Current Best Practices from Statistical Agencies

Statistics Canada's Enterprise Portfolio Management (EPM) Profiling of Large and Complex Enterprises

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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 320 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 Business Register, manage data collection, resolve data coherence issues, and 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. Initiated in 2006, the Enterprise Portfolio Management (EPM) program is responsible for managing all aspects of an ongoing relationship with Canada's 320 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 the return of valuable knowledge of Canadian corporations and industries. The EPM program's primary roles are:

- To maintain the structures of large and complex businesses on the Business Register (BR) through the analysis of the legal, operational and accounting organizations of enterprise groups at the provincial and national levels;
- To manage data collection, including directly contacting businesses to clarify reporting requirements and obtain survey responses, developing special reporting arrangements to facilitate response, resolving any collection issues that arise, and following-up with respondents to resolve collection edits;
- Proactively establish and sustain relationships with respondents; and finally;
- 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. Amongst 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[1]. The Register plays a vital role in implementing the mandate of Statistics Canada. Business surveys use it in various ways to support their activities, mainly for establishing a survey frame, sampling, collecting and processing data, and producing estimates. The BR has a direct impact on the efficiency of the business survey process and the data produced as it applies classification standards for industry and geography coding, contains statistical structures of businesses, includes measures of 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, but primarily upon 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 administered under the EPM program, for the largest 320 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 320 of the largest and most complex enterprises on the Business Register. As the organization of these enterprises is not uniform, this presents a challenge to Statistics Canada in terms of the complete and accurate measurement of their individual 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.

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[1]Country of control data - The country of control data are derived from ownership questionnaires filed annually with Statistics Canada by corporations liable under the Corporations Returns Act, and from information obtained from the Canada Revenue Agency's administrative records.

Up until 2005, two separate groups within Statistics Canada would meet with the large, complex enterprises. One group, the Large Business Profiler (LBUS) assumed the responsibility of profiling complex enterprises, while the second group, the Key Provider Manager (KPM) group, handled collection issues such as the follow-up for non-responses, dealing with failed survey edits, and developing customized reporting arrangements to minimize reporting burden.

The LBUS would start a profile exercise with an interview, confirming the legal and operating structures. Canadian production units were identified and for each, the address, the industry classification, the number of employees and revenues were obtained. Production units were classified as an enterprise, a company, an establishment or a location and depending on the financial data available from each, an accounting type was assigned: investment centre, profit center, revenue center or cost centre.

This form of interview assumed that the company was keeping its books by physical production units. Profit centers would be set-up because in theory, profit was generated by these production units. However, in practice, when the time would come to obtain data from these establishments, the KPM would often be told by the respondents that they could either not provide the data for operating profits generated at that production unit, or could provide data but such data would not be representative of the establishment unit as defined by Statistics Canada.

It was found that these theoretical profiles often caused incoherence in the data collected because the coverage statement in the collection instrument was not truly linked to the financial data available.

Recognizing the growing importance of collecting quality data from large businesses, Statistics Canada created in 2005 the Enterprise Portfolio Management (EPM) program. (Sear, et al., 2008). The EPM program was to be an evolution by merger of the two former programs, the KPM and the LBUS. Responsibilities of the EPM became profiling as well as managing the data collection from large and complex businesses. In merging the two functions, collection of coherent data became more probable because profiling activities were linked with data reporting capacity.

Today, the EPM program consists of 10 Enterprise Portfolio Managers (EPMs) along with 6 researchers. Each EPM has a portfolio of approximately 30 enterprises. They are responsible for managing all aspects of an ongoing relationship with 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 serving as a repository for valuable corporate and industry knowledge.

Enterprises are selected to the EPM program based on methodological measures of complexity. The methodology 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 revenues 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 subject matter and System of National Accounts staff 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 a profiler who becomes a point of contact for all issues and can provide assistance to respondents as required. Because the same profiler contacts the respondent for company 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 profiler by name and knows that Statistics Canada is trying hard to minimize their reporting burden. On the other, the profiler is familiar with the structure of the enterprise and with the respondent. Profilers note the best times to contact the respondent, and understand preferences such as when they wish to receive questionnaires, and how they prefer to report, whether through the electronic questionnaires, customized spreadsheet or on paper.

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 the understanding of a company'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 maintain up-to-date company profiles on the Business Register. Profiling takes the form of conducting in-depth telephone or on-site interviews with senior company representatives so as to obtain pertinent financial information, and to understand how operations are structured within the company. Thorough profile reviews are undertaken 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 a profile is the list of legal entities available from the Canada Revenue Agency (CRA), followed by information collected directly from respondents, data extracted from administrative files and data derived from Statistics Canada surveys. Through profiling, EPMs must identify ownership relationships between legal entities

along with additional operating entities to obtain an integrated structure that corresponds to how the business is organized in Canada. Once the physical locations are identified by legal entity and each contains an operating address, the industry code (NAICS) and number of employees, the profiler must confirm with the respondent how the company 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, quality data.

3.4 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. 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 mail out, 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.

Reporting arrangements are made with EPM companies, as required, to reflect their particular circumstances. 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 System of National Accounts (SNA) is collected. In terms of collection methods, the EPM can offer 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 him or her 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, the effectiveness of the collection efforts has proven to be successful as the survey response rates for EPM enterprises has historically reached 95%.

3.5 Achieving Data Coherence

EPMs are also responsible for coherence analysis of the enterprises within their portfolio. A program within Statistics Canada, the Coherence Analysis Section, is mandated to identify incoherencies in the data collected and to assist the EPM 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 data reported still occur for varying reasons: differences between SNA accounting and business accounting, and further differences between tax accounting, classification issues, coverage and structure issues, and questionnaire conceptual issues are examples.

The coherence analysts work primarily with micro-data collected from annual and monthly surveys, at the enterprise and establishment levels. The full coherence analysis compares the sum of all establishment data, to enterprise data; this is further compared to taxation data, and to other auxiliary data such as information found via the company's website, news sources and articles, government websites, etc. Data from monthly surveys are added to evaluate if they equate with annual data; 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 mart and harmonized concepts and structures across the different economic statistics programs. By making the data more accessible via the data-mart, 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 EPMs and analysts 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. An additional day of training is offered to those not achieving the pass mark on the test.

Many on-line manuals, job aids and presentation slides 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 defining every step of a profile review has been created. This list is especially important to new EPMs and analysts as they learn the many tasks necessary to complete a thorough profile review.

For analysts, a 'Research Analyst Handbook' was produced to document, in one central location, all pertinent research tools, along with their links, and research procedures.

Both the Profiling task list and the Handbook are updated on a regular bases to ensure relevancy.

Furthermore, the EPM program works closely with Subject Matter divisions to gain a better understanding of those industries that have unique operational processes. As understanding these operational processes is crucial for company profiling, the program has worked in conjunction 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. We have also hired specialists from outside the government to deliver specific training to our profilers and to subject matter experts (examples are: Oil and Gas sector: upstream and downstream processes; Electricity Industry Fundamentals).

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 the benefits of providing 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 data undergo a thorough coherence analysis process, which improves the quality of data and indicators.

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

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