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Decision-Making Process, National Culture, and Decisional Background Cross-Cultural Exploratory Quantitative-Qualitative Survey Research Project: Brazil, France, and USA-Some Preliminary Results

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Abstract

This paper presents a brief description of a survey designed to accomplish a cross-cultural exploratory study in three different countries (Brazil, France, and USA), aiming to point out the main perceptions of the managers regarding the decision-making process. 277 MBA students or managers answered. We present the first results obtained, illustrating that we do find differences, and we need to pay attention to cultural factors, especially now that every enterprise, every community is trying to be in touch and do some business anywhere.

Introduction: The Research Idea

We are having a intensification of markets globalization, competition, and cooperation. The **decision-making process** [1, 15] needs to be improved as far as we can. The economic, as well as the cultural, social, and political **globalization** is making the earth seem like one only (and *small*) market [27]. The present study try to point out profiles of managers in the organizations and compare them, especially considering national cultures.

Simon' model [24, 25] defines the decision-making process: it considers the way people decide in complex situations, incomplete information, inadequate knowledge. Of the many behavioral factors that influence the decision-maker, we can emphasize the Individual Experience and Characteristics inherent in the individuals [7] and the origin of National Culture. There are several dimensions concerning the National Culture (Hofstede, [11, 14]): hierarchical or power distance, uncertainty avoidance, individualism versus collectivism, masculinity versus femininity, and short-term or long-term orientation. Hofstede indicates that we can analyze the culture considering several "layers", like: country, gender, generation, and others.

We present now the research objectives (section 2), as well as the research method (section 3); and we develop some of the initial results (section 4), and a brief conclusion (section 5).

The Research Objectives

The overall objective [18] is to identify the potential decision-makers' perception of the decision-making process in different countries or regions, verifying whether such variables as the origin of National Culture and individual background influence the decision making model. Among the specific objectives are the following (we are right now on the 3rd. one, first two are done): Identify and validate instruments to collect quantitative and qualitative data; conceive and design a database to be explored by researchers from the countries involved; identify discriminating factors that influence decision-making perception.

Methodology

Different **methods and techniques** are being used in this research with respect to tools for the collection and analysis of quantitative and qualitative data. It is a cross-cultural exploratory cross-sectional survey [9, 10, 12, 19]. Protocols were designed to collect and analyze data. Executive MBA students were invited to participate in the research, as well as managers. Three types of tools were applied to these groups: open-ended questions about the decision-making process, a case study, and closed questions concerning decision and cultural aspects, and also demographic data. All tools were submitted to standardization, double translation and back-translation (Portuguese, French, and English). Crossing of the data collected (mainly using Correspondence Analysis [3, 4, 13], Variance Analysis, and Main Components Analysis [21]) will allow an in-depth analysis of the research questions. The answers obtained in sessions of about 50 minutes are being analyzed with software for quantitative and qualitative analyses [20, 22, 23, 26]. Since such tools are concerned with different concepts (national culture, individual

Country_data_from	32.Changing mind (R F)	33.Alternatives (R F)	36.Numbers based (R F)
BRAZIL	2.03	4.15	3.61
FRANCE	2.01	3.75	3.12
USA	2.40	4.13	3.31
WHOLE	2.12	4.00	3.35

background, and decision model), the potential contribution of results from this study is highlighted. The legitimacy of the results is afforded by the researchers from Brazil, France, and USA. The research design is described in other AIS 98 paper ("The Design Process of a Cross-Cultural Exploratory Quanti-Qualitative Survey Research Project to Study…").

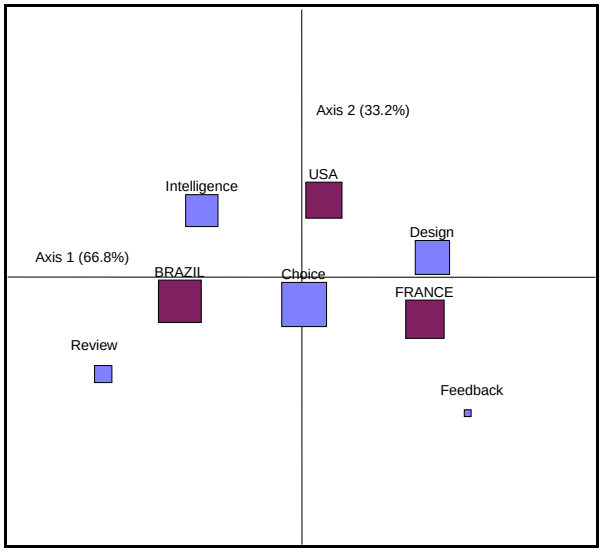
Some Preliminary Results

As an IS community interested in Global IS, the more we know about the managers, the better will be the relationships in this information and decision process. We collected data from 277 people, 103 Brazil, 102 France, and 72 USA. Age from 20 to 60 years old (Mean = 30 years old, standard deviation = 7.8 years old), 78 (28%) less than 25 years old, 114 (41%) from 25 to 35 years old, and 74 (27%) 35 years old and above. Gender: 179 (65%) male, and 95 (34%) female.

The influence of management theories and common perceptions, 1st research question: in all groups to be addressed, is it possible to identify even implicitly common factors, steps, guidelines or insights concerning the way people perceive the decision making process?

The content of the decision report (open-ended question): the respondents from each country focused in different subjects, Americans wrote about their career; the Brazilians about their professional activity; while the French statements were about personal decisions.

In another **content analysis of the decision report**: we identified in the sample the three main steps defined by Simon (1997), intelligence, design and choice. Clearly, everybody is giving attention to the "choice" step (in the center of the factor chart below), more than the previous (intelligence and design). The American and Brazilian are spending some more time in the beginning of the decision-making process (intelligence) than French, which are focusing a more in the evaluation of alternatives (design). The Brazilian seems to be the one who is caring about the decision further in the process (review).



Concerning the Correspondence Analysis (CA) to generate the chart above, please see [3, 4, 5, 13]: a geographic reading of the factor chart is enough to point out some differences. The dependence is highly significant (Chi2 = 36.42, df = 8, 1-p = >99.99%).

The decision actions (verbs): Reducing the verbs to a very few words, by Lexical Analysis, we verified that Brazilian respondents give value to the intelligence step ("search_plan_know"), while the French and the American – if we keep in mind this results - need to give more value to this first activity in the decision-making process. The Brazilian need to develop the design step ("design_analyze_think"), which is already well observed by the French and still better by the American. The Americans give less attention to the decision step itself; while everybody is taking care of the action after decision-making ("communicate_manage_ help").

The case solution, maybe a matter of "flexibility"? After content analyzing the solutions offered by the respondents to the student house case was: the American seems prefer do not break the rules, or maybe study the case and offer changements of rules for new candidates, they suggested less than expected a flexibility allowing the student to stay; while the Brazilian, and still more the French are for a flexible solution.

We have some objective data concerning the decision-making process, especially design, feedback and review, as well as some of the decision-maker perceptions about that (objectivity-subjectivity, and speed of decision). The only variables defining a difference among the three countries were "changing mind" (after having made a decision you change your mind), "all alternatives" (recognized alternatives are carefully considered when you make a decision), and "numbers-based" (your decisions are made based on numbers). All three questions have a single, scaled response, parameters ranking from 1-rarely to 5-frequently. In fact, the differences are not too big: all respondents rarely change their mind, normally evaluate alternatives, and are more number-based than not.

We collected data regarding the **layers of culture** as defined by Hofstede (1991): national level (country), gender, generation (age), social class (profession and education), linguistic, religious and ethnic affiliation. The generation and the national levels are the only two discriminant variables considering this sample. So, we defined a new variable merging Country and Age, fixing ages above and below the mean (age = 30 years old).

Considering the new variable (country and age), we have then five variables allowing to discriminate the countries and ages concerning the perception of the decision-making process: the youngest Brazilian placed themselves as the most "rational", and the oldest Brazilian are the most based on numbers. The youngest French seems to be the most subjective and emotional, as well

as they are less based on numbers than others. Almost like the oldest French, whose feedback occurs less frequently than others, the youngest American have an average perception about everything, though the oldest American perceive themselves as studying the most carefully alternatives before deciding.

We have four variables defining a common sense regarding the decision perception across the countries and ages: "speed of decision", normally they decide a little bit more quickly (2.79 in a scale from 1-quickly to 5-slowly); "safe-risky", they place safe (2.34 in a scale from 1-safe to 5-risky); "know consequences", they normally know the consequences of their decisions (3.25 in a scale from 1-rarely to 5-frequently); "feedback", after examining various alternatives, they normally go back trying to discover others before deciding... (3.02 in a scale from 1-rarely to 5-frequently).

The cultural dimensions, 2nd question: differences yes, but are they "too big"? 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?

Country_data_from	40.Superv disagr (R F)	42.Not break rules(D A)
BRAZIL	2.03	2.41
FRANCE	2.39	2.98
USA	2.74	2.60
WHOLE	**2.34**	**2.67**

Power distance: we can find a different perception when the matter is "to be afraid of showing some kind of disagreement to your superior" (Mean = 2.34, in a scale from 1-rarely to 5-frequently afraid). The Brazilian (Mean = 2.03) seems have less problem with this aspect, while the Americans (2.74) perceive themselves like having some concerns to show their disagreement.

Long term - short term: a little bit toward the long-term more than to the short term (Mean = 2.34, in a scale from 1-Long term to 5-Short term).

Uncertainty avoidance: asked if "the rules of a company should not be broken, even if the situation leads you to believe that breaking them would benefit the company", they all think the rules should be broken (Mean 2.67, in a scale from 1-disagree to 5-agree). They save salary for some unforeseen (Mean 3.51), and also feel sometimes nervous (Mean 2.94, in a scale from 1-Rarely to 5-Frequently).

Individually - Collectively: the respondents of all countries answered the same way (Mean = 2.88, in a scale from 1-individually to 5-collectively), and all of them taking care of their team's opinion (Mean = 4.18).

The decisional background, 3rd question: is the effect of cultural differentiation further enhanced by individual background as represented by situations of responsibility in decision and others? Some of the variables allow us to discriminate the countries: the age, the working time (in years), and management time (in years). The Brazilian a little bit older (32 years old), having worked around 14 years, and with 5 years as managers. The American are the youngest (28 years old), having worked only 8 years, and with 4 years as managers. The French are almost 30 years old, having worked for more than 11 years, with almost 8 years as managers. An automatical classification was tried with the three discriminant variables: as result we've had 103 respondents in the "unexperienced" class (almost 30 years old, 9 years of work, and 4 years as managers), and 50 in the "experienced" class (42 years old, almost 23 years of work, and 9 as managers). The variables were not controlled a priori.

Country_data_from	119.Age_30	128.Decision Experience
BRAZIL (103)	30.0 and above (58) less than 30.0 (39)	Unexperienced (42) Experienced (27)
FRANCE (102)	less than 30.0 (53) 30.0 and above (46)	Unexperienced (28) Experienced (17)
USA (72)	less than 30.0 (51) 30.0 and above (19)	Unexperienced (33) Experienced (6)
WHOLE (277)	**less than 30.0 (143) 30.0 and above (123)**	**Unexperienced (103) Experienced (50)**

Conclusion

The goal of this paper is to offer to the IS community some initial results (final results will be available since March 1999). It is important to develop a knowledge, even a database, concerning the decision-makers' profiles regarding the national cultures involved in global IS. Data now collected will allow us to further investigate the research questions. Since we can find differences among the countries involved, are we able to offer them different tools to facilitate the accomplishment of their tasks to increase world trade and cooperation?

References

References are available upon request from author (hfreitas@portoweb.com.br).

The software Sphinx Lexica® (e-mail: f&c_cons@ portoweb.com.br) served as support to the quanti-qualitative data analysis. The survey instrument (in Portuguese, French, or English) and two full papers (research design and first results) are available upon request from hfreitas@ portoweb.com.br. This work is supported by Brazilian Government Research Agencies (CNPq, Fapergs, Propesp/UFRGS, and Capes/Cofecub).