



Moving Beyond Colonial Models of Digital Memory

Exploring the dynamic role of tribal libraries, archives and museums in bridging community values and digital strategy.

A report based on findings from planning grant LG-72-16-0113-16
by the Institute of Museum and Library Services.

Shift

Executive Summary

Over the course of a year, Historypin worked closely with a group of tribal libraries in New Mexico and interviewed a group of cultural heritage professionals in Southern California, with an intent to discover “how can digital community memory projects like Historypin better serve indigenous communities?” This was part of an IMLS Planning Grant: *Digital Memory in Rural Tribal Libraries: A Program for Technology Training & Memory Gathering*, grant LG-72-16-0113-16.

Recognizing the problems with asking such a question as outsiders, and the potential of propagating colonial patterns of extraction and trauma, we asked Jennifer Himmelreich (Diné), someone with first hand knowledge and experience in this field, to lead the research. In working with our tribal partners, she very quickly turned the question around to have the research better suit their needs, asking instead, “how can community values inform digital strategy in tribal libraries, archives and museums?”

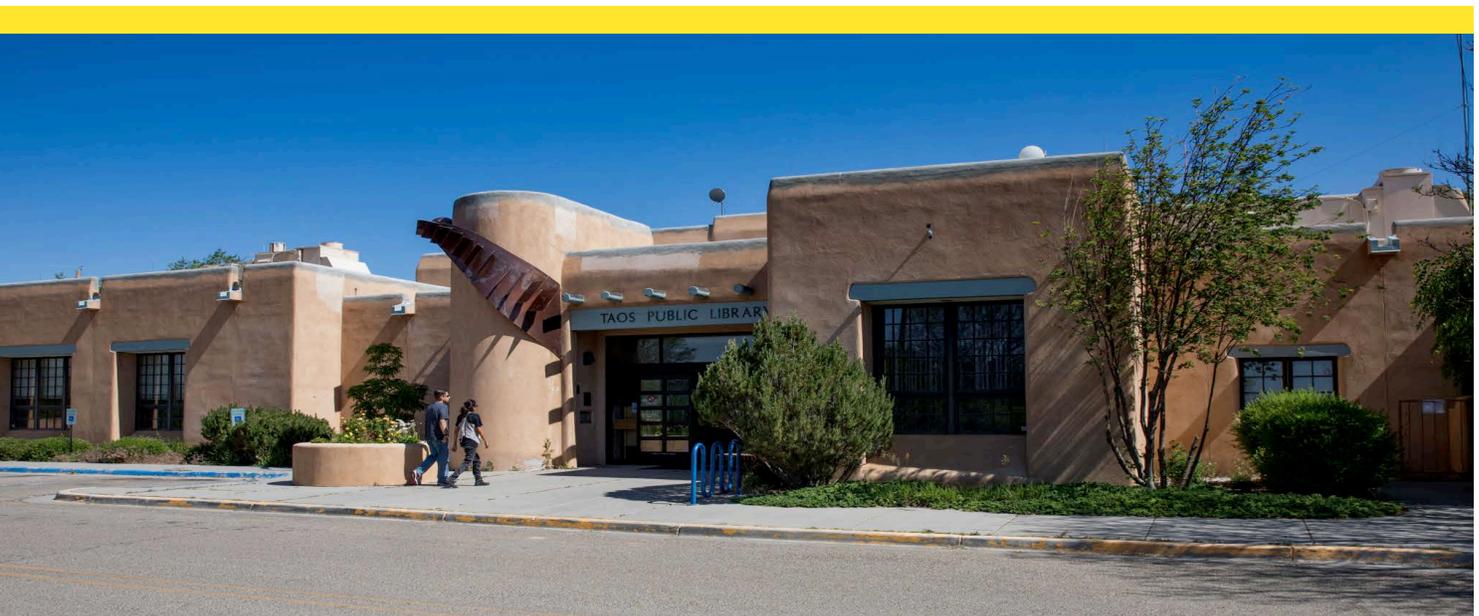
Through this lens, our long term objective was to take a native-led, human centered design approach to identify how we might create a program for technology training and memory gathering in tribal libraries. Our partners made very clear that we were looking at product solutions too soon, and not taking into account some of the key challenges facing these communities.

We identified several themes that captured some of the challenges and opportunities for digital community memory, namely:

- The dominance of social-media led communications, particularly Facebook, which enables real-time story sharing and conversation, but also complications in traditional boundaries
- The importance of controlled access and authority, which has been underlined in platforms like Mukurtu
- Leading with community values
- Recognizing that technology is only a tool, not a solution
- Empowering community tech translators, and the potential role of librarians here

Furthermore, we identified several processes or tools that could help build capacity in tribal libraries and cultural heritage organizations so they can identify, seed, and create digital products for their community needs. These include learning cohorts, methods for articulating values, focused programming, case studies, and methods for building consensus amongst stakeholders.

Our literature review included hundreds of citations regarding technology and tribal communities, though we focus on three case studies with particular relevance to the use of technology from the perspective of community values.



Contents

EXECUTIVE SUMMARY	2	Final thoughts from Lead Researcher: Implications of Tech on Culture	9
INTRODUCTION	4		
PURPOSE	5	Recommendations: Community toolkits	11
		Learning Together	11
		Articulating Values	11
		Focused Programming	11
		Case Studies	11
		Building Consensus and Stakeholders	11
CREATING A METHOD	6	Sidebar: Case Studies	12
Part 1: Building a Space of Trust	6	Nitsitapiisinni—Stories and Spaces: Exploring	12
Part 2: Naming the Tech	6	Kainai Plants and Culture	12
Part 3: Mapping Practices	6	SimPä	12
Part 4: Affirming their Voice	6	Never Alone (Kisima Ingitchuna)	12
RECURRING THEMES	7	Sidebar: Survey Highlights	14
Low-tech, Facebook-friendly Communities	7		
Not due to principle, but because of resources	7		
Facebook dominant in tribal communities	7		
The Next Iteration?	7		
Access and Authority	7		
Controlled Access	7		
Authority	7		
Audience Directed Projects	8		
Leading with Community Values	8	Epilogue: Exploring Monetary Value of Cultural Exchange	15
Defining Community Values in a Virtual Realm	8		
Tech as a Tool, Not a Solution	8	Acknowledgements	16
Empowering Community Tech Translators	8		
		About the Lead Researcher	16

Introduction



Knowledge of language and culture has meaning only within the space and material of a people, and only when there is a next generation to teach it to. Pre-contact tribal communities had their own complex knowledge systems and practices. (W)holistic. Active. Intergenerational. Unique to each community. And they had their own ways of recording and preserving these for as long as they have existed. These systems nourished and sustained their ways of life.

For many indigenous communities, it is not until contact that their lives begin to be systematically documented, sorted and preserved, according to outside classifications and ordered hierarchies that devalue traditional knowledge. Colonization, a culture of extraction, begins with the loss of land to shape a newly forming United States. Then explorers, compelled to capture what they think is a dying race, remove material culture to institutions who place living objects in cold, sterile environments for preservation. Unimagined heartbreak follows with the removal and loss of generations of children to western educational institutions and policies aimed to 'kill the savage, to save the human'. All of which paves the way for the creation of an education and governance monopoly that leaves

tribes out of many of the processes directly affecting their communities, forcing traditional knowledge and ways of life aside.

So how do communities reclaim that which was lost? Tribes can and have started to take back space through the creation of tribal cultural centers, museums, libraries and archives. Many are reconnecting with material culture through community curation, collaborative projects and federally enacted laws to bring the most sacred home. Yet despite all these efforts, what seems to be missing is the next generation. Communities want to connect their knowledge to their youth, but are finding it more difficult to compete with new technologies.

Purpose

Kim Christian, creator of the Mukurtu Content Management System (CMS), spoke to the opportunities available through new media and technology:

...indigenous communities have collaborated to produce new models for the creation, circulation, and reproduction of knowledge and cultural materials. The recent development of Web 2.0 technologies grounded in user-generated content and bottom-up exhibition and display modes has produced a dynamic platform for sharing materials.¹

With new technology becoming more attainable and affordable to those seeking this solution, the question then becomes:

What do tribal communities need before they engage in digital technologies?

Recognizing that engaged community members are the best people to guide their communities on how to protect tribal knowledge in this new age of technology, Historypin met with two groups in 2017—the first in New Mexico in January and the second in California in April. The Lead Researcher and Historypin team aimed to learn more about what communities need and how Historypin could uniquely meet those needs today, and in the future.

Ensuring that communities have an understanding of the tech-speak language used by digital project developers is essential. This, and other seminal issues, such as data management, project evaluation and funding strategies are often not considered in the initial planning process.

¹ Christian, 2011, p. 192

Goal

In many cases this leads to reactive attempts at mitigating unexpected challenges as they arise. The result is a project that falls short of the hype.

Historypin partners with cultural heritage institutions, civic organizations, councils and community groups to build stronger communities through local history and shared stories. Their team helps provide training and support materials for community engagement, technical integrations, and measurement and evaluation.

With that in mind, Historypin's goal is to work with tribal institutions and groups to grow community-driven solutions that will encompass the necessary strategic planning for technology projects while mirroring the values of the communities they serve, developing solutions that can be prototyped, tested, rapidly iterated, and potentially taken to scale.



Creating a Method

In addition to deep dive research, in-depth interviews, and surveys, the central part of our research was to bring participants together for a four part, all-day listening session. Headed by the Lead Researcher, we utilized design thinking and covered key topics employing a modified user centered research model:

Part 1: Building a Space of Trust

Organizations wanting to work with tribal communities have to be aware of the long history of mistrust between outsiders and tribal communities and be willing to bare all. Being honest about motivations BEFORE asking communities to share any information, including introductions, gives them an opportunity and choice to engage. The Lead Researcher and Historypin team conceived of participatory listening sessions, which began with:

- Welcomes from host partners who were points-of-contact within participants' communities
- Detailed introductions by present Historypin staff, including personal backgrounds, history of the organization, previous communities they've worked with, and current research areas
- Introduction of Lead Researcher and research background
- Introductions by community participants

It's important to note that we asked participants to share their thoughts on these issues with the clear understanding that we would not cite anything to any person or community directly in any of our public reporting. We made clear that we would not use any direct stories from their communities and retain anonymity of their comments. This gave participants the ability to share more freely and honestly than might have otherwise have been possible.

Part 2: Naming the Tech

A space of trust allows voices to be spoken. Once a space of trust is established, it must be maintained and organizations have to listen. Community voices get more "air time" than non-community ones. Utilizing a conversational approach, the Lead Researcher focused

questions to learn more about participants' technology background and understand what the participants were asking tech to do. Topic areas discussed included:

- Personal and institutional contexts to understand how participants got into the work they do, what their roles are in their institutions, and what they are asking tech to do
- Community knowledge and information systems to determine if the institution or community has protocols or policies in place that designate what can and cannot be shared in a virtual space
- Technologies currently in use in their communities or institutions, including infrastructure, specialized tech staff, and goals for utilizing tech in their communities

Part 3: Mapping Practices

A quick design-process activity allowed participants to visually map their project management practices for real-life projects they had conceived and implemented in their communities. Participants then presented their processes to the group. Project sharing involved mention of:

- Scope, intended audience, and stakeholders
- Funding histories
- Evaluation and Assessment
- Tribal Council/Government approval processes

Part 4: Affirming their Voice

The day concluded with the Lead Researcher and Historypin team reflecting back the major themes and challenges communicated by participants throughout the session to affirm participants' voices and ensure they had been heard. We allowed time to talk about their concerns on how it might change knowledge and the culture itself, and to consider possible solutions.

Recurring Themes

Low-tech, Facebook-friendly Communities

In both New Mexico and California, overall tech usage amongst participants is basic: *Word, Powerpoint, Excel, LibraryThing* and other Content Management Systems. Most did not have specialized websites or if they do they do not have full control to create or manage these sites.

Not due to principle, but because of resources

Both groups reflected projects based on funding, rather than rooted in institutional missions. Almost all projects presented shared very low use of evaluation and assessment techniques to document the accomplishments of their projects back to granting agencies. The exceptions were projects implemented by participants who held advanced degrees. Often they had been introduced to evaluation and assessment in programming as part of their degree programs and were incorporating various strategies into their project plans.

There are possible incentives for program leaders to begin building evaluation and assessment into their project management practices. Most were intrigued with the idea of using data to present lasting impact of the work they are doing to their tribal councils.

As the result of inherent suspicion on the part of councils and community members of all things technological, most participants in New Mexico and some in California voiced concerns about how to introduce digital projects within their communities. The lack of digital protocols and/or policies to guide them towards project completion also left them feeling unsure about crossing boundaries with projects they wanted to do.

Facebook dominant in tribal communities

When asked what social media platforms participants used, almost all participants indicated strong Facebook usage. Interestingly, they stated this platform as 'becoming essential' to those they served, especially as older populations start to log on. This is reflective of the staggering usage of Facebook across the United States and globally. From July 2015 and December 2015, 8.6 million users between the age of 50 and 65 joined the site, and among all age groups in the United States, the number of users grew by 18 million over those eighteen months.²

The Next Iteration?

But why use it when so many youth seem to have moved on to the next iteration? Many of the participants simply explained: 'Because it is THE social media platform where our community members, both young and old, are at.' They also shared that they use the platform for outreach—to engage and share events and happenings with their community members.

But a couple of participants in both groups articulated an awareness that their utilization of it was unofficially watched by their communities. These participants based their decisions of what and what not to post on their understanding of the knowledge systems within their communities. They related that if they happened to post something they should not share with non-community members, they were quickly called out and asked to remove the post in question. Whether information was 'Facebook sharable' made them aware of unspoken community rules regarding technology.

Access and Authority

The need to address regulated access and authority within a community was a theme strongly voiced throughout both sessions.

Controlled Access

Most felt, in order to gain approval and support from their communities and tribal council for projects that stored their knowledge digitally, they needed to assure their stakeholders of differentiate levels of access based on their community knowledge systems. But most of the participants did not have the tech savvy or specialized background to understand the architecture of these systems, creating an imbalance of power between the communities and those who create and sustain technology and those systems.

Authority

Participants at both sessions shared instances of their community embracing their authority through governance but struggling through what that meant in the virtual realm. Some shared issues around voice and how to determine what is 'correct'. Web 2.0 technologies blur the lines even more, where communication is truncated, authority is decentralized and sharing is everything.

² <http://www.socialmediatoday.com/social-networks/facebook-remains-dominant-social-platform-infographic>



Participants especially from New Mexico expressed concern that what they were seeing on the internet from some of their community members was not reflective of the systems they are taught in the physical world. For a couple of participants, this meant a complete skepticism of anything that could not fully reflect the systems of authority within their communities.

Audience Directed Projects

For most New Mexico participants, the focus of their work was their communities. Creating meaningful projects to connect to those outside their communities was less important than engaging their key demographics.

This was in almost direct opposition to California participants who were more willing to engage in projects that educated non-community members about their community. Their desire was to create more accurate resources online. They felt community-created projects intended for non-community audiences ensures more trustworthy information is available.

Leading with Community Values

All-in-all participants expressed the desire to craft projects that reflect the values from their communities. The Research Team avoided offering solutions about how best to implement digital projects in those communities. Rather, the goal was to ask reflective questions that did not demand an immediate answer, but were more rhetorical in nature, allowing participants the opportunity to take them back to their communities for private discussion and consensus.

Defining Community Values in a Virtual Realm

Those well acquainted with presenting projects to their tribal councils could anticipate and voice possible obstacles they may encounter. Most of the New Mexico group recognized the significance of their cultural spaces as the locations for conversations to occur in order to understand what their communities wanted tech to do. With values deeply preserved and active across their communities, they were tasked to guide their communities in a very focused way on what it means to transport their community values into the virtual world.

For the California group, many talked about tech being a way to “take their knowledge back” or to “revitalize their culture or language”. It was a balance of trying to figure out who they are virtually, while simultaneously re-establishing community knowledge and values in the real world. But the projects they hope to do in their community were often diverse and innovative in their approach and engagement.

Tech as a Tool, Not a Solution

Both groups expressed a strong desire to utilize tech as a tool, a gateway to entice their desired audience—youth in their community. In California, they clearly understood and articulated the lure and limitations of technology. Some expressed a belief tech was the only way for youth to learn about their family, histories, and lifeways.

In New Mexico, they saw tech as an opportunity to work with their councils and community members to employ tech better – whether it was developing policies concerning appropriate information in social media platforms like Facebook, or building projects to demonstrate to council their knowledge and mastery of technology.

Empowering Community Tech Translators

As we closed out the session, the Research Team encountered an unplanned for and unexpected, yet exciting, outcome. Participants in both groups expressed a sense of confidence. They expressed “feeling empowered” and advocated strongly for more tools to help guide their communities and translate tech needs to outside agencies. The research team concluded that the trust built at the beginning of the day, use of rhetorical questions, and the interactives used to engage the participants, helped to create a safe space for them to share their hopes and fears, both real and virtual. The totality of the day allowed for a shift in their mindset from reactive responses to proactive problem solving.

Final thoughts from Lead Researcher: Implications of Tech on Culture

With legacies of colonization embedded in systems all around these communities, there was a clear desire to build projects in, perhaps, the only space not yet colonized: the boundless world of the internet.

But this is not without close consideration. Neil Postman offers lasting thoughts regarding the profound impacts wrought by technology on cultures that have supplanted tech-tools with tech-solutions. He argues that in today's culture, two thought worlds exist simultaneously—the technological and the traditional. But

With the rise of Technopoly, one of those thought worlds disappears. Technopoly eliminates alternatives to itself... It does not make them illegal...immoral...or even unpopular. It makes them invisible and therefore irrelevant.³

To add to his argument, he states "a new technology does not add or subtract something. It changes everything. In the year 1500, fifty years after the printing press, we did not have old Europe plus the printing press—we had a different Europe".⁴ For tribal communities, they are fearful they will no longer be the old tribe plus a digital project—they may become a different tribe.

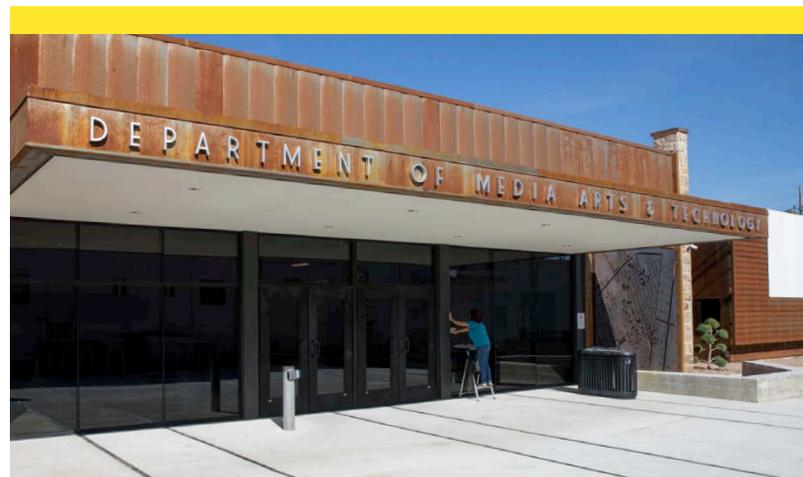
Indeed, Postman's doomsday argument of a different nation sounds strong enough to keep tribes from even considering technologies in language and cultural preservation efforts. It is a game-changer. And yet, tribes are at a point where the current state of many of their cultural heritages and languages are at risk. A 2012 NPR segment counted "some 7,000 spoken languages in the world, and linguists project that as many as half may disappear by the end of the century".⁵

Indigenous language and cultural heritage have been under attack since before the founding of the United States. And now with the competing nature of technology on the youth to whom they wish to pass on this knowledge, tribes must give serious consideration to using technological tools.

But as evidenced by one recurring theme that emerged, communities appear already instinctually aware of Postman's argument. They discern the possibility of conceiving digital projects, but only if those projects can come in the form of tools, not solutions, to engaging youth and transmitting cultural knowledge.

Without the aid of technology, tribes may lose the opportunity to preserve what they can of their heritage and culture quickly and safely. Postman is very aware that his view may only "speak of burdens and are silent about the opportunities that new technologies make possible.... My defense is that a dissenting voice is sometimes needed to moderate the din made by enthusiastic multitude". His voice imparts a needed skepticism that participants already report reflected in their communities.

But Postman's cannot be the only voice heard. There is discussion in favor of the addition of community knowledge in technological applications, and positive evidence of its affect at a variety of levels continually contesting the 'expert' voice. Elizabeth Edwards breaks it down in respect to digital projects focused on photography:



³ Postman, 2012, p. 5

⁴ *ibid.*, p. 18

⁵ Banse, 2012

⁶ Postman, 2012, p. 5

photographs and their archiving have been produced and controlled through sites of authority of the collecting society—archives, museums and universities. Their interests have been privileged in the way in which photographs have been curated, displayed and published, creating specific regimes of truth to the exclusion of others.⁷

Furthermore, Web 2.0 technologies allow tribes to go on the offensive. When the Siletz Tribe of Oregon found themselves on the verge of total language loss, they brought in the National Geographic Fellows to assist them in recording over 14,000 words and phrases. They then partnered with Swarthmore College to create an online talking dictionary along with lesson plans. Swarthmore linguistics professor David Harris said “this is what I like to call the flip side of globalization. We hear a lot about how globalization exerts negative pressures on small cultures to assimilate.”⁹ Tribes now have the opportunity to implement language programs through modern digital tools that make time and place less of an impediment to teaching to their community members. And the Siletz Tribe is seeing their efforts shape change as their youth are now texting each other in Siletz.

In using technology, tribes must be open and aware of all potential areas of change their efforts can affect. And always understand the bottom line, clearly and concisely articulated by a New Mexico participant:

How does this benefit our communities?

The effects of digital projects “undo these privileging practices, and in their place, establish a set of standards that allows for multiple voices, layered context, diverse forms of metadata in the expansion of the archival record”.⁸ A perfect example for communities that aims to confront colonial systems outside their community and fight the invisibility of tribal community in our national consciousness.



⁷ Cited by Christian, 2011, p. 198

⁸ Ibid, p. 198

⁹ Banse, 2012

Recommendations: Community toolkits

Both communities expressed a need for a “toolkit” that can help them begin the process of articulating digital protocols and/policies for their tribal libraries/institutions as they begin to create digital projects. In the New Mexico group session, they began describing what the components of the toolkit would include:

Learning Together

Because of the confidence gained during the listening session, they desired learning in a cohort model. Many expressed feeling alone in the process in their communities and sought support like that gained during their listening session. The cohort models offered them a sounding board to begin to problem solve issues from colleagues in tribal communities.

Articulating Values

For most New Mexico participants, community values were clearly identified and utilized in a variety of different levels of communication about who they are and what cultural practices needed to happen to reaffirm that identity. Their challenge was to translate these values into a digital realm.

For the others in both sessions, they were looking for questions to take back to their communities to help identify and articulate their core values for translation to stakeholders, institutions and funders leading to possible solutions.

Focused Programming

Groups wanted project ideas that were focused on connecting to their youth. New Mexico participants identified youth as key advocates for the library. It also felt like it allows for the opportunity to teach them how they could begin to understand and change the perception of native people in the outside world.

They also needed help identifying project areas that are not contentious or require communities to approach digitally preserving their communities’ sacred knowledge. Topics like the history of community athletes, library buildings or museums, or weddings allow them to safely gather memory within their communities in a way that is fun while building their skills and capacity for future projects. A participant in New Mexico summed it up, “It all comes down to how people love to tell a story, you can’t go wrong if you have a good story.”

Case Studies

Participants responded strongly in favor of the inclusion of case studies that illustrated how a wide range of communities worked through and solved issues like:

- Protocol and policies surrounding knowledge and addressed how each determined what information is shared publicly and what stays internal, how to build infrastructure to uphold the protocols and clear instances of what happens after information is loaded on a digital platform
- Project management and workflow models that include sufficient time to fully build trust, establish capacity-building process and effective communication between all stakeholders
- Funding tactics, grant narrative and budget samples that show scalability and scaffolding, and language on how to uphold privacy of knowledge and information their community does not want to share
- Vendor contracts and recommendations on how best to create a strong working relationship with outside entities without diminishing the need to uphold their communities protocols around sharing information
- Assessment and evaluation models that could clearly show impact to funding agencies, their communities, and show how communities shifted gears if projects did not perform in the way that was expected
- Especially, case studies that illustrated well documented successful projects on a variety of digital platforms that gave them a gold standard to aim for

For all, finding out what other like-minded people are doing in their communities was the best approach to community-driven model.

Building Consensus and Stakeholders

Participants shared their need to raise awareness for key groups that hold the highest level of influence in their communities but may not have experience with tech and/or are unaware of issues limiting a project’s ability to be implemented: elders and tribal councils.

In New Mexico, some participants sought unique crossover points that brought elders/council together with youth. In these moments, prime opportunities to innovate were available to resolve issues like knowledge protocols and advocacy for the work within spaces like tribal libraries and museums by the audiences that mean the most to them.

Sidebar: Case Studies

We've highlighted three case studies of digital projects led by indigenous communities that model how community values have informed digital strategy.

Nitsitapiisinni—Stories and Spaces: Exploring Kainai Plants and Culture

Nitsitapiisinni: Our Way of Life is one of the first permanent galleries in Canada to be built using a fully collaborative approach. Located in the The Blackfoot Gallery, Glenbow Museum Calgary, Alberta, Canada, the exhibition was developed by a project team comprising of nine core museum staff and seventeen representatives from various Blackfoot Nations in Alberta and Montana. The collaboration revolved around the curation of Glenbow's Blackfoot collections by the Blackfoot representatives, and the technical expertise of the Glenbow staff. Crucially, the community team members were recognized to be knowledgeable within their respective communities, and had the authority to speak about esoteric matters of their culture. On one hand, the project team wanted Blackfoot visitors to experience the history of their people as told in the Blackfoot way; on the other, the gallery and its contents aimed to dispel popular stereotypes, while educate non-Blackfoot visitors of "the strength, values and dynamism of their communities." Yet, despite the many overt methods to convey the self-representation of the gallery, including direct voice-over quotations from the community team members and other strong visual cues, a follow up review of the exhibition showed that visitors still saw the museum staff to be the primary curators of the content, with the Blackfoot people as peripheral to the process.

Brown, A. (2002). *Nitsitapiisinni: Our Way of Life* The Blackfoot Gallery, Glenbow Museum Calgary, Alberta, Canada. *Museum Anthropology*, 25(2), 69–75. <https://doi.org/10.1525/mua.2002.25.2.69>

Krmpotich, C., & Anderson, D. (2005). Collaborative Exhibitions and Visitor Reactions: The Case of *Nitsitapiisinni: Our Way of Life*. *Curator: The Museum Journal*, 48(4), 377–405. <https://doi.org/10.1111/j.2151-6952.2005.tb00184.x>

SimPā

The SimPā project aimed to convey and strengthen Māori culture, tikaka (or "the Māori way of doing things"), and knowledge by initiating a process of participatory Māori digital media design using 3D game technology. The project's goals were to develop a process and toolkit for participatory game development, develop structures

for use of resultant games, as well as to develop the training of new digital storytellers. Participants were given training in the use of Adobe Premier Pro, Adobe Photoshop, Torque engine gaming software, digital video and still cameras, and data management of said equipment. However, due to prior skill levels of the participants, a computer programmer was later hired to help complete the work that required the use of the Torque software in the interest of time. While the communities quickly adopted these skill sets, rather than making games or game-like environments, the participants developed applications for their own needs, outside of the project's original scope. Subject matters extended beyond the recording of traditional stories to include even contemporary narratives. Despite the unexpected outcomes, the project team themselves adapted their original idea to fit the needs of the communities, helping the Rūnaka retell their stories to themselves.

Mann, S. (2009, July 19). Educational Innovation Award for SimPā. Retrieved April 13, 2017, from <https://computingforsustainability.com/2009/07/19/educational-innovation-award-for-simpa/>



Never Alone (Kisima Ingitchuna)

In mid 2012, the Cook Inlet Tribal Council, an Anchorage-based social service nonprofit for Native Alaskan people and their partner, New York-based entertainment and educational publisher, E-Line Media sought to break this cycle by presenting traditional Iñupiaq oral history in a contemporary format relevant to the younger generations. The result was a co-developed and co-published video game, *Never Alone*. *Never Alone* is an adaptation of "Kunuksaayuka," a traditional Iñupiaq tale of "a boy who goes a quest to save his community from an apocalyptic blizzard." Players experience the story amidst Iñupiat voice-overs (with English subtitles) and artwork resembling traditional Native Alaskan scrimshaw. Despite the contemporary medium, the game's writing echoes many of the Iñupiaq' traditional cultural values, including a person's responsibility to the tribe, spirituality, respect for nature, and cooperation. By overcoming the game's challenges, cultural insights contributed by two dozen community members from multiple generations,

can be accessed as mini-documentaries. These video vignettes touch upon Iñupiaq culture, myths, and their ecologically-mindful worldview. Beyond its critical acclaim and accolades, including winning the British Academy of Film and Television Arts 2015 Best Debut, and Games For Change Game of the Year 2015, the community contributors themselves have found the experience to be rewarding in its own way. As Ronald (Aniqsuaq) Brower, Sr., one of the Iñupiat translator and narrators recounts, "The ability to be both a teacher of my culture and a student of game culture was tremendous."

Byrd, C. (2014, December 29). In "Never Alone" Native Alaskans explore the future of oral tradition. Retrieved August 27, 2017, from <https://www.washingtonpost.com/news/comic-riffs/wp/2014/12/29/never-alone-review-native-alaskans-explore-the-future-of-oral-tradition/>

"Iñupiaq Cultural Values." (n.d.) Retrieved from <http://ankn.uaf.edu/ANCR/Values/Inupiaq.html>

Peckham, M. (2014, November 21). *Never Alone* Is a Harrowing Journey Into the Folklore of Alaska Natives. Retrieved August 27, 2017, from <https://www.wired.com/2014/11/never-alone-review/>

"Our Team." (n.d.). Retrieved August 27, 2017, from <http://neveralonegame.com/our-team/>



Sidebar: Survey Highlights

Via Bergis Jules, UC Riverside

In follow-up interviews conducted with six tribal community-based archives partners, it was clear that digital projects around community history and access to knowledge for the local community were important tasks tribal archives wanted to address. Some of the proposed projects discussed during our interviews with tribal library and archives partners included: digitization of collections, digital oral history processing, digital storytelling, outreach to local communities and local tribal libraries, indigenous language preservation through youth instruction, community sharing of creation stories, and college preparation through technology access. These projects demonstrated not only a deep understanding of the communities the community archivists sought to serve, but also that tribal community archive projects could be more than merely preserving historical materials. The proposed projects demonstrated that tribal community archives clearly see access to and better knowledge of their history by a broader swath of their community, could have benefits beyond historical literacy, such as better educational opportunities.

The interviews also revealed that tribal archives practitioners have been thinking about these issues for quite some time and have been iterating on several ideas to try and address them, though, throughout the interviews it was consistently brought up how barriers to resources, local community politics, cultural protocols, geography, and access to professional knowledge have impeded full development of these projects. While these barriers were common across all interviewees, it seemed adherence to community values to ensure the success of projects was probably the most important takeaway. The tribal archives practitioners we interviewed were also deeply connected to their local community beyond the library and archives, which was evidenced by the thoughtfulness of the digital projects they wanted to accomplish. This local focus on community benefits is an important characteristic of community-based archives in general.¹⁰ It is vital because the values and cultural protocols of tribal communities have to be incorporated into the projects if they are to be successful. This is

important even when these same values and protocols act as barriers to seeing projects fully develop in a timely fashion. For example, if all major decisions about the community archive have to be made by the tribal council, the time it takes for answers can affect how projects develop; but when those projects eventually do develop, they have a higher chance at success because they have full community support and community ownership. And if the projects fail or never get realized, then those too are community decisions that everyone shares responsibility for. These sentiments came across as extremely important to the tribal community archives partners. In this way, one can see that what is important to the community is not necessarily format or content of the project, whether it be digital or about local history, but instead what are its benefits to the whole community.

A specific example where community values and tradition could affect a proposed digital storytelling project was an attempt by a tribal member to design a project around digitally retelling the origin stories of the community. This is a project that is directly in conflict with community protocols that make the practice of origin stories a strictly oral tradition. The interviewees did not see these tensions as things that could derail a project but instead a necessary part of engaging the community in the process of making the archive.

The reasons for developing the digital projects were similar in all of the interviews. There was a general desire to educate the community and especially the youth. As one interviewee stated: "Preserving the language, culture, and history of our community is very important. Knowledge of the native language is not strong so we are trying to strengthen the language skills within the youth population. We want more of our services to be in our native language and we want to be able to record programs to be able to play back to our young audiences as teaching tools." While interviewees were passionate about preserving their local history, they also wanted to take their work beyond preservation of content and focus on how the content can be used by the community.¹¹ As another interviewee mentioned, "we want to be the first place people come to learn about our history."

¹⁰ Christopher Harter, Michelle Caswell, Bergis Jules, "Diversifying the Digital Historical Record: Integrating Community Archives in National Strategies for Access to Digital Cultural Heritage," D-Lib Magazine, Volume 23, Number 5/6, May/June 2017.

¹¹ Caswell, Michelle, Alda Allina Migoni, Noah Geraci, and Marika Cifor, "To Be Able to Imagine Otherwise": Community Archives and the Importance of Representation." Archives and Records 2016 (special issue on public history): 1-20.

Epilogue: Exploring Monetary Value of Cultural Exchange

Hali Dardar

A continuous echo through this research is that community input in cultural projects is often unpaid work.

Institutions large and small often expect communities with collective cultural practices to share these for little or no reimbursement. The habit is possible in communities that have not defined a monetary value to their cultural output. An often cited barrier to community-based cultural archive success is money, labor, and time. I would append this by stating a barrier to success is its classification as unpaid work.

Unpaid work is any productive activity outside the official labor market. An activity is considered unpaid work if there is another entity that could be paid to do the same job. In this respect, sharing cultural stories with archivists and the community is unpaid work. If money is the only form or transferable value, and we ask others to take on work that has no transferable value, we are asking people to receive internal value for the work, or simply not be valued.

Beyond the short-term issue of devaluing output, being unpaid also creates long-term impact in communities as it devalues input. If a service is not marketed then its producer cannot be considered part of the labor force. If producers of unpaid work are not considered part of the labor force, their opinions are economically irrelevant. This could have a deep impact on the formation of local policy and government.

If in the future we aim to assist supporting cultural input as valuable, making communities visible by paying the producers for their cultural output is a crucial step. The shift could be done in the following three steps:

1. Make the worker and the nature of the work visible.
2. Quantify and track the value of the work's output
3. Monetize this output value

The first step is to declare the nature of the work. Some tribes have defined this. The Hopi, Lakota, and Nine Tribes of Mataatua have released declarations of rights which address intellectual property rights.

The next step is to quantify and track output. Quantifying cultural output would allow previously unseen work to be counted and measured. This measured output can eventually be factored into regional gross domestic product. One idea would be to develop a digital tracking system that allows individuals to maintain accounts and track intellectual property rights. Creating digital artifacts from intangibles may assist in tracking and quantifying output. This would allow previously intangible cultural resources to be tracked and quantified, as physical collections.

The last step is to monetize this output. A possible prototype would be to monetize unpaid labor through cryptocurrency. Blockchain technology, a shared universal ledger that can track changes and contributions, presents a way for individuals to track and keep provenance on their intellectual contributions. Cryptocurrency also holds a unique physical property that could be developed into physical artifacts in cultural heritage preservation.

Addressing issues of unpaid work utilizing these data storage and management systems may be transferable into other fields of unpaid work including environmental concerns, gender equality, civic engagement, and the open source internet infrastructure. We hope this issue is discussed in future conversations of the efficacy and value of community-based archives.



Acknowledgements

Unfortunately, it's not often that research about tribal libraries is led by tribal members. On the part of Shift and Historypin, we'd like to thank Lead Researcher Jennifer Himmelreich for pushing us to change the direction of our research to better address the needs of the communities we've espoused to serve by this work. Her expert leadership has helped guide a team of researchers in New Mexico and California and helped us to zoom in on some of the key questions relevant for tribal libraries today.

Of course, none of this would be possible without the participating tribal libraries, tribal institutions, and individual tribal members who took part in the workshops, meetings, and deep dive research. We mentioned in the research that some participants requested to remain anonymous, so to respect those wishes we've decided not to list any of the participants in the report, unless drawn from previously published work, such as those in the case studies. We are extremely grateful for the incredible work that these librarians, support staff, and volunteers do on a day to day basis. Working closely with them for several years, we've gotten to get a glimpse into just how much they do with such limited resources, and much of this work is motivated

by the importance of increasing the resources available to these cultural institutions and community hubs.

We'd like to thank the many individuals and research teams who contributed to this project. They include: literature review by John F. Kennedy University Museum Studies team of faculty Adrienne McGraw and Barbara Filion with graduate student, Ji Hui Lim (author of the case studies); University of California, Riverside History Department with Juliette Levy and Bergis Jules, the Native American Educational Program, and the California Center for Native Nations with Director Clifford Trafzer. Faith Toledo led the New Mexico deep dive research with tribal libraries, with support from New Mexico Highlands University, the New Mexico AmeriCorps Cultural Technology program, and New Mexico Humanities Council. We had further support in New Mexico from Alana McGrattan, Tribal Libraries Program Coordinator for New Mexico State Library; Mimi Roberts, Director for Media Projects, New Mexico Department of Cultural Affairs; and Miriam Langer, Lauren Addario, and Lucia Duncan of New Mexico Highlands University.

Jon Voss of Historypin served as Project Director, with support from Kerri Young on planning, research and human centered design implementation amongst the primary researchers. Hali Dardar provided further editorial review. We'd also like to thank Sharon Leon who served as an outside advisor.

Finally, we'd like to thank the National Digital Platform team at the Institute of Museum and Library Services for their support throughout, and for the volunteer readers who made this possible and improved the project with their comments during the review process.

About the Lead Researcher

Jennifer Himmelreich (Diné) draws on her professional experiences with tribal museums, cultural heritage institutions, and mainstream oral history and mapping projects to create community translators who will control the conversations necessary to inhabit cultural heritage spaces on our terms. Her goal of connecting source communities with their collections, and her research in technology and access in indigenous communities has led to advisory and consultant positions with the Indian Arts Research Center at the School for Advanced Research, Storycorps, and most recently, Historypin. She currently works with the Peabody Essex Museum's Native American Fellowship program in Salem, Massachusetts.

