# Building Curation into Records Creation: Developing a Series-based Digital Repository Program at the American Institute of Architects

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**Abstract:** Successful digital curation begins at the point of creation. How can a small archive achieve this for permanent born-digital records produced by its own organization? The archivist doesn't have time to assess, arrange, and describe masses of unidentified files. Creators don't have time to assess and tag each piece. The AIA Digital Repository program at the American Institute of Architects sought alternative methods to traditional description and arrangement for the digital records produced by staff members. This paper presents a theoretical underpinning for the AIA's decision to adopt an arrangement based on functional series, as well as findings from department meetings that additionally support this decision.

## Introduction

While there is widespread agreement that the successful preservation of born-digital records ideally starts at the point of creation, there is little concrete guidance on how this might happen for small, non-governmental institutions. Much of the discussion about archiving and preserving born-digital records centers on collecting institutions, university records at large academic institutions, or government archives. What is badly needed is a model for small organizations to build preservation into their routine workflows, either for preservation by their own institutional archive or to maintain them appropriately in a pre-custodial phase for later deposit with a collecting archive. In the absence of such preservation workflows, digital records tend to languish on hard drives and shared drives (not to mention external media and the various cloud storage options), and are lost simply because they are outdated or become obsolete. Counteracting this requires not only providing an infrastructure and technical support, but a cultural shift at the institution to allow staff members to understand the necessity of digital preservation, particularly if staff members will be required to transfer these digital records.[1] Like many modern organizations, the American Institute of Architects (AIA) has increasingly committed to *producing* its intellectual content in digital form, but has only recently committed to *preserving* those born-digital records. The task of developing a preservation system for born-digital records involves not only the technological challenges, but also navigating the organizational culture of our record producers. For the AIA, we need to not only advocate for the need of a repository, but understand that the structure of such a system must reflect the fluid nature of departments and their records at the AIA.

The American Institute of Architects is the primary professional association for architects in the United States. It was established in 1857, while the AIA Archives was created in 1980. The Archives maintains the records of the organization solely at the national level, and it is not a collecting repository. One full-time archivist is responsible for both archival and records management operations for all significant past and current records, from the handwritten minute books of the founding meeting in 1857 through this year's electronic award submissions. Since the mid-2000s, the archivist has recognized the need for a digital analogue to the physical archives space, and actively began working towards implementation of a

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[1] A good study on organizational culture and born digital archiving is: Anthony Cocciolo. "Challenges to born-digital institutional archiving: the case of a New York art museum." *Records Management Journal* 24, no 3 (2014): 238 – 250

digital repository since 2011. Throughout 2011 and 2013, a business case and a project plan were developed with assistance from external consultants, and in 2015, the AIA Archives successfully applied to be a host institution for the National Digital Stewardship Residency (NDSR). With the arrival of the NDSR resident in the summer of 2015, active work on the repository – including comprehensive department surveys and selection of a vendor – proceeded. The results of this paper were produced through a combination of those initial focus groups and interviews in 2011 and 2013 with key institutional stakeholders, department meetings in 2015, and a review of archival practice.

**Problem Statement**

The AIA creates a large volume of digital information, and most of it is sitting on various shared drives, hard drives, and external media: past its active lifecycle and thus temporarily forgotten. Another body of information sits within dissemination systems such as a content management system or collaborative software, in danger of being abandoned once the dissemination system is no longer in active use. However, a portion of these records are critically important for future operations, and are missed when they are needed again and cannot be found. These records create institutional memory, and as one VP at the AIA put it, a repository to centrally store those records would prevent us from "recycling bad ideas." We do not only want to fulfill our legal requirements to preserve documents, but to capture the AIA's intellectual capital. Digital records from the early to mid-2000s are now aged to the point of being in demand again. When staff ask the archives, "What did we do last time we held this conference? Last time we proposed such an initiative?" they are frustrated that the records are not conveniently to hand. The disparity between the volume of records, and the time and resources available to a single archivist, is a significant problem, and it is a problem replicated across other similar institutions. How can a lone archivist get the important digital records from staff members, preserve them for the future, and make them accessible to the necessary community?

Existing models of appraisal, arrangement, and description for electronic records weren't right for the AIA. We are not a collecting repository with an archival staff to handle all these tasks after records arrive, nor are we a large corporation with a management system for active records. Basing a structure around a department hierarchy (and essentially replicating the structure of the shared drive and other systems) is rife with problems considering how quickly departments change names and functions at the AIA, and limits the future usefulness of the system. The AIA's records needed to be processed and described with these limitations in mind.

Based on her years of experience working with paper and digital records in the AIA Archives, her knowledge about the AIA's operations, and her experience fielding requests for information from staff, the AIA Archivist, Nancy Hadley, was able to outline several basic premises about the AIA and its records. The challenge, then, was developing a structure that could take advantage of these premises.

1. *Organizational records and their characteristics are predictable.* The AIA performs similar activities from year to year, and produces the same types of permanent records documenting those activities.[2]

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[2] Some programs have exhibited this continuity for over a century. For example, records of the AIA's Contract Documents program in 1911 include the contract documents, guides to using them, the committee's reports from developing them, the agreement with the printer/distributor, and information for members on how to purchase them. Today the AIA creates over 120 contracts and administrative forms, with guidelines and articles, committee recommendations on developing the next editions, and information and marketing about the AIA's paper and electronic distribution systems.

2. *Programs and activities are continuous over time, but department structure is not.* Like many small organizations, the AIA reorganizes its department structure frequently, sometimes radically. However, its functions, activities, and major programs tend to remain stable for decades.[3]
3. *The primary access point needed by staff is at the program or activity level.* Most requests for information are about a particular program, activity, or intellectual product. Another typical request is to know what programs were done in another era in a specific functional area.[4]
4. *Departmental responsibility is only a secondary focus for records users.* Departmental responsibility for specific records is crucial to verify provenance and authenticity, and should still be recorded. However, an understanding of provenance and context is best supported by looking at the program or activity first, then secondarily at the responsible departments.

The following sections describe a sustainable way to arrange content in the AIA Digital Repository and incorporate its use into the staff's workflow, given the above premises and staff needs. It examines assumptions behind traditional archival provenance theory, as well as the Australian Series System and considerations of digital archiving. Additionally, it describes the AIA's methods for reaching out to staff members to gain both traction for the repository, and information needed to develop the structure.

**Literature Review**

The limitations of the principal of provenance and the concept of the archival fond have already been discussed elsewhere, in American, Canadian, and Australian settings.[5] The relationship between record creators and records series can be complex and fluid. Serial provenance and multiple provenance are common, and in the modern organizational environment of digital collaboration, the ease with which electronic records can be shared among different agents in an organization, and simultaneously created and altered by multiple people, compounds the limitations of traditional provenance principles.[6] Light, Pitti, Billinton, and Barrett separately and articulately point out the limitations of traditional description and arrangement for creator entities, particularly in the corporate world, where a name change or any other significant administrative change may or may not represent an entirely new function for a department.[7] Strict adherence to a single provenance for a series can result in the loss of critical context about those records - as Billinton articulates, "it can be a distortion of provenance to attribute a series to one and only one fonds-creating entity."[8] For organizations characterized by frequent administrative

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[3] Comparison of organizational charts from the 1960s, 1990s, and 2015 shows that basic functions have remained quite consistent, but have moved to very different places in the organizational structure

[4] While AIA staff members are the designated user community for the AIA digital repository, we have noted that scholarly requests for historical information about the AIA also tend to focus on the program or activity.

[5] See, for example: Adrian Cunningham. "Harnessing the power of provenance in archival description: An Australian perspective on the development of the second edition of ISAAR(CPF)." *Journal of Archival Organization* 5, no. 1/2 (2008): 15-31; and Larry Weimer. "Pathways to Provenance: DACS and Creator Descriptions." *Journal of Archival Organization* 5, no. 1/2 (2007): 33-48. doi:10.1300/J201v05n01_03

[6] Adrian Cunningham. "Harnessing the power of provenance in archival description: An Australian perspective on the development of the second edition of ISAAR(CPF)." *Journal of Archival Organization* 5, no. 1/2 (2008): 15-31.

[7] See: Michelle Light. "Moving beyond the name: Defining corporate entities to support provenance-based access." *Journal of Archival Organization* 5 no. 1/2 (2008): 49-74; Daniel Pitti. "Creator description: Encoded archival context." *Cataloging & Classification Quarterly* 38, no. 3/4 (2009): 201-226. DOI: 10.1300/J104v38n03_16; Steve Billinton. "The Role of Archival Authority Records in the Finding Aid System of the Archives of Ontario." *Journal Of Archival Organization* 5, no. 1/2 (2007): 75-93; and Creighton Barrett. "Respect Which Fonds? Personal Archives and Family Businesses in Nova Scotia." *Archivaria*, 76 (2013): 75-92. http://hdl.handle.net/10222/62781

[8] Steve Billinton. "The Role of Archival Authority Records in the Finding Aid System of the Archives of Ontario." *Journal Of Archival Organization* 5, no. 1/2 (2007): 79.

change which makes it difficult to accurately establish the provenance of records, the Australian Series System can be a good alternative to traditional provenance.[9]

The Australian Series System, as well as functional analysis, offers an alternative way of arranging and understanding records that focuses on the business purpose for which records are created, rather than the fonds.[10] In the Australian model, records are related to two types of contextual entity: people and business function. The key feature of the Australian Series System that differentiates it from other methods of descriptive control is its separation of record and description. In practice this means that:
- records,
- the persons or organizations that create and manage records, and/or
- the business described by records,

are each individually registered as separate descriptive entities. These individual descriptions are then linked to each other to enable a full and informative representation of records, their context, and their administration through time.

The series system is a three-part model, and the AIA's focus is on the description of business activities. As we have already noted, AIA staff members tend to request information framed in terms of, "what did we do about X in the 90s?" Bearman and Lytle have pointed out that provenance-based retrieval usually means that "the archivist translates a user's subject query into the terms of organizational activity," then uses finding aids or organizational knowledge to identify departments of the organization that are likely to have carried out that activity.[11] This is inefficient, and they and others have noted the potential for function as an access point, though it has not yet evolved into an independent, interrelated contextual entity as creators have.

The series system and functional analysis are not widely used in North America, though Helen Samuels, Terry Cook, and Marcus Robyns have written about its use in appraisal and arrangement.[12] The archival community in the US has moved toward the separation of creator description from records description, particularly with the development of EAC-CPF.[13] The American archival content standard, *DACS,* not only recognizes the issues of multiple provenance, but explicitly encourages the separation of contextual entities. The electronic era opens up the possibility of fluid descriptive strategies that represent a network of relationships, instead of the strict hierarchies of the paper world.

The electronic era also opens up some new challenges that highlight the need for creators to be actively involved in description. Mumma, Dingwall, and Bigelow acknowledge the importance of appraisal in archival work, as it shapes future's history, but also point to their own experiences with the digital records of the Vancouver Organizing Committee for the 2010 Olympic and Paralympic Winter Games to point

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[9] Ibid.

[10] See *Describing archives in context: a guide to Australasian practice* by the Australian Society of Archivists for more information, as well as Peter J. Scott, the originator of the Australian system.

[11] David Bearman and Richard Lytle. "The Power of the Principle of Provenance." *Archivaria* 21 (1985/86): 26

[12] A recommendation for archivists who want to learn more about functional analysis is Marcus Robyns. *Using Functional Analysis in Archival Appraisal: A Practical and Effective Alternative to Traditional Appraisal Methodologies.* Maryland: Rowman & Littlefield, 2014. This also provides an excellent overview of the history of archival theory internationally, with resources for Terry Cook and Helen Samuels papers.

[13]For a good overview of *DACS* and the distinction of creator descriptions and archival material descriptions in the U.S, see: Larry Weimar. "Pathways to Provenance: *DACS* and Creator Descriptions." *Journal of Archival Organization* 5 no. 1/2 (2008): 33-48. Additionally, NARA implemented separated description and creator with its Archival Research Catalog (ARC) system (see Reid & Simmons in the Resource page).

out that the volume of digital records makes complete appraisal impossible.[14] Carroll, Farr, Hornsby, and Ranker also agree that digital records are incredibly time consuming to review, with the added bonus of having to wait for files to open.[15] After a point, you have to rely on records creators to do some of the work for you, or develop some alternative metrics to determine which records are most likely to be relevant. Hedstrom and Niu point out that it is very labor intensive for a data manager or archivist to do appraisal after digital data sets are received to make sure that data is consistent and ready to be archived.[16] Information, files, and context gets lost, so it is beneficial to create incentives to make researchers do the work upfront. In all these cases, it makes sense to ask records creators, or staff members in the AIA's case, to do some of the work, and to push for them to include deposit into a repository as part of their workflow – something which they can be trained to do as soon as certain (usually annual) activities are completed. This may be the greatest challenge to born-digital institutional archiving, as Cocciolo suggests.[17]

There can also be friction between an individual's personal folder structures (which can replicate and compete with shared drives) and a need for an institutional structure. As Mas, Maurel, and Alberts indicate in their survey of staff, however, personal staff hierarchies tend to lean towards creation of folders based around projects (i.e., folders named after an event, or a committee), which also supports our ultimate decision to move away from traditional provenance-based arrangement and description – the repository should not be totally alien from staff members' understanding of their work.[18]

**Methods**

The AIA Archives conducted interviews and focus groups with the assistance of an external consultant in 2011 and 2013 with various key members and stakeholders among the AIA organization. These included VPs on teams with greater stakes in the development and implementation of the repository, and content creators from across departments (where "content creator" was defined as someone who regularly put content into the content management system of the time). These interviews and focus groups were well attended by staff members who represented a cross-section of AIA operations.

The plan that developed from this work was to structure the proposed AIA Digital Repository around the known, predictable programs and functions that are the work of the AIA. Appraisal and some description would be done in advance, jointly by the archivist and the record creators. Staff could easily contribute content to the repository by attaching the records to pre-defined series and subseries, without the burden of detailed tagging each time that type of record is submitted. During these meetings, it also became clear that staff saw an important positive value in not only having a reliable repository to protect permanent content, but also in having this accessible to all staff without the archivist necessarily serving as gatekeeper. A key incentive to staff buy-in was their enthusiasm at the prospect of being able to find

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[14] Courtney Mumma, Glenn Dingwall and Sue Bigelow. "A First Look at the Acquisition and Appraisal of the 2010 Olympic and Paralympic Winter Games Fonds: or, SELECT * FROM VANOC_Records AS Archives WHERE Value='true.'" *Archivaria,* 72 (2011): 93-122.

[15] Laura Carroll, Erika Farr, Peter Hornsby and Ben Ranker. "A comprehensive approach to Born-Digital Archives." *Archivaria* 72 (2011): 61-92.

[16] Margaret Hedstrom and Jingfang Niu. "Incentives for Data Producers to Create 'Archive-Ready' Data: Implications for Archives and Records Management." *Society of American Archivists – 2008 Research Forum* (2008).

[17] Anthony Cocciolo. "Challenges to born-digital institutional archiving: the case of a New York art Museum." *Records Management Journal* 24, no 3 (2014): 246.

[18] Sabine Mas, Dominique Maurel and Inge Alberts. "Applying Faceted Classification to the Personal Organization of Electronic Records: Insights into the User Experience." *Archivaria* 72 (2011): 29 - 59.

records relating to specific programs together, even when those records were originally produced by different departments, or when the responsibility for that program had changed departments.

In June 2015, with the addition of a National Digital Stewardship Resident, the Digital Repository team began holding discussions with each staff department to appraise their permanent digital records. The AIA has approximately 200 staff members, and approximately 30 departments with defined business functions, and three collateral business functions. As of November 2015, twenty-two initial department meetings and four meetings with VPs had been conducted (not including additional follow-up meetings). The number of attendees at each meeting varied between one representative to the whole department, usually no more than nine employees. The departments targeted for these meetings represent the core record and knowledge producers of the AIA. The primary purposes of these meetings were: to define the programs for which the department produced records; to identify the types of records with permanent value for each program; and to understand where and how the staff currently kept these records. The meetings were also an opportunity to inform staff members individually of the value of the digital repository to their work, to discuss recordkeeping with employees and explain how records management applied to them, and to discover any additional material that might be unknown to us.

These meetings were structured so that the digital repository team arrived with a draft of potential permanent digital records of each department, organized by program and subseries. This involved intensive preparatory work to ensure that the digital repository team had a comprehensive understanding of the department before we met. Staff members were more willing to meet with us if we could assure them that they did not need to prepare anything beforehand, and we were more likely to find out about unknown programs if we could provide a baseline of familiar records to staff members about the type of materials that counted as "permanent records."  This method combined current creators' knowledge of how they produce and use records with the archivist's perspective on appraisal and use over time. The draft record series were produced based on a combination of archivist's experience with past paper records of each department, the annual operating plans from 2005 and 2015, explorations of the shared drive, and from web page descriptions of programs and activities.

The records lists produced through these meetings also allowed for a quantifiable way to track current alterations to existent programs. Five types of actions were identified as ways that a program could be changed: creating a new program, renaming a program ("eClassroom" to "AIAU"), moving responsibility of a program to another department, splitting a large program into smaller programs (the annual AIA Grassroots Convention is being split into two separate events), and also ending (or sunsetting) a program. At the AIA, the term "program" can have multiple connotations, but the Archives is using the term "program" to refer to a concrete activity with output by the AIA, or a general business function that produces very specific and defined records. Examples of the first type of program include: a conference; administration of a scholarship, grant, or award; surveys; and committees. Examples of the second type of program include: membership support, component relations, and financial administration. However, the AIA often creates one-time or short-lived committees, or hosts one-off symposia. To accommodate these smaller programs, we included general "Committees/Task Forces" and "Events" programs for departments where this was a possibility. These records remain predictable, since while the department may or may not have such an activity at any given moment, it can be confidently anticipated from past experience and departmental mission that the department will have task forces, or organize events, or sponsor publications, at recurring intervals.

The decision about whether a program deserved its own series, or should be generally lumped under a broader heading, was based on the activity's current and past importance to the AIA, and to what degree staff viewed it as separate from other, related programs. Although we have discussed the changing nature of some of the programs (creation, sunsetting, administrative change), most of the programs we have discussed with staff members have been present in the AIA in some form or another for decades. Often

programs are sunset and resurrected at a later date. However, it was clear that programs, which deserved to have their own series, supported the broad, mission-based functions of the AIA. These broader functions (such as supporting various aspects of the profession like diversity, continuing education, or honors and awards) can also provide contextual understanding of programs and records.

**Findings**

The 2011 and 2013 meetings with staff focus groups and key management staff during the development of the business case clarified the basic goals for what the AIA Digital Repository needed to accomplish:

- To preserve permanent born-digital records;
- To be a part of record creators' regular work process;
- To allow records creators, who know their records best, to deposit records themselves, with minimum effort and no special training;
- To be internal with staff access only, since permanent records may contain confidential, proprietary, or sensitive information; and,
- To make the existence of records available to all staff to improve communication among departments and reduce duplication of effort.

As a result of these interviews, focus groups, department meetings, and long-standing knowledge of how staff members use the AIA Archives, the Digital Repository team was able to determine that the best method of structuring the repository is around programs, with departments acting as agents that should be recorded as separate entities. Both program and department roles and names will fluctuate over time, and need to be flexible.

For the AIA Digital Repository, the series system offers a solid theoretical underpinning for the decision to make the program or activity the basic unit of arrangement and description. The program acts as the highest level of descriptive unit in the repository, and contain subseries that represent record types (i.e., minutes and agendas). These discrete programs are named generically (Federal Advocacy, Member Surveys, Diversity Conferences) unless it is an ongoing program with a specific title ("Young Architects Forum"), in which case that title is used, and any name changes are tracked in the descriptive notes. Description is attached to the program level, with scope and arrangement notes to explain the subseries, while some subseries may have additional specifics, such as access restrictions.

Staff will place records in the appropriate program/subseries in the repository, thus associating actual records with the business activity from which they derive. Each individual record that goes into the repository (such as a Word file documenting the November minutes of a committee) will be automatically tagged with the originating department/contributor. We decided to make subject tagging available to staff, but not to make it mandatory since it is clear from past experiments with content management systems that most staff will not spend the time doing so. This meant that the programs and subseries have to be set up with enough information to facilitate discovery.

The department meetings also provided quantitative data to back up what we already knew: that change is constant in the AIA, and it is important to build a system that accommodates this from the beginning. The table below represents some of the findings from our department meetings, showing the instances of program change that occurred in 2014, 2015, or is slated to occur in 2016. These departments are representative of all core departments responsible for critical programs or functions at the AIA.

*Table 1: Counts of programs, 2014-2016*

| Number of Departments† | Total number of programs‡ | Number of programs renamed | Number of programs split | Number of programs created | Number of programs sunset | Number of programs moved |
|---|---|---|---|---|---|---|
| 23 | 187 | 2 | 2 | 12 | 13 | 4 |
| †Counting only those departments we've met with, excluding 3 departments without finalized records series, but including 4 VPs as "departments" ‡A snapshot of programs in 2015. This number will grow as past programs are added into the repository | | | | | | |

From this snapshot in time, we can see that the AIA creates and ends programs more frequently than programs are renamed or shuffled around in a given year (25 programs created or ended, as opposed to 8 programs altered administratively). However, they show that between the prior year, the current year, and projected out one year, approximately 17.6% of current programs were significantly changed in some way.[19]

These experiences with department meetings, and with initial interviews and focus groups, support our decision to focus the repository around programs, and not to base it hierarchically around departments. This decision, when shared with staff members questioning the structure of the repository, was universally met with approval – the AIA's shared drive, which *is* structured around the organizational chart, is already multiple cycles out of date from the current organization. Staff feedback also indicated that the archives was mostly on target with the prepared programs and records lists that were brought to initial department meetings. Discussion often focused on determining what constituted a program, and at what point an AIA activity or function should be separated out into its own category.

As noted in the table above, there were a great deal of programs discovered at the AIA (approximately 138, and counting). This can be a challenge for staff members browsing for material. To improve access to these materials, the specific programs can be grouped into broad functional areas within the Digital Repository, to enable discovery for questions such as "what programs did we have in the past for emerging architect professionals?" Grouping the programs under the major functions of the AIA (such as continuing education, or honors and awards) is not intended to be a hierarchy of functions, but a way to create manageable clusters of programs for browsing purposes. Likewise, the specific departments will be grouped by function, so it is possible to understand the changing names of departments and shifts in responsibilities over time. Interconnections between records, business activities, and creating departments allow a rich understanding of context and multiple paths for discovery.

**Conclusion**

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[19] Of course these numbers only represent changes in the programs themselves, and only represent the departments we have met so far. It is possible that we have not accounted for all changes in programs, if they were not uncovered during the department interviews and review of materials. However, these numbers do begin to put a measurement on program flux at the AIA. Whether the AIA's rate of change is higher or lower than comparable institutions is outside the scope of this paper. The changes in reporting structure for departments, and their own splits, renaming, and mergers are not discussed here.

The AIA faces a challenge familiar to many institutions: how to appropriately identify, collect, and care for born-digital records? It would be easiest to capture these records at the point of creation (when a record is "finalized"), while staff members still hold knowledge about the importance of the record, and haven't forgotten where they saved it. This also reduces the burden on a single archivist to arrange and describe digital records in addition to the physical records which may still be arriving to the archives, or be in a backlog. The series system allows for a more nuanced approach to describing records, which will more accurately capture the context of the records that are created.

The repository structure that we propose is appropriate for the premises that were put forward about the nature of the records that are created at the AIA, namely:

1. *Organizational records and their characteristics are predictable.* Because of this predictability, it will be possible to do the intellectual work of description before records arrive. We know the long-standing committees of the AIA, for example, and we know that they create minutes, agendas, and reports. This minimizes the burden of description for creators, and ensures consistency over time.
2. *Programs and activities are continuous over time, but department structure is not.* The repository will be able to handle rapidly changing department names and functions by separating creator records from record series, and will be able to handle changes in programs as well.
3. *The primary access point needed by staff is at the program or activity level.* Staff do not need to navigate to records by searching hierarchically through the responsible department – which will change rapidly over time, and will require institutional knowledge that new staff members may not possess. They can browse instead by programs, which may be grouped together generally by function, then easily locate the records for that program.
4. *Departmental responsibility is only a secondary focus for records users.* Departmental responsibility will be attached to each individual record, providing evidence of reliability and authenticity. Collocating records produced by a specific department will be possible through the department entity records, but it will not be the primary way through which staff access and think of records.

Finally, this system should be sustainable. Although our method requires major effort to do initial setup, and the department meeting structure will not scale up to larger organizations with more complex organization charts, the system, once established, should only require some annual maintenance work. The continual administrative flux at the AIA which we've noted repeatedly will require continued monitoring and updates, which can be accomplished in several ways. The AIA's annual operating plan can be used to track new programs, sunset programs, and some administrative changes. Department entities can be updated using the organizational chart whenever there is a restructuring. Previous years of digital material can be added in more slowly after the repository is established, but it is important to get staff members comfortable using the repository as part of their regular workflows.

Born-digital organizational records don't necessarily have a clear original order that can be replicated by keeping their filing structure. Business records today tend to be dispersed among various systems: in an individual's folders on the company servers, on desktop computers, in a collaborative system such as SharePoint or Google Docs, in email, and in paper form. Preserving original order means preserving information about the context and about the authenticity of the record. The program-based approach that the AIA Digital Repository will use does indeed capture all this information about original order, and presents the records in their context more effectively than a traditional fonds approach could do.

**Resources**

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