CoSA-NAGARA Great Ideas Exchange Day Case Study:

The Oregon Records Management Solution

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Background:

The Oregon State Archives (OSA) resides within the Office of the Secretary of State (SOS). It is comprised of three major sections: Records Management, Reference, and Publications. Records Management oversees the creation and maintenance of records retention schedules for all public entities in Oregon, provides broad training and assistance to agencies on records management issues, operates the state records center, and supports the Oregon Records Management Solution (ORMS). Reference oversees accessioning and processing of records transferred to the Archives, provides on-site and remote reference services to patrons and handles the Archives’ public outreach and social media presence. Publications coordinates the Oregon Administrative Rules and publishes the Oregon Blue Book biennially. The staff is small, with a total of 23 individuals at the present time. The Records Management unit consists of the unit manager, the ORMS Administrator, and four records management analysts (RMAs).

Traditionally, RMAs working at the Archives have devoted a large percentage of their time to hands-on work on records retention schedules for various agencies, sometimes working on-site for a number of months doing top-to-bottom inventories of records. This work created highly accurate and specific schedules, but was extremely resource-intensive and did not translate well when records transitioned from paper to electronic. With electronic records, if you don’t get to them early you very well might not get to them at all. We needed to shift operations forward, to engage and empower records creators to manage their own records from the start. Recognizing that manual records inventories were unsustainable in the long-run, the Archives began to seek tools to deal with the problem at a higher level. After wrestling with the problem for a decade, in 2008 SOS selected and implemented its first electronic records management system, Tower TRIM\(^1\), after a lengthy search led by State Archivist Mary Beth Herkert.

After successfully implementing TRIM internally the next step was to provide the same tool to other public entities throughout Oregon. To make this happen the Oregon State Archives joined with a private firm, Chaves Consulting, to provide business and IT support, as well as a secure datacenter to host government records. Thus was born the Oregon Records Management System (ORMS), which launched with 10 pilot agencies in 2011. In the succeeding years ORMS has grown to over 57 members, including state agencies, municipalities, counties, school districts and special districts. Member agencies gain access to a full suite of records management tools and receive training and extensive support from the State Archives for a monthly subscription fee.

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\(^1\) Tower TRIM has since gone through several name changes and two company shifts. The version currently used in ORMS is called HPE Records Manager, or HPERM.
Some of the recent growth of ORMS can be credited to the implementation of Administrative Rules governing electronic records in Oregon. Revised in 2016, these rules lay out standards for digitization and management of records in electronic form, and include required file formats for long-term retention of records. They are designed to be attainable but still maintain minimum standards. Approved formats include TIFF for images, PDF for textual documents, MP3 for audio and MP4 for video. It’s important to note that these are not supposed to be archival standards, but rather minimums for agencies maintaining records on-site. While formats such as Broadcast Wave and PDF/a may be preferable for a true preservation repository, enforcing those standards would have led to widespread non-compliance due to the hassle of converting to less widely known formats. We sought a balance between the ideal situation and what agencies would actually do.

The rules also contain an exception that allows agencies to maintain records of 100 years or more retention solely in an electronic format if they are managed within a DoD 5015.2 certified electronic records management system. Prior to this rule all such records were required to be in a physical format for longevity. For records with shorter retention agencies already have the freedom to manage in their medium of choice, but with a significant caveat that if they are unable to provide access to those records for the full scheduled retention period they are liable for both criminal and civil penalties that may result. Agencies are strongly encouraged to utilize such systems for all records of more than a decade or so retention. Many agencies around Oregon have ceased microfilming and dramatically reduced their paper storage space by taking advantage of this new option.

This study will focus on the process used to bring an agency into the ORMS program, with a particular focus on how we balance long-term RM and archival concerns with the needs to encourage agency adoption and support active business processes. A conscious decision has been made with ORMS to focus on system-level tools rather than on the files themselves in most situations. This may seem to be ignoring the issue of at-risk file formats, but without having direct control of the records in question that level of granularity is highly impractical. Instead, by helping agencies move their records into a secure and well-managed system, we give ourselves the tools to track and manage all records into the future.

**Project methods and scope:**

As a public-private partnership ORMS is comprised of several different groups, with separate but overlapping responsibilities. Chaves Consulting handles contractual and business support, over-all project management and scheduling, and staffs a support desk for issues. An IT subcontractor, Arikkan, handles management of the datacenter, network engineering and security, and software technical support. State Archives staff do much of the up-front client work, providing consulting on records organization and file structure, retention and security issues in the software and training all users. Project leadership is provided by a project manager

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2 [https://secure.sos.state.or.us/oard/displayDivisionRules.action?selectedDivision=559](https://secure.sos.state.or.us/oard/displayDivisionRules.action?selectedDivision=559)
at Chaves and the ORMS Administrator at the State Archives. They handle marketing and outreach as well as over-all project strategy and resource coordination.

Each new agency brought into ORMS forms its own implementation project, with an RMA from OSA serving as the primary lead during that time. The following steps taking place in each implementation to ensure successful roll-out:

- Initial consultation and information meetings
- Contracts and agreements signed
- Formal kickoff meeting to clarify roles and responsibilities, lay out the project timeline, and ensure that all parties are up to speed.
- “First Records” meeting, where agencies meet with an RMA to discuss which groups of records will be targeted first for ingest into the system.
- IT interface between agency IT and Arikkan to establish network linkage, provide software downloads, facilitate installs
- Build meeting between agency leads and RMA to identify file structure, retention needs, security and access requirements.
- Initial software build and review by RMA
- Training of all initial users at agency by RMA

The implementation process is designed for ease of uptake for the agency, and as such targets their areas of greatest business need initially. This often means that records that we might consider of “greatest value” are not in fact what are dealt with first. Typically first records targeted would be those which represent a comparatively large volume, are somewhat predictable (to help users ease into using the new tools), have at least 5 years of retention remaining and often have some pressing access need. The intent is that the program shows its immediate value to the agency by helping with their problems first, and then will serve the broader RM/archives concerns as the agency utilizes it more fully over time. Archives staff does not dictate, but will guide in a direction that is most productive for all parties.

The specific steps taken as part of implementation have evolved greatly since the inception of ORMS, and reflect lessons learned from early pilot programs as well as the expertise of staff brought in in the intervening years. The process continues to evolve, but with the goal of allowing for minimal disruption of agency activities and greatest benefit from the start.

ORMS implementations are also undertaken in conjunction with an expanding program of on-site and virtual records management trainings offered by OSA. By encouraging a higher level of electronic records literacy among all public employees we seek to empower them to make better decisions and identify potential problems before they become insurmountable. This allows archives staff to focus their efforts on those problems which do require more focused attention rather than getting drowned in the endless tide of small issues.

**Issues and challenges encountered**
Given the broad scope of ORMS and the sheer number of moving parts some issues are inevitable. They can be broadly classified into three different types: Project management and administration, technical infrastructure and personnel-related.

Project management/administration: As ORMS is a first-of-its-kind program few involved in the early days had much of an idea how it would all work out. Initial growth projections were unrealistic, but there was little real data to go on. The job of administering the program was initially an added duty of the Records Management Unit Manager at the OSA, dramatically underselling the amount of work required to keep it operating. There was also no dedicated project director at Chaves Consulting. The addition of these roles has gone a long ways towards creating a more controlled program. State agencies, in particular, have been prone to skepticism, quite possibly because of the overabundance software that many have seen come and go over the last 20+ years. Our continued growth has been the best antidote to it, but the state rumor mill occasionally still rears its ugly head.

Technical infrastructure: The challenges with operating a state-wide multi-tenancy ERMS are significant. In addition to the usual software and hardware maintenance cycles, patching, updates, etc. each individual implementation site has its own IT infrastructure, internal network security and requirements. The ORMS IT partners must constantly adapt and troubleshoot issues which may or may not be in their control. Additionally, making sure the software works equally for all member agencies is constant work for both the technical and RM teams. Requests from one agency could affect all other users, so each potential change is thoroughly tested by multiple groups before being considered for rollout. This means members don’t always get all of the features or customization they want.

Personnel: The right people in place is key. Some implementations have struggled to reach maturity due to internal personnel issues or outright hostility from some parties. Agency IT, administration, records management and program personnel all need to be on the same page, and when they are not it can create significant delays or, in rare cases, scuttle an implementation entirely. Change management is a constant focus, but it’s no panacea. As much as we try, it is beyond our capacity to address major internal agency structural or cultural issues.

Problems solved, successes, failures, and lessons learned

Some early agency implementations struggled due to the lack of clearly identified roles “on the ground” at the member agencies. This led in some cases to senior officials being designated project leads even if they had little knowledge of or interest in records or computer systems. Without competent point people our RMAs had to work far harder and repeat steps over and over just to get agencies off the ground. We have used this experience to create checklists of the key characteristics of the individuals who will serve roles at the member agencies in relation to ORMS. It’s not fool-proof, but the expectations are much clearer and we can rely on a much higher level of engagement on average.
We have also had to overcome some of the initial enthusiasm that turned into over-promising in the early days of ORMS. We carefully balance our communications with member agencies to ensure they are kept informed and provide positive direction while not painting ourselves into a corner with commitments we cannot meet. People can have long memories, and will hold a broken promise against you far longer than one might think is productive.

One major improvement is in the total time it takes to bring a new agency in and get them up and running. A process that could often take six months or more now is often achieved within two. No single factor gets all the credit for this, but many small improvements contribute. Focused project management, different skill sets in RMAs, clearly defined roles at the agencies, and simple experience and more efficient practices in the technical work in the software have all contributed. RMAs are now able to build a new agency into the software in less than a day versus weeks due to standardized builds, reducing unnecessary redundancy, and just general experience with the system.

**Questions remaining, future ramifications**

A fundamental question with any long-term program like this is “how do we know if we’ve succeeded?” With so many overlapping goals how do we measure what we have accomplished? Our flexibility and pragmatism is a strength, but it also means that we don’t always have directly comparable information to compare, and the defined goals are different from one implementation to the next. We can pull direct statistics in terms of raw storage numbers or number of agencies and users, but those don’t fundamentally tell us if we are in fact having a strong impact on RM practice at the agency level.

ORMS is also at a point where we are beginning to engage with larger entities, which will necessitate a shift in business practice and how we support member agencies. It’s unclear whether we will have more staff to focus on these efforts, so transferring some responsibility back to the agencies seems inevitable. This could in theory further weaken our influence regarding RM practice, although we are planning to avoid that.

Another constant challenge at the state level is the number of parallel attempts and initiatives from political offices and other agencies to gain a hold on electronic records. Will ORMS be declared the “official” state system? What would the ramifications of that be? Perhaps more likely, how would we handle being on the short list of recommended systems through state central services? These questions continue to bubble to the surface year after year, with little resolution in sight.

From a purely archival perspective, will our philosophy of “get the stuff first, then worry about the details” pay dividends? We have not yet had to undertake any grand migration effort, and as such what “should work” remains somewhat theoretical. We are confident in the control structure we have put into place, but in the rapidly changing electronic world it does not pay to be complacent.
We also have plans to utilize ORMS to facilitate near-automatic transfer of electronic records from state agencies to the archives’ custody, but this also has not been put into practice yet. There is a push and pull between getting agencies using the system as they need to and what we might desire for permanent archival records. This will continue to be hashed out in the future.

Summary

ORMS set out as an extremely ambitious project with the goal to provide effective electronic records management tools to all public entities in Oregon. From the start we had to relinquish strict archival tenets in favor of more pragmatic approaches that would actually be used. No state archives has the staffing or resources to exert direct control over all public records, so we must rely on agencies to do it on-site. Providing agencies with the tools and training to do a more effective job seems like a logical first step.

The program has evolved and will continue to do so, with more complex systems of control ensuring higher success rates in implementation and greater user uptake. The intent is that this will lead directly to better records management being practiced state wide and will directly contribute to records being preserved that otherwise would not have been. As the tools improve we fully intend to make use of them to greatest effect, amplifying our efforts through automation and machine learning wherever possible. We also hope that ORMS serves as a model for what can be accomplished at the state archives level by being more proactive and less reactive.