#### STATISTICAL LITERACY AND THE MEDIA

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The overwhelming majority of the public will never directly consult a National Statistical Office (NSO) or communicate with it directly. For most citizens, the news media (newspapers, radio and television) provide their only exposure to official statistics. Through them, the NSO achieves its goal of informing the public of economic and social conditions to a degree it could not achieve with its own resources. Consequently, collaboration with the news media as the NSO's gatekeepers to the public is of great importance. As journalists frequently change assignments and as many of them usually have no formal training in statistics, providing a form of "education" in statistical literacy is an ongoing concern for the NSO. Similarly, making the NSO staff aware of the needs and requirements of journalists is an essential step in communicating effectively through the media. The paper will outline the various elements of the media relations program that Statistics Canada has developed over the years.

#### ROLE OF THE MEDIA

A fundamental role of a National Statistical Office (NSO) is to provide relevant statistical information on the economic and social conditions of a country and its citizens. This activity is important to an open, democratic society, whether for developing government policy, making business decisions, or helping individual citizens make their daily economic choices.

The NSO's raison d'être lies in the production of high-quality and timely statistical information. Its effectiveness depends on its credibility, relevance of its information, the accuracy and accessibility of its products and services, the attainment of high professional standards, and the control of the burden on citizens as respondents to the NSO's surveys.

An NSO publishes and disseminates statistical information in a wide variety of forms and channels. The news media (print, radio, TV) play a crucial role in informing citizens about the latest release of official statistics. Most citizens get their statistical information from the media. The extent to which the NSO can gain access to the news media and communicate effectively through them has an enormous impact on how well it can inform the general population. Thus, it is in the NSO's interest to make every effort to ensure that the media report accurately and timely on its news releases. Reports in the media have two complementary objectives:

- To inform the general public about the population, society, economy and culture of the nation. This information will guide them in doing their jobs, raising their families, making purchases and in making a multitude of other decisions;
- To demonstrate the relevance of the NSO to government and the general public, so the NSO can anticipate greater public support for the importance of its programs, as well as improved respondent relations and greater visibility of its products and services.

### ROLE OF THE JOURNALISTS

To obtain media coverage, NSOs must develop a working relationship with journalists who are very much the "gatekeepers" of access and meaning between statistical agencies and the general public. Competition for their attention is fierce. Most journalists recognize the NSO as a major news source. Still, the extent of the coverage they provide depends largely on the news value of the individual release, and the extent to which the journalist's story on the release attracts the attention of his editors who make the final decision on what gets published. The clearer the communication to journalists, the more likely they will provide positive, accurate and informative coverage, not only of the data but the appropriate interpretation. So, the NSO's challenge is:

• to prepare press releases which are understandable to journalists and thus understandable to the general public as the ultimate audience, and;

• to create an ongoing working relationship with journalists to ensure that they remain interested in reporting on such releases.

Two types of journalists may cover an NSO. There are 'beat' reporters who have expertise in fields such as business and economics, and are probably statistically literate. However, the vast majority of reporters are general news journalists. These individuals do not regularly cover an NSO's releases and may not have expertise in any particular field such as economics. Consequently, they are probably not statistically literate.

### STATISTICAL LITERACY

There are many definitions of "statistical literacy" depending on the context. In the context of informing the public through the media, statistical literacy implies the ability to understand the implications of the released statistical information. For example, the figure of 7.3% as the latest unemployment rate has little statistical information value by itself in a press release. What's also needed is an explanation about the trend, whether the rate rose or fell during the past month or year, along with developments in specific populations such as youth, or part-time workers compared with full-time workers, or whether the rate moved because people dropped out of the labour force.

In journalistic terms, the number alone is not the story; the implications for the population and their employment situation make the story. The challenge is to ensure journalists get the story "straight", and report the analysis in a statistically correct way. Consequently, it is beneficial that journalists have a certain degree of statistical literacy without being required to have a degree in statistics.

# JOURNALISTS AS PARTNERS

NSOs have become more "client" focused over the last 20 years or so in step with general business practices. Many see "marketing" not as just as an activity to increase sales of information products, but as the discipline to deliver to clients what is relevant to their needs. In that sense, journalists are a particular group of clients.

Statistics Canada has developed a strong, positive relationship with journalists. We see it as our task to make it as easy as possible for journalists to access the Agency's information. As a result, we have developed a strong media relations program. The role of a statistical agency is not to create statisticians out of journalists. It is to help journalists in whatever way possible to do their job. Journalists today face tremendous time constraints. They do not have the time to analyze raw data independently. Reduced editorial budgets have made "beat" journalists who can build up specialized knowledge, a declining phenomenon. Information should be communicated clearly, in simple language, if the NSO wants it echoed accurately to the general population.

# STATISTICS CANADA'S SITUATION

Statistics Canada "entices" journalists into covering its data by issuing news releases that not only convey data, but also attempt to bring out their true significance through analysis, context and information on trends. These news releases are communicated in the language of journalists, and are written in journalistic style. The news media and their journalists are explicitly defined as the target audience for *The Daily*.

The Daily is Statistics Canada's official release bulletin, the Agency's first line of communication with the media and the public. The Daily issues news releases on the current social and economic conditions and announces all new products. It provides a comprehensive one-stop overview of all new information available from Statistics Canada. The Daily is released at 8:30 a.m. Eastern time each working day, except for the Labour Force Survey and Consumer Price Index, which are released at 7 a.m. Eastern. The Daily has been published since 1932, and posted on the World Wide Web since June 1995 (www.statcan.ca). The releases are targeted not at journalists who are specialists in a particular field, but at general news journalists who lack indepth training to fully analyze raw information. The goal is to obtain positive, accurate and informative media coverage.

Some journalists will take extra care in making sure the figures they are using correspond to the topic of their story, and that the concepts and methodology used to produce the data fit their intended use. But the vast majority of, at least, Canadian reporters are not statistical or economic experts. Moreover, journalists usually do not have much time to research and write their stories. Thus, it is important to ensure the material destined for their use is written as clearly and concisely as possible, and is readily understandable.

One must keep in mind that what the media and the public find interesting are not the data themselves, but rather their application to the lives of average citizens. Topical releases on subjects such as government revenues on gambling or on the health of baby boomers resonate with the media because many people can readily relate to them. Electronic media such as radio and television are keen to cover releases with a strong human-interest angle. At Statistics Canada, special steps are taken to alert television and radio stations of such releases.

It is not always possible, however, to write a statistical release without using precise terms and concepts that many may consider to be jargon. Furthermore, being concise when writing releases sometimes means omitting some important contextual information, which could lead to misinterpretation of the intended message. Evaluating how much contextual information to include in a release is a challenge that requires judgement, knowledge of the subject matter and understanding of media needs. In addition to *The Daily*, Statistics Canada provides a number of other services for journalists:

- Media lockups: Each day on which the Agency releases data on a major economic indicator, the Media Relations section holds a lock-up at our Ottawa headquarters. Journalists are invited to get an advance look at The Daily, enabling them to work on their stories for up to 45 minutes prior to release time. During this period, the journalists are not allowed to leave the lock-up room, or use cell phones. Occasionally, subject matter experts are on hand to answers questions about the release.
- *Media hot-line*: The Agency has dedicated a hotline (613-951-4636) solely for queries from the media. Media relations officers staff this hotline between 7:00 and 17:00 every working day to respond to any inquiries from journalists.
- *Media liaison program:* Media relations officers meet regularly with individual journalists or members of news agencies to explain the services we offer and how we can better meet their needs.
- List of upcoming releases: Every Thursday night, we fax the media a list of the major releases that Statistics Canada is scheduled to issue the following week. Editors and reporters find this is an invaluable tool in planning coverage in advance.

Statistics Canada has created a list of spokespeople who are designated to speak on various subjects, and are directly accessible by journalists. The result has been a more positive, even enthusiastic, reception from journalists who can contact analysts directly. This collaboration has expanded and improved the coverage of releases.

One issue with respect to subject matter experts dealing with journalists is avoiding the inclination to provide too much information, which could blur the most significant points. This can be a problem when statistical experts deal with journalists who in most cases are generalists. At Statistics Canada, it is mandatory that all subject matter spokespersons receive media training. As part of it, they are encouraged to prepare interview plans, which focus on three or four main messages for media consumption. Not only does this decrease the likelihood of providing too much information, it also helps ensure that spokespersons provide consistent messages from one interview to the next.

Another important aid to journalists, as well as all Agency clients, is the annual schedule of release dates for selected economic indicators, which is set 12 months in advance. The current schedule at Statistics Canada contains 28 indicators, ranging from balance of international payments to wholesale trade. It allows journalists and other clients to plan their workload and to obtain advance notice of upcoming releases. In the past, Statistics Canada has conducted seminars for journalists on the nature of the statistics produced by Statistics Canada and on the underlying general concepts. They have not proven to be popular, not necessarily because of lack of interest, but more because of lack of time. To bridge the "gap" between statistician and journalist, Statistics

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Canada has hired media relations officers who have worked in the industry. They are familiar with the needs of journalists, and speak their language.

#### INTERNET

The Internet has become an important tool not only for making access easier to the statistical information published by the NSO, but also to foster statistical literacy in the general population. Since 1995, *The Daily* has been nearly exclusively distributed via the Internet. Most journalists now access *The Daily* electronically, although print copies are still distributed daily to the Parliamentary Press Gallery.

However, *The Daily* is also accessed by many other clients who wish to get their information directly from Statistics Canada. It is a sign of the times that the Web sites of some media outlets have added a direct link from an on-line news story to the release in *The Daily*. Thus, the future may see expansion of *The Daily* from its original purpose as an information vehicle for journalists to an information tool for the general population. As more journalists use the electronic version of *The Daily*, Statistics Canada is progressively taking advantage of the many possibilities the Internet has to offer. Our Web site has started to provide a comprehensive set of meta information about all surveys and their information products. This meta information will be linked to individual releases in *The Daily*.

Fully implemented, the system will offer journalists and others, by way of hyperlinks, access to background information about the specific survey program, its concepts and methodology, data quality, and so on. While it is unlikely that every journalist will read the meta information, at least it is available easily to those who have an interest. As well, it provides a common point of reference when answering inquiries from journalists about details of a release and the underlying methodology.

### MEASURING SUCCESS

Part of being client-oriented is to evaluate the degree to which the needs of a particular client group are met. In the case of journalists and the media, the measure of success has two aspects:

- the extent to which the media use the information in the Agency's news releases, and;
- the extent to which the articles interpret the information in the news releases accurately.

In the case of the former, Statistics Canada maintains an extensive electronic media clipping service that lists all news items on any given day that contain or cite information from Statistics Canada. This service allows the agency to determine how extensively the media has picked up the information from a particular release in *The Daily*.

In cases in which journalists misinterpret data, or just plain get it wrong, it is Statistics Canada's policy to request a correction. Under the Agency's response to media program, Statistics Canada has several mechanisms at its disposal to redress errors. A simple phone call to the journalist will often clarify a relatively straightforward situation. Where some explanation is required, subject-matter analysts prepare a formal letter to the editor with the assistance of writers in the Agency's Communications Division. The Agency attempts to fax these letters to the media within two working days of the offending article. A thumbnail analysis last year showed that about 50% of such letters were published, with an average waiting time of nine days. Obviously, this mechanism works best with print media; recourse is much more limited with electronic media.

# FUTURE ISSUES

In the constant struggle in the media to increase productivity, pressure on journalists is mounting to deliver more, faster. This constitutes a problem and an opportunity. The problem is that journalists will have even less time to absorb the statistical interpretation of the press releases and get the "story" right. The opportunity is to adopt techniques, such as journalistic style, that will improve news releases, and subsequently improve the news media's ability to better inform the Canadian public. However, this requires NSOs to think like journalists, and to temper the tendency to overburden releases with too much detail.

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This is where the impact of the Internet will be felt. The Internet allows access to all information regardless of the extent of detail. The trick is to hyperlink from one information module to the next, increasing the depth of information as the reader moves along the hierarchy of links. The full potential of electronic publishing has yet to be achieved.

The main question is, "How can we use Web technology to most effectively disseminate our information?". Reaching that potential will require that we no longer think in terms of transition of existing products from print to electronic, but rather in terms of electronic publishing as a medium in its own right, with unique and powerful characteristics to be exploited. One idea would be to create and offer on the Internet different forms of "stories" for the different media. The print media need text and a few charts and tables. Television may want a dynamic grahic illustration. Could NSOs provide more visual depictions of their statistics on the Internet where the media can easily pick them up? Such multi-media presentations would also likely be of interest to the general public. In this respect, an NSO's Web site might resemble the site of a newspaper, where the top story of the day is presented as the first item of order. In effect, this is exactly what Statistics Canada has started to do. Since April 2001, *The Daily* has been the home page of the Agency's Web site, the most visible aspect of its operation. Up to 10% of the total hits to our Web site are now on *The Daily* information module.

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