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What's Wrong with Digital Stewardship: Evaluating the Organization of Digital Preservation Programs from Practitioners' Perspectives

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WHAT'S WRONG WITH DIGITAL STEWARDSHIP: EVALUATING THE ORGANIZATION OF DIGITAL PRESERVATION PROGRAMS FROM PRACTITIONERS' PERSPECTIVES

In 2012, the National Digital Stewardship Alliance (NDSA) conducted a survey among organizations engaged in digital preservation that was designed to garner a better understanding of existing staffing levels and needs.¹ The survey asked respondents to indicate their level of (dis)agreement with the following statement: “The way our digital preservation function is currently organized (staffing levels, expertise, where they are placed within the larger organization) works well.” The results showed that 34 percent of respondents disagreed, including 6 percent who said they disagreed strongly. When an updated version of this survey was conducted in 2017, 36.8 percent of respondents disagreed, and 9 percent said that they disagreed strongly (see fig. 1).²

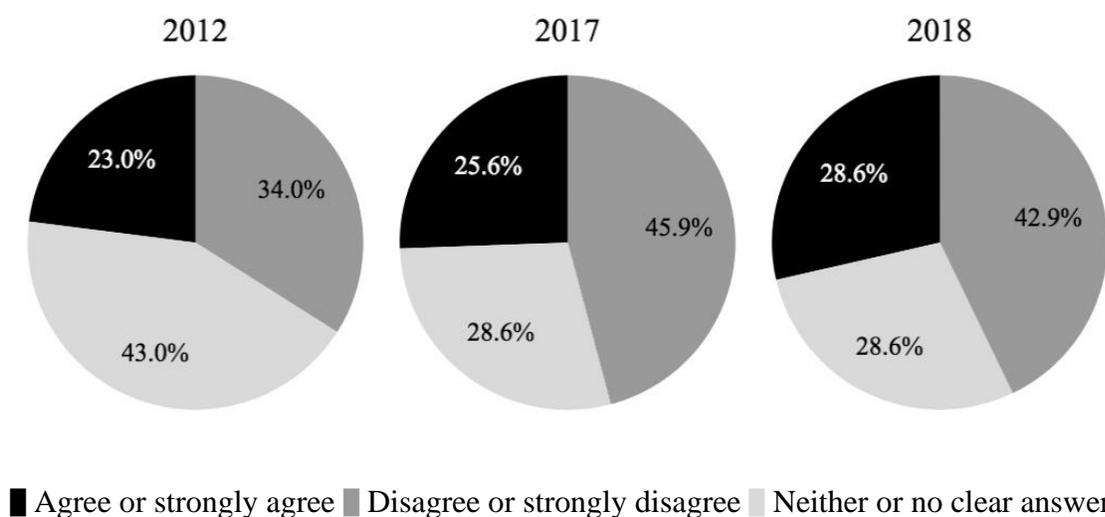


Figure 1. Perceptions that the digital preservation function at their organizations “works well” among participants in the NDSA staffing surveys (2012, 2017) and this study (2018)

That nearly half of the 2017 survey respondents expressed dissatisfaction with their institutions’ preservation programs is worthy of investigation, especially given that this number has risen since 2012. Yet the survey’s design makes complex analysis of this question difficult. Condensing three distinct factors (“staffing levels,” “expertise,” and “where they [presumably the respondents] are placed within the larger organization”) into a broad, tripartite definition makes it impossible to determine whether these components matter equally to respondents or if some are more impactful than others. The lack of any follow-up questions makes it hard to know if there are other unidentified contributing factors beyond those the survey lists. The research also raises a host of additional questions. For example, does the assessment of how well this work is organized remain constant across all levels of an organization, or does the equation change depending on where the respondent sits? Are these results consistent across institutions despite other considerations like an organization’s size, type, or budget? What additional components or characteristics might be

¹ Kussmann, “Staffing for Effective Digital Preservation, 2013.”

² Atkins et al., “Staffing for Effective Digital Preservation, 2017.”

causing such widespread discontent? And, most crucially, what does a well organized, successful digital preservation program look like?

This study seeks to better understand the sources of dissatisfaction expressed by survey participants from the perspective of a wide array of practitioners—especially those working in a hands-on capacity with digital materials. To examine this issue, we designed a study that engaged a diverse spectrum of digital stewardship practitioners and solicited their perspectives on how their work is structured, distributed, and defined. We asked twenty-one digital stewards to describe the organizational context in which they work, to reflect on what aspects of their organizations’ approach to digital preservation work well and which do not, and to evaluate necessary areas of improvement.

These interviews confirmed the pervasive dissatisfaction among digital stewards that the NDSA staffing surveys first brought to light. Seven common themes emerged from these conversations that, taken together, suggest a fundamental misalignment between senior organizational leaders and digital stewardship practitioners. This extends to how work is organized, funded, and conceived. The stewards that we spoke with understood digital stewardship unanimously as an inherently long-term and open-ended pursuit. In practice though, their work is often governed by short-term objectives that begin and end with a grant-funded period, a delimited project timeline, or a fiscal year. A contingent support model fundamentally undermines and distracts from the ongoing maintenance that responsible digital stewardship requires, and the dearth of top-down support means that stewards must routinely campaign for material resources and decision-making authority. Constant advocacy takes a toll on practitioners. The cost is burnout and frustration, which disproportionately affect those lower in the organizational hierarchy and who fall outside the entrenched systems of privilege that information and memory institutions uphold and maintain.

Our findings show that the absence of a long-term vision for digital stewardship disempowers practitioners. The issues that these conversations surfaced are revealing and suggest links between senior organizational leaders’ comprehension of digital stewardship and practitioners’ satisfaction with how digital stewardship is organized at their institutions. The evident misalignment between senior leadership’s and practitioners’ respective understanding of digital preservation has major implications with regard to the legal, contractual, and moral obligations associated with collection stewardship.

Literature Review

Understanding why practitioners believe that digital stewardship is not well organized at their institutions requires specifying (1) how digital preservation is organized and (2) the facets of this organizational schema that meet or fall short of their expectations or needs. Prior literature about wider library and information organization structures may offer some insight about the latter and how it can be studied. However, no literature currently exists that is specific to the emergent craft of digital stewardship and how its models of achievement guide evaluation of different organizational approaches.

There have been some previous attempts to address aspects of these questions. Most notably, Oya Y. Rieger’s “The State of Digital Preservation in 2018: A Snapshot of Challenges and Gaps” draws

on interviews with “experts and thought leaders” in the field to offer a picture of the dominant themes and trends in the current digital preservation landscape.³ As David Rosenthal notes in his critique of this study, the “thought leaders” with whom Rieger spoke represent only program directors and division heads, who occupy the uppermost reaches of the reporting structure. Naturally, they have a bird’s-eye view of digital preservation that may be somewhat at odds with the day-to-day realities of those charged with actually carrying out this work. “This is the bureaucracy’s view of the landscape,” argues Rosenthal. “Not that their perspective isn’t valuable, but it is just one view that can be somewhat out of touch with ‘ground truth.’”⁴

Research into the organization of staff from cultural heritage institutions generally revolves around a view of these institutions as bureaucracies and focuses on how they may yet innovate inside their existing structures.⁵ In these studies, practitioners’ own evaluations of their organizations and abilities to achieve their goals are interpreted through job satisfaction frameworks. To study practitioners’ expectations and needs, we considered incorporating lines of questioning from frameworks like Abraham Maslow’s hierarchy of needs, equity theory, or Frederick Herzberg’s two-factor theory, and from vocational research tools like the Minnesota Satisfaction Questionnaire and the Job Descriptive Index.⁶

Studies of job satisfaction in cultural heritage institutions have focused on differences among departments, the roles of discrimination and microaggressions, craft or mastery and connection to one’s work, burnout, and salary and employment concerns.⁷ Studies have also highlighted specific roles within these organizations, such as those of information technology professionals, academic librarians, and library directors.⁸ However, roles and responsibilities specific to digital stewards have not yet been similarly interrogated.

Existing literature about digital stewardship predominantly focuses on the technical requirements necessary to preserve information over time; the skills and competencies that this work requires; and the relevant academic training, fieldwork, and continuing education to prepare practitioners entering the field.⁹ There has been far less critical engagement with the administrative, staffing, and support requirements necessary for institutions carrying out this work, let alone the indicators of successful or satisfying implementation. For instance, having requested and received several organizational charts from the respondents to their survey, the 2017 NDSA staffing survey authors

³ Rieger, “The State of Digital Preservation in 2018.”

⁴ Rosenthal, “Ithaka’s Perspective on Digital Preservation.”

⁵ Budd, *The Academic Library*; Fowler, “The University Library as Learning Organization for Innovation”; Jantz, “A Framework for Studying Organizational Innovation in Research Libraries.”

⁶ Maslow, *Motivation and Personality*; Adams, “Towards an Understanding of Inequity”; Herzberg, *Work and the Nature of Man*; University of Minnesota, “(MSQ) Minnesota Satisfaction Questionnaire”; Smith, Kendall, and Hulin, *The Measurement of Satisfaction in Work and Retirement*.

⁷ Chwe, “A Comparative Study of Librarians’ Job Satisfaction”; Alabi, “Racial Microaggressions in Academic Libraries”; Morgan, “Craft and Librarianship”; Farrell et al., “Addressing Psychosocial Factors with Library Mentoring”; Allard, “Placements and Salaries, 2017.”

⁸ Lim, “Job Satisfaction of Information Technology Workers in Academic Libraries”; Mirfakhrai, “Correlates of Job Satisfaction among Academic Librarians”; Peng, “Job Satisfaction and Job Performance of University Librarians”; Ole Pors and Johannsen, “Job Satisfaction and Motivational Strategies among Library Directors.”

⁹ Phillips et al., “The NDSA Levels of Digital Preservation: Explanation and Uses”; Blumenthal et al., “What Makes a Digital Steward”; Choi and Rasmussen, “What Is Needed to Educate Future Digital Librarians”; Fulton, Botticelli, and Bradley, “DigIn”; Lee and Tibbo, “Preparing for Digital Curation Governance.”

concede that “the organizational charts were so specific to each organization that we could extract few generalities.”¹⁰

To engage with these missing aspects and indicators, we sought to design a study that would foreground the lived experiences of practitioners who are actively engaged in digital stewardship. In essence, our goal was to afford participants ample but structured space to describe the organizational models and measures of success or satisfaction for digital stewardship in their workplaces without delimiting their responses or presupposing the range of their duties and job functions. Toward this end, Kaetrena Davis Kendrick’s “The Low Morale Experience of Academic Librarians” was a touchstone.¹¹ We drew inspiration from the phenomenological methodology that Kendrick employs in this study and adapted it to meet our needs.

Methodology

The NDSA staffing surveys indicate that digital preservation practitioners are increasingly dissatisfied, but they do not show *why* that is the case. Our study seeks to fill that gap by speaking directly to digital stewards using the qualitative research methodology of phenomenology. Phenomenology examines the representation of an entity as a thing unto itself (*a priori*, independent from experience) and entities understood on the basis of experience (*a posteriori*, empirical). This centers participants’ collective experiences—that is, what they have in common—as a basis for forming conclusions about the phenomenon. We used a transcendental phenomenology approach in which we analyzed the textual descriptions of participants’ lived experiences (transcripts of our conversations with them) in order to reach a structural description of those experiences in terms of conditions, situations, and context.¹²

For this study, our *cases* are digital stewards who are active in the field, and the *phenomenon* is their increasing dissatisfaction in the way digital preservation is carried out within their institutions.¹³

With this methodological underpinning, we used standardized, open-ended, and in-depth interviews to structure our data collection. A structured design helps to ensure there is some comparability of data among interviews, making data more useful in understanding the similarities and differences among participants’ lived experiences. We identified and recruited the twenty-one participants for this study based on the following criteria:

- Currently working in a member institution of NDSA
- Different types of organizations
- Different lengths of professional experience with digital stewardship
- Geographic distribution across the United States
- Different organizational roles, responsibilities, and levels of seniority

¹⁰ Atkins et al., “Staffing for Effective Digital Preservation, 2017,” 26.

¹¹ Kendrick, “The Low Morale Experience of Academic Librarians.”

¹² Adams and Van Manen, “Phenomenology.”

¹³ To be clear, our study seeks to conduct a deep dive into this phenomenon; it is not meant to serve as a study that can be generalized empirically (which the NDSA staffing surveys have already done).

We used a mix of quota and convenience sampling to recruit our participants: we found practitioners who fit into our criteria that were proportionate to NDSA membership (e.g., if 10% of NDSA membership is nonprofits, we aimed to have at least two participants from nonprofits) and invited them to participate via email. We also considered the demographics of participants when that information was known to us, with the goal of designing a more diverse participant group than might be achieved with random sampling. Prior to each interview, we obtained informed consent in which each participant could choose whether or not to have the transcript of their interview included in the Syracuse Qualitative Data Repository (QDR) as supplemental data to this paper.¹⁴

We conducted interviews via Zoom, a video conferencing software that allowed us to both make audio recordings of the conversation for later transcription and to send questions to our participants by chat in real time, in order to ensure accessibility and/or to provide a visual reference. All five members of the research team conducted interviews in varying pairs. One member of each pair led by asking the questions and directing the conversation while the other took notes, kept track of time, and chatted the questions to the participant. All members of the research team transcribed interviews in which they had not participated to become more familiar with the data.

Given the sensitive nature of the subject matter and the accessibility of the data, we redacted and anonymized the interview transcripts prior to the analysis phase. In order to ensure that any pull-quotes or materials used for publication would not put our participants at risk, we sent the redacted transcripts to each participant for them to identify any further information that they would prefer redacted for their privacy. After redaction, transcripts were assigned identifying numbers in place of original names in order both to protect the identities of the participants and to mitigate the impact that our personal knowledge of the participants might have on our analysis.

We performed analysis collaboratively using Taguette, a free and open-source qualitative analysis tool, and employed an open coding approach.¹⁵ Coding identified specific quotes, words, or phrases as evidence and assigned them codes that represent larger ideas. We each read a subset of the interview transcripts in order to create a coding scheme that we could then apply to the interviews moving forward. Each of us then coded a subset of interviews for the themes that we had identified in the initial scan. We resolved any conflicts within our application of the coding scheme and examined the tagged text collaboratively in order to form the basis of our results.

Throughout this paper, we refer to interview participants with pseudonyms in order to protect participants' confidentiality. We also use gender-neutral pronouns (they/them) and avoid other demographic identifiers, except when attributing participants' self-reflective quotations about their demographics.

Participant Group

¹⁴ All participants chose to allow their transcripts to be deposited into the QDR. The content of the transcripts included in the repository will not be accessible to individuals unless their requests are approved by the research team. The metadata, however, is completely open. Steeves et al., "Data for 'What's Wrong with Digital Stewardship.'"

¹⁵ Rampin, Steeves, and DeMott, Taguette.

The majority (76.2%) of our participant group identified as Caucasian/White. The remaining participants identified as Hispanic or Latinx (9.5%) or other (14.3%) (see fig. 2). The participant group was also majority (fourteen participants) female, with the remaining seven participants identifying as male (see fig. 3).

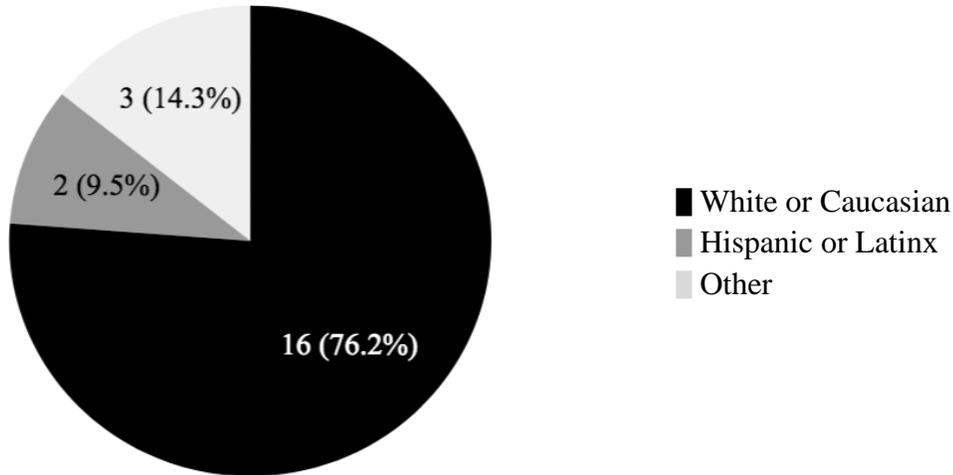


Figure 2. Interview participants by self-reported ethnicity

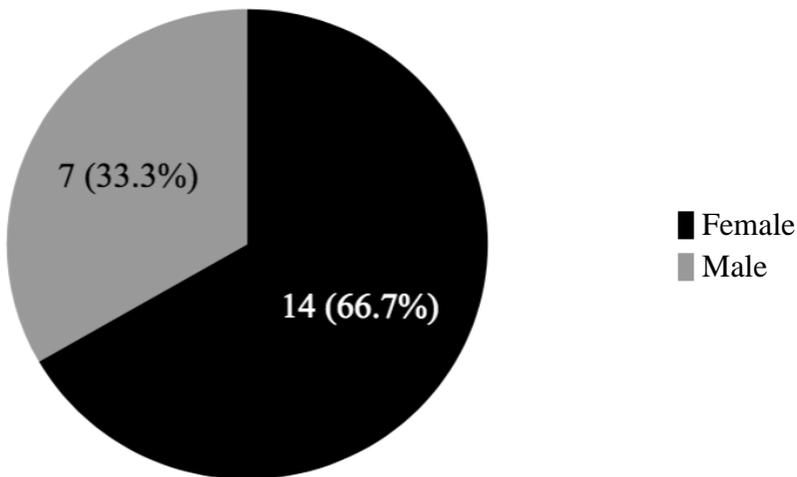


Figure 3. Interview participants by self-reported gender

Our participant group represented a range of experience in terms of years of experience as a digital stewardship professional. It included 33 percent early career professionals (less than 5 years), 43 percent midcareer professionals (5–10 years), and 24 percent experienced professionals (11 or more years). The majority (52 percent) of our participants fell into the 30–39 age range. The remaining age ranges were 20–29 (19 percent), 40–49 (24 percent), and 50–59 (5 percent) (see fig. 4).

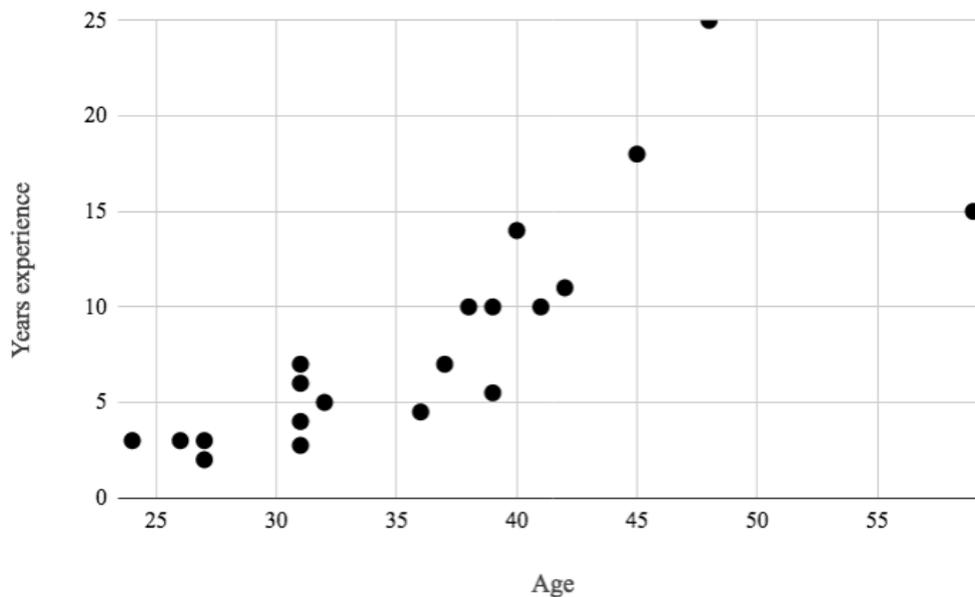


Figure 4. Chart of interview participants' self-reported age and years of professional experience in digital stewardship

Our participant group also aligned broadly with the group that responded to the NDSA staffing survey in 2017 with regard to the types of institutions in which they practice (see fig. 5). For example, 46 percent of the NDSA survey respondents and 52 percent of our interview participants practice in academic libraries or archives. Our study also included at least one participant in each of the following institution types, which were similarly included among the NDSA survey respondents: government entity; museum; national, federal, or legal deposit library; independent library or archive; nonprofit organization; public library; institutional repository; research data repository; and other.

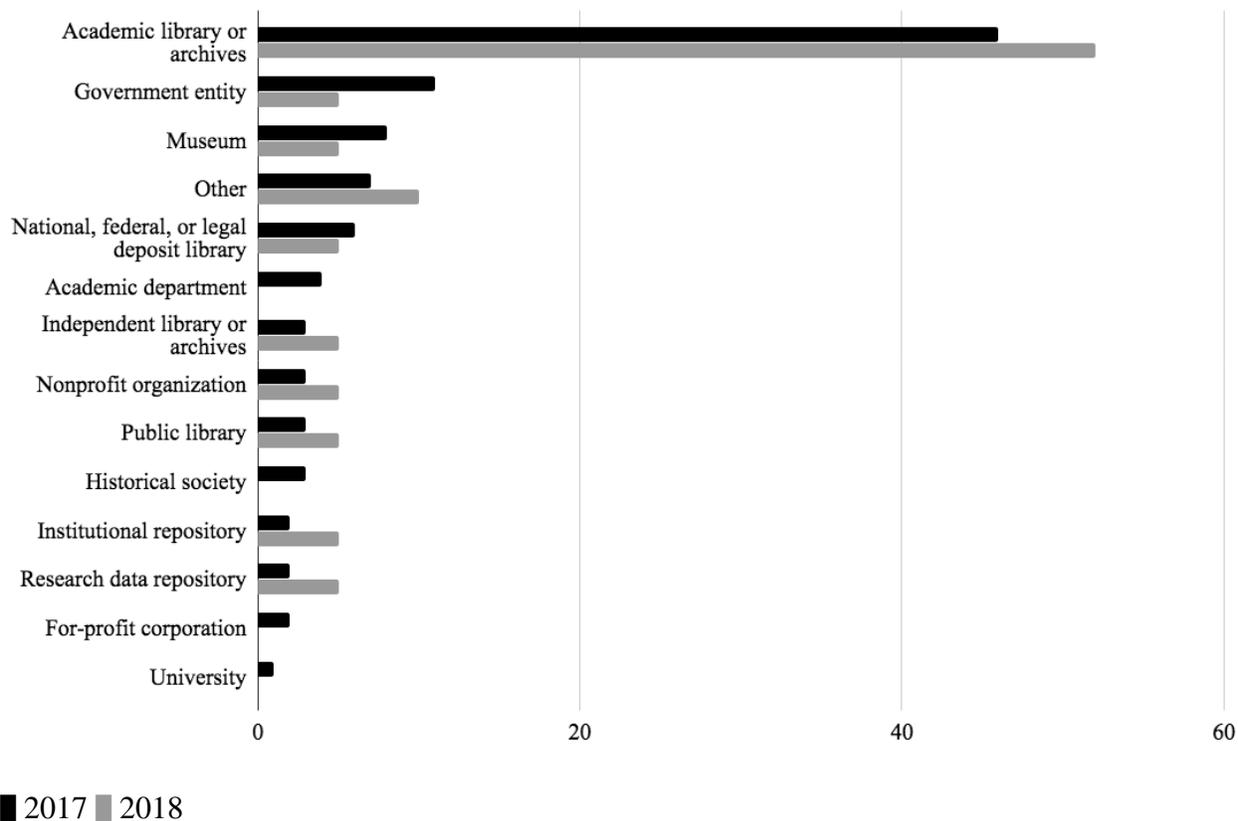


Figure 5. Percentage of institution types self-reported by respondents to the 2017 NDSA staffing survey and represented by participants in this study (2018)

Findings

Seven primary themes emerged from the analysis of our interviews with digital stewards:

1. Good digital stewardship is active and life-long.

In order to understand how practitioners determine whether their work is “organized well,” we first sought to define that work by its purpose or goals. The initial question we asked all interview participants was, “What does digital stewardship mean to you?” We intentionally used the term “digital stewardship” rather than “digital preservation” (the term used in the NDSA surveys) in order to establish a scope of discussion that included preservation within the contexts of digital archiving, digital curation, digital libraries, and other overlapping responsibilities relevant to participants working in different organizational contexts.

Participants’ answers to this question varied according to their job descriptions and their organizations’ distinct institutional missions. Nevertheless, their responses coalesced into a theme of preserving the accessibility of digital information in the longest possible term through assiduous maintenance. “Care and feeding” of digital assets was a recurrent metaphor that practitioners independently employed across different organizational contexts, from research data to state government records management.

Participants also repeatedly emphasized the imperative of access within stewardship. “Gathering digital objects,” explained an academic archivist and developer, “without making them available doesn’t make any sense to me” (Gabby). Participants shared an understanding that ensuring the continued accessibility of digital material is an endeavor which must necessarily be ongoing; it requires constant work (“care and feeding”) that should be done actively and continuously throughout the lifecycle of a digital object. “It’s not ‘set and forget,’” said an early career archivist in a nonprofit organization. “There is no ‘this thing is preserved’ in digital [preservation]” (Val).

Accordingly, there was a heavy emphasis throughout these conversations on the material and human resources required to carry out this task. This came up frequently in response to a question that asked participants to describe what a successful digital stewardship program looks like and what factors contribute to that success. Participants seldom mentioned compliance with Trusted Digital Repository Checklist (ISO 16363), Open Archival Information System (ISO 14721), or the NDSA’s Levels of Preservation in this context.¹⁶ Some participants acknowledged that these standards are aspirational and represent a scenario for their institutional context that remains out of reach for the time being. “I don’t think it’s ever going to be something that’s stable,” said a university-based digital preservation librarian (Alex). Rather, participants focused on more tangible evidence of program support, citing sufficient staffing levels, active management routines, and scalable processing workflows as indicators of well-functioning programs.

2. Practitioners are up to the challenge.

While participants acknowledged the considerable work that the long-term accessibility of digital material requires, they also expressed confidence in their and their peers’ ability to design, build, and maintain services that will achieve this goal. However, when we asked them if they felt they were able to do their jobs “as well as they’d like” to, only four of the twenty-one participants said yes. In this context, participants commonly cited the lack of human and material resources as inhibiting factors. “I could do so much more . . . if I had the staff and the resources and the technology that I wanted. . . . I think most of us can do amazing things here if we were not held back,” said a digital archivist (Riley). An archivist and program head with more than twenty years of experience echoed this sentiment, saying, “My organization is like the digital library of 1994. . . . There’s so many things that even with just a little bit of technology support, I know we could do scads better than we can right now” (Ada).

This perennial under-resourcing was a source of anxiety for some practitioners:

The work that I do, they’ve been doing it for a couple of years but there’s no budget around it. And I’ve been asking about that for, you know, a year. Like, “What are we going to do? Can I make a budget? Or how are we going to make this base funding?” And it’s just . . . it’s still this kind of conversation we’ve been pushing along. So it makes it hard to feel like I’m doing my job well if I feel like everything’s going to fall under me. (Castel)

¹⁶ Consultative Committee for Space Data Systems, “Audit and Certification of Trustworthy Digital Repositories”; Consultative Committee for Space Data Systems, “Reference Model for an Open Archival Information System (OAIS)”; Phillips et al., “The NDSA Levels of Digital Preservation.”

In this vein, many participants expressed their desire for the creation of new professional positions. A repository manager voiced this by saying, “Almost everybody is unanimous in the digital preservation committee: we want a digital preservation librarian who is charged . . . and has authority to implement policies” (Lani).

The practitioners we interviewed have a clear vision of purpose for digital stewardship and can express specific, actionable ways to improve their progress toward that goal. Although insufficient resources were a frequent topic of conversation, digital stewards did not view this as their chief impediment. Instead, participants cited various challenges and inefficiencies that they believed resulted from how their respective institutions organized and structured digital stewardship. In tandem with this critique, the interviewees offered a variety of suggestions about alternative approaches to this work using existing resources that would better orient digital stewardship toward its ultimate goal. These ideas included ways to reorganize existing staff, change existing job descriptions, redistribute responsibility for digital stewardship, and implement more effective decision- and policy-making protocols.

3. Leadership has not made a long-term commitment.

When we asked participants to describe the top three factors that contribute to a successful stewardship program, they almost universally cited administrative buy-in and support. The majority also made it clear that this support has not been forthcoming.

This lack of administrative support potentially stems from the fact that long-term goals cannot, by their nature, be as easily recognized and rewarded. Digital preservation is a maintenance-heavy undertaking that does not necessarily lend itself to the types of bureaucratic performance indicators which often sway decision-making and funding priorities. Oya Rieger’s interviews with “thought leaders” document senior administration’s ambivalence and apprehension about the value statement of digital preservation and lay bare issues of assessment, evaluation, and risk management as their primary areas of focus. Rieger notes, “As one interviewee stated, library leaders have ‘shifted their attention from seeing preservation as a moral imperative to catering to the university’s immediate needs.’ Several wondered what arguments could convince provosts and other senior university leaders to invest in digital preservation.”¹⁷

Many practitioners we spoke with believed their leadership held similar attitudes, citing the tentative support that leadership had demonstrated:

If I could make a change at [my] organization . . . I would get that buy-in that I mentioned, but with the understanding that it’s not a one time thing, that this program is going to take . . . constant care and feeding—not that sort of rubber stamp that says, “Yes, we’re going to do this,” but that long-term buy-in and support that we all know digital stewardship takes, but it’s hard to get those top-level decision-makers to see. (Avery)

¹⁷ Rieger, “The State of Digital Preservation in 2018,” 7.

This sentiment reverberated across the interviews we conducted. Some practitioners expressed frustration with their institutions' lukewarm embrace of digital stewardship. "It's not prioritized in a way that it should be," noted an early career digital archivist working in a museum (Cleo). In this environment, we found that in cases where there was support for digital stewardship, practitioners' work was frequently organized into time-limited project cycles governed by frameworks appropriated from software development, such as agile management and scrum methodology. The trend toward product-oriented management techniques may be due to the prevalence of grant funding and other short-term, contingent funding as the primary means of support for stewardship initiatives. These funding sources are premised on project deliverables oriented around firm deadlines dictated by the funding cycle and fiscal year.

Grant-funded projects play an important role in raising awareness of digital stewardship—particularly among senior administration—and can be critical in establishing a beachhead to launch a more enduring stewardship program. But our conversations surfaced a widespread reluctance among institutions to make digital stewardship a permanent line item, along with a corresponding overreliance on external, short-term funding to buoy preservation activities. As one participant working at a nonprofit organization attested, "We need to constantly go after grants because we don't have institutional funding to sustain the [staffing] numbers that we need" (Val).

The contingent funding model that participants described atomizes their approach to maintaining digital resources. The short-term nature of this system also stands in diametric opposition to practitioners' understanding of digital stewardship as inherently permanent work.

The conflict among these things was a source of tension among some practitioners with whom we spoke. An early career digital projects librarian at an academic research library has found it necessary to educate decision-makers and stakeholders on the mandate of memory institutions to support collections beyond the project lifecycle: "One of the things that I've been doing is kind of raising awareness when we work on projects that, yes, these projects have a start and end date, but ultimately we're building collections" (Raleigh).

Two of the practitioners quoted above contrasted their organizations' attitudes regarding digital stewardship to other core facets of information science such as subject and reference librarianship. Each expressed their belief that leadership took the latter for granted, treating funding for these roles as a given, whereas the same could not be said for digital stewardship. Participants drew connections between what they perceived as their senior leadership's inherent understanding of more traditional tasks, such as reference, with the permanent and unconditional top-down support that these activities received.

4. Advocacy fills the gaps left by disorganization.

One of the most significant consequences of the knowledge gap between stewards and leadership that participants described was the constant need to advocate for their work in the absence of support between project cycles or grant-funded initiatives. One practitioner said that "it took a very long time of saying 'digital preservation is important,' 'digital archives are important,' before people who are really removed from that situation decided to care" (Hayden). Another went so far as to describe themselves as being in "continual advocacy mode" (Sudip), resenting that they had to

spend valuable time trying to convince leadership that basic digital stewardship activities should happen at all.

The invisible work required to combat leadership's disinterest, educate them about the tenets of digital stewardship, and secure a commitment of resources were fundamental components of practitioners' work. Again, participants perceived this as a unique burden that colleagues in other departments and services did not share. As one participant affirmed, "We do so much advocacy work that we're . . . probably never expected to have to do as archivists" (Riley).

Constantly reifying the purpose and value of their work also negatively impacted morale for the interviewees. Throughout these conversations, participants—even those who expressed a more positive outlook on the status of digital stewardship at their institutions—described this lack of top-down support in terms that invoked a range of negative emotions, from exasperation to defeatism.

According to one participant, "I do find it . . . really frustrating, trying to do the work that I need to do, but knowing it's not actually a priority [organization-wide]" (Cleo). Another described the process of getting their administration's buy-in as an "eternal struggle" that they framed in Sisyphean terms: "It can be . . . really stressful when you ask for something . . . every year and provide a report that documents why you need these things. And you're eternally just like, 'No? Maybe next year'" (Riley).

In light of this challenge, perhaps it is unsurprising that when asked to describe the type of professional who would succeed at practicing digital stewardship within their organizations, participants frequently cited qualities helpful for building bridges and filling gaps. These included the ability to self-direct and self-motivate, the capability to be flexible and adapt to change, and a facility for educating and managing up. Some participants also mentioned an inclination to take on any project that comes their way—in the words of one participant, "someone who says 'yes' to pretty much everything" (Raleigh). This may be tied directly to the need multiple participants expressed to prove their worth by performing to a high enough standard for senior administration to take notice of their work.

The specificity of these qualities bolsters participants' accounts of unsupportive institutional climates and suggests that certain personal qualities may be equally essential as the human and material resources necessary to carrying out effective digital stewardship.

5. Digital stewards: Autonomy without authority

However, even if stewards possess these attributes in spades, they are likely to encounter other obstacles. One of the most common challenges participants described was their lack of policy- and decision-making authority to carry out the stewardship initiatives they had been hired to implement. While most participants agreed that they had relative autonomy when it came to organizing their days, projects, and tasks, they typically lacked the authority to formally create policy, enforce any of their recommendations, or greenlight necessary hires.

For many participants, this was due to their place within the organizational hierarchy. For others, it was a function of how job positions had been scoped and the ways decisions were made within the organization. In some cases, both were factors. As one participant described it, “We have these three positions that kind of have digital preservation in their jobs but then we have a committee that is really responsible for [making recommendations] so none of these three positions has any like direct authority or responsibility of digital preservation at large” (Lani).

Several participants drew connections between their lack of authority and their direct supervisor’s limited understanding of digital stewardship. While participants did not always distinguish this as a negative aspect of their job, most spoke at length about the problems that emerged when their higher-ups lacked a solid foundation of knowledge.

A lack of authority to carry out preservation activities effectively was a key marker for dissatisfaction overall. Having the autonomy to pursue digital preservation without the authority to ensure that it is being carried out effectively was demoralizing for participants and frequently a source of frustration and disillusionment. This often came to the fore when participants described gaps between articulated digital preservation policies and how work is implemented on the ground. One participant referenced their powerlessness to enforce these policies by stating, “I mean, we already have a policy in place, but it’s not like, ‘and people must actually do this’” (Ada). For another, their lack of authority in this vein represented an existential dilemma: “Is there a point to having a policy if you can’t enforce it?” (Alex).

There was a strong correlation throughout these interviews between participants’ authority to implement and enforce policies with their overall outlook on digital stewardship. Five out of the six participants who believed that digital preservation is organized well at their institution occupied leadership or managerial roles. These participants had also been working in the field for longer—12.8 years on average and a median of 14 years, compared to an 8-year average and 5.25-year median for the participant group as a whole. They also distinguished themselves demographically by being, on average, older and male, with one exception.

The overrepresentation of this group within the minority opinion is revealing. The stratification of these perspectives supports other research that distinguishes “doers” from managers and administration who are divorced from actual realities and “on the ground” truth.¹⁸ It also speaks to organizational literature that correlates job satisfaction directly with positions that entail high degrees of control, autonomy, and power. The coupling of autonomy and authority was rare among participants. The sharply divergent experiences of middle and senior managers (who had both) with stewards (who possessed only the former) suggest that many stewards are, in effect, disempowered change-agents.

6. Hierarchical organizations exacerbate stewards’ lack of authority.

We asked practitioners to evaluate and comment on their organizational cultures in order to better understand informal authority and decision-making practices. Responses to these questions were frequently the most critical or negatively received throughout the interview process. On a scale of 1 (very dissatisfied) to 5 (very satisfied), participants’ mean ratings of their level of satisfaction

¹⁸ Rosenthal, “Ithaka’s Perspective on Digital Preservation.”

with their organizations and those organizations' cultures was 2.8 (see fig. 6). This rating was significantly lower than participants' satisfaction with other areas of their work environments, such as their day-to-day job experience (3.8), the departments in which they work (3.9), and the management performance of those to whom they report directly (4.1).

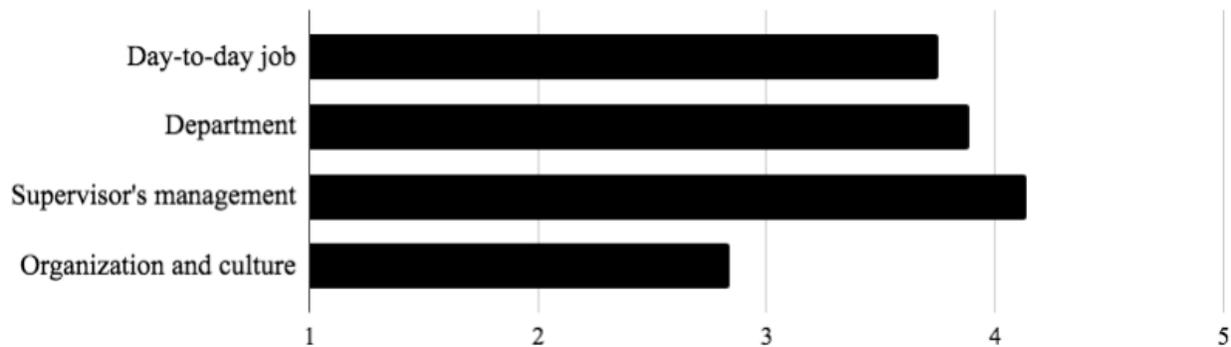


Figure 6. Interview participants' mean ratings of their levels of satisfaction, on a Likert scale from 1 (very dissatisfied) to 5 (very satisfied), with their day-to-day jobs, departments in which they work, managers' supervision, and wider organization and its culture

Generally positive or negative feelings about organizational culture did not always map directly to participants' impressions that they could perform their duties as well as they would like to. For example, even those participants who expressed satisfaction with their organizational culture could readily identify factors that hindered their work. To this end, participants consistently brought up the challenges to their work that arise from their siloed organizational structures.

Digital stewardship is a complex ecosystem of people, policies, technologies, and workflows that cut across traditional department lines, job descriptions, and areas of responsibility. The practitioners in this study made it clear that their work is not being organized accordingly. Participants pointed toward the problems that arise when institutions parcel out responsibility for various tasks associated with digital stewardship to divisions across the organization, rather than adopting a more holistic and matrixed approach. In the words of a digital archivist at a small museum, "There are times I don't even know people's names because I see them [in a] meeting once or twice. And so, I think the general feeling is [that] everyone feels really siloed and no one's really working together" (Cleo). Another practitioner echoed this sentiment: "We don't have any concept here that is called 'digital stewardship' programmatically. We have digital archives. We have digital preservation. We have electronic resources. And we have . . . technology systems in support of a few things that deal with that, but there is no digital stewardship concept model at this point" (Ada).

Several practitioners voiced concerns that silos may cause or exacerbate distrust and resentment among departments that should be working toward a common goal: "I think there's a feeling that our work is not necessarily seen or appreciated as much as it should be by the broader organization. Which I think is accurate, but it can mean there's tension between our department and other departments within the organization" (Val).

Several interviewees expressed a desire to empower more workers across other departments within their organizations to do the work of digital stewardship independently. As one participant reflected, “From an organizational structure perspective, . . . not carving off digital stuff into a separate program but embedding it within existing functions is pretty important” (Wren). A midcareer practitioner affirmed this sentiment, suggesting that ideally there should be “at least one person whose primary responsibility it is to think about those issues and communicate them to other parts of the organization. But the actual responsibility of carrying them out is, on everybody that works with that material” (Sudip).

As the above participants made clear, they do not take issue with distributing and decentralizing digital stewardship responsibilities in general. But in the absence of a functional approach to stewardship where preservation is coordinated across departments—and without the authority to direct this work on their own terms—practitioners struggled to manage horizontally across departmental lines. Instead, they are forced to rely on hierarchical reporting structures in which decision-makers are often removed by several degrees (and are therefore often disincentivized) from prioritizing digital stewardship. As one practitioner explained, “It’s very hierarchical. Very, very hierarchical. I would never go, for example, with a problem to my library director directly. I’d have to go through my supervisor first, and then he will go to his supervisor, then he will go [up the hierarchy]” (Gabby).

Practitioners’ lack of agency, coupled with bureaucratic leadership, was a major source of discontent and a contributing factor to their impression that digital stewardship was not functioning as well as it should be. The knowledge gap between senior administration and the practitioners charged with carrying out preservation compounds the challenges associated with communicating up a hierarchy. These obstacles render effective and open communication difficult at best and enhances the possibility of inaccurate or faulty reporting up the organizational chart. For example, during the course of our conversations, several participants expressed appreciation for the opportunity to share their negative assessments of digital stewardship because any discussion along these lines would be potentially unwelcome within their organizations. If stewards are reporting only their progress and not the remaining gaps and challenges, it is likely that senior administrators are unaware of the true status of the work and the associated implications and risks. This could help explain the tendency among those who work higher up in an organization to believe that stewardship is well organized.

7. These cultures maintain discriminatory systems of privilege.

At the end of the interview, we asked each participant to provide brief demographic details regarding their age, years working in digital preservation, gender, and ethnicity. We then asked them if they believed that any of these demographic factors informed how they answered our prior questions about their work environment, organization, and satisfaction. Fourteen responded that they did, four that they “maybe” or “probably” did, two that they did not, and one did not know. Rather than seeing it as a uniquely meritocratic pursuit, the overwhelming majority of participants expressed the belief that their practice sustains inequitable systems of privilege.

All participants provided examples of these privileges within their profession or specific workplaces, including the two participants who said that their answers were not influenced

directly. One of these two, a white practitioner with fewer than five years of experience in a federal library, distinguished between the content of their interview and the advantages that their race generally afford them in the profession by saying, “Obviously, being white played into all of the benefits that got me into grad school and whatever else” (Casey). The other, an early career self-identifying Hispanic person elaborated on their earlier replies about whether or not their demographics have any effect, noting, “I’m always feeling like I need to prove something to people. . . . The first year and a half or so I was just always focused on doing the work that I was asked and doing the best I could and trying to demonstrate to people that I belonged here in a way” (Gabby).

An early career practitioner of color in an academic library expanded on the additional labor of earning trust to perform their role in this culture, and the performance of white patriarchal authority that can be necessary nonetheless:

I think people, especially when I first got here, tended to think I didn’t know what I was doing. . . . Whether it’s overt or not, people tend to think that, because of who I am I don’t know as much, at least in the technical world. And whether or not that’s true, it’s my job anyway and I have to learn it. . . . I would say sometimes I have to overexplain my decisions, or I did before. . . . I would have to explain over and over again sometimes why it’s what we’re doing. But also sometimes I would have to put down my foot and say, “this is what we’re doing,” and I hate—I don’t like to do that. I don’t like to resort to that. (Castel)

Working in a comparatively new discipline, several participants saw opportunities and potential for improvement in digital stewardship, drawing contrasts with other, more well-established departments where systems of privilege remain deeply entrenched and guarded. To illustrate this point, an early career practitioner in an academic library said, “Some of the curatorial staff there are well known as being very sexist and misogynist, especially to staff in [my library]. And there has been not as much done to mediate that as I would like to see. . . . It is practically impossible to fire somebody here once they have [tenure], and the people who are the worst problems are people who have been here for thirty, forty years” (Maji).

Several practitioners conveyed the shock and disappointment they felt when they witnessed displays of outright prejudice and misogyny at their institutions. One midcareer participant observed about a senior colleague at their institution, “Women in general do not enjoy being in the room with him. . . . He once made a joke about [violence against women] at an all hands meeting. I don’t know how he didn’t get fired after that” (Sudip).

Responding to their academic library’s inaction on diversity and inclusion proposals, and its insistence on credentialing to maintain a specific professional class in all library operational roles, a midcareer practitioner conceded, “Honestly, I would not encourage someone that doesn’t have a lot of privilege to try to work here” (Riley).

Implications

The structured interviews that were conducted for this study offer a rich and nuanced picture of the digital stewardship landscape. These conversations suggest a wide disparity between how leadership and stewards believe digital stewardship should be organized, funded, and conceived. While it is natural that there would be some variation between these groups, the breadth of this gap, coupled with the profound discontent that many practitioners conveyed, indicates a need for organizations to rethink their approaches.

The stewards interviewed in this study offered a number of suggestions for how this could be achieved. While some of their recommendations require further funding that may not be readily forthcoming, there are multiple changes that could be implemented without the investment of additional resources. Perhaps the most important is empowering stewards to create and enforce policies relevant to their work. The hierarchical, siloed nature of many organizations means that authority rests with those who are at a remove from the work. However, this study finds that digital stewards feel more successful in their mission in direct correlation with their formal authority to pursue it.

Another important suggestion that arose is the necessity of educating leadership about the tenets and foundational literature associated with digital stewardship, and the acute need for educational resources and training opportunities that focus on this group specifically. These conversations revealed digital stewardship to be a major blind spot for many senior administrators, and participants repeatedly drew connections between the challenges they face and their leaderships' incomplete (or in some cases, nonexistent) understanding of their work. Since most existing training opportunities are focused on workforce development, educational opportunities directed toward senior leadership would be a novel approach and worthy avenue to explore.¹⁹ Deepening leadership's understanding of digital stewardship as an inherently ongoing and long-term pursuit would go a substantial way toward addressing their myopic focus on project deliverable-driven and short-term timelines.

These findings bolster the growing body of literature supporting the relationships among cultural heritage work, the outsized role that advocacy plays, and the professional burnout that results. Critical librarianship scholars have published extensively on cultural heritage work, "vocational awe," and related deeply ingrained norms around discouraging criticism of one's work and organization.²⁰ As some of the participants expressed, the topics they discussed were often taboo; participants were discouraged from open critical engagement with their organizational culture. In such a culture, success and failure rest solely on the shoulders of digital stewards. Burnout not only makes for dissatisfied staffing; it creates lasting damage within organizations and correlates with dissatisfaction with administration, lack of autonomy, and lack of transparency that have all been cited as contributors to turnover and lack of retention in related research.²¹

As institutions increasingly adopt corporate models with measurable performance indicators incentivizing grant-funded work and product-oriented management techniques, assessing and measuring maintenance-oriented activities like digital stewardship become both a challenge and a necessity. Digital stewardship, by nature, should be assessed and measured according to timetables

¹⁹ McMeekin, "People Get Ready."

²⁰ Ettarh, "Vocational Awe and Librarianship."

²¹ Fyn et al., "Why We Leave."

that fit well outside of these organizational models. This naturally raises the implication of expanding the research timeframe to enable a longitudinal analysis of digital practitioners' (dis)satisfaction with their organizations' digital preservation function as their careers and the field itself mature.

This study also suggests that the field would benefit from further studies designed specifically to solicit participation from an even broader and more diverse set of practitioners. The demographics of this study skewed overwhelmingly white, and involvement was limited to institutions within the United States. The interview questions did not ask participants about intersecting factors such as ability, sexuality, and gender identity that compound structural inequities already faced by those with minoritized identities. The potential effects of these and other inequities must be studied further in order to understand and address related factors that lead to professional burnout and the reification of systems of privilege in digital stewardship decision-making structures.

Conclusion

The goal of this study was to better understand the increasing dissatisfaction expressed by respondents to the NDSA staffing surveys about how their work is organized at their respective organizations. This study pursued this research by interviewing twenty-one digital stewards, selected by purposeful design, who are active in the field and who represent a diverse cross-section of characteristics. It applied a qualitative research methodology based on phenomenology in order to identify common experiences among participants. This led to the conclusion that, even as the field of digital stewardship is entering a period of operational maturity, practitioners largely consider digital stewardship values and goals to be misunderstood at an organizational level.

The conversations with study participants revealed seven primary themes. There was a clear consensus among participants that responsible digital stewardship entails an active and ongoing commitment to maintaining digital objects over the longest possible period of time, in the service ultimately of providing access to future generations. While participants expressed confidence in their and their peers' abilities to undertake the "care and feeding" inherent to this work, these conversations also revealed that the holistic support and buy-in practitioners need from leadership to pursue this mission is the exception rather than the rule.

Personal advocacy therefore plays a critical and near-constant role in countering the apathy that digital stewards perceive from their leadership and in attracting the resources and garnering authority that they may not get otherwise. This was often a source of frustration for participants, who perceived this work as a burden not shared by colleagues in adjacent areas of their cultural heritage organizations. Expectations for digital stewards to enact change also clash with their lack of authority to implement the preservation policies, workflows, and practices that their mandates require. This is exacerbated by siloes and hierarchical reporting structures that reserve the authority to make decisions and enact policy for those who occupy the remote upper echelons of the organizational chart. Practitioners' disempowerment was a reliable marker for lower overall job satisfaction.

These conversations affirmed that systems of privilege remain alive and well throughout the field, dictating practices when digital stewards lack the explicit authority to shape them. The special

stress that this places on minoritized practitioners should not be overlooked. Participants universally acknowledged that the cultures in which they work are undergirded by hierarchical power structures that help a select few to maintain power but undermine the profession by demoralizing, disillusioning, disempowering, and ultimately alienating practitioners. These kinds of stresses are exacerbated within culturally slow-moving organizations where, many participants noted, the open conversations about digital stewardship goals and practices facilitated by this project would not have been possible.

Our discussions also raised new and related questions and suggest several areas that would benefit from future study. One of the most pressing is to examine the root causes of the pervasive lack of top-down support participants reported and to address the gulf of understanding between senior organizational leaders and digital stewardship practitioners. From where practitioners sit, better comprehension among and delegated authority from senior organizational leaders would go a long way toward mitigating the burnout, stress, and overall frustration so many participants in this study expressed. Finding a way to align the goals of leadership in information and memory institutions with those of digital stewardship is key to the viability of stewards' and organizations' missions alike.

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