



Digital Research
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Institutional Research Data Management Strategy Development Template v. 3.0

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Table of Contents

Purpose of this Strategy Development Template	3
Strategy Development Stages and Activities	4
First Stage: Assemble Your Strategy Development Team.....	4
First Stage Activities.....	4
Second Stage: Assess the Current State of RDM	5
Second Stage Activities	5
Third Stage: Envision the Future State of RDM.....	7
Third Stage Activities	7
Fourth Stage: Articulate Your Institution’s Path Forward	8
Fourth Stage Activities	8
Final Stage: Assemble and Launch Your Strategy	9
Final Stage Activities.....	9
Acknowledgements	12
Appendix A: Tri-Agency Strategy Specifications	13



Purpose of this Strategy Development Template

This template is intended to assist research institutions in developing an institutional research data management (RDM) strategy, both to fulfil the first requirement of the [Tri-Agency Research Data Management Policy](#)¹ and to articulate their commitment to RDM at the institutional level. It consists of suggested activities and processes in five stages to inform and shape the creation of an RDM strategy that meets local needs and resource capacities. Crucially, it is intended as a *process*, rather than a *product* template -- it provides steps for how to develop an institutional strategy, not a template outlining what an institutional strategy document itself looks like. In fact, these processes should be seen as ongoing to inform strategy updates over time and to help align institutional RDM efforts with broader institutional goals, objectives, policies, and services. While it is recommended that institutions employ each of the strategy development activities included in this template, your institution may choose to engage in each activity at a level of depth and detail appropriate to its size, research intensity, and existing RDM capacity.

¹ The institutions which will be required to create RDM strategies are postsecondary institutions and research hospitals eligible to administer Tri-Agency funds. See both the [Tri-Agency RDM Policy](#) and [Statement of Principles](#) on Digital Data Management, which outline expectations and responsibilities for RDM in the academic community. For definitions of RDM terms in this document, please refer to the [CASRAI Research Data Management Glossary](#).





Strategy Development Stages and Activities

This strategy development template proposes five activity stages that will culminate in the launch of your institutional strategy.

First Stage: Assemble Your Strategy Development Team

Goal: Create a team to take the lead on creating your institution's RDM strategy.

First Stage Activities

- Identify the stakeholder communities on your campus. These communities could include:
 - Researchers
 - Institutional library systems
 - Research office(s)
 - Research ethics boards
 - IT services
 - Graduate studies
 - Executive management

- Decide which stakeholder communities need to be involved in the strategy development process on your campus, and invite representatives accordingly. You may find it useful to identify and include data champions — individuals with an established interest or expertise in research data management — on your strategy team.

- Collectively determine how your group will work (e.g., establish terms of reference, decide on meeting frequency, project timelines, etc.).





Second Stage: Assess the Current State of RDM

Goal: Establish an understanding of the current state of Research Data Management services, resources, staffing, and external supports used on your campus.

Second Stage Activities

- Conduct an inventory of institutional data assets and data management practices on campus, including:
 - Assessing research activity in terms of the approximate volume and variety of data being produced by researchers
 - Identifying existing RDM supports and services, including those related to:
 - Data management planning
 - Active data storage
 - Data deposit into repository storage
 - Long-term preservation storage
 - Data access and sharing
 - Data retention
 - Data and metadata quality and standards
 - Privacy, ethical and intellectual property considerations
 - Sensitive data considerations
 - Indigenous data sovereignty considerations
 - Identifying existing training and awareness-raising resources and/or initiatives
 - Identifying existing RDM or RDM-related policies, procedures, and/or best practices in use on your campus



- Evaluate existing RDM supports and services in terms of things such as availability, funding, staffing, and sustainability. Consider using an assessment tool such as the [RISE](#) or [SPARC](#) models, or the [Maturity Assessment Model in Canada \(MAMIC\)](#).



Third Stage: Envision the Future State of RDM

Goal: Determine the desired near-to-medium-term (e.g., three to five years) future state for RDM on your campus.

Third Stage Activities

- Based on the assessment of your institution's current state of RDM readiness, articulate a desired near-to-medium-term future state for RDM on your campus. Take into account the research activities, supports and services, training, and policy considerations identified in Stage 2, and any other aspects of RDM particular to your campus that may have emerged from this process.

- Identify needs associated with achieving this future state, including consideration of factors such as:
 - Staffing levels
 - Sources and sustainability of funding
 - Training for researchers, students, and staff
 - Raising awareness and increasing adoption of RDM practices
 - Intersections with other relevant strategies and/or policies
 - Addressing growing data storage needs and changing technologies
 - Long-term preservation management
 - Needs of important internal and external stakeholders, including First Nations, Inuit and Métis stakeholders
 - Ensuring that data are managed ethically and securely



Fourth Stage: Articulate Your Institution's Path Forward

Goal: Articulate the actions and resources necessary to realize your desired future state.

Fourth Stage Activities

- Identify gaps between the current state of RDM and your desired future state.
- Identify steps necessary to make progress toward the desired future state.
Consider actions such as:
 - Developing and/or providing access to RDM resources, tools, and platforms
 - Providing staffing, funding, and training
 - Developing, implementing, and aligning both RDM and other institutional policies, procedures, and guidelines
- Identify the timeline for reaching the desired future state.
- Identify who will be responsible for undertaking and overseeing the implementation of the strategy.
- Decide how often the strategy will be revisited.



Final Stage: Assemble and Launch Your Strategy

Goal: Write, obtain approval for, launch, and promote your RDM strategy.

Final Stage Activities

- Use the work you have done in stages 2, 3 and 4 to write your strategy document. You may find the following suggested headings useful in framing the final document. These headings are derived from the Tri-Agency's suggestions for strategy content (see Appendix A below). Not all the headings may be appropriate to your institution's strategy, and you may find others that need to be included to reflect your particular situation.
 - **Introduction and/or Background:** What should people reading this strategy know about the circumstances that have led to the existence of this strategy? I.e., why has this strategy been created?
 - **Importance of Research Data and Research Data Management:** From a broad, values-based perspective, why is research data and its effective management important to your institution?
 - **Scope:** What data, researchers, students, staff, and/or areas of the institution will the strategy apply to?
 - **Oversight and Review:** Who will oversee the implementation of the strategy? Will it be a particular person or position, a specific office, a committee, or some other oversight body? How often will the strategy be reviewed and revised? Who will be responsible for this?



- **Institutional Support:** What will the institution do to support strategy adoption and continued use of best practices in RDM among its researchers? This could include things like
 - awareness-raising
 - hiring and training staff
 - promoting and supporting RDM practices
 - providing and/or supporting access to RDM tools, resources, and infrastructure such as:
 - repository storage for data deposit,
 - data management planning tools,
 - curation support, and/or
 - tools for discovery and access.
- **Stakeholders:** Who has a stake in RDM at the institution? What structures will need to be put in place to ensure they are aware of the strategy and associated RDM requirements, resources, and support? How will their input and feedback be solicited?
- **Ethics Considerations:** How will the institution support researchers in adopting and complying with ethical, legal, and commercial obligations?
- **Indigenous Data Considerations:** How will the institution approach working with data from or about First Nations, Métis, and Inuit individuals, communities, and nations? How will your institution ensure these data are managed in a culturally acceptable way? How will you ensure that you take a distinctions-based approach?²
- **Other Relevant Strategies and Policies:** What other strategies and/or policies, at your institution or elsewhere, does this strategy intersect with? How will you ensure alignment among these strategies/policies?

² See <https://www.justice.gc.ca/eng/csj-sjc/principles-principes.html> (last accessed August 3, 2021)





- **Definitions:** What terms will need to be explicitly defined for the strategy to ensure accurate interpretation and application?
 - **Timelines:** When will these things happen?
 - **Looking Ahead:** What are the institution's future plans for RDM, including policy development, expansion of services, increasing resources, etc.?
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- Obtain the necessary approvals for the strategy.

 - Post the strategy in an appropriate place on your institution's website.

 - Develop targeted strategy-awareness materials and resources for different campus stakeholder communities.



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Appendix A: Tri-Agency Strategy Specifications

According to section 3.1 of the [Tri-Agency RDM Policy](#), institutional RDM strategies should include items such as:

- recognizing data as an important research output;
- supporting researchers in their efforts to establish and implement data management practices that are consistent with ethical, legal and commercial obligations, as well as tri-agency requirements, including the [Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans – 2nd edition](#), the [Tri-Agency Framework: Responsible Conduct of Research](#), and other relevant policies;
- promoting the importance of data management to researchers, staff and students;
- guiding their researchers on how to properly manage data in accordance with the principles outlined in the [Tri-Agency Statement of Principles on Digital Data Management](#), including the development of data management plans;
- committing to the adoption of established best practices when developing institutional standards and policies for data management plans;
- providing, or supporting access to, repository services or other platforms that securely preserve, curate and provide appropriate access to research data;
- recognizing that data created in the context of research by and with First Nations, Métis, and Inuit communities, collectives and organizations will be managed according to principles developed and approved by those communities, collectives and organizations, and in partnership with them;
- recognizing that a distinctions-based approach is needed to ensure that the unique rights, interests and circumstances of the First Nations, Métis, and Inuit are acknowledged, affirmed, and implemented.

