



Enterprise Portfolio Management and Coherence Program

Delivering insight through data, for a better Canada



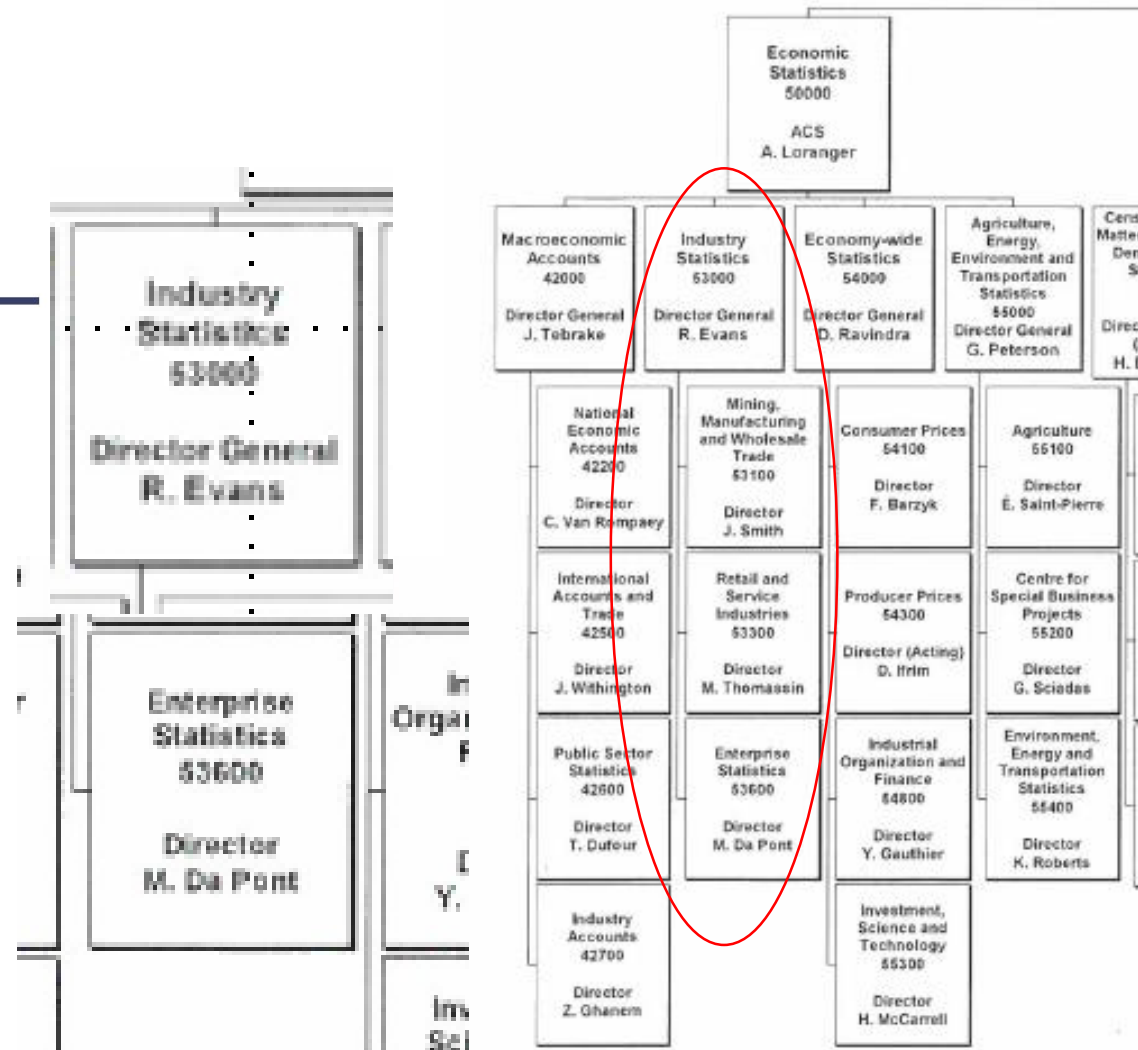
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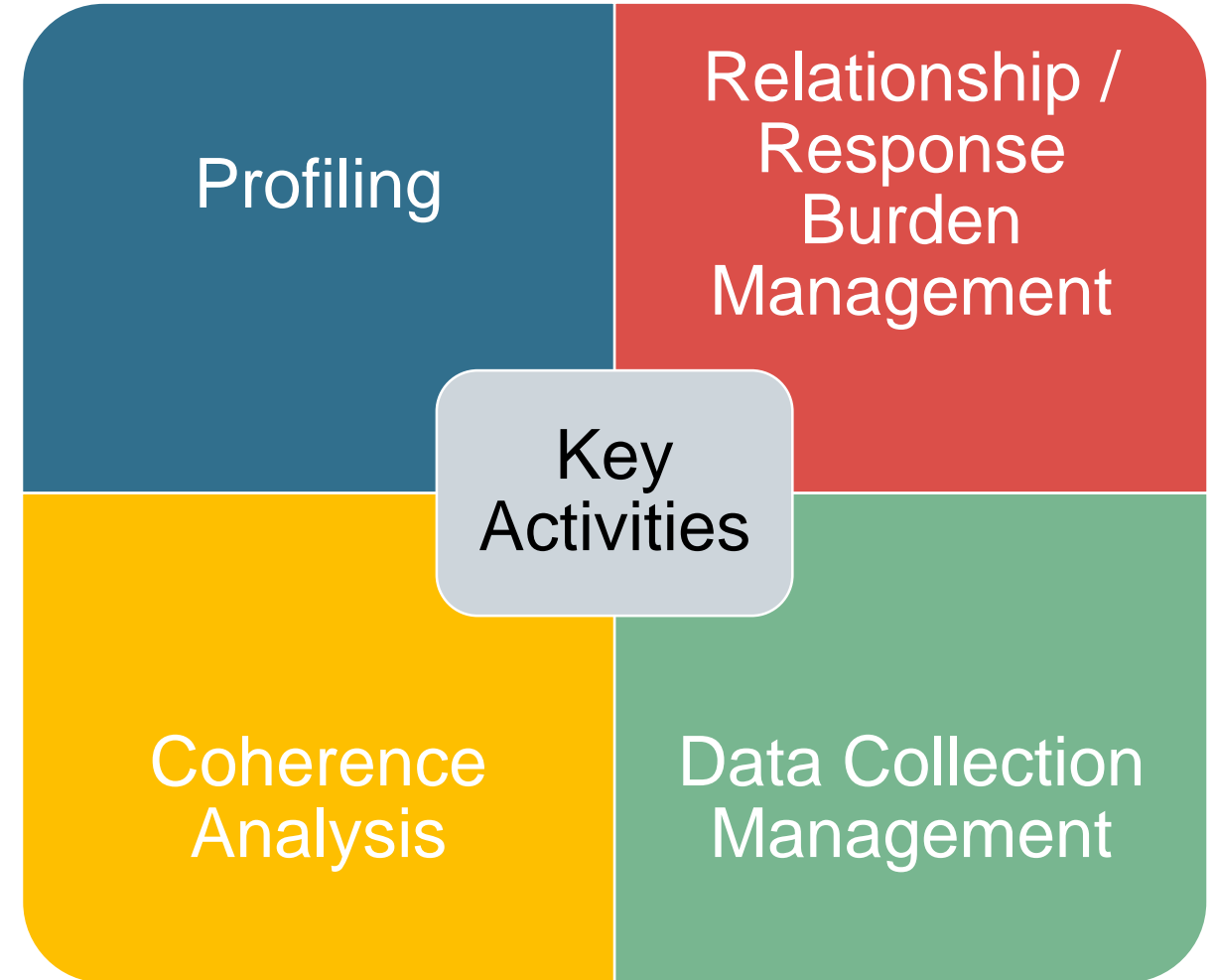
Placement within the Organization

- The Enterprise Portfolio Management (EPM) program is part of the Enterprise Statistics Division which is part of our Industry Statistics Branch under the Economic Statistics Field.
- The program works closely with the Macroeconomic Accounts Branch, Statistical Register Division and Collections and Regional Operations Branch.



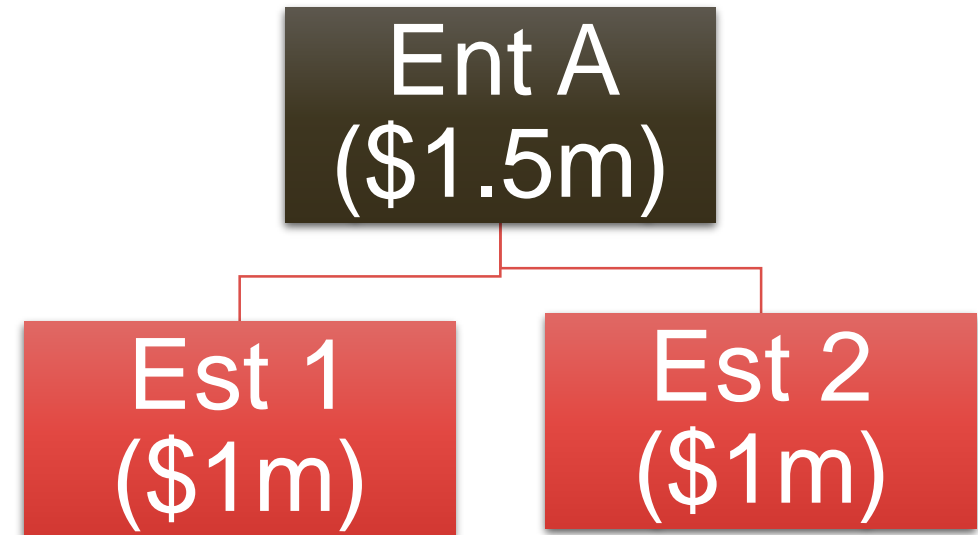
EPM Program (aka LCU)

- The Enterprise Portfolio Management (EPM) program has existed since 1997.
- The focus and key activities have remained consistent from year to year.
- The selection / updating of firms is done every 2 years.



Coherence Analysis

- A key activity is to ensure there is no duplication in reporting.
- **For example:** In RY2017, a retailing unit reported total revenue = \$1, a manufacturing unit belonging to the same enterprise reported total revenue = \$10. Since the manufacturing unit has historically reported \$1M in revenue and the retailing unit has a profiled revenue of \$400K, recommendations were made to the program areas for a possible manual correction.



Scope of the program

52%

Although complex enterprises represent just 1% of all businesses in Canada, they account for ~ 52% of total business income.

270

EPM Program works with ~ 270 of the largest and most complex enterprises in Canada, representing a significant part of GDP.

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The program has a dedicated staff of 10 Enterprise Portfolio managers.

Enterprise Selection Criteria – Complexity Metric

Industrial Complexity

the number of different industries in which they operate;

Geographic Complexity

the number of regions where they have operations;

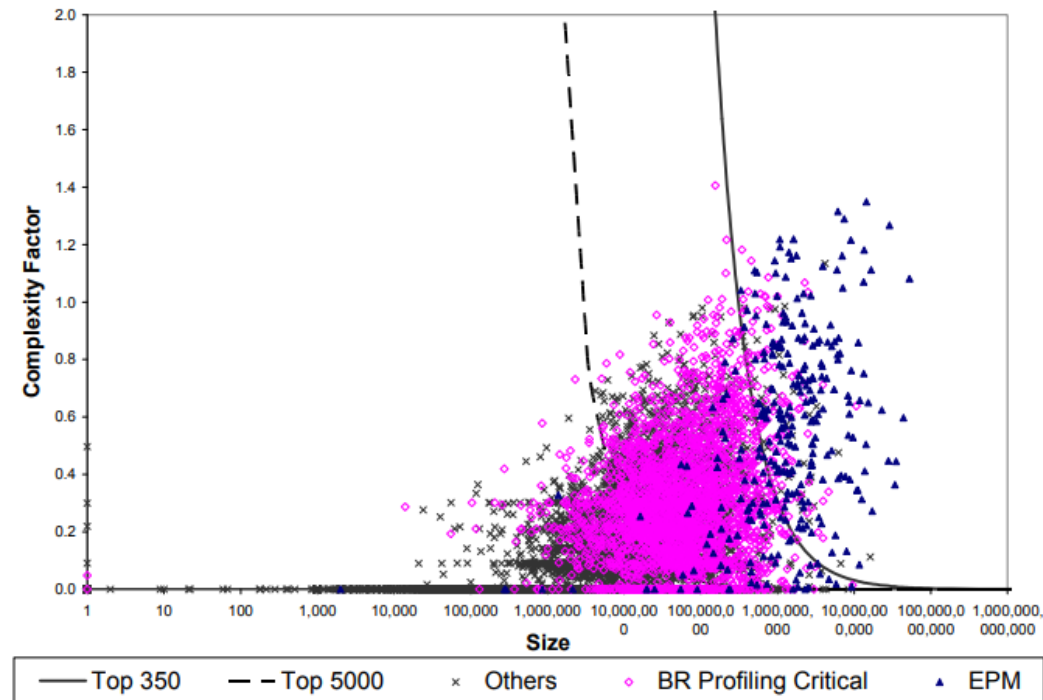
Relative Size

relative importance to the industries and regions in terms of size, which is calculated based on revenue and employment

Judgement

feedback from program staff who may identify specific complex enterprises that are creating measurement issues

Figure 9: Complex businesses by size and structure complexity



Enterprise Selection Criteria – Complexity Metric

Measuring the Complexity and Importance of Businesses in Order to Better Manage our Data Collection Efforts

Serge Godbout and SungJin Youn (2009)

Business i	Business Size y_i	Size Partition at Establishment Level P_{ik}					Structure Complexity $\eta_i = H(Y P_i)$	Complexity Metric $\kappa_i = y_i \eta_i$
		$k=1$	$k=2$	$k=3$	$k=4$	$k=5$		
A	500	1.000					0.000	0
B	500	0.500	0.500				0.301	151
C	500	0.900	0.025	0.025	0.025	0.025	0.201	101
D	500	0.500	0.125	0.125	0.125	0.125	0.602	301
E	500	0.200	0.200	0.200	0.200	0.200	0.699	349

- Business A has only 1 establishment so its complexity estimate is 0.
- Business B has 2 establishments with activity equally split between the establishments.
- Business C has 5 establishments with a high concentration of activity in one establishment.
- Business E has five establishments with activity equality distributed across all five establishments.

The Team - Enterprise Portfolio Managers

Work load



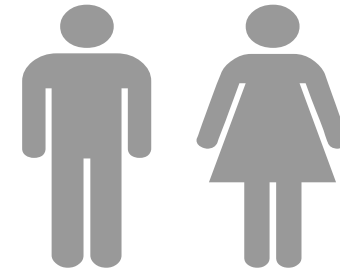
- 10 managers responsible for approximately 30 enterprises each
- Assigned enterprises cover similar activities.
- 7,500+ contacts each year

Skill Set



- Accounting, negotiation, and organization skills;
- Project manage autonomously
- Strong interpersonal skills.

Partnerships



- Organize visits and include subject matter staff.
- Work closely with both subject matter and infrastructure areas.

What is working well?

Coherence Analysis and Resolution

- New tools to communicate and track incoherence during collection have put power in the hands of analysts, helping ensure coherence adjustments are applied to data in a timely manner.

“Relationship capital”

- The mutual trust and confidence that builds up with respondents over time is important “relationship capital” – a valuable resource for the agency.
- Staff have been able to leverage their “relationship capital” and company knowledge to facilitate special projects on behalf of Statistics Canada

“Trust Center”

- Because issues are dealt with quickly and the EPMs are responsive they have been able to build trust.
- This trust has allowed the agency to move forward in a number of areas including obtaining confidentially waivers from a number of firms.

Challenges / Opportunities

Maximize use of alternative data and special reporting arrangements

Using machine learning and data science to better maintain and update structures

Better understand client data needs in order to create 'win-win' situations

Include global production arrangements as a component of the firms selection criteria.

- Can we envision a state where the enterprises see Statistics Canada as a strategic partner supplying them with aggregate economic data critical for their business while continuously reducing our response footprint?

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THANK YOU!

For more information
please visit,
www.statcan.gc.ca



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