



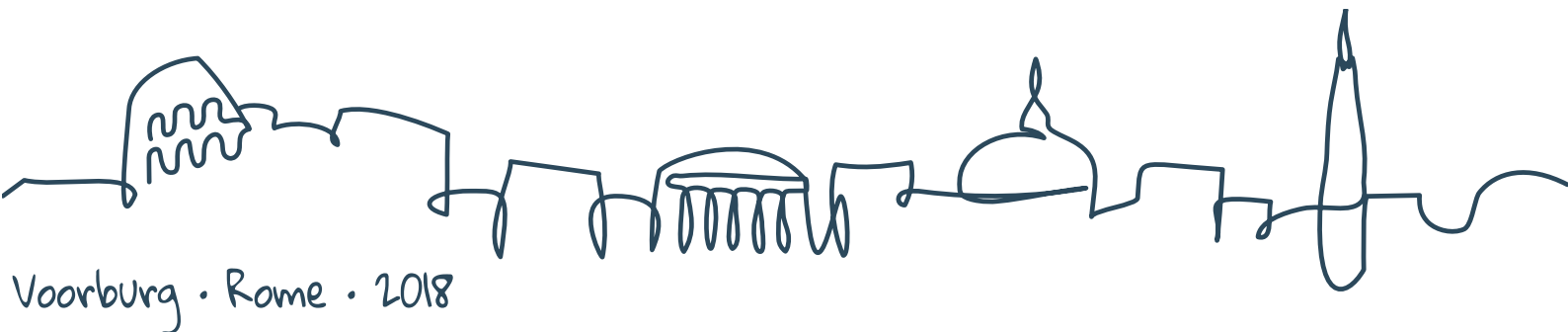
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Statistics Canada's Enterprise Portfolio Management (EPM) Program

**Profiling and collecting data on large
complex enterprises**

Enterprise Statistics Division

Statistics Canada



PROFILING AND COLLECTING DATA ON LARGE COMPLEX ENTERPRISES

Abstract

In Canada, although complex businesses represent approximately 1% of the total number of businesses, they contribute more than 52% of total economic activity. Recognizing that the quality of the information and data collected from them is of great importance, Statistics Canada implemented the Enterprise Portfolio Management program to work collaboratively with respondents from 300 of the largest and most complex businesses operating in the country. Key objectives of the program are to create and maintain business structures on the Statistics Canada's Business Register, manage data collection, resolve data coherence issues, as well as proactively establish and sustain relationships with key respondents.

1. Introduction

Statistics Canada (StatCan) has adopted a strategy for better managing its relationships with large and complex business enterprises while at the same time improving the quality and timeliness of the data received from them. Initiated in 2006, the Enterprise Portfolio Management (EPM) program is responsible for managing all aspects of ongoing relationships with Canada's 300 largest and most complex businesses. This involves relationship management; organizational profiling (legal and operating); survey collection management and coherence analysis. In addition, the Program provides ready access to a valuable pool of knowledge about Canadian corporations and industries.

The EPM program's primary roles are:

- Proactively establishing and sustaining relationships with respondents;
- Maintaining the structures of large and complex businesses on the Business Register (BR) through the analysis of the legal, operating and accounting organizations of enterprise groups at the provincial and national levels;
- Managing data collection, including directly contacting businesses to clarify reporting requirements and obtain survey responses, developing special reporting arrangements to facilitate responses, resolving any collection issues that arise, as well as following-up with respondents to resolve collection edits; and
- Ensuring that the reported data from the numerous operations within complex businesses are complete, unduplicated and coherent.

The EPM program approach has been mutually beneficial to business respondents and Statistics Canada. For business respondents, the program provides a single point of contact to obtain clarifications and resolve issues. Among the benefits to Statistics Canada are up-to-date business structures on the BR and improved quality of the survey data.

2. Role and Coverage of the Business Register

The Business Register is a frame that includes all businesses engaged in the production of goods and services in Canada as well as foreign businesses that have links with Canadian companies. The Register plays a vital role in implementing the mandate of Statistics Canada. While mainly used to establish survey frames, the BR is used by business surveys in a variety of ways to support sampling, collection, data processing and estimation activities. The BR has a direct impact on the efficiency of the business survey process and the data produced. It contains statistical structures of businesses to which classification standards for industry and geography coding have been applied, as well as provides measures of business size and other variables required for sampling and collection activities.

The BR is updated on an ongoing basis to ensure the continued quality and appropriateness of its information. Updates to the data content of the BR are based upon several sources of information, including administrative data from the Canada Revenue Agency (CRA), feedback from business surveys and information collected during the profiling of businesses.

The vast majority of entities on the BR are referred to as 'simple' in that they have one operating entity, operate in one industry and are located in one geographic region. These simple businesses account for over 99% of the 5 million businesses on the BR. The remaining 1% of businesses are labelled 'complex' as they have more than one operating entity. Complex businesses are small in number, but account for approximately 52% of the total economic activity in Canada.

BR frame updates and maintenance for the most complex enterprises are handled by the EPM program for the largest 300 enterprises, and by profilers working in Statistics Canada's Business Register Division for the remaining complex enterprises.

3. Enterprise Portfolio Management (EPM) program

The EPM program has been assigned approximately 300 of the largest and most complex enterprises on the Business Register. The organization of these enterprises is not uniform, which presents a challenge for Statistics Canada in terms of ensuring the complete and accurate measurement of their various economic activities. By understanding how an individual enterprise operates, Statistics Canada can properly assign its activities to the appropriate industry, can identify data gaps or duplication, and can ensure coherent data reporting across the various operations within the enterprise.

Today, the EPM Program consists of 10 Enterprise Portfolio Managers (EPMs) along with 5 analysts and 4 coherence specialists. Each EPM has a portfolio of approximately 30 enterprises and is responsible for managing all aspects of ongoing relationships with their business respondents. This involves relationship management; organizational profiling (legal and operating); survey collection management and coherence analysis. In addition, the program provides Statistics Canada the benefit of ready access to a repository of valuable corporate and industry knowledge.

Enterprises are selected for the EPM program based on measures of complexity. The methodology designed for this purpose ranks entities on the BR from most to least complex based on: the number of different industries in which they operate; the number of regions where they have operations; and their relative importance to the industries and regions in terms of size, which is calculated based on revenue and employment (Godbout and Youn, 2009). Rankings are updated every two

years and are used to determine if adjustments to the EPM program coverage are required. In addition to these quantitative rankings, final decisions on program coverage also take into account feedback from staff in subject matter divisions and in the Canadian System of Macroeconomic Accounts who may identify specific complex enterprises that are creating measurement issues for their respective programs.

3.1 Relationship Management

Relationship management is at the core of the EPM program. Each enterprise is assigned an EPM who becomes a point of contact for all issues and can provide assistance to respondents as required. Because the same EPM contacts the respondent enterprise for profiling, survey management and collection, and is available to provide any other assistance required, trust and confidence is built on both sides. On the one hand, the respondent knows his or her EPM by name and knows that Statistics Canada is trying hard to minimize their reporting burden. On the other, the EPM is familiar with the structure of the enterprise and with the respondent. EPMs note the best times to contact the respondent, and understand preferences such as when they want to receive questionnaires, and how they prefer to report, whether through the electronic questionnaires, customized spreadsheet or on paper.

The trust and confidence that builds up over time has been likened to “relationship capital” as it is a great asset for the agency. Beyond its obvious benefit to the collection of high quality data, EPMs can use this relationship capital to advance corporate goals related to modernizing the way respondent data are accessed and managed. For example, EPMs are now negotiating with company contacts to gain access to data stored on cloud servers via company Application Programming Interfaces (APIs).

3.2 Organizational Profiling

If there is a beginning to the cycle of deliverables by the EPM program, it lies in the profiling activity. Complete, accurate and up-to-date profiles are essential to understanding an enterprise's corporate structure, as well as its reporting capabilities. Profiling is undertaken to ensure that the most current and accurate information is on the frame for each enterprise, as well as to eliminate the possibility of reporting errors such as double counting and over/under reporting.

EPMs devote approximately 60% of their time to maintaining up-to-date business profiles on the Business Register. Profiling involves conducting in-depth telephone or on-site interviews with senior company representatives to obtain pertinent financial information, and to understand how operations are structured within the business. Thorough profile reviews are completed every 3 years, or more frequently if signals are received from media reports, internet research, or from subject matter staff indicating that significant organisational changes have occurred.

Given the importance of profiling activities in maintaining an accurate and up-to-date BR, Statistics Canada has identified profiling questions as mandatory under the Statistics Act.

The starting point of an enterprise profile is gathering all available information for the enterprise of interest. This will include a list of legal entities available from the Canada Revenue Agency (CRA), as well as any available information collected directly from respondents, extracted from administrative files or derived from Statistics Canada surveys. Through profiling, EPMs must identify ownership relationships between legal entities and their operating entities to obtain an integrated structure that corresponds with how the business is organized in Canada. Once the physical locations are

identified for each legal entity and each has an operating address, the industry code and number of employees, the profiler must confirm with the enterprise respondent how it accounts for its operating profit to ensure the proper accounting type is assigned to every production unit.

From a profiled BR structure, collection entities are derived and questionnaires are sent for collection. Eventually, the accuracy of the profile can positively affect response rates, help relieve response burden as well as ensure the collection of coherent, high quality data.

3.3 Managing survey collection efforts

Response burden and the management of that burden is a continuing issue; EPMs try to manage and minimize to the greatest extent possible the burden that is placed on companies by Statistics Canada surveys. There are many actions taken to manage response burden; namely communicating with companies the surveys for which they have been selected to complete through the "Survey Inventories" to increase awareness; managing collection efforts, including creating customised reporting arrangements where required; and ensuring survey mail-out and follow up processes result in high quality, timely data being reported.

An important component of managing response burden is the survey inventory. Exhaustive inventories of all surveys, along with their coverage, contacts and reporting history are produced by the EPM program, in collaboration with subject matter experts. The inventory of surveys is critical to the EPM's discussions with the enterprise, and to the management of the overall response burden and the resolution of collection issues.

Regular collection at Statistics Canada follows a model whereby a central collection service is responsible for the electronic questionnaire (EQ) mail out, as well as follow up for non-response and for the resolution of failed edits. Each survey is managed independently of the others in this process and even if the same respondent receives several different surveys, the current collection systems do not link them across the surveys. It has been found that this mainstream collection process is not always suited to the large and complex enterprises that receive many surveys. As a result, the person responsible for Statistics Canada survey completion within an enterprise may receive multiple calls from multiple collectors.

To avoid undue response burden, EPMs customise the reporting arrangements for their enterprises as required. Prior to mail-out, the EPM may combine questionnaires in order to reduce their number, as long as the essential information required by subject matter divisions and the Canadian System of Macroeconomic Accounts (CSMA) is collected. In terms of collection methods, the EPM can offer their respondents reporting options other than the regular collection means.

A spreadsheet reporting tool is used where content can be set up to facilitate the collection of multiple entities on one form. This makes it easier for the respondent to complete the survey rather than having them complete numerous individual questionnaires. Data from this reporting tool are received through a secure electronic data transfer system and are captured into generalized collection system tools for follow-up and processing.

The collection process itself has a profound influence on response rates and response burden. From mail out to follow up, having EPMs manage collection from their respondents has proven to be successful with survey response rates for EPM enterprises reaching 95%.

3.4 Achieving Data Coherence

EPMs are also responsible for coherence analysis of the data provided by enterprises within their portfolio. A team of coherence specialists is mandated to identify incoherencies in the data collected from EPM enterprises and to assist the

EPMs in finding resolutions. In as much as Statistics Canada has adopted standard concepts, methods and processes across survey programs and frames to foster coherent statistical data, inaccuracies in reported data still occur for various reasons including: differences in National accounting, tax accounting and business accounting practices; issues related to classification, coverage and structure; and issues with interpretation of questionnaire concepts.

The coherence specialists work primarily with micro-data collected from annual and monthly surveys at the enterprise and establishment levels. Full coherence analysis compares the sum of all establishment data to enterprise-level control totals coming from administrative (tax) sources; Collected data are further compared with other auxiliary data including information found via company websites, news sources, government websites, etc. Data from monthly surveys are summed to evaluate if they equate with annual data benchmarks; and in a country like Canada, the sum of the provincial and territorial data are added to analyse if they correspond with data available only at the national level.

The Coherence Analysis team prepares company specific reports, comprised of data tables, analysis and recommendations, before each EPM visit to identify coherence issues that can then be discussed and resolved during company visits.

In Canada, the Integrated Business Statistics Program (IBSP) initiative, launched in 2014, has centralized the storage of annual survey and administrative data in one common data base fostering harmonized concepts and structures across the different economic statistics programs. By making the data more accessible via this "DataMart" approach, coherence analysis can take place earlier in the survey cycle. The ultimate goal is to conduct coherence analysis as data are being reported and to resolve issues during data collection and before analytical activities occur. In upcoming years, several additional economic programs will be added to IBSP, including monthly and quarterly programs which will further enhance capacity for undertaking coherence analysis.

4. Training and Working Tools for EPMs and Analysts

All EPM staff are required to take part in a 2-week training session, developed and delivered by the Business Register Division specifically for profilers and analysts. Through training, students acquire a clear understanding of the concepts and processes involved in updating the BR frame. Throughout the course, individual and group exercises are carried out, and a test is administered at the end.

Many on-line manuals, job aids and PowerPoint presentations are available for the BR frame covering practically all concepts and update applications. A profiler may refer to these tools as necessary.

A detailed 'Profiling task list and deliverables' document, detailing and defining every step of a profile review has been created. This list is especially important to new EPM staff as they learn the many tasks necessary to complete a thorough profile review.

A 'Research Analyst Handbook' has also been produced to document, in one location, all pertinent research tools, along with their links, and research procedures.

The EPM program works closely with Subject Matter divisions to gain a better understanding of those industries that have unique ways of operating (e.g., retail vs. manufacturing industries). As understanding these operational processes is crucial for business profiling, the program has worked with subject matter specialists to create industry specific profiling guides. Examples include a guide for profiling the Oil and Gas industry, a guide outlining Head Office activities, and a guide identifying the concepts for property ownership and management. Such guides provide guidelines and standards that lead to harmonized profiling practices and classifications.

In keeping with the Agency's modernization mandate, the EPM program is working with Statistics Canada data science researchers and new data sources to streamline the way in which EPM staff profile large enterprises and enhance coherence analysis. Recent efforts in this vein include using Factiva (a business information database that aggregates content from thousands of licensed and free sources) to gain access to new company-level information for profiling. Our data science researchers have recently been granted direct access to the Factiva database through several APIs that were used to make customized data requests. These were used to create structured reports that supplement existing research. EPM staff can save time and effort on profiling since they no longer need to comb the internet for information manually.

5. Conclusion

The benefits of the EPM program are immediately obvious to enterprises and to Statistics Canada survey programs. The most complex businesses in Canada have a key contact with which they can clarify their information reporting requirements and resolve issues with collection instruments or conceptual frameworks. To survey programs, the EPM program offers a mechanism for obtaining direct and timely feedback from the business community.

While globalization does not make collection of business data any simpler, Statistics Canada has gained by profiling these complex enterprises with the collection of coherent data in mind.

Establishing a team of dedicated staff with responsibility for building relationships and maintaining accurate, current legal and operating structures on the BR, has provided many benefits to Statistics Canada's economic statistics program. Up-to-date business structures on the BR allow surveying divisions to effectively target operations of these businesses. The collected data undergo thorough coherence analysis, which improves both the quality of data and granularity of survey estimates.

The work of the EPM program has resulted in producing economic statistics of better quality while reducing the burden on the respondents.

Enterprise Portfolio Managers can use their relationship capital to bring about positive change in the statistical system, helping Statistics Canada move forward with its goal of modernizing the way in which data are accessed, processed and disseminated.

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