Reduction respondent burden - the role of statistical business registers

Integration of the collection system and the Business Register system: Summary of lessons learned, benefits achieved and the future of this approach in relation to response burden management and reduction

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Introduction

The following paper is a continuation to the paper presented at the last Wiesbaden Group meeting in Estonia on the integration of the Collection and the Business Register systems. Since the two systems are now integrated for a group of surveys, the paper summarizes lessons learned, benefits achieved and the future of this approach in relation to response burden reduction and management.

1. Background

Like many statistical agencies around the world, Statistics Canada has been required to review its business architecture to optimize the use of its resources. Statistics Canada is seeking ways to be more efficient in producing and delivering products and services while maintaining or improving their quality. One of the many ways for Statistics Canada to become more efficient is to reduce the duplication of systems supporting the same activity, and to maximize the usage of already existing central corporate services.

Within this context, one objective was to establish the Business Register (BR) as the only Frame for all economic surveys. In addition to reducing the duplication of effort and cost, a unique, central Frame will allow the Agency to be more efficient at measuring response burden and should improve coherence between various survey results. To further increase the efficiencies and maximize the benefits of a central frame, Statistics Canada worked towards integrating the BR with its collection systems.

2. Integration with the collection system

During 2010, Statistics Canada designed a new Business Collection Portal (BCP) to replace the old Collection systems. The new BCP was designed to interact with the existing BR interface. This way, collection staff can access to the most current frame information at all times.

In 2011, the migration of Business Surveys from their older collection platforms to the new BCP started. The goal is now to have all Business Surveys migrated to the new BCP within the next 3 years.

The following section outlines the benefits achieved by the realisation of having the BR interface and BR “live data” as an integral component of the BCP.
3. **Benefits achieved**

3.1. **Accessibility to most recent information**

The main benefit achieved corresponds to the goal of the systems integration itself: The integration of the BR with the BCP allows collection staff to access the BR 'live', at collection time, ensuring they have access to the most current frame and contact information available within the agency.

Access to the BRS “live” facilitates many aspects of the work performed in the Collection offices, where most of the data collection activity occurs. Several tasks can be performed more efficiently. First, for pre-contact, the staff can access easily all contacts and most recent contact information available for any businesses by accessing the BRS. During survey data collection itself, the staff can see all the pertinent information about the business, while speaking with the respondent.

Having access to the entire business structures alongside the specific information necessary for collection, provides a better context about the surveyed business, helps the collection staff to better interpret the information received from the respondents and thus allows them to provide improved frame information to the business register. It has been noted that with this new operating model, the quality of the frame feedback and frame updates received from collection has improved.

3.2. **Improved timeliness equals efficiencies**

The integrated system also allows collection staff to perform frame and respondents updates directly using the BR interface. Allowing collection staff to perform updates directly is in line with the vision of working towards centralization of the information and a decentralization of the frame maintenance. In addition to minimizing the number of manual interventions required to perform every single update, it minimizes the number of file transfers between the collection and the BR systems and ensures that a consistent set of information is available within both systems.

For the BR to have the most representative image of the business population possible, the update processes have to be as timely as possible.

The new BR system is a unique centralized frame for all business surveys with its maintenance partially decentralized, allowing subject matter experts and collection staff to perform direct updates to the frame, based on their roles, responsibilities and permissions. The system is designed to allow users with the appropriate permissions to perform updates directly on the BR database in real time. This has removed the need for subject matter and collection staff to send a request for update. This new approach has increased the efficiency and timeliness of updates.

3.3. **Improved respondent relations**

A unique frame, integrated with the collection system can definitely help the Bureau improve its respondent relations. Business's respondents can find it frustrating dealing with various people from the same Bureau who do not seem to communicate with each other. Just by managing the respondent's information centrally, not only are we more efficient, we are also reducing the frustration of respondents by not having to ask them the same questions on multiple occasions.

Also, allowing the collection staff direct access to the BR helps them to better understand the business and in turn, have a better context when discussing it with the respondent. Improving respondent relations should also lead to greater quality responses and data collected.
4. **Summary of lessons learned**

This section summarizes the lessons learned from this successful integration of systems.

4.1. **One System Architecture Group directing developments is beneficial**

In addition to the benefits targeted and achieved as discussed in the previous Section 3, the integration of the BCP with the BRS was also driven by the technical vision to maximise the communication between the two systems as well as eliminate duplication of data and functionalities across systems.

In order to be successful, this project required a clear governance model. Since this project required a strong technical expertise, it was important for the governance model to have a designated system architect(s) to direct the developments. Ideally, the integration of the two systems should occur with one System Architecture Group (SAG) overseeing and directing all developments. The SAG would guide the group responsible for the development of the new collection platform (the BCP), as well as oversee the group responsible to design and perform the adjustments required to the BRS.

Having a single System Architecture Group (SAG) to oversee, conceptualize and design the integrated system, is beneficial to avoid certain developmental issues or to resolve them in an effective manner. As well, the SAG places us in a better position to ensure the maximization of the overall benefits of the final integrated system.

4.2. **Co-dependence of system**

It is essential to realize that having integrated systems also means having co-dependent systems, sometimes. It is very important to identify the justified systems dependencies required to satisfy the business model versus other system dependencies that can be, and should be avoided if possible, to minimise risk and simplify system maintenance.

Designing the system with de-coupled components, when possible, allows for easier maintenance of each component, as well as minimise the risk of the entire integrated system “going” down, because of a failure to a small component.

4.3. **Thorough training is essential**

Since the BR is a central database maintain by numerous input files and numerous users, its information is constantly changing. As discussed in section 3 above, having access to the entire business structure alongside the most recent specific information necessary for collection, provides a better context about the surveyed business, and helps the collection staff to better interpret the information received from the respondents. But thorough training of the staff is essential as large and complex business structures are often changing, even between each survey steps like sampling, collection and estimation.

For untrained users, it could be fairly difficult to attempt to collect specific business information for a specific reference period, as the BR information may have changed between the time the entity(ies) was(were) sampled and time of collection.
In order to proceed with the collection processes using the new BCP, with access to the BRS, we have developed specific BCP and BRS training for all collection staff in order to ensure their full understanding of the BR concepts. Furthermore, we developed a series of specific procedures covering all the multiple scenarios the collection staff could encounter. This training and these procedures were essential to maximise the efficiencies and usage of the integrated systems.
5. Future of this approach in relation to response burden reduction and management

The following section outlines the opportunities created when developing and maintaining a central frame integrated with the collection system. In addition to reducing the duplication of effort and cost, a unique central frame allows the Agency to be more efficient at measuring the response burden.

5.1. To improve response burden management

The BR is also the source and repository of the business contact information. It is where we maintain and update the terms and conditions for data collection on which Statistics Canada has reached agreement with businesses. It contains the lists of respondents who can be contacted to supply the data that is requested when surveys are conducted. This information plays a vital role in managing and monitoring the response burden imposed by Statistics Canada on the business community.

Managing the response burden in an organization where each survey has its own frame is very difficult, if at all possible. As the unique central frame, the BR allows us now to improve Statistics Canada’s response burden management by allowing us to monitor more accurately and efficiently the response burden of each respondent, and by helping us develop strategies to minimize the burden on specific respondents by adapting our methodology (i.e.: for example adjusting our sampling methodology to introduce rotation) and/or by helping the respondent in managing its burden by developing an integrated collection.

5.1.1. Past and Current Initiatives

In fulfilling its mandate, Statistics Canada has always tried to keep the response burden on firms to a minimum.

To reduce excessive response burden and ensure that consistent processes are applied, Statistics Canada created in 1997 the position of Ombudsman for Business Response Burden reporting to senior management. In addition, an annual survey prescription process was put in place to review and approve existing and new surveys. This process requires each survey program to describe and justify the needs for the survey, including reasons why it should be mandatory or voluntary. This process forces survey programs to ensure that questions asked are relevant and no covered elsewhere.

Reducing response burden is a key objective for Statistics Canada. We have worked hard in the last decade to maximise the use of tax and other admin data to replace survey data and reduce response burden but we understand that more remains to be done.

5.1.2. Future Plans

The agency is currently working on a new initiative that will further reduce response burden. This new initiative (the Integrated Business Statistics Program (IBSP)) is a wide-scale integration of the agency’s business statistics programs into a single generalized system that will use increasingly more administrative data in lieu of survey data. Through this project, Statistics Canada is also reviewing survey questionnaire content to eliminate duplication and to determine whether all requested data, including their level of detail, are still needed. Efforts are also being made to clarify survey questions to ensure that businesses fully understand their applicability to business operations.
Statistics Canada is also exploring new ways of collecting information that are less burdensome to participants. Recently, the agency developed a number of alternative electronic options to meet the needs of survey participants, while protecting the confidentiality and privacy of the information they provide. This web-based collection approach (E-questionnaire) will offer even more reporting flexibility to respondents and also improve the quality of the data collected, which will in turn reduce the number of follow-up calls. Over the next years, Statistics Canada plans to make web-based collection its most predominant mode of collection. Within the next five fiscal years, over 100 additional business and agriculture surveys will adopt the electronic questionnaire as a primary collection method.

To even further reduce response burden, some survey programs will send electronic questionnaires prefilled with information from the previous collection period and requiring only the participant's validation. This will lessen the response time for these surveys and also decrease the amount of required follow-up calls.

In order to pursue the new E-collection approach as described above, it was essential to build the proper infrastructures first. The integrated BR with the Collection system is an essential component to the E-collection. E-Collection requires the most current, ('live BR') information to operate properly. For example: At pre-contact stage, collection staff can update the respondent information, including e-mail addresses directly within the BR, and the collection process can continue with the most current respondent information available within the new collection system (BCP).

### 5.1.3. Working towards an “Enterprise centric” Collection Model

Finally, to further minimise the response burden, with the new integrated collection system, Statistics Canada can now work at developing a new collection model. We can work towards an “Enterprise Centric” collection model for many of the largest businesses, instead of the current Survey centric model.

The current model is “survey oriented”. Every survey is “processed independently” and based on its own “schedule”. This means that when an Enterprise is selected for multiple surveys, it is contacted every cycle of every survey it is selected for. i.e.: A respondent within the same enterprise can be contacted for survey X on Monday and survey Y on Friday, since each survey’s collection process depends on each survey’s collection schedule.

Enterprises responding to many surveys on a regular basis, could benefit from an “Enterprise centric” model. This model would help reduce the response burden, at least by minimising the number of times a respondent is contacted and it would also help client relations as both the collection staff and the respondent, would be aware of all the existing ‘relations’ (active surveys).

The new BCP integrated with the BR, contains all the information needed to better manage the response burden of a particular Enterprise or of a particular respondent within an Enterprise. In the coming years, we will be working on maximising the use of this information, to improve the collection processes and reduce the response burden for the Enterprises and respondents receiving multiple surveys.
Conclusion – Vision of the future

All the essential elements are now in place:

- We can now proceed with the migration of all business surveys to the new integrated collection system (BCP),

- We can work towards a more modern collection model allowing us to reduce the response burden

Statistics Canada is ready to move forward. With the corporate support, we are now finalizing the migration of all business surveys to the new BR. Hence, the BR will soon be a central frame for all economic and institutional surveys, documented based on recognized standards, simple, flexible and accessible by all. It will be used by all statistical programs to determine the in-scope population, select samples and support collection activities.

We are on our way to benefit from all the opportunities outlined in this paper. We will see improvements in response burden management and respondent relations. Finally, the central BR integrated with the collection system will facilitate the production of a set of coherent statistics.