

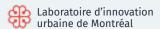
DIGITAL DATA PARTNERSHIPS:
BUILDING THE FOUNDATIONS FOR COLLABORATIVE
DATA GOVERNANCE IN THE PUBLIC INTEREST

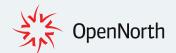
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EXECUTIVE SUMMARY

In the age of digital transformation and artificial intelligence, data—whether it be open data or big data—and the issues data raise are in the spotlight. Spurred by the potential of shared data, a growing number of public, private, and civil society stakeholders are interested in sharing digital data with third parties to achieve public policy objectives and resolve complex social issues. New forms of inter-organizational cooperation that aim to share, combine, cross-reference, and leverage datasets are emerging every day.

However, these digital data partnerships require time, effort, resources, and sustained collaboration. Their success also depends on strong data governance that protects the public and maintains its trust.

Organizations that wish to engage in data partnerships will find in this report a discussion of the different success and activation factors for digital data partnerships, along with practical information that will guide them in building shared data governance that is collaborative, responsible, effective, and accountable.

Digital data partnerships: definitions and concepts

It quickly became apparent during our research that there were no turnkey data partnership or governance models that could be easily applied, duplicated and scaled. Despite the interest in notions such as data trusts and digital commons, practical, mature, and documented experiences are still few and far between.

Organizational factors, as well as the social and political contexts in which digital data partnerships operate have a significant influence on the data governance frameworks used by organizations to share and exchange their data. Indeed, the role of collaboration is critical to the success of data partnerships, despite the diverse configurations of private, public, and civil society actors that are involved, the types of data they value, and the objectives they pursue. Moreover, recognizing citizen concerns about new technological advances and the absence of a proven regulatory framework to protect their rights, it seems that data partnerships that focus on the common good enjoy greater legitimacy and capacity for action.

These findings are documented in the first chapter of our report, and they continue to serve as a guide for the analysis and explorations of best practices in data governance which follow.

Key components of data governance

As digital data partnerships multiply and evidence of their potential grows, more and more stakeholders in sectors other than information technology are becoming interested in their potential. Chapter 2 therefore provides a practical knowledge base in data governance by defining common terms and concepts.

Simply put, data governance determines who makes decisions, how decisions are made, and how decision-makers are held accountable for the collection, use, sharing, or control of an organization or group's data.

To help break down this definition, we use a conceptual framework developed by Abraham, Schneider, and vom Brocke (2019) in order to identify the building blocks of data governance. This framework is primarily descriptive, rather than prescriptive. It highlights the influence of antecedents (such as legislative frameworks or organizational culture) on governance and identifies three key elements that define the scope of data governance, that is, the level of organizational governance, the characteristics of (shared) data, and the domain scope, which in turn influence the concrete mechanisms through which governance is operationalized on a daily basis.

Three guiding principles for data governance in the public interest

Chapter 3 is devoted to an in-depth discussion of several categories of data governance mechanisms. These include informed consent; anonymization; risk assessment; data quality, standardization, and interoperability; access management; compliance monitoring; and the auditability of decisions. The mechanisms that can be deployed are as numerous as the issues they seek to address. Their selection must consider not only the antecedents, but also the context of each partnership and the scope of the established governance.

To help organizations shape their governance choices toward morally and socially desirable ends, we have structured this chapter around three key guiding principles. We thus propose that the governance frameworks developed by digital data partnerships, be guided by the following principles:

- Responsible: realizing value from data in a responsible and ethical manner
- Effective: managing data effectively and consistently
- Accountable: assessing compliance and impact on an ongoing basis

Montréal perspectives

In the final chapter of the report, we present the results of discussions with representatives of Montréal organizations involved in data sharing initiatives. The real-world experiences and perspectives of these stakeholders, who are active in the arts and culture sector or the *Montréal in Common* smart city program, have played an important role in the creation of this report. For one, they confirmed the influence of organizational factors as an enabling condition and success factor for data partnerships.

The interviews also highlighted a number of barriers to participation, including: the role of data culture within the organization, the degree of adherence to the data sharing initiative, a lack of organizational capacity, and data production costs. They also highlighted the importance of securing third-party support (e.g. legal experts, government initiatives, public funds) in response to the complexity of issues raised as well as technical requirements of the project.

Despite these major obstacles, we found the participants to be genuinely interested in exploring and developing alternative models of data governance that are tailored to their needs and ambitions.

Conclusion

This report was written with the intention of making a useful contribution to the existing theoretical and practical corpus on data governance. We hope that it will also support, in a concrete way, the movement toward shared and pooled data in Québec, where for some years now, key players such as Synapse C and the Montréal Urban Innovation Lab have been exploring and experimenting with new approaches to data governance.

For those who are interested in exploring and experimenting new digital data partnerships, we conclude by summarizing some of the key lessons learned during the making of this report:

- Recognize that the public interest is defined and negotiated by citizens;
- Invest time in your collaboration and experimentation processes;
- Create data governance that is tailored to your needs;
- Document your impact and share your successes.