Library Lab Project
Final Report
Enhancement of Open Source Software for IRMA (Improved Records Management Administration)

Submitted by:

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Project summary

The Harvard University Archives (HUA) received funding for a pilot project to take the first steps to gather information, gauge interest, and aim to put into eventual production at Harvard an open source records management tool to enhance user and system access to records retention schedules – that is, important records policies statements – and to assist in the identification, capture and management of University records in all formats.

The proactive and systematic identification, capture, and management of University records provide the policies and framework integral to building the permanent archival collections of Harvard, the oldest and largest such collection in the US. Equally important, records management significantly enhances the University’s operational efficiencies and assures the demonstration of regulatory compliance. The Records Management Services (RMS) unit of the HUA, assists (either directly or indirectly and variously through other records management units) the over 6,000¹ staff and administration whose day – to – day activities keep the University running, with the identification, management and long-term preservation of appropriate and significant University records.

Records managers at Harvard know that records responsibilities and requirements must be made easier for University administrators and staff to understand, access, and employ. To date, the University records retention schedule access interface has had limited browsing and search capabilities and provides user access to only a portion of the full schedule set of University records retention schedules. There has also been no way to personalize repeated local use of this data. The schedules have not been “user friendly” and thus not been serving our patrons/clients as well as they could.

The IRMA project focused on building on a current open source software project (“Records Authority”) funded by the National Historic Publications and Records Commission (NHPRC) and based at the University of Denver (DU). This project and tool were selected by HUA because as NHPRC has concluded by its funding of the project, the tool fills a void for a low cost, flexible and web based solution for user engaged and systematic retention schedule building and access. The aim was to adapt this tool for use at Harvard and to supply new open source code.

A significant portion of the work was also to gather information from patrons/clients and library/records management peers before undertaking a full revamping of access to the General Records Schedule (GRS).

¹ Staff and administration count increases to approximately 10,200 when HBS and HMS are included. Harvard University Fact Book, 2010-2011.
staff from the Institute Archives at MIT (our previous partner in the Library Lab Zone 1 Project) as well as the records manager at Tufts University (working on similar projects) to discover how they may be addressing parallel issues in their similar institutional contexts.

**Accomplishments**

The tasks we were able to complete fully were the following: completion of the background survey and focus groups on the GRS; conferring at MIT and Tufts about alternative approaches distribution and use of record series; and discussions with Harvard colleagues at Houghton (working on a Library Lab project with the Beineke at Yale) about possible overlaps of interest in EAC-CPF. We have completed our focus groups, analyzed data and have summaries that were shared with the project programmer Justin Clark.

In May 2012 we sent a survey to members of the Harvard University community to gather user feedback about the General Records Schedule (GRS) website and how this feedback might assist our thinking about the IRMA tool. We were specifically interested in the issues of website navigation, language, design, and search. The survey was sent to 1347 people drawn from lists of authorized users of the Records Center and attendees of the “Trash or Treasure” workshop held by RMS. From this list, 341 responded giving us a 25% response rate. We followed up by identifying key offices within Central Administration from which no one responded and sent the survey to an additional 40 people in those offices. A report on the survey results is attached as Appendix 1.

In June 2012 we assembled five focus groups to gather more specific suggestions for improving the user experience of the GRS website. The focus groups were held as a follow-up exercise to the survey about the website and were solicited through the survey. Selected from the 115 people who indicated willingness to take part in a focus group, we scheduled five focus groups, three in Cambridge and one each in the Longwood Medical Area (LMA) and at Harvard Business School (HBS). Twenty-eight people attended the focus groups in Cambridge, four people at LMA, and four people at HBS, for a total of 36 participants. Focus groups were facilitated at all locations by Liz Copenhagen; Sharyn Nolan was the recorder for all sessions. A report on the findings of the focus groups is attached as Appendix 2.

We were able to share this data with Justin Clark, the programmer assigned to our project. Justin was also able to attend one of the focus groups and we believe this was helpful in thinking through how we might make adjustments to the IRMA tool to suit the needs of Harvard’s users.

**Challenges**

What we did not know when we began this project – and which hampered completion – was that the University Archives website would be pulled into the development of the new library portal and that we would be moving into a Drupal environment. This transition should have included the move of the General Records Schedule (GRS) - upon which IRMA is dependent – as part of this move, but it did not. Rebuilding the GRS (the single largest textual document available through the Archives website) in Drupal was impossible to accomplish in the allotted time frame. Also, the GRS requires pin-protection, which is not possible in the new portal environment. With the old Archives website shutting down, a temporary solution to keep the GRS accessible was resolved by reworking it slightly and making it available and protected on an iSite [http://library.harvard.edu/university-records-management](http://library.harvard.edu/university-records-management). Given that this is a temporary solution, we did not seek to continue any of the programming work necessary to complete this project and create the actual tool we hoped to make accessible.

In addition, changes in staffing meant that the project needed to be rebooted a few times. Our original project manager, David Read, left the Archives in the Spring to take another position at the University. David’s supervisor, Elizabeth Copenhagen took over and managed the follow-up on the survey and the focus groups. Elizabeth, too, left for a new position in the early Fall. Skip Kendall, who was familiar with the work of the project all along, took over and worked with Megan Sniffin-Marinoff and Virginia Hunt to continue and finalize work.
Next Steps

Our hope is that we will, in the next few months, be able to resolve the Drupal and GRS privacy issues with an eye to seeking an extension of funding so we can complete this project. We will work with the Harvard Library portal team to see how we can resolve the Drupal issues for the GRS or seek an alternative solution. Megan Sniffin-Marinoff will also work the Office of the General Counsel to determine whether or not we need to continue to limit access to the GRS to the Harvard community. We have fantastic data from our work with stakeholders and other partners and realize now more than before how important it is for us to follow this project through to completion.

Deposited code

Justin Clark reported to us that he provided original source code to the IRMA project based at the University of Denver.

Budget spent

The data is not yet available. Our budget was for programming (for testing and development) and to provide for hiring temporary staff to allow for release time for records management staff to set aside other duties and work on this project. We did fulfill our commitment to purchase Camtasia software from Archives funds.

Publicity/presentations

Our survey and focus groups served as a principle point of publicity for the project and they are summarized in the appendices. In addition, we announced the receipt of the grant for the project in the New England Archivists Newsletter, April 2012, 39:2, p. 15 [NEA_Newsletter_April2012_final.pdf](mailto:NEA_Newsletter_April2012_final.pdf)

See Appendix 1 – IRMA Survey Results, August 2012
See Appendix 2 – IRMA Focus Group Results, August 2012
Appendix 1

IRMA Survey Results, August 2012

In May 2012 we sent a survey to members of the Harvard University community to gather user feedback about the General Records Schedule (GRS) website. We were specifically interested in the issues of website navigation, language, design, and search. This report summarizes the findings of the survey; the entire survey results can be viewed by opening the survey results box at the end of this report.

Survey Recipients

The survey was sent to 1347 people across the University, of whom 341 responded for a 25% response rate. We drew the initial list of recipients from lists of authorized users of the Records Center and attendees of the “Trash or Treasure” workshop taught by RMS. After the survey closed at the end of May, we identified key offices within Central Administration from which no one responded and sent the survey to an additional 40 people in those offices.

The respondents to the survey were asked to identify the part of the University in which they worked. Eighty respondents were from Central Administration offices (23%), 235 respondents were from the various schools (FAS, HMS, etc., 70%) and 26 were from non-school based centers, programs and interfaculty initiatives (7%). This breakdown by part of the University closely maps to the breakdown of users of the Records Center (Central Administration 22%, Schools 68%, other 10%).

Questions and Responses

In the survey we solicited feedback about four attributes of the GRS website: navigation, language, design and search. Additionally, we asked questions about familiarity with and use of the GRS on the web, use of records management services (from all three records management programs), and willingness to participate in a focus group. The results are as follows:

- Awareness of records schedules – 84% of respondents (278) were aware of records schedules, 16% (53) were not aware.
- Use of GRS website – 55% of respondents (150) used the GRS on the web, 45% (124) did not use it on the web.
- Navigation – on a scale of 1-5, with 5 being “like” and 1 being “dislike,” 84% of respondents (115) ranked the navigation between 3-5 (like-neutral) while 16% (22) ranked the navigation as a 1 or 2 (somewhat dislike-dislike). Of those who ranked navigation as a 1 or 2, labels/headings and logic of the structure were the top complaints.
- Language – using the same scale as for navigation, 87% of respondents (114) ranked language between 3-5 while 13% (17) ranked language as a 1 or 2. Of those who ranked language as a 1 or 2, clarity and the ability to easily skim for relevant content were the top issues. Design – using the same scale as for navigation and language, 87% of respondents (110) ranked design between 3-5 like-to-neutral and 13% (16) ranked design as a 1 or 2. Of those who ranked design as a 1 or 2, layout and spacing were the top complaints. Search – using the same scale as navigation, design and search, 87% respondents (106) ranked search between 3-5 liked-to-neutral while 13% (16) ranked search as a 1 or 2. Of those who ranked search as a 1 or 2, ease of use of search and quality of search results were the top issues.
- Use of services offered by records management programs – 75% of respondents had used services provided by one of the three University records management programs. The services most often cited by respondents were records center storage (86%), records management consultations (64%), records management websites (49%), educational workshops (46%) and transferring records to an archive (45%).
- Willingness to participate in a focus group – 40% of respondents expressed interest in taking part in a focus group to continue exploring how to improve the delivery of the GRS on the web.
Summary of Findings

Overall, the findings from the survey are encouraging. We had a good response rate and those who responded represent a cross-section of our clientele. Most respondents were familiar with the concept of records retention schedules and used the GRS. A majority of respondents had also used the services of a records management program.

The responses to the four core questions about navigation, language, design and search, while generally positive, leave room for improvement. In each of the four areas, survey participants frequently ranked their experience as a “3,” indicating they were neutral with respect to liking or disliking the navigation, etc. A closer look at the positive ranking for each area reveals that while the overall experience is positive-to-neutral, a breakdown of the responses for each question shows that the “3” (or neutral) ranking accounts for 34-44% of the overall response (38% of navigation, 34% of language, 42% of design, and 44% of search). These results, combined with the additional feedback on elements of each core area and the comments by respondents, provide us with suggestions for improving the delivery of the GRS on the website.
Appendix 1 - Survey Results

Double-click on the image below to open the entire report

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My Report
Last Modified: 07/16/2012

1. Records Management Services (RMS), in cooperation with the Archives and Records Management Program at HMS/HIC and the Information Lifecycle Management Program at HMS, is considering ways to improve the design and delivery of the University's General Records Schedule (GRS). The GRS provides guidance for Harvard staff on how long to keep records and what to do with them when they are no longer needed. Please use the arrow buttons in the lower right corner of the page to navigate through the survey. Please do not use the back button on your web browser.

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Appendix 2

IRMA Focus Group Results, August 2012

In June 2012 we assembled five focus groups drawn from the Harvard University community to gather user feedback about the [then in use] General Records Schedule (GRS) website. The focus groups were held as a follow-up exercise to a survey about the GRS website that we sent out to clients in May 2012. The intent of the focus groups was to gather from participants more specific suggestions for improving the user experience of the GRS website.

Focus Group Composition

We solicited volunteers to participate in a focus group through the GRS website survey we distributed in May. One hundred and fifteen people indicated that they were willing to take part in a focus group. We scheduled five focus groups, three in Cambridge and one each in the Longwood Medical Area (LMA) and at Harvard Business School (HBS). Twenty-eight people attended the focus groups in Cambridge, four people at LMA, and four people at HBS, for a total of 36 participants. Focus groups were facilitated at all locations by Liz Copenhagen; Sharyn Nolan was the recorder for all sessions.

Questions for the Groups

The purpose of the focus groups was to gather more in-depth feedback from users of the GRS website. Prior to the focus group meetings, we sent out a short exercise for participants to complete as a way to encourage them to think about their experience using the GRS website (noted at the end of this report). During the focus groups we asked the following questions:

1. How did you first learn about the General Records Schedule?
2. We sent out a brief exercise [prior to the focus group] to get you thinking about the records schedule website. Please describe your experience when you did the exercise, or the last time that you used the records schedule on the web. What was your overall impression? Did you find what you expected? How easy/hard was it?
3. What features of the records schedule website do you find to be useful?
4. What features of the records schedule website do you find frustrating?
5. Think about websites that you visit and find easy to use. What do you like about them and why?
6. If you could make one improvement to the website for the records schedule, what would it be?

While we generally followed this question outline, we were flexible when posing the questions to the group. If a group seemed to be particularly responsive to certain questions, we would spend more time on that question, and perhaps not ask one of the other questions on this list. Often questions 3 and 4 were not specifically asked, as people generally volunteered their opinions on what they found useful and frustrating about the GRS website in their answer to the second question.

Summary of Feedback on the Current GRS Website

The responses of the focus group participants to the questions about the current GRS website were surprisingly consistent and revealed several common themes. Most of the responses can be grouped into the same categories that were identified in the survey, with issues related to navigation, design and search most often mentioned. When discussing what they did not like about the GRS website users often made specific suggestions for improvements which are mentioned below.

Navigation

While some participants found it easy to navigate the GRS website, others found it difficult to find their way
through the site. The most common complaint was that navigation elements are present on both the left and the right side of the GRS web pages. Participants had two specific suggestions for improving navigation. People indicated that they would prefer to have navigation on only one side of the page. People also mentioned that having “breadcrumbs” at the top of the page (e.g. links showing their path to the page they were currently on) would be helpful to users to determine where they were in the GRS, where they had been, and how to return to a previous page. In several of the focus group sessions, users mentioned that rather than using links to direct a user to a new web page, it might be easier to use the GRS if we incorporated pop-up windows in the GRS to display additional information. Users also mentioned that they appreciated having the option to browse the GRS through the list of categories on the right side of the web page.

**Design**

Members of the focus group had mostly negative comments about the current design of the GRS website. The color scheme was mentioned often as unattractive. Respondents in all sessions disliked the font and found the font size to be too small to read easily. Participants also mentioned that there was too much white space on the web pages, referring to the expanse of white space on the right side of the GRS web pages. Users thought the website could be improved with more visual elements, which would help to offset the “wordiness” (text-heavy) of the GRS. Users also commented negatively on the need to scroll up and down pages to see all of the information on each page.

**Search**

One of the areas that drew the most criticism was the existing search function of the GRS website. Several respondents mentioned that the search function was not easy to use or provided the information for which they were searching. Every group expressed frustration that the search box was only available on one web page; they wanted to be able to easily access the search box from wherever they were in the GRS. Participants disliked that clicking on a search result would take them to the top of a page on the website instead of to the exact result on the page, meaning that they would then have to search through the information on that page. Respondents mentioned that they would like search terms highlighted in the search result, similar to Google’s search function. Participants also reported that the search results were not always relevant, which led them to question the accuracy and completeness of the search.

**Additional Comments**

There are two other issues with the GRS website that were raised by each focus group. While respondents mentioned that they thought the GRS is “too wordy,” at the same time, they said that there is not enough information on the web page to help them decide “what to do next.” The remarks about the wordiness of the GRS website reflected two concerns: the amount of information being presented (the actual content of the GRS itself, which is outside of the scope of the focus groups) and the way in which the content is displayed on the website. Many users said that the sheer amount of information on the page made the GRS seem “intimidating” and “scary”. Participants reported that using the GRS would seem less daunting if less information were displayed on one page, perhaps by using a different layout. Finally, several participants remarked that they had office-specific schedules and asked if those schedules were available to them from the GRS website.

**Participants’ Favorite Website Functionality**

After discussing the current GRS website, we asked participants what they liked about their favorite websites. The two websites mentioned most often were Amazon and Google. Users liked Amazon for two primary reasons:

- Personal accounts which allow you to save/track items for future viewing, access past order information, and share your lists with other users (this feature was mentioned as the reason people liked other websites as well).
• Recommendations such as “customers who viewed this also viewed X,” related product lists, ratings of products, and other recommendations specifically for the user based on past browsing, purchasing, and that of others with similar profiles and histories.

Google was praised for
• having a very simple interface
• being easy to use
• results with highlighted search terms
• suggesting search terms and phrases (auto-filling search terms, suggestions to correct misspellings)
• listing related searches (to help guide users)

Other website traits that were mentioned in more than one focus group include clean interfaces, attractive visuals, good search function, the ability to change or customize the view of a website, easy navigation, and easy to find contact information. The traits that users mentioned most often as desirable on websites corresponded to their suggestions for improvements to the current GRS website.

Response to IRMA Prototype

As part of the presentation to the focus group we also showed participants screen shots of the IRMA website to gauge their reaction to the new features and layout. We highlighted the improved search function (“did you mean” suggestions) and the “My Schedule” function that allows users to save series to their profile for future reference. Participants reacted positively to both of the highlighted features. They also liked how the GRS was displayed as a table that could be expanded through pop-up windows.

General Recommendations for Future Enhancements to IRMA

The focus groups’ suggestions for improvements to the GRS website and responses to the IRMA prototype confirm that we are moving in the right direction with the IRMA tool, particularly with respect to the search and “My Schedule” functions. Based on user feedback and suggestion, recommendations for changes and enhancements to the IRMA tool are as follows:

• Increase the font size
• Make display of GRS entries customizable; e.g. let people adjust which columns they see in the GRS table
• Configure search function to
  o Highlight search terms in results
  o Recommend similar (related) searches to the user
• “My Schedule”
  o Continue to explore authentication options that would link individual users with their office so that users will be able to view their office-specific schedules (if they have them)
  o Allow people to attach their own comments to the entries they save to “My Schedule”
  o Investigate how to let people to share their “My Schedule” with others
  o Consider how we could create “My Schedule” accounts for departments/offices (not just individuals) that could be shared among all members of the department
• Investigate the possibility of pushing out recommendations to users similar to Amazon.com based on what they view, save to “My Schedule,” and what other people view/search
• Create supplemental pages on website accessible from left navigation bar for FAQs, contact information and “what’s next” instructions

Pre-meeting Exercise Sent to Focus Group Participants

Before attending next week’s focus group session, please take a few minutes to re-familiarize yourself with the General Records Schedule (GRS). Please walk through the website as if you were using it for advice on how long to keep your office records. Think about how you would describe your experience. If you do not have specific records
Exercise: You are a new employee at the Human Resources office at one of Harvard’s schools. You have inherited some records from your predecessor, including employee personnel records from the years 2000-2006. You turn to the General Records Schedule because you saw it referenced in a new employee’s orientation handout. You want to know if you need to keep these records any longer and what to do with them when you no longer need to hold onto them.

When you go to the home page of the GRS, what is your first impression? As you navigate the website, how would you describe your experience? Can you find the records described above by browsing the list of categories? Now try to do a keyword search for the personnel records described above. Were you able to find the information that you expected? How easy/difficult was it to find what you were looking for? Are there navigation guides or tools that you would expect to find when looking up this type of information? If so, were your expectations met?