Issue 106 | October 7, 2021

Residential School Records and Data Governance



By Ushnish Sengupta

INDIGENOUS COMMUNITIES IN CANADA maintained an important truth about Residential Schools: many children never came back home. Yet, the majority of Canadians did not believe those who survived, at least not until technology such as ground-penetrating radar uncovered additional unquestionable evidence. While this is a testament to ongoing racism in Canada, there is also a point to make here about the value of information technologies.

To that end, this brief explores technologies that are already available, and that can be utilized to further reduce the burden of proof on Indigenous communities, particularly in records management.

There are four arguments made here, should this technology continue to be taken up (and it likely will). First, Residential School records management has to be informed by Calls to Action numbers 71-76 (Missing Children and Burial Information) made by the Truth and Reconciliation Commission (TRC). Second, the governance of Residential School records needs to be led by Indigenous communities or organizations (as stated in the previously mentioned Call to Action #76). Third, digitization of records lowers costs and enables contribution by a wider group of collaborators. Fourth, there is a potential for developing much needed Indigenous Technology governance frameworks through application in a long-term project, as well as a secondary benefit of enhancing Data Science, AI (Artificial Intelligence), and Information Science skills that already exist within Indigenous communities through a long-term digital records management project

CALLS TO ACTION: RECORDS MANAGEMENT

The first place to start on Residential School records management is the Calls to Action made by the TRC. Not only does the TRC Calls To Action outline the nature of these records in their Final Report, but they also demonstrate the need for Indigenous leadership in this area in the specific Calls to Action, namely:

71. We call upon all chief coroners and provincial vital statistics agencies that have not provided to the Truth and Reconciliation Commission of Canada their records on the deaths of Aboriginal children in the care of Residential School authorities to make these documents available to the National Centre for Truth and Reconciliation.

72. We call upon the federal government to allocate sufficient resources to the National Centre for Truth and Reconciliation to allow it to develop and maintain the National Residential School Student Death Register established by the Truth and Reconciliation Commission of Canada.

73. We call upon the federal government to work with churches, Aboriginal communities, and former Residential School students to establish and maintain an online registry of Residential School cemeteries, including, where possible, plot maps showing the location of deceased Residential School children (Truth and Reconciliation Commission, 2015).

While these Calls are seemingly obvious, there are several short-term challenges in fulfilling them.

First, the institutions that hold the majority of records, the Government of Canada and the Catholic Church in Canada, have not released all their records. Due to significant pressure, I believe it is not a question of if, but when the records will be released.

The ongoing reluctance is nonetheless frustrating. The second problem is that official records published in many cases are incomplete and have recorded fewer cases of death and violence compared to the actual experiences (as well as lack documentation of deaths and the names of those deceased). In these cases, community testimony can offer a substitute, but we have to acknowledge that some records are simply incorrect. The third issue is that many records on Residential Schools will only exist on paper, and this is where existing technology can be helpful: digitizing records. But the issues of data governance must be addressed first.

LEADERSHIP BY INDIGENOUS COMMUNITIES

Information scientists, Data Scientists, and AI scientists can provide their skills in the retrieval and analysis of Residential School records, but the effort has to be governed by Indigenous communities, institutions, or organizations.

There are a number of existing examples that demonstrate this type of leadership (Sabeti et al., 2021). A helpful starting point in this work is establishing Ownership Control Access Possession (OCAP) principles — and following them — for any data-related activities (First Nations Information and Governance Centre, 2021).

While the Indigenous organizations that work with big data are few, there are increasingly more of them. This is a trend that will only continue. Under the management and direction of Indigenous community-led governance structures, Data and Information Scientists, librarians, historians, and digital humanists can help determine where the records are, what format they are in, and how to access them. The digitization of records can enable effective contributions by these professions and other stakeholders.

DIGITIZATION OF RECORDS

A few projects are already underway involving digitization of Residential School records, including one led by the National Centre for Truth and Reconciliation (Wong, 2021). The short-term obstacles to the digitization of Residential School records are not technological or even economic; they are political and cultural obstacles (Gollom, 2021). Digitization of records is an important step that requires a relatively small investment of time and effort initially but pays off over time through multiple benefits, including removing the gatekeeping of governments and churches.

Once in a digitized format, the content of files can be verified by Indigenous community members anywhere, reducing effort and travel costs to current physical record locations.

For handwritten records, once a document has been digitized — i.e. saved in a machine-readable format — there are solutions such as Optical Character Recognition (OCR) offered by technology vendors that will recognize many different types of text, including handwriting (Microsoft, 2021). Technologies such as OCR and translation of content into other languages will be essential in tackling the initial task of digitizing records.

Once the records are digitized and converted to a machine-readable file, they could be made further accessible to Indigenous community members, including Elders, by translating the content. Another possible application of effort and cost-reducing technology is the use of Artificial Intelligence (AI) for speech-to-text recognition. Many Residential School histories are oral, and where appropriate, AI can be used to perform speech-to-text recognition, minimizing the costs of transcription. Many Canadians already use AI-based voice assistants on their phone or at home (Siri, Alexa, Google Home) and the technology is sufficiently advanced to provide an accurate record of a person's verbal story. Once an oral history is digitized, it can again be converted to a machine-readable file that can be searched for keywords such as names or places to match existing complete and incomplete Residential School records. The use of residential School records, written and oral, must be administered in accordance with the OCAP principles previously listed. In some cases, community members and family members may place privacy restrictions on certain records, and these wishes need to be respected by implementing the appropriate administrative mechanisms based on OCAP. Additionally, when records are digitized and the data is structured for searchability, data scientists can use their data linking techniques to match records from different sources of partially complete records to develop a complete set of Residential School records within allowed administrative frameworks.

The burden of proof on Residential Schools records often falls on Indigenous communities, and the effort required to retrieve and analyze records to determine the full extent of the truth is often costly and labour intensive.

Just as the technology of ground-penetrating radar has made the identification of physical evidence less costly, similarly a number of information technologies such as OCR and AI can make the retrieval and analysis of information records less costly, reducing the total burden of proof for Indigenous communities.

INDIGENOUS AI

Digitizing and analyzing Residential School records provides a long-term project opportunity for applying Indigenous self-determination frameworks to meet the needs in the growing area of Technology Governance. Technology and the new governance space it creates are being colonized by dominant powers in similar ways that land has been historically colonized (Couldry & Mejias, 2019).

Indigenous knowledge and Indigenous community led governance approaches are critical interventions required to decolonize the current power structures in data and technology-related spaces.

As a secondary benefit, digitizing Residential School records provides a long-term project opportunity for enhancing high-demand digital skills through hands-on apprenticeship to improve existing related technology skills in Indigenous communities. Data Science, AI, and Information Science are growing fields with an incredibly high demand for employing individuals trained in these skills. A Royal Bank of Canada (2021) report concluded there are risks of decreased employment in traditional industries that are subject to automation resulting in reduced work for Indigenous workers. The same report concluded there are simultaneously possibilities of increased employment in fields that are less likely to be impacted by automation, which has additional opportunities for growth for Indigenous youth, such as digital and data-related fields.

We need to recognize that Indigenous individuals are underrepresented in technology professions across Canada (Wiebe, 2020).

This underrepresentation is a lack of diversity of thought and ideas, which correspondingly reveals that the trajectory of technology development is being shaped by an unrepresentative group of people.

Training and apprenticeship of Indigenous community members interested in particular data and records management related professions — such as AI scientist, Data Scientist, or Information Scientist — will help build on existing Indigenous community skills and knowledge and provide additional capacity to contribute to communities in new ways and through new projects. Indigenous individuals and groups supported with funded education opportunities, hands-on experience and resources, could start new technology-oriented nonprofits and even private organizations.

CONCLUSION

The barriers currently being experienced by Indigenous communities in accessing the truth, part of which is records of their families and children, are political and cultural rather than economic ones.

The Canadian government's resistance to releasing Residential School records is a political barrier; by not releasing this information, they can avoid political damage. The Churches' resistance to releasing Residential School records is a cultural barrier, an organizational culture of concealing uncomfortable truths. Misappropriated economics is often used as a false barrier in stalling requests for records by indicating it is too expensive. Appropriate investments, funding and grants in digital technology, education and training, managed and administered under Indigenous leadership, can substantially reduce the long-term and total lifetime costs of Residential School records management and analysis.

Finally, this brief was written during the year 2021, when September 30th was declared as the National Day for Truth and Reconciliation by the Government of Canada. Rather than a commemorative day, substantive actions need to be taken, supported by substantial investments to address the TRC's Calls To Action, including the calls specifically on records. This brief is yet another voice among many calling on the Government of Canada and institutions, including Churches who have been resistant to releasing records, to uphold their promises to implement the TRC's Calls To Action, and support Indigenous community-led initiatives in the necessary work to uncover the complete truth about Residential Schools.

CITATION: Sengupta, Ushnish. "Residential School Records and Data Governance" *Yellowhead Institute*, 6 October. 2021, https://yellowheadinstitute.org/2021/10/05/residential-school-records/

REFERENCES:

Assembly of First Nations (2021). AFN National Chief Archibald launches a strategic direction toward positive and evolutionary change for First Nations and all Canadians in "The Healing Path Forward: 2021 Federal Priorities for Strengthening and Rebuilding First Nations." Retrieved from: https://www.afn.ca/afn-national-chief-archibald-launches-a-strategic-direction-toward-positive-and-evolutionary-change-for-first-nations-and-all-canadians-in-the-healing-path-forward-2021-federal-priorities-fo/

Couldry, N., & Mejias, U. A. (2019). The Costs of Connection: How Data Is Colonizing Human Life and Appropriating It for Capitalism. Stanford University Press.

First Nations Information and Governance Centre (2021). The First Nations Principles of OCAP. Retrieved from: https://fnigc.ca/ocap-training/

Gollom, M. (2021). Why retrieving former residential school records has proved so difficult. CBC. Retrieved from:

https://www.cbc.ca/news/canada/residential-school-records-indigenous-1.6083493

Government of Canada (2021). Canadian Indigenous languages technology project. Retrieved from: https://nrc.canada.ca/en/research-development/research-collaboration/programs/canadian-indigenous-languages-technology-project

Microsoft (2021). What is Optical character recognition? Retrieved from: https://docs.microsoft.com/en-us/azure/cognitive-services/computer-vision/overview-ocr

RBC (2021). Building Bandwidth: Preparing Indigenous youth for a digital future. Retrieved from: https://thoughtleadership.rbc.com/building-bandwidth-preparing-indigenous-youth-for-a-digital-future/

Sabeti, S., Xavier, C., Slaunwhite, A., Meilleur, L., MacDougall, L., Vaghela, S., . . . Henry, B. (2021). Collaborative data governance to support first nations-led overdose surveillance and data analysis in British Columbia, Canada. International Journal of Indigenous Health, 16(2), 338-355. doi:http://dx.doi.org.myaccess.library. utorontoca/10.32799/ijih.v16i2.33212

Truth and Reconciliation Commission's Calls To Action (2015). Truth and Reconciliation Commission Calls To Action. Retrieved from: https://nctr.ca/records/reports/

Wiebe, J. (2020). An Indigenous future and present of work. Brookfield Institute for Innovation and Entrepreneurship. Retrieved from: https://brookfieldinstitute.ca/an-indigenous-future-and-present-of-work/

Wong, N. (2021) Digital archive to help National Centre for Truth and Reconciliation access Residential School Survivor stories. Winnipeg Sun. Retrieved from: https://winnipegsun.com/news/news/digital-archive-to-help-national-centre-for-truth-and-reconciliation-access-residential-school-survivor-stories