

TRANSPARENCY IN THE CONTEXTS OF BRAZILIAN AND SPANISH GOVERNMENTS: PROPOSAL OF A MODEL FOR COMPARATIVE ANALYSIS

Mauricio Vasconcellos Leão Lyrio

Rogério João Lunkes

Universidad Federal de Santa Catarina (Brasil)

Emma Castelló Taliani

Universidad de Alcalá

ABSTRACT

This study aims to propose a model for the assessment of transparency web portals of Brazilian and Spanish governments at sub-national level in order to allow for comparison between the two contexts and suggest improvements to their levels of transparency. The article is based on a constructivist perspective and adopts as an intervention instrument one of the methodologies arising from European school of operations research, namely Multi-Criteria Decision Aid – Constructivist (MCDA-C). It is believed that this study can contribute to the discussion of government transparency on the Internet, since it seeks to address the issue not only from a legal perspective, but from a broader perspective, incorporating elements of assessment that go beyond legal requirements, and seeks to present an application at a level of government not yet explored thoroughly in the academic field.

1. INTRODUCTION

Government transparency is a theme that goes back a long time. Meijer (2015) argues that the discussion arose from the French Revolution, involving its construction in a representative democracy and based on legal grounds, to the idea of transparency in participatory democracy, incorporating the relationship between government and society in a virtual environment, involving issues such as the availability of government documents on web sites. When discussing the historical evolution of the term, Meijer (2015) argues that its roots go back to the Greek city-states, but the Enlightenment thinkers (Rousseau, Kant and Bentham) and the French Revolution played an important role in relation to the growth of attention to transparency aiming to check abuses of power. For the author two phases can be identified in relation to the history of transparency. The first phase can be labeled as transparency in a *representative* democracy -a concept related to the construction of representative democracy, propagated by the American and French revolutions. The second phase can be labeled as transparency in *participatory* democracy- with its concept associated with a greater active participation of society in the public business. The author argues that in both cases the term is associated with an opening of the corridors of power for the possibility of monitoring and public scrutiny.

Taking into consideration its historical trajectory, Lyrio, Lunkes and Taliani (2015b) argue that the debate on public transparency gains strength from the 2000s on, coupled with the emergence of public governance theories and the popularization of the Internet. The discussion of government transparency on the Internet, context in which this work develops, comes from

the 90's and is related to the relationship between government and society in a participatory democracy. Meijer (2009, p. 259) argues that computer-mediated transparency relates to "[...] ability to look clearly through the windows of an institution through the use of computerized systems" and that this characteristic (transparency mediated by computers) is related to a modernist perspective of transparency. Its proponents argue that transparency through computerized systems can improve governments around the world by reducing corruption and strengthening accountability for citizens. On the other hand, opponents of modernist ideas of transparency see negative effects in this perspective. They argue that those who know that everything they say or write will be public, can 'massage the truth' and the fact that it is often unclear who has said, compiled or endorsed the supposed "information" makes it worse (Meijer, 2009).

Despite the heated debate, there is some consensus regarding the relationship between transparency and corruption (Flórez, 2008; Kim, 2008; Rausch & Smith, 2010). Flórez (2008) starts from the assumption that the risks of corruption decrease as management is transparent and promotes social control, arguing that the greater the transparency in management processes, the smaller are the risks of corruption and, consequently, the lower the levels of its occurrence. Kim (2008) argues that many of the problems related to corruption in the public sector are linked to lack of transparency. Rausch and Soares (2010) corroborate this understanding by claiming that transparency in public accounts can inhibit the practice of corruption, through pressure exerted by social control. It can be inferred that higher levels of transparency tend to be associated with lower levels of corruption; moreover, it can be said that this discussion is reinforced in public governance, since this movement involves joint and shared actions with a view to solving social problems, within the context of a network design concept in the search for consensual decisions between State, Market and Society (Kissler & Heidemann, 2006; Pedersen, Sehested, & Sørensen, 2010; Robichau, 2011).

This study is part of ongoing research inserted in a modernist perspective of transparency (Meijer, 2009) -in its understanding of the importance of the Internet in government transparency mediation in our times- and aims to propose a model¹ for assessing electronic portals of Brazilian and Spanish governments at sub-national level, which allows for the comparison between the two contexts and suggest improvements to their levels of transparency. As a result, we expect to identify and organize criteria for assessment of the transparency levels presented in web portals of sub-national governments of the countries (States and Autonomous Communities, respectively), making use of elements from literature, as well as legislation and other indices used for assessment in these countries.

The relevance of the study can be argued in terms of a certain reductionism perceived in studies that seek to analyze the levels of transparency in government web portals: generally such studies do so locally, from a legalistic perspective and focusing on fiscal transparency (Armstrong 2011; Benito & Bastida, 2009; Cruz et al., 2015; Lawrence et al., 2013; Pattaro, Jorge Sá, & Lawrence, 2012; Rios, Bastida, & Benito, 2014; Staroscky et al., 2015). In this sense, it is believed that the present study can contribute to the discussion of government transparency on the Internet, since it seeks to address the issue not only from a legal perspective, but from a broader perspective, incorporating elements of assessment that will go beyond legal requirements, and seeks to present an application at a level of government has not yet explored thoroughly in the academic field.

After this introductory section the study is organized as follows: Section 2 presents its methodological framework and the intervention instrument adopted in construction of the model -Multi-Criteria Decision Aid- Constructivist (MCDA-C); Section 3 presents the process of construction of the assessment model; finally, section 4 presents the final remarks about the proposed model, shows the limitations of the study and suggestions for future research.

2. METHODOLOGY

With respect to its methodological framework, this study is based on a constructivist paradigm, which according to Lincoln and Guba (2000) is based on the belief that realities are constructed around a consensus on the understanding of the investigated object and having the researcher as a facilitator in the process of constructing this knowledge. The constructivist paradigm adopted concerns the intervention instrument, based on the European school of decision aid, that according to Roy (1990, 1993, 1994) seeks to build suitable models to given contexts, considering assumptions, beliefs and values of the parties involved.

From the point of view of its objectives, the present study constitutes a piece of exploratory research aiming to deepen the understanding of a particular phenomenon, in this case the phenomenon of transparency in government public management in the specific context of sub-national governments of Brazil and Spain. This exploratory feature is present at the time of structuring the proposed assessment model, as a thorough search of the literature is required, as well as a search of the laws of both countries to identify elements that may contribute to its structure. Moreover, the exploratory feature is also present at the time of carrying out semi-structured interviews, which aim to deepen the understanding of this phenomenon from the perspective of experts.

From the point of view of the approach to the problem investigated, it is configured as a piece of qualitative/quantitative research. Merriam (2002) considers that qualitative studies seek to understand a given phenomenon, in this case the phenomenon of public transparency in the electronic media, and is present in the structuring phase of the assessment model. The quantitative approach, in turn, is present in the assessment phase, as seeking a higher level of accuracy in the evaluation by quantifying the levels of transparency (Bryman, 1988a, 1988b). Finally, in relation to technical procedures, data collection adopts document analysis and semi-structured interviews to identify what the experts in the field consider important in the assessment of transparency of government public management from their experiences and worldviews. Qualitative information coming from the documentary analysis and semi-structured interviews will be arranged through the application of the decision aid process adopted by the MCDA-C methodology (Ensslin, Montbeller-Neto & Noronha, 2001).

The intervention instrument used in this study, the MCDA-C methodology is one of the methodologies that come from European school of operations research. Roy (2005) argues that decision aid is an activity in which a person, by means of explicit models, but not necessarily completely formalized, helps to obtain elements that respond to questions posed by a group of people in a decision process. For the author, these elements serve to clarify the decision and the objectives and value systems of those involved in a particular process.

One of the basic convictions of any MCDA approach is that the introduction of criteria representing the various dimensions of a problem is seen as the best way for a robust decision when faced with multi-dimensional and poorly defined problems (Bana-e-Costa, Stewart, & Vansnick, 1997). For the construction of an assessment model, methodology MCDA-C makes use of the decision aid process, divided into 3 phases, namely: (i) structuring phase; (ii) the assessment phase; and (iii) recommendations phase (De Moraes et al., 2010). The details of this decision aid process will be discussed in the next sub-section, concerning the presentation of the procedure for the construction of the assessment model proposed.

3. CONSTRUCTION OF THE ASSESSMENT MODEL

This section seeks to present the model proposed to assess public management transparency, in web portals of sub-national governments of Brazil and Spain. Therefore, it is organized according to the phases of the decision aid process used in its preparation.

3.1 Structuring phase

The first step in the structuring phase is to identify the context of the problem to be analyzed, involving and considering its description and its feasibility, ie., if it is resolvable. Moreover, it is important to identify the "owner" of the problem, the source of dissatisfaction and what one seeks to achieve (Checkland & Scholes, 1999). The context in which the problem arises is public management transparency. As described in the introduction of the study, transparency is a key factor for strengthening democracy, social control and in the fight against corruption. Given the importance of transparency, therefore it is also important to assess whether governments are acting transparently.

In this context, society itself is identified as the owner of dissatisfaction, on the basis of the assumption of right to obtain information on how the government is using public resources and on its decisions, in order to proceed with social control. The source of dissatisfaction is reflected in the academic interest as well as in that of practitioners in identifying the level of transparency with which governments offer information about their management. In the literature no assessment models were found encompassing a comprehensive analysis that goes beyond the verification of the legal requirements on transparency and enable the development of suggestions for improvement. Given this issue, we propose a model that meets these prerequisites (incorporation of elements other than those required by the legislation and allow to propose improvements).

The actors participating in the decision aid process are: (i) decision makers, experts interviewed in the course of preparation of the evaluation model, responsible for the legitimacy of each of the stages of construction, the establishment of the cardinal scales for each of the criteria, as well as by each criterion replacement rates; (ii) facilitator, first author of this work, responsible for identifying primary evaluation elements, the structure of these elements arising from documentary analysis and literature, as well as the establishment of ordinal scales for each of the proposed assessment criteria, supporting the process of the model construction in all its phases.

Finally, the label for the problem is presented, in this case defined as *evaluation of the transparency of public management in electronic portals*; in the sequence, the next step in the structuring phase is taken care of, ie. The construction of the Hierarchical Value Structure - HVS (Kenney, 1992). This structure brings together a set elements or key aspects that may become assesment criteria, grouped into concern areas (Bana-e-Costa & Chagas, 2004; Bana-e-Costa et al., 1999).

The first step in the construction of the HVS is the identification of Primary Evaluation Elements - PEE (Kenney, 1992). These PEEs were identified from three sources, namely: (i) factors to reinforce transparency (25 PEEs), identified by Lyrio, Lunkes and Taliani (2015a) in the literature; (ii) legislation on transparency of Brazil (34 PEEs) - Complementary Law 101, 2000 (Fiscal Responsibility Law) Decree 7185, 2010 (quality standards for integrated financial management system) and Law 12,527, 2011 (Access of Information Law); and Spain (22 PEEs) Ley 19, 2013 (Transparency Law); (iii) transparency indices, Autonomic Communities Transparency Index - INCAU developed by the NGO Transparency International España (53 PEEs) and the model proposed by Nunes (2013) (8 PEEs). An PEE related to public safety was

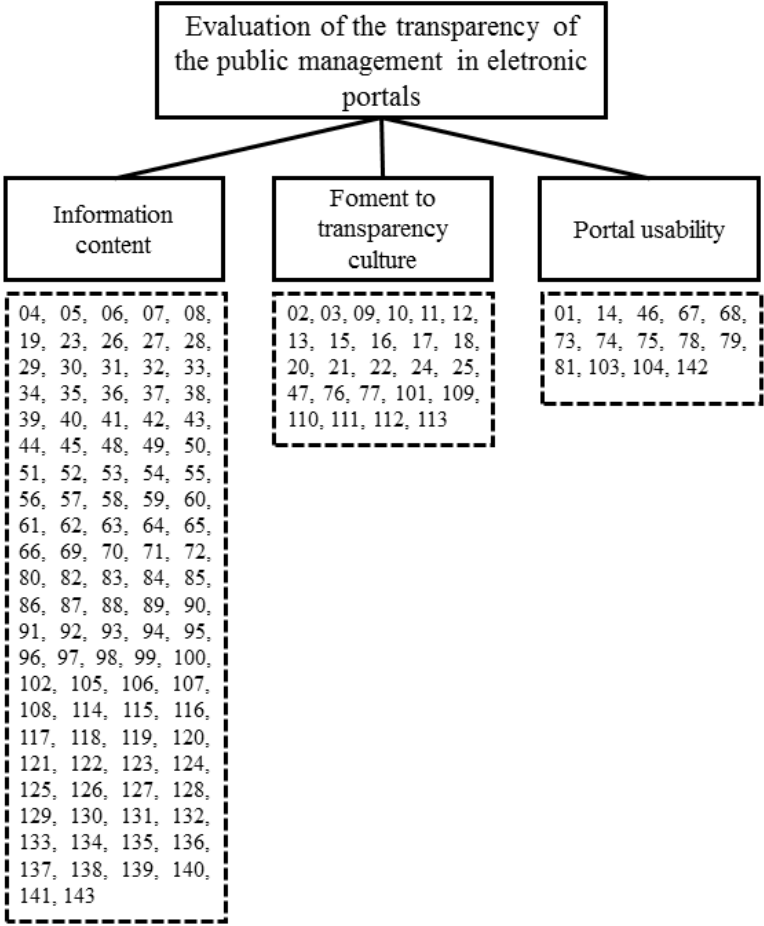
also included by the facilitator, amounting to an identification of 143 PEEs. Table 1 shows an extract of these evaluation elements.

Table 1: Examples of Primary Evaluation Elements – PEEs

| N° | Source | PEE |
|-----|--------------------------|--|
| 11 | (Bonsón et al., 2012) | Web 2.0 usage and social media tools |
| 28 | Ley 19/2013, art. 6,1 | Identify the responsible for government agencies and their professional career |
| 53 | LC 101, art. 48A, I | Disclose expenses by managing unit during the execution, with data for the payee. |
| 58 | Decree 7.185, Art. 7, Ic | Disclose expenditures by budget unit. |
| 73 | Law 12.527, art. 8, 1VI | Disclose answers to frequently asked questions of society. |
| 105 | INCAU | Regularly publish data on the number of hospitals, health care centers, hospital beds per capita and their return. |
| 137 | Nunes, 2013 | Disclose the nominal list of servers (staff) |
| 143 | Facilitator | Publish information on public security |

Once finished the identification of PEEs these are grouped by affinity in a HVS, as Figure 1 shows, presenting the set of identified PEEs arranged in concern areas, namely: (i) information content, (ii) foment of transparency culture and (iii) usability of the portal. Then these concern areas are hierarchically deployed in Fundamental Points of View - FPVs and Elementary Points of View - EPVs until is identified a point of view which is capable of measurement. Ensslin, Montibeller-Neto and Noronha (2001) argue that this procedure is used according to a decomposition logic, in which a more complex point of view to be measured is decomposed into point of view of easy measurement. Once HVS was elaborated, the first interviews were held with stakeholders, in order to legitimize the structure proposed in this step of the process.

Figure 1: Hierarchical Value Structure at concern areas level



The last step in the structuring phase involves the construction of descriptors that will allow for the completion of the evaluation process. A descriptor, as Ensslin, Montbeller-Neto and Noronha (2001) explain, is made with an ordinal scale that presents the purpose of the descriptor -what you want to measure- and a set of impact levels, and are established two reference levels -Good and Neutral- which allows for the comparison between different descriptors of the assessment instrument and synthesis of these assessments in a comprehensive evaluation. Table 2 shows an example descriptor.

Table 2: Example of a descriptor

| Descriptor 1.1.1.1 - Program information | | | |
|---|-------------|--|-----------------------|
| Impact levels | Ref. | Ordinal Scale | Cardinal Scale |
| N5 | | Publishes government programs with their objectives, activities, resources and expected date of conclusion | 138 |
| N4 | G | publishes government programs with their objectives, activities and resources | 100 |
| N3 | | Publishes government programs with their objectives and activities | 69 |
| N2 | | Publishes government programs with their objectives | 38 |
| N1 | N | Does not publish information on government | 0 |

Objective: Check the availability of information on government programs

The assessment model proposed consists of 71 descriptors, 33 binary descriptors and 38 descriptors with more than 2 impact levels. The process of legitimation of the proposed descriptors was conducted as follows: The facilitator proposed descriptors and assessment scales and during the interview, asked one of the decision makers about the adequacy of scales to assess the proposed criteria and where the referent levels would be inserted - Good and Neutral - in his perception. Once descriptors were constructed and legitimated by the decision maker, the structuring phase ended, followed by the development of the evaluation phase, presented in the next sub-section.

3.2 Assessment phase

The assessment phase in a multi-criteria methodological approach involves two steps. Initially it is necessary (i) to build a criterion for each point of view which formally represents the local attractiveness of a particular criterion, ie a local assessment; then (ii) to apply a multi-criteria aggregation procedure that allows, through a criterion of synthesis, to carry out an overall assessment (Bana-and-Costa & Vansnick, 1997).

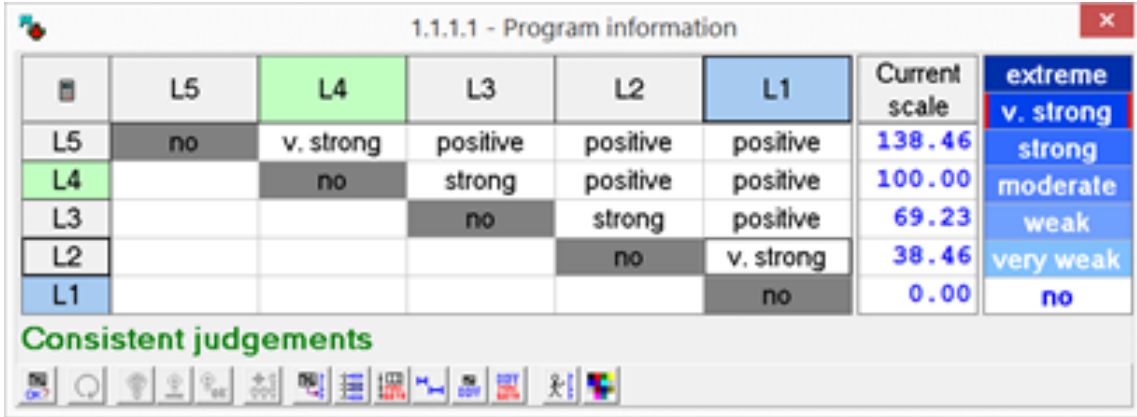
Among the methods used to perform local assessment are the direct rating and MACBETH approach - Measuring Attractiveness by Categorical Based Evaluation Technique (Bana-e-Costa & Chagas, 2004). In the present study, both methods were used in the process and also carried out through interviews with one of the actors.

In the case of binary descriptors, the direct method rating was used, assigning one hundred (100) points to a good level and zero (0) point for the neutral level. In the case of descriptors with more than two levels of impact, the MACBETH approach was chosen, since the perceived loss of transparency in the passage from one impact level to another, immediately below, was not considered linear by the interviewee.

The MACBETH approach allows the user to quantify on a cardinal scale each of the impact levels, selecting from a semantic scale ranging from extreme to very low, the perceived loss in this passage from one level to the other (Bana-e-Costa & Chagas 2004; Bana-e-Costa & Vansnick, 1997).

For purposes of exemplification, Figure 2 shows the scale developed in MACBETH for the descriptor 1.1.1.1 -program information. As shown in this figure, the actor considered the passage of N5 level- a situation in which they are available in the transparency portal the government programs with its objectives, related activities, means of implementation and expected completion date -for the N4 level- in which it is not the expected date of completion to be presented -as very strong. Then the loss of information concerning the means of implementation of programs was attributed- passage of N4 level to N3 level -as strong, as well as the passage of the N3 level to N2 level- not providing information on the activities related to programs only being presented their goals. Finally, the passage of N2 level to the N1 level, in which information is not available on the programs, the actor considered this loss of information as very strong. From this information, the software calculates the loss of attractiveness and generates a cardinal scale for the descriptor, taking into account the impact levels in which were established the level Good and Neutral.

Figure 2: MACBETH scale developed for the descriptor 1.1.1.1



Source: M-MACBETH, 2005

In the case of the overall assessment, this is the identification of replacement rates, ie, the "weight" of each of the criteria for the achievement of the overall result. Lyrio et al (2008, p. 180) argue that "[...] to be gained from the replacement rates that inform the relative importance of each criterion, one can transform the value of the assessment of each criterion in values of an overall assessment."

Among the methods used in determining replacement rates, we chose to use the Swing Weights method (Beinat, 1995; Bodily, 1985; Goodwin & Wright, 1991; Von-Winterfeldt & Edwards, 1986), which consists in asking the respondent to consider all the criteria in neutral level, which he would consider a priority to pass to the good level, attributing to this criterion 100 points. Then, the respondent is asked which criteria to move to the Good level and how much it would be worth, as the most important criterion received 100 points. This procedure is adopted at all levels and criteria of the assessment model, which allows for "[...] adding, compensatory way, local performances (the criteria) in an overall performance" (Ensslin et al., 2001, p. 219).

For this activity, one of the HVS was referred to one of the decision makers, who assigned scores according to his perceptions. Then the facilitator made the adjustment of these

scores, as shown below, held at the level of concern areas. In the case, the decision maker considered as a priority the concern area 1 - informational content, giving them 100 points. Then he opted for area 3 - Portal Usability, giving it 78 points. Finally, he awarded 45 points to the area 2 - Promotion of culture of transparency, generating the following replacement rates:

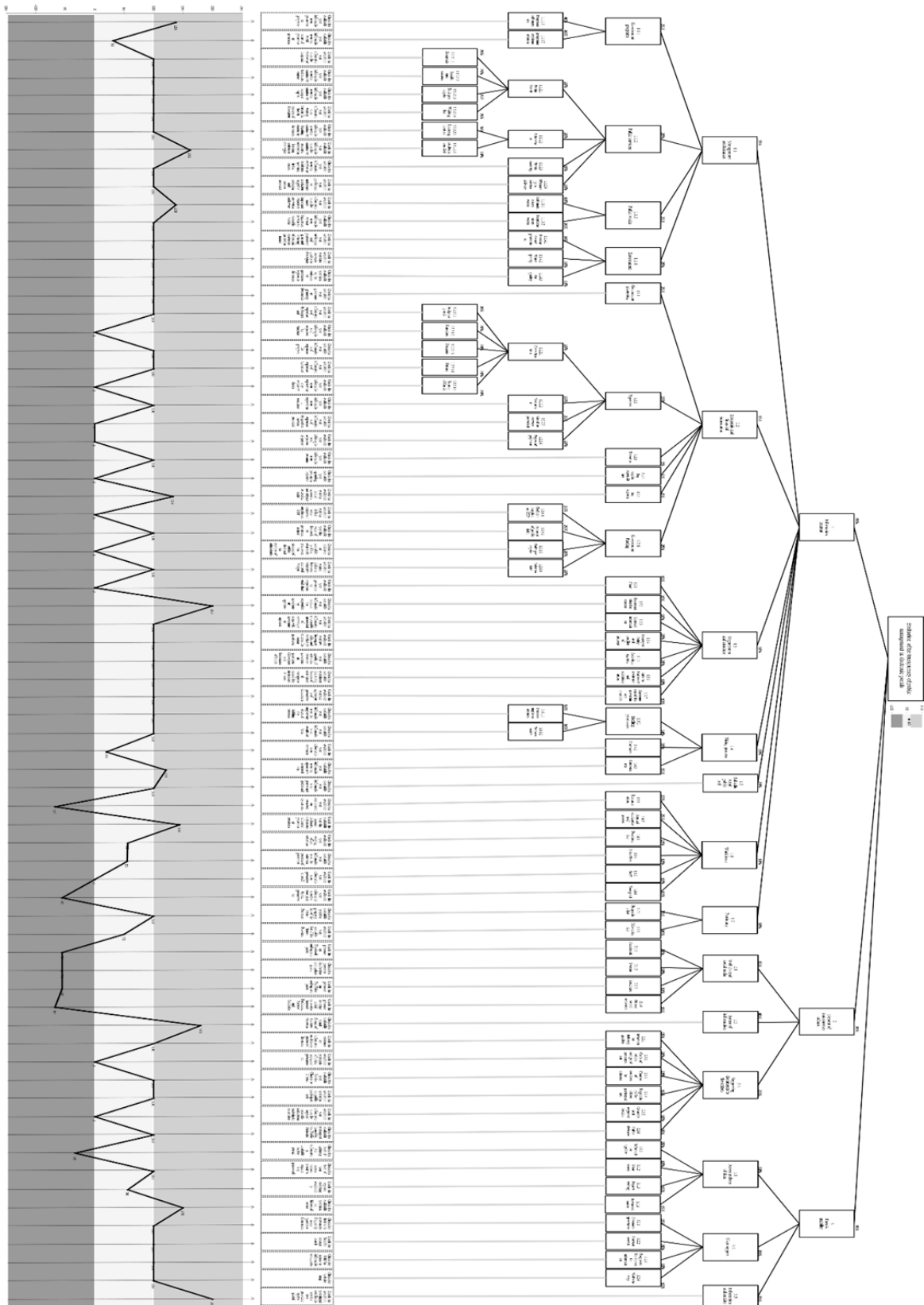
| | |
|---------------------------------------|-------------------------------|
| 1 – Information Content | $w_1 = 100/223 = 0,45$ or 45% |
| 2 – Promotion of Transparency Culture | $w_2 = 78/223 = 0,35$ or 35% |
| 3 – Usability of the portal | $w_3 = 45/223 = 0,20$ or 20% |

With replacement rates obtained the valuation model will be built, the next step being the evaluation process; we use the following equation of additive aggregation, where $V(a)$ = the overall performance value; v_i = local performance value in the evaluation criteria; w_i = compensation rate in the evaluation criteria; n = number of evaluation criteria.

$$V(a) = \sum_{i=1}^{i=n} w_i x v_i$$

Once the compensation rates were determined, the model constructed was again sent to all decision makers for final legitimation. With the acceptance by them this step was finished and the construction of the model completed. Figure 3 shows the proposed model with the performance profile regarding the portal of transparency of Andalusia Autonomic Community, as an illustration of its application. Andalusia got 80 points in the overall assessment score considered adequate, but high, as it approaches the transparency level considered good (the overall evaluation points 100).

Figure 3: Evaluation Model built with the performance profile of Andalusia AC



4. RECOMENDATIONS PHASE

Once the assessment is completed, the final stage of the decision aid process is the development of recommendations. In this study, we use the example of Andalusia to present this procedure, which consists in proposing potential actions to improve the level of transparency, based on two analyzes: (i) performance profile analysis – it is decided, on the basis of the

performance profile of the chart, which descriptors present compromising and / or neutral level and; (ii) analysis of the global contribution – it is decided which descriptors have the greatest potential to contribute to improving the transparency portal.

Through the profile analysis it is possible to identify objectively and clearly which are the criteria on which the rated entity is in imperiling levels, facilitating the initiative identification process to improve their performance in these criteria. Once identified a criterion that is in compromising level (below of the neutral level), the descriptor associated to this criterion is analysed and it is decided what should be done to improve its performance.

The second analysis involves the identification of descriptors with the greatest potential to contribute to overall assessment, that is, how much they could potentially contribute to reaching Good level performance (100 points), considering the overall contribution rates and potential contribution of each descriptor. To illustrate this procedure, Table 3 presents a detailed assessment of the Andalusia Autonomic Comunity.

This table consists of seven columns. Column 1 shows the coding of each criterion that makes up the model; column 2 shows the description of evaluation criteria used; Column 3 presents each criterion compensation rates; column 4 shows the performance level achieved by the aspect analysed in each of the descriptors (local assessment); and column 5 shows the score achieved on each of the criteria. The last two columns are used for assessing the potential contribution. Column 6 shows the overall rate of contribution of a descriptor, that is, as a percent, this descriptor contributes to the overall assessment; column 7 in turn presents the contribution of each descriptor in absolute terms, that is, how many points it can still add to the overall assessment so that the aspect analysed reaches 100 points.

Table 3: Detailed assessment of the Andalusia Autonomic Community

| Andalusia Autonomic Community | | Compensation rates | Performance level | Rating (score) | Global contribution tax | Potential contribution |
|-------------------------------|------------------------------------|--------------------|-------------------|----------------|-------------------------|------------------------|
| CODE | EVALUATION CRITERIA | - | - | 80 | 100% | 20 |
| 1 | INFORMATION CONTENT | 45% | - | 83 | - | - |
| 1.1 | MANAGEMENT PERFORMANCE | 15% | - | 103 | - | - |
| 1.1.1 | Government programs | 25% | - | 74 | - | - |
| 1.1.1.1 | Program information | 40% | N5 | 138 | 0,68% | (0) |
| 1.1.1.2 | Programs implementation | 60% | N2 | 31 | 1,01% | 0,70 |
| 1.1.2 | Public services | 25% | - | 108 | - | - |
| 1.1.2.1 | Public health | 25% | - | 100 | - | - |
| 1.1.2.1.1 | Hospitals | 25% | N2 | 100 | 0,11% | 0,00 |
| 1.1.2.1.2 | health care centers | 25% | N2 | 100 | 0,11% | 0,00 |
| 1.1.2.1.3 | Beds per capita | 25% | N2 | 100 | 0,11% | 0,00 |
| 1.1.2.1.4 | Waiting list | 25% | N2 | 100 | 0,11% | 0,00 |
| 1.1.2.2 | Education | 25% | - | 131 | - | - |
| 1.1.2.2.1 | learning centers | 50% | N2 | 100 | 0,21% | 0,00 |
| 1.1.2.2.2 | students enrolled | 50% | N4 | 162 | 0,21% | (0) |
| 1.1.2.3 | Public security | 25% | N2 | 100 | 0,42% | 0,00 |
| 1.1.2.4 | Efficiency in service delivery | 25% | N2 | 100 | 0,42% | 0,00 |
| 1.1.3 | Public works | 25% | - | 130 | - | - |
| 1.1.3.1 | Information on works | 80% | N6 | 138 | 1,35% | (1) |
| 1.1.3.2 | Regulations on the works | 20% | N3 | 100 | 0,34% | 0,00 |
| 1.1.4 | Environment | 25% | - | 100 | - | - |
| 1.1.4.1 | Environmental Protection | 34% | N3 | 100 | 0,57% | 0,00 |
| 1.1.4.2 | Water quality | 33% | N2 | 100 | 0,56% | 0,00 |
| 1.1.4.3 | Air quality | 33% | N2 | 100 | 0,56% | 0,00 |
| 1.2 | ECONOMIC AND FINANCIAL INFORMATION | 15% | - | 67 | - | - |
| 1.2.1 | government planning | 25% | N4 | 100 | 1,69% | 0,00 |
| 1.2.2 | Expenses | 25% | - | 40 | - | - |
| 1.2.2.1 | Classification | 25% | - | 60 | - | - |
| 1.2.2.1.1 | budgetary unit | 20% | N2 | 100 | 0,08% | 0,00 |
| 1.2.2.1.2 | Function | 20% | N1 | 0 | 0,08% | 0,08 |
| 1.2.2.1.3 | Program | 20% | N2 | 100 | 0,08% | 0,00 |
| 1.2.2.1.4 | Nature | 20% | N2 | 100 | 0,08% | 0,00 |
| 1.2.2.1.5 | Source of funds | 20% | N1 | 0 | 0,08% | 0,08 |
| 1.2.2.2 | Execution | 25% | N4 | 100 | 0,42% | 0,00 |
| 1.2.2.3 | Good or service provided | 25% | N1 | 0 | 0,42% | 0,42 |
| 1.2.2.4 | Payee of payment | 25% | N1 | 0 | 0,42% | 0,42 |
| 1.2.3 | Revenue | 9,0% | N4 | 100 | 0,61% | 0,00 |
| 1.2.4 | Per capita expenditure | 8,0% | N1 | 0 | 0,54% | 0,54 |
| 1.2.5 | tax reports | 8,0% | N5 | 133 | 0,54% | (0) |

Continues ...

| Andaluzia Autonomic Comunity | | Compensation rates | Performance level | Rating (score) | Global contribution tax | Potential contribution |
|-------------------------------------|---|---------------------------|--------------------------|-----------------------|--------------------------------|-------------------------------|
| CODE | EVALUATION CRITERIA | - | - | 80 | 100% | 20 |
| 1.2.6 | Government funding | 25,0% | - | 50 | - | - |
| 1.2.6.1 | Deficit / surplus on GDP | 25,0% | N1 | 0 | 0,42% | 0,42 |
| 1.2.6.2 | Amount of public debt | 25,0% | N2 | 100 | 0,42% | 0,00 |
| 1.2.6.3 | Debt per capita | 25,0% | N1 | 0 | 0,42% | 0,42 |
| 1.2.6.4 | Relative debt | 25,0% | N2 | 100 | 0,42% | 0,00 |
| 1.3 | ORGANIZATION AND STRUCTURE | 10,0% | - | 100 | - | - |
| 1.3.1 | Chart | 10,0% | N1 | 0 | 0,45% | 0,45 |
| 1.3.2 | Responsible for organs | 10,0% | N3 | 200 | 0,45% | (0) |
| 1.3.3 | Contact information | 10,0% | N3 | 100 | 0,45% | 0,00 |
| 1.3.4 | Incompatibility and conflict of interest | 25,0% | N2 | 100 | 1,13% | 0,00 |
| 1.3.5 | Activities agenda | 25,0% | N3 | 100 | 1,13% | 0,00 |
| 1.3.6 | Link to bodies of institutional administration | 10,0% | N3 | 100 | 0,45% | 0,00 |
| 1.3.7 | Agreements of the government councils | 10,0% | N2 | 100 | 0,45% | 0,00 |
| 1.4 | HIRING PROCESS | 20,0% | - | 81 | - | - |
| 1.4.1 | Bidding processes | 34,0% | - | 100 | - | - |
| 1.4.1.1 | Implementation of process | 50,0% | N4 | 100 | 1,53% | 0,00 |
| 1.4.1.2 | Result of the process | 50,0% | N4 | 100 | 1,53% | 0,00 |
| 1.4.2 | Contracts | 33,0% | N3 | 20 | 2,97% | 2,38 |
| 1.4.3 | Covenants | 33,0% | N6 | 121 | 2,97% | (1) |
| 1.5 | SUBSIDIES AND PUBLIC AID | 20,0% | N4 | 100 | 9,00% | 0,00 |
| 1.6 | WORKFORCE | 10,0% | - | 26 | - | - |
| 1.6.1 | Remuneration | 25,0% | N1 | -67 | 1,13% | 1,88 |
| 1.6.2 | Annual declaration of assets | 25,0% | N5 | 144 | 1,13% | (0) |
| 1.6.3 | Positions list | 12,5% | N3 | 56 | 0,56% | 0,25 |
| 1.6.4 | Job offers | 12,5% | N3 | 55 | 0,56% | 0,25 |
| 1.6.5 | Staffing | 12,5% | N1 | 0 | 0,56% | 0,56 |
| 1.6.6 | Fees paid | 12,5% | N1 | -55 | 0,56% | 0,87 |
| 1.7 | PATRIMONY | 10,0% | - | 85 | - | - |
| 1.7.1 | Properties list | 70,0% | N3 | 100 | 3,15% | 0,00 |
| 1.7.2 | Movables list | 30,0% | N2 | 50 | 1,35% | 0,68 |
| 2 | FOMENT OF TRANSPARENCY CULTURE | 20,0% | - | 69 | - | - |
| 2.1 | WEB 2.0 AND SOCIAL MIDIA | 35,0% | - | -56 | - | - |
| 2.1.1 | Facebook | 30,0% | N1 | -55 | 2,10% | 3,26 |
| 2.1.2 | Twitter | 30,0% | N1 | -55 | 2,10% | 3,26 |
| 2.1.3 | YouTube | 30,0% | N1 | -55 | 2,10% | 3,26 |
| 2.1.4 | Other social networks | 10,0% | N1 | -67 | 0,70% | 1,17 |
| 2.2 | REUSE OF INFORMATION | 40,0% | N5 | 180 | 8,00% | (6) |
| 2.3 | SUPPORTING DOCUMENTS TO THE CITIZEN | 25,0% | - | 65 | - | - |
| 2.3.1 | Information delivery guide | 15,0% | N2 | 100 | 0,75% | 0,00 |
| 2.3.2 | code of ethics and good government | 20,0% | N1 | 0 | 1,00% | 1,00 |
| 2.3.3 | Charter of services to citizens | 20,0% | N2 | 100 | 1,00% | 0,00 |
| 2.3.4 | Regulations for citizen participation | 15,0% | N2 | 100 | 0,75% | 0,00 |
| 2.3.5 | Councils and regional bodies | 15,0% | N1 | 0 | 0,75% | 0,75 |
| 2.3.6 | Public defense | 15,0% | N2 | 100 | 0,75% | 0,00 |

Continues ...

| Andaluzia Autonomic Comunity | | Compensation rates | Performance level | Rating (score) | Global contribution tax | Potential contribution |
|------------------------------|------------------------------------|--------------------|-------------------|----------------|-------------------------|------------------------|
| CODE | EVALUATION CRITERIA | - | - | 80 | 100% | 20 |
| 3 | PORTAL USABILITY | 35,0% | - | 84 | - | - |
| 3.1 | ACCESS AND USE OF DATA | 50,0% | - | 28 | - | - |
| 3.1.1 | Information update | 55,0% | N1 | -33 | 9,63% | 12,80 |
| 3.1.2 | User access | 15,0% | N3 | 100 | 2,63% | 0,00 |
| 3.1.3 | Report writing | 15,0% | N3 | 56 | 2,63% | 1,16 |
| 3.1.4 | Historical series | 15,0% | N5 | 150 | 2,63% | (1) |
| 3.2 | USER SUPPORT | 30,0% | - | 100 | - | - |
| 3.2.1 | Common questions | 15,0% | N2 | 100 | 1,58% | 0,00 |
| 3.2.2 | Content search | 35,0% | N2 | 100 | 3,68% | 0,00 |
| 3.2.3 | Requests for access to information | 35,0% | N2 | 100 | 3,68% | 0,00 |
| 3.2.4 | Website map | 15,0% | N2 | 100 | 1,58% | 0,00 |
| 3.3 | INFORMATIONS AUTHENTICITY | 20,0% | N3 | 200 | 7,00% | (7) |

From the analysis of Table 3, it becomes clear that the descriptor in compromising level with the greatest potential contribution is 3.1.1 – information update, with an overall contribution rate of 9.63% and potential contribution of 12.8 points. Thus, in case of need for prioritizing actions, it should be placed in 1st place. When analyzing the impact levels of this descriptor in Table 4, what can be done to improve Andalusia’s performance in this criterion becomes evident.

Table 4: Descriptor 3.1.1 – information update

| Descriptor 3.1.1 - Information update | | | |
|---|------|--|----------------|
| Impact levels | Ref. | Ordinal Scale | Cardinal Scale |
| N5 | | Tax information is available on the business day of the date of the accounting records; information on government performance are available from the current month | 167 |
| N4 | G | Tax information is available on the business day of the date of the accounting records; information on government performance are available in the previous month | 100 |
| N3 | | Tax information is available on the business day of the date of the accounting record | 33 |
| N2 | N | Tax information is available to the first working day following the accounting record | 0 |
| N1 | | Tax information is not available until the first business day subsequent to accounting record | -33 |
| Objective: Check the level of updating the information available on the portal | | | |

In the current situation, the tax information is not available until the 1st working day to accounting. As improvement, systems integration could be achieved, making the information available in the system updated immediately after registration, raising the performance to N3 level. In addition, the provision of monthly reports on the government's performance in providing services to society would raise the performance level for N5, reaching a level of excellence as this evaluation criterion. Thus, the overall assessment of Andalusia goes from 80 points to 100 points. This occurs because the potential contribution of a descriptor with regard to the score needed to reach the level of performance Good. In this case, the Good level descriptor is N4 and corresponds to 12.8 points, which would result in a comprehensive evaluation of 92.8

points. Raising the performance descriptor for N5 in level of excellence, would increase the overall score of 20 points, which would lead to Andalusia to a good level of global transparency.

5. FINAL REMARKS

This study aimed to propose a model for the assessment of electronic portals of Brazilian and Spanish governments at sub-national level in order to allow for comparison between the two contexts and suggest improvements to upgrade their levels of transparency. To this end, we used a decision aid process adopting the MCDA-C methodology. Through this methodology it was possible to identify concern areas that have been deployed in Fundamental Viewpoints and Elementary Viewpoints, where similar assessment elements were being herded to a level where it was possible to propose descriptors for assessment transparency.

This unfolding of concerns generated a Hierarchical Value Structure (HVS) that allowed for the organization of criteria for the assessment of transparency in these two countries; and by means of the proposed descriptors, it was possible to establish scales to check the situation of each of the entities with respect their levels of transparency. Also, through the decision aid process in its evaluation phase, it was possible to establish a quantitative scale for these descriptors, which allowed the measurement of the levels of transparency of the ones analyzed.

The proposed assessment model has identified important issues with regard to government transparency of Brazilian States and Spanish Autonomic Communities. The use of information coming both from the literature, the legislation of the two countries and transparency indices, generated knowledge about transparency and allowed for the expansion of the scope of discussion beyond legal issues alone. Related issues, for example, promotion of the culture of transparency, use of open data and social networks to citizen engagement and increased popular participation in government emerged during the process of construction of the model. Concerns related to public services in the areas of health, education, environment and safety have also emerged, giving the model proposed a direction also focused on the verification of issues linked to the results achieved by the governments in the carrying out of their activities.

Similarly, criteria linked to the presentation of service standards, such as presentation of service letters and documents related to government activities and information about senior positions, as well as documents to support citizens both in the use of transparency portal and in the use of public services, enriched the assessment scope, extrapolating an assessment of transparency basically linked to public expenditure and revenues and disclosure of tax documents usually required by law.

Regarding the limitations of the study, it is argued that this model was developed to evaluate the sub-national governments of Brazil and Spain, and so the laws of those countries were used as reference. In addition, the model was developed by a group of researchers who have a particular worldview and previous experiences as well as legitimated by a group of experts who also have particular worldviews. These worldviews ultimately influence the model building process, both in its structuring phase and in the assessment phase. Changing the actors in the decision aid process adopted here may be change the criteria adopted and their replacement rates, which is inherent in the process of construction of any assessment model from a constructivist perspective. Another important question concerns the scope of the study, which was limited to the executive power; thus other specific concerns related to the legislative and judicial powers were not taken into account.

Nevertheless, the concerns that emerged from this process - since they arose from the literature and other indices used to assess public transparency in these two countries -, as well as the fact that the experts interviewed in the course of its construction possess have strong

experience in this field of study, support the argument that this model has the potential to be applied in the context of other countries, as well as other levels of government if evaluation criteria are considered legitimate by the evaluators who come to adopt it. Thus, the application of this model in the municipal and federal levels, as well as in other countries is configured as a suggestion for future research to be conducted.

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ⁱ The authors of this study using the Model terminology as adopted by Landry (1983) and Roy (1996). Landry (1983, p. 212) defines model as a "[...] coherent 'mental image' of the problem situation and is formed by the perceptions and value of Judgements BOTH model builders and decision-makers. In a sense, it is the way the problem situation is perceived and presented by modelers and users". Roy (1996, p. 7), in turn, understands the term as "[...] the schema Which, for a Certain family of questions, is Considered the representation of a class of phenomena que an observer has more or less carefully removed Their environment from to help in the investigation and to Facilitate communication". As it follows the same tradition of research, this is the understanding adopted for the term during the study.