



Canadian Research  
Knowledge Network

Réseau canadien  
de documentation  
pour la recherche

# Digital Cultural and Heritage Collections of the Future: Enabling Innovative Access and Expanding Research

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CRKN Conference, Montreal  
November 2, 2022

[crkn-rcdr.ca](http://crkn-rcdr.ca)

# Agenda

- 1 CRKN's Cultural and Heritage Collections and Infrastructure: Where We Are and Where We Are Going
- 2 CRKN's Researcher Council: Findings to Date
- 3 Break (10:45-11:00)
- 4 Digital Cultural and Heritage Collections of the Future Facilitated Discussion - Part 1
- 5 Lunch (12:00-1:00)
- 6 Digital Cultural and Heritage Collections of the Future Facilitated Discussion - Part 2
- 7 Sustainability and Resourcing



# CRKN's Cultural and Heritage Collections and Infrastructure: Where We Are and Where We Are Going

# Speakers

**Ken Hernden**, Chair, PAC and University Archivist and Associate University Librarian, Queen's University

**Mark Jordan**, Chair, PTSC and Associate Dean of Libraries, Digital Strategy, Simon Fraser University

**Brittny Lapierre**, Application Developer, CRKN

**Natalie MacDonald**, Senior Metadata Analyst, CRKN

**Ian Milligan**, Member, PAC and Associate Vice-President, Research Oversight and Analysis and Professor of History, University of Waterloo

# Looking to the Future - Canadiana as Open Infrastructure



Creating innovative research and collaboration capacity across Canadian digital heritage collections

# Last year's member discussion



**FEE FOR  
SERVICE**

**PUBLIC  
GOOD**

**EXIT  
STRATEGY**

# Infrastructure

Custom Code



Paid Service Model



No Charge Access

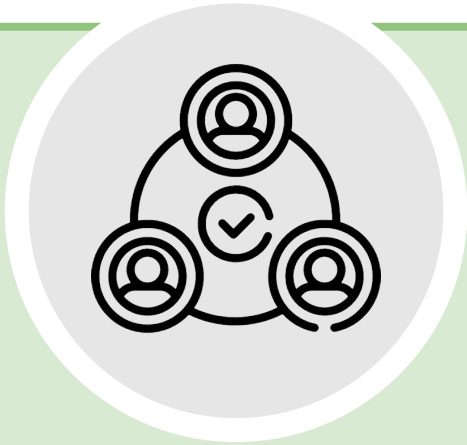


Open Scholarly Infrastructure:  
Access and preservation

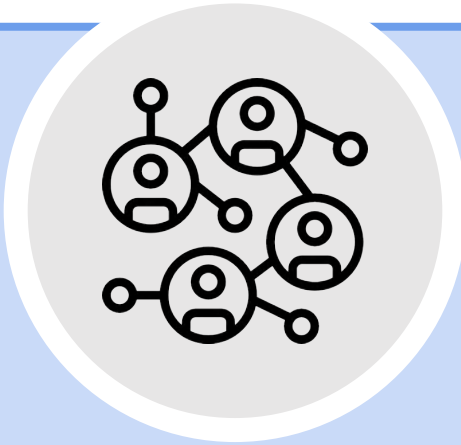


Open Knowledge

# Partnerships



Build upon existing relationships made through both the licensing and heritage programs



Collaborate with groups already in this space



Focus on Open Knowledge and partnering with organizations with similar values



# Content

Why Are  
We Here

Recognize the research potential of cultural and heritage content

What Do  
We Want  
to Do

Collaborate collectively to build sustainable open infrastructure for access and preservation of cultural and heritage content

How We Are  
Going to Do It

Become a member driven infrastructure hub for research

# Member & User-Driven Content

# Research in the Present



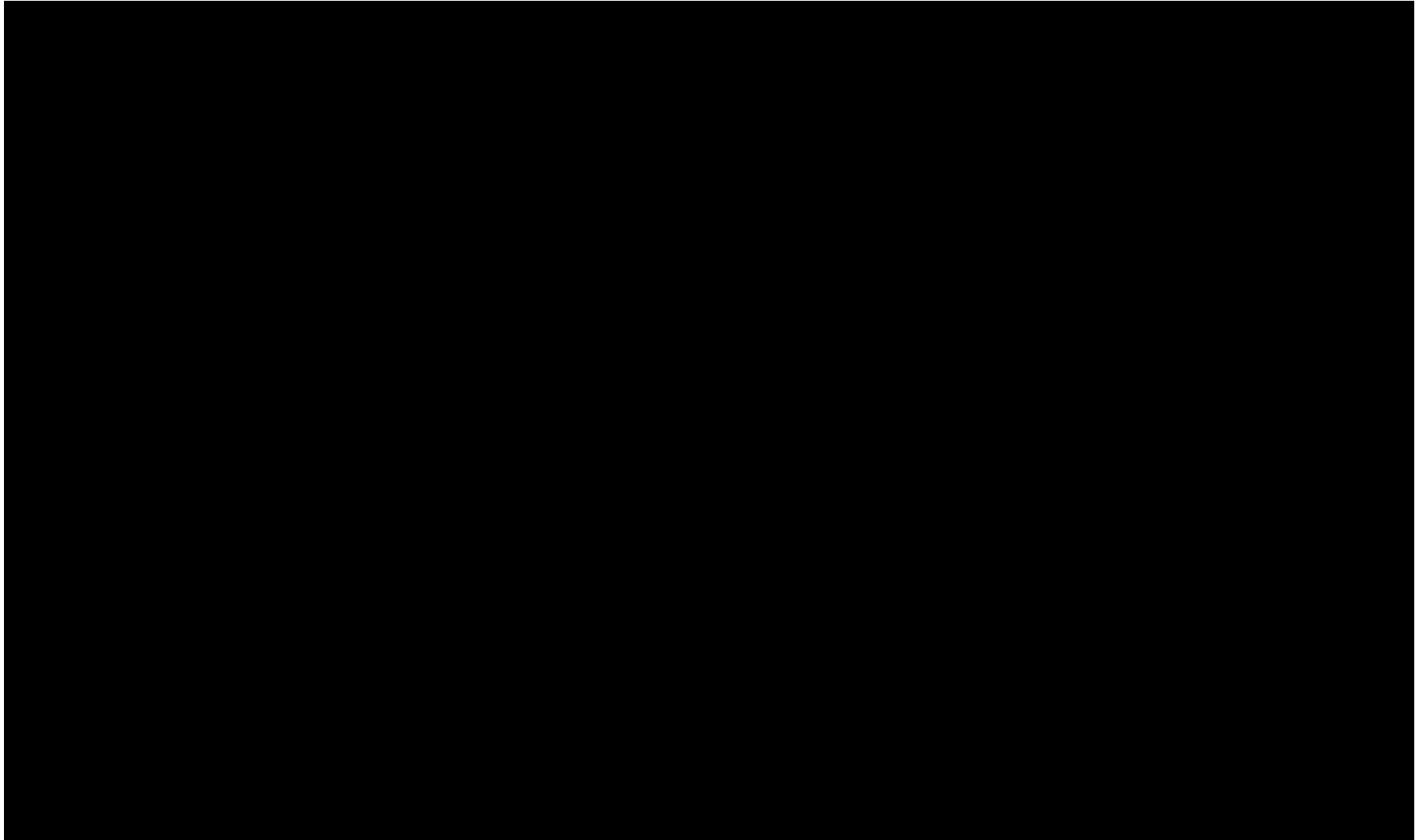
## > 90,000 monographs

- pre-1920
- Subject areas include:
  - women's history
  - indigenous history
  - immigration
- 47 different languages, including 14 Indigenous languages

## > 4,000 serials

- Early Canadian Periodicals
- Annuals
- Historical newspapers from across Canada
  - From Toronto World to Robochyi narod (The Working people)

# Research in the Present



# Expand Research Potential

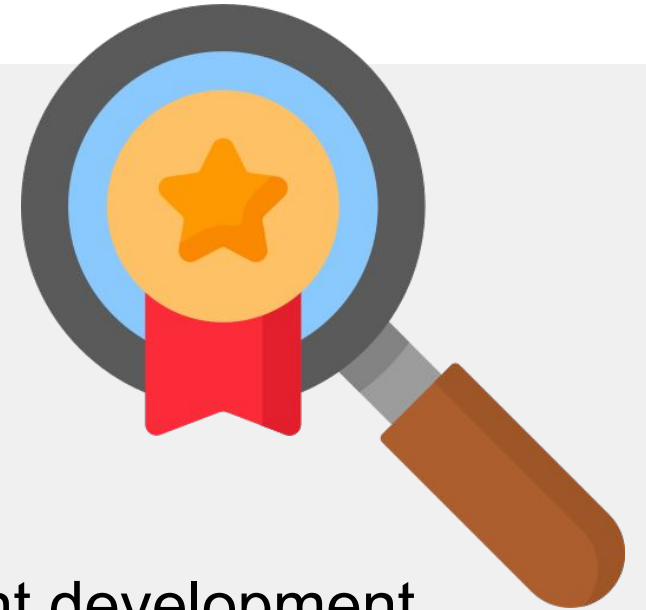
Intentionally adding content

Protecting long-term access to content

Prioritizing representation and diversity in content development

Using CRKN's negotiating power to include copyrighted material

Building upon partnerships to strengthen access to content



# Expand Research Potential

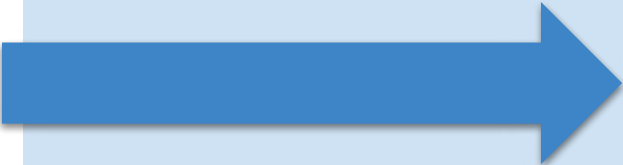
As Members, are we ready to ...



Add content from our collections to Canadiana?



Rethink the scope of Canadiana?



Be adventurous and innovative with Canadiana?

# Member & User-Driven Preservation

# CRKN's Trustworthy Digital Repository (TDR)

## Where We Are Now

- One of six existing TDR's internationally
- Only preserves Canadiana content

## Where We Will Be in the Near Future

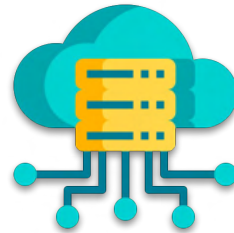
- Running Archivematica
- Preserving member content



# Open Future of the Canadiana Infrastructure



Improvements on the status quo




A preservation service for members




National preservation infrastructure

# Expand Preservation Potential

As Members, Are We Ready to ...



expand the preservation scope of the Canadiana TDR?



consider the TDR as national preservation infrastructure?



leverage CRKN's expertise and infrastructure for institutional preservation?

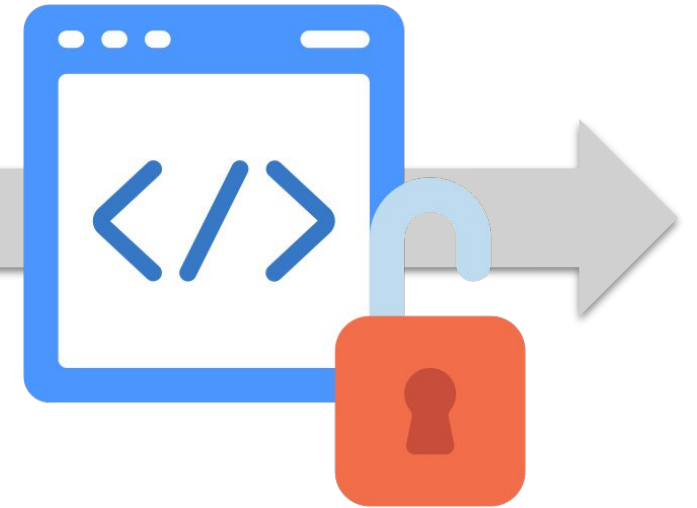
# Member & User-Driven Development

# Member & User-Driven Development




## Move to Open Development Practice

- Incorporate User Feedback
- Implement Open Standards
- Collaborate with Community



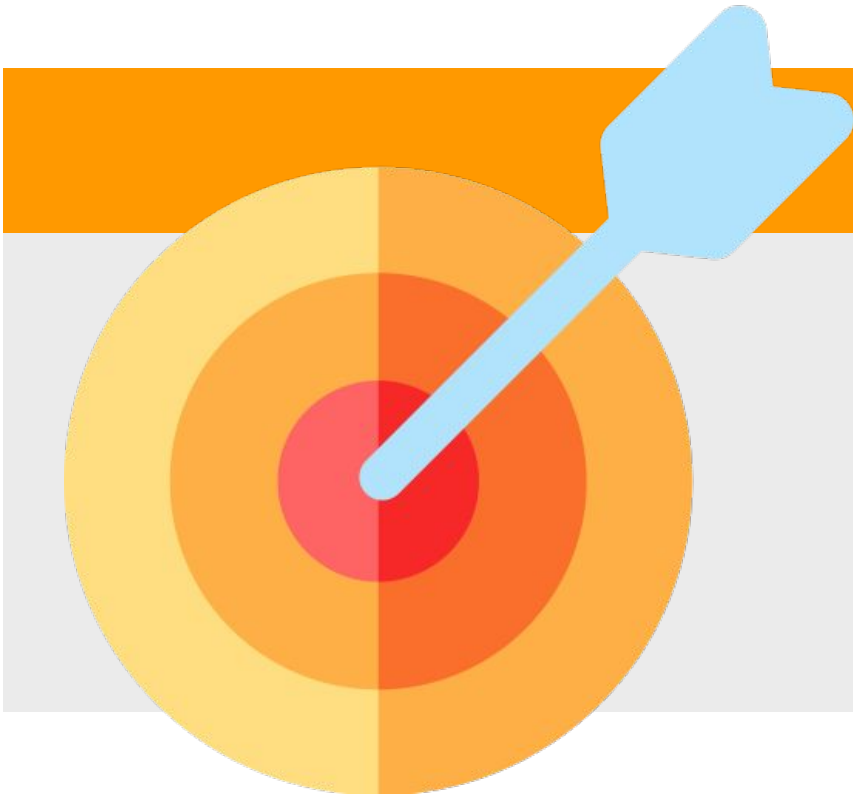
# Member & User-Driven Development



Short-Term Goals

- User Testing
- Roadmaps
- Standardizing Metadata

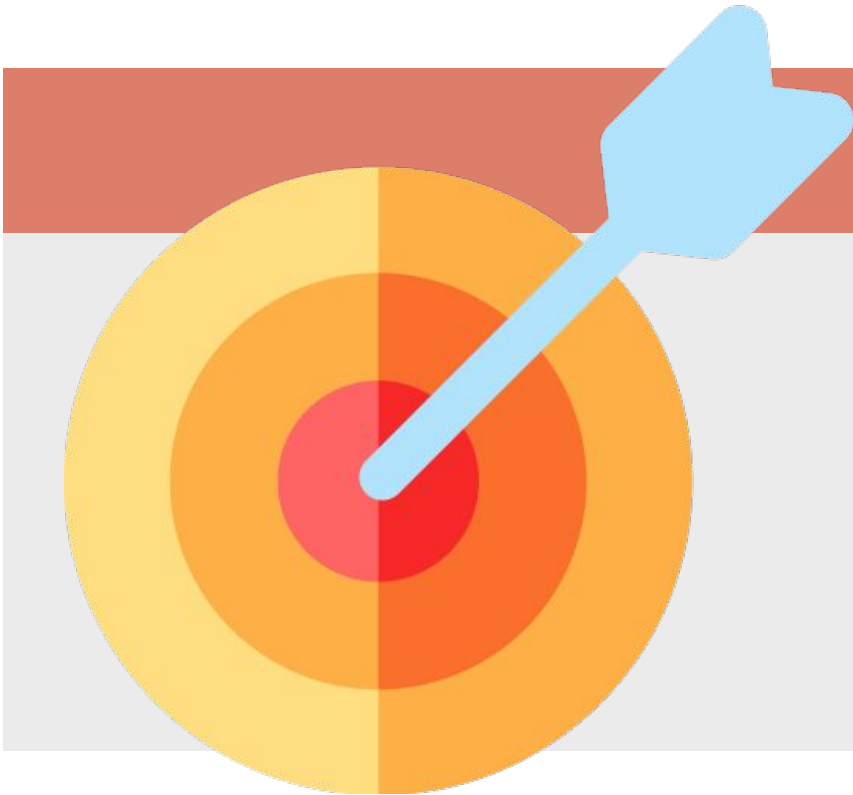
# Member & User-Driven Development



## Medium-Term Goals

- Feature Planning
- Community Engagement
- Implement standards
  - Rights Statement
  - Linked Open Data/DOIs

# Member & User-Driven Development



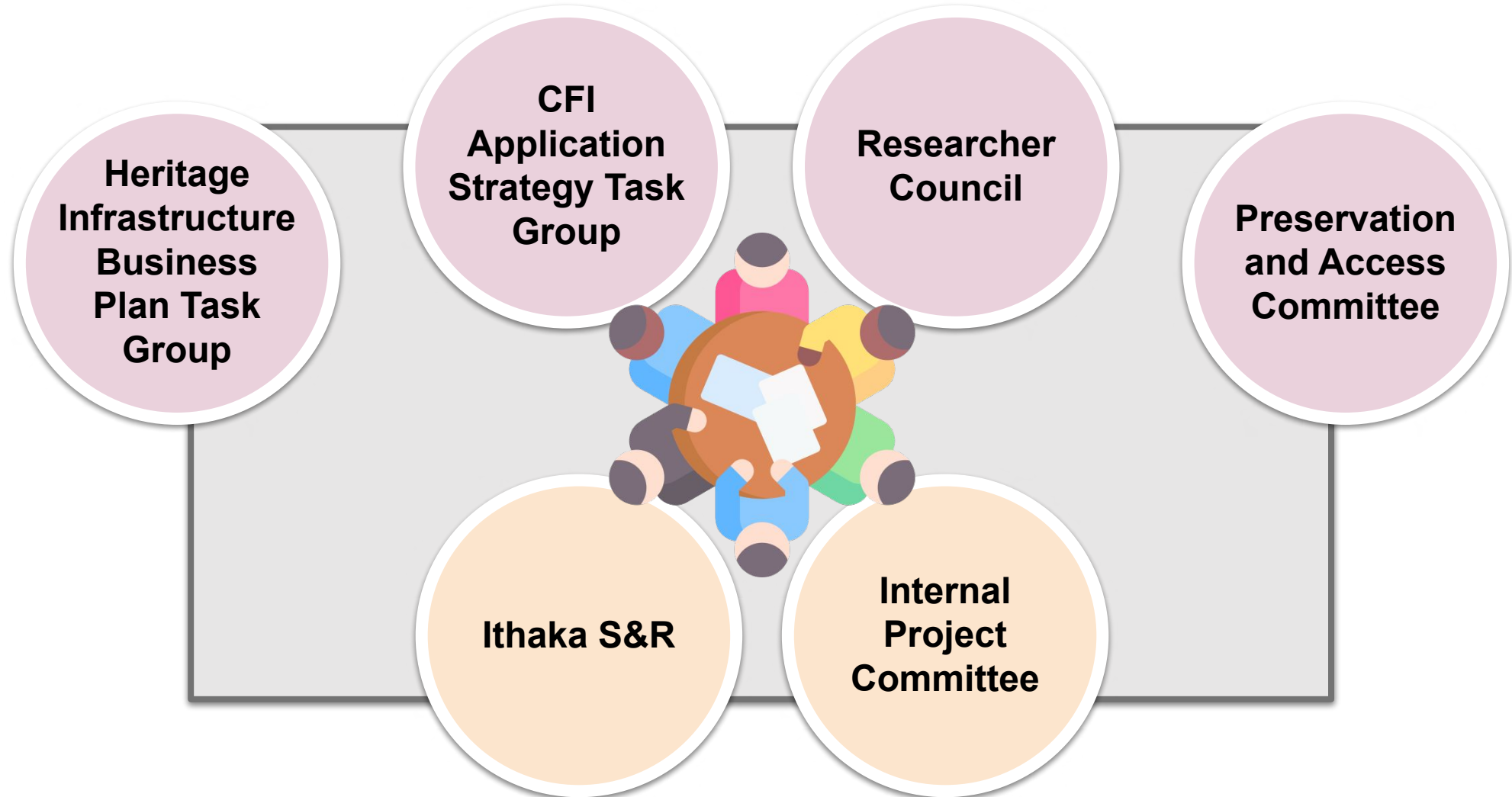
## Long-Term Goals

- Reduced technological friction
- Improved national governance
- International collaboration

# Supporting the Transformation



# Supporting the Transformation



# CRKN's Researcher Council: Findings to Date

# Speakers

**Susan Brown**, Co-Chair, Researcher Council and Professor and CRC in Collaborative Digital Scholarship, University of Guelph

**Camille Callison**, Co-Chair, Researcher Council and University Librarian, University of the Fraser Valley

**Alyssa Arbuckle**, Member, Researcher Council and Associate Director, Electronic Textual Cultures Lab, University of Victoria

**Maxime Gohier**, Membre, Conseil des chercheurs du RCDR et Professeur régulier, Université du Québec à Rimouski

**Dan Malleck**, Member, Researcher Council and Professor, Brock University

# Introduction to the CRKN Researcher Council

# CRKN Researcher Council

In July 2022, the CRKN Board of Directors launched the CRKN Researcher Council, which includes 16 multidisciplinary researchers who are providing advice and input on the Digital Cultural and Heritage Collections of the Future project.

# CRKN Researcher Council



**Camille Callison**  
*University of the Fraser Valley*



**Susan Brown**  
*University of Guelph*



**Dan Brown**  
*University of Waterloo*



**Rebecca Dickson**  
*COPPUL*



**Jada Watson**  
*University of Ottawa*



**Alyssa Arbuckle**  
*University of Victoria*



**Camie Augustus**  
*Vancouver Island University*



**Jennifer Bain**  
*Dalhousie University*



**Sabeen bin Zayyad**  
*University of Calgary*



**Colleen L. Renihan**  
*Queen's University*



**Jeremy Heil**  
*Queen's University*



**Dan Malleck**  
*Brock University*



**Kim Martin**  
*University of Guelph*



**Sheila Petty**  
*University of Regina*

**Stacy Allison-Cassin** (Dalhousie University),  
**Maxime Gohier** (Université du Québec à Rimouski), and  
**Jane Griffith** (Toronto Metropolitan University)

# CRKN Researcher Council

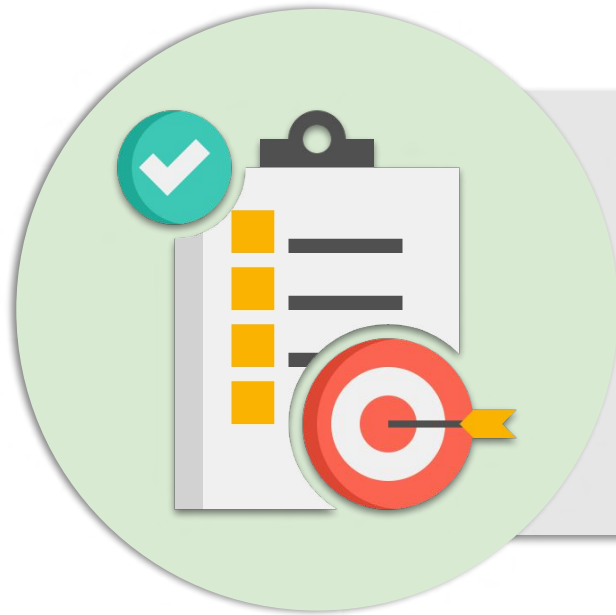


How can the content in Canadiana be best used to advance the Canadian research field?

# Project Vision



# Mission



To build a comprehensive, collective digital library of Canadian cultural heritage content that provides a respectful and representative historical narrative and enables transformative research and equitable access to knowledge.



# Vision

Accelerating Canadian research and innovation objectives at a system-wide level

Preserving Canada's heritage content for future generations

Ensuring state-of-the-art, researcher-driven access to heritage content

Integrating cultural heritage content into the research ecosystem

Building an equitable and inclusive future through understanding

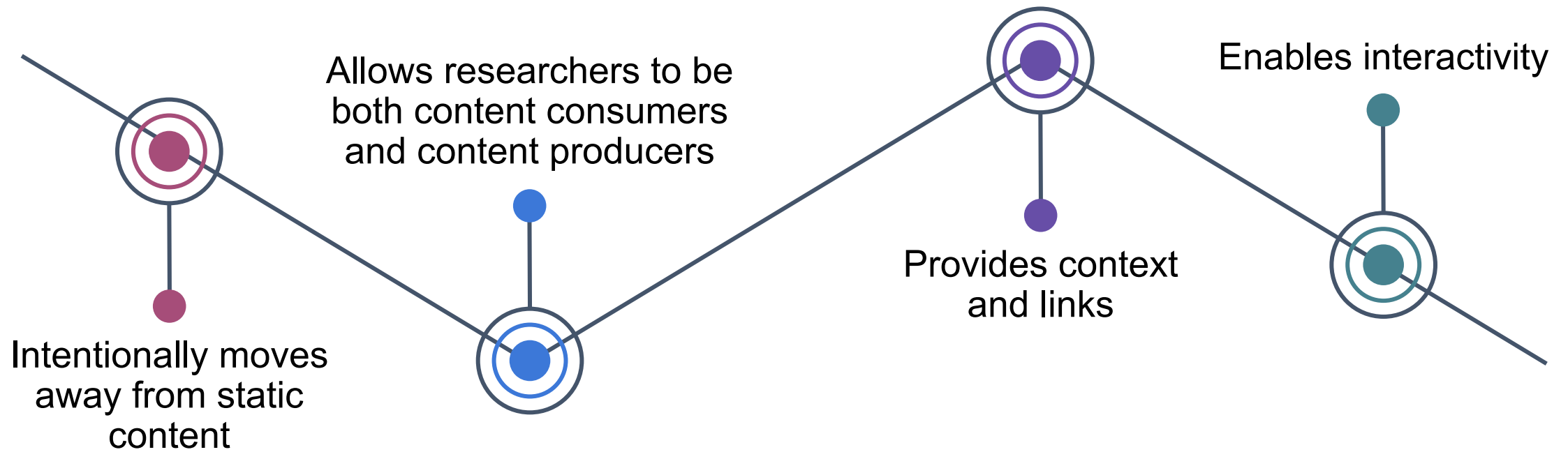
Enabling transformative research

Increasing the resiliency of the Canadian GLAM sector

# Researcher Council Findings to Date

# Exploring a Paradigm Shift

Envisioning an innovation research platform that:



# Summary of Findings



**Findability**



**Access**



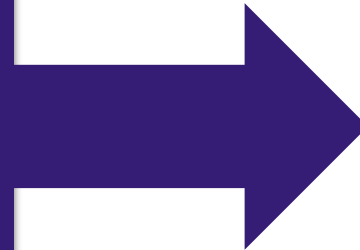
**Searchability**



**Content**



**Support services  
& documentation**



**Equity, Diversity,  
Access, and Inclusion**

**Truth and  
Reconciliation**

# Findability



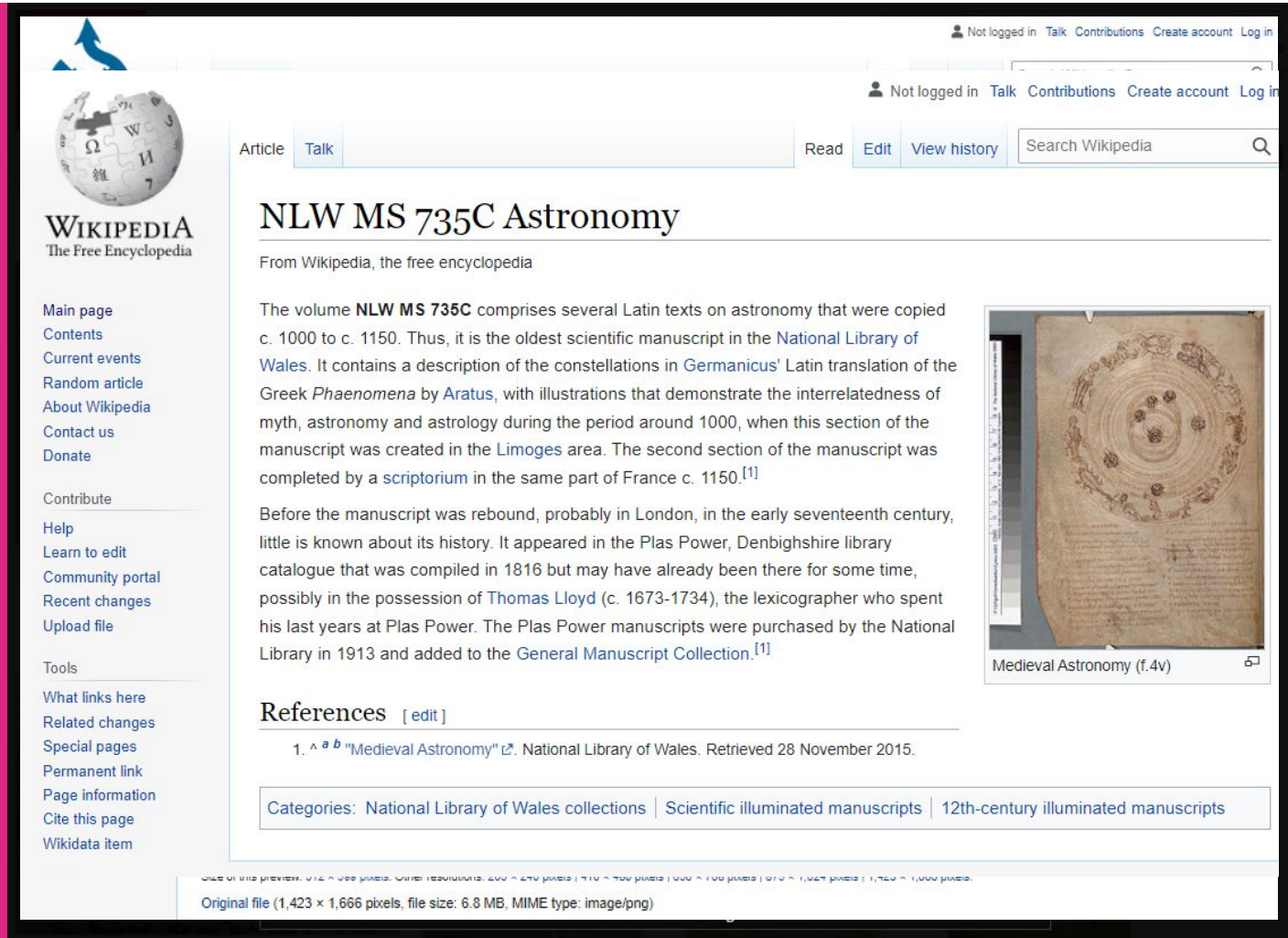
Making it easier to search for and find relevant content

- Improved search functionality and filtering
- Structured metadata to serve specialized and citizen researchers
- Capacity to replicate and automate searches via linked open data
- Interoperability between different databases and collections

# Findability Example

## Dwynwen

An example of how linked open data supports findability, Dwynwen is a search and display engine for visual artworks of the National Library of Wales.



The screenshot shows a Wikipedia article titled "NLW MS 735C Astronomy". The article text describes the manuscript's contents, including a description of constellations in Germanicus' Latin translation of the Greek *Phaenomena* by Aratus, and mentions its location in the National Library of Wales. A reference is provided: "Medieval Astronomy" from the National Library of Wales, retrieved on 28 November 2015. The article also includes a category: "National Library of Wales collections | Scientific illuminated manuscripts | 12th-century illuminated manuscripts".

Original file (1,423 × 1,666 pixels, file size: 6.8 MB, MIME type: image/png)

# Access



Breaking down barriers to making content widely accessible

- Enhancing access to community materials for Indigenous peoples
- Prioritizing access for residential school survivors
- Welcoming diverse groups of researchers
- Ensuring inclusive design principles
- Multilingual infrastructure
- API access to metadata and content



# Access Example

## Plateau Peoples' Web Portal

Using Mukurtu CMS as the platform for the Portal allows tribes to determine culturally appropriate access to their cultural heritage and knowledge.

# Searchability



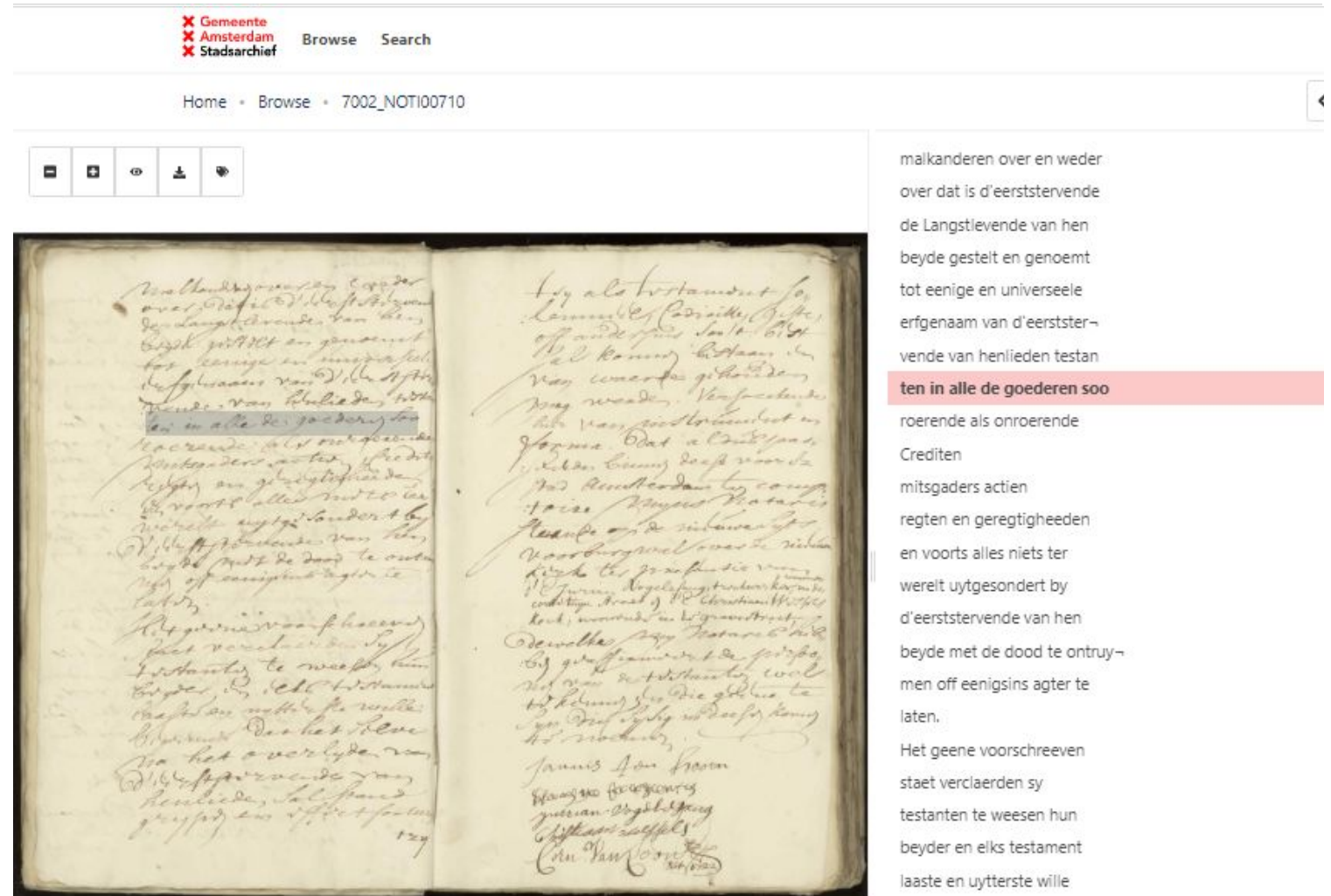
## Improving the search experience

- Improving the functionality of searching within an item
- Allowing users to understand the quality of the text recognition of each item
- Maintaining the ability to flip from page to page

# Searchability Example

## Amsterdam City Archives

Using Transkribus Handwritten Text Recognition (HTR), allows for searching within hundreds of thousands of documents inside the Amsterdam Notarial Archives.



The screenshot displays the Amsterdam City Archives website interface. At the top, there are navigation links for 'Gemeente Amsterdam Stadsarchief', 'Browse', and 'Search'. Below this, the breadcrumb trail reads 'Home • Browse • 7002\_NOTI00710'. A toolbar with icons for zooming and downloading is visible above the document image. The document itself is a handwritten notarial record, with a search overlay highlighting the phrase 'ten in alle de goederen soo'. To the right of the document, a list of search results is shown, including 'malkanderen over en weder over dat is d'eerststervende de Langstlevende van hen beyde gestelt en genoemd tot eenige en universeele erfgenaam van d'eerststervende van henlieden testanten in alle de goederen soo roerende als onroerende Crediten mitsgaders actien regten en gerechtigheeden en voorts alles niets ter werelt uytgesondert by d'eerststervende van hen beyde met de dood te ontruymen off eenigins agter te laten. Het geene voorschreeven staet verclaerden sy testanten te weesen hun beyder en elks testament laaste en uytterste wille'.

# Content



Making important content and its contextual information available

- Inclusion of robust contextual information with each item
- Consistent access to government records
- Researcher-produced digitized content
- Preserving fragile and at-risk material
- Audiovisual content
- Content relating to land claims while also respecting Indigenous data sovereignty
- Completeness of content

# Content Example

## Early Caribbean Digital Archive

Plantation slavery and settler colonialism are defining aspects of the early Caribbean. The ECDA works to decolonize the archive using digital tools to remix and recontextualize the archive.

### *The Interesting Narrative of Olaudah Equiano (1793): A Scholarly Introduction*

By: Max Dodge-Harkins

#### Works Cited

##### Carretta, Vincent. *Supplementary Bibliography*

- Carretta, Vincent. Aravamudan, Srinivas. "Equiano Lite." *Eighteenth-Century Studies* 34, no. 4 (2001): 615-619.
- Carretta, Vincent. African." *Slavery*. Carey, Brycchan. "Olaudah Equiano: An Illustrated Biography." *Brycchan Carey*. Accessed June 15, 2016. <http://www.brycchancarey.com/equiano/index.htm>.
- Fisch, Audrey. *The Press*, 2007. Chiles, Katy. *Transformable Race: Surprising Metamorphoses in the Literature of Early America*. Oxford: Oxford University Press, 2014.
- Davidson, Cathy. Dillon, Elizabeth Maddock. "A Sea of Texts: The Atlantic World, Spatial Mapping, and Equiano's Narrative." In *Religion, Space, and the Atlantic World*, edited by John Corrigan, 22-54. Columbia, SC: University of South Carolina Press, 2017.
- Kelleter, Frank. "Lovejoy, Paul E. "Autobiography and Memory: Gustavus Vassa, alias Olaudah Equiano, the African." *Slavery and Abolition: A Journal of Slave and Post-Slave Studies* 27, no. 3 (2006): 317-47.
- Little, Kenneth. Potkay, Adam. "History, Oratory, and God in Equiano's Interesting Narrative." *Eighteenth-Century Studies* 34, no. 4 (2001): 601-614.
- Samuels, Wilfred. Sweet, James H. "Mistaken Identities? Olaudah Equiano, Domingos Álvares, and the Methodological Challenges of Studying the African Diaspora." *The American Historical Review* 114, no. 2 (2009): 279-306.

# Support Services & Documentation



## Empowering and supporting users

- Sophisticated training for large scale datamining, filtration, and analysis
- Accessible search guides and finding aids
- Clear documentation of search functionality and metadata
- Identification of resources relating to Indigenous peoples on a national level
- Open metadata models and schemas for users to add their own content

# Support Services & Documentation Example

## Indigitization Project

The Indigitization Toolkit is a collection of resources to support and guide digitization projects in Indigenous communities.



## Language Revitalization

[New Audio Recordings with Zoom Recorders](#)

Indigenous Language Apps (coming soon)

Transcription and Translation of Language Content (coming soon)

# Researcher Council Member Lightning Presentations



# Lightning Sessions

<i>Policy, medicine, and historical sources: Confronting strengths, weaknesses, opportunities, and “threats” of digital sources</i>	Dan Malleck
<i>Nouvelle-France numérique : une expérience de partenariat global dans la recherche sur le patrimoine documentaire et la gestion des données</i>	Maxime Gohier
<i>Open Social Scholarship and the INKE Partnership</i>	Alyssa Arbuckle
<i>Connecting Research to Cultural Content Online: The Linked Infrastructure for Networked Cultural Scholarship</i>	Susan Brown



# Questions For Consideration

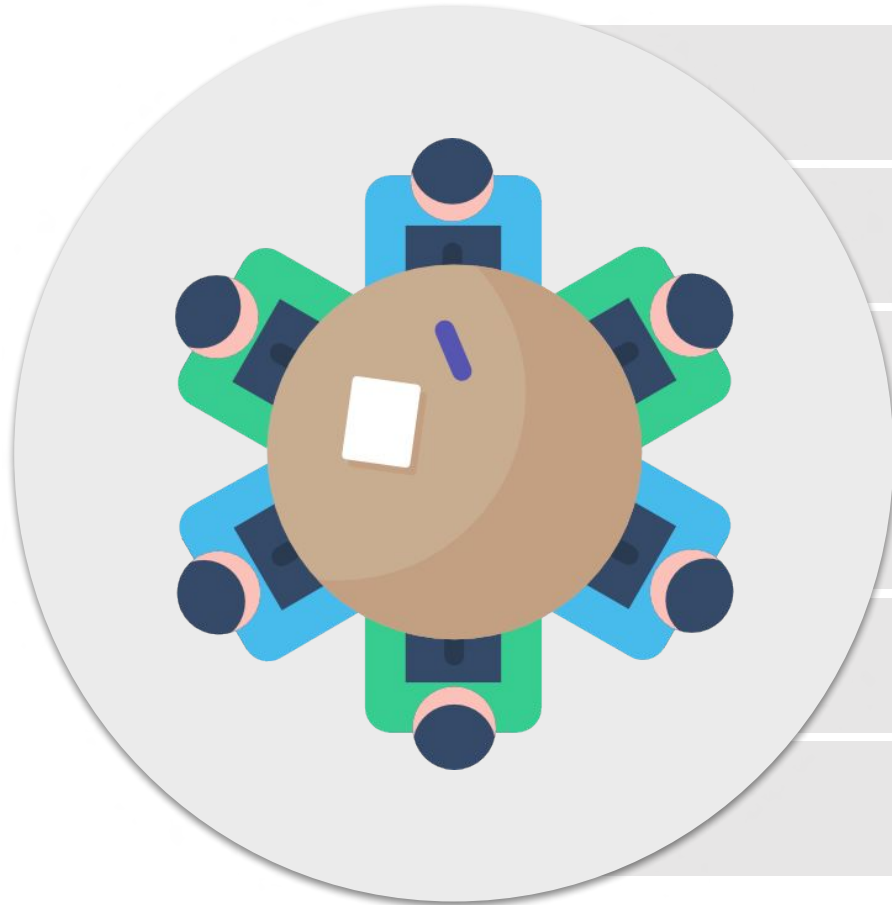
- Does this envisioned future align with your goals?
- What other projects/platforms should CRKN draw inspiration from? Are there any national examples of initiatives that have EDIA and Indigenous cultural sensitivity woven into the project from the beginning?
- What are your recommendations for building this initiative in a way that centres Truth and Reconciliation and that respects Indigenous cultural sensitivity?
- What initiatives are happening at the institutional and regional level and how would these initiatives support or enhance existing access and preservation programs/infrastructures?
- Are there other themes that should be considered/explored as part of this initiative?

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Break

# Future of CRKN's Heritage Program

# Future of CRKN's Heritage Program



Vision and scope

CRKN's role in digital heritage

Research potential

Institutional needs

Supporting the project

Short, medium, long term vision

# Future of CRKN's Heritage Program

## Path 1

Status Quo: Mainly  
Maintenance

Maintain current  
infrastructure

## Path 2

Community Open  
Infrastructure

Work with  
members to  
expand current  
infrastructure

## Path 3

Transformational  
Open Research  
Infrastructure

Partner with  
members and  
researchers on  
research,  
innovation

# Future of CRKN's Heritage Program

Requires significant funding and resourcing (e.g. CFI Innovation Fund)

- Opportunities to think big with regards to how we provide access to and preservation of heritage and cultural content
- Inspired by examples of transformation & leading by example

## **Path 3**

Transformational  
Open Research  
Infrastructure

Partner with  
members and  
researchers on  
research,  
innovation



# Digital Cultural and Heritage Collections of the Future: Enabling Innovative Access and Expanding Research - Part 1





# Integrating Innovation & Defining Value

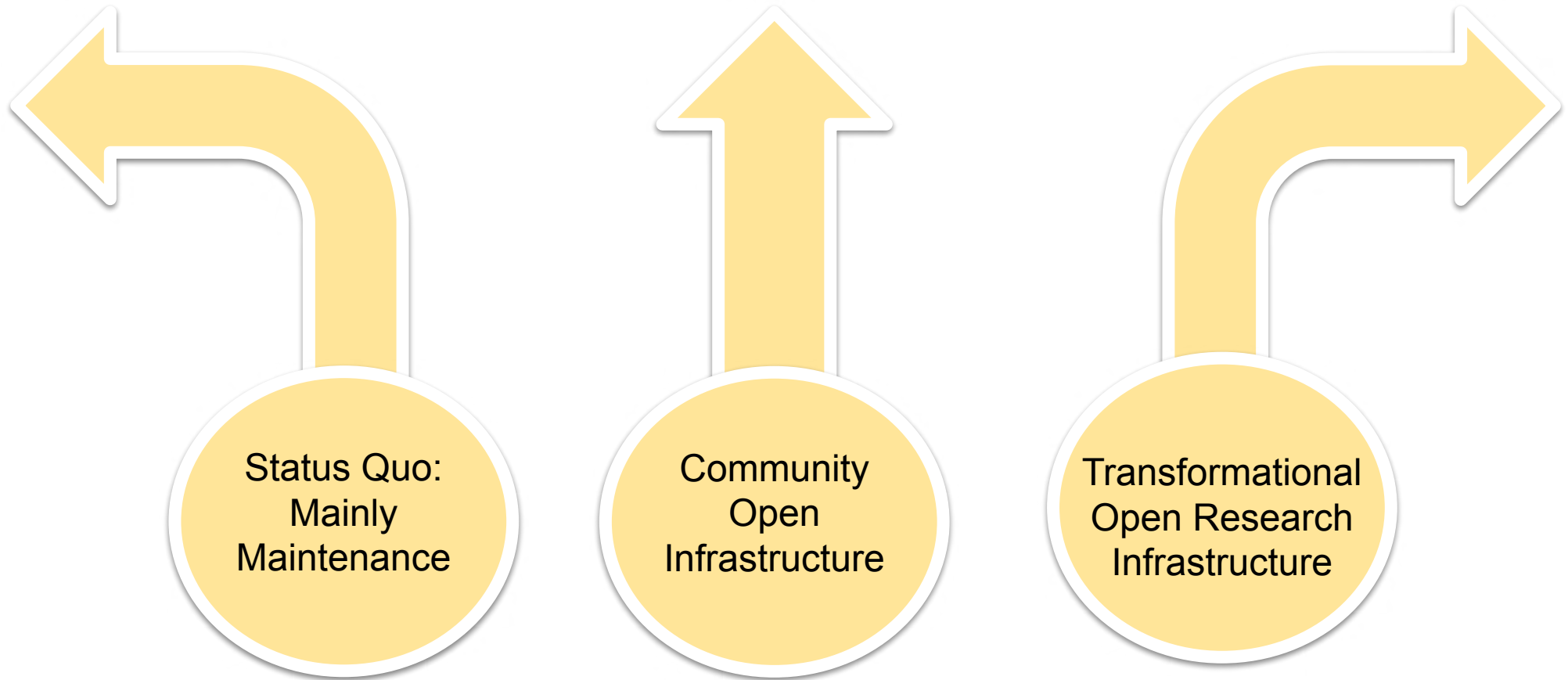
What is the distinct value that CRKN currently delivers to members through Canadiana? How might that value evolve in 5 years?

What kind of innovation in national cultural and heritage infrastructure is needed to enable transformative research and what is CRKN's role in enabling it?

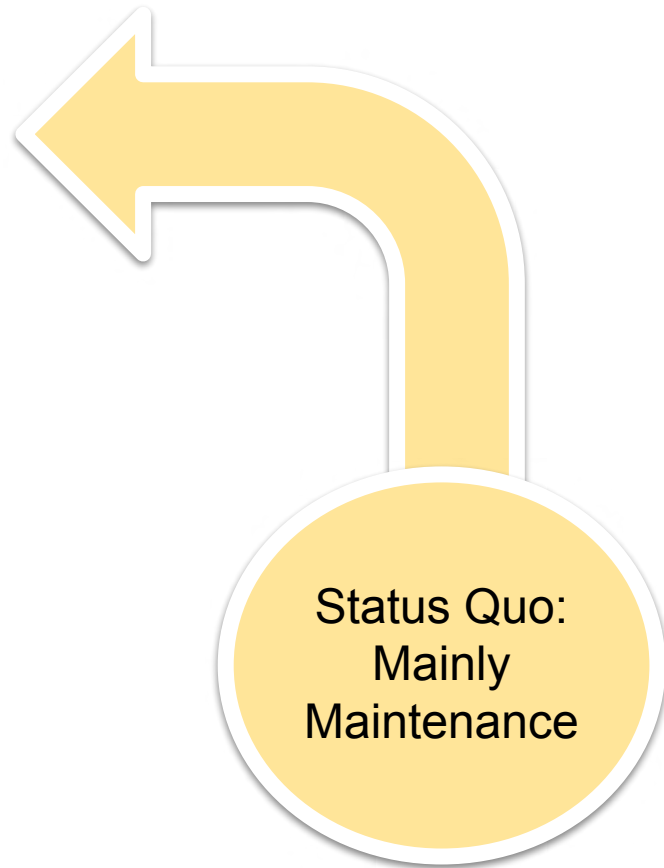
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# Digital Cultural and Heritage Collections of the Future: Enabling Innovative Access and Expanding Research - Part 2

# Today: Three Paths towards the Future



# Status Quo: Mainly Maintenance



Continue supporting Canadiana  
in its current state

- basic development to maintain platform
- limited capacity for new content
- maintain member commitment to support Canadiana

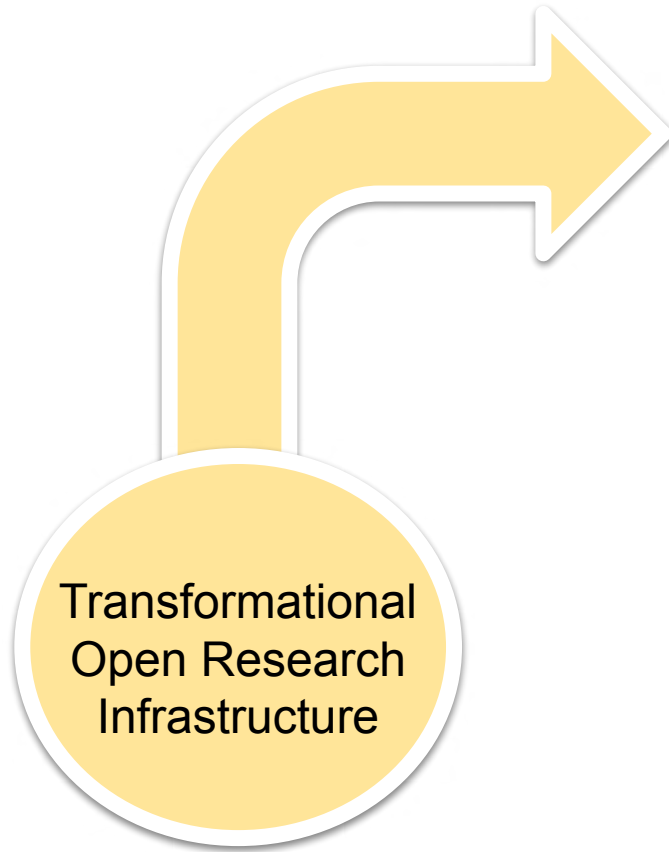
# Community Open Infrastructure

Canadiana becomes  
community-driven infrastructure

- intentional collection development with member content
- new content formats
- significant technological development
- extend member commitment to support Canadiana
- diversified portfolio for funding sustainability



# Transformational Open Research Infrastructure



Enhanced version of the Community Open Infrastructure approach for CFI IF

- mobilize content as research data
- leverage member connections
- extend and increase member commitment
- resource additional capacity in CRKN team
- diversified funding portfolio plus CFI IF

# What are we collectively building?

What are some of the ways that your institution could support the development *and* resourcing of this future? E.g. in-kind support, expertise, connections to researchers from your University, technology, co-development of tools, content, CFI envelope.

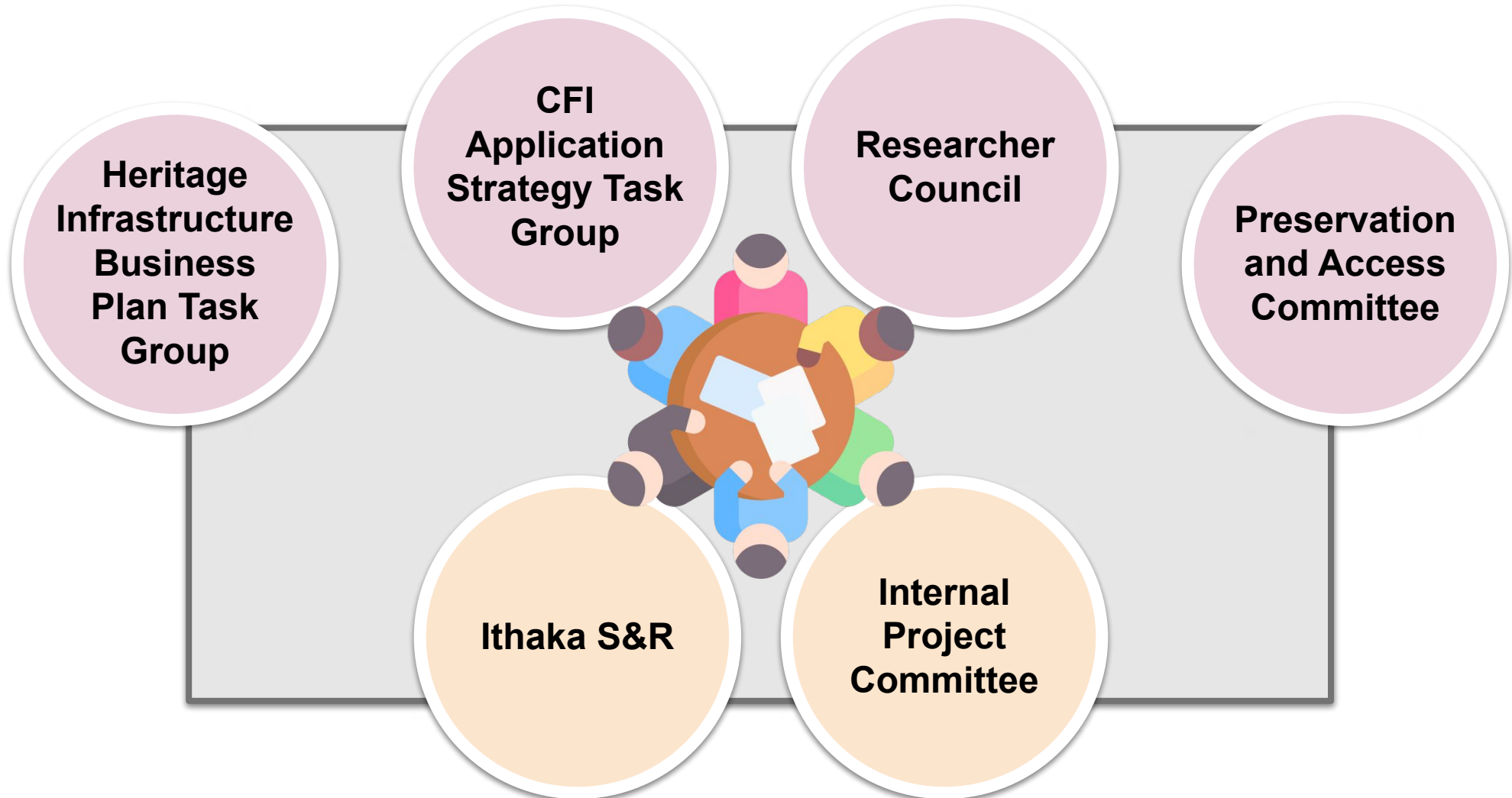
Where should we, as a member community, devote our collective energy and resources?

- Towards maintaining the status quo?
- Towards transitioning Canadiana to open scholarly infrastructure?
- Towards partnering with members and researchers on research and innovation through the creation of transformational open research infrastructure?

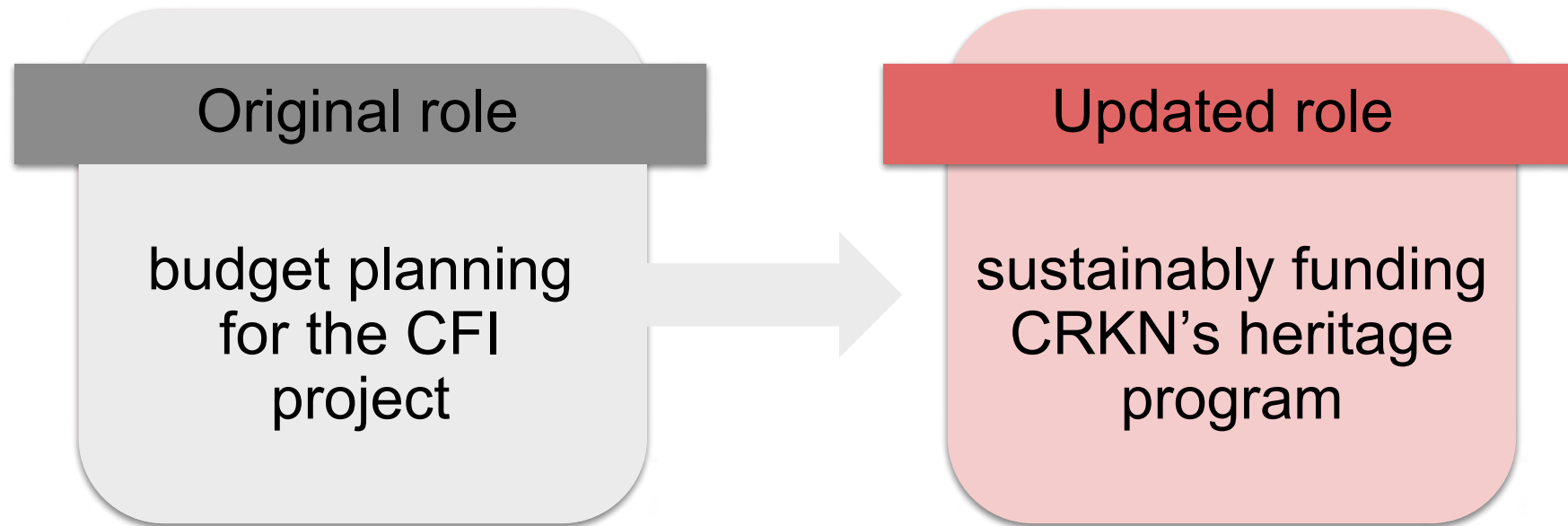
# Sustainability and Resourcing



# Future of Canadiana Project Governance



# Heritage Infrastructure Business Planning Task Group



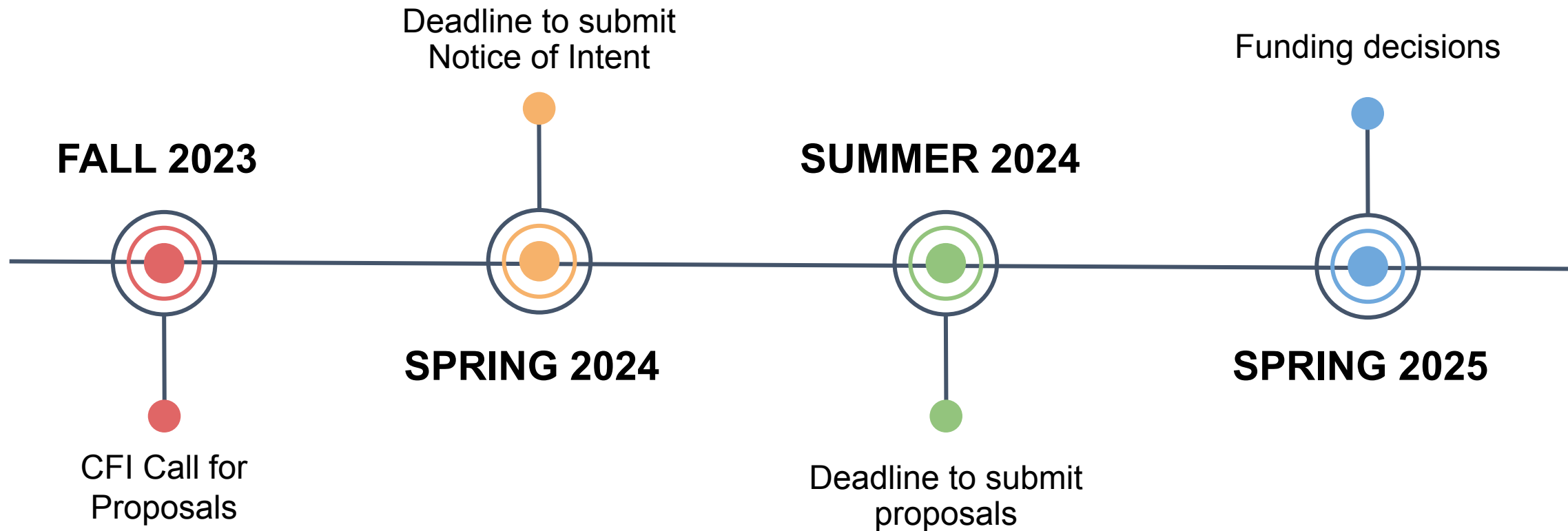
# Prospective Administrative Host Institution



uOttawa

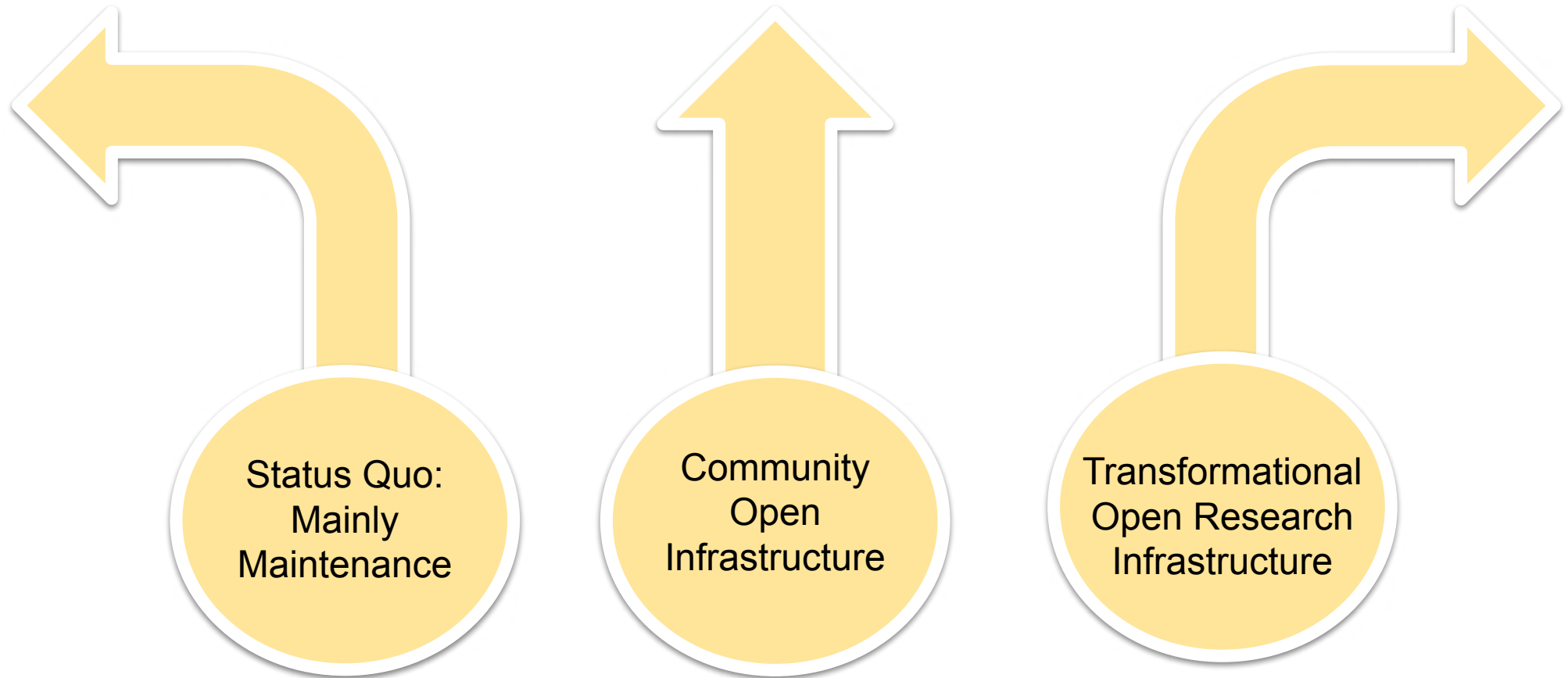
Builds on past partnerships between uOttawa and CRKN, including CRKN's two previous successful CFI applications in 2000 and 2004, with uOttawa acting as host organization.

# CFI Innovation Fund - Draft Timelines\*



*\* As the next Innovation Fund call has not yet been issued, these are based on the timeline of the 2023 Innovation Fund Call*

# Gut Check: Where are we going?

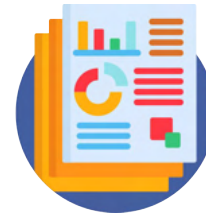


# Engagement

What can we provide to enable our collective path forward?



Full project vision and description



1-pager about CRKN and the project



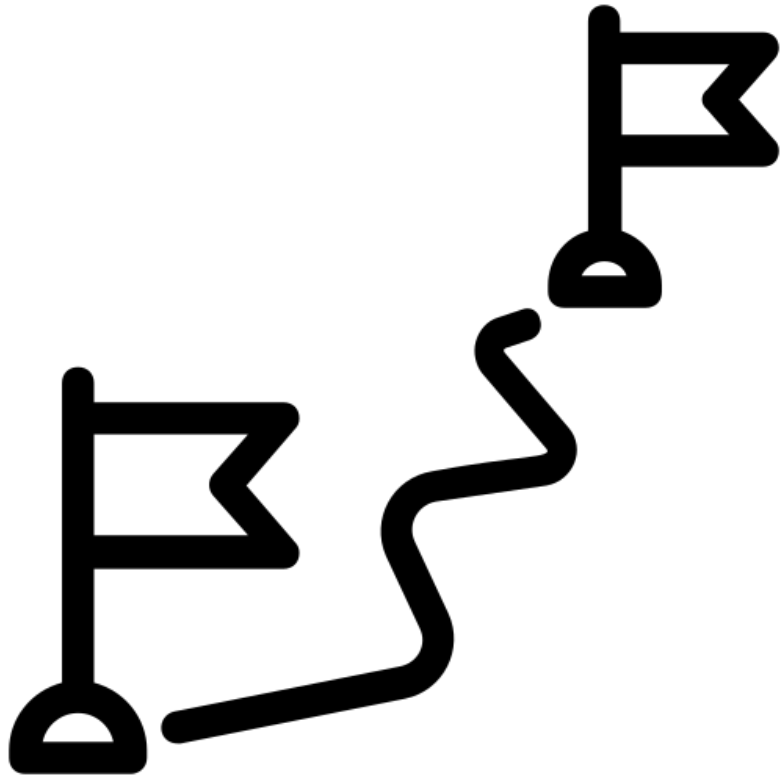
Project webpage



Slide deck with project information

What would you, as UL/decision maker for your institution, need to get support and secure funding for this project?

# What We Need from Members



- Commitment on path to move forward together
- Connect with researchers at your institution
- Connect with librarians, archivists, and infrastructure support providers at your institution
- Input on transformational research potential
- Outreach to your VP Research

# Next Steps



Commitment to collectively drive this project together



Continue these conversations with:

- Project governance groups
- Potential partners
- CRKN Members



Introduce project to:

- Your institution
- Researcher community



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Wrap up

# Strength in Community

Designing the  
Future of Open  
Scholarship in  
Canada

CRKN members:  
working as a  
community to build a  
future where  
knowledge is  
accessible by all

Digital Cultural  
and Heritage  
Collections of  
the Future

# Voting Cards



Reminder for voting members to collect their voting cards at registration desk