

Beyond digitization: Turning digital collections into research assets

How TCU and UT Dallas are using Specto to make distinctive collections easier to manage, discover and preserve.

Digital collections have become some of the most valuable assets libraries steward, preserving institutional history, supporting scholarship and connecting unique materials with researchers around the world. Yet many of the systems and workflows used to manage those collections were designed for a different era.

Today's researchers expect the same seamless discovery experience they encounter elsewhere online. They want to search once and find relevant results immediately. Librarians want better, more productive experiences too. They're managing growing volumes of born-digital content while facing budget constraints, staffing pressures and increasing expectations for preservation, accessibility and engagement.

For many institutions, these realities are prompting a fundamental rethinking of digital collections. They are looking for ways to address the bottlenecks in their processes that often come from metadata creation and correction, with the ultimate goal of making collections more discoverable, more sustainable and more deeply integrated into teaching, learning and research.

Clarivate

At **Texas Christian University** (TCU) and the **University of Texas at Dallas** (UT Dallas), **Mary Saffell, Director of Special Collections at TCU**, and **Dr. Misu Kim, Assistant Library Director for Technical Services at UT Dallas Libraries**, found themselves confronting similar challenges despite their different collections and institutional priorities. Both institutions recognized that valuable digital materials were often a struggle to manage at scale and remained difficult for users to find. Both were looking for ways to streamline workflows, make better use of limited staff resources and ensure long-term preservation of their growing digital assets.

"What excites us most about this system is the opportunity to bring preservation, access and discovery in a single environment."

Mary Saffell, Director of Special Collections, Texas Christian University

TCU and UT Dallas turned to Specto, a digital collections platform that's integrated with Alma and Primo, to improve discovery, create more sustainable workflows, accelerate the development of high-quality metadata and build preservation into the digital collection lifecycle.

The new mandate: discoverability everywhere

For both TCU and UT-Dallas, the strategic question is not whether a collection is online, but whether the people who could use it can find and understand it. They're building new opportunities to expose their unique digital collections by using Specto to make digital materials discoverable via Primo alongside books, articles and other library resources.

"Historically, digital collections have been maintained in a separate environment and usually intended for specific users, who tend to know where to look for some resources. But we began to recognize the expectations for digital collections and the demands for those materials to be easily discoverable and more intuitive to use."

Dr. Misu Kim, Assistant Library Director for Technical Services, UT Dallas Libraries

When digital materials appear alongside other library resources, researchers can encounter relevant primary sources even when they are not actively searching for them. This kind of serendipitous discovery reveals hidden relationships, unexpected document connections and cross-domain topics. It supports teaching and learning, extends a collection's reach beyond campus and helps libraries realize more value from their investments in digitization and curation.

Misu Kim offers an example of the serendipity Specto has created in the search experience at UT Dallas, where digitizing a faculty member's collection on historic Islamic cities made a varied body of source material available for teaching and research at any time and beyond campus.

Sustainability becomes a strategic requirement

If discoverability is the most visible challenge facing digital collections, sustainability may be the most pressing operational one.

"Think about where you are right now, and what you need right now, because we can't guarantee that we'll get the funding, or that we will have the staff. You have to think about sustainability."

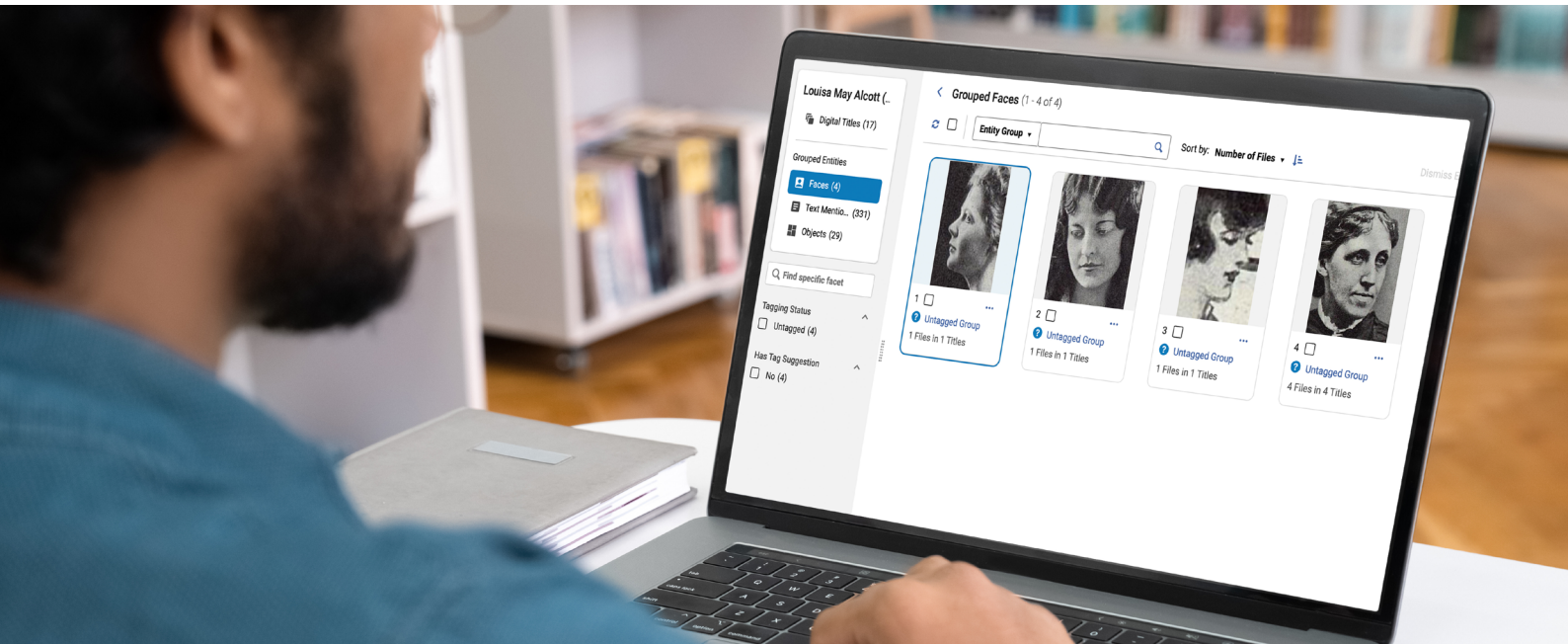
Mary Saffell, Director of Special Collections, Texas Christian University

Libraries are managing growing collections at a time when budget pressures and staffing constraints are affecting nearly every institution. Specialized technical expertise can be difficult to recruit and retain, and many libraries are being asked to support increasingly complex digital initiatives without adding dedicated staff. As a result, sustainability has become a critical factor in digital collection planning.

At TCU the need for sustainability was a major driver behind the decision to rethink its digital collections environment. The library had successfully maintained an open-source platform with the support of an in-house developer, but that model became more difficult to sustain over time. Staffing changes and budget realities made it clear that long-term success depended on a platform that could be managed by a broader group of library staff rather than a small number of technical specialists.

UT Dallas faced similar pressures. Digital initiatives were handled largely by existing staff members in addition to their other responsibilities, making efficiency an essential consideration. Rather than creating entirely new workflows and systems, the library sought ways to build on expertise and infrastructure already in place.

Specto addresses this risk by bringing digital collection work into the Alma environment staff already know. Rather than depending on a separate platform that requires highly specialized technical knowledge, libraries can build on existing skills, workflows and infrastructure. A system already understood by several staff members makes the program less vulnerable to a single departure. This does not eliminate the need for expertise. It allows specialists to spend more time on the decisions that require context, authority work and professional judgment.



The metadata challenge and the promise of AI

Metadata remains the foundation of effective digital collections. Descriptions, subject headings, authority records and contextual information help researchers understand what materials are, where they came from and how they relate to broader topics of inquiry. Without strong metadata, even the most valuable collections can remain effectively invisible.

"The labor of digitization really comes in the metadata creation."

Mary Saffell, Director of Special Collections, Texas Christian University

This is why many libraries view metadata creation as the primary bottleneck in moving collections online. As collections grow and born-digital materials arrive in larger volumes, the amount of descriptive work required can quickly outpace available staff resources.

At UT Dallas, staff have begun using Specto's Digital Assistant to support metadata creation. For image collections, the assistant can identify and group photographs that likely contain the same individual, helping librarians work more efficiently through large volumes of content. For textual materials, it can extract full text and suggest names, places and other entities that may be relevant to the record. Importantly, the system also generates preliminary metadata records that librarians can review, refine and approve.

As libraries evaluate the role of AI in digital collections, the most promising applications may not be fully automated workflows. Instead, they are workflows that combine machine efficiency with human expertise. By reducing the time required to create and review metadata, libraries can make more collections discoverable while maintaining the standards their researchers expect.

For institutions facing increasing volumes of digital content and finite staffing resources, that balance between efficiency and oversight may be one of the most important developments shaping the future of digital collections.

"This [Specto] process is designed for librarians' review and verification, rather than the assistant's independent work. But it saves librarians time, so it brings efficiency."

Misu Kim,
Assistant Library Director for Technical Services, UT Dallas Libraries

"A system with the digital preservation already in place, embedded as part of it, makes me feel better about saying yes to new collections."

Mary Saffell, Director of Special Collections, Texas Christian University

Preservation for a born-digital future

As born-digital materials become a larger share of library collections, preservation must begin at ingest rather than follow as a separate project.

Storage alone cannot protect university records, research outputs, photographs, audiovisual files and other materials with no physical counterpart. Files can become corrupted, formats can become obsolete and essential metadata can disappear. Long-term stewardship depends on continuous monitoring that keeps content accessible and authentic.

Specto builds that work into the collection lifecycle. Within the same environment used to ingest, describe, publish and discover materials, libraries can monitor file integrity, run fixity checks, manage formats and identify risks before they compromise access. Bringing these capabilities together helps staff save time and effort, while avoiding new silos and protecting the resources invested in digitization and metadata.

TCU saw the value during migration, when Specto's automated preservation checks surfaced files with integrity issues. Staff traced most of them to PDFs created with an outdated version of Adobe Acrobat and corrected the problems before the materials moved further into the new environment. The experience showed why preservation controls are most effective when they are part of daily collection management, supporting both immediate access and long-term confidence.

Bringing the digital collection lifecycle together

The experiences of TCU and UT Dallas point to a more connected approach. By bringing discovery, metadata, staffing and preservation into the same Alma environment, Specto helps libraries build on familiar workflows while preparing distinctive collections for wider use and long-term stewardship.

Discoverability, sustainable workflows and preservation are not separate ambitions. They are parts of one lifecycle. Specto is built around that connection, helping libraries move distinctive collections from storage to active use in research, teaching and public engagement.

Curious to see Specto in action?

Request your personalized Specto demo and get a guided walkthrough with one of our library specialists.

Get in touch here.

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