### Association for Information Systems AIS Electronic Library (AISeL)

AMCIS 1998 Proceedings

Americas Conference on Information Systems (AMCIS)

December 1998

# The Design Process of a Cross-Cultural Exploratory Quantitaive-Qualitative Survey Research Project to Study the Decision-Making Process

Henrique Freitas

Follow this and additional works at: http://aisel.aisnet.org/amcis1998

#### **Recommended** Citation

Freitas, Henrique, "The Design Process of a Cross-Cultural Exploratory Quantitaive-Qualitative Survey Research Project to Study the Decision-Making Process" (1998). *AMCIS 1998 Proceedings*. 320. http://aisel.aisnet.org/amcis1998/320

This material is brought to you by the Americas Conference on Information Systems (AMCIS) at AIS Electronic Library (AISeL). It has been accepted for inclusion in AMCIS 1998 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

## The Design Process of a Cross-Cultural *Exploratory* Quantitative-Qualitative Survey Research Project to Study the Decision-Making Process

Henrique Freitas and Research Team

Associate Professor, GESID - PPGA - Escola de Adm. da UFRGS and CNPq Researcher (Brazil) Visiting Researcher at ISRC, University of Baltimore (USA)

**Research Team** 

João Luiz Becker, Amarolinda C. Zanela, and Marie A. Macadar, Gesid-PPGA, Escola de Administração da UFRGS, Porto Alegre/RS, Brazil Jean Moscarola, Irege, UFR Gestion-Université de Savoie, Annecy, France Milton Jenkins, ISRC-University of Baltimore, MD, USA

#### Abstract

This paper describes the design process of a exploratory cross-cultural and cross-sectional survey to be applied in different countries, aiming to point out the main perceptions of the managers regarding the decision-making process. We present some of the main steps in the beginning of the research process in order to conceive and validate quantitative and qualitative instruments to collect data to our investigation.

#### **Introduction: The Research Project**

The end of the twentieth century has been characterized by the redefinition of lines in the world map, and the emergence of a new global order has profoundly transformed the political and economic relationships among the countries. The beginning of the twenty-first century will be characterized by the intensification of markets globalization, competition, and also cooperation. The **Decision-making Process** field (ALTER, 1996) has, in this connection, aroused much interest in the academic and entrepreneurial communities, and the economic as well as cultural, social and political **globalization** can be seen in the ever-close proximity between different continental organizations like EEC, Nafta, etc (THUROW, 1996). The challenge for greater competitiveness has led to *rethinking* international entrepreneurial relationships. Joint-ventures and multinational companies are becoming ever more frequent, with a intensification of international interaction. Such development has brought increasing complexity to the decision-making process.

There is a growing need for making decisions in less time; that is, the decision maker must rapidly assess this complex picture and its consequences. There may be short-term or long-term consequences at social, economic, or political levels. It is also necessary to <u>understand the necessities and logic of decisions</u>, which may vary according to a number of aspects; such as culture, values, and individuals involved. The different countries, with which they relate, may also have an influence on decisions. Against this background – failing to mention, though, the serious political, religious, or other conflicts among nations and their consequent negotiations – it is easy to see the importance of performing studies in this area. How does the decision maker perceive such a process? How does the decision maker's reasoning develop during the decision-making process? What does the decision maker actually think and value during the decision-making process?

A study of this nature also has its practical importance: as two companies from different countries enter into negotiations, the negotiator that is acquainted with such a reference will be favored because of his understanding (and perhaps prediction) of the other negotiator's reasoning, certainly taking advantage of the interaction or, at least, facilitating interaction and comprehension.

By analyzing organizations, SIMON et al. (1987) claim that "the activities carried out in organizations, at their various hierarchical levels, are essentially Decision Making and Problem Solving activities". <u>Decision</u> is the least visible part of the organizations policy; nevertheless, it is their main engine, since it is through decisions that the individuals' ideas, feelings, and ambitions turn into actions. In studying organizations, managers and executives, their information systems, etc., we cannot fail to understand the Decision-making process.

Even if many researchers are working on decision theories, **SIMON's model** (1947, 1997) still is supposed to illustrate very well the <u>decision-making process</u>: his approach is based on the decision maker's limited rationality, which means he fully accepts decisions only tolerable (and does not intend to maximize the utility or even cost minimization). In fact, his model considers the way people decide in situations of complexity, incomplete information, inadequate knowledge, etc. He highlights some important steps (and their characteristics), like identify the problem and its scope; find and collect the relative information; set some objectives; design some practicable alternatives to consider, and evaluate each one, and then make a decision, which will determine some actions and need the adoption of some controls in a way to be sure of the consequences and also to be able to follow and even review the process and to improve the decisions.

Of the many behavioral factors that influence the decision maker, we can emphasize the Individual **Experience** and Characteristics inherent in the individuals (DAVIS & OLSON, 1987) and the origin of National **Culture**. There are several dimensions concerning the National Culture, such as those studied by HOFSTEDE (1991). "Culture is the collective programming of the mind which distinguishes the members of one group or category of people from another". Among these dimensions are the following: hierarchical or power distance, uncertainty avoidance, individualism versus collectivism, masculinity versus femininity, and short-term or long-term orientation. HOFSTEDE also indicates that we can analyze the culture considering several "layers" of mental programming within each person as almost everyone belongs to a number of different groups and categories of people at the same time, like: country, gender, profession, generation, and others.

Based on the literature, we have identified three initial issues or questions on which to base our investigation. They are:

**"The influence of management theories":** in all groups to be addressed (regardless of their national culture or their decisional background), is it possible to identify (even implicitly) common factors, steps, guidelines or insights concerning the way people perceive the decision-making process, especially if we take the SIMON's 'limited rationality' model of decision making as a reference?

**"The variation of national culture":** can the cultural differences account for deviation of the considered or outlined decision model? Will this variation influence the perception they have of the decision-making process?

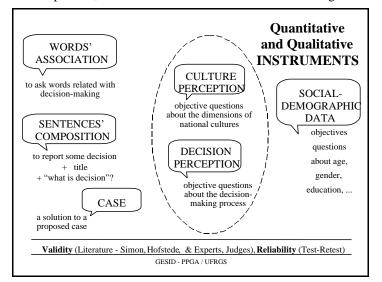
"Variation related to the decision-maker's individual background": is the effect of cultural differentiation further enhanced by individual background as represented by situations of responsibility in decision?

#### **Objectives and Methodology**

The overall **objective** of this study is to identify the potential decision-makers perception of the decision-making process in different countries or regions in cooperation, verifying whether such variables as the origin of National Culture and individual background influence the decision making model. After had defined the subject, main research design and questions, the especific goals in a first phase are:

- To conceive a set of data collection instruments that allows to identify the perception of decision-makers about decision-making process at different countries or regions, considering the research questions.
- To verify the validity and the reliability, at local level, of the data collection instruments.
- To develop and apply a method to define the best sequence to present different quantitative-qualitative instruments to the respondents.

A second phase will allow us to collect data from Brazil, France and USA, and then proceede all qualitative and quantitative data analysis, to have then the results and analyze the implications of such a project, expecting have defined some decision-makers profiles, as well as have available a decision-making database concerning people from the three countries.



#### **Sample and Tools**

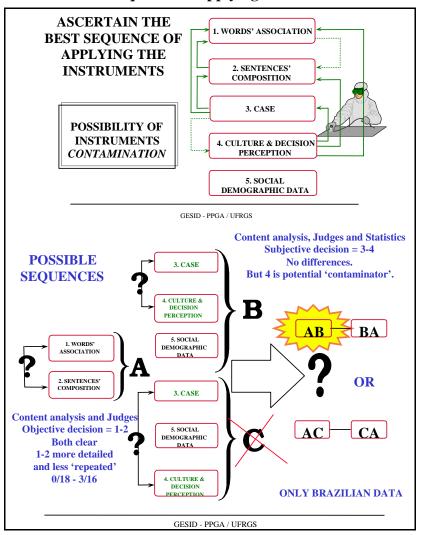
In order to apply the set of tools for quantitative and qualitative data collection characterizing a survey (GRAWITZ, 1993; FOWLER Jr., 1993), MBA students are being invited to participate in the research, as well as professionals working in organizations. Data from about 70 to 100 people are expected to be obtained from each country (non probabilistic sample).

Three different types of tools are being applied to these groups: open-ended questions about decisionmaking process, a case study, and closed questions concerning decision and cultural aspects and also demographical data. These tools are Protocols for Data Collection in order to standardize their application. The protocols comprise interrelated question sets that will allow us to obtain the decision-makers perceptions of certain aspects.

In the **first** tool, <u>open-ended questions</u> should be answered, according to a Protocol of Words Association

and another of Sentence Composition. The participants will be acquainted with a certain context and required to issue perceptions inherent in the decision-making process: verbs (action), adjectives (qualities), a decision report. The **second** tool seeks to complement the data collection undertaken with the previous tool. It comprises a 'case' (10-15 lines text) that involves the respondent in a given decision situation to which he should propose a written solution. Thus, the protocols already used will receive additional information that will lead to a greater understanding of the problem. In such analyses, we make use of content and lexical analysis techniques (KRIPPENDORFF, 1980; GRAWITZ, 1993; BARDIN, 1996). The **third** tool concerns <u>closed</u> <u>questions</u>, making use of a Protocol of Attitude and Opinion Scales about Decision and Culture and another one with socio-cultural and demographical measures.

#### What is the Sequence of Applying the Instruments?



#### **Data Analysis**

The answers obtained in sessions of about 50 minutes will be analyzed through software proper for quantitative and qualitative analyses (MOSCAROLA, 1990; SPHINX LEXICA, 1995), as well as simple and multiple crossings between variables. The results are afforded by the cooperation with researchers from the 3 countries. Data collection ended by February 1998, almost 300 respondents, around 100 from each country. The analysis plan is based on the content of the open-ended questions, which will be explored by the research team.

#### Conclusion

The goal of this paper is to give an idea about the process to design a set of quantitative and qualitative instruments to study the managers perception about decisionmaking process: the better we know the managers, the better will be the solutions, tools and systems offered to them! It is not so easy to follow all steps that the academical world asks when we want define ours as a "rigorous" study or instrument. A lot of different procedures are needed in order to verify "validity" and "reliability" of each one of the scales, questions, instruments. After all, were we as rigorous as possible? How many times should we verify and discuss about the way we do our research before really apply it? Should we stay in the way to look for being rigorous or should we do this study before it is too late?

#### References

Alter, S. Information system. The Benjamin-Cummings Publishing Co., 1996.

Bardin, L. L'analyse de contenu, Paris: PUF, 1996. 291p.

Davis, G. & Olson, M. Management Information Systems. McGraw Hill, 1987. 718p.

Fowler Jr., F.J. Survey research methods. Sage Publ, Applied Social Research, v. 1, 1993. 156p.

Grawitz, M. Méthodes des sciences sociales. Paris: Dalloz, 1993. 870p.

Hofstede, G. Cultures and organizations: software of the mind. London: McGraw-Hill, 1991. 279p.

Krippendorff, K. Content analysis: an introduction. The Sage CommText Series, 1980, 191p.

Moscarola, J. Enquêtes et analyse de données. Paris: Vuibert, Gestion, 1990

Simon, H.A. et al. Decision making and problem solving. *Interfaces*, v.17, n.5, Sept. 1987, p.11-31

Simon, H.A. Administrative behavior: a study of decision-making processes. New York: MacMillan, 1947. 259p., and The Free Press, 4th. Edition, 1997.

Sphinx Léxica<sup>®</sup>, <u>User's guide</u> (for Windows). Brazil: http://www.freitasecunha.com.br, 1997.

Thurow, L.C. The Future of Capitalism. New York: William Morrow & Co., 1996.

A full text of this paper is available upon request from author, as well as the survey instrument to collect data (in Portuguese, French, or English) are available upon request from hfreitas@portoweb.com.br. This work is supported by several Brazilian Government Research Agencies (CNPq, Fapergs, Propesp/UFRGS, and Capes/Cofecub).