Comparative Analysis of Research on Tourism Expenditure

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1. GENERAL REMARKS

This paper concerns the project co-funded by Canada (Canadian Tourism Commission), Spain (Instituto de Estudios Turí sticos), Sweden (Swedish Tourist Authority) and WTO (World Tourism Organization), and developed by the firm Araldi during the period 2000/2001.

The purpose of this project was to examine various experiences relative to statistical operations used to estimate tourism expenditure and covers a research that had as a purpose to develop three clearly distinguished products:

- Comparative analysis of the questionnaires (Part 1)
- Comparative analysis of the respective work process and methodologies (Part 2), and
- A proposal for a general questionnaire (Part 3) to be used for measuring tourism expenditure related to inbound tourism.

The interest that presents the work methodology used to obtain the different products mentioned above consist in its high level of generality. Its specific application to this comparative analysis on tourism expenditure does not impede to show this generality, but rather make more easy its comprehension now that we have an example which patent it.

- *In terms of organizational formats*, the first point to highlight with respect to the application of this methodology is that it required the close collaboration of experts from all the participating countries and the coordination of their work.

  The participation of experts from the different countries, in order to obtain the three different products, has been indispensable in three decisive aspects:

  - *Supplying* the questionnaires used and related information necessary for Part 1.
  - *Filling out different questionnaires* in order to describe the varied researches on tourism expenditure, as well as the statistical operation involved in each of them (surveys geared to estimating visitor entries and/or departures, manual counts at border posts, visitor surveys at entry points, departure points and in accommodation establishments), necessary to be able to carry out the comparative analysis on systems and methods in each country (Part 2).
  - *Analysing the results* obtained by the research team of the firm Araldi.

- *With regard to its content*, this methodology makes it necessary to distinguish two major parts:

  - Parts 1 and 2 which are *merely descriptive* and is characterized by the inclusion, in comparative formats, of data that are representative both of the questionnaires used and the methods of procedure and work tools used to perform the various statistical tasks.

    Once the data-collection phase has concluded, the work that is conducted will obviously follow a very clearly defined pattern whose results will be presented in hierarchical structures in the form of an index showing the responses that correspond to each country.

    Table 1 reproduces a short example of the results obtained in Part 1 where coloured cells indicate the questionnaire where the question of reference comes from. The results obtained in Part 2 are also presented in a similar way.

Table 1

	CAN	FIN	FRA	ITA	MEX	SPA	SUE	USA
EXPENDITURE								
The information is refered to								
You alone								
The goup you are travelling with								
Size of the group								
Have you make any expenses								
No								
Yes								

– Part 3 has been *more creative*, and concerns the procurement of a unified general framework which incorporates aspects that are common to the different countries while maintaining, as far as possible, aspects that are specific to them. Based on this general framework, [1] a general questionnaire on tourism expenditure for inbound tourism has been developed as well as the corresponding general guidelines for its implementation.

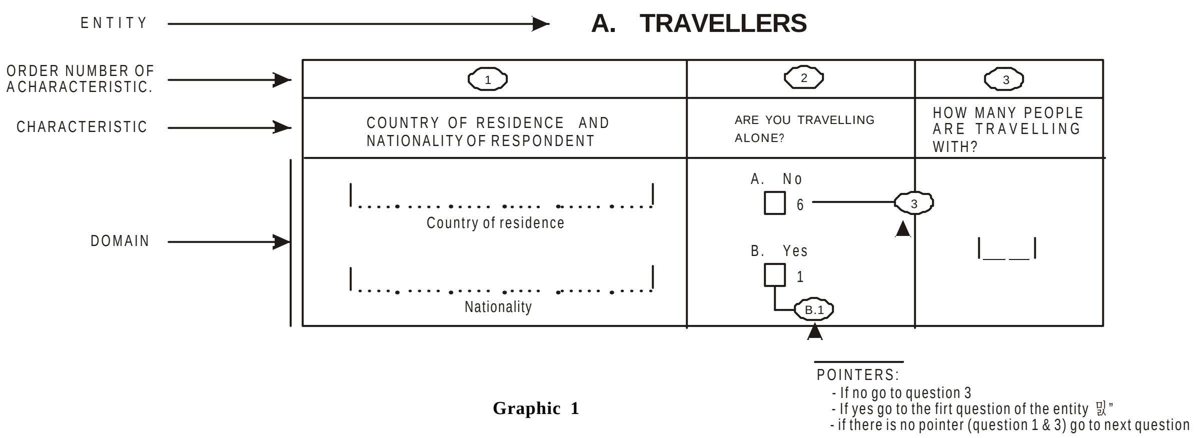
The materialization of the contents of each of these three Parts of the analysis hinges on the availability, a priori, of a *formal methodology* for designing questionnaires and *a definition of the different tasks* comprised in the statistical undertaking. This allows to count on a more objective basis than the one generally used in similar comparative analysis.

Both the data-capture and data-analysis parts follow the norms laid down by the Grafo_Test Methodology (so called because it applies the graph theory to the design of tests or forms).

2. COMPARATIVE ANALYSIS: THE QUESTIONNAIRES (Part 1)

Once the questionnaires of the different countries were received, and, in order to make possible the hierarchical structure in the form of an index which shows the responses that correspond to each country (page 1 - table 1), it was necessary a homogenisation process in terms of contents and structures.

- In order to homogenize the contents, a linguistic study of the questionnaires have been made so that in every questionnaire it is always to distinguish between Entities (subjects), Characteristics (open predicates that determine the Entity) and Domains (close predicates that determines the Characteristic) as shown in graphic 1.



Graphic 1

After the linguistic study every questionnaire have been defined in terms of Entities, Characteristics and Domains, linking each other through pointers, with an informatic toll called Grafo_Win. Using the data-bases generated by this program it is easy to structure the information of each of the

[1] This general framework is presented under the form of a questionnaire, in order to be able to use it as an instrument to help the design of a specific questionnaire.

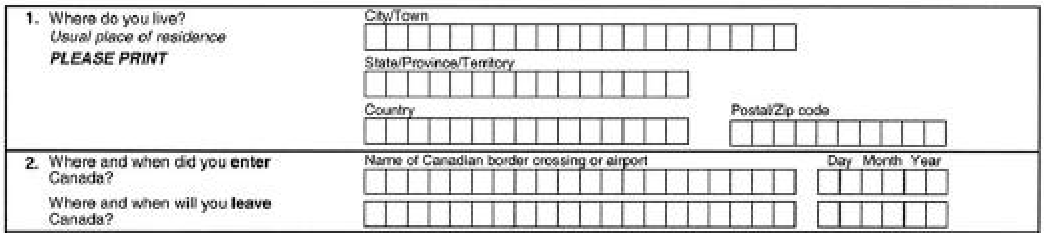
questionnaires used in terms of Characteristic and Domains related to an Entity.

It is then when establishing a unified matrix as the one that is here presented (table 1 – page 1) is a relatively simple matter. By structuring the answers for each country in columns, an immediate comparative analysis can be made.

Once the questionnaire has been defined, Grafo_Win is also able to built atomaticaly the entry-data screens and a questionnaire in Grafo_Test format which afterwords is converted into Corel as shown here below.

The following example highlights the differences between the original an the transformed questionnaire:

Canadian original questionnaire


1. Where do you live?
Usual place of residence
PLEASE PRINT

City/Town

State/Province/Territory

Country

Postal/Zip code

2. Where and when did you **enter** Canada?

Where and when will you **leave** Canada?

Name of Canadian border crossing or airport

Day Month Year

Canadian ***Grafo_Test*** transformed questionnaire

1	2	3
WHERE DO YOU LIVE? Usual place of residence	WHERE AND WHEN DID YOU ENTER CANADA?	WHERE AND WHEN WILL YOU LEAVE CANADA?
1. |..............................| City / Town 2. |..............................| State / Province / Territory 3. |..............................| Country 4. |__ __ __ __ __ __ __ __ __ __| Postal / Zip Code	|..............................| Name of Canadian border crossing or Airport |__ __/__ __/__ __| Day / Month / Year	|..............................| Name of Canadian border crossing or Airport |__ __/__ __/__ __| Day / Month / Year

3. COMPARATIVE ANALYSIS: METHODOLOGICAL BACKGROUND (Part 2)

In order to gather the different types of information that make possible the hierarchical structure in the form of an index which shows the responses that correspond to each country similar to the one show in table 1 (page 1), it was decided to design an *ad hoc Manual*, to be implemented by means of a computerized programme, and easy to be used by each of the countries involved in this research. There were two main reasons to prepare this Manual:

- On the one hand, if we used the methodological references already published, the process to come to the comparative analysis might have been tortuous and difficult for the informers. Our aim was to pick up the diverse specifications that may be presented in the study of a statistical operation, both spatial (diversity of countries) and temporal (different versions of the same type of operation in a country).
- On the other hand, because it was thought of great importance to keep some kind of information that is not generally mentioned in the methodological references normally published.

The Manual was designed with eight modules (each of them including an explanatory note, the corresponding questionnaire and a brief description of the aims of the answers to each question included in it). The structure of the Manual and the order of importance of its modules meet the concept of *work process* for statistical operations.

From this standpoint and in relation to the statistical work process, the methodology applied is based on the premise that it is just as important to describe the end data presented in book, leaflet or database form, as to explain the conditions in which they have been obtained. Hence the importance, in terms of mirroring the outcome of the entire specific statistical work process, of ensuring that the questionnaires that need to be completed refer both to the documentation on the end results generated and to the intermediate data produced, and also to the methods used to obtain both sets of data in the course of the various statistical operations. In the case of research on tourism expenditure, the nature of the statistical operations conducted in the countries studied varies substantially: counts of vehicles at border entry and exit points, surveys of traveller entries at border points, expenditure surveys at border exit points, expenditure surveys in tourism accommodation establishments, etc.

The Manual has been designed as a computerized programme, implemented in Excel. It includes two introductory modules (M1 and M2) that allows to know not only the content of the respective tourism expenditure surveys, but also the administrative records used and the number of statistical operations involved. Depending on this, the application provides another five modules (M3 to M7) that can be used to describe each of them. The content of these modules is as follows:

- Organizational aspects
- General data
- Software used
- Work team
- Administrative documentation

Finally, M8 is an extra module for specific remarks and for identifying further wok envisaged by the country in a medium term.

4. **GENERAL FRAME WORK OBTAINED AND WTO PROPOSAL OF A GENERAL QUESTIONNAIRE RELATED TO INBOUND TOURISM EXPENDITURE (Part 3)**

As already mentioned, the main priority of this research project was to obtain a unified general framework (incorporating aspects that are common to the different countries while maintaining, as far as possible, aspects that are specific to them) with the objective of designing specific questionnaires that could have a general application by different countries (with respect, for example, to different forms of tourism, different institutions interested, etc.).

It was an ambitious objective in itself since, at the beginning, it was difficult to guarantee its technical feasibility and it was not evident whether the complexity of the questionnaires used by the countries having participated in this project, could have a common and solid background to initiate it.

Once the general framework obtained, the process to design a questionnaire must take into consideration, on the one hand, the characteristics of the tourism economy of the country(ies) of reference and, on the other hand, the main technical characteristics (that is, statistics related to the operation to be developed).

Since the statistical operations analysed are diverse (for example, while Sweden undertakes expenditure surveys in hotels, the rest of the countries analysed undertakes frontier surveys by all means of transport - except the USA that limit themselves to air traffic -), it is possible to suggest different approaches.

The WTO has chosen the following scenario:

(a) a country where "inbound tourism" is important (not only with respect to arrivals but also with respect to expenditure in the country in terms of the "travel" item of the Balance of Payments) and, more specifically "tourists" (that is, where the importance of non-resident "same-day visitors" at national borders is not relevant); and

(b) where it is possible to make interviews at national borders (that is, in the different access routes –air, rail, road or sea- when the tourist leaves the country).

The proposal offered by WTO to those countries willing to undertake a statistical operation on tourism expenditure of non-resident visitors, or to update/revise the one in force, is a basic questionnaire with a series of guidelines for its application. In principle, this could lead to the use of a common questionnaire by a group of countries, with a similar implementation and, consequently, the data obtained could be, to a great extent, comparable and reliable.

(It is obvious to say that the questions included in this general questionnaire can be completed with others contained in the unified general framework of reference).