

CRKN PIDs Problem Statement

What problems would widespread PID implementation help address for the Canadian research community?

Persistent identifiers (PIDs) are fundamental building blocks for the digital research infrastructure of the future. Functioning as both a unique label for and a long-lasting link to a person, place, or thing, PIDs help us to disambiguate and connect people (researchers), places (their organizations), and things (eg, their grants, research outputs, etc), making them critical to the success of the Canadian research ecosystem.

In a PID-optimized world, metadata about researchers, their organizations, and their outputs would be captured as early as possible and would flow seamlessly between the systems used throughout the research ecosystem, minimizing the manual entry of information and maximizing the opportunities for it to be reused. While PIDs and their metadata are used in many Canadian research organizations, they are not yet ubiquitous and have not been adopted or implemented consistently. Their full benefits are, therefore, yet to be realized.

Discussions with key stakeholders across the Canadian research community identified several problems that could be addressed by the widespread adoption and implementation of PIDs at the national level across all researchers and their organizations – funders, institutions, publishers, and more. A national approach to PIDs can also help to address inequities in Canada – resulting, for example, from differences between disciplines, language, geography, institution type, access to resources, etc – by giving all stakeholders an equal voice in the decision-making.

Researchers spend too much time on administrative tasks and too little on their research:

Estimates suggest that researchers can spend as little as [17% of their time doing research](#).

For example, the time they spend rekeying the same information into systems again and again has been [estimated to waste 55,000 researcher days a year in the UK alone](#). By enabling data to be entered once and reused across multiple systems, PIDs can remove much of this effort, freeing up more time for actual research while also improving accuracy.

“You can’t be FAIR without PIDs”: PIDs are integral to the [FAIR principles](#) which, in turn, are an essential component of open science – including the [Canadian government’s 2020 Roadmap for Open Science](#) (Principle Two: Transparency). National PID adoption will ensure that Canadian research data are Findable, Accessible, Interoperable, and Reusable.

Demonstrating ROI in research is challenging: Across the research ecosystem, organizations need to demonstrate the return on investment of the projects they support. PIDs facilitate this by making connections between researchers, their organizations, grants, and outputs.

The research evaluation process for grants (including the Canadian Common CV) and for promotion and tenure is “detested and a huge administrative burden”: PIDs can help reduce the administrative burden if implemented in Canada’s research administration systems by storing, maintaining, and pulling the data used for evaluation directly from ORCID records.

Conducting research analysis – especially over time – is difficult: Keeping track of alumni and awardees’ career paths, outputs, and collaborations is currently very challenging for institutions, funders, and other research organizations. Widespread PID adoption will make tracking institutional metrics and connections over time much easier.