Data Strategy

Protein Industries Canada aims to assist companies to capture the benefits of their innovative work, avoid risks, and participate and compete fully in all aspects of the intangible economy through data. Our strategic approach to this data assistance is threefold: Collect, Protect, Commercialize.

This Data Strategy is a two-part document. The first is the main body of the Data Strategy, which reflects our overarching approach and policies with respect to data in the funds we administer (which devolves from our responsibilities under the Contribution Agreement, and should not change), and the second is an Annual Data Strategy Addendum, which will be updated with annual priorities and planned activities.

COLLECT (& OBTAIN) DATA

In "Collecting" or "Obtaining" data, we are referring to the gathering of data through a company's own processes (e.g. research results, farm trials, data collected from users or devices), as well as, through procured access to others' data.

In the context of PIC projects, data rights are described in Data Management Rationales detailed in project proposals which break down each consortium member's rights today and in the future (as relevant to the project). Such Data Rationales include a blend of:
- Background data, including relevant data collected through previous PIC funded projects
- Third party data (licensed)
- Project output data (foreground data) (anticipated)

It is important to distinguish between stewardship or storage of data and ownership of data. Data ownership does not necessarily follow from possession of that data. Companies must ensure that data is collected legally (including applicable consents) and that it is held and used at all times in accordance with applicable restrictions or conditions set by law or by the sources or subjects of the data (including First Nations Data Sovereignty). Even where a company is not the owner but has data in its possession, there may be applicable responsibilities associated with stewardship.

It is also important to distinguish data from intellectual property. Although IP frameworks may be relevant and helpful as we think about questions of ownership and access, data has its own unique character as a non-rivalrous asset and brings unique issues.

Licensed or purchased data will often have restrictions as to appropriate uses, who may access and use, how the data should be stored, and whether it may be changed, or linked to or bundled with other data sets. Unlike most conventional forms of IP, data may bring with it many "strings attached".

Here's how PIC assists:
- Helping to recognize and name the relevant data a consortium member already has
- Helping to identify the third party rights a consortium member is/will be using, including access to other consortium member data. PIC does not dictate specific licensing structures for a consortium, rather liaises with and encourages the consortium members to negotiate their own terms of access, within bounds of fairness, reasonableness, and non-discrimination.
- Encouraging consortium members to consider data standardization issues and feasibility related to quantity, quality and velocity of data as appropriate
- Determining that in-licensed data is clearly identified and scoped and allows the licensee a path to commercialization, if appropriate
- Helping to recognize and name the data that will be generated in project
- PIC project selection criteria considers the relevance and feasibility of the Data Rationale and the benefit to Canada from the project as a whole

Means of support:
- Proposal reviews
- 1:1 and consortium-based consultations with IP Manager
- Access tools (such as the IP Hub) which can be used to bring attention to existing sources of data

PROTECT DATA

In "Protecting" data, we are referring to a couple of different things – identifying risks and potential problem areas, and helping consortium member companies to take appropriate steps to responsibly manage the data in their possession.

For each company, identifying risks and potential problem areas involves:
- Being smart about their own freedom to operate relative to other rights-holders, and the limits on rights associated with the data already in their possession
- Resolving with other consortium members who owns the data outcomes for various parts of the project
- Resolving access and permission questions within a consortium (apart from ownership)

Taking appropriate steps to responsibly manage data involves:
- Recognition and tracking of data that is collected or obtained from other sources, including tracking of associated permissions and restrictions
- Each consortium member should avail themselves of applicable legal agreements through external resources – e.g. data licenses, user agreements, API agreements, storage and hosting agreements, non-disclosure agreements, and data clauses in employment agreements and contractor agreements
- Electronic and physical protocols to protect, e.g., security of confidential and sensitive data against data breach and other security threats

Here's how PIC assists:
- Asking questions early within a consortium about freedom to operate, planned ownership/ stewardship, access, so that these are clearly built into the Data Rationale. Neither PIC nor ISED takes any ownership stake in the project data (other than to the extent that data is collected by PIC to carry out its management and reporting functions with respect to a project). Ownership/ stewardship and access are decided within each consortium.
- Reviewing planned ownership pathways to evaluate:
  - That there is a clear way to determine whose data is whose where work is collaborative
  - That data ownership/stewardship plans are equitable between the consortium members – e.g. avoiding situations where one party does the work, while another gets the benefit
  - That owners can independently make decisions and take steps with the data in the future (while respecting applicable conditions and restrictions)
- Reviewing planned licensing pathways to evaluate:
  - That the licensor has a specific licensing model in mind
  - That the licensor has all of the rights needed for the licensed offering (e.g. sufficient data access)
  - That a user/licensee (or type of user/licensee) has been identified and there is a path to commercialization, as appropriate
- Suggesting ways to build on data already developed or obtained for stacking opportunities, as applicable (or to leverage IP with new or evolving data)
- Asking about agreements and protocols
- Asking about storage and security plans, and compliance issues as appropriate
- Providing a standing discussion point for Steering Committee meetings where both IP and data issues can also be raised within the consortium
- Providing a mechanism for resolution of disputes

Means of support:
- Data expenses (licensing fees, applicable agreements, incremental storage and compute resources) are funded in accordance with Contribution Agreement
- IP Manager check-ins in steering committee meetings and otherwise
- A mechanism for obtaining approvals from other consortium members when selecting subcontractors that will be exposed to confidential data during project management (part of change order process)
- Tracking of Data Outcomes generated in project
- Referral to external resources
- Data literacy programming on high-level concepts, data governance best practices, precautions to take
- Written Master Project Agreement with data and confidentiality terms, and dispute resolution provisions. The dispute resolution provisions provide in every case for informal discussion through steering committee delegates, which if unresolved, escalates to non-binding mediation, and if still unresolved, escalates to binding arbitration. PIC also has the right to engage the dispute resolution provisions.

COMMERCIALIZE DATA

In "Commercializing" data, we mean deployment of data in a commercial context, such as by:
- Selling a product or providing a service to which the data relates (or providing insights or recommendations derived from such data)
- Using data toward fundraising or company transactional goals, as a balance sheet asset and in due diligence to show indicia of a sophisticated and well-organized company
- Licensing data to generate income (through royalties, user fees or subscriptions)

We also mean the use and management of data in a competitive landscape through:
- Deterrence (e.g. through confidential or proprietary notices/marking, physical and virtual protocols to safeguard)
- Enforcement action
- Use of data (with IP or on its own) as leverage in business discussions and to motivate partnering

Not all data is positioned to, or should aim to, be "monetized" – data also has value for a company while simply being held or used as an internal asset (e.g. to optimize processes).

Here's how PIC assists:
- Providing funding for some commercialization supports in accordance with our Contribution Agreement.
- Enforcement activity is not funded by PIC, but we do not prevent any company from taking the steps it feels it needs to in order to enforce or assert its rights against a potential infringer (e.g. in the case of an unauthorized access, retention or use of its confidential data), or to transact with or leverage its data for business goals
- Disputes within a consortium are channeled through the dispute resolution process, as applicable.
- Asking about and tracking new licensing and other commercialization activities annually through Annual Reports
- Providing discussion opportunities about commercialization through steering committee meetings

Means of support:
- Data literacy programming
- Referral to external resources
- Connecting companies together for potential opportunities
- Access to funding network, including funding sources that emphasize IP and data
- Promotion of non-confidential data sets and business successes through PIC's member-accessible IP registry (the IP Hub), and through other PIC communication channels

PIC DATA MANAGEMENT & RESPONSIBILITIES

In addition to PIC's role in helping companies with their data practices, PIC has internal data management practices in line with our responsibilities under the Contribution Agreement.

Data Handling

Data acquired, stored, managed, shared and used by PIC in the exercise of its operational and reporting functions is handled confidentially. This includes project data reported to PIC by member companies for its reporting requirements (e.g. project activity report data).

Security, Privacy, Data Integrity, and Legislative and Regulatory Compliance

PIC staff and contractors are bound by confidentiality obligations and subject to relevant organizational policies and operational practices including those related to privacy, conflict of interest, communication, and a general code of conduct, all of which are incorporated herein by reference. PIC's policies and practices include respect for data security, privacy, data integrity, and legal compliance. For example, Declarations as to Authorization and Compliance are signed by organizations at the Expression of Interest stage of applying to PIC; these are retained by PIC for evidence of consent as part of its privacy and compliance practice. PIC's policies and practices are reviewed as part of PIC's risk management at least annually.

Data as a Resource and Asset

In addition to PIC's own aggregated metrics, which may be published from time to time, PIC regularly commissions analytical reports from reputable outside firms on sector trends and relevant statistical data for the benefit of its members. PIC also makes available a member database and IP Hub for the benefit of members.

Data Extraction, Standardization, Storage and Access

PIC's data collection and handling practices recognize the importance of clean, useable data that is securely stored. Where access to data is contemplated (e.g. member database, IP Hub), PIC provides for access controls to limit to authorized access and restricts editorial permissions.

PIC Roles and Responsibilities with Respect to Data Strategy

PIC's Director of IP is responsible for implementation and administration of the present Data Strategy, assisting the Board and PIC management in executing it, assisting consortium members in all aspects of project Data Rationales, providing a resource to the Project Selection Committee in reviewing project proposals, and working with consortium members to fulfil their data plans and objectives. The Director of IP also acts as a resource for matters of compliance internally.

PIC's Board of Directors will be conversant in and champion the Data Strategy. The Board will review and advise on annual priorities in the addendum.

PIC management and staff will work with the Director of IP to implement the Data Strategy in day-to-day operations.

ANNUAL DATA STRATEGY ADDENDUM

SUMMER 2024

In addition to regular data support for projects in development and underway, priority activities this year include:

- Dissemination and awareness related to this new Data Strategy
- Data literacy programming on confidentiality, cybersecurity (with trade secrets)
- Liaison with other Global Innovation Clusters to share best practices