

Who Gives a DAM?

Texas A&M University's Iterative Process for Assessing Digital Asset Management Tools

University Libraries: Greg Bailey, John Bondurant, Sean Buckner, James Creel, Anton duPlessis, Jeremy Huff, Pauline Melgoza, Julie Mosbo, Sarah Potvin, Robin Sewell; **College of Architecture:** Ian Muise; **Marketing and Communications:** Brian Wright

Charge:

In fall 2014, a DAMS assessment task force was established with the objective of investigating and making recommendations for **a solution or solutions that would enable the Texas A&M University Libraries to store, display, and preserve new forms of university information and research.** In the spring of 2015, the charge expanded to include **attention to broader campus needs.**

Process:

After defining an assessment process and expanding our scope to include campus, the task force worked to conduct a campus needs assessment, to identify and develop use cases, and to distill core requirements. This became the basis of our testing rubrics. We ran multiple stages of assessment to identify and test systems, as well as to analyze the results of those tests. A recommendation was reached on the basis of this analysis, and further inquiries.

What's a DAM(S)?

Broadly, "digital asset management consists of management tasks and decisions surrounding the ingestion, annotation, cataloguing, storage, retrieval, and distribution" of image, multimedia, and text files. These tasks are performed by systems (DAMS) that differ in their approach to functions and range of associated capabilities.

Evaluation:

We narrowed the viable options down to five systems: **DSpace, Islandora, Hydra (+Sufia, Blacklight/Spotlight), Nuxeo, and Resource Space.** Each system was piloted individually and sequentially with a common rubric and using multiple pre-determined sets of sample content containing various types of files, to include AV. The rubric developed by the task force consisted of individual tasks or functions grouped into the following eight sections, each with additional sub-sections:

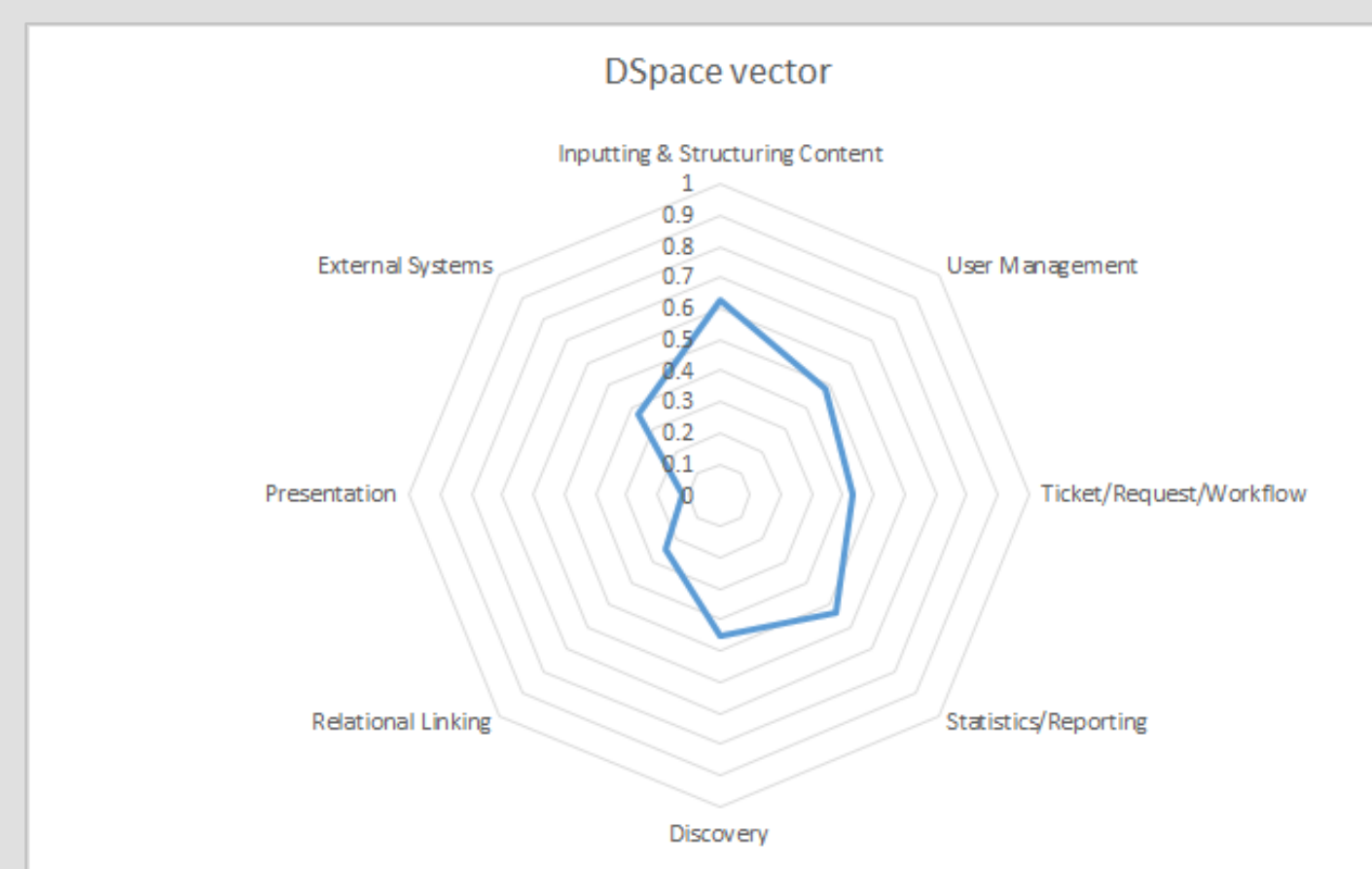
- | | |
|--------------------------------------|-----------------------|
| 1. Inputting and Structuring Content | 5. Discovery |
| 2. User Management | 6. Relational Linking |
| 3. Ticket, Request, and Workflow | 7. Presentation |
| 4. Statistics and Reporting | 8. External Systems |

The systems were developed, deployed, and tested, generally in one-month intervals. For the first three pilots, we developed a sandbox/test environment. However, because of technical problems with Islandora, many tests were performed on a hosted sandbox. A modified and condensed rubric was created to score the Nuxeo and ResourceSpace systems; for these systems, we relied on hosted sandboxes, conversations with platform users, and demonstrations.

Testing Results

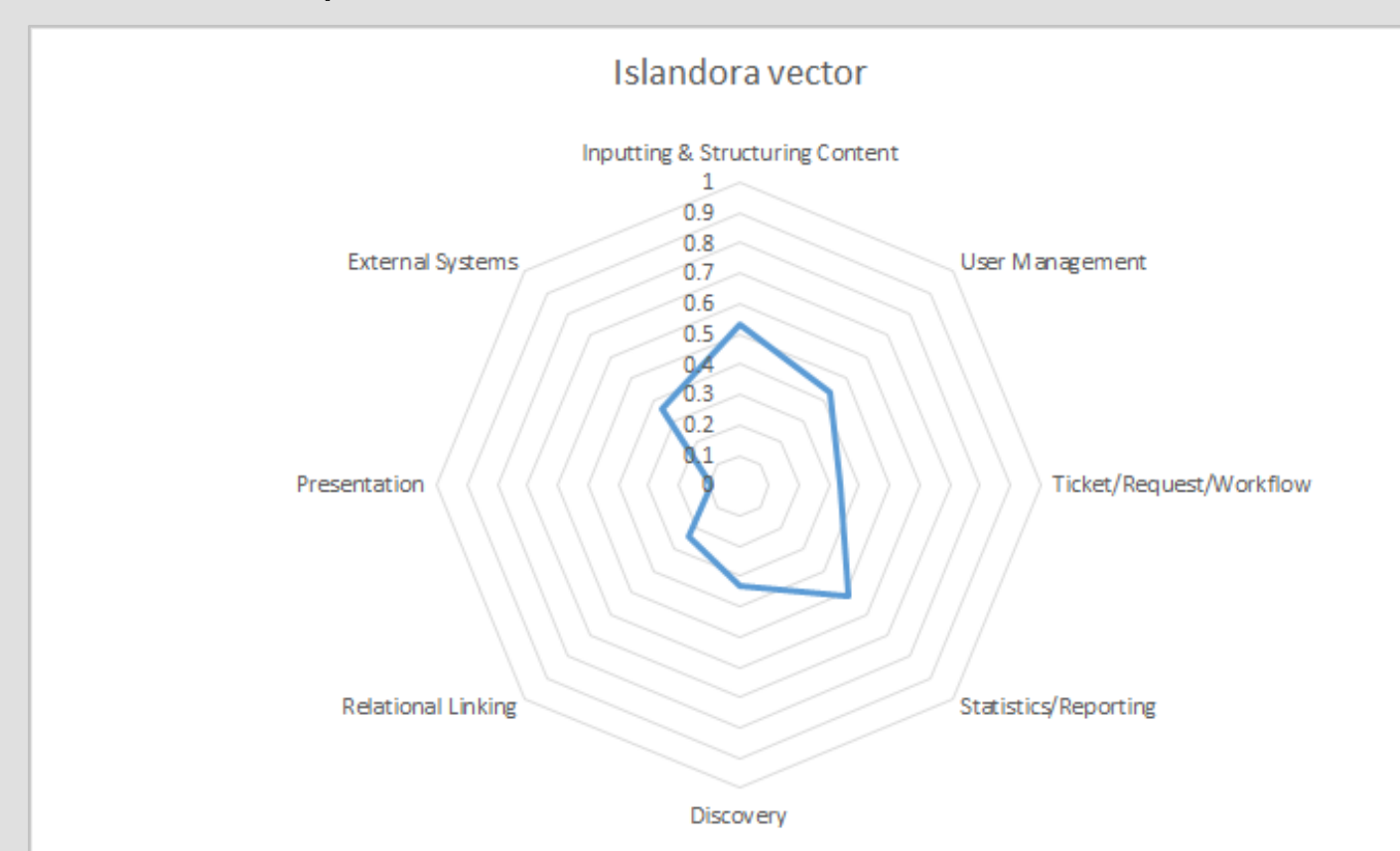
DSpace

Version tested: 5.5
Final score: 315.5
Vector space final score: 253



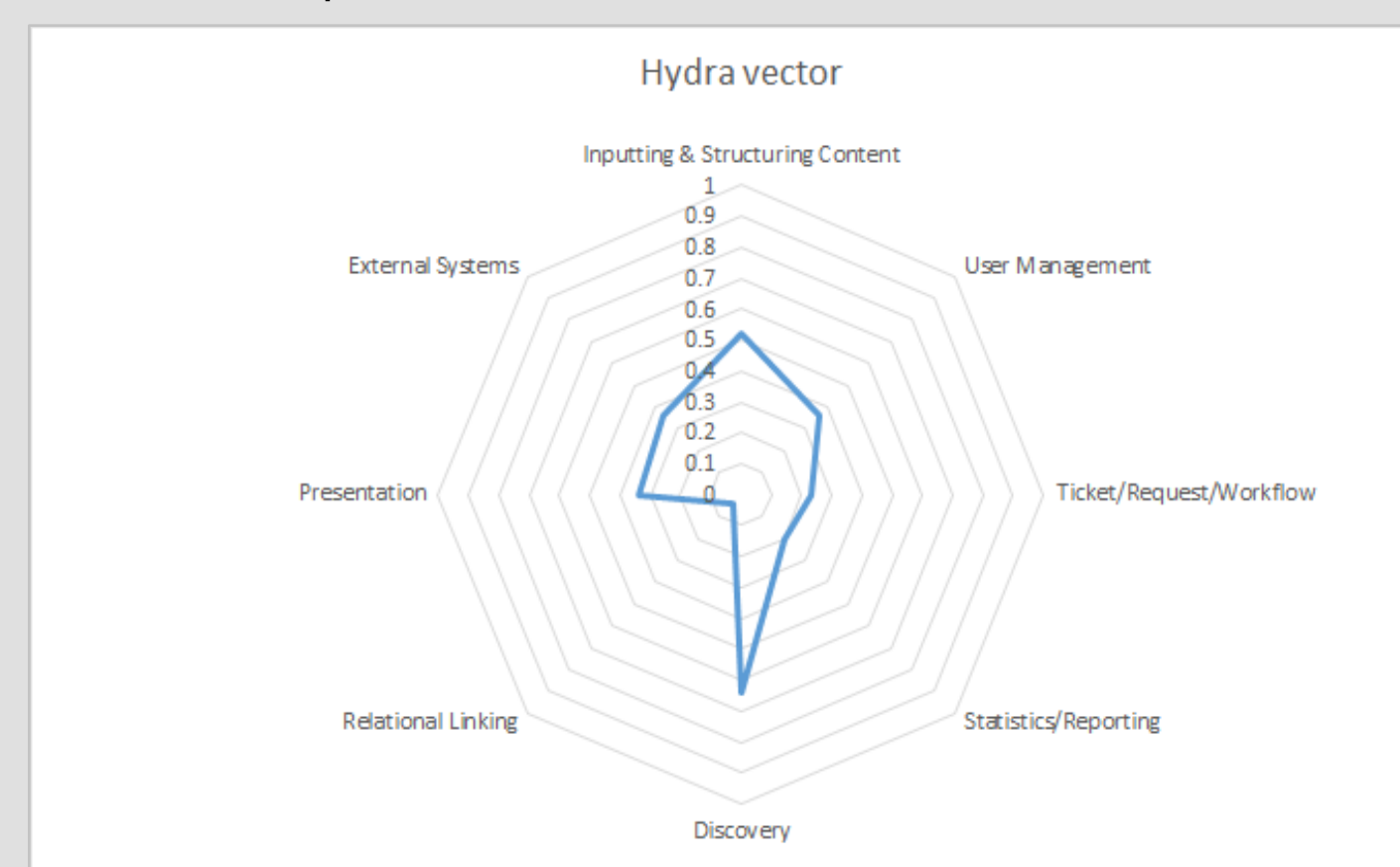
Islandora

Version tested: 7.x.-1.6
Final score: 316.5
Vector space final score: 216



Hydra/Sufia

Version tested: Sufia 6
Final score: 301
Vector space final score: 226



Results + Recommendations

The task force's analysis of twenty-six systems allows us to confidently assert that **no one digital asset management product will meet library and campus needs.** Given campus needs, and our experience with the DSpace digital asset management system, the task force was attuned to the particular importance of the **data models** embedded in these systems, which guide and constrain other functionality.

The task force members are convinced that modular solutions to discrete needs for storing, displaying, and preserving digital assets are warranted, and that these solutions are likely to require customization. We recommend building a digital asset management ecosystem (DAME) rather than attempting to meet all needs with a single DAMS.

The DAME

The DAME is a Digital Asset Management Ecosystem. The choice of the word ecosystem, as opposed to "system" (as with a DAMS) is explained by the DAME's emphasis on a distributed service architecture. This is an architecture in which the discrete roles of a DAMS are handled not by one application, but instead by a collection of applications, each one suited for the role it plays. The DAME's structure will certainly vary from institution to institution, and in fact this flexibility is perhaps the DAME's strongest quality.

We recommend the deployment of modular digital asset management components to meet the complex needs of the Texas A&M University Libraries and campus. These include:

- The deployment of a system to manage and store digital assets and metadata. Our recommended open-source system is Fedora 4, to be coupled with Blacklight and Solr for search and retrieval. Solr indexes content managed by the repository, and Blacklight enables search and retrieval across the indexed content.
- Nuxeo may serve as a vendor-supported alternative to the Fedora-Solr-Blacklight stack.
- The development of custom user interfaces as appropriate (likely, public user interface and administrative interfaces).
- The deployment of a triple store to enable linked data, along with Apache Camel and Fuseki as the basis of connecting Fedora to the triple store and to Solr indexing software.
- An exhibits system, to be determined by another task force.

