Davis Technology Infrastructure Forum (technology leads from all campus schools, colleges and administrative units) on several occasions, including in March 2005 when an overview and status update of the project was provided to the group.

Key Findings

Overall, participant users are enthusiastic about MyInfoVault, especially regarding its potential to reduce staff workload.

- The majority of users report that MIV is a very good system with tremendous potential as an effective faculty advancement system, as well as having potential to significantly enhance NIH and NSF grants preparation, and to prepare other documentation required for site visits, accreditation visits and nominations for honors and awards.
- Some additional features have been identified, many of which are under development (see list of 2005-06 enhancements).
- Central campus funding for the initial entry of the publications list into the database was viewed as being essential. User concerns about formatting issues, and especially the need for the HTML coding, has already influenced the perception of MIV that is held by some department chairs.
- Not all of the Academic Personnel review committees have been briefed on the MIV system and consequently their recommendations have not yet been solicited. Additional input from the Academic Senate and Federation will be solicited.

Suggestions for Functional Enhancements

The following is a list of major functional enhancements suggested by pilot users and/or campus constituents. A brief description of each suggested enhancement follows, along with notes regarding actions taken or items requiring further consideration.

- **Additional Formats:** The MIV program contains specific formatting that was initially designed to address the needs of the School of Medicine. During the 2004-05 pilot, several new screens were designed to accommodate different academic series titles, and additional screens will need to be developed to address the even greater variety of academic titles across the general campus. The anticipated ability of MIV to provoke some standardization of formats across the campus may depend somewhat on our ability to negotiate standardization with the Academic Senate. One question is how extensively format customization can be supported; the cost effectiveness of further customization and the impact of format standardization on faculty reviewers are both factors for consideration.
- **Functional Enhancements:** Throughout the duration of the 2004-05 pilot, a number of functional enhancements were suggested by departments and users, and a significant number of those enhancements were delivered throughout the pilot. One of those enhancements, online review capability, has already been implemented. A list of known enhancements is included as Appendix A. Some additional enhancements that address discrete unit practices may be necessary for full deployment of MIV.
- **Initial Data Entry:** Virtually all of the pilot participants report that the initial entry of publication lists into the database is extremely time-consuming. Although some publications can be downloaded directly from professional Web resources such as PubMed, existing electronic professional websites contain a fraction of the publications produced by faculty on the Davis campus. Most existing publication lists must be manually entered into the database. The solution to this problem is twofold: first, the campus funding for the initial input of publication list data, as outlined in the original MIV proposal, must be secured; second, IET will continue to develop the ability to import data from existing internal and external databases
- **HTML Formatting:** Many pilot participants initially identified the requirement for specific instance HTML formatting as a major workload issue. Some departments reported they could not use MIV until there was a better resolution because of the additional and cumbersome process of HTML coding for entering special characters. Other departments have accepted the limitation, realizing that a long-term solution must be developed. To address this situation, Word documents can now be converted to PDF documents and uploaded into the system.
- **Archival Storage:** The Office of the Chancellor and Provost's Electronic Data Management System (EDMS) will provide permanent archival storage for the completed, static dossier record that is produced in MIV. Academic Personnel will oversee periodic, situational access to the file by the Committee on Academic Personnel when CAP is involved in the personnel review. MIV should allow for a static document to be archived (using local departmental protocols) at the department and School/College levels.
- **Academic Senate and Individual Faculty Perceptions:** Faculty involvement with MIV is most likely to be initiated with the on-line review of dossiers, rather than the data input function. Department managers predict that new faculty will be willing to enter their own data; however, few faculty seem to be interested at this point. Consultation with the Academic Senate has so far produced mixed results. Demonstrations of MIV for CAP and for the Executive Committees of the Schools and Colleges produced generally supportive responses, but responses also reflect some skepticism and concerns about security of some documents (such as the online review/voting function, and allowing online extramural reviewer letters and student evaluations). Many faculty say they would be supportive of an e-dossier system that actually reduces department staff workload, and that they will support MIV to the extent that it reduces department staff workload and is not too cumbersome to use.

- **Local enhancements:** Users appreciated the ease of use and ability to tailor these systems to meet the needs of local practices. For example, the School of Veterinary Medicine has been conducting student evaluations online and is using MIV to report results of these evaluations for online faculty review, and the School of Medicine will complete all of its re-delegated and some non-redelegated actions using MIV this year. In addition, some departments have developed specific electronic systems to address their current needs to streamline faculty reviews. However, most of the systems do not have the MIV advantage of the relational database, some are based essentially on document imaging, and others are limited to using Word document attachments. These methods do not provide a relational database approach to addressing the goals of a centralized merit and promotion system. In addition, there are security and compatibility concerns about the use or further development of these systems.
- **Security and Sensitivity of Information:** Users and some campus constituents have reported concerns regarding the security and confidentiality of the MIV system and of faculty merit and promotion data. In May 2005, the campus adopted the UC Davis Cyber-Safety Program which defines campus units' responsibilities and outlines fourteen key practices for assuring the integrity, availability and confidentiality of UC Davis computing systems and electronic data. Highest campus security priorities include protecting personal information, optimizing physical/environmental security, encrypting sensitive data, and establishing suitable processes for securely authenticating users of electronic resources. The policy recognizes that without physical security measures at the departmental and user levels, campus community members run the risk of a passer-by accessing and recording, removing, or altering confidential information. This Fall quarter, all campus organizations conducted a preliminary assessment of their security practices and developed an action plan for compliance. In addition to these unit- and desktop-level measures, the project team has taken several steps to further secure the application/system itself. These include transferring the MIV application to a server in the campus Data Center and integrating the application with the campus Kerberos authentication system. In addition, a security assessment of the MIV application is under consideration.
- **Streamlining Dossier Preparation and Review:** MIV has the potential to streamline the faculty advancement system by reducing redundant data input, by facilitating the importation of data from existing databases to replace hand entry, and by reducing the number and variety of formats now used to increase the ease of data entry and readability between Schools/Colleges. Much can be accomplished by instituting the standardized formats that are already provided in the APM (UC Davis has allowed a variety of dossier formats to proliferate over the years and central faculty reviewers often request that new or different formats be adapted; these often change every few years to the frustration of the departments who must accommodate these frequent changes). It is not clear whether the Academic Senate or staff will resist any particular decisions to limit formats or to eliminate School/College or department-specific formats that have been allowed to develop over the years.

Technical Development: Recent Highlights

As noted above, a number of technical enhancements were implemented throughout the duration of the 2004-05 pilot. Others are in progress (see Appendix A for more information). An overview of key areas under development follows.

- **Capacity Planning:** The project team is conducting load testing to ensure sufficient capacity for 1,000 concurrent users with varying degree of task complexity for an estimated user base of 5000 faculty/staff. Testing is estimated to be completed by the end of December, 2005.
- **Special characters rendering:** The current special character utility requires the user to use HTML tags to designate special symbols. The utility indicates the character and associated HTML tag and the user is required to cut/paste the HTML tag to the input screen to render the appropriate special symbols. An interface is being tested that would

include only the special characters be selected without the need for cut/paste of the HTML coding representations. Testing in progress.

- **Electronic Document Management archive preparations:** Update Employee ID and set up file transfer procedures. Due February 1, 2005.

Recently completed:

- Transfer of the MyInfoVault application from the School of Medicine server to a new campus server
- Integration with the campus Kerberos authentication system
- Transfer of existing data from the School of Medicine server to the campus server.
- Completion of several functional and technical enhancements, new features and fixes, many of which to align the system more closely with local business needs– see Appendix A.

Appendix A: Enhancements to the MyInfoVault Application (as of 12/05)

Enhancements presented below were requested in 2004-05 and 2005-06; they were approved and prioritized by the Pilot Implementation Workgroup.

Enhancement To:	Enhancement Description:	Complete	In Progress	Pending
Kerberos Authentication	Integrate application with the main campus Kerberos authentication architecture.	X		
Online Review/Roles Management	This functionality will allow for the assigned review of packets, while maintaining secure control of the user's packets and materials	X		
Teaching Evaluations	Add mean score to the Teaching Evaluations input form for both "Course" and "Instructor." Add "Evaluation Submitted" radio button to indicate "Summary" or "Complete". Add URL to link to VetMed online teaching evaluation data.	X		
Agricultural Experiment Station Report	Add the Agricultural Experiment Station Report input form and output list. Add ability to upload Agricultural Experiment Station Reports. Upload feature will require the implementation of the IText PDF concatenate tool.	X		
Extending Knowledge Lists	Create an Extending Knowledge List input form and output list for "Broadcast, Print, or Electronic Media", "Workshops, Conferences, Presentations & Short Courses" and "Other"	X		
List of Service	Combine inside and outside committee screens into a single screen & rename to "List of Service" and create output list. Change categories to "University" and "Non-University" (radio buttons). Add a "Type" drop-down box. Rename "Type/Classification" to "Role" as text input field.	X		
Merit, Promotion, Appraisal, Accelerated Merit List	Add action description and candidate's title to "Merit, Promotion, Appraisal, Accelerated Merit" List	X		
Upload Chair's Letter, Candidate Statement, & Org Chart	Add ability to upload Chair's Letter, Candidate's Statement and Org Chart to the packet. Upload feature required the implementation of the IText PDF concatenate tool.	X		
Department Letter format	Add a department letter format option for creating department letters and display the correct department letter format based on the option selected for the department	X		
New Home Page/Login Page	New design	X		
New Index/Menu Page	New design	X		
Usability Enhancement	Move "Training Grants" from Teaching to Research category	X		
Capacity Planning	Set up & configuration of load testing tool JMeter to test system capacity for 1000 concurrent users. Testing to complete in December 2005.		X	
Usability Enhancement	Need replacement for special character interface to eliminate the cut/paste of html coding for special characters		X	

Enhancement To:	Enhancement Description:	Complete	In Progress	Pending
Electronic Document Management Archive Preparations	Update Employee ID and set up file transfer protocol procedures.		X	
Packet Font Size	Make packet font size 12pt		X	
Other Letter/Recommendation & Joint Appointment Dept Letter	Add PDF upload for "Other Letter/Recommendation" & "Joint Appointment Dept Letter"		X	
Contributions to Jointly Authored Works	Add print/no print for "Significance of Research"		X	
DESI – Instructor Activity Report	Upload DESI reports. Need to confirm PDF availability.		X	
Courses Data Entry Screen	Add sort order to "List of Courses"		X	
Teaching Evaluations	Automate the population of the URL field for online Teaching Evaluations		X	
Publication Data Entry Screens	Consolidate the publication data entry screens into one or two screens with a preview page		X	
Grant Data Entry Screens	Consolidate the grant data entry screens into one screen and create with a preview page		X	
Usability Enhancement	Add refresh reminder			X
Usability Enhancement	Improve ability to re-sequence publications			X
University Extension Data Entry Screen	University Extension: add drop down with 4 qtrs; add fractional Units			X
CV	Create CV with un-numbered items			X
Publications Data Entry Screens	Out of order dates - in pub list - issue with pubs that are long "In Press" before being published. Maybe a policy issue.			X
Usability Enhancement	Improve user interface for resequencing of pub lists; drag and drop.			X
Publications Data Entry Screens	Add capability to transfer entries from/to all appropriate categories, in order to fix incorrect data entries			X
Research Grants Data Entry Screen	Add "Trainer" to Grant dropdown			X
Usability Enhancement	Flag fields that have been modified.			X
CV	Add course numbers to CV			X
Usability Enhancement	Add "last modified" info to data entry screens.			X
Usability Enhancement	Standardize date formats			X
Lecture/Seminar/Lab / Others Data Entry Screen	Sort Lecture list by date			X