

# Audit Case Studies: A Lesson from the Past and an Opportunity for the Future

## User-Centric Design and Data Transformation

Joanna Murphy, Director, IT Audit



Office of the  
Auditor General  
of Canada

Bureau du  
vérificateur général  
du Canada

# Who We Are

- The Auditor General of Canada is an Officer of Parliament.
- We conduct audits to provide information, advice, and assurance.
- We have had an environment and sustainable development mandate since 1995.



# A Lesson from the Past

- User-centric design



# Case Studies

- **Case 1: No Need**  
The Beyond the Border Action Plan, 2016
- **Case 2: Left Behind**  
Federal Government Call Centres, 2019
- **Case 3: One Size Fits All?**  
Federal Government Call Centres, 2019
- **Case 4: Transforming Without Clear Expectations**  
IT Shared Services, 2015



# Case 1: No Need

## The Beyond the Border Action Plan, 2016



- **Need:** Online application for travel documents between 2 countries (picture of travel documents)
- **Original budget:** \$10.5 million
- **Result:** Cancelled (online application system already existed in other country; cheaper for other country to process application)
- **Final amount spent:** \$14.5 million

## Case 2: Left Behind

### Federal Government Call Centres, 2019

- **What:** President of the Treasury Board of Canada Mandate Letter—Service to Canadians
- **Treasury Board of Canada Secretariat response:** Clients First Service Strategy (2017), \$6 million
- **Problem:** Online focus and unanswered phones  
How Canadians contacted the federal government (according to a 2018 survey):
  - in-person visits: 32%
  - website: 28%
  - phone: 26%
  - email, mail, or other methods: 14%
- **Finding:** Departments not answering half of calls from people who wanted to speak with an agent





# Case 3: One Size Fits All?

## Federal Government Call Centres, 2019



- **Need:** Modern call centre technology for better service to Canadians
- **Original budget:** \$20 million
- **Plan:** Modernize 221 call centres from 2013 to 2020
- **Result:** 8 modernized call centres by 2020
- **Final budget:** \$52 million

# Case 4: Transforming Without Clear Expectations

## IT Shared Services, 2015



- 2011—Shared Services Canada created as a service provider for 43 departments with a mandate to transform the IT infrastructure.
- 2013—7-year transformation plan to consolidate, standardize, and modernize email, data centres, and network services to improve service, enhance security, and generate savings.
- No service level agreements.
- Expectations not met.
- Improvements difficult to measure.



# An Opportunity for the Future

- Data transformation



# Case Studies

- **Case 5: Data Integrity Issues**  
Processing of Asylum Claims, 2019
- **Case 6: Data Integrity Issues**  
Conserving Federal Heritage Properties, 2018
- **Case 7: Not Using Data**  
Socio-economic Gaps on First Nations Reserves, 2018
- **Case 8: Not Using Data**  
Managing the Risk of Fraud, 2017
- **Case 9: Not Using Data**  
Settlement Services for Syrian Refugees, 2017
- **Case 10: Not Using Data**  
Adapting to the Impacts of Climate Change, 2017



## Case 5: Data Integrity Issues Processing of Asylum Claims, 2019

- Inaccurate and incomplete information about asylum claimants.
- 400 claims with no biometric checks.
- Different IT systems, with limited interoperability. Although the organizations shared some information electronically, they still relied on paper and faxes to share specific claim information.



# Case 6: Data Integrity Issues

## Conserving Federal Heritage Properties, 2018



Hangar 13 at Canadian Forces Base Borden, Ontario

# Case 6: Data Integrity Issues

## Conserving Federal Heritage Properties, 2018 (cont'd)



Superintendent's Residence in Carillon, Quebec



# Case 7: Not Using Data

## Socio-economic Gaps on First Nations Reserves, 2018

- Did not adequately use data to improve education programs and inform funding decisions.
- Did not assess data for accuracy and completeness.
- Could not report on how funding for on-reserve education compared with other schools across Canada.





# Case 8: Not Using Data

## Managing the Risk of Fraud, 2017

- Used data analytics and data mining, but not to detect contract splitting, inappropriate contract amendments, and inappropriate sole-source contracting.
- Data quality problems in 5 federal organizations prevented important data analysis.



# Case 9: Not Using Data

## Settlement Services for Syrian Refugees, 2017

- Immigration, Refugees and Citizenship Canada's settlement objective: To help Syrian refugees benefit from Canada's social, medical, and economic systems.
- Inability to track whether Syrian refugees had access to basic provincial services, such as health care and education.



# Case 10: Not Using Data

## Adapting to the Impacts of Climate Change, 2017

- Need for a centralized, easily accessible source of information (such as climate data) and tools (such as guidance and training) to help departments and agencies understand climate change and what impact it could have on their organizations.
- Departments and agencies produced useful information, but it was often hard to find.



# Example of Good Use of Data



Margaree Harbour (2010):  
Wharf breached by rising sea levels  
Credit and Source: Ted Chiasson, Fisheries  
and Oceans Canada, 2010



Margaree Harbour (2016):  
Wharf raised 0.7 metre  
Credit and source: Donald MacDonald,  
Fisheries and Oceans Canada, 2016

# How Will the Government of Canada Transform?

- Government is in the business of service—it must be user-centric.
- Government must be nimble—data must be transformed.





# Where Will Canada Be in 2030?

