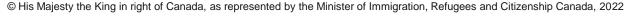
Show Me the Money: Funding Data Governance - A Canadian Government Case Study Using a Practical Strategy to Costing the Work of Data



Data Foundations and Modernization Division

Research and Data Branch of Immigration, Refugees and Citizenship Canada August 15th, 2023







# **Overview**

- 1) Introduction
  - 2) The Demand is Real
    - 3) Getting Buy-In
    - 4) You Get What You Pay for
    - 5) An IRCC Case Study: Our Framework
  - 6) The Result
- 7) Conclusion: Lessons Learned



#### Introduction

IRCC has a vested interest in improving its use of data.

Evidence-based decision-making means managing data as a critical corporate asset, and it should be costed as such.

#### A Problem versus An Opportunity

How does the Public Sector determine the cost of managing data?



#### The Demand is Real

#### **Better Data**

Data needs have led to the establishment of CDOs

2015

Government of Canada Agenda committed to evidence-based decision-making

2018

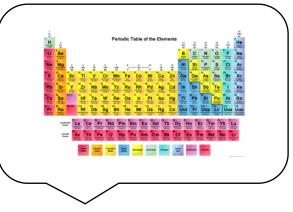
 Publication of a Data Strategy Roadmap for the Federal Public Service

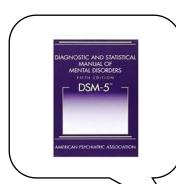
2021

Data is a Government of Canada priority

### **Getting Buy-In**

Standards Help Us Speak the Same Language...

















...But Standards Require Investment.

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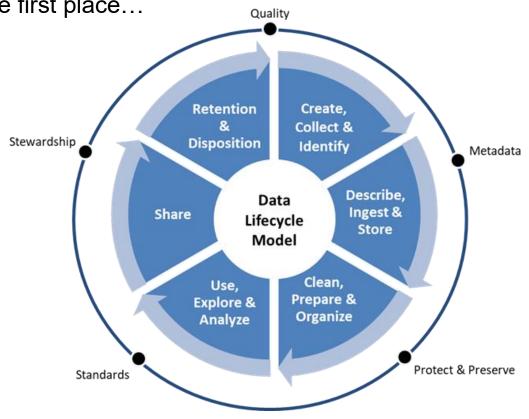
### You Get What You Pay For

# **Total Cost of Ownership (I)**

Costing data comprises much more than just those activities that are associated with collecting it in the first place...

#### **Examples of Hidden Costs:**

- Data Stewardship
- Data Governance
- Business Glossaries
- Master Data Model
- Master Data Management
- Data Quality Assessments
- IT Security
- Data Retention
- Data Disposition



#### **Context is King**

### **Total Cost of Ownership (II)**

Think about how the military accounts for the cost of owning large physical assets like airplanes, warships, and tanks, which can last decades.

 Full lifecycle cost includes the price of the asset itself, fueling, storing, maintaining, staffing, disposal, etc.





In other words, all activities that interface with these assets, throughout the entirety of their respective lifecycles, are accounted for.

We must treat data the same way.



#### The Solution:

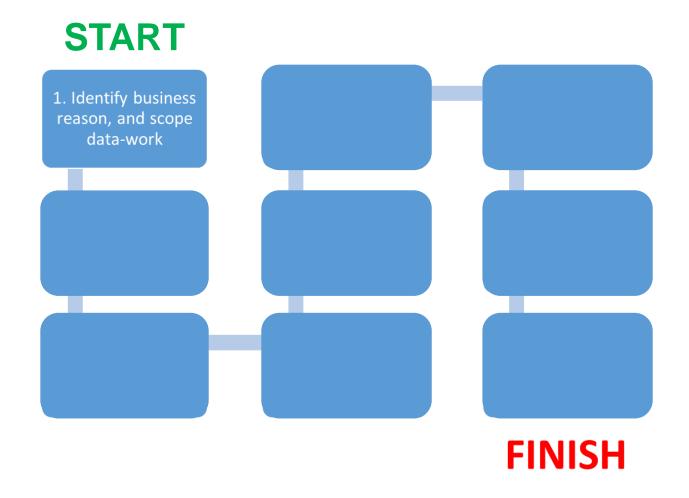
IRCC developed a tool, the **Data-Works Costing Framework**, to assess the Data-Works Cost (DWC) within any initiative, project, program, or policy within IRCC.

#### The Tool

The Data-Works Costing Framework:

- Better identifies and defines data-work activities within the organization;
- Better explains and substantiates the data work related to government initiatives, projects, programs, and policies to finance professionals using an Activity-Based Costing (ABC) Model;
- Better assesses how data is approached, perceived, used, and needed, thus allowing the associated work or practices to be costed.







Immigration, Réfugiés

et Citoyenneté Canada

# **START** 1. Identify business reason, and scope data-work 2. Assess work against current data-works **FINISH**



# **START** 1. Identify business reason, and scope data-work 2. Assess work against current data-works 3. Prioritize dataworks **FINISH**





# **START** 1. Identify business reason, and scope data-work 2. Assess work against current data-works 3. Prioritize data-4. Organize dataworks works (Categorize) **FINISH**





#### **START** 1. Identify business reason, and scope data-work 2. Assess work 5. Submit dataworks to client for against current data-works review 3. Prioritize data-4. Organize dataworks works (Categorize) **FINISH**





#### **START**

1. Identify business reason, and scope data-work

2. Assess work against current data-works

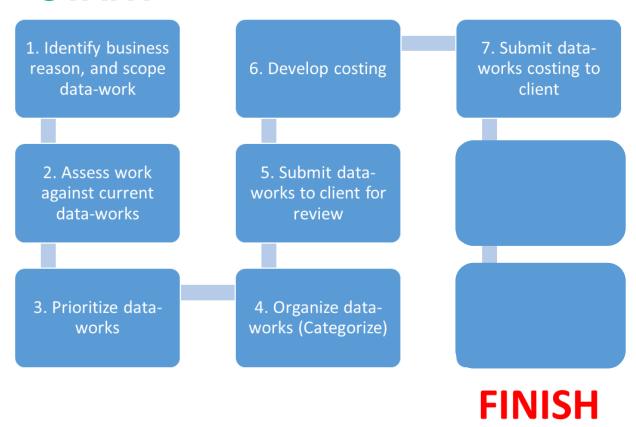
3. Prioritize dataworks 6. Develop costing

5. Submit dataworks to client for review

4. Organize dataworks (Categorize)

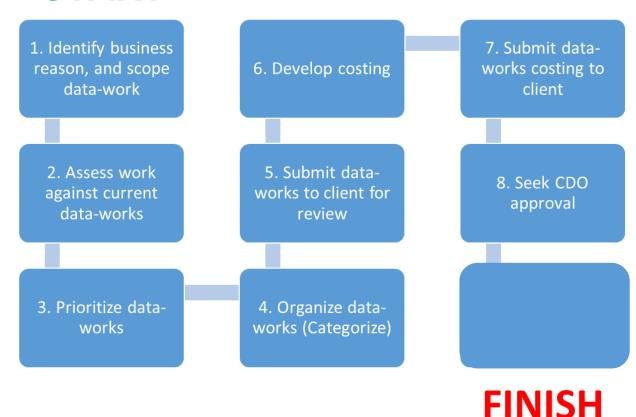
**FINISH** 

#### **START**





#### **START**





#### **START**

1. Identify business 7. Submit datareason, and scope 6. Develop costing works costing to data-work client 2. Assess work 5. Submit data-8. Seek CDO against current works to client for approval data-works review 9. Add approved 4. Organize data-3. Prioritize datadata-works to works works (Categorize) **CDOB Program of** Work







#### An example of a Data-Works Costing Formula:

$$DWC = \left[ \begin{array}{c} FTE \times Level \\ \hline t \end{array} \right] \times DWSA$$

**DWC** – Data-Works Cost

**FTE** – number of Full Time Equivalent Employees (FTEs)

Level - Annualized salary cost for each FTE level

**DWSA** – Data-Works Sub-Activity

t – Time period over which the process is measured





#### The Result

#### The Data Works Costing Framework...

1

Provides a **clear costing estimation** for all requested data-work

2

Bridges the gap between data and finance

3

Enables an agile response for budgetary submissions

