



Open Parliaments: Technological Enactment in State Legislatures

Tiago Carneiro Peixoto

Thesis submitted for assessment with a view to
obtaining the degree of Doctor of Political and Social Sciences
of the European University Institute

Florence, October 2013

European University Institute
Department of Political and Social Sciences

Open Parliaments:

Technological Enactment in State Legislatures

Tiago Carneiro Peixoto

Thesis submitted for assessment with a view to
obtaining the degree of Doctor of Political and Social Sciences
of the European University Institute

Examining Board

Prof. Alexander H. Trechsel, EUI (Supervisor)

Prof. Giovanni Sartor, EUI

Prof. Leonardo Avritzer, Federal University of Minas Gerais

Prof. Graham Smith, University of Westminster

© Tiago Carneiro Peixoto, 2013

No part of this thesis may be copied, reproduced or transmitted without prior
permission of the author

ACKNOWLEDGEMENTS

First and foremost, I would like to thank my Supervisor, Alexander Trechsel. It has been a long journey since I moved to Florence, and Alex has excelled as both a professor and friend throughout that journey. Coming to the EUI was a unique opportunity in my life, and I am also indebted to Professor Yves Mény for this. Among the many great things that the EUI has offered me, I am grateful for having the opportunity to meet Professor Peter Mair (in memoriam), the brightest and most gentle human being. I am also thankful for his unconditional support during the difficult moments.

Graham Smith has spared no effort to ensure that I would be able to finish this PhD, playing the informal role of a *de facto* co-Supervisor without claiming credit for it. I am also grateful to Professor Philippe Schmitter, whose approach towards Political Science has changed the way I view the discipline. Marta Arretche and Cristiano Faria were major supporters of this enterprise, offering insightful suggestions and valuable assistance with reaching out to the state Legislatures. I am also indebted to my teachers throughout the years, including Dona Nelma, Onofre dos Santos Filho, Elizabeth Marques and Erhard Friedberg. I am also thankful to all the interviewees who contributed their time and information for this thesis. Among those interviewees, I am particularly thankful to those civil servants whose commitment to the public good is a source of inspiration. I hope this thesis does them justice.

Special thanks are due to the Ladies who make the EUI's Political Science Department breathe. To Gabriella Unger for her friendship, advice and help to keep track of schedules and deliverables. To Maureen Lechleitner and Marie-Ange Catotti for the healthy food, the occasional candies, and the permanent kindness. Getting to know a bit more of each of them has been a special privilege as a person and as an EUI student.

I would not have finished this thesis without a support network of friends and family. My sister Tatiana Dorazio who never stopped believing in me – even when things did not look so good – cannot imagine how much her support has always been valued. I am also forever thankful to Cornelius Cappelen (Nelito), for the true friendship, encouragement and fun. Other names that deserve a special mention include Vania Cruz Carneiro, Leonardo Peixoto, Madrinha Madalena, Marcos Peixoto, Simone Cruz, Ricardo Mameri, 'the Rowlands', 'the Chamberlains', Iassen Lazarov (Punky), Giovanni Pauciulo, Walke Piloto, Cecilia Bergqvist,

Rafael Morado, Sheyla Zandonai, Bruno Teixeira, Guilherme Lessa, Pedro Meyer, Leonardo Moreno, Massimo Torelli, and all the JJ Cathedral crew.

A PhD is a title that should be conferred to more people than the author himself. Were this possible, I would share it with three people. With my wife, Amy Chamberlain: since entering my life, all the good things have happened, and the completion of this PhD is one of them. I would also share it with my parents, who always did and continue doing everything possible and impossible for me. All my mistakes in life were my own fault. But all my victories – past, present and future – are owed to my parents. This PhD is dedicated to them: Eleovir Peixoto Carrijo and Kátia Carneiro Peixoto.

ABSTRACT

This thesis starts with a simple research question, asking why parliaments that share the same level of functions and competencies produce different results in terms of the level of development of their websites. The research is divided into three stages: comparative website analysis, quantitative analysis and case studies. Looking at 93 state Legislatures in Brazil, Spain and the United States, each of the stages of the research presents findings that contribute to the literature on e-democracy and open government.

The comparative website analysis shows a varying degree of development amongst state Legislature websites. This heterogeneous level of development is contrasted with a common denominator amongst most websites: while the majority of efforts are towards the provision of Legislative information, the prospects for participation and deliberation are extremely limited. Standing out against these rather predictable results, findings also suggest that certain institutional traits such as electoral systems may influence the design of websites in terms of both their content and features.

The quantitative analyses single out a number of factors that influence the differences in levels of development of Legislative websites. First of all, contrary to what has been suggested by a portion of the e-democracy literature, neither resources nor partisanship seem to matter for the development of Legislative websites. Conversely, the quantitative findings suggest that matters of institutional design (e.g. parliaments' autonomy) and demand (e.g. Internet access, population) may play a significant role in the performance of Parliamentary websites.

The case studies – the core of this research – follow an institutional approach to the process of ICT usage within public organizations, through a detailed analysis of the inner workings of three different Legislatures in Brazil (Rio Grande do Sul, Minas Gerais and Rio Grande do Norte). This analysis evinces the role played by factors largely ignored by the majority of the e-democracy research until now. It shows how the different institutional arrangements ultimately shape the very configuration of websites, impacting each of them in terms of their features and contents. By reversing this interpretation, we surmise, the configuration of Legislative websites *per se* may provide external observers with information regarding institutional arrangements and policy-innovation cycles and processes within a Legislature.

Finally, the comparative perspective taken sheds light on the role played by civil servants in the technological enactment process within Legislatures. All other things being equal, it is the relationships among civil servants and MPs, and the relationships between the two groups – mediated by institutional arrangements – that will ultimately affect the level of development of parliamentary websites.

TABLE OF CONTENTS

1. INTRODUCTION.....	1
2. RESEARCH QUESTION.....	5
3. CONCEPTUALIZATION.....	7
3.1 e-Government and e-Democracy	9
3.2 Information, Deliberation and Participation: e-Democratic Traits in the Development of Legislative Websites	12
4. THEORETICAL CONSIDERATIONS.....	17
4.1 The Factors that Influence e-Democracy Practices	17
4.2 e-Democracy and Parliaments	19
4.3 MPs and Civil Servants Enacting Technologies.....	20
4.4 Actors' Strategies as a Function of Interests, Resources and Institutions.....	23
5. MODEL AND HYPOTHESIS	28
6. CASE SELECTION.....	33
7. RESEARCH DESIGN	37
7.1 First Phase: Comparative Website Analysis.....	38
7.2 Second Phase: Analysis of the Independent Variables	42
7.3 Third Phase: Case Studies.....	43
8. E-DEMOCRACY SCORES OF STATE LEGISLATURE WEBSITES.....	47
8.1 Brazil's Overall e-Democracy Score.....	48
8.2 Spain's Overall e-Democracy Score	51
8.3 United States' Overall e-Democracy Score.....	54
8.4 e-Democracy Scores in a Cross-country Perspective	56
9. QUANTITATIVE ANALYSIS	65
9.1 Brazil	66
9.2 Spain.....	73
9.3 United States	79
9.4 Analysis at the Inter-Federation Level.....	85
9.5 Analytical Overview of Quantitative Findings	89
10. CASE STUDIES	95
10.1 Background to Case Studies: Rationale, Case Selection and Contextual Factors	95

10.2 Description of Websites	99
10.2.2 Minas Gerais' Legislative Website	101
10.2.3 Rio Grande do Norte's Legislative Website	103
10.3 Rio Grande do Sul.....	106
10.3.1 Politics and Administration in RS State Legislature	106
10.3.2 Website Contents as an Expression of Political Elites Competition.....	114
10.3.3 The Website as a Mixed Expression of Internal Needs and Politico-Bureaucratic Interactions	122
10.4 Minas Gerais.....	142
10.4.1 Politics and Administration in Minas Gerais State	142
10.4.2 Website Contents as an Expression of Institutional Design.....	158
10.4.3 Web Features as Expression of Needs, Institutional and Organisational Settings	174
10.5 Rio Grande do Norte.....	196
10.5.1 Politics and Administration in Rio Grande do Norte Legislature	196
10.5.2 Website Contents as an Expression of Political Configuration.....	209
10.5.3 The Website Contents as an Expression of Oligarchic Factionalism.....	216
10.6 Analytical Overview of Qualitative Analysis.....	235
11. CONCLUSION.....	245
LIST OF REFERENCES	251
ANNEX 1: DETAILED DESCRIPTION OF E-DEMOCRACY SCORES & FEATURES.....	269
Brazil	269
Spain.....	291
United States.....	311
ANNEX 2: DESCRIPTION OF CODEBOOK & CONSTRUCTS.....	333
Information Provision.....	333
Bilateral Interactivity.....	336
Multilateral Interactivity.....	337
Usability	338

LIST OF FIGURES

Figure 1. Fountain's Technological Enactment Model	22
Figure 2. Technological Enactment with State Legislatures	30
Figure 3. Brazil's e-Democracy Index	49
Figure 4. Average Scores for All Categories – Brazil.....	50
Figure 5. Spain's e-Democracy Index	52
Figure 6. Average Scores for All Categories – Spain	53
Figure 7. United States' e-Democracy Index.....	54
Figure 8. Average Scores for All Categories – United States	55
Figure 9. Cross-country e-Democracy Scores.....	56
Figure 10. Cross-country Scores for Information Categories	58
Figure 11. Cross-country Scores for Bilateral Interactivity	59
Figure 12. Cross-country Scores for Multilateral Interactivity	60
Figure 13. Cross-country Scores for Usability.....	61
Figure 14. Availability of Individual MPs' Contact Information – Cross-country	62
Figure 15. Listing of MPs by Party – Cross-country	63
Figure 16. Correlation e-Democracy Index Brazil and Website Age	69
Figure 17. Correlation e-Democracy Index Brazil and State Population.....	70
Figure 18. Correlation Internet Access and e-Democracy Index Spain.....	77
Figure 19. Correlation Regional Autonomy and e-Democracy Index Spain	77
Figure 20. Correlation Population and e-Democracy Index United States	82
Figure 21. Correlation Internet Access and e-Democracy Index United States.....	83
Figure 22. Mean e-Democracy Score and Percentage Household Internet Access	88
Figure 23. Overview of e-Democracy Index in Brazil.....	97

LIST OF TABLES

Table 1. e-Democracy Construct and its Dimensions	42
Table 2. Constructs and Possible Indicators.....	43
Table 3. Bivariate Correlation e-Democracy Index Brazil	66
Table 4. Linear Regression e-Democracy Index Brazil	68
Table 5. Regression e-Democracy Index Brazil.....	71
Table 6. Bivariate Correlation e-Democracy Index Spain	74
Table 7. Multilinear Regression e-Democracy Index Spain	76
Table 8. Multilinear Regressions e-Democracy Index Spain.....	78
Table 9. Bivariate Correlation e-Democracy Index United States.....	80
Table 10. Multilinear Regression e-Democracy Index United States	81
Table 11. Multilinear Regressions e-Democracy Score United States	84
Table 12. Bivariate Correlation e-Democracy Index at Inter-Federal Level	85
Table 13. Multilinear Regression e-Democracy Index at Inter-Federal Level	86
Table 14. Multilinear Regressions e-Democracy Index at Inter-Federal Level.....	87
Table 15. Multilinear Regressions e-Democracy Index at the Inter-Federal Level	89
Table 16. Professionalization Level in a Comparative Perspective	237
Table 17. Innovation Cycles in a Comparative Perspective.....	239
Table 18. Factors and Final Configuration of Websites.....	242

1. INTRODUCTION

Within the political and social sciences literature dealing with the use of ICT by public organizations as a means to enhance democracy (e-democracy), only a minor part has dealt with a core institution of modern democracies: the Legislative. At the same time, a simple glance at the websites of different Legislatures shows a high level of variance in their development as a means to promote transparency and citizen participation. Such a fact, *per se*, should draw the interest of researchers working in the field of e-democracy. However, if the Legislative has been neglected by scholars working in the field, an even smaller number of studies have taken a systematic approach to identifying which factors lead parliaments to produce different results with regard to the level of development of websites. In this sense, this research joins the effort initiated by a limited number of e-democracy scholars towards a better understanding of the factors that impact the usage of ICT – and the Internet in particular – by Legislative institutions.

In order to address this question, building on the methodology applied in previous studies, a comparative perspective is adopted. Thus, the initial object of this study consists of 93 state Legislatures from 3 different federations: two symmetrical federations (Brazil and the United States) and one asymmetric federation (Spain). In this respect, in addition to filling a gap in the literature by providing an empirical analysis of the use of ICTs by Legislatures within federations, the cases selected enable us to assess the impact that different federal arrangements may have on technology adoption processes carried out by state (or regional) parliaments.

This research can be divided into four major sections. In the *first part* we present and contextualize the research question, followed by a conceptualization of elements that are relevant to the theme of ICT usage in political processes and the dimensions that are used as indicators of the level of development of Legislative websites. We then proceed to a discussion of the theoretical body that informs this research, from broad e-democracy-related theory to the role of career civil servants and MPs as mediators of technological use within parliaments. Finally in this section we present the analytical model, as well as hypotheses and the research design adopted.

In the *second part* of this research, the ensemble of 93 Legislative websites is presented and analysed according to their e-democracy traits/potential, thus enabling us to identify the variance existing among the websites. A classification of the websites (e-democracy scores) is generated in this process, based upon four dimensions adopted to assess the Legislative websites with regard to their e-democracy potential: information provision, bilateral interactivity, multilateral interactivity and usability. Also, within this section, we highlight patterns and similarities that emerge during the process of presentation and analysis of the variance among the different Legislative websites.

In the *third part* of this research, based on the outcomes (e-democracy scores) of the comparative website analysis carried out, we proceed to our quantitative analysis. At this stage, we aim to identify which factors are related to e-democracy development in the different state Legislatures. The first section of the quantitative analysis looks at the correlations and significance of the distributions at the intra-federal level for each of the countries analysed. In a second moment, an analysis is carried out at the inter-federal level, taking into account the scores of all the 93 state Legislatures in the study. After examining and discussing the correlations of these distributions we proceed to the analysis of the findings. Based on the existing literature we discuss the causality mechanisms that might lead to the relationships found.

Finally, in the *fourth part* we move on to what can be considered the *core* of this research: the case studies. Bearing in mind that we have limited the case studies to the Brazilian context, we proceed with the analysis of three Brazilian state Legislatures. The first two state Legislatures, from Rio Grande do Sul and Minas Gerais, are the Legislatures with the most developed websites in the country. Conversely, our third case, Rio Grande do Norte Legislature, is amongst the group with the least developed websites in Brazil. Following an institutional perspective of ICT usage by public organizations, the aim of the analysis carried out is that of assessing the role played by actors' strategies – mediated by institutional settings – in the development of Legislative websites. This section concludes with a comparative analysis of the case studies, singling out the relevant elements that contribute to understanding the process of technological enactment that takes place within state Legislatures.

The research is concluded with an overview of findings, highlighting both their strengths and weaknesses. It draws attention to the concrete contributions that the research brings to the

field of e-democracy and, based on these contributions, suggests new paths for future research.

2. RESEARCH QUESTION

How have legislatures and legislative bodies used the prospects of ICTs as a means to enhance democracy? A limited number of scholars and practitioners have deployed efforts to answer to this question (e.g. Hoff 2004, Frick 2005, Braga 2007, Leston-Bandeira 2007, Coleman 2009, Papaloi and Gouscos 2011, Esterling et al. 2012). Bearing in mind the different approaches adopted by these scholars, relevant to the purposes of this thesis are two main works by Norris (2001) and Trechsel et al. (2003) that have made systematic comparisons across different polities. In the first work, Norris (2001), considering parliamentary websites as the chief public face of the institution, made a systematic comparison of the 98 national parliamentary websites existent by then, looking particularly at the richness of the information provided and the opportunities for interactive communication. The results obtained by Norris then showed a great deal of variance in these criteria, finding for instance that while some websites provided daily updated notices of parliamentary actions (e.g. legislation search, press releases), other websites were limited to providing little information of a static character and limited relevance such as history of the parliaments and information about the parliament buildings. Two years later Trechsel et al. (2003) did a similar exercise looking at 38 European parliaments, measuring four different dimensions in parliamentary websites: information provision, bilateral interactivity, multilateral interactivity and usability. In this case also, the findings were similar with regard to the existence of variance in the level of development of parliamentary websites across different European polities.

Nonetheless, these seminal works (Norris 2001, Trechsel 2003) share a relevant similarity with regard to the period in which they were carried out. For instance, if during Norris' work in 2001 there were 98 national parliamentary websites, in the present day this number has reached 189. As Leston-Bandeira (2007) underlined, to some extent, assessing which parliaments are online or not is not even a matter of concern anymore. Furthermore, as to the difference between the parliamentary websites themselves found by Norris (2001), Trechsel et al. (2003) and Ferber et al. (2003), given the widespread access to technologies and the relatively low costs of imitation (Barro and Sala-I-Martin 1997), provided that a minimum of resources are available and by holding other factors constant (e.g. competences), in the present day one should expect to find convergence in the level of development of parliamentary websites.

However, despite the context of technological diffusion and increased access to ICTs where the relative costs should not be an impediment for the development of parliamentary websites (e.g. open source, free online software), a simple glance at the websites of parliaments that share the same level of functions and competences (i.e. symmetric parliaments) shows that the variance among websites is still present. In this respect, the research question is framed in the following way: *in a context where the costs of access to ICTs are relatively low, why do parliaments that share the same amount of functions and competences (i.e. symmetric federations) produce different results regarding the level of development of their websites?*

To answer this question, in this research, a comparative perspective will be adopted, employing a comprehensive and systematic comparison of 93 state (regional) parliaments' websites from three different federations: two symmetrical federations (Brazil and the United States) and one asymmetric federation (Spain). This methodology has been chosen in order to quantitatively assess the e-democracy traits/potential of the websites, subsequently identifying the role that these factors play in the development of these websites. Following this, and under a neo-institutional perspective of ICT usage within public organizations, three case studies of Brazilian state legislatures will be conducted in order to assess the role that actors' strategies – mediated by institutional factors – play in the process of technological enactment within parliaments and the development of Legislative websites. This section will then conclude with a comparative analysis of the case studies, identifying the relevant elements for understanding technological enactment processes that take place within state Legislatures.

In the following chapter we will go over the main concepts related to the theme of the use of ICTs in political processes (i.e. e-government, e-democracy) and the conceptualization of the dimensions that are operated as indicators of the level of development of parliamentary websites as a means to enhance democracy: i) information provision, ii) bilateral interactivity, iii) multilateral interactivity and iv) usability.

3. CONCEPTUALIZATION

As Thierry Vedel (2004) has underlined, the idea of using ICTs as a means to promote democracy is not a recent event deriving from the phenomenon of the Internet, and it goes back to as early as the invention of the telegraph itself. With regard to the most recent history, a real enthusiasm for the use of technologies first emerged after the Second World War with the invention of computer systems in the early 1950s. In fact, the assumptions in the literature concerning the use of ICTs to enhance political/democratic processes vary through history as a result of the convergence of two factors: 1) the technical innovation of a precise moment and the assets of this technology (i.e. data processing, on time communication); and 2) the current perception of social problems at the time that these technologies became available.

Thus, in the 1950s the dominant concerns as regards the use of technological innovations consisted of understanding to what extent informatics could be used as leverage in the rationality of governing societies, in a cybernetic approach (Beer 1973). As early as 1948, the cybernetic model was proposed, becoming widely popular, mainly with Norbert Wiener's book *Cybernetics, or Control and Communications in the Animal and the Machine* (Wiener 1948). Cybernetics were conceived, then, as a means to create a new social modeling (Breton 1992), where computers were claimed to be capable of treating enormous amounts of data, replacing man in administrative procedures and consequently giving more efficiency and rationality to administrative action – as though the Weberian ideal of bureaucracy could finally become a reality. As can be seen, such an approach was not oriented towards reinforcing democracy, but rather towards addressing matters concerning government efficiency and efficacy.

As a practical result of such an approach, the PPBS¹ system implemented in the United States in 1965 by President Johnson can be cited. The system consisted basically of the use of informatics tools to help American public administrations in the decision-making process by planning and rationalizing choices. Similar systems were implemented in Europe at the same time, for instance the system of *Rationalisation des Choix Budgetaires* in France in 1968, which concerned budget allocations.

¹ Planning-Programming-Budgeting-System

In the 1960s the cybernetic approach started to be the object of criticism. Habermas, for instance, considered cybernetics as a technocratic ideology in which politics was conceived as a science or as a technique, replacing citizen deliberation and leading to public opinion apathy (Habermas 1968). It was also argued that politics consist of complex processes that cannot be handled by a technical approach, whilst technological processes themselves could be the object of political and ideological manipulation (Meynaud 1964). On practical grounds, by the end of the 1960s it did not seem that the cybernetic approach implemented by governments would fulfill all of its promises of efficiency and neutrality. The use of technologies was seen as far from unbiased and unable to provide a rationality that would overcome actors' interests and strategies (Crozier and Friedberg 1977), as was initially expected.

If the cybernetics approach and its virtues concerning government efficacy began to lack shine by the beginning of the 1970s, simultaneously the development of new technologies was seen as a new possibility to enhance democracy and citizen engagement (Martin and Norman 1970). Particularly with the development of cable TV networks in the 1970s and 80s, ICTs were perceived as tools that could enable a renewal of public information and democracy as instruments to be used at the service of citizens, favouring a broader civil participation in the decision-making process (Becker 2000). It was at this specific moment that the local and regional level started to be seen as a privileged arena for the use of ICTs as a means to promote democratic values such as transparency and participation. Through interactive TV systems, for example, citizens would vote on policies and provide feedback on different governmental actions (Dutton 1992, O'Sullivan 1995). A multiplication of experiences aiming to increase citizen participation at the local level came into being in this period, these practices being referred to as "teledemocracy" by the literature at the time (Arterton 1987, Becker 1998). However, as cable networks expanded during the 1980s it gradually became clear that the vocation of these TV networks was more focused on providing mass entertainment than on being a means of information provision and citizen engagement. The teledemocracy era did not create a new public sphere as expected, and most experiences in the medium and long term were abandoned. Despite the fact that teledemocracy was not as successful as expected, this period created a favourable environment for the first attempts to theorize the democratic potential of ICTs.

3.1 e-Government and e-Democracy

Since the 1990s expectations of new technologies such as the Internet have not been so different (Pratchett 2006). As ICTs start to offer a reliable means of communication, decentralized warehousing capacities and lowered costs thereof, democratic processes and governments' efficacy can be altered in a revolutionary way: governments and citizens are now able to share information and knowledge in such a way that a new democratic environment has been created (Levy 1997), where governments are capable of addressing the interests of the community in a more suitable way with respect to their needs, and of improving the performance of decision-making processes. From such a perspective, two expressions are broadly employed in order to describe the use of new technologies in governing processes: e-government and e-democracy. Even though the two terms sometimes overlap and refer in general to the use that is made of new technologies to exchange data on governing processes, each notion has experienced its own development in the literature (Frick 2005, Trechsel et al. 2003).

The first of these concepts, e-government, is one that has been described as an “amorphous concept with multiple meanings” (Wyld 2004) due to its several and distinct uses in the recent literature. In fact, such a multiplicity of competing definitions reveals the contextual complexity and fluid nature of e-government practices (Relyea and Hogue 2004). Generally referred to as the electronic delivery of government services, e-government derives from an intersection of information technology developments and delivery of public services. Observers of these e-government initiatives suggest that the delivery of services through the means of ICTs can become more convenient, dependable and inexpensive with respect to previous methods (Seyfert and Petersen 2002), increasing efficiency with citizens accessing information and governments delivering services on a continuous basis (West 2003, Norris 2001). In this sense, it has been put forward that e-government will optimize the responsiveness of governments to citizens via communication tools that are faster and more convenient for users (McNeal and Hale 2007, Thomas and Streib 2003).

In this respect, e-Government involves the use of ICTs, and particularly the Internet, to optimize the delivery of services by government agencies to citizens, businesses and other government agencies. Or, as defined by Barr, e-government is “the use of Internet technology and protocols to transform agency effectiveness, efficiency, and service quality” (Barr 2001).

David Wyld, in his turn, proposes a definition of e-government as “the use of electronic processes by citizens, businesses, and the government to communicate, to disseminate and gather information, to facilitate payments, and to carry out permitting in an online environment” (Wyld 2004). Despite the heterogeneity of definitions that can be found concerning e-government and its “outside statute” (Seyfert and Relya 2004), there is a common denominator among these definitions that refers to e-government as the use of ICTs by governments aiming to increase their efficiency in the delivery of services with a concomitant reduction of overall costs to governments, citizens and businesses.

The definitions of e-democracy, in their turn, if they take into account the notion of government efficiency (e.g. responsiveness to citizens), tend to privilege and concentrate on the prospects that ICTs present for democracy. As a consequence, what is regular and stable in the definitions of e-democracy is the perspective of the use of communication technologies in order to enhance democratic institutions and processes (Coleman and Norris 2005).

Since the Internet allows for the coexistence of several networks, where the information exchanged is filtered according to the interests of each individual or entity involved, some scholars argue that this will result in a new environment where knowledge and information, when properly taken into account, can lead governments and citizens to new levels of political and social action (Levy 1997, Ari-Veikko 2006). This includes governments being compelled to be more transparent, new forms of citizen participation being created, with accountability being renewed in a groundbreaking way (Jaeger and Thompson 2004, Pardo 2000). Considering that the processing and comprehension of information and knowledge provided by ICTs would become progressively easier, incorporating new agents into the information system, some authors even speculate that a new socio-political order, a *veritable universel* might emerge (Levy 1997). In short, ICTs will enable actors to “deepen democracy and ensure representation and citizen engagement in the information age” (Clift 2004).

The first speculations on the Internet emphasized its potential for direct, unmediated democracy (Coleman and Norris 2005). In its most extreme conception, e-democracy is seen as a trend of an inevitable shift from traditional representative democracy to direct democracy practices, where citizens are not only able to vote online but are also able to take decisions on all issues between the election cycle, by referendums systems or by directly participating in the decision-making process, for instance. This cybertimistic perception assumes that there

is an increasing demand by citizens to participate in political processes, and it presupposes that the possibilities offered by the Internet will allow a higher civic engagement by an ever-increasing number of informed citizens (Norris 2004).

Such an optimistic view has been counterbalanced by authors who have seen in such a process a catastrophic effect, where collective ignorance, prejudice, and narrow interest would distort the political agenda with a never-ending process of referenda initiated by citizens (Coleman and Gotze 2003) in which elected representatives will no longer play the dominating role in democracy, being overthrown by common citizens (Grosman 1995). In a less catastrophic reading of the phenomenon, it is argued that the prospects offered by new technologies will provide opportunities of participation only to those who are already interested in public affairs, with ICTs neither implying a drastic transformation of citizen participation, nor a democratic rebirth (Norris 2004, Frick 2005). Moreover, it is warned that in the context of a wide digital gap, democratic practices can be seriously jeopardized, as the least favoured actors would naturally be marginalized from the democratic processes with only a segment of favoured citizens benefiting from these technical advancements, therefore potentially widening the gap between those actors who participate and those who do not participate in political processes (Trechsel et al. 2003, Norris 2004, Gurstein 2011).

The plebiscitary visions of e-democracy, even though they still persist, have recently been supplemented by trends that see e-democracy as a means to make representative democracy work more effectively (Coleman and Norris 2005). And, in this research specifically, ICTs are considered as tools capable of strengthening democratic institutions with the participation of medium-level actors within representative democracies. For this reason, this research is about the use of ICTs in the core institution of representation, the parliament, with e-democracy being understood as the use of ICTs as a means to enhance democratic practices in representative democracies.

3.2 Information, Deliberation and Participation: e-Democratic Traits in the Development of Legislative Websites

What are the concepts that guide scholars on the use of Internet in relation to democratic practices? Most scholars in the field of e-democracy emphasize the provision of information as one of the main potentials of the Internet to foster democratic institutions and processes (Eisenberg and Cepic 2005, Robinson et al. 2008, Bertot et al. 2010). This is the first use that most governments tend to make of the Internet. One-way dissemination and provision of information is dominating communication between governments and citizens, indicating that the Internet is seen by governments, at least in a first instance, essentially as a means of unilateral communication (Musso, Wear and Hale 2000). Compared to traditional means of information (such as printed media, TV and radio), the Internet allows low cost data storage with – at least in theory – unlimited possibilities for updating information. Concerning governments, such a prospect can be explored through, for instance, providing extensive online information on governments' activities, administrative procedures and public expenses and legislation (Yuhang and Scavo 2000, Welch and Hinnant 2002).

In the same way that technical conditions provided by the Internet allow governments to increase their transparency vis-à-vis the citizens, Welch and Hinnant (2002) argue that the diffusion of information technologies in society itself affects citizens' expectations towards governmental transparency. In a similar vein, Shapiro (1987) states that ICTs have produced an information culture in which citizens have access to and, by consequence, tend to expect access to a great amount of data and information. As a result, the phenomenon of the Internet, with all its potential of providing unlimited amounts of information, tends to make citizens more demanding regarding the amount of information that is provided by governments.

Another dimension that is underlined concerning the potential of the Internet to enhance democracy is one that concerns a renewal of the public space and the political debate, with it now being possible for deliberation to exist in a virtual, online dimension. In such a cyberoptimistic perspective, what is underlined is the possibility for the creation of an open and virtual public space, which is capable of incorporating a plurality and quantity of ideas and demands that cannot be manifested in the rigid framework of traditional representative democracy institutions (Melucci 1996). Going further, and in order to summarize the advantages of online spaces, Kies and Janssen (2004) compare informal public spaces (i.e.

face-to-face public squares, informal community meetings) to online spaces (i.e. online forums), highlighting the following advantages: i) online spaces allow for non-centralized communication of many-to-many, in which each participant is normally equally entitled to participate; ii) online spaces are open spaces, and even more open than informal discussion spaces for there are no geographical or temporal limitations; iii) online spaces are places where participants are expected to be free to express their opinions, generally with no censure and limits on the participants (Kies 2010).

In fact, one of the first characteristics to be highlighted by the literature concerning the advantages of the Internet to enhance public debate is the fact that the Internet has the potential to reduce the costs of participation in terms of time and distance if compared to a face-to-face debate (Levy 2002, Eisenberg 1999). For instance, if in a traditional situation a citizen who wants to attend a city council meeting needs to be present at a certain place and at a certain time, the same citizen may post his comments and points of view from any place and at any time of the day through an online forum.

Furthermore, it is argued that the Internet allows every individual to express himself freely in online spaces, with the possibility of anonymity reducing the constraints on participants' freedom of expression (Vedel 2000). Moreover, due to its virtual ubiquity, it is claimed that the Internet allows interactions to go beyond geographical, social and cultural barriers in a way that was not possible before (Levy 2002, Grossman 1995). Thus, according to a cyberoptimist perspective, the interaction among individuals from different backgrounds should generate new models of self-regulation, condensing collective identities. In this view, the Internet is even presented as a didactical vector to educate individuals in the principles of debating (Vedel 2003). Added to this is the fact that the written and asynchronous nature of communication that generally characterizes these spaces should support more rational, argumentative and reflexive debates. Finally, it is claimed that these new online spaces have an impact on the quality of political participation, as they correspond to deliberative communicative contexts (Kies and Janssen 2004, Kies 2010).

However, these virtues concerning the possibilities of debate on the Internet also have their critics, broadly described as "cyberpessimists" (Kies and Janssen 2004). One of the significant obstacles to the virtual public spaces listed in the literature is the fact that a large part of the population lacks the connectivity, skills and time to use these ICT mediums

(Maldonado 1997, Hill 2004). Furthermore, it is argued that even the access to the Internet, the skills and the time to participate in these online debates will not affect the participation level of those who are traditionally apathetic to politics (Davis 1999). Moreover, critics consider that it is unlikely that a real deliberative space can be created, where participants will act in a sincere, respectful and reflexive manner. For instance, it is argued that since anonymity is possible in most of the existent online forums, sincerity and respect are seriously undermined (Kies and Janssen 2005). That is to say, participants are not bound by the normal conventions of reciprocity, particularly politeness, which results in many cases in a chaotic environment where no intersubjective rational deliberation is possible, with personal insults jeopardizing the debate process (Hill 2004, Kies and Janssen 2005). Finally, authors such as Dumoulin (2002) consider that since there are no constraints on the forums in which people wish to participate, users will tend to converge towards forums that are formed by citizens sharing the same background and/or ideas, thereby privileging interlocutors and positions and, consequently, leading to a polarization of societies (Davis 1999, Shapiro 1999, Sunstein 2001, Lawrence 2010, Benkler and Shaw 2010). Considering that both perspectives, cyberpessimistic and cyboptimistic, are reasonably defensible, and that so far there has not been any consensus in the literature as to where one perspective supplements the other, we present the view in this work that such a process of free, informed and self-regulated online deliberation is not impossible but, in many cases, it is a phenomenon that is difficult to engender and hard to sustain (Coleman and Gotze 2004).

The third dimension concerning electronic democracy that is recurrent in the existing literature refers to citizens' participation in political processes that are initiated and/or led by governments. Such practices can vary within a large spectrum, from online voting in election processes (Trechsel and Mendez 2004, Alvarez et al. 2010), to citizen participation between the electoral cycles. In most of these cases, the use of the Internet is seen as an additional means of interaction between citizens and their governments that will be adapted from already existing practices of participatory and/or direct democracy (Pratchett 2006). For instance, existing participatory budgeting processes become interactive (Welp 2006), or traditional referendums made by postal voting processes are "updated" by giving the citizens the possibility of voting online (Trechsel 2007).

One of the most known and widely studied phenomena concerning e-democracy in this regard is electronic voting as a means to increase voter turnout. The idea of electronic voting as a

means of increasing participation follows a rational choice approach (Downs 1957, Olson 1965), assuming that the act of voting implies both costs and benefits. These costs may be manifested either materially (i.e. money spent on going to the polling booth) or immaterially (i.e. time spent voting). Clearly, it is true that the variance in costs does not constitute by itself the only explanatory factor for voter turnout. However, the potential link between the accessibility of the ballot box and the participation level remains a strong hypothesis: if all the other factors are considered to be constant, the probability of participation will be inversely proportional to the costs of participation (Trechsel 2007, Gronke 2008).

The same argumentation based on costs/benefits inspires the aspirations of increasing citizens' participation/influence in public processes between electoral cycles. The main criticism concerning these practices hold that electronic voting and other modalities of online participation – similar to the limits of online deliberation – will not increase the participation of citizens who are traditionally indifferent to politics (Davis 1999, Vedel 2004). It is also posited that such practices create precedents to a virtual plebiscitary context, where politics is conducted by misinformation and the volatility of public opinion (Grossman 1995). Added to electronic voting practices is the problem of the security of these voting systems, thus calling the reliability of the current available technology into question.

The set of possibilities offered by the Internet is hypothetically achieved with the integration of the various dimensions mentioned previously: it is expected that through the Internet, citizens will be able to inform themselves, to debate online, and to participate in the decision-making process. While the prospects offered by the Internet are broadly discussed in the e-democracy literature, less has been written about the factors that influence the adoption of ICT mediated democratic practices: which are they, how do they operate and what is their impact. The next chapter aims to address these issues by presenting an overview of the scholarly debate on the matter.

4. THEORETICAL CONSIDERATIONS

4.1 The Factors that Influence e-Democracy Practices

A current debate in the e-democracy literature concerns the role that different factors may play on e-democracy outcomes. In other words, such literature is interested in the elements (e.g. institutional, technological) that influence the development of e-democracy practices. One of the initial approaches concerning this subject was made from a technodeterminist perspective. In a general manner, technological determinism understands technologies as autonomous forces that affect individuals, social arrangements, and institutions, and are generally beyond human agency (Danziger 2006). Thus, from a technodeterminist point of view (Levy 2002), there is an assumption that ICT development will by itself have an impact on political behaviour and citizens' demand for democracy (Ari-Veikko 2003). Furthermore, the development of democratic practices through the use of ICT tools is the outcome of the level of development of the ICTs in a certain political context: the more developed and accessible ICTs are, the more developed e-democracy is. Hence, technodeterminist scholars will tend to question how institutions can be affected by ICTs without taking into account how institutions can change and use technologies in particular contexts (Ari-Veikko 2003). In this case, the level of technological development in a defined context will be considered the main – if not the only – constraint or input for the development of e-democratic processes.

However, the contemporary literature concerning the use of ICTs by governments assumes the existence of a dynamic interaction between social structures and the use that is made of technologies (Lamb and Kling 2003, Castells 2003). While it is evident that a technological development is necessary for the implementation of e-democracy practices, it can also be considered that such a requisite does not determine *per se* the outcomes of e-democracy practices (Brousseau and Ralet 1997), and such a consensus around this idea is clear in the most recent literature in the domain (Gil Garcia 2005, Bussell 2011, Chadwick 2011). Therefore, amplifying the scope of analysis to a broader approach, rather than relying on a purely technodeterminist theoretical framework, could enlighten the analysis of the outcomes produced by the use of ICTs by governments (Zhoe 2006). In this perspective, e-democracy practices will also be affected by factors other than just the technological one, such as institutional arrangements (formal and informal), organizational configurations, and contextual factors (Gil-Garcia 2005). For this reason, in this research, differences of practices

in e-democracy among the parliaments are analysed not only from a technological development approach but also by considering other explanatory factors that might have an impact on e-democracy outcomes.

Early works concerning services provided by governments' websites (Gil-Garcia 2006, Zhoe 2006) indicate that institutional arrangements have shown themselves to have a direct effect on organizational sets (i.e. number of employees, management structure). In their turn, these organizational sets have a direct effect on governments' website designs. Even though these results are from governments' websites and not from parliaments' websites, such findings encourage the researcher to go further, analyzing not only the institutional arrangements, but also other factors such as organizational configurations and contextual factors. Institutional arrangements are here understood as the set of regulations, laws, and other cognitive, cultural or socio-structural constraints found in parliaments' frameworks, including actors' strategies (Fountain 2001). Organizational configurations are considered to be related to the parliaments' organization as a whole and to some characteristics intrinsic to ICTs practices in a particular context, such as size of governments' ICT structures, the human and material resources available, and the number of organizations involved in the conception and maintenance of websites.

There is a consensus among authors on the relevance of contextual/environmental factors in the way technologies are designed and used by governments (Gil-Garcia 2006) and organizations in general (Friedberg 1977, Pettigrew 1987), including parliaments. Several factors have been considered in order to understand the role that context plays on organizational settings, such as cultural, economic, technological, demographic and ecological conditions (Friedberg 1993, Clegg and Dunkerley 1980, Hatch 1997). In this research, contextual factors such as the political orientation of parliaments and socio-demographic and overall economic features of each sub-unit will be singled out.

Nevertheless, while the most recent literature on e-democracy tends to be consensual on the existence of multiple factors that influence e-democracy practices – other than just technology – there are only a few studies that have been realized in a comprehensive way that aim to understand this interaction between ICTs and social structures on a 'how' and 'to what extent' basis. In short, there is not a sufficient existing knowledge concerning the factors that affect "how government uses information technologies" (Gil-Garcia 2004), and the same may be

said about parliaments. This leads to the question concerning the use of ICTs by parliaments: how are parliaments using ICTs and what are the factors that affect the uses parliaments make of these technologies?

4.2 e-Democracy and Parliaments

As mentioned before, in a context of high technological diffusion and increased accessibility of ICTs, a simple glance at the websites of parliaments shows variance among websites, as has been shown by previous works (Norris 2001, Trechsel et al. 2003, Ferber et al. 2003). Pertinently pointed out by Leston-Bandeira (2007), few works that look at parliamentary websites have taken into account the offline characteristics of parliamentary institutions and their respective contexts. Here again, we find the notable exceptions of Norris (2001), Trechsel et al. (2003) and Ferber et al. (2003), where the scholars looked for factors that explained the level of development of parliamentary websites.

In this respect, looking at 178 national parliaments around the world, Norris (2001) found that even when controlling for technological and socio-economic development, the level of democratization of the countries was the strongest and most significant predictor of the level of parliamentary websites, measured for quality by the provision of information and communication functions. Ferber et al. (2003), analysing the 50 legislature websites in the United States, looked for relationships between the scores obtained by the websites and political and demographic characteristics of the states. Trechsel et al. (2003), looking at the level of development of parliamentary websites across 26 European polities, and also considering the level of socio-economic and technological development, further explored the link between variables such as institutional (e.g. presidential/parliamentarian) and ideological (e.g. right/left) factors. In this case, the authors did not find any conclusive results concerning the factors that might predict the variance in the level of development of parliamentary websites, suggesting that it is political actors' strategies rather than ICT development or other institutional variables that are driving the development of parliaments' and parties' websites (Trechsel et al. 2003). This brings me to the discussion of the role of actors' strategies and, particularly, the role that civil servants (i.e. legislative staff) and MPs play in the level of development of parliamentary websites.

4.3 MPs and Civil Servants Enacting Technologies

If, as underlined by Fountain (2001), studies of technology and organizations have been persistently ignored by social scientists – except those with an explicit interest in technology – the role of civil servants in e-democracy policies has not been properly addressed, if not largely ignored by social and political scientists in the domain. However, taking for granted the extent to which policy and administration are intertwined, treating policy and administration as clearly separable entities – with politicians responsible for the former and civil servants for the latter – is a flawed assumption (Putnam 1973) that makes the understanding of e-democracy policies incomplete. In this respect, civil servants are most often those who dispose of the means to help elected officials achieve their goals (Huber 2000).

Civil servants offer a reservoir of expertise without which MPs cannot, in any proper manner, conceive and enact policies. To perform many of these activities, MPs have neither the time, the inclination, nor the expertise (Finer 1925). Such an assumption becomes even truer with the ever-growing level of specialization of themes to be legislated and enacted. Even though the congressional terminology of ‘legislative staff’ may suggest the idea of second-order operational employees, members of the staff may enjoy a high level of autonomy and a privileged status within the parliamentary institution (Romzek and Utter 1997). Moreover, considering the privileged possession of information and expertise, civil servants naturally dispose of some discretionary margins (Crozier 1964) that enable them to reinterpret and alter the demands of MPs. Heclo (1974) claims that civil servants “have consistently made more important contributions to ... policy development than political parties or interest groups” (in Fountain 2001), which makes overlooking the role of civil servants a misleading choice for understanding the way policies are conceived and implemented.

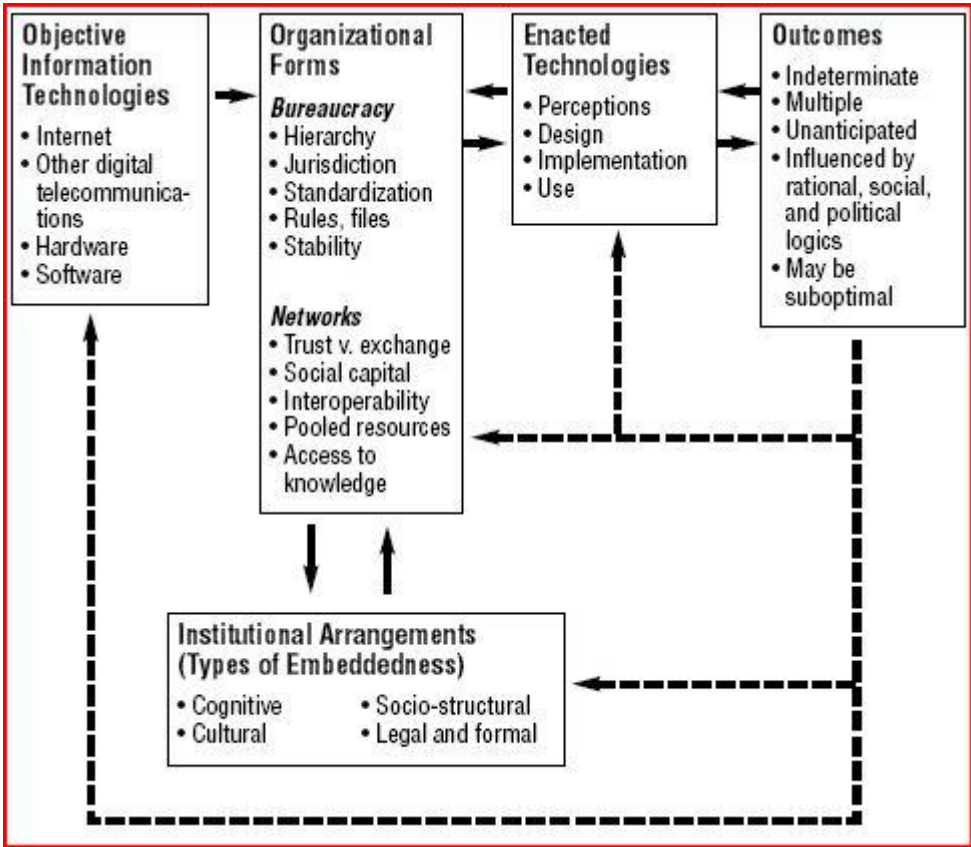
Moreover, it should be expected that such an influence and discretionary margin of civil servants be accentuated when it comes to the highly specialized domain of ICTs, and particularly during its implementation phase, when the use of ICTs is “greatly shaped by public managers’ concern” (Garcia and Moyano 2007) and where the asymmetry of technical knowledge between MPs and civil servants is clearly to the advantage of the latter. Indeed, writing about the virtual state, Fountain argues, “The role of public managers is critical to understanding how IT is being used to develop a virtual state. It is public managers who

puzzle over structural and process arrangements, new technologies, and the implementation of policy within institutions” (Fountain 2001).

Jane Fountain’s (2001) conceptual framework of technological enactment is particularly useful for the purposes of this research. This framework is based on a broad empirical research on the behaviour of civil servants as decisions are taken concerning the design and use of ICTs in governments. Even though Fountain’s technology enactment framework was initially designed based on the observation of government agencies, it is argued that the way technologies are enacted by state/regional legislatures – as public organizations – can also be understood through the analytical lens of the technology enactment framework. Hence, enacted technology is here understood as the way in which ICTs are perceived and actually used by the actors in parliaments, with these perceptions and actions being mediated by institutional frameworks and organizational settings.

An essential element of the technological enactment approach is the distinction between objective and enacted technology: whereas the former refers objectively to the Internet and other ICTs, hardware and software, the latter refers to “the perceptions of users as well as designs and uses in particular settings” (Fountain, 2001). A simple example that illustrates the way in which technology is enacted as the fruit of perceptions is when highly sophisticated mobile phones are utilized only as a means to effectuate phone calls and send text messages, whereas in fact these ‘phones’ are tools that have been objectively designed in terms of software and hardware to perform a much broader set of functions (e.g. photo, Internet browser, calendar) than an average user is normally aware of or interested in.

Figure 1. Fountain's Technological Enactment Model



Source: J.E. Fountain, *Building the virtual State: Information, Technology and Institutional Change* (Washington, D.C.: Brookings Institution Press, 2001), p. 91.

Thus, according to Fountain, the way in which actors implement, adapt and use technologies is the fruit of their perceptions of ICTs and their potential, mediated by organizational forms and institutional arrangements as shown in the figure above. In this respect, given that civil servants exercise their functions of policymaking and implementation of policies within bureaucracies, within Fountain's framework, organization structures (including soft structures such as behavioural patterns and norms) are considered to be a major mediating variable, influencing the design, development, implementation and use of technology. Furthermore, the networks that civil servants possess – given that they also interact with different external actors (e.g. IT providers, citizens) and that they are permanently working in a system that links agencies, publics and sectors – might play a key role in the way technology is enacted. As regards institutional frameworks, Fountain considers that cognitive, cultural, socio-structural and governmental institutions also play a considerable role in the enactment of technology, and that these institutions are simultaneously influenced by the technology they

adopt (Fountain 2001, 2005). As demonstrated in the figure above, the causal arrows in both directions indicate that there is a recursive relationship between technology, organizational forms, institutions and technological enactment: that is, influences or causal connections flow in all directions among the variables (Fountain 2005).

As to the actors that play a role in the enactment of technologies, Fountain specifies three groups of actors, composed of a first group of ‘external’ actors, vendors and consultants, and two other groups composed of public servants. If the vendors and consultants are those responsible for the provision of objective technology, Fountain underlines that the way this group understands governments is critical to their process of identifying and providing technological solutions, which affects which solutions and alternatives these providers offer to governments. The second group includes the civil servants who are the main ICT decision-makers and the key actors in the decision-making process related to the design of technological systems to be used by public organizations. The third group of actors is a broader group that is not directly linked to the design of ICTs (e.g. policymakers, administrators, workers) but that is key in the process of converging technological, political and programmatic logics (Fountain 2005). In the next section we shall address how actors’ strategies can be singled out and analysed, and how these strategies are mediated by institutional settings.

4.4 Actors’ Strategies as a Function of Interests, Resources and Institutions

Case studies are a pertinent means for the study of actors’ strategies, considering that these strategies cannot be understood and analysed unless they are “clinically” approached (Crozier and Friedberg 1977:169). But on what premises does this clinical approach rely and what are the specific analytical tools offered by this approach that enable a satisfactory understanding and, to some extent, measurement of actors’ strategies? In this research, we shall rely upon the organizational approach put forward by Crozier and Friedberg (1977). In other words, we shall examine the parliament as an organization that is a social construct where a multiplicity of rationally bound actors pursue different objectives by deploying diverse strategies as a means to reach their ends. This clinical approach to the object of study resonates with Fountain’s technological enactment framework, which puts forward the need to understand the “internal workings” of public organizations. At a same time, the organizational approach addresses neo-institutionalism’s shortcomings in terms of appropriately accounting for strategic-driven

behaviours (Friedberg 1998), interests, and “the generative capacity of actors” (Hirsch and Lounsbury 1997:410).²

In this sense, in parliaments we shall find a structured game (concrete action system) where actors’ behaviour is characterized by the pursuit of personal benefit and the mobilization of resources to increase their power in ceaseless negotiation processes. Power and resources, distributed among the different actors (e.g. MPs, civil servants) lead to a pattern of interdependence and exchange that underlines the negotiations among the actors (Bekkers and Homburg 2005). The interaction among the actors is mediated by the “rules of the game” – that is, formal or informal structures through which actors “regulate and manage their mutual dependencies” (Friedberg 1993). The use of these rules by the different actors (e.g. formal sanction, moral disapproval) are part of the set of strategies to be deployed in the pursuit of personal goals and power, where power is understood as the capacity of an actor to impose exchange processes in his favour, exploiting both the constraints and opportunities offered by the situation, ultimately imposing terms of exchange that are to his advantage (Friedberg 1993). As to the sources of power that were underlined by Friedberg and Crozier (1977), given their particular relevance to this research, we underline three factors:

- The possession of a particular competence (e.g. skills, knowledge)
- The control of communication and information (e.g. sources of information, flux of information)
- The ensemble of rules (formal and informal) of the organization.

As an example of how actors will mobilize sources of power in the context of parliaments and of enactment of technologies, we shall provide a hypothetical situation.

The *Chief of Parliamentary Staff* asks his subordinate, the *IT Unit Director* to make changes in the website to improve its graphic design and usability. The *IT Unit Director* then claims that such improvement is unfeasible given the amount of resources available, asking for additional resources to comply with the task. In this context, the *IT Unit Director* relies on his expert knowledge to make an assertion that he knows can hardly be contested by the *Chief of Parliamentary Staff*. Even though the job could have been done with the available resources,

² On the analytical approach to case studies, see also section 10.6, Analytical Overview of Qualitative Analysis.

the *IT Unit Director*'s demand for supplementary resources could enable him to invest in other projects – such as making the website more interactive – that he judges as being priorities. Facing such a situation, using the control of communication and information, the *Chief of Parliamentary Staff* 'bluffs' the *IT Unit Director* by telling him that the *Speaker of the House* himself stated that the website should be revamped without using further resources. Even though it might be untrue that the *Speaker of the House* has asked so, the privileged contact of the *Chief of Parliamentary Staff* with the *Speaker of the House* puts him in control of the information that comes from elected officials concerning their demands for parliamentary staff. Finally, as to the rules of the organization as sources of power, the *Chief of Parliamentary Staff* could threaten the *IT Unit Director* if he does not comply with the demand, for which the *IT Unit Director* could threaten to resign from his post in case of sanction as he has been given an 'impossible task'. In this case, both actors will structure their strategy based on 'uncertainty' margins. For instance, it might be that the *IT Unit Director* will adopt the strategy of not complying with the demand for improving the website without additional resources, given that he considers himself irreplaceable and that he does not risk any sanction while he might gain additional resources for his department. The *Chief of Parliamentary staff* might mobilize his resources in terms of control of information flows and application of rules by saying that even though he knows the *IT Unit Director* is nearly irreplaceable, given that the demand comes from the *Speaker of the House* he would be obliged to continue with a sanction. From this perspective, actors' behaviour and eventual negotiations that take place will be based on their partial judgments of the situation, with the actual enactment of technologies becoming a byproduct of actors' strategies.

Even though the example above is rather simplistic and caricatural – i.e. negotiations tend to be more nuanced and do not imply necessarily lies and bluffs – it shows how rationally bound actors might mobilize different sources of power (e.g. skills, rules) in the pursuit of their personal goals. In this respect, *the strategy of each actor is measured as a function of his or her interests and resources* (Brousselle 2004:160). Hence, differences of priorities will create spaces of conflict and cooperation framed by institutional settings – formal and informal – and it is in this context that 'virtual parliaments' are conceived, used and adapted.

However, how can these conflicts be concretely delineated and mediated by institutional and organizational settings, and in what contexts? Huber (2000) identifies political context and institutional settings as factors that may influence the quality of delegation to civil servants

(Huber 2000). It is assumed here that these factors are also relevant in mediating the conflicts between civil servants and elected officials, and will have a considerable impact on the way technologies are enacted. To these factors, legislative professionalism has been added, since an extensive literature associates it with policy innovation (Downs 1976, Derthick 1970, Kousser 2005). These various factors are described below:

Political environment

According to Huber (2000), political context may play an important role in the strategy for the delegation to civil servants (e.g. majority status of parliament, presence of coalitions as opposed to single party government). The political inclination of civil servants may also have an effect on the way technology is enacted. For instance, civil servants with a political inclination aligned with their superiors or with the MPs in charge (e.g. speaker) may result in cooperation models where convergence of political support and technical expertise may lead to better cooperation in engaging projects in ICTs use. Conversely, an opposite situation may lead to constraints on engaging in more ambitious projects concerning the use of ICTs.

Institutional/organizational settings

Institutional settings such as the level of cabinet stability, level of turnover of top servants, autonomy of services and rules for decision-making may play an important role for those who wish to exert an influence in agency decisions (Huber 2000, Huber and Lupia 2001, Rose-Ackerman 1995). In this respect, structures of administrative law are taken into account considering that legislation has an impact on the discretionary power of civil servants (Rose-Ackerman 1995). For instance, in the particular framework of this research, one could test whether more autonomous and stable civil servants in charge of ICT use take more risks and engage more in long-term projects, thus producing better and more ‘e-democratic’ websites. Another important dimension to be considered is the extent to which MPs are allowed to name the personnel, a characteristic that varies considerably in a cross-country perspective.

Professional legislatures/staff professionalism

Legislative professionalism has commonly been associated with policy innovation (Downs and Rocke 1980, Downs 1976, Derthick 1970, Kousser 2005), and recent literature associates e-

government innovations with legislative professionalism³ (McNeal et al. 2007, Mossberger et al. 2005) by using it as a proxy for government professionalism. If legislative professionalism can be expected to have an impact on innovations implemented by governments, such an effect should be even more accentuated in those policies that are directly implemented by the parliament, as is the case of parliaments' websites. Squire (1992) considers legislative professionalism as a function of compensation, parliamentarian activity (e.g. committee meetings, sessions) and size of staff. However, such a measure tends to take professionalism into account in the perspective of elected officials, and a specific measure for *legislative staff professionalism* should also be considered if one wishes to assess actors' strategies. In this sense we would consider legislative staff professionalism also as a function of compensation and hours of work (e.g. full-time/part-time). It could be expected that the higher the level of professionalism of the legislature and of its staff, the more e-democratic outcomes might be produced when parliaments enact technology.

Needless to say, the factors above are still exploratory, and as the research unfolds other factors that may mediate actors' strategies may eventually be included. However, this indicates the possible effects that the complex relations between civil servants and MPs – within institutions – might have on the ways technologies are enacted and, ultimately, may explain heterogeneity in the development of parliaments' websites. Finally, considering that the current literature in the domain of e-democracy has neglected the role of actors' strategies that shape the relations between MPs and civil servants, such exploratory work could bring new elements to the understanding of determinant factors concerning the use of ICT by parliaments.

Having looked at the broader debate on the factors that affect e-democracy outcomes to more specific works in the domain concerning the level of development of parliamentary websites, we have dealt with the relevance of actors in the way technologies are enacted and, more particularly, the role that civil servants might have in such a process of technological enactment. Based on this discussion, we shall move on to the next chapter, where an analytical model is proposed and hypotheses are clearly elaborated.

³ In the case of e-government innovations, professional legislatures have been considered either as a primary explanatory variable or as a proxy for state government professionalism (Mossberger et al. 2005, McNeal et al. 2007).

5. MODEL AND HYPOTHESIS

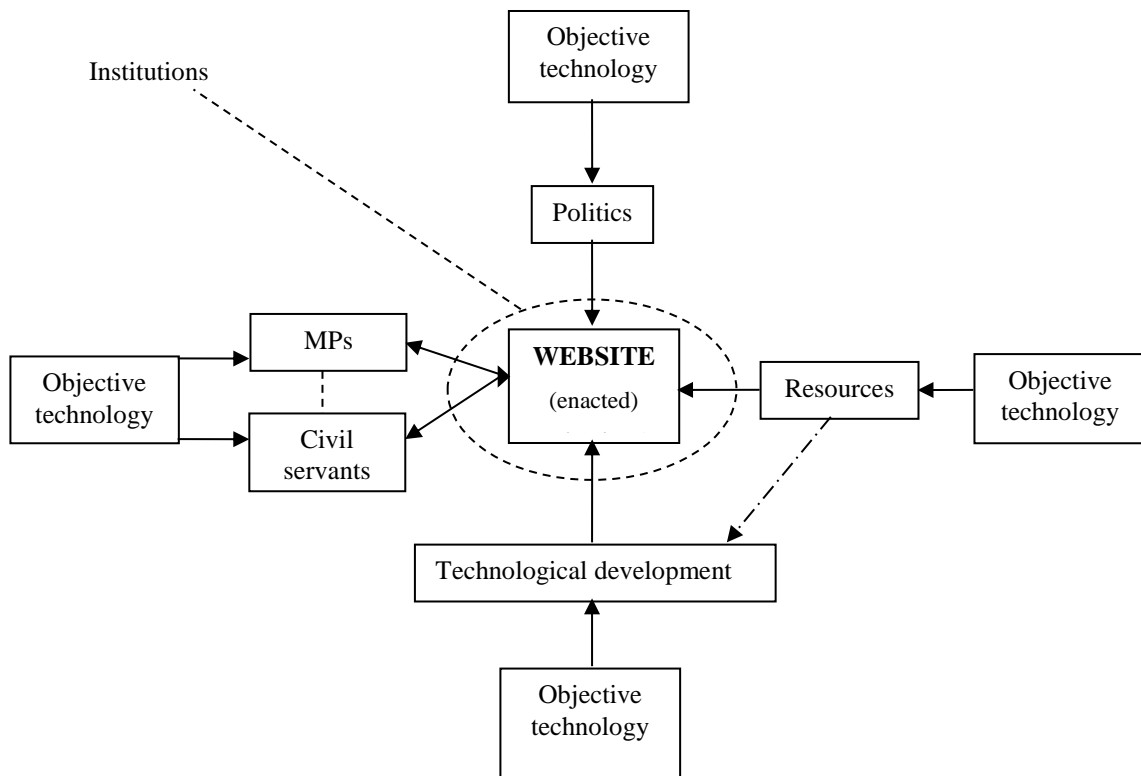
Fountain's model presents the valid distinction between objective and enacted technology and identifies a number of actors and their respective roles in the enacting process. In the context of Legislatures, we add MPs to the system of actors, for the obvious reason that they are relevant actors in such an organizational setting. It is also important to emphasize the conflictive nature that underlines the interaction among the different actors. In whatever organization, independent of its nature, actors do not share the same interests and priorities, and they tend to pursue different objectives (March and Simon 1958, Simon 1976, Friedberg 1977). In a dynamic relationship, coalitions are fluid and arrangements about actors' preferences are hardly ever conclusive. As in any other organization, in parliaments, "conflicts among individuals are the norm and they are quasi resolved instead of decisively concluded" (Aberbach and Rockman 1987), with actors pursuing their interests and making choices within institutional constraints (Friedberg 1977).

Thus, it might be expected that in many cases MPs and civil servants will pursue different objectives concerning the use of ICTs based on their perceptions of the potential of technologies. For instance, it might be that MPs see the potential of websites mainly as a communication tool to promote their actions, whereas a civil servant working with ICTs might pursue the creation of more sophisticated websites that enhance interactivity vis-à-vis the citizens (e.g. blogs, polls) as a means to obtain recognition of his professional skills within his professional network. In this sense, both MPs and civil servants must be able to structure their relationship with each other in such a manner that different goals are achieved through negotiation (implicit or explicit) of the varying interests at least to some extent. In this sense, paraphrasing Fountain (2001), in this research it is assumed that it is the negotiations, conflicts, struggles and strategies among parliaments' civil servants, among MPs, and between these last two, that will constitute the building of the 'virtual parliaments'. It is expected that actors' strategies that shape the complex relations between MPs and civil servants – with the latter playing a major role – mediated by institutional settings, are powerful determinants in explaining the existing variance between the e-democratic traits of parliaments' websites. If this is to be true, it should be no surprise that provided that a minimum of resources is available, once parliaments that are similar in competences and functions decide to 'go online', the level of development of parliamentary websites will be, above all, determined by the interests and technical skills of civil servants, who more than

users are the architects of implementation, operationally feasible processes and politically sustainable designs (Fountain 2005). In this respect, a hypothesis is formulated, claiming that *it is the conjugation of the strategies, conflicts and struggles among civil servants, among MPs, and between civil servants and MPs, that will constitute one of the main pillars of the level of development of parliamentary websites.*

However, as mentioned earlier, previous works – albeit with different designs in a cross-polity perspective – have suggested other factors that may have an impact on the development of parliamentary websites, and these shall be used as secondary hypotheses to be tested in this research. As regards political variables, Norris (2001) found that the level of democratization of the countries was the strongest and most significant predictor of the level of parliamentary websites, whereas Ferber et al. (2003), looking at the state level in the U.S., suggested that the level of development of parliamentary websites is directly related to the level of political participation in the different states. Also, McNeal et al. (2003) have found that partisanship in state legislatures has an impact on the provision of online services by state governments. As to economic factors, slack resources and economic wealth have been associated with the capacity to implement policy innovation (Downs and Mohr 1979, Dye 1966, Hwang and Gray 1991) as well as investment in technology (McNeal et al. 2007). Finally, as mentioned in the previous chapter, the technodeterminist perspective expects the level of development of e-democracy practices to be a function of the level of technological development (Levy 2002, Ari-Veikko 2003, Danziger 2006). The scheme below, informed by the literature on the subject, presents a simplified model for the different factors that might affect the level of development of parliamentary websites.

Figure 2. Technological Enactment with State Legislatures



The process of technology enactment starts with an objective technology, which is represented in the extremities of this scheme. In the first case, on the left side of the figure, objective technologies will be adapted and transformed by MPs and civil servants, which would lead to the actual configuration of the website. The dotted line around the website square represents the institutional arrangements (e.g. formal/informal) that mediate the relationships between the enacted technology and the different factors (e.g. resources) that enact technology. In this case for instance, between the parliamentary website and the civil servants and MPs, the arrows pass through the institutional line, representing institutional arrangements that mediate the enactment of the technology. Also, between MPs and civil servants we find a dotted line that also represents the institutional arrangements that mediate the relationships between these two groups, such as, for instance, hierarchy. The causal arrows in both directions (between MPs and civil servants) and the actual website indicate that there is a recursive relationship between the first two, institutional arrangements and technological enactment. At the top of the figure we find the political factors (e.g. partisanship, democracy level) that in their turn might affect the development of parliamentary websites, followed by economic resources on the right and finally at the bottom

of the figure, technological development. The arrow linking resources and technological development indicates the direct relationship that might exist between these two factors: the higher the resources the greater the technological development.

From this simplified model, we can generate a clear set of hypotheses concerning the factors that might affect website development.

Hypothesis 1 (leading hypothesis) – *actors' strategy*: according to this analytical framework, it is the relationships among civil servants and among MPs, and the relationships between the two groups – mediated by institutional arrangements – that will affect the level of development of parliamentary websites, where the strategies and technical expertise of civil servants play a determinant role. In this respect, the more professionalized civil services within parliaments are, the more developed the websites are.

Hypothesis 2 – *political context/ideology*: in accordance with previous findings on parliamentary websites, their level of development will be ultimately defined by political factors and, more particularly, partisanship. Under this perspective, the development of parliamentary websites will be affected by the partisan orientation within parliaments.

Hypothesis 3 – *resources*: traditionally associated with policy innovation, resources will be the main factors affecting the level of development of parliamentary websites. In this context, the higher the amount of resources and economic wealth, the more developed parliamentary websites will be.

Hypothesis 4 – *technological development*: according to this hypothesis, the level of development of e-democracy policies will be determined by the level of technological development of their context, that is to say, technological development is the determinant factor for the outcomes in e-democracy. Thus, for instance, in contexts of higher technological developments, a higher level of development in the use of ICTs related to democratic practices should be identified.

As outlined above, it is expected in this research that actors' strategies might be the strongest predictor for the level of development of parliamentary websites. However, this does not mean that the hypotheses are mutually exclusive, and does not rule out the importance of

other factors. For instance, despite the fact that it is believed that actors' strategies will be the main factor, it is difficult to conceive of a highly developed parliamentary website (e.g. in terms of transparency of information, interactivity) where no resources whatsoever are available and in the context of a totalitarian regime. The possible interactions between these distinct variables and the possible causality among them are, however, unknown in this particular domain of e-democracy. In this respect, specific interactions and causality among factors shall be approached and analysed as evidence emerges during the research.

6. CASE SELECTION

As previously mentioned, other studies (Norris 2001, Trechsel et al. 2003) have looked at factors that determine variance in the development of Legislative websites. Nonetheless, these studies share one common trait that is not free from implications: the comparisons were made in a cross-polity perspective. In this respect, the authors consider parliaments that have in common the fact that they are Legislatures and, to some extent, this is as far as the similarities between the cases go. Even though in the work of Trechsel et al. (2003) the authors look for institutional factors such as bicameral or unicameral, parliamentary or presidential systems, such a model does not account for the institutional differences related to competences, for instance, among parliamentary systems or bicameral legislatures themselves. In other words, in a cross-polity perspective, it may be that it is precisely the inherent difference in competences and functions in the division of powers within the polities that explains the variance among the parliamentary websites⁴.

Thus, this research design privileges the application of the Most Similar Systems Design (MSSD), looking at sub-national Legislatures within federal systems⁵. Sub-national Legislatures may be considered as similar and comparable units of analysis with regard to competencies and functions. Therefore, the reason for the focus on sub-national Legislatures within federations is to ensure that the differences of development of parliamentary websites are not attributed to variances in competences and functions of Legislatures. In other words, at *the intra-federal level* the application of the MSSD approach is particularly appropriate, given that at this level the analysis is carried out in an environment where the institutional traits are equal among all the sub-units of each federation⁶.

⁴ The exception to this approach was the work of Ferber et al. (2003), in which 50 state legislature websites in the United States were evaluated according to the following criteria: content, usability, interactivity, transparency and audience. In this case, given that Ferber et al. (2003) were looking at the Legislatures of units within a symmetric federation, where parliaments shared similar competences and functions, the author still found a wide range of variation among the websites according to the criteria adopted. A similar approach has been adopted by Snider (2009), looking at online disclosure of MPs' votes.

⁵ Federalism can be broadly defined as the theory of federal orders where final authority is shared between sub-units and a central federal government (Wheare 1964, King 1982, Elazar 1987, Riker 1993, Watts 1998). By consequence, a federation (from the Latin *foedus*: covenant) is understood as a state constituted by a number of partially autonomous sub-units⁵, united by a federal government, as in a principle of *self-rule plus shared rule* (Elazar 1987).

⁶ It is important to note that this similarity exists only at the intra-federal level (i.e. within each of the countries) and not at the inter-federal level (between different countries).

This leads me to another form of classification of federations, and one of particular relevance to this research, which categorizes federal orders according to the distribution of competences among the sub-units of a state. Where every sub-unit of a federation is entitled to the same competences and is subject to the same set of rules/laws, having similar bundles of authority, we are said to find *symmetric federations* (Watts 1999, Requejo and Wynants 2001). Conversely, *asymmetric federalism* refers to federal arrangements where sub-units of the same state are granted different competences, with some sub-units possessing greater autonomy than others (Fossas 2002, Novensa 2005)⁷.

Two out of the three countries selected in this research – Brazil and the United States – can be considered as standard examples of symmetric federations. In this sense, given that the sub-units of each federation are subject to the same set of laws/rules, the levels of competencies of parliaments in a symmetrical federation are homogeneous. Therefore, the selection of symmetric federations as cases to be studied gives the researcher stable units of analysis within the federations as regards institutions⁸.

Spain, often cited as an example of an asymmetric federation, is composed of 17 sub-units (*comunidades autonomas*) and of two municipalities with a special status of autonomy (*ciudades autonomas*), where the interest of this research focuses on the 17 sub-units⁹. Even though all the sub-units are entitled to self-government in some domains, the distribution of competences among these sub-units is not homogeneous¹⁰. That is to say, if all the units have the right to a certain level of autonomy, not all of them dispose of the same amount of competences. In practice, the constitutional granting of competences in Spain tends to lead to the homogeneity of competences in the sub-units of Castilian origin, with the exception of

⁷ This is generally the case in federations where there is recognition of the existence of significantly distinct culture(s) in a particular region(s). It is argued that an asymmetric federal arrangement allows national minorities to self-govern – in certain domains – according to their particular traits and needs (Fossas 2002, Novensa 2005) with a capacity to address specific challenges that are set by current plurinational democracies (Elazar 1987, Requejo 2001, Novensa 2005). Converging the advantages of self-government and of belonging to a broader political structure (Simeon and Cornwell, 2001), asymmetric arrangements grant acknowledgement and political autonomy to national minorities (Novensa 2005).

⁸ The choice of Brazil and United States is also justified by the fact that – in both countries – previous studies have already identified variance in the development of sub-national legislative websites (Ferber et al. 2003, Braga 2007).

⁹ These municipalities will not be considered in this research as their statuses do not correspond *strictu sensu* to sub-units of a federation and because they do not dispose of parliaments, which are the object of the research.

¹⁰ The Spanish Constitution of 1978 defines the structure of the Spanish State as formed by sub-units, acknowledging and granting autonomy to the nationalities and regions that compose the state, and determining the competences that correspond to the sub-units and those that are the reserved domain of the state.

Galicia (Herrero 2003)¹¹. The other sub-units of different origins – the Basque country, Catalonia and Andalusia – also known as historical communities, have broader competences that are expected to address the particularities of these sub-units, as in a typical configuration of asymmetric federalism. Among the examples of extra competences that are granted to the historical communities, one can cite the tax system in the Basque Country and the acknowledgement of the official languages of Galicia, the Basque Country, and Catalonia, as well as the existence of their own civil codes.

It is believed that the choice to add to the comparative perspective between two symmetric federations (Brazil and the U.S.) a case of an asymmetric federation (Spain), will allow us to better explore the impact of different institutional configurations in the framework of federations. The selection of an asymmetric federation, however, does not invalidate the MSSD approach, given that the levels of competences are stable among all the regions with the exception of four (Galicia, Basque Country, Andalusia and Catalonia). In this respect, this difference is not a handicap to the analysis, but rather may facilitate an exploration – while controlling for other factors – of the impact of different attributions of competences within an asymmetric federation.

Finally, even though there are several important works focused on the implementation of public policies within federations (Braun 2000, Wachendorfer-Schmidt 2000, Banting and Cornett 2002), and despite an increasing body of literature concerning the use of ICTs by governments, few are the studies that link federal arrangements and ICTs (Manz and Trechsel 2004). This research seeks to fill such a gap by providing an empirical analysis of the use of ICTs by parliaments within federal orders.

Given the theoretical framework that is adopted concerning e-democracy in this work, the choice is obvious. If e-democracy is considered in this work as a means to make representative democracy function more effectively, parliaments are chosen for being a core institution of representative democracy. The lower chamber is chosen as all three countries' sub-units dispose of lower chambers, which is not the case for the higher chambers (i.e. Senate). Finally,

¹¹ In 1992, the Spanish Prime Minister (Felipe Gonzalez) and the leader of the opposition (Jose Maria Aznar) signed the Second Autonomy Pact (*Segundo Pacto Autonómico*), defining the current configuration of 17 sub-units that dispose of similar institutions (i.e. parliaments) but with different competences.

the N of 93 parliaments' websites to be quantitatively analysed¹² offers high degrees of heterogeneity. It is expected that this universe of analysis will allow a broader understanding of the factors that influence e-democracy outcomes in websites of parliaments within federative systems.

Finally, with regard to the case studies, the analysis is limited to cross-national case studies in one country only due to external constraints (e.g. logistics, resources). In this case, the choice of Brazil is justified by two factors. First, we contend, the high level of variance in important factors within the country (e.g. political, administrative) provide a rich context for the analysis of institutional factors that may impact processes of technological enactment within the country. Second, by studying Brazil we aim to contribute to reducing the scarcity of literature on ICT and parliaments in developing countries. Finally, within the country, the case selection is based primarily on the dependent variable, i.e. the e-democracy score of the state Legislatures. Two cases of high e-democracy performance (Rio Grande do Sul and Porto Alegre) are selected, in addition to one control case (Rio Grande do Norte) – one of the states with the lowest levels of e-democracy scores in the country¹³.

¹² U.S. (50 sub-units, “states”), Brazil (26 sub-units, “states”) and Spain (17 sub-units, “autonomous communities”). Districts and Provinces are not included as they are subject to a distinct set of laws and rules.

¹³ A further discussion on the selection of cases for the case studies can be found in section 10.1, Background to Case Studies.

7. RESEARCH DESIGN

In aiming to study information technology and its effects on democracy at the parliamentary level – of sub-units of federations – this research will explore not only the technological aspects concerning parliaments' websites but will also take into account the social and political processes that interact with these technologies, instead of defining them in simple terms of hardware and software. Thus, this thesis aims to identify and analyse how parliaments within federations are using the prospect of new technologies, particularly the Internet, as a tool to promote e-democracy, by comparing parliaments' websites extensively and systematically.

However, the metrics used to understand governments' use of ICTs mainly based on web content analysis do not adequately capture the nature of the actions and interactions that are involved in the use of new technologies (Moon, Welch and Wong 2005). Consequently, this research will take a mixed-method approach, that is, the combined use of quantitative and qualitative methods in order to conduct research (Mingers 2001, Creswell 2003, Tashakkori and Teddlie 2003, Williams 2007). A sequential explanatory research design is adopted, where the research begins with a quantitative data collection and analysis followed by the collection of qualitative data and their subsequent analysis, with the two methods being integrated during the interpretative phase of the research (Creswell et al. 2003). The subsequent qualitative analysis takes as its objective the interpretation, support and complementation of significant findings in the quantitative part of the research. Employing these complementary methods (quantitative and qualitative) will allow us to maximize the gains that each method offers, exploring the trade-offs of each one, and therefore broadening the possibilities of a better understanding of the phenomenon studied (Johnson and Onwuegbuzie 2004, Williams 2007). Even though in the current literature on the use of ICTs by governments most of the approaches tend to privilege one method over the other – with qualitative methods being those most often employed (Heeks and Bailur 2007) – multi-method approaches have shown themselves to be more effective as a means to present a comprehensive explanation of the complexity involved in the use of ICTs by governments (Garcia and Pardo 2006).

Such a comprehensive research design has the potential to describe and understand more accurately the complexity of the impact of social phenomena on the e-democracy traits of websites. This multiple approach will allow me to integrate the perspectives of various existing theories which examine specific elements (i.e. technologies, actors' strategies), thus enabling

me to better explore the intersections and complementarities of distinct theoretical perceptions concerning the same phenomenon. In short, with the deployment of a broader research methodology, and simultaneously approaching the main theories concerning the factors influencing e-democracy, my aim is to enlarge the explanatory potential of the research.

The research will be developed in three major phases:

- Comparative website analysis: Websites will be analysed according to their e-democracy traits/potentials, identifying the variances existing between the websites. A classification of the websites (ranking) will be made based on their level of development, from the most developed to the least developed websites, both at the intra-federation level (variances between websites from a same federation) and at the inter-federation level (between the different websites from different federations).
- Analysis of explanatory factors: The outcomes of the comparative website analysis – the data concerning e-democratic traits/potentials and its variances – will be analysed (e.g. in technological, political terms) in order to find the causalities and possible explanatory models for the intra-federation variances and inter-federation variances.
- Comparative case studies: From the results of the statistical analysis, its causalities and possible explanatory models, cases will be selected based on their comparability and will be the object of an in-depth qualitative study. This posterior qualitative analysis aims to deepen the interpretations and substantial findings in the quantitative part of the research. The qualitative methods will include multiple techniques such as document analysis and semi-structured interviews.

7.1 First Phase: Comparative Website Analysis

Website analysis like the one proposed in this research is an up-to-date method used to assess the deployment of ICT and its relationship with politics. Focusing on the parliaments of sub-units of symmetric federations – in order to keep the comparison among the units of each federation stable at an institutional level (i.e. same set of rules and competences for each state belonging to one federation) – a comprehensive and systematic comparison will be made, identifying and singling out patterns in the development of these websites according to their e-

democracy characteristics. The methodological approach relies on a major component of the research, ICTs, also as a means for the data gathering process, through comparative website analysis. In other words, substantial data will be generated and coded through the analysis of websites. In order to do so, a comprehensive coding book has been developed, based on previous comparative research conducted by Trechsel et al. (2003), Della Porta (2004) and Frick (2005).

The methodology applied in the comparative analysis of the websites will not only enable a quantitative count and evaluation of features but it will also enable an assessment of interactivity. The interactivity features are also of core interest to this research because it is considered that interactivity can potentially allow increased scope for deliberation and participation. Therefore, four characteristics will be approached in order to evaluate the e-democracy quality of the websites: 1) Information Provision, 2) Bilateral Interactivity, 3) Multilateral Interactivity, and 4) Usability.

1) Information Provision

In general, when starting to use the Internet through websites, governments normally begin with the stage of information provision, presenting simple statistical information about agencies, legislation and services that can be provided to citizens and private organizations (Garcia and Moyano 2005) and offering access via e-mail to government members and personnel. As has been underlined in a similar work of web content analysis (Trechsel et al. 2005), the capacity of provision of information on a website is, in theory, unlimited. However, technology in this case is simply an enabler, and the quantity of information does not assure its quality (Caddy 2005). Thus, in order to better evaluate information provision and its quality we will divide this activity into five components:

- General information concerning the parliament: e.g. recent news, history of the parliament, functioning of parliament.
- Information concerning the MPs and Parliamentary Committees, offices: e.g. background information, role of parliament members, latest actions, and agenda.
- Information on legislation: e.g. information on legislative procedures, ongoing legislations, and updates on legal propositions.

- Information on debates and meetings: e.g. information on meetings held by committees, transcriptions of meetings and speeches, and schedules.
- Information on budgeting and expenditures: information on budgeting, sources of income, expenditures, and public calls.

2) Bilateral Interactivity

Bilateral interactivity is understood in this research as the characteristic of parliaments' websites that allows citizens to access general contact information (i.e. e-mail addresses) and to interact with parliaments' representatives and personnel by directly contacting them. It is known, however, that it is relatively easy to put the e-mail addresses of MPs/personnel online, but that this does not assure that there will be a response to any e-mails sent by citizens. Replying to an e-mail sent by a citizen is the action that completes the cycle that characterizes interactivity between citizens and parliaments. Otherwise, the provision of contact information constitutes a mere formality. Bearing these considerations in mind, in the quantitative assessment of Legislative websites, the focus of this research is limited to evaluating the extent to which governments provide channels for bilateral interactivity, without assessing directly the responsiveness from public officials and civil servants¹⁴.

3) Usability (user-friendliness)

The third feature to be evaluated in the web assessment is the user-friendliness of parliaments' websites. It is obvious that despite all the information and bilateral interactivity possibilities that a website may offer, such characteristics have their potential drastically reduced if the user – the citizen – finds it difficult to use the website. Thus, parliaments' successful website applications will depend on well-designed interfaces that support effective human performance. In short, user friendliness is here considered as the feature that a website has of being accessible to a general user, allowing the user to “find what he needs and to understand what he finds” (Schneiderman 2005). In this sense, user-friendly tools such as ‘frequently asked questions’ sections, illustrations, statistical graphics, content indexes, among other indicators, will be used to determine the level of usability of parliaments' websites.

¹⁴ To address this caveat, the analysis of the issue concerning the responsiveness from public officials and civil servants from the Legislature is carried out in the case studies.

4) Multilateral Interactivity

Multilateral interactivity is the feature that describes not only the bilateral interaction between citizens and elected officials, but also the possibility of debate offered by a website (Mosca 2004, Kies 2010), for instance through online forums, chats, and mailing lists. From a theoretical perspective of e-democracy, this is the most important characteristic of a website, for it potentially reinforces the deliberative aspects of citizen participation (Trechsel et al. 2003). As mentioned above, the theme of deliberation is one of the widely debated subjects concerning e-democracy practices and one of the most difficult practices to be achieved effectively. Even though measuring online deliberation is a prominent research domain in the literature concerning e-democracy (Trénel 2004), this present research does not intend to assess the level/quality of deliberation on its quantitative part; it is only intended to evaluate through an effective coding system the extent to which parliaments' websites offer possibilities of multilateral interactivity and, consequently, facilitate the prospects of deliberative action.

Another dimension of multilateral interaction corresponds to tools that can potentially increase citizens' participation / influence on processes initiated and / or led by governments. Accordingly, it will be analysed, for instance, whether there are any online consultations of citizens concerning specific subjects of public interest (Welp 2006) or if there are any means by which citizens can participate in the decision-making process, such as, for instance, proposing themes to be approached by parliamentary committees.

As an outcome of this analysis, the research will identify the patterns, commonalities and discrepancies among the cases studied for each of the four dimensions approached (generating a ranking of these websites for each of the dimensions) at the intra-federation and the inter-federation levels. Generating this data separately, divided by dimensions, is of utmost importance in this research, as the means by which to identify the role that different factors can have on the e-democracy traits/potentials of websites.

An overall 'e-democratic classification will be generated as well, both at the intra-federal and inter-federal level. The following table presents the constitution of the e-democracy construct according to the dimensions assessed.

Table 1. e-Democracy Construct and its Dimensions

Construct	Dimension
E-DEMOCRACY	Information provision (score)
	Bilateral interactivity (score)
WEBSITE DEVELOPMENT	Usability (score)
	Multilateral interactivity (score)

7.2 Second Phase: Analysis of the Independent Variables

Once the quantitative data of the first phase is generated, the next procedure will be the identification of explanatory models based on the hypothesis concerning the role of the independent variables in the level of development of e-democracy traits/potentials of websites. As mentioned before, we will work with the overarching general hypothesis that actors’ strategies, mediated by institutional settings, are the powerful determinants in explaining the existing variance between parliaments’ websites concerning their e-democratic traits. However, applying quantitative methods in order to understand actors’ strategies is not an easy task. The option offered by Jane Fountain for case studies in “The Virtual State” – and most of her work in the domain – should not be considered a mere coincidence or an arbitrary methodological choice. If actors’ attitudes and perceptions can be quantitatively assessed, the same cannot be said about the strategies and the *enjeux* of a system of action, where a clear understanding can only be achieved through a “clinical” approach to the object (Friedberg 1977). In this respect, this section of the research will limit itself to assessing the validity of the secondary hypotheses previously evoked, namely related to i) political context, ii) resources, and iii) technological development.

Aiming to approach the different factors that might explain the level of development of parliamentary websites, drawing on the relevant data of the 93 states and their respective e-democracy scores, through multivariate regression analysis, the influence that the different factors – apart from actors’ strategies – have on the level of development of parliamentary websites will be evaluated. In this respect, political context will be evaluated by factors such as¹⁵ partisanship, turnout level, seats-to-vote distortion, and so on. For resources, we shall rely

¹⁵ The number of indicators used in each of the country analyses is not entirely uniform amongst the countries given the discrepancy in the amount of data available for each country. In the cross-country analysis a reduced

on data such as state (region) GDP, per capita income, number of seats in parliament, salary of MPs, and index of legislative professionalism. Finally, as a proxy for technological development of a state we shall use data such as percentage of homes with Internet access, e-government index and average Internet connection speed. The table below exemplifies the data that can be potentially used and its sources.

Table 2. Constructs and Possible Indicators

Construct	Possible indicators
Political context	Partisanship
	Turnout level
	Seats-to-vote distortion
	Others
Resources	State region GDP
	Per capita income
	Number of seats in parliament
	Salary of MPs
	Others
Technological development	Internet access per household
	Average state Internet speed
	e-Government index
	Others

Source: Existing aggregate data

7.3 Third Phase: Case Studies

Following the sequential explanatory research design adopted (nested design), once the quantitative data collection and analysis is concluded (first and second phases) we will move on to the comparative case studies. A case study is understood in this research as the in-depth analysis of a small number of websites (cases), where the intention is to understand a larger class of similar units, a population of cases (Seawright and Gerring 2005). This qualitative analysis aims to interpret, support and complement significant findings from the quantitative

number of indicators is used in order to ensure a homogeneous approach, i.e. same number of independent variables used in the cross-country approach.

research. The main problem concerning the qualitative part of the research is not how many cases are analysed but which ones, although these problems cannot be separated entirely. As mentioned before, the choice of cases will be based on how they fit the model found in the statistical part of the project. In other words, the criterion for the selection of cases in the qualitative analysis depends, ultimately, on the quantitative findings.

If it is clear that the choice of cases is based on their fit with the quantitative findings, these statistical findings are expected to relate to the theoretical concerns of this study: the role that different factors play in the outcomes on websites according to their e-democratic potentials/traits. Consequently, the selection of cases to be studied shall be considered as an additional opportunity to better understand previous findings – or non-findings – about the influence that different variables have on the level of development of parliaments' websites. The number of cases to be selected will, evidently, also depend on the robustness of the quantitative findings and the main questions that remain to be answered, knowing that the more case studies attempted, the less in-depth they are likely to be, due to constraints in time and resources. Nonetheless, it is possible to put forward some of the following methodological tools that shall be employed:

- In-depth analysis of the websites of the cases selected: In this part, an in-depth analysis of the website will be made in order to qualitatively assess the dimensions previously analysed: Information Provision, Bilateral Interactivity, Usability and Multilateral Interactivity. Such an analysis is justified because the coding system used in the quantitative part of the research does not allow us to capture important qualitative features of a website. Assessing in a more detailed way the type of information available, and how it is presented, may reveal important communication strategies deployed, with multiple purposes: e.g. electoral purposes, ameliorating the image of the parliament.
- Documental analysis: Analysis of documentation concerning the internal functioning of the parliament (e.g. internal regiment, directives to personnel) may reveal important factors that will justify the deployment of the Internet by actors. It is expected that other documentation specifically concerning the functioning of the website within the framework of the parliament must be found (i.e. guide to users, definition of people/services who have access to the back-office). Such documentation may give us valuable indications of the factors that influence the use that is made of the website.

- In-depth semi-structured interviews: Interviewing is an essential method to enable a researcher to grasp actors' perceptions and strategies and behavioural and attitudinal patterns. Interviews will also represent an opportunity to gain a clearer understanding of other socio-cultural aspects that cannot be captured by the previous phases of the quantitative research, such as informal rules or interpersonal relationships.

One of the main advantages of the qualitative case study approach is that it allows the research to rely upon a variety of sources, data and research methods. Furthermore the case study will be the opportunity to identify more accurately the role that informal rules and other cognitive, cultural or socio-structural constraints found in parliaments' frameworks – as well as actors' strategies in the pursuits of their goals – play in the outcomes of democratic traits/potentials of parliaments' websites. In other words, in the case studies we find the crucial moment to assess how actors' strategies that shape the complex relations between MPs and civil servants (i.e. legislative staff) – mediated by institutional settings – affect the way technology is enacted.

Before exploring these factors, however, a series of steps have to be taken, as previously described in this section. To this effect we proceed in the next section to the presentation of the first empirical component of this research, that is, the results of the comparative website analysis.

8. E-DEMOCRACY SCORES OF STATE LEGISLATURE WEBSITES

Before presenting the results of the website analysis, it is important to remind the reader that the task of individually coding websites consists of an extremely monotonous and time-consuming effort. This is so for a variety of reasons. First, a number of websites are extremely slow, taking a long time to navigate through one page to the other within the website. Furthermore, more frequently than not, state Legislature websites provide the information sought in heavy archives (e.g. PDF, Word files), which requires a considerable amount of time to download. Finally, the organization of information within several websites resembles that of a labyrinth, where the user is permanently misled in the wrong direction. More often than not, when these factors are found simultaneously in the same Legislature website, the coding exercise can take up to 10 hours. Furthermore, the support of ICT tools to conduct such practices in an automated manner (e.g. software) is rare and of doubtful reliability. This is one of the reasons, we suggest, that exercises of detailed analysis of web contents of Legislative websites – as the one herein presented – are still rare in the field of e-democracy studies.

In this chapter we proceed to the presentation of the results of the comparative website analysis of the 93 state Legislature websites from Brazil, Spain and the United States¹⁶. Data was collected and coded through the individual analysis of the websites in the period ranging from September 2009 to March 2010. A codebook composed of 87 indicators of features that can be associated with e-democracy guided this comparative analysis. In other words, for each of the 93 state legislature websites analysed, the extent to which each of these 87 features were existent or not was verified. A thorough explanation of the codebook and its contents can be found in Annex 2, Description of Codebook and Constructs.

For each of the features identified in a Legislature website (e.g. news section, legislation search) a value of one point was assigned. The results correspond to the percentage of total points achieved by the websites in each of the categories analysed. As previously mentioned, to measure the level of e-democracy development of state Legislature websites, four dimensions were taken into account: Information Provision, Bilateral Interactivity, Multilateral

¹⁶ Considering the bicameral system in the United States Legislatures (with the exception of Nebraska), for comparative purposes we have focused on the websites of the lower chambers (i.e. House of Representatives). Whenever Legislatures presented a joint website or shared structure for information provision/interactivity, coding was restricted to information pertaining to activities carried out by the lower chamber.

Interactivity and, finally, Usability. The analysis is first conducted at the country level, presenting the results for each of the countries analysed. In a second moment, an overview of the results is presented at the inter-federation levels, that is, across the three countries studied.

For the purposes of brevity, the following results are presented in terms of the overall e-democracy score achieved by each of the state Legislature websites – that is, the percentage of the total of 87 possible points to be scored by the websites. A more detailed presentation of the results can be found in Annex 1, Detailed Description of e-Democracy Scores and Features¹⁷, which presents a breakdown of the scores achieved according to the different dimensions (e.g. information provision) and sub-dimensions (e.g. information on committees).¹⁸

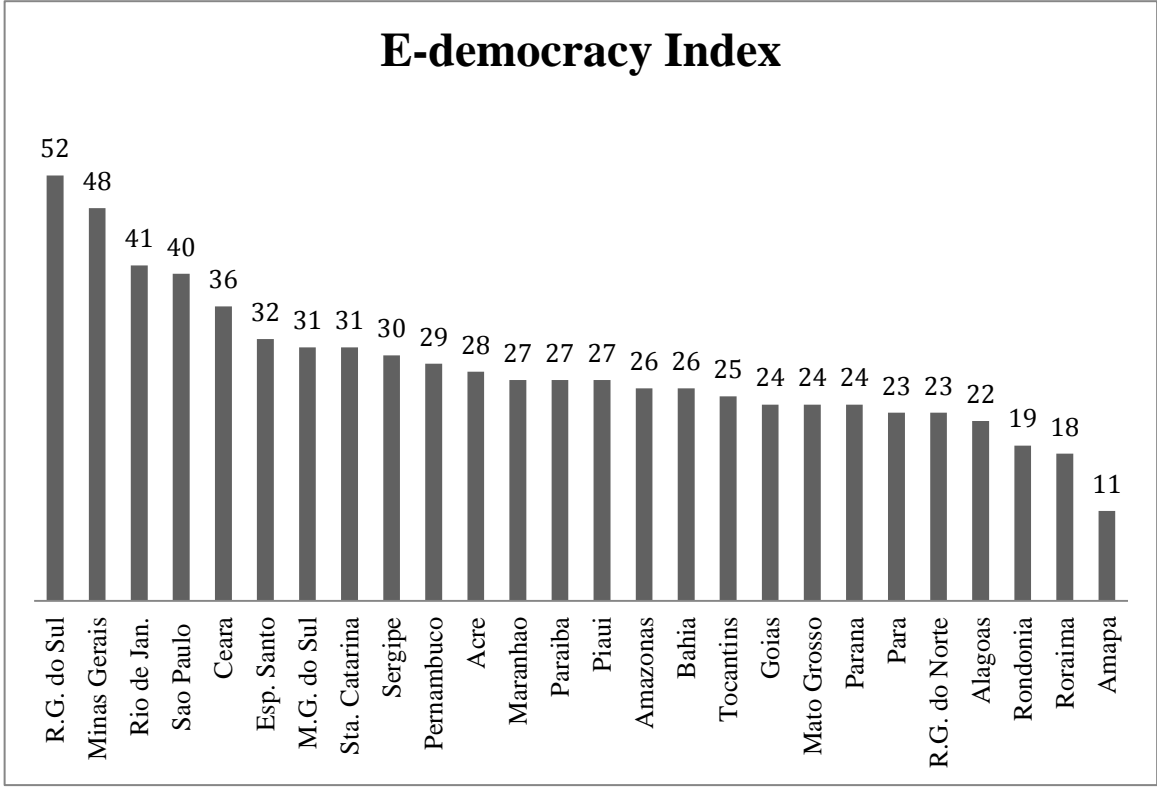
8.1 Brazil's Overall e-Democracy Score (average 29)

Eleven parliamentary websites score above the average score, with two states standing out far above the average: Rio Grande do Sul (52) and Minas Gerais (48). In third position we find the parliamentary website of the state of Rio de Janeiro (41), which discretely scored well in all of the categories with the exception of *multilateral interactivity*. In fourth place we find Sao Paulo (40), followed by the state of Ceara (36). These scores are followed by the states of Esp. Santo (32), and Mato Grosso do Sul (31). The lowest scores are those from the state of Rondonia (19) and the northern states of Roraima (18) and Amapa (11). The figure below shows the overall results for e-democracy traits for Brazilian parliamentary websites.

¹⁷ The Annex also presents the distinctive features that could be found in the different Legislative websites in accordance with the different dimensions analysed.

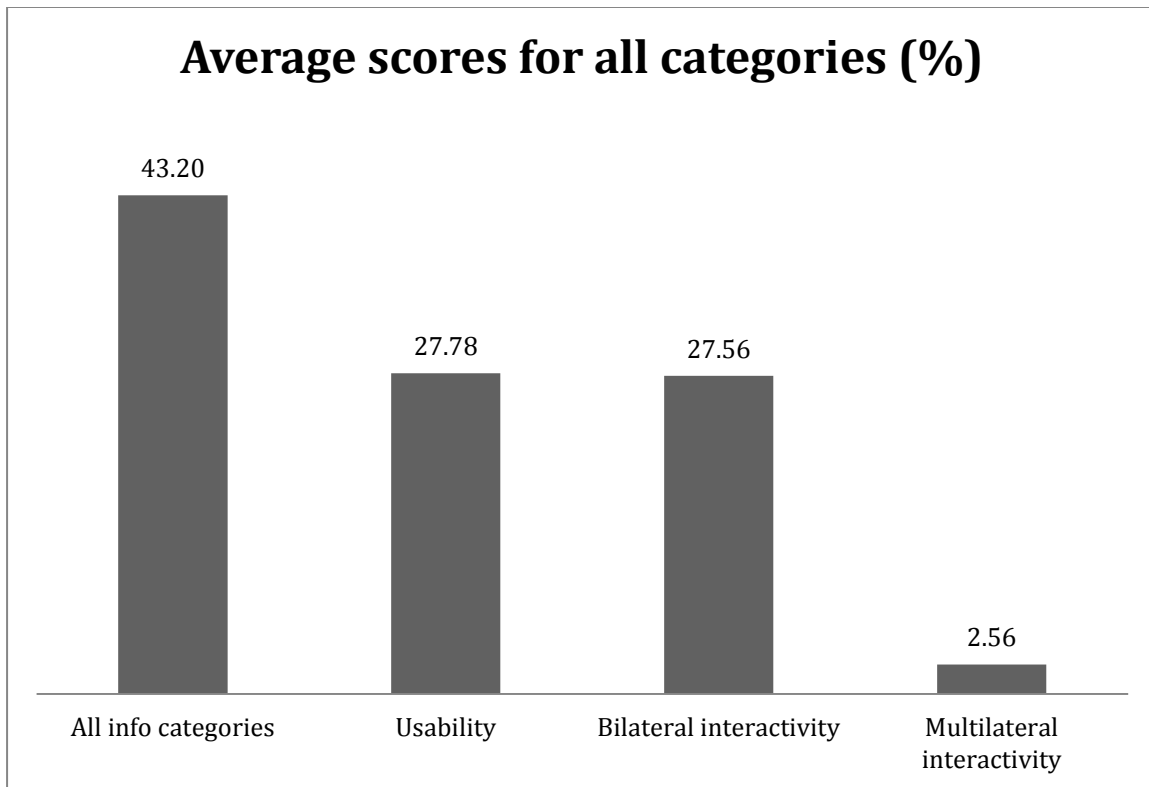
¹⁸ We assume all of the dimensions to be equally relevant in terms of e-democracy as, one could argue, an underperformance in any of the dimensions taken into account affects the performance of other dimensions. The interdependence between different dimensions has led us to consider them equally, where any attempt to distinguish them in terms of importance would lead us into questionable normative considerations.

Figure 3. Brazil's e-Democracy Index



In a country perspective, it can be said that Brazilian state parliament websites are above all using the prospects offered by the Internet to provide information about their parliaments, with an average score of 43.2 in *information provision* (see figure below). Nonetheless, the amount of information and how this information is presented and accessed varies as we have seen before. One can identify a general trend where most parliaments present general information of a static character and few websites allow citizens to access detailed information concerning the quotidian functioning of the parliaments and their institutions (e.g. committees). This information is even scarcer when it comes to individual-level information concerning the political behaviour of the elected representatives (e.g. voting records).

Figure 4. Average Scores for All Categories – Brazil



Usability, or user-friendliness, reaches the second highest average score with 27.8 points, with the particular finding that many states that score well in other dimensions have poor results in usability. Such a fact means that, in practice, even when contents and tools are provided, these are not always accessible for the average Internet user and even less to those with lower skills in computer use. In other words, there is little use for a parliamentary website that scores very highly on all other dimensions when these are not accessible to the general public. In this respect, usability becomes a significant constraint on the use of the Internet for Brazilian parliaments.

With the average score of 27.6, websites seem to be used as means to enhance *bilateral interactivity*, understood here as the possibility for citizens to access general contact information (e.g. e-mail addresses) and to interact with parliaments' representatives and personnel by directly contacting them and receiving feedback. If most websites offer the possibility for users to directly contact their MPs, few websites allow these users to suggest legislative discussion topics or issues, and even fewer allow citizens to post their comments on the website. Last, but not least, if most websites offer tools for contact with MPs and staff, the idea of interaction only makes sense to the extent that feedback is given to citizens in an

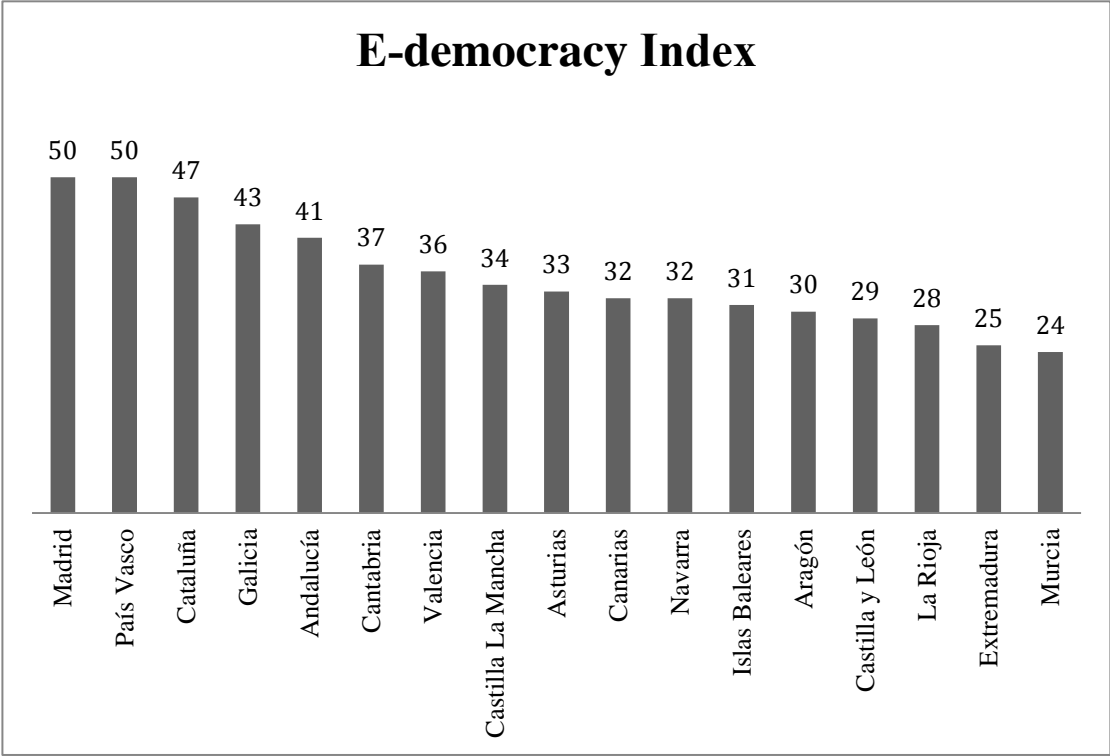
adequate manner. In this respect, despite the existence of contact facilities, the level of responsiveness of these parliaments remains an open question.

Unfortunately, there is little to be said about *multilateral interaction* on Brazilian parliamentary websites. Acre, the only state that scored on the multilateral dimension, did not promote deliberation itself, but rather offered users the possibility to comment on news generated by the House administration and on MPs' blogs. In this sense, the extent to which these tools actually enable online deliberation should be viewed with caution. With an average score of only 2.7 percent, we find that the vast majority of Brazilian parliamentary websites are not using the prospects of ICTs to promote online deliberation, with only one Legislative website using tools that could – potentially – enable online deliberation.

8.2 Spain's Overall e-Democracy Score (average 35)

Seven parliamentary websites score above the average e-democracy score, with Madrid and the Basque Country standing out well above the average (50). In third place we find Catalonia (47), which scored particularly well in *provision of information* and *multilateral interactivity*. The lowest scores are identified in the parliament websites of La Rioja (28), Extremadura (25) and Murcia (24). Needless to say, there is visible variance among the different regions, a variance that is a response to the different scores in each of the dimensions previously considered. The figure below shows the overall scores for e-democracy traits for all Spanish regional parliamentary websites.

Figure 5. Spain's e-Democracy Index

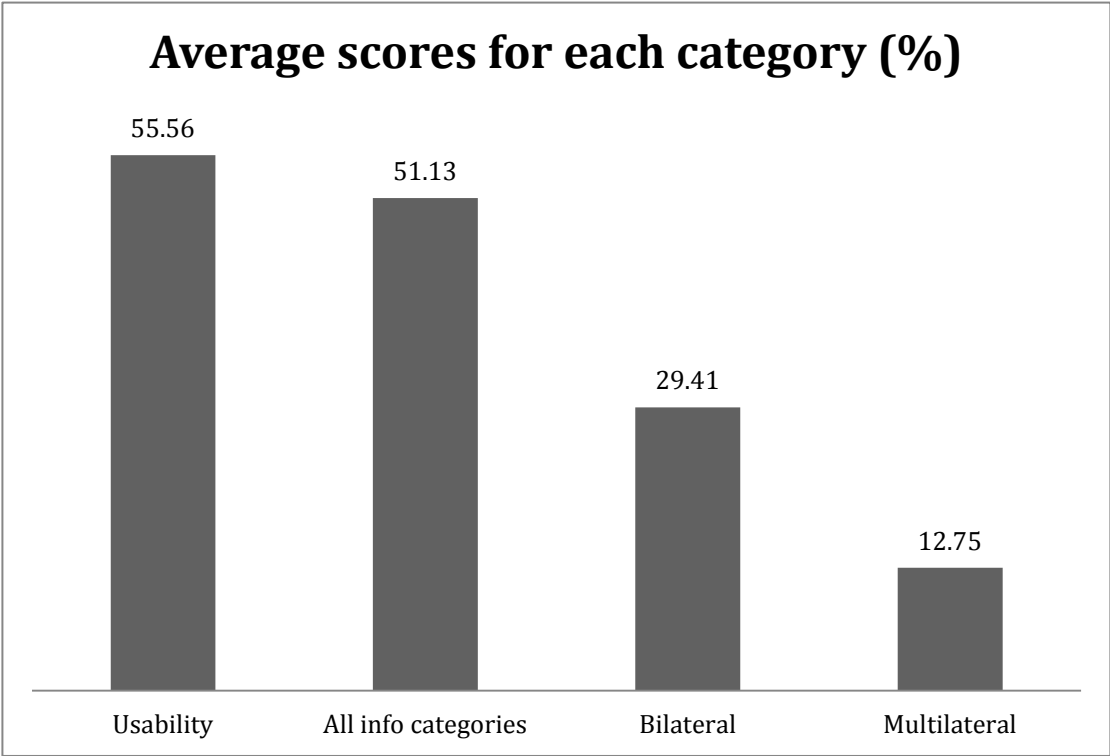


Spanish parliamentary websites tend to privilege, by far, their *usability*. With an average of 55.5 points, the majority of Spanish websites provide traditional usability tools such as search facilities and site maps. Generally speaking, such a finding shows an overall positive trend for making parliamentary website navigation less restrictive for the average user, allowing citizens to better benefit from the facilities provided by the websites.

The *provision of information* comes second in Spanish parliamentary websites, with an average of 51.1 points. Nonetheless, as explained before, there is significant variance concerning the type and amount of information provided, as well as how this information is provided and presented to its users. The provision of general information tends to be privileged above all other types of information, followed by the provision of legislation information. In both cases we find a general trend where most websites tend to privilege the provision of information of a static nature (e.g. the role of parliament, the legislative process) rather than more dynamic and frequently updated information. The same tendency is identified in the sub-dimension of information on committees, with few websites providing information concerning committees' routine functioning and the actions taken by their members. Considering the variance in how information is provided and presented, such a fact becomes more visible in the sub-dimension

of information on parliamentary debates where, for instance, a reduced number of websites provide archived multimedia files of the parliamentary debates. Lastly, there is an evident scarcity in the amount of information provided on the members of parliament, and the little information that is provided still tends to be of a very static nature, with the majority of websites being characterized by the absence of individual-level information on MPs.

Figure 6. Average Scores for All Categories – Spain



Bilateral interactivity scores relatively low if compared to the dimensions considered above, with an average score of 29.4 points. Noteworthy is the surprisingly low number of websites that provide links to contact MPs directly (6). This trend is even lower when it concerns allowing citizens to give their opinions on issues and having their comments/questions answered by MPs or their staff. In other words, there is a less generalized trend of using the prospects of the Internet as a means to provide citizens with access to facilities that allow them to interact with parliamentary representatives and to receive feedback, which is one of the most promising possibilities offered by the Internet with regard to e-democracy.

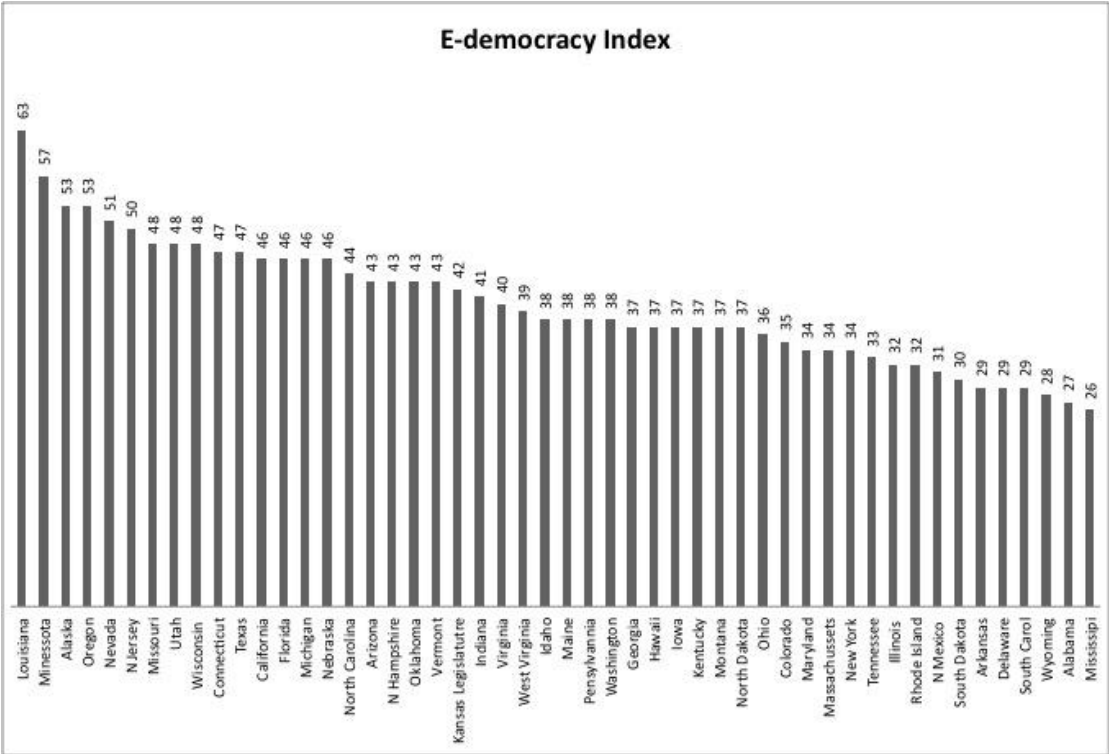
Finally, and not so unexpectedly, the lowest score concerns *multilateral interactivity*, with an average score of only 12.7 points. Overall, only four regions use the prospects of the Internet to

allow for deliberation amongst users on parliamentary issues, with each of these regions providing distinctive prospects for online deliberation to take place.

8.3 United States’ Overall e-Democracy Score (average 40)

Twenty-three parliamentary websites score above the average, with the case of Louisiana boasting above all the others a total of 63 points, having scored well above the average in every dimension taken into account in this analysis. In second, we find the parliamentary website of the state of Minnesota, which also presented significant scores above the average in the previous dimensions considered (57). In third place we find the states of Alaska and Oregon (53), followed closely by the state of Nevada (51). While the state Legislature of Louisiana scores the highest¹⁹, its southern peers from Mississippi and Alabama present the lowest e-democracy scores, with 26 and 27 points respectively.

Figure 7. United States' e-Democracy Index

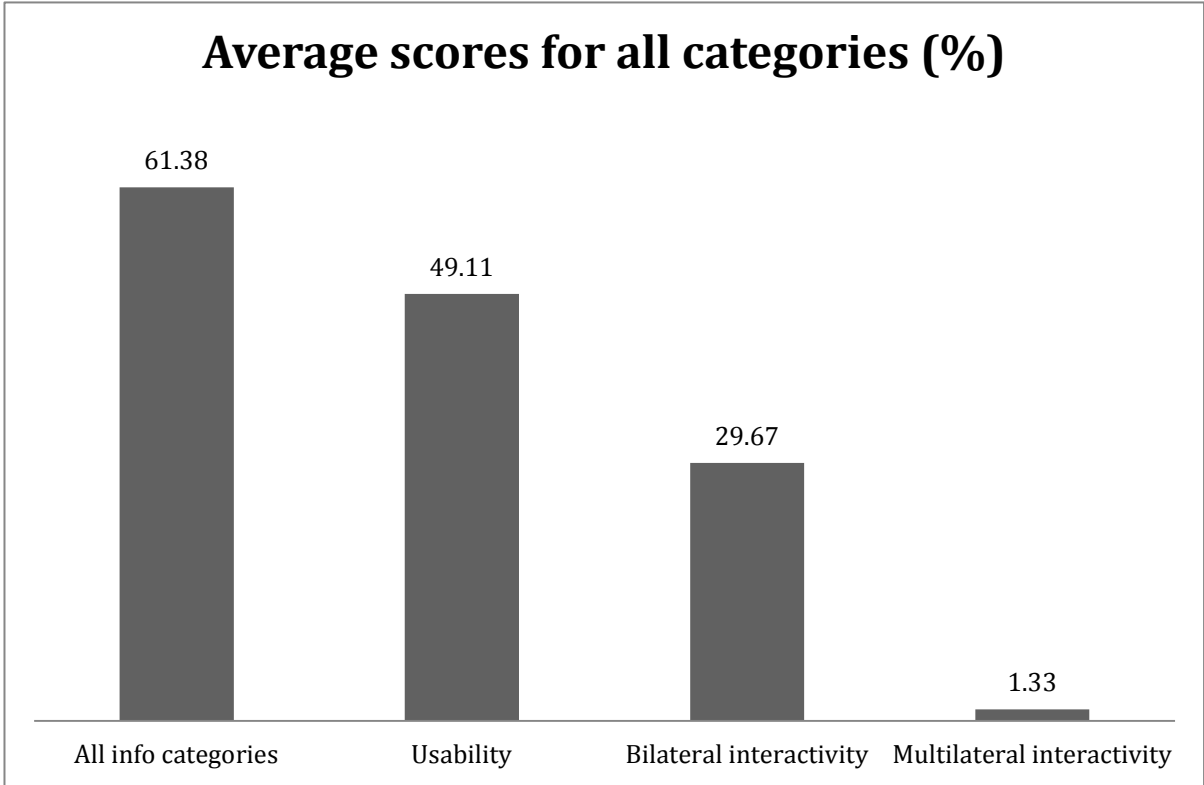


In an overall perspective, there is a prominence of *provision of information* over the other dimensions. Nonetheless, as we have shown before, there is reasonable variance concerning

¹⁹ Although Louisiana’s scores might come across as surprising to some observers, other studies (e.g. Ferber et al. 2004) have come up with similar results.

what information is provided and how it is provided. In this dimension, it is interesting to note the high level of provision of both static and dynamic information concerning the legislative process. It also bears mentioning that *general information* scores the lowest in the U.S. case, whereas this sub-dimension was the one with the highest scores in the Brazilian and Spanish cases.

Figure 8. Average Scores for All Categories – United States



Usability is the second dimension to be generally privileged by U.S. websites, reaching an average of 49.11 points. In other words, most of the websites provide enough resources to make the navigation of an average user as friendly and intuitive as possible. Variance in this case will correspond mostly to the existence of ‘how to use the website’ sections and specific facilities for difficult to reach groups, such as a ‘for children’ section.

Bilateral interactivity in U.S. parliamentary websites scores fairly low if compared to the previous dimensions analysed, with an average of 29.67 points. While most websites provide links for contacting MPs individually, a much smaller number of cases provide tools that enable more sophisticated forms of interaction, such as facilities for commenting on issues.

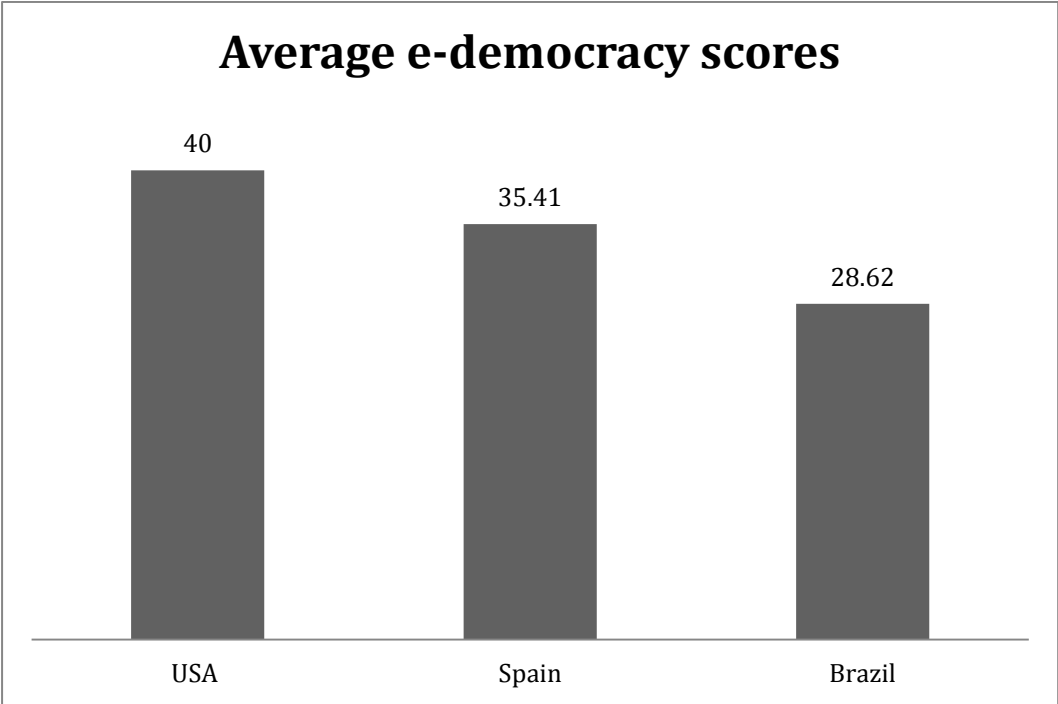
Particularly interesting, despite their reduced numbers, are the websites that allow citizens to register and/or submit hearing testimonies online.

Lastly, the lowest score concerns *multilateral interactivity*, with an average score of only one point. These low multilateral interactivity levels of U.S. state Legislature websites are consistent with previous findings by Ferber et al. (2003, 2005) on interactivity of state Legislature websites: apart from the Louisiana exception, U.S. Legislatures are systematically neglecting the prospects for ICT tools to further mechanisms that can potentially lead to more deliberative models of interaction.

8.4 e-Democracy Scores in a Cross-country Perspective

As seen above, substantive variance in e-democracy scores can be found in each of the countries. In this section we shall compare how the different countries perform with regard to their state Legislature websites. As illustrated by Figure 9, the average e-democracy scores of the 50 U.S. Legislatures are significantly higher than the Brazilian and Spanish ones. Following the U.S., we find Spanish state Legislature websites presenting an average of 35.4 points. Finally, in last position, we find the Brazilian state Legislatures, with an average of 28.6 points.

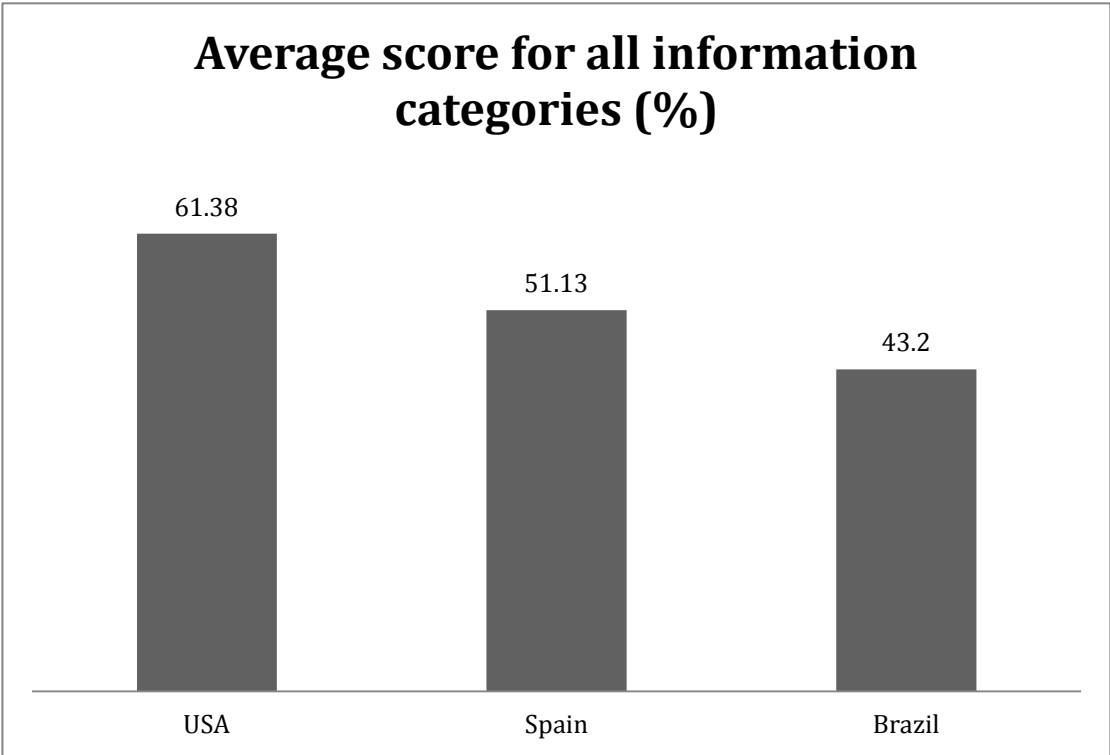
Figure 9. Cross-country e-Democracy Scores



Bearing these global findings in mind, it is also relevant to compare the extent to which the different countries' Legislature websites perform with regard to the dimensions that we have considered, i.e. information provision, bilateral interactivity, multilateral interactivity and usability. As Figure 10 shows, the overall landscape does not change much when considering *information provision*, with the United States coming first, followed by Spain and then Brazil.

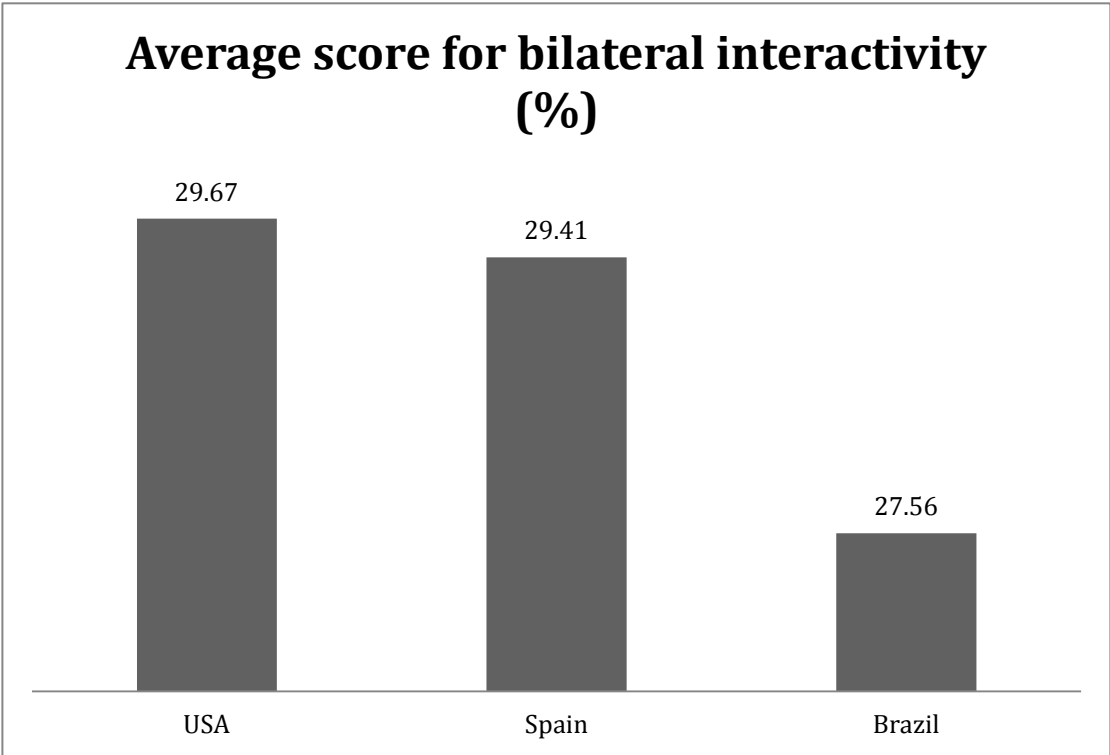
It is interesting to note that parliamentary websites of the United States tend to provide substantially more *information on legislation* than any other type of information. Over one third of US Legislature websites scored the maximum number of points possible in this category. This finding stands in stark contrast with Brazil and Spain, where the provision of *general information* is privileged on their websites. Indeed, whereas *general information* is the primary category of information provided in the Brazilian and Spanish cases, in the case of the United States *general information* is the type of information provided least. In this sense, less than a simple quantitative difference, there is a significant qualitative difference between the types of information that are provided on the different countries' Legislature websites, with the United States privileging legal (*information on legislation*) and procedural (*information on committees*) information, while the Spanish and Brazilian legislatures focus on the provision of communicational/public relations information (*general information*).

Figure 10. Cross-country Scores for Information Categories



A glance at Figure 11 below, on the provision of *bilateral interactivity*, demonstrates a different pattern, with the United States and Spain scoring almost the same for bilateral interactivity, with a difference of less than 0.5% between the two countries (29.7 and 29.4 respectively). Brazilian state Legislatures follow closely behind, with an average of 27.6% points on *bilateral interactivity*. If the variance among the three countries is not so elevated in percentage terms, here, once again, there is some qualitative difference among the different countries on how *bilateral interactivity* is addressed.

Figure 11. Cross-country Scores for Bilateral Interactivity

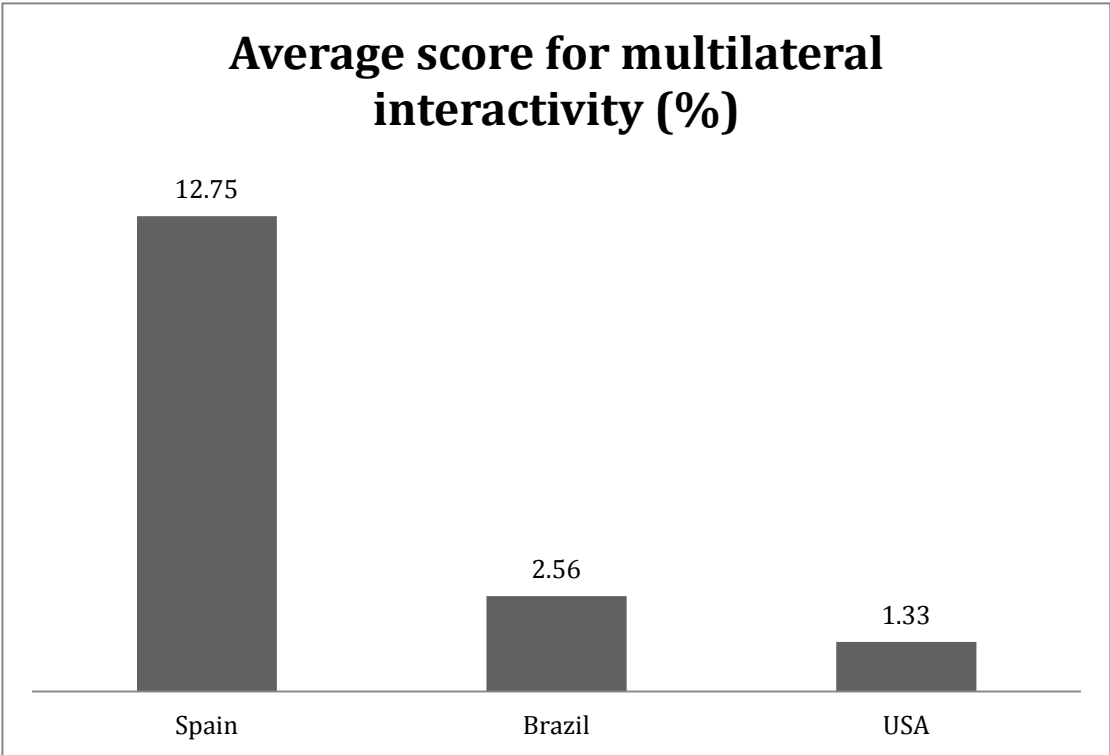


In the case of the United States, unlike in the two other countries, we identify a rather intensive usage of the website as a means to reduce the participation costs for citizens to take part in the legislative process. In this respect, a number of websites will enable citizens to register for public hearings online, with a smaller number of cases allowing for citizens to submit their testimonials via the Internet. In the Spanish case, a number of means for users to contact webmasters and Legislative services are provided, which boosts the overall score for the country in the category. Contrasting with this wide range of possibilities for citizens to interact with the institutional/administrative spheres of Spanish Legislatures, is the low level of *bilateral interactivity* that is provided between citizens and MPs individually. Despite Spain’s relatively high scores, surprisingly, only six websites provide e-mail addresses for users to contact the MPs. Finally, in the Brazilian example, in the majority of cases, websites provide users with the means to contact their MPs and general information services on their websites. With regard to *bilateral interactivity* as a means to gather citizen feedback for the lawmaking process, a common denominator is found amongst the three countries: whenever inviting citizens to submit comments/proposals, these comments were most often not available to the public, which undermines any prospects for deliberation (hence classified as bilateral rather

than multilateral interactivity)²⁰. Furthermore, with a few select exceptions, there was no information on how citizen feedback was taken into account in the lawmaking process, leading external observers to question the extent to which such initiatives are typical exercises of *tokenistic participation* (Arnstein 1969).

With regard to *multilateral interactivity* a different scenario emerges: Spain, with 12.7 points, stands ahead from the extremely low scores from Brazil and the United States (2.6 and 1.3 respectively). Unfortunately, however, the overall scores remain particularly low when compared to the previous dimensions considered.

Figure 12. Cross-country Scores for Multilateral Interactivity



It is also important to note that in most cases, these technological deployments for multilateral interactivity are limited to blogs²¹ that enable citizens to comment on the posts that are written, either by MPs or Legislative staff. Nonetheless, the potential for blogs as tools to enable actual

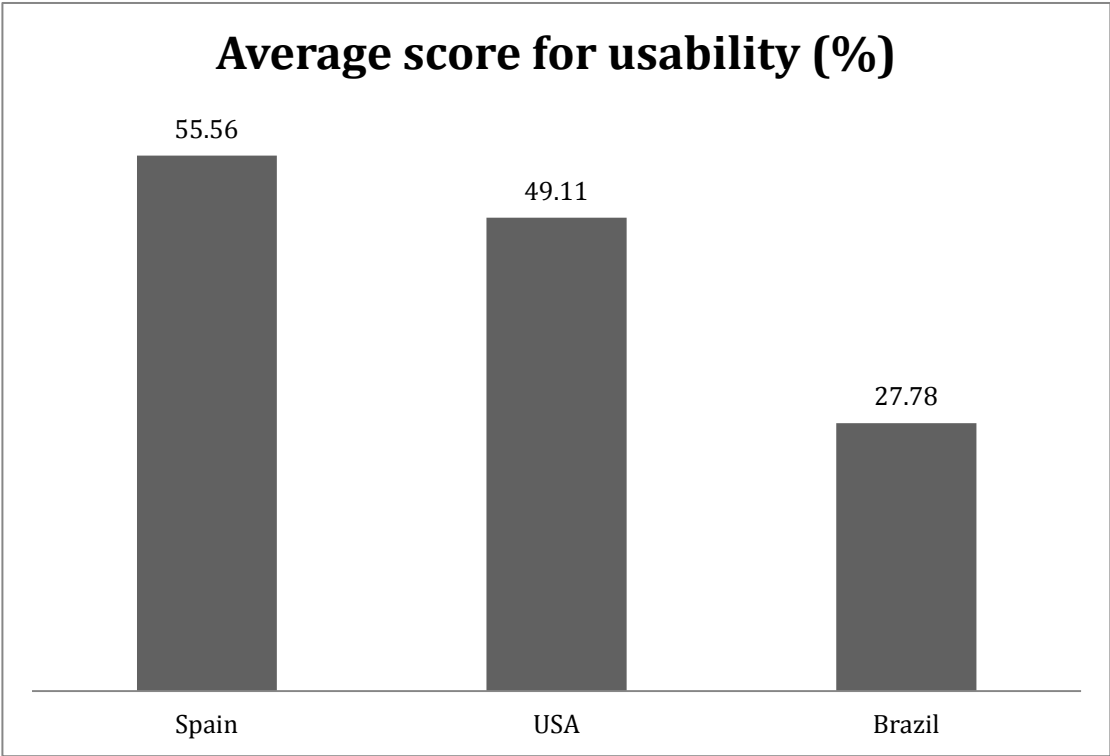
²⁰ Here we do not refer to public hearings, where the role of citizens in the lawmaking process is considered to be clear and defined by a legal framework.

²¹ The use of social networks (e.g. Facebook, Twitter) – a relatively recent phenomenon in the domain of ICT usage by state Legislatures – has not been assessed by this study.

large-scale online deliberation should not be overestimated, as these tools face substantial limitations from a deliberative/technical perspective (Klein 2007, Farrel et al. 2008).

Finally, with regard to the *usability* of websites, similar to the previous dimension analysed, Spain takes the lead with 55.6 points, followed by the United States (49.1) and Brazil (27.8). The variance in this case, however, is greater, as illustrated by the difference between Brazil and Spain, which is almost twofold.

Figure 13. Cross-country Scores for Usability

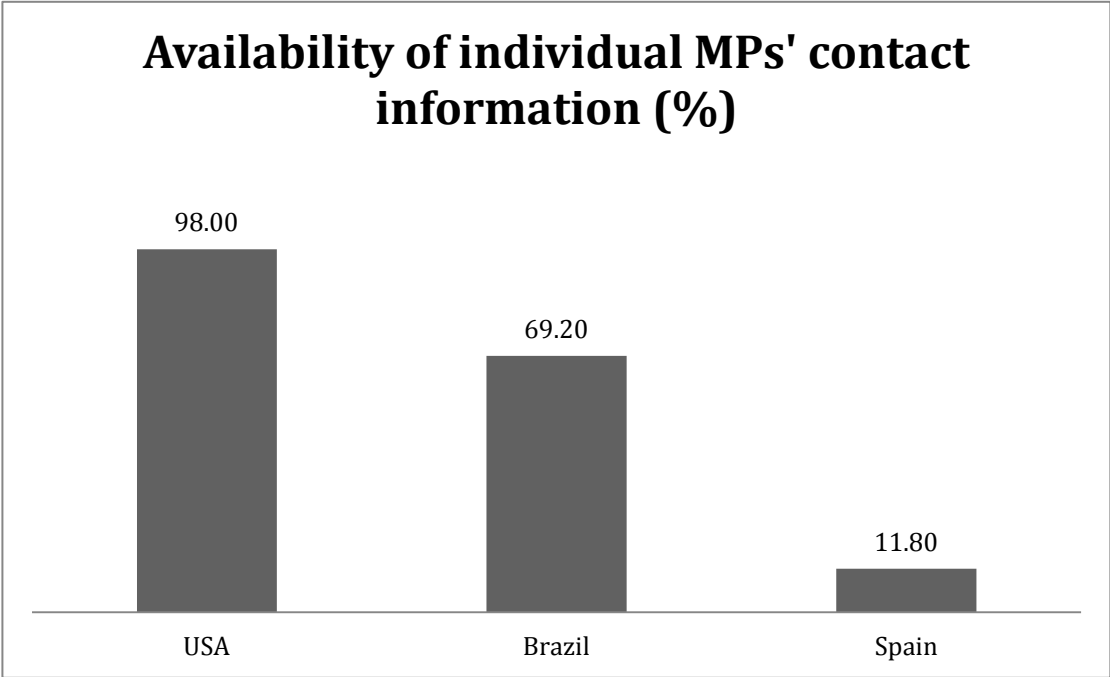


The importance of usability, again, should be underlined at this point. No matter how much information or facilities might be provided by a Legislative website, these efforts are partially – when not entirely – undermined by usability problems. If one of the rationales for ICT usage is that of lowering the costs of access to information and participation, whenever usability problems are present these transaction costs are reintroduced into the equation. In other words, without usability, the usage of ICT tools misses its *raison d’être*.

Finally, before concluding this section, a small parenthesis should be made with regard to an unexpected pattern that emerged when looking at the Spanish case in comparison with the two

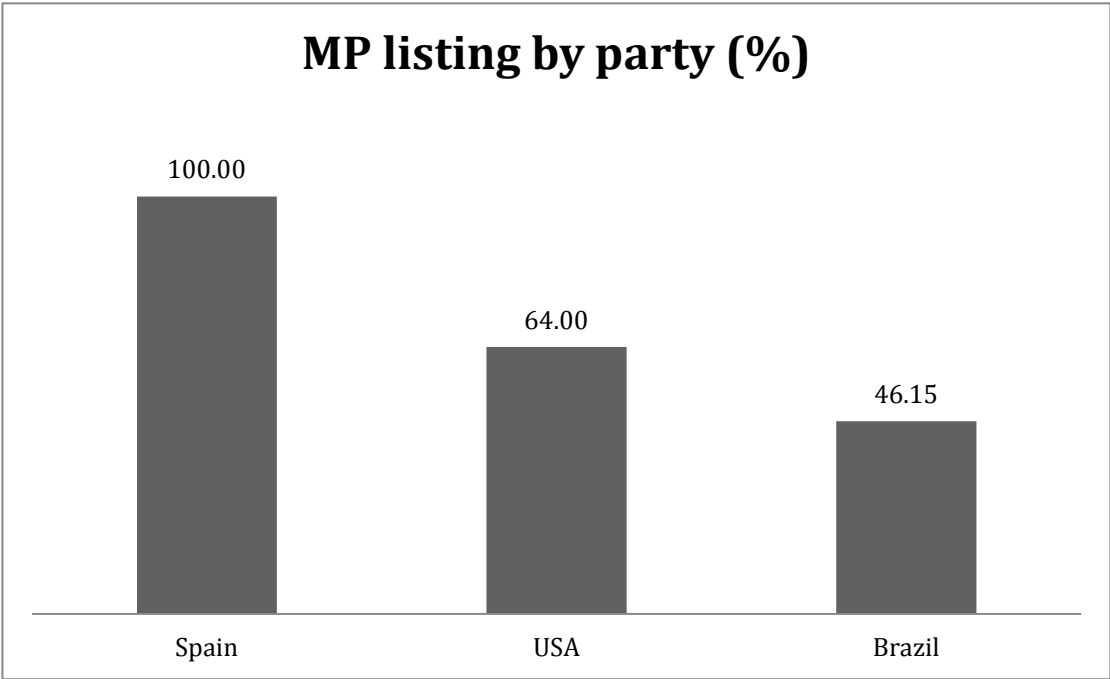
other countries analysed. With regard to information provision, as mentioned earlier, the Spanish case is the only one where the minority (four) of the state Legislature websites provides users with the contact details of their MPs. While in the case of the United States nearly all the websites provide this kind of information (98%), and almost three quarters (69.2%) of the Brazilian websites do the same, only 12% of the Spanish websites offer MP's contact information.

Figure 14. Availability of Individual MPs' Contact Information – Cross-country



In contrast to this substantial lack of information about individual MPs, Spain is the only country providing 100% listings on party affiliation, such as the Basque Country, Canarias and Baleares Islands, that will provide – added to an alphabetic list– a list of MPs by party. In a similar vein, we have also noticed, a majority of Spanish websites provide unique illustrations (in some cases, interactive ones) showing the distribution of party seats in the Legislature. Furthermore, interactivity mechanisms on the Spanish websites more often than not provide means for users to interact with parties rather than with MPs themselves. In this sense, it is not uncommon to find the provision of email addresses for parties rather than for MPs (e.g. Cantabria), with links to blogs following a similar pattern, i.e. links to parties' blogs instead of MPs' blogs (e.g. Catalonia). When MPs have individual blogs, these blogs are organized (i.e. listed on the website) according to their partisanship.

Figure 15. Listing of MPs by Party – Cross-country



Even in the most sophisticated mechanism of user interaction with the parliament, the Basque Country’s ‘Parte Arku’ section, users are not able to ask questions or direct comments to MPs individually, but rather to political parties as a whole. In other words, the possibilities for online communication are structured in a manner that allows users to interact with the parties instead of doing so with MPs in an individualized manner.

These particularities seem to indicate that, when compared to the other two countries, while individual MPs are not prominent in Spanish Legislative websites, parties play a protagonist role both with regard to the information that is provided and the interactivity possibilities that are offered. Such a particularity of the Spanish case, we suggest, may be linked to the Spanish electoral system of closed-list proportional organizations. This electoral system, most likely to promote strong parties (Mainwaring 1991, Rose-Ackerman 1997), we hypothesize, is reflected in the prominence that is given to political parties in Spanish Legislature websites. Given the small number of cases (i.e. three countries) with different electoral systems, such a hypothesis cannot be fully confirmed by this present research – nor is it its intent. What such initial findings do offer are some indications of promising directions for further research in the field of Legislative websites. In other words, it might well be that different electoral systems

generate variance in the manner in which and extent to which parties and politicians (individually) are represented.

Leaving these considerations aside, as this section concludes, one overarching finding is rather irrefutable. Both at the intra- and inter-federal levels, there is significant variance in the level of development of parliamentary websites. Thus far, however, the possible reasons for such variance have been superficially addressed. In the next chapter, we shall proceed to the first part of our empirical analysis, aiming to verify which factors are related to the variance of e-democracy levels amongst the different Legislative websites.

9. QUANTITATIVE ANALYSIS

As shown in the previous chapter, there is clear variance in the e-democratic traits of state (regional) parliamentary websites, where this variance is identified both at the intra-federation level (between states of the same federation) and at the inter-federation level (between the three federations). In addition, the extensive analysis has shown on a large scale and in detail how regional parliaments are using the prospects offered by ICTs as tools to enhance democracy.

Similarly, some patterns within the use of ICTs by parliaments have been identified both at the intra- and inter-federal levels. For instance, it is clear that most websites, when providing information, tend to privilege the provision of static information rather than providing more dynamic information that requires constant data management and website updating. Another pattern that stands out is the systematically low tendency of parliamentary websites to provide technological solutions to support multilateral interactivity, and more specifically, online deliberation.

Nonetheless, so far there is no clear identification of the factors that cause the variations that have been identified amongst parliamentary websites. Thus, this section aims to examine the correlations of these distributions to, in a second moment and whenever possible, make deductions about the probable and significant existence of causal factors. In this respect, bivariate correlations have been executed, followed by linear regressions. In order to identify problems related to collinearity, for each case a battery of regressions has been carried out with the exclusion of all the independent variables one at a time. The results of the models remained stable and in accordance with the results presented.

This part of the research is then divided into two sub-sections. The first sub-section will look at the correlations and significance (or lack thereof) of the distributions at the intra-federal level for each of the countries analysed: Brazil, Spain and United States. The second sub-section, in a more global quantitative analysis, will look at the correlations and significances at the inter-federal level, with a total of 93 cases.

It is important to underline that at the intra-federal level the number of variables taken into account varies according to the country. This is due to the heterogeneity of the available data at

the sub-national level for each country. In this sense, at the intra-federal level we have tried to gather the maximum amount of data per country that is considered relevant by the literature on e-democracy. As to the inter-federal level, in order to create a stable analytical model, we have reduced the number of standardized independent variables to four: i) political orientation of parliaments, ii) level of internet access per household, iii) population, and iv) time of existence of parliamentary website. It bears noting that the selection of independent variables was done in accordance with the literature that looks at factors that may influence the performance of ICT usage by parliaments in particular and public organizations in general.

It is expected that the analysis of these distributions both at the intra- and inter-federal levels will shed some light on the factors that might explain the variance found in the use of ICT tools by parliaments – via their respective websites – as a means to enhance democracy.

9.1 Brazil

A number of studies suggest a link between partisanship and the adoption of technology by governments (e.g. Tolbert and McNeal 2003, Reddick 2005, Lassen and Brown 2010). In this sense, one might suspect that the ideological orientation of parliaments would have an impact on the e-democracy traits of parliaments' websites. This is not the case, however, for Brazilian state Legislatures: our bivariate analysis shows that no correlation exists between e-democracy scores and the percentage of seats held by right- or left-wing parties in parliaments. That is, the ideological orientation of parties with the majority in Legislatures does not have any effect on the way Brazilian parliaments use ICTs as a means to enhance democracy.

Table 3. Bivariate Correlation e-Democracy Index Brazil

	E-democracy Index		
	<i>Pearson</i>	<i>Sig.</i>	<i>N</i>
Party	-0.270	n.s.	26
Population	0.592	**	26
Gross product	0.525	**	26
Legislature budget	0.771	**	26
Average spending per MP	0.504	**	26
Internet access	0.482	*	24
Time online	.554	**	26

* = significant at the 0.05 level; **= significant at the 0.01 level; n.s. = not significant

Nonetheless, an initial glance at the table above reveals that five of the seven variables correlate with the level of development of parliamentary websites (significant at 0.01 level). In this respect, we can see that state population is correlated to states' e-democracy scores – that is, the larger the population of the unit of the federation (and the number of seats in parliament) the more developed its website is likely to be. As noted in a previous work (Trechsel et al. 2004), a possible explanation of the positive correlation between population and parliamentary website development could be related to the number of legislative staff or to some economy of scale. In fact, economic development, measured by the GDP of each of the units of the Brazilian federation, also shows a correlation with the level of e-democracy traits in parliamentary websites: the higher the economic development of a state, the more likely its website is to reach high e-democracy levels. This seems to be confirmed by two other variables used to measure parliaments' resources: the total budget of legislatures as well as the average spending per MP. Both of these variables, which measure parliamentary resources more precisely, show correlation to e-democracy scores.

As mentioned before, in a technodeterminist perspective, the higher the level of technological development and access to new technologies, the higher the level of e-democracy development (Norris 2001, Dawes 2009). According to this, one would expect a positive correlation between access to ICTs – as a proxy for technological development – and the development of parliamentary websites themselves. In this respect, a less significant correlation has been found between e-democracy traits of parliamentary websites and the level of household Internet access in the units of the federation, which indicates some degree of association between the two variables.

The last indicator taken into account concerns the duration of existence of the parliamentary websites – a measure that shows a high degree of variance among the different parliamentary websites. As Table 3 shows, there is a significant correlation between the time a parliamentary website has been online and its development: the older a website is, the more e-democratic traits it tends to present. The implications of the indicator concerning duration of existence of website shall be discussed later on.

As an overall result of our bivariate analysis, out of the seven factors analysed, only partisanship is not related to the level of development of parliamentary websites. In this respect, our initial findings suggest that ideological orientation does not have an effect on the

e-democracy level of legislative websites. Conversely, variables related to resources, the time that a state website has been online and, to a lesser extent, technological development, do indicate a correlation with our dependent variable.

In the following step, we proceed to a linear regression to find which variables are significant when controlling for other factors. However, due to the possible collinearity resulting from this ensemble of variables that are strongly correlated, we proceed to exclude variables in order to ensure the validity of the model. In this sense, all of the variables included in the regressions present a low correlation coefficient²² among themselves.

Table 4. Linear Regression e-Democracy Index Brazil

Variables	B (se)
Partisanship	-1.022 (6.600)
Population	0.000 ** (0.000)
Average spending per MP	0.003 (.000)
Internet access	-0.005 (0.241)
Time online	0.113 ** (0.045)
Constant	9.951 (6.600)
Valid cases	24
Adjusted R Square	0.495

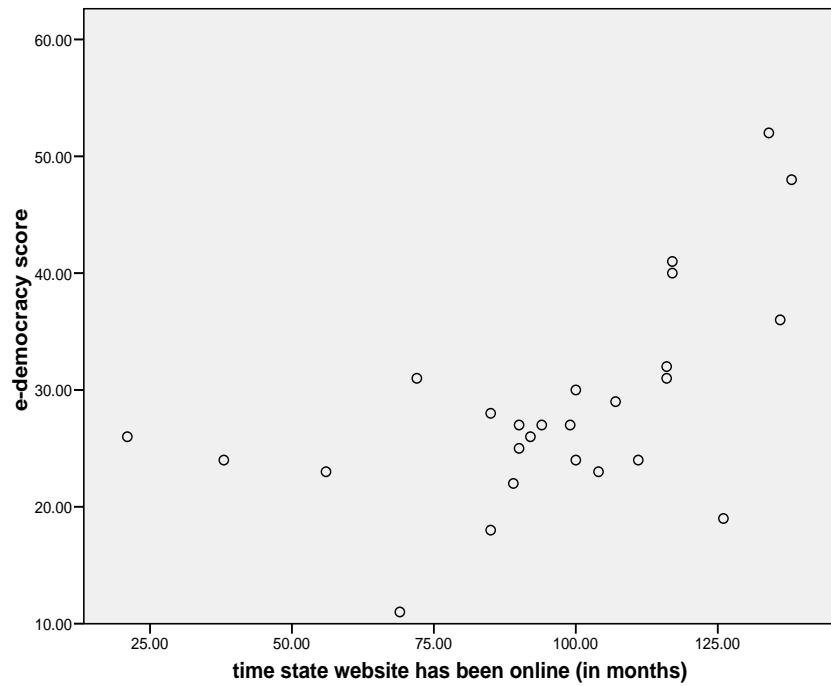
Standard errors in parentheses

***p<0.01, **p<0.05, *p<0.1

An initial glance at Table 4 shows that two of the five variables presented in our model are significantly related to the level of development of Legislatures' websites: the longer a Legislative website has existed, the higher the level of e-democracy development, as illustrated in Figure 16.

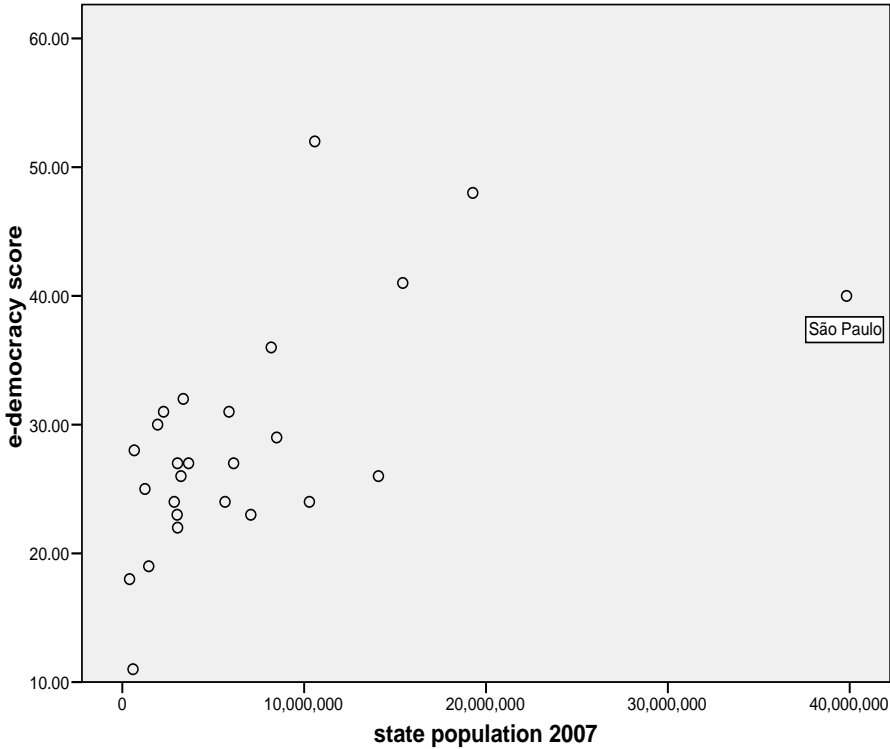
²² $r < 0.6$

Figure 16. Correlation e-Democracy Index Brazil and Website Age



In addition, our results show that the population of a state is also a predictor for the level of development of Brazilian Legislative websites. However, as Figure 17 below shows, the state of São Paulo behaves as an outlier, where the extreme size of its population by no means corresponds to the level of development of its Legislature's website.

Figure 17. Correlation e-Democracy Index Brazil and State Population



In this respect, we perform a regression after removing the case of São Paulo to examine whether its influence on the regression estimates is substantial or not. The table below demonstrates the results of our first regression in comparison to the new regression with the outlier removed.

Table 5. Regression e-Democracy Index Brazil

Variables	1 st regression (all states)	2 nd regression (SP removed)
	B (se)	B (se)
Partisanship	-1.022 (6.600)	-1.037 (1.547)
Population	0.000** (.000)	0.001*** (0.000)
Average spending per MP	0.003 (0.000)	0.002 (0.002)
Internet access	-0.005 (0.241)	0.007 (0.217)
Time online	0.113 ** (0.045)	0.117** (0.041)
Constant	9.951 (6.600)	9.298 (5.964)
Valid cases	24	23
Adjusted R Square	0.495	0.577

Standard errors in parentheses

***p<0.01, **p<0.05, *p<0.1

Even though our subsequent analysis shows that population and the time a Legislature's website has been online are the only two significant predictors for the level of e-democracy development, by removing São Paulo from our model some results are noteworthy. First of all, we must note an improvement in the model fit that comes from extracting the outlier, with the adjusted R² model increasing by nearly 20 percent. Secondly, a closer look shows that by removing São Paulo from the model, population clearly becomes a more significant predictor for the level of development of Legislative websites. In a similar manner, by extracting the outlier, the time websites have been online becomes more significant in explaining the level of development of Brazilian Legislative websites. As to what leads São Paulo to behave as an outlier remains unclear at this phase of the research. In this respect, the only hypothesis that we can formulate is that such a fact is linked to particular patterns of actors' behaviour and institutional settings (formal and informal) that cannot be grasped by the present quantitative analysis, and therefore this subject will be addressed further on in this research.

With regard to the relationship between population and legislatures' e-democracy scores, we have previously put forward that this could be related to some economy of scale and its effect on the development of the websites. However, if resources can be considered an explanatory factor, such a hypothesis should be nuanced by the fact that there is no correlation between e-democracy levels and average spending per MP – another measure of resources in parliaments, although not correlated to the population. In this respect, another possible explanation is related to the relative price of websites that is reduced as the number of users increases.

First of all, in order to explain our argument, it is important to understand the intrinsic characteristics of a website that are somehow similar to those of a non-rivalled good. By this we mean that the fact that one user accesses a website does not reduce the availability of the service to another user²³. To clarify further, let us compare a website to printed media. Suppose a Legislature wants to communicate to the broader public on an important piece of legislation. If the Legislature uses printed media such as a newspaper to communicate its new legislation, it has the potential to only reach a limited number of readers. If the Legislature wants to reach more readers than those that read a certain newspaper, it has to announce its legislation in an extra newspaper, which consequently increases the cost of the operation. For a website, the logic is inversed. Given that a website can be accessed by one user without reducing the availability to another one, and that the cost of a website is fixed and does not vary according to its number of users, the higher the number of absolute users, the lower the relative price of a website. On this basis, we can hypothesize that Legislatures of more populated states have more incentives to invest in websites as a means to communicate and interact with the public. This is particularly so if the actors involved in the use of ICTs share the commonly accepted idea that universal or quasi-universal Internet access is only a matter of time. Even though we cannot confirm such a hypothesis at the present moment, it does offer some promising directions for further research on the factors that impact the level of e-democracy development by Legislatures.

But, what does the relationship between the age of parliamentary websites and their level of e-democracy indicate? Following our previous argument, one would expect that the Legislatures that were early adopters of the Internet would be those with more resources

²³ Even though websites that support a great number of users and transactions may have server and maintenance costs to increase, this increase is by no means proportional to the number of users as in, for instance, printed media.

and/or more populated states. However, no correlation whatsoever can be found between population and resources and the time a website has been online.

Thus, one possible interpretation is that the variance in the age of parliamentary websites might be the chronological register for drives of innovation that are reflected in the development of parliamentary websites. However, in order for these websites to achieve such a level of e-democracy, such innovation would have to have taken place incrementally over time. If we assume this to be true, it seems to suggest some kind of virtuous path-dependency for innovation. Such drives for innovation, we hypothesize, rather than being explainable by any general factor, are the fruit of the interplay between local institutions and actors' strategies that will determine the particular ways in which technologies are enacted. If this is to be true, we shall confirm it during the qualitative phase of our study.

Finally, we underline once more that, contrary to the expectations of the technodeterminist literature on e-democracy, when controlling for other variables, levels of technological development are not significant predictors of the development of e-democracy traits in Brazilian parliamentary websites.

9.2 Spain

As in the Brazilian case, the ideological orientation of parliaments does not have any significant correlation with e-democracy traits of Spanish parliaments' websites²⁴. That is to say, even if the majority parties in parliament belong to the left, centre or right of the political spectrum, such a fact does not predict an impact on the level of website development. However, unlike the Brazilian case, the time that a regional Legislature website has been online is not a predictor for the level of development of the website.

²⁴ As in the Brazilian case, measured by the proportion of left-wing seats held by parties in parliament.

Table 6. Bivariate Correlation e-Democracy Index Spain

E-democracy Index			
Independent variables	<i>Pearson</i>	<i>Sig.</i>	<i>N</i>
Partisanship	-0.148	n.s.	17
Population	0.648	**	17
GDP	0.731	**	17
Average income	0.532	*	17
Internet access	0.490	*	17
Age of website	-0.216	n.s.	17
Autonomy	0.689	**	17

* = significant at the 0.05 level; **= significant at the 0.01 level; n.s. = not significant

GDP, an obvious variable related to resources, appears as the strongest variable correlated to e-democracy scores. As with the Brazilian case and other similar studies²⁵ in the domain, the bivariate analysis shows that the level of e-democracy traits on Spanish parliamentary websites is correlated to the population size of the region and the number of seats in parliament. In other words, the larger the economy and the population, the more developed regional Legislature websites are. To a lesser degree, and fulfilling to some extent the expectations of a technodeterminist approach, the results of our bivariate analysis show technological development as being significantly correlated to the level of development of Spanish parliamentary websites. That is, the higher the level of technological development, the more developed a parliamentary website is likely to be. Also, known as a determinant for Internet access – thus technological development – average income per capita is related to the level of development of websites.

It bears mentioning that the ‘fast-track’ variable has been added as a proxy for autonomy of regions to the Spanish model²⁶. As explained before, in this research, the Spanish case is added as an asymmetric federation as opposed to the symmetric federal arrangements of Brazil and the United States. This approach for classifying federations, which is of particular interest to this research, classifies federations according to the distribution of competencies among the units of a federation. Wherever the sub-units of a federation are entitled to the same set of competencies, we are said to find symmetric federations (Watts 1999, Requejo and Wynants

²⁵ Trechsel et al. 2003

²⁶ Fast-track is added in this analysis as a dummy variable.

2001), whereas we refer to asymmetric federations where their sub-units are granted different competences, with some sub-units possessing more autonomy than others. Spain is often cited as an example of an asymmetric federation, as it is composed of 17 sub-units (*comunidades autonomas*) and two municipalities with a special status of autonomy (*ciudades autonomas*), where the 17 sub-units are of interest to this research²⁷.

Even though all the Spanish sub-units are entitled to self-government in some domains, the distribution of competences among these sub-units is not homogeneous. In Spain, constitutionally, the provisions for regional autonomy are optional and two tracks are available, known as ‘slow track’ and ‘fast track’. As the names suggest, these constitutional channels refer to the procedures that each region has to comply with in order to acquire supplementary competences and the time required to obtain the additional powers once requirements are met (Keating and Wilson 2009). In this respect, the regions that benefit from the ‘fast track’ correspond to the ‘historic communities’ that are simultaneously considered to be the ones that, *de facto*, benefit from a higher level of autonomy – Andalusia, Catalonia, the Basque Country and Galicia. Therefore, the variable ‘fast-track’ used in the bivariate analysis is a proxy for the increased level of autonomy of the historic communities as a means to identify the impact of institutional arrangement of asymmetric federations on the level of development of parliamentary websites. As shown in Table 6, in fact there is a significant correlation between the e-democratic traits of websites and the level of autonomy of Spanish regions: the more autonomous the region is, the more likely its website will be to present e-democracy traits.

Taken as a whole, six out of the eight independent variables taken into account in this analysis have shown themselves to be correlated to the level of development of Spanish parliamentary websites, with three independent variables presenting a higher level of significance: GDP, household Internet access and the level of autonomy of the regions. Now, following the pattern of analysis adopted previously in the Brazilian case, a linear regression is effectuated. In this particular case, we start by selecting the ‘usual suspects’, considered by theory as being determinant of e-democracy development and relevant to this research, with the addition of the autonomy factor. The aim of this exercise, as mentioned before, is to assess the impact and significance of the dependent variables when controlling for other factors.

²⁷ These municipalities will not be considered in this research because their status does not correspond *strictu sensu* to sub-units of a federation and because they do not use parliaments, which are the object of the research.

Table 7. Multilinear Regression e-Democracy Index Spain

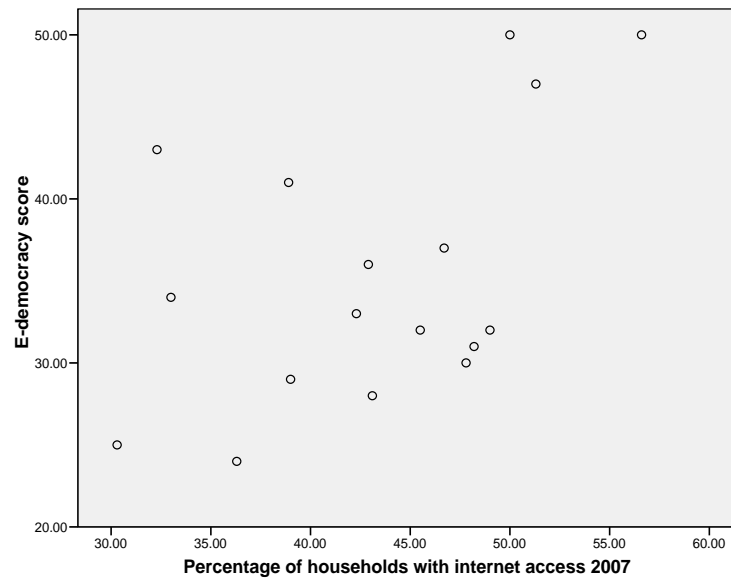
Variables	B (se)
Partisanship	-0.685 (1.314)
Population	0.001 (0.001)
Internet access	0.501** (0.165)
Time online	0.052 (0.043)
Autonomy	10.012 ** (3.520)
Constant	4.119 (8.158)
Valid cases	17
Adjusted R Square	0.686

Standard errors in parentheses

***p<0.01, **p<0.05, *p<0.1

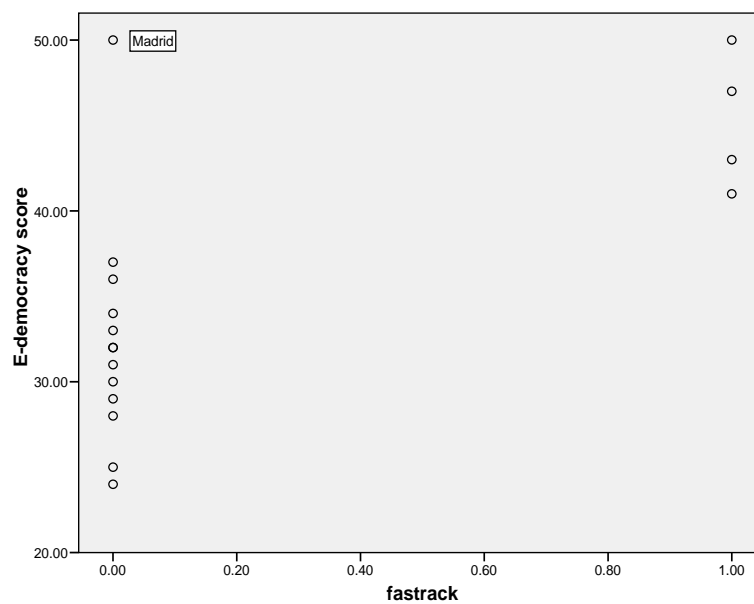
A first noteworthy observation from the results presented in Table 7 is the explanatory level of the model, which explains nearly 70% of the variance in the development of parliamentary websites across 17 Spanish regions. Even so, as Table 7 noticeably shows, the only two variables with statistical significance are autonomy level and Internet access. This implies that, when controlling for other variables, an increase in the level of autonomy of sub-units of a federation or an increase in the level of Internet access predicts the likelihood of an increase in the level of development of parliamentary websites. As to the interest of this research, it is noteworthy that technological development is a predictor of the level of development of parliamentary websites, in conformity with technodeterminist approaches.

Figure 18. Correlation Internet Access and e-Democracy Index Spain



Nonetheless, the most important finding in the Spanish case is, by far, the significance of the autonomy variable, opening a new perspective on the understanding of institutional factors that might affect the e-democracy traits of parliamentary websites.

Figure 19. Correlation Regional Autonomy and e-Democracy Index Spain



As Figure 19 clearly shows, of the five websites that obtained high e-democracy scores, with the exception of Madrid, all of them are websites from Legislatures of autonomous regions.

Thus, by extracting Madrid, we subsequently perform a regression to evaluate the extent to which it influences the regression estimates. The table below demonstrates the results of our first regression in comparison to the new regression with the outlier removed.

Table 8. Multilinear Regressions e-Democracy Index Spain

Variables	1 st regression	2 nd regression
	(all regions)	(Madrid removed)
	B	B
	(se)	(se)
Partisanship	-0.685 (1.314)	-0.785 (1.098)
Population	0.001 (0.001)	0.000 (0.001)
Internet access	0.501** (0.165)	0.346** (0.152)
Time online	0.052 (0.043)	0.018 (0.039)
Autonomy	10.012 ** (3.520)	13.179*** (3.221)
Constant	4.119 (8.158)	15.154 (8.216)
Valid cases	17	16
Adjusted R Square	0.686	0.739

Standard errors in parentheses

***p<0.01, **p<0.05, *p<0.1

By extracting Madrid from our model, some results become noteworthy. First of all, it is important to underline a slight improvement in the model fit, with the adjusted R Square increasing by nearly 5 points – that is, nearly 74% of the variance in the development of Spanish parliamentary websites across the 16 Spanish regions can be explained by our model. Also, by extracting Madrid from the model, both Internet access and autonomy level continue to be significant predictors to the level of development of parliamentary websites. What is noteworthy, in this case, is the fact that by removing Madrid from our analysis the independent variable of autonomy clearly becomes the strongest predictor in the model. In other words, the fact that some regions benefit from higher autonomy has a positive and significant impact on the level of development of their parliamentary websites. Such a finding, far from simplistic, identifies the impact of institutional arrangements and the role that autonomy levels may have

in the presence of e-democratic traits in parliamentary websites. A hypothesis to explain the causality between the two factors seems to be related to the increase in legislative competencies that go hand-in-hand with greater autonomy. As the regions that benefit from the fast-track enjoy more autonomy, the number of subjects and policies that are the object of legislation tends to increase. From this perspective, a hypothesis is that such an augmentation of competences calls for an increase in legislative capacity that is in practice turned into a more professionalized structure with qualified civil servants. This increase in professionalism, we hypothesize, may lead to better policies, including those that concern the use of ICTs by the parliament. Last, but not least, more autonomous Legislatures might be more willing to engage with their constituents in the legislative process. We shall return to these points later, when looking at the role of career civil servants in the enactment of technologies by state and regional parliaments.

9.3 United States

As in the previous cases, our bivariate analysis shows that the ideological orientation²⁸ of state Legislatures in the United States does not have an impact on the e-democracy traits of the Legislative websites. It is also interesting to point out that other usual suspects such as population and average per capita income seem to have no impact on the level of development of parliamentary websites. Financial resources are normally linked to the access to ICTs and staff size has been associated with legislative professionalism (Bowman and Kearney 1988, Rosenthal 1998, Squire 2003). Furthermore, legislative staff has been considered as an important element in institutional and organizational change in the framework of U.S. state Legislatures (Grossback and Peterson 2004). Hence, in this bivariate analysis we also take into account two independent variables as proxies for the human and financial resources of U.S. state legislatures, respectively the size of parliamentary staff and the average spending per MP in each of the state Legislatures.

²⁸ Measured as the percentage of Democrat legislators in the state.

Table 9. Bivariate Correlation e-Democracy Index United States

E-democracy Index			
	<i>Pearson</i>	<i>Sig.</i>	<i>N</i>
Party	0.108	n.s.	49
Population	0.153	n.s.	50
Average per capita income	0.261	n.s.	50
Staff size (2003)	0.130	n.s.	50
Average spending per MP (2005)	0.255	n.s.	50
Internet access	0.355	*	50
e-Government Index	0.092	n.s.	50
Time online	-0.010	n.s.	50
Average turnout state elections	0.122	n.s.	50

* = significant at the 0.05 level; **= significant at the 0.01 level; n.s. = not significant

Here, we highlight the fact that our bivariate analysis shows no correlation between the financial resources of a state legislature and the presence of e-democracy traits on its website. The same holds true for human resources, measured by the staff number of Legislatures: the amount of servants employed by a Legislature does not predict the level of development of parliamentary websites. In our model, we have also added to the independent variables an index²⁹ that measures the level of e-government development in different government websites across the United States. The purpose of this analysis is to verify to what extent the context of delivery of public services online has an impact on the overall quality of legislative websites. In other words, we aim to examine if a context of intensive use of ICTs by state public organizations leads to a ‘spill-over effect’, positively impacting the quality of parliamentary websites. Nonetheless, once more, our bivariate analysis shows no correlation between the two phenomena. That is, the fact that a state government and its agencies provide high quality services online seems to have no impact on the level of development of a state parliamentary website.

In a previous work, Ferber et al. (2003) suggested that the level of development of parliamentary websites is related to the level of political participation. By looking at the average turnout³⁰ in state elections, unlike the previous, aforementioned work, our bivariate analysis shows no correlation between the level of political participation and the level of

²⁹ See *State and Federal e-Government in the United States* (West 2007)

³⁰ Average turnout for state executive and legislative elections.

development of parliamentary websites. Also noteworthy is the fact that the time that a Legislative website has been online does not present a correlation to our dependent variable. As an overall result of the bivariate analysis, out of the nine independent variables of our model, only the level of Internet access is related to the level of development of parliamentary websites.

We proceed now to the linear regressions. Here, once again, due to the possible multicollinearity resulting from correlating factors, we exclude variables in order to ensure the validity of the model. The results are shown in Table 10.

Table 10. Multilinear Regression e-Democracy Index United States

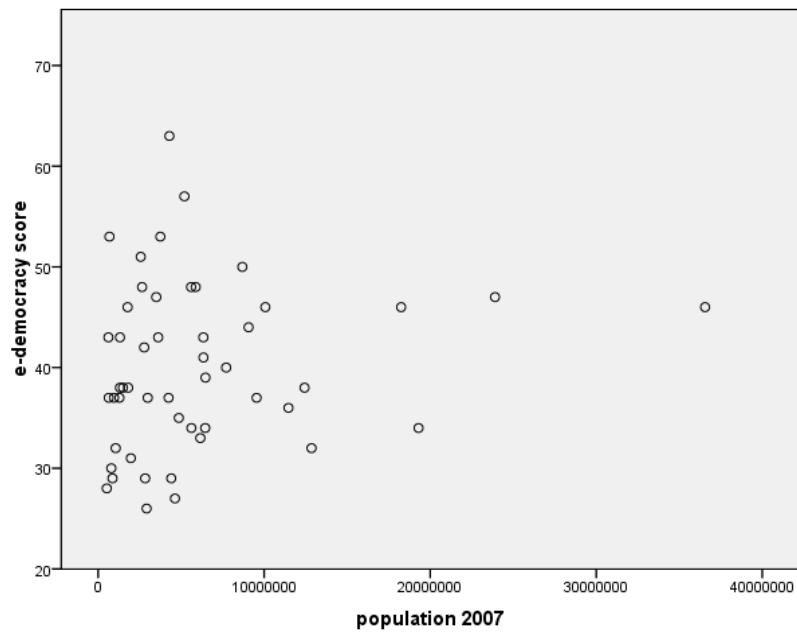
Variables	B (se)
Partisanship	-0.071 (0.086)
Population	0.000 (0.000)
Internet access	0.422** (0.194)
e-Government Index	0.017 (0.162)
Time online	0.013 (0.031)
Average turnout	0.089 (0.196)
Constant	9.689 (14.426)
Valid cases	50
Adjusted R Square	0.068

Standard errors in parentheses

***p<0.01, **p<0.05, *p<0.1

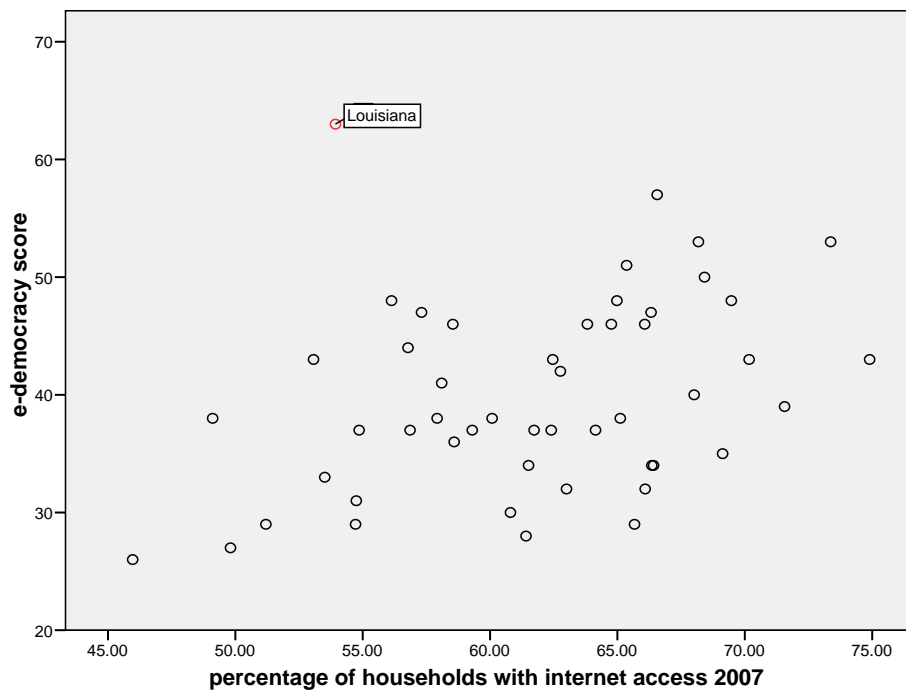
When controlling for other variables, the results are not surprisingly different. Population, for instance, is not a significant predictor of the level of development of parliamentary websites in the United States, as shown in Figure 20 below.

Figure 20. Correlation Population and e-Democracy Index United States



Equally insignificant is the ideological orientation of U.S. state legislatures. Other variables indicating ideological orientation and political participation remain insignificant as predictors of the level of development of parliamentary websites. In fact, the only dependent variable to present a positive and significant relationship to the presence of e-democracy traits in state parliamentary websites is the level of Internet access, as illustrated in Figure 21.

Figure 21. Correlation Internet Access and e-Democracy Index United States



Looking at Figure 21, the relationship becomes clear: in accordance with a technodeterminist perspective, an increase in the proportion of the population with access to the Internet corresponds to higher e-democracy scores. It is noteworthy that Figure 21 above renders visible the case of Louisiana, clearly behaving as an outlier. As one of the United States units with the lowest levels of Internet access, the website of the Louisiana Legislature reaches the highest e-democracy score. Thus, we proceed to exclude the case of Louisiana from our model and perform a new regression in order to evaluate the influence that it exerts in our regression estimates.

Table 11. Multilinear Regressions e-Democracy Score United States

Variables	1 st regression	2 nd regression
	(all states)	(Louisiana removed)
	B	B
	(se)	(se)
Partisanship	-0.071 (0.086)	-0.083 (0.73)
Population	0.000 (0.000)	0.000 (0.000)
Internet access	0.422** (0.194)	0.536*** (0.166)
e-Government Index	0.017 (0.162)	0.038 (0.137)
Time online	0.013 (0.031)	0.032 (0.027)
Average turnout	0.089 (0.196)	0.096 (0.165)
Constant	9.689 (14.426)	-0.620 (12.400)
Valid cases	50	49
Adjusted R Square	0.068	0.223

Table 11 shows the results of the regressions in two moments: a first moment with all the cases included and a second moment with the outlier extracted. The first evident difference between the two regressions is the clear improvement in the model fit that comes from extracting Louisiana. If in a first moment the model explained only 6.8% of the variance in the development of parliamentary websites, by extracting Louisiana from the model our R2 indicates that over 22% of the variance can be explained by the model. Similarly to the first regression, the level of Internet access remains as the only significant predictor of the level of development of parliamentary websites. However, we note that the values and significance of the variable are considerably increased in the second model. In this sense, even though these findings show a positive and significant correlation between levels of Internet access and development of Legislature websites, the case of Louisiana calls for prudence in the interpretation of the results. If it is the case that the level of Internet access in the United States is associated with the development of websites, Louisiana illustrates that a high level of development is possible in the absence of high Internet rates. The reasons behind this go

beyond the scope and reach of this analysis, but later on in this research we shall approach the explanations of the particular behaviour of the Louisiana case.

9.4 Analysis at the Inter-Federation Level

The first part of our analyses approached which factors function as predictors of e-democracy development of parliamentary websites at the intra-federation level. In the Brazilian case our results have shown that population and, to a lesser extent, the time a website has been online, are relevant predictors for the level of development of a legislative website. In the case of Spain, the level of Internet access has been identified as an important predictor to our dependent variable. In this case, however, the most important predictor was found to be the level of autonomy of a region, which consequently shows the impact that the institutional arrangement of an asymmetric federation may have on the level of development of parliamentary websites. Finally, in the case of the United States our results have shown that Internet access remains as the only significant predictor of the level of development of state Legislatures’ websites.

The second part of the quantitative analysis takes into account the ensemble of the 93 state Legislature websites. Here, we aim to identify which factors function as predictors of the level of development of state/regional government websites across the three different countries. Table 12 presents the results of our bivariate analysis of the inter-federation model.

Table 12. Bivariate Correlation e-Democracy Index at Inter-Federal Level

E-democracy Index			
Independent variables	<i>Pearson</i>	<i>Sig.</i>	<i>N</i>
Partisanship	-0.086	n.s.	93
Population	0.253	*	93
Internet access	0.563	**	93
Age of website	0.121	n.s.	93

* = significant at the 0.05 level; **= significant at the 0.01 level; n.s. = not significant

An initial glance at the results of our bivariate analysis in Table 12 reveals that there is no correlation between the ideological orientation of state and regional Legislatures, and the level of development of parliamentary websites. Equally irrelevant is the link between the e-democracy score of the websites and the time that these websites have been online.

Nonetheless, it is possible to single out two positive and significant correlations from our model. First, to a lesser extent, the results of our bivariate analysis show a positive relationship between the size of the population of a state/region and the level of development of Legislative parliamentary websites: the more populated a state is, the more developed its parliamentary website is. A stronger correlation is found between our dependent variable and the level of Internet penetration of the states, where the more citizens have access to the Internet, the higher the e-democracy score of the website of the unit of the federation. Thus, in order to find which variables remain significant when controlling for other factors, we proceed to a linear regression. The results are shown below in Table 13.

Table 13. Multilinear Regression e-Democracy Index at Inter-Federal Level

Variables	B (se)
Partisanship	-0.383 (0.847)
Population	0.000 *** (0.000)
Internet access	0.241 *** (0.036)
Time online	0.015 (0.023)
Constant	22.120 (3.028)
Valid cases	92
Adjusted R Square	0.372

Standard errors in parentheses

***p<0.01, **p<0.05, *p<0.1

A first observation with regard to the results presented in Table 13 is the explanatory level of the model. With no more than four independent variables, our model explains 38% of the variance in the development of parliamentary websites across the three countries analysed. Also, in a similar vein to the results of our previous bivariate analysis, our linear regression indicates that population and Internet access are the two variables with statistical significance. However, given that our analysis is based on a cross-country perspective, to test for possible

country effects in our results, we proceed to further testing by introducing two dummy country variables, Brazil and the United States³¹, into our model.

Table 14. Multilinear Regressions e-Democracy Index at Inter-Federal Level

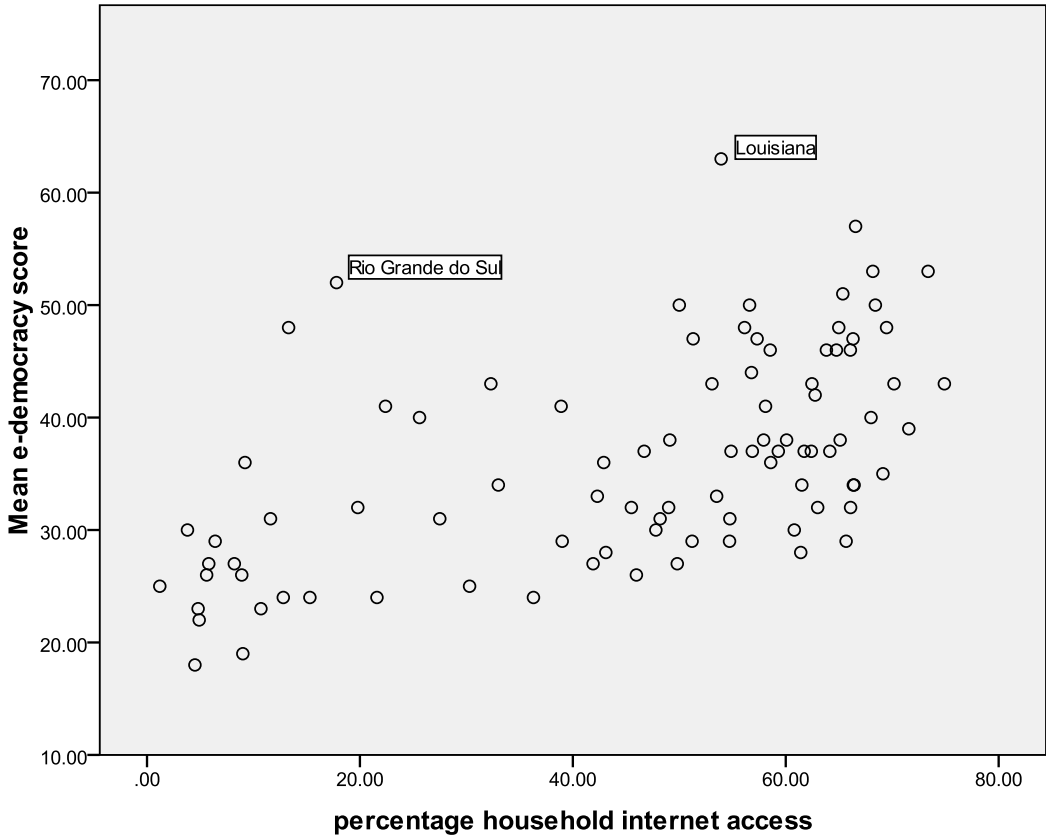
Variables	1 st Model	2 nd Model (country dummy)
	B (se)	
Partisanship	-0.383 (0.847)	-0.317 (0.853)
Population	0.000 *** (0.000)	0.000*** (0.000)
Internet access	0.241 *** (0.036)	0.342*** (0.108)
Time online	0.015 (0.023)	0.018 (0.023)
Brazil	-	2.306 (4.146)
United States	-	-3.246 (2.902)
Constant	22.120 (3.028)	18.386 (5.567)
Valid cases	92	92
Adjusted R Square	0.372	0.367

***p<0.01, **p<0.05, *p<0.1

Table 14 compares the results of our linear regressions between our first and second model with the introduction of dummy country variables. As to the explanatory potential of the model, we notice no significant changes in the model fit when country variables are introduced. As to country effect, we do not find any statistically significant correlation with the level of development of parliamentary websites. Finally, our results show that the size of the population of a state/region and the level of access to the Internet remain statistically significant.

³¹ Spain is our reference category.

Figure 22. Mean e-Democracy Score and Percentage Household Internet Access



However, when plotting our graphs we find two evident outliers in the relationship between the level of access to the Internet and the development of parliamentary websites: the cases of Louisiana and Rio Grande do Sul. That is, in an overall perspective, the levels of development of the parliamentary websites of these two states do not correspond to their high e-democracy scores when compared to their peers. Thus, we proceed to a new regression after extracting Louisiana and Rio Grande do Sul to verify the influence that these variables might or might not have on the linear regression estimates. The table below shows the new results – with the outliers removed – in comparison to our previous results.

Table 15. Multilinear Regressions e-Democracy Index at the Inter-Federal Level

Variables	Model 1	Model 2 (Louisiana and Rio Grande do Sul removed)
	B (se)	B (se)
Partisanship	-0.383 (0.847)	0.149 (0.761)
Population	0.000 *** (0.000)	0.000*** (0.000)
Internet access	0.241 *** (0.036)	0.251*** 0.033
Time online	0.015 (0.023)	0.017 0.066
Constant	22.120 (3.028)	20.654 (2712)
Valid cases	92	90
Adjusted R Square	0.372	0.445

Table 15 shows that even when extracting the two outliers the results remain largely unchanged. Nonetheless, there is an improvement in the model fit, with the current model explaining 45% of the variance in the development of state/region parliamentary websites across the three countries that are part of our analysis. In the following section we shall discuss the overall implication of these findings.

9.5 Analytical Overview of Quantitative Findings

The aim of this brief quantitative analysis was that of exploring at a macro level factors that could be associated with the variance identified among the different parliamentary websites. All of the various factors taken into account – such as partisanship, Internet access and size of population – have at some point in the relevant literature been associated with the adoption of technology by governments. A number of relevant findings can be drawn from the analysis performed, both at the country level (intra-federation) and among the countries (inter-federation) themselves.

In the Brazilian case, when controlling for other factors, we find a strong and positive correlation between the age of a state Legislative website and its e-democracy score. In other words, the earlier a parliamentary website was created, the more developed it is likely to be in

terms of e-democracy traits. We suggest, in this case, that the fact that some parliaments behave as early adopters of technology indicates a certain drive for innovation, which, incrementally and over time, leads to a higher quality of the websites. A limitation of the quantitative analysis in this case is its inability to identify which factors generate such innovation. Nonetheless, part of this question may be partially addressed if one takes into account a second relevant finding in the Brazilian case: a positive correlation between the level of development of parliamentary websites and the population of the states. As previously mentioned, it has been suggested that the potential link between population size and e-democracy development levels could be explained by effects of economy of scale and resources of parliaments (Trechsel et al. 2004). From this perspective, the fact that parliaments behave as early adopters of technology – and thus are more developed in the long term – would be linked to matters of economic resources.

Nevertheless, other indicators related to parliaments' resources (i.e. average spending per MP) do not show statistically significant correlations with the level of development of websites when controlling for other factors. These findings resonate with the recent literature on the subject, which questions the often overstated role played by slack resources – such as gross state product – with regard to technology development in the public sector (Tolbert et al. 2008, Yun and Opheim 2010).

Bearing this in mind, a second possible explanatory factor for understanding this drive for innovation, we suggest, might be linked to the relative costs of parliamentary websites and the perceived benefits of implementing them. In other words, we suggest that the early adoption of the Internet by parliaments could be explained by the fact that as the costs for setting up and maintaining a website remain stable, its relative perceived cost decreases as the absolute number of potential users (i.e. population) increases. Indeed, such reasoning echoes earlier studies that consider population size as the main predictor of early adoption of ICTs by public organizations (Bozeman and Bretschneider 1986, Scavo and Shi 2000, Moon 2002, Schelin 2003). Such an assumption, obviously, can be framed in terms of demand for ICT services: all other things being equal, the larger the population, the greater the potential demand for parliamentary websites. In this respect, scholars have often regarded population size as an indicator of demand for ICT-related services and as a predictor of the quality of these services

(Ho 2002, Arduini et al. 2010)³². In short, the two statistically significant factors identified as predictors of the e-democracy level of parliamentary websites appear to be intrinsically related. As the size of the population increases, the incentives for adopting technological innovations seem to increase, be it in the sense of adopting technology (i.e. creating a website), or in the sense of incrementally innovating in the use that is made of technology, ultimately leading to more developed websites. Finally, it is worth noting that, in the Brazilian case, other factors that the literature would suggest as having an effect on the development of parliamentary websites do not appear to do so here, with neither partisanship nor levels of Internet access in the states playing a significant role in the e-democracy scores of parliamentary websites.

In the Spanish case, two factors appear as significantly related to the level of parliamentary websites' development: levels of Internet access and autonomy of the Spanish regions. The first finding, as we have already noted, confirms the predictions of a technodeterminist perspective, where a higher level of technological development – measured by access to the Internet – is linked to higher levels of e-democracy development (Norris 2001, Dawes 2009). With regard to the Spanish analysis, however, the role played by institutional settings in the development of parliamentary websites is likely to be the most important finding. As previously explained, the Spanish case is added to this analytical framework as a case of an asymmetric federation. Unlike the federative arrangements found in Brazil and the United States – where competences are equally distributed among the units of the federation – in the Spanish case the distribution of competences is made heterogeneously. By looking at the provisions that each Spanish region has to comply with to obtain supplementary competences and the time required to do so, i.e. 'slow' and 'fast' tracks (Keating and Wilson 2009), we were able to verify the extent to which benefiting from greater autonomy relates to the quality of regional parliamentary websites. When controlling for other factors, a significant correlation between the e-democratic traits of websites and the level of autonomy of Spanish regions was found: the more autonomous the region is, the more likely its website is to be developed. In the current literature, a number of studies have looked at the factors that influence the level of development of parliamentary websites (e.g. Norris 2001, Trechsel et al. 2003, Ferber et al. 2003, Leston-Bandeira 2007). However, the findings from the analysis

³² Indeed, such an explanation resonates with the broader and well-established literature dealing with organizational innovation, which stresses the role of external demand as an important driver for innovative behaviour (Edquist and Hommen 2000, Miles 2005, Edler and Georghiou 2007, Gunday et al. 2008).

carried out in this research are the first to present evidence suggesting an impact of different federal arrangements on the processes of technological enactment that take place within Legislatures.

The way the causality mechanism between these factors (federal arrangement and e-democracy levels) operates, we hypothesize, is linked to the increase of legislative competences that goes hand-in-hand with greater autonomy of federal sub-units. As regions are *de facto* enjoying increased autonomy, the range of issues that are subject to legislative action (representation, legislation and oversight) is also broadened. This increase in competences for parliaments of sub-units corresponds to a demand for an enabling environment that is characterized by enhanced organizational settings and professionalized civil servants. Indeed, the relevance of legislative professionalism and bureaucratic efficacy as enablers of legislative capacity is a constant in political science literature dealing with parliaments (e.g. Rosenthal 1996, Squire 1998, Huber 2001, Burns et al. 2008). Particularly with regard to the link between parliaments' human resources and their respective legislative capacity, when looking at the different U.S. state Legislatures, Rosenthal notes that "the greatest boost to legislative capacity was from professional staffing, both larger numbers of staff members and their broader distribution within legislatures" (Rosenthal 1996, p. 174). In this sense, the increase of legislative professionalism – catalysed by the greater autonomy of regions – leads to better policies also with regard to ICT usage. In other words, the better legislatures perform in global terms – we hypothesize – the better their websites will be.

Compared to the previous countries, in the case of the United States, the level of e-democracy development could be linked to an elevated number of factors. This is strictly related to data availability: in the United States, compared to the other countries, the amount of data available at the sub-national level is substantially higher. The findings, in this case, are elucidative. For instance, partisanship, suggested in the literature as having an effect on technology adoption by public organizations (e.g. Tolbert and McNeal 2003, Reddick 2005, Lassen and Brown 2010), appears to play no role in the level of development of state Legislature websites. In other words, the findings show that the levels of e-democracy of Legislative websites are independent from the fact that a Legislature has a Republican or Democrat majority. In a similar manner, no relationship between parliamentary resources and quality of Legislative website has been found: neither Legislative spending nor staff size appear to be significantly related to e-democracy scores. In the analysis it was also implied

that staff size could also be considered as a proxy for Legislative professionalism. In this case, Legislative professionalism would have no impact on the level of e-democracy development of the website. Nonetheless, measuring staff size as a measure of professionalism is extremely limited as a proxy for professionalism in itself. On the contrary, as in other countries, more staff in U.S. public organizations may even be associated with lowered efficacy and clientelist practices (Clark 1994). In other words, these findings do not invalidate the hypothesis that having a professionalized staff leads to better outcomes in terms of e-democracy development.

Interestingly, by looking at the e-Government index of the different states, we can evaluate the extent to which the level of sophistication in public service delivery of state government (i.e. Executive) could impact the quality of state Legislature websites. That is, we verify the extent to which technological development in the Executive branch influences technology take-up in the Legislative (or vice-versa). Here, again, we found no significant relationship. Furthermore, if previous work has found a relationship between political participation levels and the quality of Legislature websites (Ferber et al. 2003), no correlation between these two elements could be found in our analysis. Finally, the only factor related to the level of e-democracy development in state Legislatures is the level of Internet access in the states, confirming Norris' (2001) findings on technological diffusion as a predictor for Legislative website development.

If there are relevant findings when looking at the three countries individually, when comparing the results a rather unsettling picture emerges. No common factor appears among the three cases as a predictor of the level of e-democracy development of parliamentary websites. To this effect, a subsequent quantitative analysis at the inter-federation level has been conducted, taking into account the ensemble of the state Legislature websites.

When analysing the cases, controlling for other factors and country effects, two factors emerge as determinants of Legislative website development: population and Internet access. With regard to the first factor, as we have discussed, our findings conform with the literature dealing with technology development, in which population size is considered a predictor for both the early adoption of ICT and its further development (Bozeman and Bretschneider 1986, Scavo and Shi 2000, Ho 2002, Moon 2002, Schelin 2003, Arduini et al. 2010). Also, in accordance with the literature in the field, such a fact is related to the demand for Internet

services, which we assume is higher in more populated states. In a similar manner, while Internet access in the states can be an indicator of technological diffusion, as put by Norris (2001), it is also a measure of demand for Internet services (Mooney and Lee 1995, McNeal et al. 2003, Yun and Opheim 2010). In this sense, when taking both factors into account – population and Internet access – demand emerges as the explanatory factor for the level of websites' development. The higher the population, and the higher the level of Internet penetration within this population, the higher the overall demand for Internet services is, ultimately impacting the quality of state Legislature websites.

Nevertheless, such an assumption should be considered carefully. With regard to both factors – population and technology diffusion – the relationship with e-democracy features of Legislative websites is by no means perfect. In a number of cases, Legislatures scoring high on e-democracy present low Internet penetration levels and/or small population sizes. Even at a glance, the landscape of causality between the factors exposes many important outliers, raising scepticism about the view that e-democracy goes hand-in-hand with demand. On the contrary, these outliers suggest that population size and technological diffusion are far from being sufficient explanations for the development of parliamentary websites. In this respect, two main caveats should be noted. First, the limited number of cases (particularly at the intra-federal level) should lead us to interpret these cases with caution. Second, it is worth noting that the independent variables in this study were limited to those used in previous literature in the field of e-democracy and the use of ICT by public organizations. As such, a number of other variables such as social capital and the existence of participatory institutions were left aside. Bearing these considerations in mind, it is even likely that the level of e-democracy development of parliamentary websites is an equifinal event, where the same outcomes can be produced by various causes. We expect to explore this further in the qualitative and final part of this work, which consists of case studies of the most relevant observations.

10. CASE STUDIES

10.1 Background to Case Studies: Rationale, Case Selection and Contextual Factors

In accordance with the sequential explanatory research design adopted (i.e. nested design) in this study, following the previous quantitative analysis we proceed with the second major part of this research, which consists of case studies³³. Indeed, the preceding quantitative approach in this research produced a number of valid findings in terms of predictors of the development of Legislative websites. Nevertheless, the very limitations of these findings raise questions that call for further analysis. As has been suggested throughout this work, an important element of the development of parliamentary websites concerns the way in which ICTs are perceived and used by different actors, where these perceptions and actions are mediated by institutional frameworks and organizational settings.

In this respect, the notion of actors' strategies – as discussed in the first part of this research – becomes essential to the understanding of the process of technological enactment that takes place within parliaments. It is worth reminding ourselves that these case studies appear as a 'clinical approach' concerning the system of action that encompasses the different actors' strategies (Friedberg 1977) within the Legislative framework. Thus, with actors' strategies as the backdrop of the analysis to be carried out, case studies are considered as the opportunity to accurately seize the role that rules – both formal and informal – and other cognitive and socio-cultural elements play in the development of parliaments' websites. More precisely, it is through case studies that we are able to assess how actors' strategies that shape the complex relationships between MPs and civil servants – mediated by institutional settings – affect the way technology is enacted. In this respect, as widely discussed in the first part of this study, it is expected that actors' strategies shall be informed – but not conditioned – by the contexts in which they are inserted. One could expect, for instance, that the political environment (e.g. majority status of a Legislature) in which interactions between the actors take place may play an important role in the quality of delegation to civil servants (Huber 2000). In a similar vein, institutional and organizational traits such as level of cabinet stability, level of turnover of top servants, autonomy of services and rules for decision-making may play an important role for those who wish to exert an influence in agency decisions (Huber 2000, Huber and Lupia

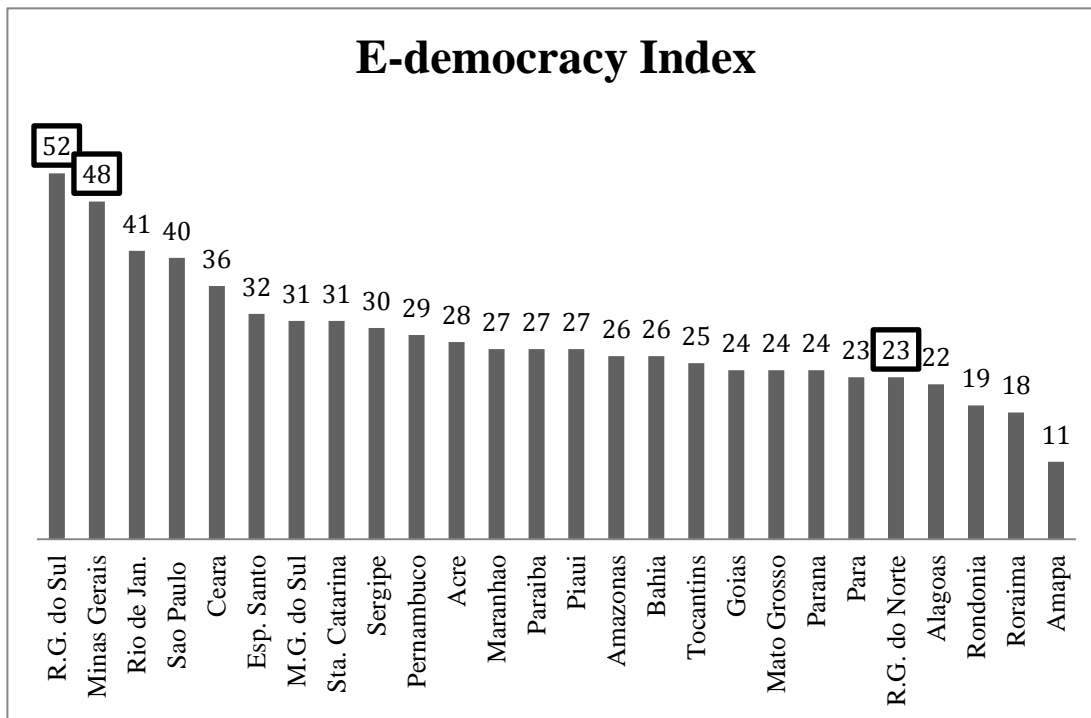
³³ For an overview of the methodology employed for the case studies, see the section entitled *3rd Phase: Case Studies and Measurement of Actors' Strategies*.

2001, Rose-Ackerman 1995). Last, but not least, one could also expect that the level of legislative professionalism that is found in each of the state Legislatures might play a positive role to the extent that policy innovation is present or not (Downs and Rocke 1980, Kousser 2005, McLendon et al. 2005, McNeal et al. 2008).

Due to external constraints (e.g. logistics, resources) the cases that are the object of study are limited to one country. In this case, Brazil was chosen as the country for the case studies for two main reasons. First, in selecting Brazil, we aim to reduce the scarcity of literature in the field of ICT in parliaments from developing countries. It should not come across as surprising that, with a few exceptions (e.g. Frick 2005, Braga 2007), the majority of studies on ICTs in parliaments are focused on developing countries. Second, given the context of strong regional differences in the country, the Brazilian context presents a high level of variance across a number of variables that are relevant to this case study, such as models of elite competition (e.g. plural, oligarchic), and bureaucratic capacity. Such variance, as we shall see, plays an essential role in understanding the different processes of technological enactment that take place in each parliament.

Nevertheless, it should be noted, given that at the time of the case selection limited background information was known about these Legislatures, the selection of cases was based primarily (although not exclusively) on their e-democracy scores, i.e. the dependent variable. Thus, in a first moment, two similar cases of high e-democracy performance were selected: the Legislatures of Rio Grande do Sul and Minas Gerais. The aim, in this sense, is that of identifying the common traits that produce similar outcomes in terms of e-democracy in both Legislatures. Conversely, the Legislature of Rio Grande do Norte was added to our case study analysis as a control case, as it belongs to the group of states with the lowest performance in terms of Legislative e-democracy. The figure below highlights the different positioning of the states with regard to their e-democracy scores.

Figure 23. Overview of e-Democracy Index in Brazil



It is worth highlighting that the three cases – geographically situated in three different Brazilian regions (South, Southeast and Northeast) – are immersed in significantly different political contexts with regard to political competition and ruling elites. Following Borges’ (2007) typology of political competition in Brazilian states, Rio Grande do Sul belongs to a context of *conflictive pluralism*, while Minas Gerais falls into the category of *coalescent pluralism*, with Rio Grande do Norte being a typical model of *oligarchic factionalism*. By conflictive pluralism in Rio Grande do Sul’s political competition model, we refer to a highly antagonistic system between two political groups, where polarization is nearly absolute and consensus in political issues is almost never reached (Noll and Trindade 2004, Grohmann 2006, Borges 2007). Conversely, Minas Gerais’ coalescent pluralism model of political competition can be understood as a system that, despite a certain degree of dispersion of political power, can be characterized by its “centripetal drives” (Sartori 1976, p.195) “as parties seek to occupy the centre of the ideological spectrum rather than appealing to extreme ideological positions” (Borges 2007). Finally, by oligarchic factionalism in Rio Grande do Norte we refer to an oligarchic system characterized by “severe restrictions to effective political competition” (Borges 2007:111), with political dispute limited to a number of charismatic personalities who tend to perpetuate their political control through practices of clientelism and nepotism (Spinelli 2006). In this respect, the selection of cases from different

contexts, as we shall see later, enables us to provide additional insight on the impact of different political competition models on the way technology is enacted.

At this stage, it is important to underline how we structure the case studies and their relation to our theoretical framework. As discussed earlier, we expect that ‘virtual parliaments’ will result from differences of priorities among different actors, which create spaces of conflict and cooperation around processes of technological enactment. In this sense, although not limited to, we consider political environment, institutional and organizational settings and levels of staff professionalization as major elements that will mediate the relationships between different actors (e.g. MPs and civil servants) around processes of technological innovation. With regard to political environment, we approach the case studies from macro and micro perspectives. By macro perspectives we refer to the overall model of competition between political elites, as explained above. From the micro-perspective, we assess how political issues might mediate the relationship between actors within the Legislatures.

Concerning institutional and organizational settings, we consider a number of issues such as levels of cabinet stability, turnover of career civil servants, bureaucratic autonomy and rules for decision-making. Considering that legislation may have an impact on the discretionary power of civil servants, we also consider in our analysis the structure of administrative law and notably internal house rules, which are specific to each of the Legislatures and which codify their institutional and organizational traits. Finally, our theoretical framework leads us to expect that innovations – or the lack thereof – will be associated with varying degrees of legislative professionalism for each of the Legislatures. In this respect, we approach legislative professionalism from two perspectives. The first refers to the existence of institutions and processes that may impact the levels of professionalism of those working within the administration of Legislatures, such as methods of recruitment and capacity-building institutions. At the individual level we seek to assess civil servants’ interests and strategies as well as their attachment to standard bureaucratic public service principles, such as neutrality and efficiency.

For this section of the work, multiple techniques associated with qualitative methods have been employed, notably in-depth analysis of each of the websites, documental analysis (e.g. internal rules, transcription of speeches) and semi-structured interviews. Interviews in particular have proven to be an essential means to seize actors’ perceptions and strategies as

well as their behavioural and attitudinal patterns. To this effect, during the field research we aimed to – whenever possible – identify and interview all the actors who were concerned directly or indirectly with the process of technological enactment that takes place within each of the Legislatures. In this respect, as the reader will notice later on, we go beyond the usual suspects (e.g. MPs, IT staff) as sources for this research, often reaching out to staff working indirectly with the Legislative website (e.g. Legislative school, librarians) and external actors whose work is somehow related to the Legislative website (e.g. watchdog organizations, external IT providers). Such an approach has proved extremely effective as a means to appropriately depict the system of action in which the different actors – mediated by institutional settings – pursue their strategies with regard to technological enactment. The following case studies constitute a picture of such a system of action.

Before delving into the core of the case studies, however, it is appropriate to present a brief description of the websites of each of the three state Legislatures that are the object of this analysis. Following the description of each of the websites, we shall proceed to the case studies themselves, respectively the cases of Rio Grande Do Sul, Minas Gerais, and Rio Grande do Norte state Legislatures.

10.2 Description of Websites

10.2.1 Rio Grande do Sul's Legislative Website

At any given moment, a visit to the Rio Grande do Sul Legislature website will show an impressive amount of recently updated information regarding activities in the house, such as recently released reports, ongoing public hearings, public debates and publication of legislative studies. In other words, the Rio Grande do Sul Legislature website provides a dynamic space that reflects the institutional outputs of the house (e.g. voting results, commission reports) and the activities led by the different actors, ultimately leading it to provide outstanding levels of information. The amount of information provided already on the first page gives the user an impression of an extremely dynamic and ‘lively’ website.

But if these are important factors for determining the quality of Rio Grande do Sul's state website, in the Brazilian landscape, the website stands out not only for its provision of general information, but also distinguishes itself by presenting a broad set of innovative techniques in

terms of how information is conveyed (e.g. data visualization) and other technological functionalities, ultimately outscoring the majority of Brazilian websites – as we have seen in the first section – with regard to e-democracy traits.

For instance, while a minority (9) of Brazilian state Legislature websites provide the chance for users to subscribe by e-mail to receive news updates, through Rio Grande do Sul's website citizens can choose the type of information they want to receive by e-mail, where they are able to select according to various criteria: subject, political party, commission, and general news. The website also makes available a well produced video that takes the user on a 'virtual visit' of the Assembly building while the activities that are led by the house are explained in an accessible manner.

Also noteworthy on the website is the extent to which it provides information concerning the legislative action of MPs on an individual basis. The level of attendance of all the MPs is presented in one single table that allows the user to easily compare the attendance level among the different MPs in plenary sessions and committee meetings. Furthermore, if only a few other state Legislatures enable the user to see how votes were cast by MPs on particular issues, Rio Grande do Sul's website stands out for the ease with which users can access the information: votes can be found by date, sponsor, MP and type of legislation.

Also, Rio Grande do Sul's is the first state Legislature website to make use of the micro-blogging system Twitter which allows a more dynamic provision of information and interaction with users, indicating an early-adopter attitude on the part of the city administration with regard to social media tools.

Finally, and probably the most distinguishing feature of the Rio Grande do Sul Legislative website concerns its 'transparency portal'. This section provides users of the website with an impressive amount of information on the state Legislature's spending, outscoring by far not only Brazilian websites in this category, but also those from Spain and the United States. For instance, it provides users with explanatory texts, graphs and charts for the budget of the house, where the information on the budget is updated monthly. The Legislature also presents, on a monthly basis, a graph illustrating the difference between the expected and consolidated expenditures, as well as the salaries of the different political appointees and career civil servants. Moreover, detailed information is provided with regard to MPs' Cabinets' expenses

and their respective salaries. In this respect, a user can find for each MP monthly reports on per diems perceived, and refundable Cabinet expenses such as phone and gasoline bills, subscriptions to printed material and photocopying expenses.

Bearing these considerations in mind, Rio Grande do Sul's website appears somehow as the fruit of a certain 'patchwork'. Already on the first page, the user is overloaded with a variety of links, pointing the website user to the numerous different paths to be followed. Interestingly, within the very website, whenever navigating from one page to another, the user might experience the sensation of being directed to another website: in a number of cases the layout and functionalities of the several pages composing the website are extremely varied. This is the case, for instance, when navigating from the first page of the website to the radio section, the transparency portal or the MPs' information section: the sections vary substantially in terms of layout, fonts used, information positioning, hyperlink location and functionalities offered. In sum, Rio Grande do Sul Legislature's website appears to be constituted by a large number of loosely joined pieces that, despite their differences, offer the user more than the simple provision of general information. This website stands out from the majority of Brazilian websites by providing extremely detailed information in an accessible and user-friendly format, as well as by deploying different technological functionalities that significantly improve the 'e-democratic' potential of the website.

10.2.2 Minas Gerais' Legislative Website

Contrary to Rio Grande do Sul's website, which conveys to the user an impression of a lively website, the Minas Gerais website, from its first page, strikes the user with its visual sobriety. For instance, in the centre of the first page, where Legislative websites normally tend to post pictures linked to texts related to the activities of the Legislature and/or MPs, Minas Gerais' website provides only partial texts of recent news from the Legislature. Thus, at first glance, the website transmits the notion that it is privileging the provision of dense information rather than making it attractive for its users.

Indeed, Minas Gerais' Legislative website is extremely informative, being one of the few websites to provide, for instance, detailed information on committees, their agendas, minutes and publications. Specific search sections where users can search legislation by different criteria such as keywords, sponsors, date and type of legislation (e.g. constitutional

amendment, decree) are also provided. The Legislative website of Minas Gerais also allows its users to track particular legislation as it goes through the legislative process: by choosing a specific piece of legislation and providing a valid e-mail address, the user can be alerted by e-mail whenever there is a new development regarding the ongoing legislation that has been selected. As noted earlier in the Brazilian case, only a minority of Legislature websites provide citizens with more in-depth and dynamic information about the legislative process. It is important to remember that in the comparative analysis of the websites, Minas Gerais' website was the only one to achieve 100 points with regard to *provision of information on legislation* in the Brazilian context. In this sense, Minas Gerais' website appears as an example of Internet usage that prioritizes, to a certain degree, the provision of procedural information regarding the legislative process in a wealth of manners.

The provision of information on Minas Gerais' website, however, is not circumscribed to legislation *per se*. On the website, videos (live and recorded) about the plenary sessions (e.g. speeches) and other activities of the Legislature are streamed 18 hours a day. Also, given that the Legislature finances and supports a significant number of academic research projects related to legislative studies, the website presents a specific section with all of the research outputs (e.g. theses, articles) that have been financed or sponsored by the Legislature. Furthermore, the website provides links to several governmental institutions and offers extensive and detailed socio-economic information on each of the municipalities in the state. With regard to spending transparency, the Minas Gerais website presents specific information on the remuneration and benefits of MPs and administrative expenses of the Legislature as a whole.

Also noteworthy on the first page of the Minas Gerais website is the high number of links to 'micro-sites' related to events (e.g. public consultations, conferences) carried out by the House. Micro-sites, also known as 'hotsites', are quickly deployable and temporary pages within a website. Even though the various events announced on the hotsites possess different graphic identities (e.g. logos), all of the different micro-sites are inserted in a standardized template, which corresponds to the graphic identity of the Minas Gerais website. This draws attention to an interesting fact. While on a number of websites (e.g. Rio Grande do Sul) it is common to find heterogeneous designs and utilities as the user navigates through it, the internal pages of Minas Gerais' Legislature website follow a consistent and standardized format of web design.

Finally, it is important to underline aspects regarding the *usability* of the website and its information architecture – that is, the manner in which it enables its users to find the information they are looking for and to efficiently accomplish the tasks in which they engage. Minas Gerais scores highly in terms of website usability. In this respect, the website complies with the basic standards of usability, such as providing search tools and a website map. Nonetheless, Minas Gerais’ website information architecture conveys a certain sense that it is designed for sophisticated users who have prior knowledge of the legislative process or the internal organization of the Assembly. In this respect, for instance, news is contained in a section named ‘communication’, which leads to the activities that are carried out by the department of communication. In a similar vein, unlike a number of Brazilian websites that provide ‘transparency’ sections for users who might want to find out about MPs’ expenditures, in the case of Minas Gerais, such information is under the ‘administration section, once more reflecting the administrative structure of the House. In this sense, the Minas Gerais website appears as a ‘professional-bureaucratic’ website: its contents are dense, legal and procedural information is abundant, and functionalities (e.g. thematic searches by status of legislation) are designed in a manner that responds to even the most sophisticated user. Contrasting with this excellence, however, is the circumspect graphic identify of the website, extreme standardization, and sometimes counter-intuitive information architecture, which might render it unattractive to average users.

10.2.3 Rio Grande do Norte’s Legislative Website

As shown before, the website of the Rio Grande do Norte state Legislature appears as one of the least developed websites in the Brazilian context. The distinctive feature of the website is the absence of information and functionalities that are relevant for citizens to follow up on the actions carried out in the Legislature and to interact with the parliament and/or MPs individually. For instance, with regard to the Legislative committees, the only information available is a brief description of the mandate of the committees and the names of their members. In a similar manner, information about legal propositions is virtually absent. The value of search utilities with regard to legislation is next to nothing. For instance, when searching for ‘propositions’³⁴ over a period of one year, a message appeared indicating that the information will be available soon, which raises questions about the extent to which such a problem is to be addressed within any reasonable timeframe. In this respect, most of the

³⁴ Section ‘requerimentos’. Period between January 2010 and January 26, 2011.

information available about legislation is in the section ‘news’, which occasionally provides information on legislation passed. However, this procedure of providing information on legislation itself is far from systematic: it is rather randomly included in the website apparently in function of their journalistic interest or lack thereof.

Similarly, the information provided in the section ‘news’ in many cases is of doubtful relevance in terms of the contents of a Legislative website. Along with news about legislation and plenary sessions, the user can find ‘tips on how to enjoy the summer in a healthy way’³⁵, or ‘cultural events for the weekend’³⁶. In this respect, it is important to note that Rio Grande do Norte’s website dedicates a substantive amount of its contents to announcing cultural/entertaining events taking place in the region, where many of them are sponsored by the state Legislature.

Another distinctive feature of Rio Grande do Norte’s state Legislature website is the visibility that is given to MPs on an individual basis. For instance, in the top left-hand corner of the first page of the website alternating pictures present news about MPs and their actions, such as attending official meetings outside the parliament or participating in community events, where some of these events are not directly related to the mandate of a legislator³⁷. In a similar vein, at the centre of the website, a slideshow presents pictures of the different MPs and gives their names. In short, Rio Grande do Norte’s website shows a voluntary effort to provide visibility to the MPs in individual terms, to the detriment of other relevant information concerning their actions as legislators (e.g. propositions made, roll-call votes). Finally, significant visibility is also given to the Legislative TV and radio, respectively the television and radio channels owned by the state Legislature. In this respect, a great number of news items provided on the website are related to programs of these different means of communication. Links to the TV and radio stations are prominently displayed on the first page of the Legislative website, second only to MPs in terms of visibility.

To conclude this section, Rio Grande do Norte’s website can be characterized by the following distinctive traits. The first concerns the near total absence of information

³⁵ Section ‘news’ from 12/01/2011, “Saiba aproveitar o verao com saude”

³⁶ Section ‘news’ from 21/01/2011 “Momento cultural: programe o seu final de semana”

³⁷ For instance, on 21/01/10 this section of the website features news about the Speaker of the House participating in a local religious procession: “Presidente da AL na procissao de Sao Sebastiao”.

concerning the legislative action carried out in the Legislature, with very little information available, for instance, about the activities of the committees or about ongoing legislation. Secondly, it conveys the sense that a voluntary effort is taken to promote the visibility of MPs in a superficial manner, rather than focusing on their legislative action. Finally, the website appears as an instrument to relay information provided by other means of communication of the Legislature, notably the Legislative radio and TV stations. Overall, Rio Grande do Norte's Legislative website performs extremely poorly by any standards.

10.3 Rio Grande do Sul

10.3.1 Politics and Administration in RS State Legislature

The Polarization of the Political Context

A major characteristic of Rio Grande do Sul's (RS) 'gaucho'³⁸ politics is that of an extremely polarized political system (Noll and Trindade 2004). As noted by Grohmann (2006), analyses throughout Rio Grande do Sul's political history have always emphasized its bipolar characteristics, where opposition between forces is nearly absolute and no point of consensus can be found. In other words, a constant in Rio Grande do Sul's political history within the Brazilian context has been the existence of extreme antagonisms between two political groups. This condition has endured to the current context, where a strong polarization between those who support the Workers Party (PT) and those who oppose it is often evoked as the product of a unique tradition in the Brazilian landscape (Grohmann 2006). This historical feature is not unfamiliar to those working in the state Legislature and is often evoked by interviewees to justify the high degree of political polarization within the Legislature³⁹:

Rio Grande do Sul's political tradition is deeply rooted within us. The gaucho has a historic relationship of dialectic with his reality. You are either in favour or against it: republicans against monarchists, federalists against unionists, and even in football: you are either Gremio or Internacional. And today you have those who support the PT and those against the PT.

(Legislative Supervisor)

Within the state Assembly, the full establishment of a polarization between PT (left-wing) and the center-right political groups can be chronologically situated in 1999, when the PT became the largest party within the Legislature, holding 22 of the 55 seats of the state Assembly. It is important to note that the rise of PT as a major party within the state Legislature did not lead to a simple reconfiguration of political forces within the parliament: the functioning of the house and the distribution of internal political offices was dramatically changed.

³⁸ In this context, 'gaucho' refers to the inhabitants of Rio Grande do Sul.

³⁹ The terms Legislature, House, Assembly and Legislative in capitalized format are used interchangeably in this work.

According to the Internal House Rules, the Speaker's Cabinet should be formed every two years for a period of four years. Up until 1999, an informal agreement established that the largest party of the majority coalition was to name the members of the Speaker's Cabinet⁴⁰ in the first two years of the Legislature, with the second-largest party naming the Cabinet for the remaining two years of the Legislature. If the PT became the largest party, the left party coalition (PT and other minor left parties) still remained the minority group within the parliament, with 36% of seats against 64% of seats held by centre-right coalitions. Thus, the arrival of the PT as the largest party brought about a dilemma that until then had not been dealt with: how to accommodate the PT within the Legislative structure as the largest party while it was still a minority party. In the absence of any explicit internal rule⁴¹ to address the impasse, a new informal agreement was established: the Speaker's Cabinet would be nominated on a yearly basis, with the PT having the right to nominate the Speaker for one of the years and to participate in the Speaker's Cabinet under different functions for the remaining years. In other words, a system of political cohabitation was installed at the very heart of the politico-administrative structure of the state Assembly, with political forces being reconfigured on a yearly basis.

As we shall see later, the permanent renewal of the members of the Speaker's Cabinet constitutes an essential element for the understanding of the functioning of the administrative sphere of the House. Besides the chief duty of the Speaker's Cabinet to "conduct the legislative process"⁴², of particular interest to this analysis is his competence to administer the internal functioning of the Legislature⁴³. Among these competences, one can enumerate the organization of administrative services (e.g. creation of functions, resources allocated) and the promotions within the ranks of the administrative structure of the House. In the following section, we shall take a deeper look at the functioning of the administrative services of the Legislature as well as the implications that derive from its particular organizational setting.

⁴⁰ By 'Speaker's Cabinet' we refer to the politico-administrative structure composed by the Speaker of the House and the MPs nominated to his Cabinet (e.g. vice-chair, treasury).

⁴¹ With regard to the composition of the Speaker's Cabinet, the Internal House Rules only state that "as far as possible (...) the criteria of multiparty representation and proportionality shall be respected" (article 23, paragraph 1).

⁴² Internal House Rules, Article 30, paragraph 1.

⁴³ Internal House Rules, Article 30, paragraph 2.

The Administration of the Legislature: Between Politics and the Institution

Whereas in politics the distinctive feature of RS state's Legislature is its polarization, what stands out in its administrative structure is the cohabitation of highly professionalized career civil servants and political appointees. This distinction between two types of legislative staff is not simply for descriptive purposes.

Particularly in the context of this research, this differentiation constitutes a means to understand the extent to which administrative/institutional activities are affected by the system of political nominations within the state Legislature. Such an approach is built on the widely shared assumption by public administration scholars that appointment processes constitute *the primary locus of politicization* of public servants (Eichbaum and Shaw 2008), as we shall explain further. At this point, a distinction between these two types of legislative employees is relevant.

- Civil Servants and Political Appointees

Career civil servants are permanent staff members who are selected through highly competitive entrance examinations (public competitions) specific to the different functions (e.g. legislative specialist, IT engineer), where the grade obtained by each candidate is the only criterion for the selection process. Once admitted, these servants go through compulsory training in the *Legislative School*, which consists of a post-graduate program that is specific to the legislative action and knowledge of institutional practice, such as lawmaking techniques and Internal House Rules. This training is further complemented by a lifelong series of compulsory and optional courses.

Conversely, the integration of political appointees into the administrative body is free from formal requirements with regard to professional skills. Nominated externally by the individuals and parties composing the Speaker's Cabinet, it is political allegiance that plays the determinant role. This logic that underlines the appointments may or may not be counterbalanced by the criteria of professional qualifications.

The overarching rationale that relates the politicization of staff to their modality of entry into the administration is, at least apparently, trivial. Career civil servants, as a permanent and

professionalized body of the state Legislature, would have stronger incentives to guide their actions according to standard bureaucratic public service principles: career progress is possible to the extent that these principles are observed and translated into practice⁴⁴. Thus, as public servants in the strictest sense, Legislative career civil servants would be strategically inclined to adhere to values such as neutrality and efficiency in the delivery of services (Heclo 1977, Smith 1987, Pfiffer 1988).

Following this line of reasoning, the motivations and consequent strategies of political appointees could not be more different. Unlike career civil servants, appointees' positions are unstable and their prospects of permanence and progress are strictly attached to the extent to which the party or personality to whom they are allegiant is politically successful. As a consequence, political appointees are better off when adopting the strategy of using their position within the administrative structure as a means to favour the party or personality to whom they are allegiant and indebted. Bearing these differences in mind, one could expect different levels of attachment from the two categories of staff, with career civil servants privileging the 'institutional' sphere of the Legislature⁴⁵, and political appointees privileging the 'political' domain of action. In fact, RS's career civil servants will often underline their institutional commitment⁴⁶, given their character of permanence, as opposed to the transitory condition of political appointees. The explicit claim for a clear demarcation between the political and administrative spheres is a constant in the discourse of career civil servants.

I believe that the more permanent the staff, the greater the commitment to the institution. Because there are two types of staff: those who are circumstantial and those who are permanent.

(Legislative Supervisor)

⁴⁴ See Smith (1987).

⁴⁵ See Green, Lawrence and Keller (1993).

⁴⁶ Even though interviewees employ the term *institution* with nuanced meanings, all of them can be traced back to literature related to legislative institutionalization. The common denominator among these meanings refers to an ensemble of practices and outcomes that are universalistic as opposed to particularistic (Polsby 1968, Gungor 2003). Members from the political sphere will refer to institutions as the policy-making capacity of the organization as a whole (Polsby 1975), and the legislative outputs collectively produced, such as committee reports and public hearings. The term 'institutional commitment' refers to a zeal for the "value and stability" of the Legislature (Huntington 1968). Finally, the term is often evoked by career civil servants as the observance of "norms and standard operating procedures" (Hibbing 1999) and allegiance to core values of public services, such as professionalism and accountability, grounding their actions within institutions "vested with public purposes" (Green et al. 1993).

The commitment described above is contrasted by a widespread feeling among different observers that MPs – who ultimately decide who the political appointees are – tend towards a detachment from the collective outputs generated by the Legislature and its constitutional function of representation.

Each MP is only interested in his agenda... MPs as individuals have a very good relationship with their constituents, but the Legislative institution is divorced from society. And it is divorced because of this: because what the Legislature produces as such, collectively, goes unnoticed. The MP has become an individual mediator of his constituents vis-à-vis the Executive. What counts is his access to the Ministry. And the institution loses its representation function.

(Speaker of the House)

Considering that one of the major goals of legislators is electoral success (Mayhew 1974, Jacobson 1992) MPs' primary focus of attention is on an unmediated relationship with their constituents, whereas the promotion of the collective outputs generated by the Legislature as a policy-making body does not constitute a priority. The exception to this, as we shall see later, is when MPs assume the position of Speaker of the Legislature.

- The Politicization of the Administration: Checks and Balances

If we accept the arguments that have been previously laid down, an observation of the rough numbers of jobs held would lead us to believe that most of the administrative sphere is controlled by political appointees: the number of positions held by career civil servants and political appointees are 500 and 1200 respectively⁴⁷. Consequently, one could infer that the administrative structure of the Legislature would tend to serve as a mere instrument for the circumstantial preferences of dominant political forces at any given moment, with the institutional role of the Legislature being seriously jeopardized.

Nonetheless, such a hypothetical assumption contrasts with the observed reality, with legislative studies repeatedly showing Rio Grande do Sul's state Legislature as one of the

⁴⁷ <http://www.al.rs.gov.br/?Transparencia/quadro.asp>

most institutionally developed Legislatures in Brazil⁴⁸ (Santos 2001, Grohmann 2006, Nunes 2009). Of the explanations for this apparent paradox, the following one is of particular relevance for this research: if political appointees constitute the numeric majority of the staff body, formal rules determine that some key functions in the administrative body can be occupied exclusively by career civil servants. This is the case, for instance, for the position of the supervisor of the Legislative Department, a position that is at the heart of the functioning of the legislative process⁴⁹, where only career civil servants can take the position.

This does not mean, however, that administrative positions that are exclusive to career civil servants are immune to partisan politics (Eichbaum and Shaw 2008). This is so given the fact that the nominations of these very key positions are made by the Speaker's Cabinet, and are hence vulnerable to political interference. The practical consequence of this element leads us to rethink the strategic behaviour adopted by the Legislative career civil servant, who, up to this moment, has been seen under the optics of the virtuous Weberian bureaucrat. In fact, such a system of promotion of career civil servants – eloquently referred to as “gratified position” – leads to a nearly inevitable politicization of the servants' body (Pfiffner 1987, Peters 2001, Mulgan 2006). Unlike our previous assumption, the adoption of a visible political positioning by career civil servants might be a rewarding strategy (Eichbaum and Shaw 2008). In the case of Rio Grande do Sul's Legislature, both in professional and financial terms:

Gratified position is an internal promotion system which means that each career civil servant becomes, as an individual, an agent with some degree of interest in politics. (...) It's hard to believe that the career civil servant, within our structure, will never acquire a political positioning. I don't know if it's vicious or not, but many of your possibilities of earning more money are through political affinities, because of the gratified positions. Our current coordinator (career civil servant) is also a historical PT militant.

(Director of Journalism Division)

⁴⁸ Institutional development is understood, in this sense, as the organizational and institutional capacity to fulfill its role as a legislative body (Nunes 2009).

⁴⁹ Among its many attributions it administers and decides upon the procedural flows of legislative proposals – such as to which committees proposals will be directed – and provides essential support to committees and MPs on the elaboration of proposals with regard to legislative procedures and matters of constitutionality. As such, its influence goes beyond that of the procedural formality: it can play a determinant role in the odds that an MP project has of being approved or not.

Thus, political influence can be exerted upon the administration of the Legislature on two fronts: a) through the nomination of external political appointees and b) through the use of the mechanism of gratifying position for career civil servants. With regard to the latter, however, it is important to note that the system of gratifying positions finds limitations in terms of the technical skills necessary for a certain career civil servant to take up a function.

For example, the position of Legislative Supervisor plays a key role within the hierarchical structure of the state Legislature. Besides the task of ensuring the functioning of the legislative process, a major role of the Legislative Supervisor is that of personally advising the Speaker of the House. In RS's state Legislature framework, the political advantages that stem from the position of Speaker of the House (e.g. agenda-setting power) are highly dependent on the ability of the Speaker to apply the Internal House Rules in his favour. However, the effective application of these rules requires a degree of technical knowledge that is far beyond the reach of MPs: such expertise is provided by the Legislative Supervisor, traditionally a senior civil servant from the Legislative Support Department. It is the Legislative Supervisor's technical expertise that enable the Speaker of the House to opportunistically translate institutions (e.g. Internal House Rules) into political action (Price 1965).

In 2008, when PT MP Ivar Pavan took office as Speaker of the House, he could have, in theory, nominated any career civil servant as the Legislative Supervisor. In principle, the PT's optimal choice would be that of nominating a career civil servant with affinities with the party. Nonetheless, given that the PT's stronger political presence in the state Legislature was relatively recent, it did not have the time to 'train' career civil servants with the leverage to take up the position of Legislative Supervisor. The PT's final choice was that of nominating a career civil servant identified with an opposition party. This servant was, however, unanimously recognized by PT interviewees for his technical expertise on Internal House Rules and legislative process matters.

Ivar always says that the Internal Rules are an instrument of the minority. This is even more so now that we have the Speaker's office. If you talk to our Legislative Supervisor, he is not from the PT. He has links with the PMDB. But the Legislative Supervisor has to be a career civil servant, and we still don't have (PT) servants trained to take this office. And our Supervisor is extremely competent; he's been here forever.

(Head of the Speaker's Cabinet Staff)

As the example above shows, the existence of rules that impose the allocation of certain positions to civil servants combined with the practical requirements for the fulfilment of functions may lead to a constraint to the political usurpation of the administrative services. That is, under conditions such as the one exemplified above, between politics and expertise, the latter might have the upper hand. Consequently, if career civil servants have incentives for some degree of politicization, technical expertise also constitute a precious resource for a favourable positioning within the administration. Despite their political differences, the Legislative Supervisor describes the relationship between him and the Speaker as a professional one.

Here, as a civil servant... for instance, my opinion is extremely valued. The Speaker consults me on every issue that he judges important. Before anything, I am an expert on legislative procedure. (...)

(Legislative Supervisor)

This seemingly ambiguous strategy is particularly important given the level of extreme political competition within the Legislature: with different parties alternating in power, politicization constitutes a good strategy as long as it is moderated by a degree of professionalism that is acknowledgeable by all of the political counterparts. Or, as put by Hammond (1996:146), under such circumstances, career civil servants are better off when adopting a minimal level of “studied neutrality”. The acknowledgement of expertise under politically adverse configurations is, obviously, perceived as a rewarding experience.

Being nominated as a Legislative Supervisor despite my political affiliation is probably one of the most rewarding things that happened in my career.

(Legislative Supervisor)

Moreover, one should not disregard the role that the status of a career civil servant plays on their intrinsic motivations, instilling in them allegiance to the legislative institution and responsiveness to the broader public interest (Pfiffner 1988). The very existence of the Legislature is what, ultimately, justifies their *raison d'être*.

The civil servant is the one who has this procedural vision of optimization of the legislative process and outputs, based on constitutional principles such as probity and transparency. This preoccupation with the protection of the institution is taken up by the career civil servant. Politics is transitory, we stay here.

(Legislative Supervisor)

In addition, the extreme competitiveness of Rio Grande do Sul's system is, in itself, an incentive for parties not to overstretch the influence that they have over the administrative services. Given the yearly reconfiguration of political forces within the Speaker's Cabinet, any extreme politicization measures could easily be reverted to one's disadvantage in the very short term. In this respect, one could hypothesize that the unpredictability of the short-, medium- and long-term consequences of behaviour considered being abusive (e.g. nominations) are, in themselves, an incentive for actors such as parties to voluntarily restrain themselves (Crozier and Friedberg 1977, Gneezy and Rustichini 2000). The institutional capacity of the administrative services is the fruit of an equilibrium that is achieved through a fine balance between multiple interests, dynamically structured within the boundaries of formal and informal institutional arrangements.

10.3.2 Website Contents as an Expression of Political Elites Competition

The Legislature Website as a Resource for Increased Visibility

An essential element for understanding the process of technological enactment within the Legislature concerns the perception and attitudes of members of the political sphere towards ICTs and the state Legislature website itself, and the impact that this has on the administration of the House. The interviews with MPs of different political orientation, their respective personal staff (political appointees) and civil servants enable us to shed some light on this matter.

A first element that emerges from the interviews concerns the perception that MPs and their personal staff have of the Internet and the Legislative website. A relevant point – although unsurprising – is the fact that MPs and their staff are generally aware of a low degree of pervasiveness of Internet within the state population (about 20% of households in the state have access). Nonetheless, among different interviewees from the political sphere it is possible to identify a well-settled perception that, despite the low level of Internet access, the

contents provided by the Legislative website reach a much broader audience than is relayed by the traditional media:

The newspaper of a small town does not have the means to pay a journalist to be here following up the work of an MP. They barely have the means to exist. It is through the website that these newspapers follow up on what the MPs are up to.

(MP and former Speaker of the House)

Added to the traditional media that is perceived as a hub for disseminating content from the website, the information is also relayed by the TV channel and radio station owned by the state Legislature on a regular basis:

The 'Assembly Radio' and the 'Assembly TV disseminate the information that is on the website. They use the website as one of their primary sources, so these means of communication function as an intermediary between the website and the broader public.

(IT Division Staff – Web Unit)

The state Legislature website, in this respect, constitutes a unique source for leveraging the impact of activities to which MPs devote substantial resources: advertising, credit-claiming and position-taking (Mayhew 1974). Despite the fact that the potential audience of the website is perceived as low, this consideration is balanced by a perception that a multiplying effect is generated through traditional media. If the Internet is considered as an important means of communication as long as it is relayed by traditional media, this leads the interactive potential of the Legislative website – and the Internet in general – to often be ignored by the political sphere.

Whenever asked about the potential of the website as a means to increase interactivity with constituents and the population in general, MPs and their staff will often question the extent to which any interaction online could be considered as representative of general public opinion. However, this does not keep MPs' offices from being submerged with e-mails from civil society groups that engage in online campaigns around a certain issue.

We do get a lot of e-mail, in terms of organizations... So, for instance, when there was an issue about raising the minimum wage in the region, there they go: 50 organizations send you an e-mail with the same agenda, same subject, and sometimes even the same text.

(Member of Parliament)

A natural question that arises from this fact concerns the extent to which the responsiveness to these messages is related to the ideological positioning of MPs. In fact, among the different MPs interviewed, there was an apparent ideological cleavage in the importance that is given to e-mails received from civil society organizations. MPs from right and centre-right parties in their majority seem to qualify the political impact of these online campaigns as minimal.

Sometimes we don't even read these e-mails... This is not something that I have to respond to... my answer is through my vote, through my speeches. But they don't even want an answer I think... they just want me to know their position with regard to a certain issue...

(Member of Parliament, centre-right)

Conversely, MPs from the PT for instance, a party traditionally linked closely to civil society organizations, seemed to have a more nuanced attitude towards organized online campaigns.

The political effect of these emails... normally we know already what the vision of our base is. But I mean, organized groups are our segment of action... so we try to answer the e-mails. Maybe we will not answer one by one... but we can make one collective e-mail to all of them showing our position. But why the heck should I answer one by one individually. They send the same e-mail to all MPs' offices! (laughs)

(Member of Parliament, PT, left)

Nevertheless, it is important to underline that the rather weak political effect of e-mails received by MPs' offices was almost a constant across different ideological lines. In this sense, the perception of some difference among the parties remains based on anecdotal evidence and would need further research to be proven. In sum, what becomes evident from the interviews with the members of the political sphere concerns their perception of the potential of the Internet as a one-way communications device. This is particularly so given a

consideration that the Legislative website gains importance as long as its contents are relayed by the traditional media, thus reaching broader audiences. Under this perspective, the role of the Internet as a means for promoting interactivity with constituents is minored. The low levels of Internet penetration are often cited as an impediment to a more interactive usage of the technology. However, the extent to which increased access to the Internet would lead to increased interest on the part of the political sphere in interactivity remains purely hypothetical.

The Struggle for Visibility on the Computer Screen

Up until now we have reviewed the main issues relating to actors' strategies and institutional frameworks that should enable us to better understand how technology is enacted within Rio Grande do Sul's state Legislature. The latter section on the political sphere's perceptions of ICT completes the necessary understanding that informs actors' strategies, more particularly those from the political sphere. In this following section we shall look at specific issues that shed some light on how the different strategies adopted by the actors in RS's institutional framework affect the Legislature website, both in terms of its contents and technological features.

MPs and their staff hold the potential of the Internet as a means for unmediated interaction with their citizens in low esteem. However, they still perceive the Legislature website as an important means to reach broader audiences. If, in the light of these perceptions, we accept that the website constitutes a strategic resource for the competing forces within the Legislature, it is pertinent to question the extent to which – and how – political actors try to reap the benefits from it and what the consequences are of this in terms of the contents provided by the website. By contents we refer to all of the information that a user can access when navigating on the Legislative website and the manner in which this information is presented and organized⁵⁰. A hypothesis that could be formulated is that, in a context of fierce competition between different parties (and individuals), actors would compete to influence the content that is displayed on the website as a means to increase their visibility.

⁵⁰ As opposed to contents, we refer to the technological features of the ensemble of technical functionalities (e.g. email updates, Twitter accounts) that make part of the website. Such a distinction – that is put forth for analytical purposes only – is more nuanced than it seems when put into practice. For instance, the way data is conveyed (e.g. graphs/charts) and its positioning is by no means fruit of a neutral process, playing an important role in the way contents are perceived by users (Perez 2009).

In the case of a state Legislature website one can expect that the most visible content is that which is available on the initial page of the website. Hence, the privileged *locus* to verify if competition for visibility among the different parties exists – and if so, how it is structured – concerns the sections of greatest visibility on the initial page of the website. In this sense, a quick overview of some of the contents and the rules that guide the information architecture of the website is required.

The most prominent section of the site and the one that is often relayed by traditional media – thus with a broader outreach – is the ‘general news’ section, which occupies roughly 75% of the initial page layout. Informal rules state that the general news section should be dedicated exclusively to the provision of ‘institutional’ information. Even though there is no clear definition of what *institutional* consists of, three understandings of the term are recurrent among the interviewees when considering the eligibility of contents for this section.

The first understanding of *institutional* refers to news that does not privilege individual MPs, rather relating to outputs that are collectively produced by the MPs, such as public hearings, committee decisions and passed legislation. Another dimension of this understanding refers to the actions and statements from the Speaker’s Cabinet, such as speeches by the Speaker, signings of institutional agreements and official visits received by the Cabinet. A third understanding of what *institutional* consists of is more loosely defined: it refers to debates and speeches by individual MPs that take place during plenary sessions which are considered to be ‘of general interest’ or ‘hot issues’ at any given moment. News that refers to MPs on an individual basis are supposed to be placed in the ‘Cabinet News’ section, which is vertically placed on a bar discretely located on the top right side of the initial page of the website.

Content for the general news section is produced by journalists under the responsibility of the supervisor of the Communications Department. The Communications Department, based on the services that it provides and its nomination policies, has a unique vocation to be a politicized entity within the organizational framework. With regard to the services that it provides, besides being responsible for generating website contents, it is also – among other things – responsible for running the Legislature’s TV and Radio stations. In other words, it is the department in charge of promoting the visibility of the Legislature, an element of obvious interest for the competing political forces.

Concerning the nominations within the structure, it is the department most open to nomination of political appointees. For instance, unlike the Legislative Department Supervisor position, which can be occupied exclusively by career civil servants, the Communications Department position is occupied by political appointees. Under each Department Supervisor, the immediate hierarchical function is that of Division Director, a position that has to be exclusively occupied by career civil servants across the different departments. The only exceptions to this rule are the two divisions within the Communications Department: Journalism and Communications Divisions.

I'm not a career civil servant; I'm a political appointee. The Directors of the Journalism Division and the Publicity Divisions are the only two positions of Division Director that do not require you to be a career civil servant. So myself and the Publicity Director, we are the only Directors who are political appointees.

(Director of Journalism Division)

If the generation of content for the website is the responsibility of the Supervisor of the Communications Department, on a day-by-day basis it is the Director of the Journalism Division who runs the activities, such as assigning journalists to cover the different events taking place within the House and deciding on the visibility that is given to the different contents that are fed into the website. The fact that the Director of the Journalism Division – as well as his Supervisor – is a political appointee with discretionary power on the visibility of contents is not free from implications. This is particularly so because, as we have seen before, individual MPs' debates and speeches that are considered by the Journalism Division as being a 'hot issue' or 'of general interest' fall into the news section of the website, hence benefiting the visibility of one MP – or party – over another. The suspicion of political favouritism is a permanent source of conflict between the members of the Communications Department – who are appointed by the Speaker's party – and opposition parties.

Of course we have fights over that! All the time! It is my routine. I try to explain to the people from the opposition parties all the time the criteria with regard to what falls into institutional news or not. But they ask me: "where is this written?" Then we say "these are the rules", but the problem is that these rules are not written anywhere...

(Director of Journalism Division)

The consequences of these permanent conflicts are twofold and play a determinant role in how the content is controlled and how the Internet is perceived. With regard to control, whereas one could hypothesize that the discretionary margin of those responsible for the contents of the website could lead to some favouritism, such actions find their limits in the virulence with which opposition parties react to it.

Sometimes one can say that there can be some kind of favouritism... yes, it is possible. But the guys react. They are extremely vigilant. For instance, the other day there was an opposition MP aide that spent lots of time going through online articles. He wanted to know if we were adding pictures⁵¹ or not to the articles when they concerned their party. He went over one by one (...) I mean, if the opposition finds a problem... the guys are super paranoid, they go completely nuts! (laughs) At the end of the day it is not worth politicizing the usage of the website.

(Director of Journalism Division)

Such a watchful attitude by the opposition and the extreme reaction that abuses might generate serve primarily as a tacit mechanism of control, providing a check against an unrestrained politicization of the contents provided online. The practical consequence of this is by no means negative. The objective of the Legislative website as a means of communication for institutional contents and contents of interest to the general public, while avoiding political favouritism, is dialectically achieved.

Secondly, although no less importantly, interviewees often point out another outcome of such a situation: it drives the attention of the political sphere to the Legislature website, increasing its perceived importance within the institution.

Nobody will tell you it like this, but the truth is... all this paranoia is good. It is good and it is even flattering for us (laughs). They pay attention to what is on there! While everyone is looking at the website nobody will start to do political campaigning with it, and at the same time people are looking at it, they are reading it, they see it as important! It's much better than if they just didn't care... in here, if they don't care about something, it dies. Just like that.

⁵¹ Articles with pictures are considered to be more attractive to readers.

(Journalist)

Also, it is important to note that even if content is considered to be institutional it does not mean that parties or MPs do not gain visibility from it. For instance, most news displayed on the site about collectively produced outcomes (e.g. committee reports, public hearings) is attached to the names of those involved, such as which MP took the initiative of carrying out a public hearing or who presides over a certain parliamentary committee. Thus, as a consequence of the perceived importance of the website, different sectors of the House constantly provide content to be posted online, in a climate of near competition, for instance amongst the parliamentary committees. As actors realize that unquestionably ‘institutional’ contents are given a free pass to higher visibility on the Legislature website, a virtuous circle of generation of this type of information is achieved.

Everyone wants to be on the website. If there is one event, if there is a public hearing, anything, they tell us right away. When it is institutional stuff, a debate, a public hearing... we better do it quickly. Otherwise they will call you first thing in the morning to know why it is not there! But it is good you see, we cannot complain that we don't have contents. We don't need to run after people to get contents. On the contrary, sometimes it is us who have to run away from them! (laughs)

(Journalist)

Based on the evidence presented, the existence of a large amount of content on the website and the low politicization of that content can be – at least partially – explained by the competition among actors and their vigilant attitude towards the content that is provided. Also, such an environment leads actors to respect some ‘rules of the game’ which, albeit unwritten, lead those from the Communications Department to privilege the provision of institutional over politicized content. Finally, the fact that attention is driven to the website generates a virtuous circle where a growing amount of content is provided by the different sectors of the House, consequently leading to a wealth of information provided to the website users. The wealth of content on the Legislature website becomes, in this sense, a result of the competition of political elites.

10.3.3 The Website as a Mixed Expression of Internal Needs and Politico-Bureaucratic Interactions

Part of Rio Grande do Sul's level of website development is linked, obviously, to the rough amount and quality of the information provided, i.e. its content. However, one of the most distinctive features of the RS website concerns the manner in which it is provided, for example allowing users to sort votes by MPs or visualizing graphs of the state Legislature spending. Moreover, there is an ensemble of functionalities (e.g. a Twitter account, personalized e-mail alerts) which, rather than being strictly related to contents, concern innovations that are better conceived as part of the technological features of the website⁵². But what are the sources of innovation⁵³?

Before carrying out our analysis, it is important to point out that if the content of the website is a responsibility of the Journalism Division, the maintenance and development of the website itself is ensured by the members of the IT Division, which is composed entirely of career civil servants with strong professional backgrounds in ICT. As we will see in the following sections, such a fact is not free from implications for the way the website is conceived.

Bearing this observation in mind, two sources of innovation that eventually impact the final design of the website have been identified. The first concerns the use of ICT as a means to primarily address internal needs. In fact, much of the innovation that is integrated on the website is the fruit of early techno-organizational innovations that had little or nothing to do with a normative concern in a strict sense: the promotion of transparency, for instance, is not considered *a priori*. Secondly, the permanent shift in the configuration of the Speaker's office and the consequent change of directives with regard to the website development constitute a permanent – albeit disruptive – source of innovation.

The IT Division Career Civil Servants: Generalities and Specificities

The technological enactment that takes place in RS state Legislature and the overall characteristics of its website cannot be understood without assessing the values and attitudes

⁵² For an accurate distinction between 'features' and 'contents', see footnote 46.

⁵³ Innovation is here defined as the "adoption of an idea or behaviour that is new to the organization" (Hage, 1999).

of the IT Division. As discussed earlier, the content of the website can be understood as the expression of political competition mediated by institutional settings (e.g. formal and informal rules). However, particularly with regard to technological features of the website and its structure, the role of IT Division staff is central for the understanding of its overall design. Therefore, in this section we take a closer look at the IT Division, to some extent a *sui generis* organizational unit within the RS Legislative administration.

A first element identified in the interviews with IT Division career civil servants is the values and attitudes they share with other peers from the administration. From this perspective, IT Division personnel, as career civil servants, on a discursive basis are not differentiated from others with regard to their intrinsic motivations towards the public interest (Green et al. 1993), often proclaiming their attachment to public service principles such as transparency, neutrality and efficiency in the delivery of public services (Hecló 1977, Smith 1987, Pfiffer 1988). In fact, one could hypothesize that the allegiance to such values and principles is even stronger amongst the members of the IT Division, considering that it constitutes one of the few divisions that is exclusively occupied by career civil servants, leading to an hermetic environment where common beliefs are more likely to be mutually reinforced. Even though such a fact remains to be verified, two other characteristics specific to the IT Division are worth mentioning.

A significant peculiarity of the IT Division is the continuous expansion of its workload due to the increasing pervasiveness of technologies in the routine work of MPs' offices. Formed entirely by highly qualified IT professionals (e.g. computer engineers), the Division is the organizational unit of the administration responsible, among other things, for providing access to equipment and support services for the different sectors of the House, including MPs' offices. Whereas the administrative sphere of the Legislature seems to have gone through a smoother process of technology adoption over time, MPs and their staff appear to be a large group of late adopters of technology whose demands are suddenly overwhelming.

In fact, as described by most interviewees, their daily use is not any different from that commonly found in other organizations: MPs and their large staffs⁵⁴ rely increasingly on ICTs

⁵⁴ Each MP office can nominate up to 11 full-time staff members, political appointees paid by the state Legislature. Just for illustrative purposes, in the UK House of Commons the average is 4.5 staff members per MP. Source: <http://www.juryteam.org/p14-reduce-mps.php>

to perform what can be considered as routine office tasks, such as editing texts, preparing presentations, reading the news and sending e-mails. The daily use of ICTs by MPs' offices is described by politicians and their staff as the mere result of a natural process of technological diffusion within organizations.

It's not like we woke up one day and said "let's have computers". It is a natural process, as for any other business; technology evolves and we follow it... People may say that the public sector is archaic, but we are not that bad! It would be weird if we were still using typewriters in the daily work of the office, not the contrary.

(Member of Parliament)

However, if technological diffusion is perceived as a natural process by political stakeholders, in organizational terms the consequences are by no means negligible for the IT Division. The ever-growing pervasiveness of ICT within the daily work of MPs' offices makes their work increasingly dependent on the services of the IT Division. Staff members of MP offices are requesting the Division's help more and more, from support on how to perform the most menial ICT-related activities (e.g. formatting a text or an image), to accessing ICT equipment and services, such as the provision of extra computers and supplementary Internet connection points to the MP offices. Particularly with regard to support concerning ICT usage, the members of the IT services perceive such demands as abusive and, to some extent, degrading given their level of qualification.

Our internal joke is that everything that is plugged into electricity is the responsibility of the IT Division. I have felt this increasing tendency where every time someone says: "I can't solve this" someone else says "call the IT Division", and I don't have enough people to do that. (...) It has already happened that MP office people called my office to ask me about PowerPoint! And that is not what I do! It's only a matter of time until someone gives me a handwritten paper and asks me to type it in Word format!

(Director of IT Division)

Sometimes the requests... how can I explain it to you...? It is as if I called the engineer who was responsible for the project of this building to change a bulb in my office.

(IT Division Staff)

Nonetheless, the frustration generated by these demands is tempered by a perception that such a situation is the fruit of a growing importance of ICT in the House and, as a consequence, of the IT Division.

Another thing is the computers, they ask for more all the time. (...) But I mean... we have to understand... what I have noticed is that the IT Division in practice covers more and more domains of activity in the House because more and more people, and processes, are using computers, Internet (...) And this cannot be too bad for us...

(Director of IT Division)

This growing importance of ICT tools for MPs and parties to carry out their routine activities renders privileged access to the IT Division increasingly strategic for the competing political forces. The implications of this matter shall be discussed in a later moment. Here, it is sufficient to underline that the demand for ICT equipment and support is higher than the supply, thus leading access to these scarce services to be perceived as an important resource for the daily work of MPs' offices, and as a burden for members of the IT Division.

A second characteristic that is exclusive to the members of the IT Division is their concern for the interoperability⁵⁵ of information systems. The lack of interoperability and the existence of parallel systems are described by interviewees from the IT Division as one of the most undesirable conditions for conducting their activities.

On one occasion when we were implementing the automation of legal procedures there were at least six parallel systems running in the different committees. In these case it is nearly impossible. We are information systems architects, for us this is the worst thing that can happen.

(IT Division Staff)

To the extent that ICT systems are not interoperable, supplementary work is necessary on the part of members of IT Division in order to ensure that the overall communication amongst the

⁵⁵ In this context, we refer to interoperability as “the compatibility of two or more systems such that they can exchange information and data and can use the exchanged information and data without any special manipulation” (Taylor 2004:369).

different systems takes place and that the sustainability of the ensemble can be guaranteed. Such a fact, rather unappealing to non-experts in technology – hence politically irrelevant – is at the core of the agenda of members of the IT staff. As we shall see later, such a concern becomes an essential element for understanding the behaviour routinely adopted by members of the IT Division in the exercise of their duties.

To conclude this brief section, three main elements are to be retained with regard to the IT Division. The first concerns the high degree of technical expertise possessed by its members, all of them career civil servants who do not hesitate to state their value as such. The second refers to the increasing workload of the Division as a result of demands from the political sphere, whose trivial requests are most often perceived as degrading by the Division staffers. Third, a major concern for the interoperability of systems is a unique trait of the IT Division. In the next sections we will attempt to render evident how these characteristics inform the actions taken by the IT Division staff in the process of technological enactment.

Addressing Internal Needs: Sources of e-Democracy Innovation

The RS state Assembly's intensification of ICT usage can be tracked back to the state Constitutional Convention in 1989 that followed the democratic transition in Brazil. These first intensive usages were means to address hurdles linked to institutional and organizational traits of the state Legislature. For instance, in Brazilian Legislatures voting procedures can be roughly divided into two types: by acclamation and roll-call voting. In the first, votes are counted by the Speaker, who observes the rough number of parliamentarians who remain seated (in favour) and those who stand (against). In this case the voting process is quickly concluded, although MPs' individual votes are not registered. In contrast to acclamation voting, in roll-call voting, MPs' votes are registered on a one-by-one basis, making it clear how each of the MPs has voted.

Rio Grande do Sul's Internal House Rules, however, present a unique feature in the Brazilian landscape: voting by acclamation is not allowed⁵⁶. This requirement for roll-call voting combined with the great amount of voting that was taking place during the Constitutional

⁵⁶ Another exception in the case of Rio Grande do Sul state Legislature is that abstention votes are not allowed. Interviewees often relate this peculiarity to the traditional context of political polarization, where MPs are expected to be clearly pro or against any given issue.

Convention rendered the process extremely slow. In this respect, the administration decided to implement an electronic voting system⁵⁷ to accelerate the Constitutional Convention proceedings.

We didn't even have electronic voting at the beginning of the Constitutional Convention. It was a need that came from the constitutional process. We had roll-call voting only. There were thousands of propositions.

(Former Constitutional Convention MP)⁵⁸

All of the projects were voted on individually. There is no vote by acclamation here in our state Legislature. As far as I know, our system of electronic voting was the first one in Brazil, because it took us ages to call the MPs name by name. And each vote had to be done twice to make sure the counting was correct! (...) We called an external provider and the system was up and running within one week. Voting started to take 10 seconds only.

(Former Legislative Constitutional Director – Career Civil Servant)

Moreover, the process of constitutional drafting in Rio Grande do Sul, considered to be extremely open to the participation of civil society, led to an even greater number of propositions to be considered. Once again, the use of ICT was perceived as a means to address the unprecedented workload the Legislature was facing:

Our constitutional process was based on the principle of citizen participation. Not only could the MPs present proposals, but every organization with 200 signatures could present a proposal to be inserted in the Constitution. It was a huge volume of information to deal with (...) At some point I realized: if we don't use informatics to manage this thing, we are screwed. (...)

(Former Legislative Constitutional Director – Career Civil Servant)

⁵⁷ Free translation from the original in Portuguese “Painel Eletrônico”, which literally translated refers to the electronic panel that displays the number of votes by MPs.

⁵⁸ Source:

http://www.riogrande.com.br/rio_grande_do_sul_politica_celso_bernardi_entre_as_funcoes_que_me_orgulham_esta_a_de_ter_sido_deputado_estadual-o160477-en.html

If addressing perceived internal problems appears as the first driver for ICT usage within the state Legislature, the same can be said for many of the innovations within the state Legislature website. For instance, since 2008 the Legislative website has included a unique feature in the Brazilian context: a particular section of the website is dedicated to providing the user with the agenda of the Speaker's political activities (e.g. meetings, official missions). Such an innovation, which could be perceived as a measure of transparency of the actions of the official representative of the Legislative branch in the state, actually finds its origins in practical concerns.

The Speaker of the Assembly is often invited to attend public events across the state to represent the state Legislature (e.g. agriculture fairs, city birthdays). Nonetheless, the Speaker is not able to respond to all of the demands, whereas MPs are eager to replace the Speaker and to officially represent the state Legislature at events that are related to their constituents.

This is what happens: the Speaker cannot accept all of the invitations for the events. But the MPs like the prestige of replacing the Speaker and officially representing the Assembly. But this is dependent on the constituency of each of them: the MP of a certain city is interested in the Grape Fair but is not interested in attending the Cattle Show. So there is also this segmentation of interests of the different MPs.

(IT Division Staff, Web Unit)

Traditionally, the management of nominations for 'representations' was dealt with mainly through a series of never-ending phone calls, with MPs' staff permanently calling the Speaker's office to ask which events he was attending or not, in search of opportunities for officially representing the Legislature. Such a system of distribution of representations was perceived as extremely time consuming for both sides. With the arrival of a new Speaker in 2008, the IT Division was asked to find a method of rendering the process more efficient.

So all the time the MPs wanted to know what events the House was invited to participate in, and would call the Speaker's office non-stop to know what was happening. So there was a difficulty in managing this representation system. So this was the demand we received: a system to manage the responses to the invitations, so that when the Speaker could not go, another MP could come and take it. That is, a better way to distribute the different events among the MPs.

(IT Division Staff)

The solution devised by the IT Division was simple: to create a system where every MP office computer linked to the internal network (i.e. Intranet) could see which events the Speaker was attending or not. However, this would not solve the problem for MPs who were not physically present at the Assembly, since the Intranet could be accessed only locally. The simplest solution considered by the IT staff was to put the Speaker's agenda on the website. The Speaker of the House, himself, does not hesitate to praise the solution given by the IT Division:

It solved a problem for me because it made the external representations easier. Before you had to waste a week to find someone to represent you, and MPs love to represent the Assembly. Sometimes there were many events that an MP would like to be present at and this would not happen, and the House would not be represented as well. Actually yesterday an MP from the opposition came to me and said "look, even when the Speaker of the House was from my party I did not get as many representation opportunities as I get now". And this happens now because we have a system now that enables us to do that.

(Speaker of the House)

Besides making the Speaker's agenda remotely accessible to the MPs and thus rendering the external representations system more effective, the IT staff perceived such a solution as one that was simultaneously easy to achieve and that increased the amount of information provided to the general public. Conversely, the Speaker of the House, in addition to having an internal need addressed, can capitalize politically on the innovation by promoting it to the external public as a measure to reinforce transparency.

In fact, the example above is illustrative of a general trend that can be identified in the Rio Grande do Sul Legislature's technological enactment process and its impact on the Legislature's website. A considerable number of e-democratic traits that are found on the website actually would not exist if they were not related to ICT usage as a means to address internal problems.

For instance, in terms of rendering MPs' individual votes public and accessible, Rio Grande do Sul's Legislative website is by any means the most effective one in the Brazilian context. By simply clicking on an MP's profile, users can see all the propositions and votes that have been cast by the MPs individually. However, Rio Grande do Sul's system was easily available online due to a very early system of automation of the registering of roll-call votes which, as we have shown, was implemented as a means to render the voting process faster and not as a means of rendering the state Legislative more transparent.

Once these systems are in place internally, the marginal effort required to provide the information online is minimal. Simultaneously, as we have shown earlier, career civil servants possess a non-negligible degree of attachment to public service values such as transparency and accountability. In this context, the pursuit of an agenda towards the public interest, such as the provision of information to the general public, comes as a byproduct that members of the IT staff – as career civil servants – seek to promote whenever an occasion is identified.

To put something that is from an internal environment (i.e. intranet) to an external environment (i.e. Internet) doesn't really imply extra work for us. So we asked the Speaker's Cabinet: "do you want us to put it online?" We try to stimulate them: "you can consult the agenda from home, if you are traveling". So this is how we work: we always try to respond to the objective of providing more information online to the general public at the same time that we respond to an internal problem.

(IT Division Staff)

Last, but not least, it is important to note the role that rules, as institutions, play in such a process. Rio Grande do Sul's Legislative website is the only one in the Brazilian context where *every* vote that is cast can be linked to an individual MP. While being the fruit of an early technological process, such information is only available given that it is the sole Legislature where Internal House Rules do not allow voting by acclamation. The exact same technological system in other state Legislatures would not provide an equivalent amount of information given the high number of votes by acclamation that take place. In other words, if technology in this case is a means to convey transparency, the extent to which transparency is conveyed is an institutional matter.

To conclude, it is evident that some of the innovations found on Rio Grande do Sul's state Legislature website are, to a certain extent, better understood as late spin-offs of early innovations that had little or nothing to do with normative concerns in their origin. Rather, these innovations were first put in place internally as a means to address organizational challenges that are inherent to dynamic Legislatures⁵⁹ such as that of Rio Grande do Sul. Therefore, what could be perceived as an institutional change towards a more e-democratic agenda is neither the exclusive product of deliberate actions oriented by normative issues, nor the fruit of a "blind evolution" (Dahl 1998:21) of the Legislature as such. Rather, as put by Olsen (2009:6) innovation is better understood if conceived as the result of a "shifting mix of deliberate design and adaptive behaviour". Thus, the "adaptive behaviour" of career civil servants can be understood as their efforts deployed to address objective organizational/institutional needs, whereas their deliberate actions towards normative concerns are rather subsequent actions taken when an opportunity for addressing a broader public interest (e.g. increased information for the public) is perceived.

Unbridled Innovation: The Disruptive Effects of Political Change

As previously described, even though the Internal House Rules of the RS Legislature prescribe that the Speaker of the House should have a two year mandate, in order to accommodate the divergence of political forces, an informal agreement among the parties established that the politico-administrative hierarchy of the Assembly (i.e. Speaker's Cabinet) will change every year. This yearly reconfiguration of the Speaker's Cabinet most inevitably comes with a reallocation of political appointees and career civil servants within the administrative structure of the Legislative. Such a repositioning is not without effects on some of the administrative priorities of the House, and members of the administration tend to experience these changes as rather disturbing events. The same is true for those who work in the IT Division, with its members describing such changes as rather undesirable occurrences, as positions shift and the continuity of certain projects is compromised.

The average is one Cabinet per year. This always has an impact. And it is an impact that is not good for the House, because people come with different ideas and the aspect of continuity is jeopardized. Many times a project is imploded, a project that was not yet well settled. People are not there to explain the reasons for the project

⁵⁹ See Santos (2001), Grohmann (2006), Nunes (2009).

anymore, and then there is a rupture. Then we have to renegotiate things all over again, explaining again a project, its value. It is obvious: the less stable it is, the worse it is for us.

(Director of IT Division)

Such a disruptive effect of political changes is particularly felt given that different MPs taking the position of Speaker, more often than not, will want to ‘leave their mark’ on the administration. Interviewees relate the enthusiastic and proactive attitude of Speakers towards the implementation of new projects as a byproduct of the political polarization. For instance, the ‘transparency portal’, a unique feature of the Legislature website, is often explained by interviewees as a byproduct of the competition among different parties that take the position of Speaker. This strongly resonates with the literature that associates transparency with political polarization (Alt et al. 2006, Osorio 2009). Soccer metaphors, not unusual in the Brazilian narrative, are often used to describe the situation.

I think that in Rio Grande do Sul, all these innovations, the ‘transparency portal’... you see this level of polarization, almost as a great derby, this helps. (laughs). I do think this competition is a factor that plays a role for transparency in the end.

(Head of Cabinet)

Interviewees from the IT Division are not indifferent to this. Apart from the discontinuity of structural IT projects, frequent remarks are made regarding the fact that the change of Speaker often comes with some change in the Legislative website. These demands for changes are perceived as having a disruptive effect: the term ‘innovation’ assumes a negative connotation.

Innovation? Innovation happens every year when we have a different Speaker. Everybody wants to leave their mark, and this is extremely harmful for us, there is a problem of continuity.

(IT Division Staff)

Many of the innovations that are found on the website can be situated in moments that immediately followed a new reconfiguration of the Speaker’s Cabinet, as was the case of the Speaker’s agenda going online. A fair number of innovations on the website start with a renewal of the ‘Speaker’s Section’. For instance, during the period 2008/2009 the Speaker of

the House requested a more interactive page, providing facilities for online opinion surveys and chats between the Speaker and the users. At a second point in time, these options were extended such that every MP could include the tools on their websites.

In responding to these demands, there is an apparent incoherence in the behaviour of members of the IT Division. First, as far as possible, whenever addressing internal problems members of the IT Division will consciously try to further the public good. This is done, for instance, through rendering external the information that is internally available (e.g. the Speaker's agenda). Nonetheless, such behaviour contrasts with attitudes that are indicative of some resistance to website innovations that are proposed by the political sphere itself. How can we explain this rather counterintuitive behaviour?

A first reason for this seeming resistance is the fact that, if the arrival of a new Speaker is synonymous with new projects, it is also associated with a lack of project continuity. Moreover, as has already been noted, the capacity of the IT Division to respond to demands is far from being unlimited. This is particularly so given the increasing demands from the different sectors of the House for support services from the IT Division.

Also, one could hypothesize that putting information online that is available internally demands little effort on the part of the IT Division. Conversely, the creation of new technological functionalities does imply more substantial endeavours. Given the environment of work overload, this would explain the attitude of IT staff towards innovation. IT Division staff members, considering their difficult circumstances, are only willing to address the broader public interest when it does not imply significant supplementary work.

Nevertheless, this combination of overwhelming demand for services and the disruptive effect that political changes have on the continuity of IT projects only partially explains this negative attitude towards requests for changes to the website. A fuller understanding of this behaviour emerges if one takes into account the major concern that is exclusive to the members of the IT Division: the interoperability of information systems. Thus, the demands for service support and permanent changes in ICT priorities reduce the time available for the IT Division to dedicate to ensuring the interoperability of systems.

We do not have time to make interoperable and reusable systems; internally we are dealing with the provision of technical assistance, making all these technological innovations that we are asked to do... But it is necessary to think about interoperability!

(IT Division Staff, Web Unit)

To the extent that interoperability problems are not dealt with, IT staff members' time is also dedicated to the management of the consequences of such a situation. In the absence of time that can be fully committed to addressing problems in a definitive manner, punctual interventions are necessary in order to deal with the issues that arise from the lack of interoperability. These interventions, although punctual, once considered globally are perceived by the IT staff as extremely time-consuming.

Instead of developing new things that would solve very serious problems, we spend an awful lot of time fixing old things that are technologically obsolete.

(IT Division Staff, Web Unit)

Members of the IT Division will picture the situation as a vicious circle. As each year new demands are made and pressure for quick changes is felt, temporary technical solutions are implemented. The Portuguese word *gambiarra*, which roughly corresponds to a “technological make-do” (Rosas 2008), is often evoked to describe the response given to the challenges that are imposed upon the IT staff.

And you know, every year it changes. A new person comes in and says “no, this should not work like this; this should work in another manner”. This changes the way the systems operate, and generally these changes have to happen quickly, and the results are, you know, the famous ‘gambiarra’.

(IT Division Staff)

This never-ending process of technological improvisation is described as unsustainable in the long term. Actions taken by the IT Division begin to seem provisory and the potential imminent collapse of the systems is a constant in the narrative of interviewees. Thus, the situation of the website – and the ensemble of IT systems – is portrayed using the image of

Frankenstein: the dangers of pushing something beyond its capabilities are rather unpredictable.

You take an AM radio and now transform it into a radio transmitter. Then you have to plug things into it, and you have to make it work in this new manner no matter what it takes: because it's been requested it has to be done. It will not be long until we have a Frankenstein! It will not be long until it collapses, for heaven's sake! At some point it will be difficult for us to do something in the system.

(IT Division Staff, Web Unit)

Nevertheless, it would be rather naïve to consider that the IT staff do not develop strategies to counter what they perceive as perverse effects that derive from political reconfigurations and the consequent changes in ICT directives. The fact that career civil servants possess different policy preferences (e.g. interoperability) from their political principals (e.g. short-term innovation) is not a novelty for political science and public administration literature (Aberbach and Rockman 2000, Golden 2000, Gailmard and Patty 2007). In a similar vein, the superior technical expertise of bureaucrats vis-à-vis their principals is a constant in the literature on modern democracies (Huber 2002). This rather classic collective action problem, albeit overwhelmingly underestimated in e-democracy studies (Chou 2008), is a central element for the understanding of the technological enactment that takes place in Rio Grande do Sul state Legislature.

Resisting Political Pressures: Technical Expertise as a Resource

It is almost commonplace to state that bureaucrats' technical superiority constitutes a resource for public servants to pursue their goals in the face of undesirable demands from the political sphere (Crozier and Friedberg 1964, Moe 2005). The case of the RS Legislature is no exception. As we shall demonstrate, the IT Division staff will mobilize their technical expertise whenever possible in order to pursue their agenda.

We have previously shown that actors from the political sphere are vigilant with regard to the contents of the website, which keeps incumbents from overstressing their temporary capacity to use the website in their favour. This overall awareness of the contents of the website on the

part of the political sphere can be contrasted with its major lack of knowledge of the technical aspects of ICT.

The MPs for sure have no idea about the functionalities of the website, the technological possibilities.... What they have internalized – and very well – is to follow up on the contents, the news that are published; they know that their projects are in the website. But it does not go any further than that.

(Director of Journalism Division)

As a consequence, the demands for innovation that come from the political sphere inevitably share one common element: their generality. When uncertain about which technical solution leads to the best outcomes for their general policy idea, the political sphere finds itself delegating more autonomy to the career civil servants (Huber and McCarty 2004). The demands are thus made in a quite unspecified manner, and it is to the discretion of the IT Division staff to translate demands as general as “make something new” into concrete ICT policies.

They think the website is important, but I mean, they don't understand what it is. They don't know what they want many times. (...) They just want us to make something new sometimes.... So it is up to us. So at this point we come in to help them. Or actually, we tell them what they want...

(IT Division Staff, Web Unit)

If bureaucratic autonomy is perceived by the literature as being manifest mainly during the implementation phase (Huber and Shipan 2002), the extreme asymmetry of information between the political sphere and the IT Division enables the latter to start intervening much earlier in the policy cycle (e.g. agenda-setting). In other words, by telling politicians ‘what they want’, IT Division staff members are able to influence the very framing of ICT related policies.

Such a discretionary power opens windows of opportunity on two fronts in terms of the pursuit of interests of the IT Division: i) reducing the amount of work dedicated to activities that they consider superficial while ensuring interoperability, and ii) furthering the public

interest through the promotion of transparency and interactivity of the website. The following examples shed some light on how this process operates.

As previously discussed, one of the burdens felt by the IT Division is the increasing demand for internal services. This is particularly so given that a fair amount of the services requested are perceived as degrading by the IT staff given their level of technical qualification. One of the services that fall into this category are the frequent demands for individual changes (e.g. colour, size of photos, text) in the section of the website dedicated to MPs. With the arrival of a new Speaker in 2008 the IT Division was asked to improve the overall quality of the MPs' sections of the website. The IT Division saw this request as an opportunity to address part of what they perceived as being a problem. They were able to devote their time and resources to the implementation⁶⁰ of a system with an easy interface where the personal staff of each MP office could themselves implement most of the changes that they traditionally requested of the IT Division. The decentralization of the management of the site content and interface – which would eventually reduce the workload of the IT Division – was then framed to the political sphere as an improvement in “autonomy” with regard to the MPs' individual website section.

We had started to do some stuff on the Speaker's website, then they asked us to start doing it for the other MPs: something more customized, personalized. Currently we have to help with changing pictures, texts... You can imagine, one-by-one! So we migrated to a technology that enables the staff of the MP offices to do it themselves. This story of autonomy, we sell it to them, you see? We say it gives them autonomy, agility, mobility...

(IT Division Staff, Web Unit)

In fact, much of the e-government literature will regard decentralization of IT systems as a move towards promoting an increased sense of ownership and improved management and design of websites (Franzel and Coursey 2004, Seifert and McLoughlin 2007). The members of the IT Division appropriate such concepts in their discourse in a rather efficient and opportunistic manner, ultimately convincing the political sphere of the benefits of their proposed solution of task decentralization. An MP's personal staff, when asked for a second

⁶⁰ This was an ongoing process in July 2009.

time about the benefits of using interactivity tools, provided the spontaneous response that confirms the success of the IT Division's framing artifice.

We don't do interactivity now. But the IT guys are creating a system for us that will be great. We will be able to make our MPs' websites as we want. Everything: colour of the screen (sic), with or without chat, forums... then why not? Those guys are pretty good!

(MP Office Staff)

If the system implemented ultimately achieves the goals of autonomy and ownership, as we have seen, the actual motivation for the IT Division is the pursuit of a very specific agenda: that of the reduction of workload associated with the section of the website dedicated to MPs. Consequently, the liberation from this work that is considered as degrading and fastidious allows the members of the IT Division to dedicate themselves to projects that they consider to be priorities, such as the interoperability of systems.

A second window of opportunity that is opened by the generic requests that come from the political sphere is that of implementing solutions that they consider to be of public interest. Once again, it remains at the discretion of the IT Division staff to choose which technological solutions are presented as viable options. Hence, the IT Division functions as a gatekeeper for the technical alternatives that are considered, based on their preferences. For instance, putting the agenda of the Speaker online is thus perceived as an alternative that simultaneously addresses an internal demand while promoting transparency. In a similar vein, the interactivity tools that are found on the website are also the fruit of pre-established choices by the IT Division. Ensuring the interoperability of the systems is one of the criteria for the alternatives that are presented.

We went there and said, look, you can have chat, surveys... they go "what is it?" (laughs). But then we explain, we try to convince them (...) all these tools, of course, we are also looking for stuff that is interoperable with what we already have.

(IT Division Staff, Web Unit)

Thus, contrasted with the vision of a website as Frankenstein, nearly beyond control, is contrasted with the actions undertaken by the IT Division to ensure the sustainability of the

system. Members of the IT Division do not hesitate to extract discretion from their technical superiority. This is not the only source of uncertainty controlled by the IT Division (Crozier and Friedberg 1977). As pointed out earlier, the demand for ICT equipment and support is higher than the supply. Aware of the limited capacity of the IT Division, members of the political sphere find themselves obliged to implicitly negotiate with the IT Division on what can be delivered. The members of the IT Division do not hesitate to set limits on their capacity to address demands.

With a new Speaker... these people come, they bring a series of ideas that they want to do during the year. We try to be as clear as possible, saying: "look, from this portfolio of projects that you want to do this year, we can do only 30%, the rest we can't do. Or I can do another 30% but you have to let this one go" (...) I try to be totally in accordance with what the new administration wants... well, most of the time. But of course I have my limits! (...) But they know we are saturated... so if internal services start going slow, they know they have to take it easy...

(Director of IT Division)

Also, as quoted above, the timing of responses to demands may be a clear sign sent to the political sphere of the saturation of the IT Division's capacity. Hence, even though not openly admitted, the speed with which the IT Division responds to internal demands becomes in itself an implicit element of negotiation (Crozier and Friedberg 1977). Moreover, the inability to address all demands and the discretionary power of the IT Division to respond to them leads to an inevitable politicization of the distribution of access to ICT support and tools. That is, in the absence of a written rule on how ICT equipment and support must be distributed, and in a context where demand is higher than supply, priorities have to be established. In this case, the political criterion comes into play.

At the end of the day, the decision on which MP office will get more computers boils down to two things: the power of the MP at a certain moment and the pressure that he exerts.

(IT Division Staff)

The slowness or denial of delivery of services opens up spaces for negotiation. The moment at which access to services is negotiated is the same moment at which the IT Division asks for a

moderate attitude from the political sphere. The ability to respond is viewed, in itself, as a political act and, as such, the notion of compromise is evoked.

Sometimes I am called to higher spheres to give an explanation for a denial that my Division has made. If the high sphere of the House supports me, then I say: "Ok, I will try to respond at least partially". But this is also the moment that I can ask them to take it easier on other demands... it is a compromise. It is natural that this happens this way. At the end of the day, we are all politicians in here. Nobody likes to say no.

(Director of IT Division)

As becomes evident, the margin for discretion of the IT Division is far from being null. If the yearly configuration of the Speaker's Office is perceived as disruptive, the IT Division staff will not hesitate to take advantage of their technical superiority to further their interests (e.g. resources, technical) whenever an opportunity is presented. Furthermore, if interoperability problems are present, the extent to which the frequent allusion to interoperability is a strategy to keep ICT policies a reserved domain of the IT Division remains an open question. The frequent references to technical issues – often supported by usage of technical jargon – are an often-used strategy among IT experts to avoid being confronted by amateurs (see Lacity and Hirschheim 1995). Although there is a shared discourse of an imminent collapse of the systems due to the permanent changes and apparent interoperability problems, the IT staff will deploy every possible artifice to ensure that minimal levels of sustainability of the systems are ensured.

Concluding Remarks

This case study began by underlining how the characteristics of conflictive pluralism present in the state of Rio Grande do Sul reflected on its Legislature and, more specifically, on the politico-administrative sphere of the Legislature. In this respect, to mediate internal conflicts, an arrangement between opposing political groups has led to a yearly reconfiguration of the Speakers' Cabinet. In such a conflicting environment, we have shown, it is the existence of internal needs conjugated with the presence of a professionalized administration and servants that ultimately enabled early techno-organizational innovations to take place in the Legislature. The ensemble of internal technological and procedural characteristics, we argue, constitutes an enabling environment that is conducive to more developed websites, as internal

information and processes can be easily transferred to an external environment, i.e. the Legislative website.

The effects of the yearly alternation of political forces in control of the Speaker's Cabinet appear as ambiguous: while they are perceived as jeopardizing events for the continuity of projects and interoperability of systems, with this cyclic rupture new demands on the architecture of the website are required. Ultimately, innovations are 'forced' into the system. In the long-term, however, the Speakers' rational action as individuals towards innovation would tend to lead to irrational outcomes (Olson 1965) in terms of technological interoperability and continuity of projects, ultimately endangering the sustainability of IT systems and the quality of the Legislature's website. However, the tragedy of Rio Grande do Sul's commons is avoided by a proactive strategy deployed by highly professionalized career civil servants. In this sense, civil servants' strategies consist mainly – but not only – in mobilizing their technological expertise as a resource to manipulate the way technological problems are framed and addressed.

It is only when one takes into account the different elements that this analysis has rendered evident, that the Portuguese expression '*gambiarra*'⁶¹ – often evoked by the IT staff – assumes its full meaning. Rather than a mere practical endeavour temporarily conceived to address the frequent demands that come from the political sphere, it consists of an authentic technological enactment process, embedded in strategies and institutions. *Gambiarra* thus becomes the use of technology that is resultant of a system of action, of a dialogue with the surrounding environment: the apparent technological improvisation and precariousness of solutions flirt with the possibility of sustainability (Rosas 2008). The result is that of short-term innovation cycles that, despite the difficulties and conflicting strategies, lead to a website that is in permanent transformation, ultimately reflecting positively on its overall quality.

⁶¹ Literally translated to English as 'makeshift' or 'make-do'.

10.4 Minas Gerais

10.4.1 Politics and Administration in Minas Gerais State

The Context: Coalescent Pluralism and Institutional Development

In Minas Gerais, popular culture says, politics is done in accordance with a distinctive trait of the state's population: with moderation. If there is no anthropological evidence to confirm the causal relationship, it is clear to observers that partisan polarization is definitely not a trait of the politics of Minas Gerais (Medeiros 1990). Rather, the Minas Gerais model of political competition is better characterized if understood as following centripetal tendencies, in a context where "the centripetal drives are precisely the moderating drives" (Sartori 1976:95). Or, as in the words of Borges (2007), in the Brazilian landscape political competition patterns in Minas Gerais constitute a typical model of "coalescent pluralism", described as follows:

Although these political systems display a reasonable dispersion of power, elite behaviour is coalescent, leading to possibilities for bargaining and coalition-formation (...) political competition in these systems is characterized by centripetal tendencies, as parties seek to occupy the centre of the ideological spectrum rather than appealing to extreme ideological positions.

(Borges 2007:112)

As noted in previous studies⁶², the consequences of this elite behaviour in the Minas Gerais context is that of strong partisan cohesion and significant Legislative support to the political agenda of the Executive. Internal and external observers are not indifferent to this strong support of the Executive by Minas Gerais' Legislature:

Currently the support that the Executive has from the state Assembly is enormous. After the election, the government coalition now has the support of the parties of 68 of the MPs. 68 MPs out of 77!

(Member of Legislative Watchdog Organisation)

If, *a priori*, Minas Gerais' Executive traditionally enjoys high levels of Legislative support through coalitions built following elections, this does not mean that the Legislative functions

⁶² See, for instance, Medeiros (1990) and Nunes (2009).

act as a mere *chambre d'enregistrement*. Although such a fact might seem to be counterintuitive, despite the existence of a strong government majority in the Legislature, Minas Gerais MPs are far from playing a residual function of passively approving legislation submitted by the Executive. Despite the tradition of the Minas Gerais Executive enjoying comfortable levels of Legislative support through majority coalitions, on a certain number of occasions MPs refrain from voting along with the government. For instance, as shown in research by Nunes (2009), even though in the majority of cases the Legislature approves proposals of minor importance submitted by the Executive, when it comes to salient issues⁶³, the government's rate of Legislative approval is lower than 50%. Moreover, as noted by the author, low party cohesion is not at the root of such a phenomenon: a high level of partisan discipline⁶⁴ is identified among Minas Gerais legislators. Rather, scholars will often justify the nature of this relationship between the Legislature and the Executive as the reflex of the high level of institutional development⁶⁵ of Minas Gerais' Legislature (Santos 2001, Anastasia 2001, Lima 2005, Fleury 2007). The overarching understanding of 'institutional development' among these different scholars refers to the organizational and institutional capacity of the Legislature to fulfil its roles of representation, oversight and lawmaking.

With regard to institutional capacity, and in comparison with other Brazilian Legislatures, two distinctive features can be underscored in Minas Gerais. The first refers to the creation of institutional channels of interaction with organized civil society (Anastasia 2001, 2009), rendering possible the inclusion of new actors, preferences, issues and procedures in Minas Gerais' Legislative process (Lima 2005). For instance, the Minas Gerais Legislature holds a large number of public hearings, consultations and public debates through which civil society and individuals are able to bring new concerns to light, to channel their preferences and to exert pressure on Legislators. A second unique characteristic of the Minas Gerais Legislature in terms of institutional development refers to the existence of a highly complex and professionalized administrative structure (Lima 2005, Anastasia 2009), which enables the Legislature, among other things, to refrain from simply rubber-stamping proposals from the Executive.

⁶³ Nunes (2009) considers as "salient" those propositions requiring a qualified majority to be approved, involving the interest of a great number of stakeholders and where roll-call voting is present, thus rendering the vote of each of the MPs identifiable.

⁶⁴ For instance, in the latest legislature (15th) the Rice Party Cohesion index was 99.1% (Nunes 2009).

⁶⁵ As previously mentioned, institutional development is understood, in this sense, as the organizational and institutional capacity to fulfill its role as a legislative body as constitutionally defined (Nunes 2009).

As we intend to show further, the technological enactment that takes place in the Minas Gerais state Legislature is, to a certain extent, the expression of these two distinctive features, with the latter exerting a stronger influence (i.e. administrative professionalism). Before doing so, we delve into the genesis of Minas Gerais' administrative structure and the impacts of particular institutional and organizational arrangements.

Citizen Participation and Legislative Professionalism: The Genesis of a New Legislature

In 1986, during the elections for state MPs in Minas Gerais, 70% of elected MPs were new incumbents. As noted by Assis (1997) these numbers – considered surprising to observers – were read by the political sphere of the Legislature as a clear sign of the population's dissatisfaction with their state representatives. Four years later, as the fruit of a long internal debate between MPs and servants of the Legislature, it was decided to hire an external provider to carry out qualitative research on the image that the public held of the institution⁶⁶. Across all of the focus groups held with citizens from different socio-economic and geographic backgrounds one element was constant: the image of the state Legislature and MPs could not be any worse. Citizens described “not knowing what happens” in the Legislative, thinking that “something was hidden” and, finally, they associated their negative views of MPs to that of the Legislative branch (Fleury 2007). These findings are not surprising *per se*: even in advanced democracies, negative public perception of state Legislatures constitutes more the rule than the exception⁶⁷. However, this short account does draw attention to the fact that stakeholders within the state Legislative (e.g. MPs, civil servants) started, during the democratic transition in the country, a process of reflection on the place that the Legislature should occupy in the new democratic political landscape at the end of 1980s and beginning of the 90s (Assis 1997, Anastasia 2001). The Secretary General of the State Legislature, the highest position within the administrative hierarchy of the Legislature, recalls the situation:

It was a period of recent democratisation, it was still agitated. I have been here since 1985, and it is still fresh in my memory. The elections of '86, democratisation... It was a context that favoured the Parliament to question itself. It was intense! How do I organize an institution within this new political order? What is the place of the

⁶⁶ This analysis is based on the excellent account on this process made by Fleury (2007).

⁶⁷ See, for instance, Hansen (1994).

parliament in the middle of this? So at this time we started these things, focus groups, dialogue with academics...

(Secretary General of State Legislature)

In this period of reflection, a series of reforms start to be adopted by the institution. These reforms were led with two main objectives (Santos 2001, Anastasia 2001, Lima 2005): 1) to create institutionalized channels of interlocution between the Legislative and society, and 2) to promote the professionalism and technical expertise of the administrative services of the Assembly.

With regard to institutionalization of channels for citizen participation, one of the first formal⁶⁸ measures taken by the parliament was the creation in 1991 of the Legislative Seminars. These seminars consist of public meetings mainly composed of MPs and civil society organizations where a number of policy issues and respective legislative options are discussed. The particular feature of this process is the legal possibility that, at the end of the discussions, a legislative proposal can be collaboratively drafted by the different participants and submitted to the legislative process. As noted by Fuks and Fialho (2007), these seminars constituted a new modality of citizen participation in the Legislative framework, enacting the possibility of bringing new issues and actors to the lawmaking process of the state. In a similar vein, in 1993, Regional Public Hearings were created by the Legislature. Such a process consists of public hearings that are held by the Legislature across different regions of the state in order to gather input from local officials and civil society organizations for the elaboration of the legal framework of the state budget. More impressively, since 1997 a permanent Legislative Committee of Popular Participation enables civil society to submit proposals to the legislative process, which has become an important mechanism for fostering participation in the lawmaking process in the state of Minas Gerais (Fleury 2007). In sum, as eloquently put by Anastasia (2001:25), one of the main novelties put forward by the state Legislature in this period was

(...) the adoption of institutional mechanisms of dialogue with segments of organized civil society, constituting channels of communication between the two processes of political participation and political representation.

⁶⁸ Deliberation number 720, 18th December 1991.

(Anastasia 2001)

As a result of this process, already by 1997, the number of institutional channels available for citizens to influence the legislative process added up to 77 in total (Assis 1997). At this point, it is important to underline that these institutional innovations were not conceived in an unbridled manner. Rather, they are perceived by key stakeholders in the Legislature as the fruit of a well-calculated will to design institutions that addressed the new political order (i.e. democracy) and to revitalize the image of the Legislature vis-à-vis its external audience.

Then we had all these innovations... There were bets that we had to make at that time, and they were actually quite fortunate ones. The first major bet was that of interaction with society. Actually it was to open the House or to bring it down.... So the Legislature started to work hard to have allies in civil society, so that the House could get back on its feet, to become a project that was politically viable. This is when these models of participation arose, the creation of legislative seminars, decentralized public hearings... these institutions that the House created by itself.

(Secretary General of State Legislature)

In a similar vein, Anastasia (2001:53) underlines the extent to which the institutional innovation was put in place as a fruit of stakeholders' deliberate design. According to the author, these institutional innovations, instead of a simple adaptive behaviour were rather

(...) the expression of intentionality of a number of strategically oriented actors who (from a broad diagnosis of the institution and sensitive to the need to restructure the House in order to adapt it to the demands of the new political moment and to render it more effective for the exercise of the Legislative duties) "chose" new institutions and dealt with the costs incurred by the process of institutional creation. (Anastasia 2001:51)⁶⁹

If the creation of instances of participation combined with the representative model was a major element guiding the reforms of the Legislature in this period, stakeholders were aware that such a process imposed an additional burden on the political and administrative capacity

⁶⁹ Translated by the author, also quoted in Fleury (2007).

of the Legislature. It could find itself in a situation where it was not able to manage a sudden inflow of information and demands generated by the process. The presence of a highly professionalized body of civil servants was then essential for the appropriate implementation of the reforms taking place in the Legislature at the beginning of the 1990s. To address these needs, an ensemble of organizational reforms was made in this period. The aim was that of reinforcing the technical and political capacity – for civil servants and MPs respectively – to deal with the participatory institutions that were being put in place (Anastasia 2001, Fleury 2001, Silveira 2008).

So we had these participation institutions... But then we had to reinvent ourselves, we needed to train our staff. You had to train your team, you needed a professional Legislative! The MPs also need a new type of support from the administration. That is when the house invests internally in an administrative reform, the creation of a professional bureaucracy that is qualified, the organization of its cadres, public exam to hire civil servants... A bureaucracy that could support this new political framework of participation, a bureaucracy in accordance with these principles of dialogue with the public.

(Secretary General of State Legislature)

Of the series of initiatives adopted by the Legislature towards its professionalization, two measures are particularly important for our current analysis: i) the creation of the Legislative School, and ii) the organizational and formal separation of the administrative and political sphere of the Legislature.

With regard to the first, there is a consensus among scholars that the creation of the Legislative School was a major step towards the institutional capacity building⁷⁰ of Minas Gerais' Legislative (Assis 1997, Fleury 2007, Fuks and Fialho 2007, Silveira 2008, Marques Junior 2008). Prior to the 1990s, with the purpose of training bureaucrats from the Executive in the exercise of their functions, “schools of government” were already common in the country, as determined by the Brazilian Constitution (Marques Junior 2008). However, it was not until 1992 that the first school in the country⁷¹ dedicated exclusively to those working in the Legislative sector was created: a pioneer initiative by the Minas Gerais Legislature.

⁷⁰ For a theoretical account of institutional capacity building, see Hedlund et al. (2008).

⁷¹ The Legislative School was officially created in July 10th 1992 (Resolução n.º 5.116).

Among other objectives, the aim of the Legislative School was that of providing high-level technical training to the members of the administrative body of the House (Fuks and Fialho 2007) while associating “theory to practice” and “providing MPs and civil servants the opportunity to better identify themselves with the mission of the Legislative”⁷². As summarized by Luiz Assis, historian of the Legislative School, the main roles of the newly created institution were

(...) to professionalize as much as possible all of the servants of the Assembly, to serve as a channel of dissemination of information, knowledge and working method and last, but not least, to promote an environment of political and philosophical thinking on representative systems. (Assis 1997:112)⁷³.

Also, as underlined by a number of scholars (Fuks and Fialho 2007, Fleury 2007, Silveira 2008), a second milestone towards the professionalization of the Minas Gerais Legislature was the formalization⁷⁴ of a clear and irreversible separation (Assis 1997) between the political and administrative spheres. In practice, such a separation implied that the technical body of the House could not offer support to MPs’ offices as previously practiced. In this respect, MPs were individually assigned a budget for their offices whereby they could freely choose the political appointees for their offices. From this period on, all permanent servants were to be admitted exclusively through entrance examinations (public contests) specific to the different functions (e.g. legislative specialist, IT engineer), where the grade obtained by each candidate was the only criterion for the selection process. As underlined by Assis (1997) and Fuks and Fialho (2007), all permanent servants of the House were then to be positioned exclusively in the administrative structure of the House, whereas political appointees could only take positions within MPs’ offices. The implications of these measures were by no means negligible. In practice, this meant that the whole administrative structure of the state Legislature was to be entirely composed by career civil servants, a unique characteristic in the scenario of Brazilian state Legislatures (Silveira 2008). In the next section we shall see how these institutional innovations affect the daily functioning of the state Legislature and inform the different actors’ strategies.

⁷² Text of Legislative Resolution 5.116 (10/07/19992) quoted in Fleury (2007).

⁷³ Translation by the author, also quoted in Marques Junior (2008).

⁷⁴ Legislative Deliberation 5.086/90 (1990).

The Separation of Politics and Administration: A Non-Zero-Sum Game

A noticeable element that arises whenever interviewing career civil servants at the Minas Gerais state Legislature is their attachment to their status as ‘professionals’. Among all of those that were interviewed and independent of their levels, the fact that the whole administrative structure of the House was entirely composed of career civil servants was often evoked.

The whole administrative structure of the Assembly is made up of career civil servants admitted through a public exam. From the Secretary General to the Division Directors, the IT people... everyone is a career civil servant.

(Director of Legislative School)

As discussed earlier⁷⁵, this is by no means trivial: all other things being equal, career civil servants, as a permanent and professionalized body, are strategically inclined to guide their actions in accordance with standard bureaucratic public service values (e.g. neutrality, efficiency). In this sense, the notion of an institutional commitment as referring to a zeal for the “value and stability” (Huntington 1968) of the Legislature is a common notion in the discourse of interviewees.

Our efforts, in the administration... they are also good for us as civil servants... this values us... and this idea is very present in the administration, this is something that is kind of injected in us... At the end of the day everyone has a notion of citizenship as well... you don't want to be a servant of a place that just gets slammed by the press... I think that as a civil servant in the House, you do take pleasure when something good that is done goes public. We do make good things. It is not because it is public that everything we do is wrong. We do interesting work, we render a service to society.

(Director of IT Division)

We, the servants, are born and will die in this struggle: society always suspicious of the politicians and the Legislative... and this is something that bothers me a lot, I think it would be good if people could look and trust the Legislative.

(Director of Communications Division)

⁷⁵ See page 117 (Rio Grande do Sul).

However, as previously discussed, the incentives for this kind of behaviour where civil servants' actions are "vested with public purposes" (Green et al. 2003) find their limits in the extent to which the internal system of rewards (e.g. nomination to a higher position) is dependent or not on political interference⁷⁶ and particularistic interests (Eichbaum and Shaw 2008). In this respect, only two positions within the administration are subject to nomination by the Speakers' Cabinet: the Secretary General and the General Director. The role of the first is that of coordinating the functioning of the legislative process and to advise the Speaker of the House, whereas the second is the head of the administrative services of the House. Interviewees unanimously refer to this limitation of the nominations by the political sphere as a factor that limits the influence that the political sphere can directly exert over the administration. Servants from different positions are unanimous in declaring that, apart from these two positions, promotions to all of the other positions are based on merit. It is important to note, however, that if only two positions are directly subject to political nomination, the seven Division Directors occupying strategic positions within the administration (e.g. Communication, IT) can be replaced by the General Director. Even when taking into account the fact that the General Director is, in theory, in a position to follow a certain political agenda that influences nominations, interviewees still perceive the possibility of such an event taking place as low.

The only two people who are nominated by the political area are the General Director and the Secretary General. Even though I have never participated in the process of nominations, I can imagine the Speaker's Cabinet trying to influence the nomination of the Division Directors. They can try to negotiate something. But frankly, I am convinced that this happens extremely rarely.

(Director of IT Division)

Thus, the possibility of influence by the political sphere is perceived as residual by members of the administrative sphere, particularly when it comes to conducting day-to-day administrative services. The fact that Division Directors tend to be maintained through changes in political offices is considered one of the reasons for stability in the administration's capacity to conduct its business.

⁷⁶ In this respect, appointment processes constitute *the primary locus of politicization* of public servants (Eichbaum and Shaw 2008).

Over the years our Assembly has managed well to preserve itself against this kind of political influence. In other Legislatures in Brazil they change the Division Directors, they are subject to gratified positions and sometimes they are political appointees. Not in here. Here we have maintained this structure of professionalism and continuity... the day-by-day business continues, the administration, the services...

(Director of Communication Division)

In a similar vein, if the positions of Divisions Directors are resilient to political changes in the Speaker's Cabinet, to a certain extent the same is verified for the positions of Secretary General and General Director of the Legislature. Even when there is a change in the incumbents of the Speaker's Cabinet, the tendency is that of maintaining the same servants in the two positions.

This model of continuity is a model that is working well. In these last 20 years, I am the fourth person to be Secretary General.

(Secretary General)

These indications of low political interference in the administration are important to underline. If there might be attempts from the political sphere in this direction, they are discrete and moderated. Overall, however, interviewees are unanimous in their reporting of a clear separation between the political and administrative spheres of the House, often underlined as unique when compared to other Brazilian state Legislatures.

Here at the Assembly we have a very distinctive dynamic of relationship between the political and administrative areas... something I would say that is not commonly found in other Houses. There is clarity. And this does not mean that one side imposes one thing on another, but there is clarity that the administrative area conducts the functioning of the House very well.

(Dean of Legislative School)

If there is a division between the two spheres, this does not mean that the administration considers itself indifferent to demands from the political sphere. A number of administrative decisions that are considered to be politically delicate – or that imply major changes that are deemed of interest to the political sphere – are submitted for approval by the Speaker's

Cabinet. The notion of reciprocal trust enters the equation that informs civil servants' behaviour.

And this story of submitting things to the Cabinet, you do it only when you are going to make a change or a restructuring that has a more direct impact, the introduction of a new service, of a new entity... the day-by-day management of things we do not need to present, we don't get to this level.

(Director of Legislative School)

Some things we do submit to the Cabinet, but it is something that is a bit... the Cabinet delegates us power... but in some cases of course we are going to make a project and present it to the Cabinet. But we have some discretion on this. There is a trust relationship.

(Director of Communications Division)

In this sense, interviewees more often than not will show some degree of discomfort every time the term 'administrative autonomy' is used to describe their position vis-à-vis the political sphere. Interestingly, on a discursive basis, among civil servants the term 'autonomy' is replaced by the terms 'delegation' and 'clarity' of roles. Hence, a shared understanding among the different stakeholders with regard to their roles solves the equation between autonomy and responsiveness that each sphere – political and administrative – plays in the Legislature.

So, in a general manner, it is clear for everyone: the Speaker's Cabinet gives the direction, the great lines, but it doesn't give... neither the Speaker's Cabinet nor the MPs individually make a direct intromission in administrative matters.

(Dean of Legislative School)

In practical terms, the will of responsiveness on the part of the administrative services is to a certain degree the fruit of a calculation of the extent to which demands are to generate benefits for the political sphere collectively or on an individual/partisan basis. Demands that are perceived as an instrumentalisation of the administration as a means to generate non-collective gains are dismissed. For instance, interferences that are perceived as the intention of a certain political actor of leaving his 'mark' on the administration are thus considered as

perverse inputs that are to be filtered by the administration. Simultaneously, the fact that MPs might be in a privileged position to channel demands from a broader audience that are legitimate is not questioned. Administrative staff will consider themselves in a position to discern between the different types of demands that are made.

Interviewer: The less interference the better?

For negative ones, the less the better. For example those where simply for vanity one wants to do things differently, or one who wants to leave 'a mark' for the period he has been in the Speaker's Cabinet. But of course we have political sensitivity: it is important because it gives us a notion of what can be interesting for society, the MP is there representing society. We do not work with the vision that it would be better without the MPs. Not at all. We listen to the MPs, the demands that they bring. But these pass through a filter to tell what is political demand from an MP and what is good for the institution.

(Director of IT Division)

It is important to question why the stakeholders from the political sphere refrain from rent-seeking the administration of the House for individual or partisan advantages that could potentially be achieved. Part of the explanation can be found in the technical capability of the Minas Gerais administrative staff and the services that they render to the political sphere in the conduct of their activities. As noted already in 1998 by political scientist David Fleischer, in terms of human resources, the Minas Gerais Legislature is the best-equipped when compared to others in Brazil. Such a perception is well-settled among those from the political sphere.

Have you talked already to some of the servants? This House has a body of civil servants that is extremely well prepared with a high level of technical expertise. It is an extremely well prepared bunch of people!

(Head of MP Office)

However, this perception is only achieved through the interaction between administrative services and members of the political sphere. In other words, if there is a widespread impression among political stakeholders that the career civil servants have a superior professional capacity, such a perception is the direct result of the quality of services that are

delivered to those in the political sphere. To illustrate the importance that the administrative services may provide to an MP, there is probably no more compelling example to be given than the services provided by the Legislative Consultants.

In a number of Brazilian state Legislatures, the administrative services provide MPs with ‘technical-legislative consultancy’ services. These services provide MPs with support in the formal (e.g. writing techniques) and legal adequacy (e.g. constitutionality) aspects of the exercise of their legislative actions, such as presenting a proposal or drafting a committee report. Consultancy on other issues that do not relate to the legislative process itself (e.g. environment, security) is normally provided by consultancy services from party groups or by the staff of MPs’ offices. Bearing this in mind, as noted by Silveira (2008), one of the main innovations that took place at the beginning of the 1990s in Minas Gerais’ Legislature was the creation of highly competitive public exams for hiring specialized consultants for the different thematic issues that are the object of the legislative process (e.g. environment, public security). As noticed by a civil servant of the Legislature

Minas Gerais Legislature is one of the few that provides this autonomous, independent and non-partisan technical support. Thematic consultancy is normally provided by the party groups, that is, the groups or the own staff members of MPs’ offices. And Minas Gerais Assembly, from the 1990s, made a separation. It decided to hire through public exams a technical body with expertise in several themes to provide support to the legislators and the legislative process: health, education, finances, labour...

(Manager of Constitutional Consultancy)

With the implementation of these ‘thematic’ consultancy services a new point of cooperation between MPs and a highly qualified group of civil servants is created. For MPs these services constitute an exceptional asset to an activity to which they traditionally devote substantial resources: persuasion and position-taking (Mayhew 1974). Whenever MPs find themselves in a disadvantageous situation of information asymmetry vis-à-vis their interlocutors, be it internal or external ones, the consultancy services will provide MPs with the necessary information to minimize the asymmetry.

This gives MPs serenity... because the great challenge is... you elect an MP but he is not obliged to be specialist in a zillion things. Here votes are cast on health,

environment, human resources, public licenses... you will not find someone who can deal with all this. It is the consultancies that provide them with informed decisions, help them to reduce the asymmetry of information vis-à-vis the others. This is also true for the debate between the Legislative and the Executive; I need a technical body to face this. (...) This gives the MP the ability to debate on a more equal basis with someone from the Executive or the Judiciary... with someone who elaborated a project during one year and comes here to debate it in one day... this service of the consultancy is essential to the MPs.

(Secretary General)

Resonating with the previously mentioned literature on the subject (Anastasia 2001, Santos 2001, Lima 2005, Fleury 2007), in many cases the technical capacity of the Legislature is underlined by interviewees as one of the reasons why – despite the government majority in the Minas Gerais Legislative – the House does not adopt subservient behaviour vis-à-vis the Executive.

For instance, in the last reform of the public sector led by the government, nothing, absolutely nothing that came from the Executive was passed the way it arrived to us... Every proposal that came from the Executive, when they passed, was better than before: from a technical point of view, in terms of legislative technique, in political terms... And this is linked to the technical capacity of the House. You need to offer a structure... our experience shows that a stable structure with qualified servants is determinant for the results.

(Secretary General)

In a similar vein, the appraisals given to the consultants by the political sphere are no different and, to some extent, surprising to an external observer. Among every interviewee from the political sphere, references to the technical expertise of consultants are a constant. It is interesting to note that a certain number of consultants leave the Legislature as they pass new public exams to move to other public sector positions considered to be extremely selective. Such a fact is not irrelevant to those in the political sphere, who often use this as proof of the high level of technical expertise that they benefit from among the Legislative servants, as exemplified by the Chief of Staff of an MP's Office:

I don't know if you had access to the work of the people from consultancy services: that is world class stuff, it is super specialized, you understand? They are extremely good at what they do. It is very common for our consultants to pass other public exams such as federal judge, federal prosecutor... one girl just now passed the exam to become a judge at the Federal Court of Audits. And she was in fourth place! So, there is no doubt about it, it is an extremely well prepared group working for us.

(Chief of MP Office)

The support given by the consultancy staff is also perceived as an important resource for providing MPs with the knowledge necessary to claim their positions particularly when in the presence of an external audience, thus keeping them from damaging their public image. In this respect, there are common references to the role that the consultancy plays in equipping MPs with familiarity on a broad range of issues, something considered necessary particularly during public appearances. Although it is not formally part of the consultants' job descriptions, interviewees often mention the occasional role that the consulting services play in enabling MPs to 'look good' when they are in a position of visibility.

Imagine you are an MP and you are invited to talk about something... but you know nothing about the subject. Then you go on TV and look plain stupid. But you go anyway, you are a politician, and you can't resist (laughs). Now, imagine if you are invited to the TV for something that you know nothing about, but you have a service where you know the best people are going to help you, to explain the things to you, and that at the end of the TV show you look really smart. Wouldn't you want this kind of service? Well, the MPs have it here; and they love it! (laughs).

(Chief of MP Office)

And the MPs acknowledge it... the fact that you can sit on a round table of political debate and authoritatively talk about the theme that is being debated... to arrive there and offer alternatives and possibilities, to be able to face the debate.

(Secretary General)

The consultancy services, although unique within the administrative structure of the Legislature, are representative of the political sphere's perceptions of the administrative services as a whole. The existence of a professionalized body of civil servants ultimately pays

off through the availability of services that provide MPs with the resources necessary to conduct their mandates and pursue their political projects (Pfiffer 1988). In other words, it is against the self-interest of those from the political sphere to rent-seek the administrative services, thus avoiding destabilizing a system that produces superior results: the unpredictability that interferences in the relationship between the administrative and political spheres might generate constitutes in itself a deterrent for eventual temptations (Crozier and Friedberg 1977, Gneezy and Rustichini 2000). Among the interviewees from the political sphere, the notion of reciprocity was brought up, as evoked by this MP:

The administrative structure that we have here is known for being the best one in Brazil, and the competence of the civil servants means that the MPs establish with them a relationship of reciprocity and respect. Because of their competence, they managed to impose a group of methods and procedures that has to be respected by us. On the other hand, the MPs here have everything... everything they need to support their work.

(Member of Parliament)

In a similar manner, one MP, when discussing the formal separation between the political and administrative spheres of the House, and the professionalization of the latter, evokes the need for a pattern of behaviour that complies with certain ‘rules of the game’.

The civil servants here are extremely appreciated. Now this imposes on the MP a certain behaviour... this imposes on the MP a behaviour strictly in accordance with the rules of functioning of the House. This is also the process of a long construction of the Legislature ... the presence of career civil servants in management positions. This is extremely important.

(Member of Parliament)

Thus the relationship that is built between the political and administrative spheres consists of a non-zero-sum game, where the “the growth of cooperation strengthens the logic of further cooperation” (Wright and Kaplan 2001:60). This cooperation is structured as actors from the political sphere refrain from intervening in the administrative sphere, as the latter provides excellence in the support of services.

We do have an administrative continuity...but this is a relationship that is built with the political body. The political body perceives that this favours their own work. They agree with this situation not because they simply renounced the possibility of interfering, but because they see that the work is being done for them. And this ensures them access to technical support on an egalitarian basis ... we are a technical body that is stable, but this body is here to serve the institution that is formed by them. If the politicians did not exist, we wouldn't exist either.

(Director of Communications Division)

In general terms, Latin American democracy scholars often deplore the limited bureaucratic capacity found in the region (e.g. Geddes 1994, Maxfield 1997) and in Brazil (Weyland 1996). Also, as pointed out by Huber and McCarty (2001), in developing democracies the incentive for politicians to concede administrative discretion to civil servants – bureaucratic capacity – is often absent. In Minas Gerais Legislature, however, with regard to the bureaucratic capacity of its civil servants, the bureaucratic capacity incentive is not only present, but also salient. Simultaneously present is a system of reciprocity where payoffs are distributed to all the participants of the equation, keeping the administration from becoming “a self-willed and uncontrolled apparatus” (Hayek 1960:62) and politicians from usurping the administrative services. The whole system achieves a fine equilibrium between bureaucratic responsiveness and legislative professionalism.

10.4.2 Website Contents as an Expression of Institutional Design

The Website as a Resource for Institutional Visibility

Before analysing the process of technological enactment that takes place in Minas Gerais state Legislature, an essential step is that of achieving a clearer understanding of the different perceptions and attitudinal patterns that can be found amongst the Legislature stakeholders with regard to ICT. In a first moment, we shall approach the perceptions civil servants have of the Internet from the perspective of content-generators, i.e. those responsible for generating the majority of the contents of the website. In a second moment, we shall see how actors from the political sphere perceive the technology and to what extent these perceptions converge and/or diverge with those of civil servants.

A major element of a website is its contents, that is, the information that is provided by it as a whole. In Minas Gerais Legislature, the administration of which contents are to be posted online is the responsibility of the Communications Division. The main concept that arises from interviews with civil servants from the Communications Division is that they perceive the Legislature website exclusively as a tool for provision of information on institutional contents. By institutional contents the interviewees refer to information that is the fruit of collective outputs generated by the different formal institutions of the Legislature. In other words, institutional information is considered the type that derives from “constitutional prerogatives (...) of the Legislative as a democratic institution (such as) propositions, committee reports, speeches, administrative structure, financial management among others” (Mello et al. 2007:5). In this sense, the Internet is conceived as a later component of a sequence of efforts taken in the 1990s to intensify the communication capabilities of the Legislature (Silveira 2008), where the focus on ‘institutional’ contents was set from the very beginning of the professionalization of the communication services.

We have an orientation here that was put in place since the very moment that the communication services were being structured, that is the following: we produce institutional coverage, so we do not cover particular or private interests of an MP. Even so because it would be a mess, can you imagine?

(Director of Communications Division)

It should not come as a surprise that the understanding of the functioning of the Legislative is often restricted to a small number of external observers, who are familiarized with a complex setting of procedures and technical jargon. In this respect, another issue that was identified through the interviews – with those working directly or indirectly with the generation of contents for the website – concerns the permanent effort to deploy a communication strategy that renders the Legislature more accessible to the average citizen. Thus, the role of the Internet as an additional means to provide contents that ‘translate’ to the external public the activities of the House is often underlined. At the same time, a pedagogical effort to explain jargon and procedures in order to enable citizens to autonomously follow up on the Legislature is considered, by those in the communication service, as what differentiates them from the coverage given by the traditional media.

What is the role of the Internet, our role in the House? I think our fundamental role is to translate to the citizen what the Assembly is. We can't make an article as a commercial online newspaper, we have a double responsibility: to tell what happened but also to explain the jargon. We have to give the person the tools to follow up on what is happening independent of us. I can't just say "the House approved" as they do in traditional media. I have to say "the project was approved in plenary, but it will only be approved after it passes the committee and is voted by the plenary again". We also try to explain what the jargon means, so that the next time the citizen already knows what it means.

(Director of Communications Division)

The fact that there is a clear strategy of demarcation from the Assembly with regard to the traditional media and the content that is offered does not mean that there is not a will to reach broader audiences. Evidence of this is the fact that already in 1995 Minas Gerais state Legislature was the first Legislative institution in Latin America to have a TV channel of its own (Jardim 2006). More recently, this effort for increased visibility of the Legislative can be rendered evident by the resources deployed by the House in order to be present in different media outlets, such as the payment for daily insertion of news related to the Legislature in the news programme of the main commercial TV of the state and weekly contents in state newspapers (Silveira 2008). This quest for an increased audience is defined by the Secretary General as a 'struggle' of which the Internet is a component.

My struggle is for the audience, and for the attention: yours and everyone else's attention. So, I need to have a House TV that the people want to see, I have to provide a website that people want to use.

(Secretary General State Legislature)

If the Internet is a component of this strategy for driving the 'attention' of Minas Gerais' citizens towards the Legislature, those in the Communications Division further elaborate the notion of what institutional contents consist of. Hence, whereas there is a focus on the provision of content considered to be institutional, effort is given to providing increased visibility to contents that are considered to be more salient to the public in general. The criteria for the selection of this kind of content, although not formally established, are perceived as natural and intuitive.

The visibility that something acquires is natural. For instance, the visibility that the project will get depends on its content, where it is going to resonate, in which segment of society. So, normally these are projects that have to do with: allocation of resources, loans, professional categories, public administration reform.... impact. The impact that something will have in the public sector, in the organization of the public services, in the management of the budget, or in the society...

(Communications Division Manager)

Interesting to notice, within the understanding of institutional contents of the website, a certain number of career civil servants will refer to contents that have a potential of mobilizing external audiences. In this sense, a notion of temporality of the contents is raised. Under this perspective, whereas information of past events is considered as disengaging, news of events (e.g. debates, votings) that are to take place in the future are considered of higher value once it allows for external audiences to mobilize themselves according to their interests.

We try to do the contrary of what every other Legislature do, they do archaeology. They tell what has happened already, almost as if they did not want that you to get in their business, with things that are ongoing or that are going to happen. And our approach is the opposite, I want to let you know “Within two weeks we are having a meeting about this. Come to participate.” People have lots of things to do, but they will mobilize if they know about it beforehand.

(Secretary General)

If career civil servants provide a clear picture of their perception towards the contents that are on the website and their purpose, it is important to evaluate to what extent these perceptions resonate within the political sphere. In this respect, a first element to take into account based on the interviews is the disparity of familiarity that members from the political sphere – and particularly MPs – demonstrate to have with ICT.

The profile... you take any MP, the profile will never be homogeneous. I have MPs who are intensive users of the Internet and others who never sat down in front of a computer screen.

(Secretary General)

While a considerable number⁷⁷ of MPs are considered as having very low levels of computer literacy – if any – actors from the political sphere often will underline that such a fact is counterbalanced by their staff. According to interviewees, this is particularly so whenever younger users are part of the staff, often described as more prone to be tech-savvy and intensive users Internet.

It is the young kids in the office who are more into it, there is no doubt about it, but it is normal, isn't it?

(MP Press Officer)

If you tell to my MP what Internet is, he thinks you are talking about an animal (laughs) So, if your subject is related to technology I would say that it would be better to talk to us from the staff, and the young ones!

(MP Office Staff)

Those from the political sphere that show some degree of familiarity with the ICT - and particularly the Internet - will often refer to its potential as a means of communication where the associated costs are lower when compared to those of traditional media. This perception of the usefulness of the Internet and its cost-benefits seem to be particularly salient among those interviewees who have experienced some relative degree of success when using the Internet during previous electoral campaigns.

I had the idea of creating a personal website for my MP after my own campaign for city councilor. At the time, I had lots of comments and visits to my website, and compared to other kinds of publicity it cost me virtually nothing. So the price is a strong incentive, if you think.

(Head of MP Office Staff)

Unsurprisingly, another factor that seems to impact the extent to which MPs and their staff are more inclined towards technology usage or not is related to the characteristics of the constituency of each legislator. For instance, some interviewees will argue that the interest of their MPs on technologies is low for the simple fact that ‘their voters’ are not Internet users.

⁷⁷ Given a survey was not conducted amongs the MPs to identify this fact, such an assumption is built on the information conveyed by the different interviewees on the subject.

Noteworthy, interviews suggest that those MPs whose electoral support is based on richer regions where organized interests are more present, are more likely to receive email from their constituents. Also, the means of communication used seems to bear an impact on the contents of the communication: while e-mails contents are more related to collective demands, postal mail communication often is related to clientelistic requests from individual constituents. Such a fact is not indifferent to an MP staff who has worked with different constituencies, when describing the difference between the communication by postal mail letters and emails.

The amount of letters⁷⁸ you receive depends on the region and on the type of demand. I have worked with poorer regions, and there the demand is more individualist, and in this case the elector writes many letters. Now, if you take a richer region, things will appear in a more collective manner, segments of the society... In this case, e-mail is much more present. This difference is clear for me.

(Head of MP Office)

Thus, actors from the political sphere with stronger links with organized interests appear to be more aware of the possibilities of reaping the benefits of the use of the Internet as a means to communicate to a broader public. The engagement with existing networks is described as the most effective communication strategy, as these networks relay the information that they have received to a broader public. In this sense, the possibility of targeting groups according to their interests constitutes an advantage.

From a communication perspective, we identify a greater effectiveness mainly through the networks. You have social segments, children, social assistance, food security, and social policies. And these networks have a great capacity of disseminating information. So whenever there are events that are related to these networks, you will see more newsletters, posts in our website, an intensified and targeted communication... this is for sure.

(Member of Parliament)

Moreover, considering that civil society access to the Internet is much higher than among the general population (Surman and Reilly 2003) one could hypothesize that, all other things

⁷⁸ Postal mail, as opposed to email.

unchanged, MPs who have as civil society organisations as main interlocutors are most likely to engage in online communications. These types of generalizations remain, however, to be identified in further research. The absence of data (e.g. survey data) that would capture a full picture of the attitudes of actors within the political sphere towards the usage of ICT impedes one from making any bold claims with regard to ICT adoption by the members of the political sphere. Bearing these considerations in mind, the interviews suggest the existence of rather heterogeneous patterns of attitudes and behaviours towards the Internet within the political sphere.

Contrasted with this diversity, a common denominator can be found among actors from the political sphere is their attitude with regard to the Legislature website. It is perceived, essentially, as a reserved domain run by the administration of the House where its contents are clearly institutional and unlikely to be politically manipulated.

The Legislature website is institutional. The political one is the personal one that we put for our MP ourselves. In the MP personal website... if our MP is against the policy implemented by another X person this is something that has to go in his own website. Not in the Legislature one.

(MP Press Officer)

This adhesion to the rhetorics of institutional contents of the website on the part of the political sphere reaches surprising levels. For instance, every MP has a personal page in the Legislature website where basic information is provided, such as biography and submitted legislative propositions. Whereas in a great number of Legislature websites the MPs section offers links to their personal (external) websites, in Minas Gerais this is not the case. However, there is no disposition on the part of the administrative services that keeps MPs from putting external links to their personal websites.

If an MP has a personal website we can go and put the link for him, that is no problem for us. Our only concern is that, in our institutional website, all the MPs sections have the same format, the same template. But if they have an external website, we will put the link to the website.

(Communications Division Staff)

Interestingly, among different interviews with those in charge of MPs' websites, they unanimously assumed that a link to an external website was not allowed by the administration. In other words, those from the political sphere tend to behave expecting an even higher rigor from the administration with regard to the contents of the website than it actually is.

Can we put links to the external sites? I had already talked about it with someone else from another MP office and I thought we couldn't, because the House website is very institutional. So I thought we could not make this link to the external, personal website of the MP.

(MP Press Officer)

Also noteworthy, those in charge of the online communications of MP sometimes do the opposite. That is, in some cases, original contents from the Legislature website are reproduced or linked in the personal website of the MP.

But we always do the other way around. In every post and newsletter that we make for the MP personal website, we always refer to some content that is in the website of the House.

(MP Press Officer)

If this practice of relaying information from the House website on personal MPs website is evoked by certain members of the political sphere, it is important to underline the incentives for adopting such a behaviour. The choice of what information is relayed or not sheds some light on this issue. The fact that the website of the Legislature focuses on the provision of institutional information does not mean that MPs do not benefit from individual visibility. This is because depending on the position that is held by a certain MP on formal instances of the Legislature, such as committees and public hearings, they will automatically benefit from visibility as the Legislature website conveys information about them.

We will value the site, specially when... my MP presides the Committee of Popular Participation and coordinates this work of public hearings (...) and then the assembly creates a specific section in the website about the public hearing, and this is extremely important, not only for giving information, but also politically for the mandate of my

MP (...) this is fundamental for the MP, it is very good for him, I think the elector, his supporter, they go there and see something that is linked to the work that is carried out by the MP.

(MP Press Officer)

Finally, it is important to consider an additional element that potentially interferes on the perception that the political sphere has on the web. As mentioned previously, Minas Gerais MPs are one of the few state legislators in the country to enjoy the privilege of having a TV channel⁷⁹ as part of the communication services of the Legislature. In fact, as noticed by Jardim (2008), the first Legislative TV created in Latin America was that of Minas Gerais Legislature, inaugurated in 1995: even before the national House of Representatives and the Senate (Renault 2004). If “media and politics are intimately related” (Jardim 2008: 60) and MPs are willing to spend a great deal of their time devoting to advertising themselves (Mayhew 1974), the role of an *open TV channel* cannot be underestimated when considering how MPs drive their attention to different means of communication. A number of studies have shown the seductive effect – although strategically oriented – that legislative television plays on the behaviour of MPs. For increasing visibility on TV MPs are even willing to work longer hours: the introduction of TV broadcasting of Legislative plenary sessions leads to a systematic increase in their length (Maugret and Monnoyer-Smith 2000, Mixon et al. 2003, Queiroz 2007, and Cohen et al. 2008). Thus, it should not come across as a surprise the fact that the Internet – with limited audience when compared to that of the Legislative TV – constitutes a secondary focus of attention of MPs. Interviewees will frequently underline the greater attractiveness of the Assembly TV for MPs when compared to the Internet. The creation of an entire Division specifically dedicated to the Television – and not as a part of the Communications Division – is perceived as symptomatic of the importance of the TV in the eyes of the political sphere.

Of course, one can't deny the role of the TV assembly, another means of communication that is extremely powerful. It is clear that depending on the perception that MPs have of a means of communication, they will have a greater interest and will invest much more on this. (...) So, nowadays, the TV is even separated from the

⁷⁹ According to Jardim (2008), In a total of 26 state Legislatures, only 6 have open TV channels (VHF, UHF). Minas Gerais Legislature – along with Amazonas Legislature – are the only state Legislatures to simultaneously broadcast over the web, cable, satellite, VHF and UHF.

Communication Division, it is a Division of itself. And it is the level of interest on the TV that led to this new organizational setting. .

(Legislative School Director)

As a result, to the extent that the interest of the political sphere is drawn towards the Legislative TV, the attention of MPs is driven away from the Legislature website⁸⁰. Interviewees, while denying the presence of political pressure for influencing the contents of the Legislature website, tend to nuance this perspective when the same concerns the Legislative TV channel.

I don't believe that they (TV staff) change their contents, but the pressure exists. Because the TV is very visible, a spotlight... something that renders that gives visibility. So I believe that they are more frequently requested, that MPs are more demanding.

(Director of Communications Division)

To conclude this section, the perceptions of the different actors of the Legislature with regard to ICT, the Internet and the state Legislature website can be summarized as follows. First, the civil servants perceive the Internet as a means for the provision of information on the Legislature website, within the boundaries of what they consider to be institutional contents. Amongst the different conceptions of what institutional content is referred to, they can be clustered as i) information that regards collective outputs produced by formal institutions of the Legislature and ii) contents that are considered to be of interest to a broader public, such as Legislative propositions that affect a certain professional category. Moreover, career civil servants will place a pedagogical role on the manner that information is conveyed: the format in which the contents are provided should simultaneously lead to a greater familiarization of the audiences with the Legislative process.

To this rather homogeneous attitude towards technology and the role of the Internet in the state Legislature, on the side of the political sphere the perception towards technology is often heterogeneous. The perception of the potential of the Internet seems thus to constitute a function of two elements: i) the level of IT literacy of an MP and his staff and ii) the

⁸⁰ Even though the Legislative TV is also streamed through the website, MPs still perceive the website as a secondary means to reach their audiences.

constituency traits of any given MP. In the first case, even when MPs are to be considered IT illiterates, this factor can be compensated by their staff. In the second case, MPs whose constituencies are more organized around collective interests and with higher Internet access appear to take a further interest in the prospects offered by new technologies. However, across the different attitudinal patterns, actors from the political sphere adopt an attitude of compliance with the administration's discourse that the contents of the Legislature website are to be of institutional character. This minimizes the attempts of members from the political sphere in influencing the contents that are provided in the Legislature website. Nonetheless, benefits can still be reaped in terms of visibility from the contents of the Legislature website as information of an institutional nature may refer to MPs individually when, for instance, they exercise an important function of a parliamentary committee (e.g. president, rapporteur). In this case, MPs with personal websites will go as far as reproducing information from the Legislature website in their own websites. Finally, the possibility of MPs perceiving the Legislature website as a tool for increasing their visibility is nuanced when one considers the existence of an open TV channel in the Legislature. As a means of communication that reaches much broader audiences, the Assembly TV seems to justify to some extent a certain degree of MPs' indifference towards the Legislature website. In the following section, we shall see how the ensemble of attitudes and perceptions of the Legislature website ultimately affects its contents and the visibility that is given to them.

The Contents of the Website as an Expression of Organisational and Institutional Design

As mentioned, the contents of the website and the visibility that is given to these contents are formally under the auspices of the Communications Division. If our observations allow us to show that the political sphere adopts a behaviour of compliance towards the Communications Divisions' content policies – where no interference from the political arena is identified - this does not mean that other actors do not try to exert an influence on the contents and their visibility.

A first pressure that is exerted over the Communications Division, and that this latter is keen on revealing, is that from external actors. The Legislature holds a number of events such as public hearing and Legislative seminars where external actors (e.g. experts, civil society organizations) are invited to participate. Given these events are considered to be of institutional character, in many cases these external actors and their interventions are reported

on the Legislative website. In many cases, this constitutes a unique possibility of visibility for these individuals/organizations. For instance, a civil society organization may send links of the website to their members showing the role that the organization plays in the Legislative process of the state. In a similar vein, a consultant who has been invited to a public hearing may send links of the committee as a means to advertise his notoriety. In sum, on a number of occasions, external actors have a direct interest on the contents of the Legislature website that are somehow related to them. On some occasions external individuals and organizations will not hesitate to try to exert some influence on the contents.

This person came here for a debate... and we put something that she talked about during the debate. Afterwards she called me, and said that she was going for a meeting in Brasilia and would like to show an article of the website to other people and asked if I could change a few things in it... then I talked to her. I said, "Look, there are some things that are even a matter of journalistic technique, I cannot make a huge quotation of your talk". We talk nicely; you need to know how to deal with it...

(Director of Communications Division)

However, as the quote above shows, the position of the Communications Division is, rather than ceding to pressures, to engage in a dialogue in explaining the reasons why certain content has been presented in a given manner. It is also interesting to note the discourse of 'journalism technique' adopted, which provides the staff from the Communications Division with an authoritative argument that is unfamiliar – thus hardly challengeable – by external actors. The subject of 'journalistic technique' with regard to the way that contents are provided is often evoked by those interviewees from the Division, describing journalistic activities as a reserved domain of the members of the Division who possess a specific type of expertise.

If some degree of external pressure is felt by the Communications Division, the interviewees suggest that those who attempt to exert influence on the contents more frequently are the members of other organizational units within the administration. This is particularly so as the promoters of different events of 'dialogue with society' – as previously described – claim for increased visibility in the Legislature website. Consequently, at any given time, a visit at the website of the Legislature will show a number of 'banners' advertising institutional events in the Legislature, such as public hearings, consultations and broadcast of these events in the Legislative television. In the absence of political interference, as shown before, the 'internal

dynamics' of the administration is what defines the struggle for visibility in the computer screen. As the Director of the IT Division eloquently describes, the difference of behaviour of the political sphere and administration vis-à-vis the contents of the website can be put in the following terms:

The administrative sectors are the ones who ask for things. The TV for instance is always asking for a good placement in the initial page of the site. So, when you look at it, all that excess of banners, it is fruit of this, many people in the administration wanting to show off. In the website, the very internal administrative dynamics imposes itself when compared with the political sphere. The MP knows already and will tell you in a resigned tone “no, I know that whatever I want to do I can only do in my personal website”.

(Director of IT Division)

The consequences of this pressure from other administrative units go beyond the visibility that is given to contents of the Legislature website. It also impacts on the very distribution of labour with regard to the generation of web contents, in principle responsibility of the Communications Division. In this respect, a first element to be taken into account is the fact that interviewees from the Communication Division perceive an increasing demand for visibility in the Legislature website, as other administrative sectors view it as an important means of communication.

This pressure has increased and it tends to increase even more as time goes by, as one becomes aware of the importance of this media... so they realize that it is a space for visibility, interactivity, a verve of modernity... then they want to use it.

(Director of Communications Division)

Needless to say, if the Communications Division is responsible for the generation of contents, this increasing pressure for visibility has led to a work overload on the part of the Division. Moreover, many of these administrative sectors required the creation of specific sections within the websites for the publicity of their events and activities. This implied also additional work for the IT Division, responsible for the architecture of the website. These increasing demands from the different administrative units in the Legislature have led both of the Divisions – Communication and IT - to adopt a decentralization strategy through the creation

of the so-called 'hotsites'. These sites, also known in the Internet jargon as 'microsites', normally refer to easily deployable and temporary web pages (or sections) where the contents are compiled by a third party. In the context of Minas Gerais Legislature these microsites started to be deployed for the different administrative sectors that want to publicize their events and activities, generating themselves the contents of the sites such as texts, pictures and reports. The implementation of this strategy as a means to reduce the workload of both the IT and Communication Divisions is perceived as successful.

We are using these hotsites for the communication of events. So when there is going to be an event, for each of these events a hotsite is published, a tiny little site with five or six pages, information and news.... Nowadays we don't even see this being done anymore, for me it's great, they do their stuff, as they want.

(Director of IT Division)

Nonetheless, it should be noticed that if the creation of these microsites are intended to reduce the workload of both Divisions, this does not mean that other administrative sectors are free to create websites at their will and in whatever format they prefer. Both the IT and Communication Divisions' in this respect are willing to restrain the number of hotsites that are created as well as playing a determinant role in the format of these hotsites and eventually their contents. Towards the objective of keeping a minimal standard of quality and similarity among the different hotsites, it is the Communications Division that defines their deployment and structure (e.g. number of pages, sections, layout). That is, other administrative sectors are granted with limited autonomy with regard to when they can have a hotsite and what they can do with it. The notion of a 'controlled decentralization' is thus conceived as a solution for reducing workload while ensuring minimal standards of quality among the different hotsites are met.

One of the objectives of these hotsites is to have a decentralization of tasks, but a controlled one. The guy of another sector will be able to insert information through this tool, but within an architecture defined by us, a template, a layout... So things are somehow semi-controlled you see. Only the Communication Division and us has a privileged access to this tool, they are also the owners of the layout, but we know that over there they won't do anything silly. But if you are to put this in the hands of

another sector, this has to be tighter, to keep it within the standards... more autonomy on the contents and less on the format....

(Director of IT Division)

The limited autonomy with regard to the structure of the hotspots does not appear as a problem to the interviewees from the different sectors of the administration: it is a means to keep a minimal coherence among the different hotspots. The Director of the Legislative School thus describes the autonomy of the School's hotspot vis-à-vis the Communication Division with regard to the hotspots

So the School has a page inside the Legislature website, which is of our responsibility... It is not that we manage it, because everything is centralized in the Communication Division... we let them know how we want, the general format and they put it into a perspective of standardization... you do not get individual pages... with one hotspot totally different from another one, this is why it is centralized. The more dynamic things, we do it ourselves... news... but anything that is structural has to be done through the Communications Division.

(Legislative School Director)

Moreover, even considering these microsites are intended to provide autonomy to third parties in terms of generation of contents, the staff from the Communication Division still adopts a vigilant attitude towards the content that is uploaded by the different sectors, intervening whenever it deems necessary, either by recommending changes in the content or by offering to make the changes themselves.

Sometimes we make a follow up of the hotspots and we say "Look, you have to put this information in the site, how we should go about it". The other day I saw a piece of information in a hotspot and I thought to myself: "this text needs to explain a bit better". I can make a suggestion for them or we can make it ourselves.

(Communications Division Staff)

In other words, if autonomy is granted to other administrative sectors in the generation of contents in their hotspots, a proactive behaviour can be identified in the part of the Communications Division that certain standards are met as well. This can be explained in

part, by a repeatedly evoked concern on the part of the Communications Division in providing contents that are institutional and accessible to a broader audience. Moreover, one could hypothesize that these punctual interventions from the Communications Division also function as a strategy to remind other units that the Division remains the ultimate communication service in the House, thus rendering evident their level of professionalization and specialization that, as we have discussed before, remains the major value within the administration.

The contents of the website, based on the discussion above, constitutes the result of institutional and organizational traits of the organisation. First, the non-intervention adopted by the politicians enables the Communication's Division to ensure that contents provided are of institutional character. Nonetheless, other sectors of the administration will try to exert some influence on the visibility that is given to contents. This is the result of an internal dynamics of the House that finds its roots in a process of institutional innovation adopted by the House: the creation of channels of interlocution between the Legislative and Society. The consequence of this process started in the early 1990's is that the Legislature nowadays carries out a series of activities and events that, among themselves, compete for public visibility. As the different administrative sectors in charge of these activities realize the growing potential of the Legislature's website as an important means of communication with the public, so grows the incentives to exert pressure in the Communications Division in order to achieve increased visibility in the website. Responding to these demands has implied a supplementary workload for the Communications as well as for the IT Division. In order to alleviate this effect, the strategy of creation of hotspots was jointly adopted by the two Divisions (IT and Communication). First, the creation of hotspots has released the staff from the IT Division from the fastidious task of creating specific website sections in the Legislature website. The equivalent of this task is then performed by the Communications Division, though through the usage of an easily deployable tool. If this constitutes an extra activity to be performed by the Communications Division, such a fact is outweighed by the benefits of transferring to other administrative sectors the responsibility to create contents themselves (e.g. texts, formatting pictures), an activity described as increasingly time consuming and previously carried out exclusively by the Communications Division.

Nonetheless, despite the decentralization of tasks to different sectors of the administration, both the IT and Communications Division will deploy strategies to keep on exerting control

over the usage of hotspots by third parties. The IT Division, which grants only to the Communications Division the technological means to deploy new hotspots, sets the first control. Also, the Communications Division is the only sector with discretion over the format (e.g. layout, number of pages) of hotspots adopted by the different administrative sectors, hence ensuring a minimal uniformity amongst the several hotspots implemented. Finally, staff from the Communications Division will adopt an observant behaviour vis-à-vis the contents that are generated by other sectors, occasionally intervening by providing suggestions or 'offering' themselves to execute the changes they consider desirable. The functions of such soft interventionism, we suggest, are twofold. First, it ensures that the Communications' Division authority is preserved with regard to the communication activities of the Legislature, in the framework of a Legislature where labor division is highly salient and specialization is part of the *raison d'être* of the different Divisions. Secondly, it ensures and reinforces the adherence of the different sectors to the principle of provision of institutional contents. To conclude, the complex set of strategies adopted by the different actors in the pursuit of their interests, embedded into organizational and institutional settings, will ultimately define the contents of the state Legislature website.

10.4.3 Web Features as Expression of Needs, Institutional and Organisational Settings

The Legislature Website: a Shared (and Sometimes Disputed) Paternity

Before entering the discussion on the factors that shape the features of the Legislative website, it is relevant to clarify the role played by the different actors in the process of technological enactment taking place in the state Legislature. Based in the previous analysis carried out, it should not come as particularly insightful that two categories of actors play an important role with regard to the Legislature website: members of the IT and Communication Division.

Important to notice though, an element that arises from the interviews carried out is the absence of any formal rules with regard to the management of the Legislative website. In other words, there is not any element that formalizes which sector of the administration has authority over the website.

The website is managed by the IT and the Communications people. There is not formalization about it: the website we started here in the IT Division in 1996, because at the time it was something merely technological. But over the time and given the

interest of the Communications department in using the Internet, there was an approximation of the work in both sectors.

(Director of IT Division)

However, based on the previous accounts, it becomes clear that despite the absence of explicit rules, the Communications and IT Divisions do exercise a *de facto* authority that is rarely challenged by other sectors of the administration who – at least in principle – would have an interest in being able to exert influence in the way the Legislative website is handled.

A first element to underline, in this sense, regards the interests of these two actors. If holding *de facto* authority over the Internet comes associated with an increase of workload, what motivates the IT and Communications Divisions towards monopolizing control over Internet services? A first element to be considered could be the inclination of the members of these two Divisions to perceive themselves - based on their expertise on IT and Communications - as best equipped to “uphold the public interest” (Chen et al. 2003:166) with regard to Internet usage. In opposition to this somehow altruistic ethos of career civil servants, one could however claim that the interest of the actors from both Divisions is simply that of maximizing the size of the budget under their control (Niskanen 1967, 1971). Thus, as the Internet is perceived as an increasingly important means of communication within the Legislature, actors would be strategically oriented towards holding a present and ensuring a future authority over the Internet. Indeed, on a number of occasions interviewees will ponder the relationship between the difficulties associated with being responsible for the Internet and the potential of the Internet as the ‘next big thing’. The Internet, source of occasional disadvantages, appears in the discourse of interviewees as holding a promise for the future.

I think there is a growing importance [the Internet]. And if your division is co-responsible for providing these resources, it is important for your division. If we outsourced everything, we would get rid of the problems, but we would also lose the visibility, wouldn't we? (...) The TV Assembly appeared and it started to be the darling, the biggest budget and all that stuff; and I think in the future it will be the Internet. So it is not just important for us, it is fundamental for us to be involved in this.

(Director of IT Division)

If utilitarian arguments as quoted above are not rare in the interviews, the same can be identified with regard to attitudes of public mission towards the general good. In fact, any manicheism concerning the sources of motivation of members from the IT and Communications Division would provide an inaccurate picture of the reality. Whilst the dilemma between the prevalence of intrinsic or extrinsic motivations cannot be resolved, it is unquestionable that the actors from both the IT and Communications Division bear an interest in reinforcing and increasing their authority over the Internet in the state Legislature.

To an external observer, the pattern of shared authority over the Internet between the two Divisions would appear as simple and serene: while the Communications Division is responsible for the contents of the Legislature website, the IT Division is responsible for its technological features. Such an intuitive interpretation, however, could not be any further from the truth. The division of tasks between the two administrative sectors is rather inconsistent and the shared authority is often a source of veiled conflicts.

You must have talked about this in other places and must know how it is, the question is the following: we have a partnership with the IT Division, we are building this partnership, but there are conflicts of course! The partnership is better now; it is not the same as when it started: in the beginning it was very difficult, but we still have points of conflict.

(Director of Communications Division)

Much of the conflicts are linked to the very nature of the Legislature website: while it is a means of communication it also constitutes a technological construct whose handling is dependent on a highly specialized knowledge. To an external observer, the conflict can be summarized as the fruit of a divergence between the focus that each of the divisions give – technical or communicational - when dealing with the Legislative website.

I think you could put the conflict in this manner: what determines what? The technology determines what you can make in terms of communication? Or what you have to do in terms of communication will determine how you use the technology?

(Legislative School Director)

In the absence of a consensus of which aspect should prevail, i.e. communicational or technological, each of the Divisions share the perception that the counterpart is interfering in a domain that is reserved to them. On the Communications Division perspective, members from the IT Division try to exert influence in the way the communication is done over the website, whereas actors from the IT Division judge that their counterparts occasionally consider them as mere implementers of technology.

The classical conflict is the IT people to think that they are the ones to run the communication for being the ones who possess the technique.

(Director of Communications Division)

We already had conflicts; for instance, when people from the Communication thought that we were mere implementers of what they defined. And our understanding is that we do have to contribute with the conception of the website, and not simply execute what they define.

(Director of IT Division)

If the lack of clear definition of attribution of roles is source of veiled conflicts between the IT and Communications Division, actors from both sides are resistant to the idea of a clear formalization of separation of roles. Actors from both sides consider the unpredictability that such results could bring as being too high. Moreover, previous attempts of formalization have proven to be unsuccessful and were abandoned before reaching any conclusive results.

The formalization is avoided. We tried in the past to try to establish some rules for this partnership, so that each part could know how far its autonomy goes, but the process did not go forward. The relationship is informal because I think both sides fear that if we move towards formalization, the power will have to go towards one of the sides. We might lose the margins of negotiation. This could have a boomerang effect.

(Director of IT Division)

Apart from illustrating the resistance of sectors to opening the Pandora's Box of formalization, it draws attention to another aspect that is crucial. The introduction of formalization in the relationship between the two divisions would risk undermining an element that is essential in their relationship: flexibility and the respective capacity to

negotiate. It is precisely the absence of formal rules that engenders the uncertainty necessary for negotiations to take place between the parts (Crozier and Friedberg 1977). But what precisely are these negotiations, and what are their terms? If these negotiations vary in nature and are not always explicit, in many cases they concern access of a Division to supplementary resources or services. For instance, in a number of cases, the Communications Division might request services from the IT Division such as a new feature in the website. In this case, the IT Division might see such a request as an opportunity for access to additional resources, be they of material (e.g. hardware) or immaterial (e.g. Communications' support for a certain project) order. Thus, the uncertainty of the possibility of the IT Division to respond to a demand from the Communication Division opens up space for negotiation. A senior civil servant, who has been directly involved in some of the negotiations between the Communications and the IT Division describes a typical negotiation as it follows:

Generally this is how it happens: "Look, for us to do what you want, we need the hardware X, the software X. And we do not have it, and we do not have money to buy it. So let's buy it?" To which the Communications responds: "OK". And the IT: "But I do not have access to who can decide it now, to who buys and who makes the budget, do you have?" to which the Communication responds: "OK, we will ask the people to buy, we will see who buys, who makes the budget and everything else. (...) So it is very common to see they take profit from a situation to achieve something that they would not have achieved by themselves."

(Senior Legislative Staff)

Note that in technological terms, there is a clear asymmetry of information between the two Divisions: in most of the cases, the Communications Division has a limited capacity to assess to what extent the needs expressed by the IT Division in order to respond to a demand are accurate, a fact acknowledged by the latter. If technical issues are to be raised by the IT Division, members from Communications, in principle, have little choice but to accept the arguments brought to the table. Actors from the Communications Division often convey a sense of discomfort with such a condition.

It's like this: we want to do lots of things and they say it is not possible: technological limitations....

(Director of Communications Division)

The Director of the IT Division acknowledges the implications that their technical superiority plays vis-à-vis the Communications Division. The latter has no means to carry out an in-depth evaluation of the claims made by the IT personnel. According to the Director of the IT Division, it is the level of trust between the members of both Divisions that minimizes the problem.

It is obvious that at some point a discussion might involve technical issues, no? And they will not be able to analyse in the minimal details that we are going to give, because if they are technical they have to believe it. It might be that they [Communications Division] think that we raise some difficulties to impose an idea of ours... but I think this depends a lot on the trust that is established between the teams and amongst the people themselves. (...) But this depends a lot on the profile of the people working together at the moment.

(Director of IT Division)

If it might be probable that trust enters the equation, it does not alter the overall outcomes. On the one hand, trust relationships remain contingent, as they are dependent on the profile of the people working together at any given moment. On the other hand, the disparity of technical expertise and the consequent asymmetry of information functions as a constant in the relationship between the two Divisions. Such a fact might explain the enthusiastic attitude of interviewees from the Communications Division with regard to the then recent hiring of two highly skilled web designers to work in their division⁸¹. Noteworthy, the admission of these two web designers was made possible only after the creation of the two positions in the statutory framework of the administration and the realization of an entrance examination (public contest) designed exclusively for these two positions. Members from the Communications Division have gone to great lengths to overcome the barriers of creating two new positions in their sector and to create a public exam suitable to their specific needs.

And I will tell you something about creating a new position: in public services it is a process extremely difficult to create a new position, you have regulations and it is something complicated to do. (...) And also for the entrance exam: it is a new area,

⁸¹ The web designers were recently contracted during fieldwork in July 2009.

and a position that did not exist internally, and an in-depth research had to be done in other institutions to see if a similar public exam had been done elsewhere. (...) And this exam was even to give us increase autonomy and depend less on external services.
(Director of Communications Division)

Vis-à-vis the IT Division, the first argument employed by those in the Communications Division will be to claim that there are benefits to the former, as it reduces the number of requests from the Communication Division to the IT Division thus releasing this latter to other activities. Interestingly, shortly after the arrival of the web designers, the IT Division sought a close collaboration with the two web designers in the development of the Intranet of the Legislature, which was halted by the Communications Division shortly after the start of a few common activities carried out. The ambiguities of roles to be played by the two divisions should not be extended to the role the functions to be played by the newcomers: the web designers remain an exclusive resource of the Communications Divisions.

Interviewer: Did the arrival of the web designers generated confusions about whom does what?

Yes it did, but what happens? In the reformulation of the Intranet for instance, she [one of the web designers] took a work to do that was development of code... and this took too much time of hers. (...) So she can't take code to develop, otherwise she will not do things that are specific to us [Comm. Division] and that other people can't do. To do coding, this is stuff the system analysts do or... the IT professional does. So I have already told the IT Dept. "Look, from now on she will not do these services"

(Director of Communications Division)

This reaction of the senior manager of the Communications Division with regard to the incipient relationship between the IT Division and the web designers is not to be underestimated as a simple measure of operational order. Rather, it seems to render evident the extent to which Communication Division members perceive the incorporation of the web designers' expertise in their own unit as an important element for altering the previous – and disadvantageous - terms of negotiation with the IT Division. The hiring of the web designers, by the time fieldwork was being conducted seemed to be already producing results. During interviews with members of the Communications Division, they would often evoke the role

that the arrival of their new tech-savvy colleagues played in minimizing the asymmetry of technical knowledge vis-à-vis their counterparts from the IT Division.

How it was before? We would complain about software and they would say “No, this is a good product”, and nowadays we say “No, take a look, there is a problem in this part, you have to take look because there is a bug here...” (...) But now with the arrival of the web designers, we have a better knowledge of this part and we know how... we know how to negotiate better.

(Communications Division Journalist)

Bearing these considerations in mind, our understanding of the contentious nature of the relationship between the two divisions should be nuanced. On most of the occasions, whenever conflicts are referred to, the notion of partnership between the divisions is brought up, and the dimension of the conflicts are minimized as something inherent to the nature of their activity.

But they participate in the process, they have an experience that is very important, and they do have a technical expertise. It is in partnership with them. There is our team with some IT analysts from there; we exchange opinions, we have meetings to let each other know what is happening.

(Communications Division Web designer)

We support each other. Like it or not, even though we disagree on some punctual things - something natural - we are together in this for quite a long time, and we know how things were conceived, why they are in a certain manner, so it is more or less like husband and wife.

(IT Divisions Director)

In this respect, both divisions are more likely to achieve their goals when working in tandem. For instance, in the absence of any formal authority over the website, in a number of cases reinforcing the authority of each other functions as an alliance that deters the interference from third parties (e.g. administrative sectors), thus ensuring that the Legislature website remain *de facto*, under the control of the two divisions only. In other words, both sides perceive the good relationship amongst them as being an essential strategy to keep externals

from crossing the boundaries of their informal – notwithstanding clearly defined – reserved domain. Images and terminologies related to strategic behaviour are permanently evoked when describing the relationship between the two sectors of the house.

On the other side, it is very good to have a relationship with the Communications Division. Because sometimes a person from another sector comes here out of the blue and says: “Oh, I would like to have this in the website of the House”. So it is extremely good for us to have the IT and communication people together, to discuss these things and to counter the things that we think that should not be done.

(Director of IT Division)

We are allies. It is much better to have a good relationship with the IT Division.

(Communications Division Journalist)

Moreover, it is important to notice that internally and vis-à-vis the administration, the bargaining power of the two divisions for resources increases when they are combined, as well as their chances of putting forward projects and capacity to face internal resistance. With regard to this latter, as noted by the Director of the Communications Division, a prior alliance between the two divisions is essential before implementing changes that have an impact in the work of other sectors. For instance, a change in the interface of the system of uploading contents to the Intranet and a new design in the usability of the website was in course of implementation when interviews were being conducted: a preceding agreement with the IT Division on the activities to be carried out was considered by the Communications Division as a pre-condition for taking the project further.

So now, any changes that we make in the website, there will be a moment of resistance from the others, and we do not have an illusion about not having difficulties. (...) But we will already be in agreement with the IT Division, by consensus or decision; we don't start these things without a previous dialogue.

(Communications Division Journalist)

Based on the accounts laid down in this section, the following elements should be underscored. A first question concerns the absence of any formal rules determining which sector of the administration holds authority over the Internet. Whereas other services are

clearly defined within Divisions, the Internet appears under the shared and informal ‘paternity’ of the Communications and IT Divisions. The informal attribution of competences to each of the Divisions under this pattern of shared authority is far from clear, with each of the Divisions often conveying some degree of dissatisfaction with regard to interference of their counterpart in issues that one considers to be its domain of action. Such a situation of veiled suspicion aggravates when one considers the asymmetry of technical expertise between the two divisions, with the Communications Division for a long period unable to verify the validity of technical claims made by the IT Division. Such a process started to be reversed by the hiring of web designers for the Communications Division. The technical expertise brought by the web designers to this Division, albeit in its early stages, showed an improvement on the capacity of their members to negotiate with the IT Division. Finally, the account of the conflictive nature of the relationship between the two divisions must be nuanced by the strong evidence of patterns of collaboration between the divisions both in operational as well as in strategic terms. In the following section we shall see how the strategies of these two sets of actors (IT and Communications divisions), embedded in the institutional and organizational settings of the Legislature impact on the features of the Legislative website.

The Architecture of the Website as an Expression of Organisational Needs

The beginning of a more intensive usage of ICT in Minas Gerais state Legislature can be chronologically situated during the 1989 State Constitutional Convention. The rationale for technology usage was, then, that of addressing organizational needs related to the Constitutional process itself, as it entailed the necessity of processing a great number of proposals and managing information in a timely and reliable manner.

It was an opportunity; during the Minas Gerais Constitution we made an agreement with a company for the concession of an equipment that suited our needs with regard to processing information.

(Secretary General)

In the years that followed, the Legislature invested heavily in the usage of ICT in the administrative sphere of the House. Soon Minas Gerais Legislature was standing out with regard to ICT usage in the Brazilian Legislative landscape. For instance, as underlined by Assis (1997), the Legislature was considered a pioneer in the usage of ICT in Brazil as it

adopted in the early 1990's systems allowing the exchange of information amongst all of the House sectors and ensuring Internet access to every servant in the administration. Already by 1998, in a report for the Interamerican Development Bank looking at different Brazilian Legislatures, political scientist David Fleischer noted that in terms of information management, of all the Legislatures studied Minas Gerais was:

“(...) the best equipped state Legislature in terms of hardware, software and human resources. Under these criteria we can consider the Legislature, under several aspects, as even more equipped and advanced than the very National Congresss”.
(Fleischer 1998:6, quoted in Fleury 2007)

According to Anastasia (2001) these innovations, rather than contingent, were the fruit of strategic choices aiming to adapt to the new institutional model adopted by the Legislature in the beginning of 1990's. In other words, these technological innovations were embedded into a context of institutional change. The intensive use of ICT was a means to respond to the needs generated by the implementation of a highly complex and professionalized administrative structure, as discussed earlier.

Such a perspective with regard to the motivators for the adoption of technologies remains in the Minas Gerais state Legislature: the ultimate goal, in most cases, is that of addressing internal needs. In this respect, a number of technological features that can be found in the Legislature website (e.g. information automatically updated, search facilities) are actually only possible to the extent that a certain number of internal systems were already pre-existing.

The website of the House today reflects many IT systems that are used internally. In some cases, they even existed before the website, but they provide a huge amount of information automatically.

(Director of IT Division)

For instance, as quoted above, much information is updated automatically in the Legislative website such as Committee members' names and positions, status of bills and public procurement calls by the administration of the House. The final result is that of a great amount of information that is provided in a timely manner. However, apart from the contents generated by the Communications Division (e.g. news, events) and third parties (e.g. hotspots)

none of these contents are generated exclusively for the website. They are automatically uploaded in the website as career civil servants carry out their day-by-day activities. For example, whenever the servant who is in charge of administering the functioning of public hearings inserts information about a new public hearing in his system (an internal activity), this new information is automatically uploaded in the website. The provision of information to external audiences thus emerges as the byproduct of internal procedures as they are fed into the management systems, where the marginal effort to provide the information externally is minimal.

So in the course of these years, all the sectors of the house were computerized, including our Legislative process, and these systems were being interfaced with the Legislature website. So nowadays you can track projects, laws, speeches, name of MPs... all these are systems that we are already running, and they show up in the website without any additional effort on our part. (...) The user of a system that feeds data for his internal work is automatically feeding information to the website. We respond to a demand [for transparency] with minimal effort.

(Director of IT Division)

Interestingly, an observation of the architecture of the information of the website appears to reflect, to some extent, the internal organisation of the Legislature's administration, not easily understandable by an observer unfamiliar with it. This is perceived by those interviewees from both the IT and Communications Division as the natural – albeit undesirable – result of the process of rendering internal systems available externally i.e. in the website. In other words, as information of internal systems which are organized following internal procedures, the website tends to mirror the internal organisation of the Legislature. Furthermore, information and tools used by career civil servants for their daily work is only available on the Legislature website. The contents of the internal network of the Legislature (i.e. Intranet) are not repeated in the Internet and vice-versa. For a majority of career civil servants interviewed in the Legislature, the website constitutes a major tool for conducting their daily activities.

The website is a tool for the work of the majority of the sectors. The contents of the Intranet are not repeated... so for instance, the people at the Legislative Process Division, all their stuff is in the website: agenda, results of meetings, database

search... without the site they don't work! In the Intranet we have payments, book reservations... just really internal stuff.

(Communications Division Journalist)

If the website is also a tool for daily work of career civil servants, they have a direct interest on the design of the website. For instance, the more intuitively they can access a certain part of the website, the less time is spent on a given activity. Hence, civil servants that are more comfortable in navigating through the website when its architecture is conceived representing the organizational setting that they are familiar with. Thus, members of the administration do not hesitate to exert pressure on members of the IT and Communications Division in order to alter the design of the Legislature website in a manner that is more convenient to them: reflecting the internal organisation of the Legislature. Occasionally, interviewees will admit, this pressure impacts on the design of the website. This generates certain problems in terms of usability for external users who are not familiarized with the internal structure of the administration.

Sometimes they call saying that they could not find something. The internal users want a mirror of our structure, of our functioning in, the website... So much that the Intranet nowadays reflects this very well: each of their sectors with their own processes. And then they want it to be repeated on the Internet. They make requests that will make things easier for them, but they do not think what is good for the external users. And maybe that's why things get a bit out of hands with a few problems of navigation for an external user.

(Website Designer)

However, as the quote above suggests, if the Legislature website might occasionally reflect the internal organisation of the House, it does not reach the point of becoming a perfect 'mirror' of the administration, as it is the case of the Intranet of the House. This is so because, despite the pressures exerted by civil servants, members from the IT and Communications Division seek to resist on a case-by-case basis the requests made by servants, in an attempt to ensure minimal standards of usability for the external user. This is a typical case where the cooperation of IT and Communications Division is essential. In this sense, a new redesign of the website aiming to improve usability for the external user was in course, as discussed in the

earlier section. Despite the internal resistance, the IT and Communication Division staff attempt to prioritize - in unison – the website usability for the external user.

They will complain why their links are not in the first page... but they can complain... our concern is for the external user. The internal user has the obligation to know where things are. So we have to think about the external.

(Communications Division Webdesigner)

So the website is looking like a Times Square for the external user, with things pointing in every direction. It is because of these pressures... but now we are going to clean that up, think of the external user. (...) We have agreed with the Communications on that.

(IT Division Staff Member)

Bearing the elements exposed above, this section can be summarized in the following manner. A number of features in the website are actually the fruit of pre-existing systems that were created, in their origin, as a means to address organizational needs of the Legislature. The professionalization of the Legislature in the early 1990's as a process of institutional change, led to a simultaneous intensification of ICT usage within the administration, as a means to allow for increased efficiency of internal process. This has led to a high informatization of administrative procedures where a great amount of information is processed internally by IT systems. In this respect, the features that allow for a great deal of information to be provided in a timely manner (e.g. automatically updated) in the website are actually the fruit of previous systems that are simply transferred to an external environment. The marginal costs for increasing provision of transparency are, in this sense, lowered as contents are automatically uploaded as career civil servants carry out their routine activities.

This leads, however, to a certain paradox. Whilst the externalization of internal systems generates an increase in transparency, it also leads the website to increasingly reflect the internal structure of the administration. In other words, the architecture of the website tends to become 'bureaucratized', reflecting internal processes that are unfamiliar to external users. Usability problems start to arise. These problems are aggravated by the pressure exerted by different servants aiming to reinforce this characteristic of the website as a reflection of the administration. However, the effects of these attitudes are somewhat minimized as members

of the IT and Communications Division jointly seek to resist the pressures, aiming to ensure that usability – in the perspective of the external user – remains the guiding value of the architecture of the website. The final architecture of the website stands half way between the needs of the internal and external users. Actors strategies, embedded in organizational and institutional settings, define the configuration of the website.

Interactivity in the Website as an Expression of Institutional Design

In the second part of this section we have shown that provision of information is limited by the scope of ‘institutionality’ of the contents; which is understood either as fruit of collective outcomes or as being of general interest. We have shown then that those in charge of the website are particularly keen in taking every measure possible to avoid instrumentalization of the website with regard to the contents that are provided.

In a similar vein, the possibility of enhancing the interactive potential of the website is approached carefully by the career civil servants in charge of the website. On the Legislature website, citizens can already send e-mails to the MPs and to the administrative sphere. On the part of the administrative services there is a particular concern for being responsive to those citizens that contact the administrative services. In fact, administrative policies impose that every question made by citizens through the website – or any other means – should be replied within a limited lapse of time. Conversely, career civil servants will often convey – albeit subtly – a certain regret that the political sphere (e.g. MPs and their staff) does not adopt with the same rigor this behaviour with regard to the e-mails from the public.

Interactivity... It is a concern of the house to reply to every institutional question from the public, and always in the best possible manner. There was even a working group that studied a best way for channeling the e-mails received from the public... so that an e-mail doesn't get here, then it goes to another department and so on... there is a concern for giving the appropriate reply and as fast and in a timely manner. This institutional concern exists; and we even have rules about it. But now the MPs... we have no way to control that. I don't know... it is up to each MP office...

(Communications Division Journalist)

Interesting to notice, whenever concerning MPs, interactivity appears in the discourse of interviewees from the administrative sphere as limited to the exchange of e-mails, i.e. bilateral interactivity. However, such a discourse describing interactivity limited to exchange of emails does not correspond to a limited understanding of what interactivity consists of. Rather, it conveys the discomfort with which the notion of interactivity beyond the simple usage of e-mail (with regard to MPs) is approached by career civil servants. This is so particularly when it refers to using ICT tools for the creation of enhanced channels of interaction, such as the creation of means for citizens to provide feedback directly to MPs on the activities led by the legislature (e.g. forums, blogs). If Minas Gerais website remains in great part as a means for the provision of information, part of this is due to a certain resistance to providing additional means of interactivity (e.g. blogs, chats) to MPs individually. Such a usage is perceived by some as a risk of jeopardizing the institutional focus that is given to the website. The initial institutional focus given to the contents of the website functions

Our website is essentially 1.0, informative. Because before there was this restriction to “what the MP can do on his site”... because the site was made to inform. The result is that people moved towards adopting these directives to avoid MPs from doing political propaganda through the website.

(IT Division Staff Member)

The ease with which MPs theoretically could start to use services for interactivity is also viewed with reserve: if MPs are willing to engage with their constituents through the usage of tools that allow for multilateral interactivity (e.g. blogs, social networks) they must do so through their personal (i.e. external) websites. Interesting to notice, with regard to the usage of social networks (e.g. Facebook), the limited capacity of the administration to provide support to each of the MPs in the usage of these tools is often evoked as an impediment.

Out there everything is easier. If an MP is really interested in getting involved with technology, he will end up looking for this solution outside, because this is not part of the main mission of the institution. And there are limitations as well. You have the case of social networks for instance. We would not be able, in this moment, to support the insertion of 77 MPs in social networks.

(Director of Journalism Services)

Hence, interactivity appears to those from the IT and Communications Division as presenting risks on two fronts. First, interactivity provided to MPs individually would risk weakening the institutional focus of the Legislature website. As MPs could start posting and openly interacting with their constituents through the Legislature website (e.g. through personal Forums), this could lead to instrumentalizations of the tool towards individual or partisan gains: something that is diametrically opposed to the values held by the career civil servants. Second, the provision of services of individual order to MPs could generate an undesirable increase of workload for those in charge of the Legislature website. Simultaneous to the reserve adopted towards interactivity, stakeholders from the Communications and IT Department convey a feeling that their resistance to interactivity is unsustainable in the long term if they want to keep up with the technological advancements.

But we know, and the Communications sector knows, that we have to start to insert the assembly in this new technological context, so interaction is fundamental. (...) We have to interact. So we have to start to think of ways of doing it without losing our institutional approach.

(Director of IT Division)

If interactivity with MPs individually is perceived as an inconvenient and, at the same time, it is perceived as a necessary advancement for the website, the notion of interactivity with the institution – as opposed to with individuals – is raised by different interviewees in charge of the website.

Interactivity? I think it has to be with the Institution... we are starting to think about it, our ideas are still quite raw on this area... possibility of commenting on the news... this is a matter that is being studied... if it is worth it to make in the institutional part... or if we use a blog... ... we are still identifying.

(Communications Division Journalist)

In fact, in the last two years, the first attempts of use of the Internet as a means of promoting interactivity has privileged the use of the Internet as a means to support the activities of the institutionalized channels of interlocution between the Legislative and society. For instance, in 2009, parallel to an official public consultation held by the Legislature on the state's *Educational Decennial Plan*, citizens could provide online proposals for improving education

in the state. Interesting to notice, all of the proposals submitted online were officially evaluated by the *Consultation Committee*, with a number of those being included in the final legislative proposal produced by the end of the process. In a similar manner, an online consultation carried out in the same year constituted one of the bases for the Legislation that determines the strategic planning of the Legislature for the period 2010-2020. It is important to notice, in both of the initiatives exemplified above, citizens' participation online had a direct impact in the decision-making process. If, in most ICT mediated participatory experiences across the world the link between citizens' input and decisions taken is rather weak⁸², Minas Gerais Legislature's case appears as one of the few exceptions where citizens' impact is unambiguous. However, such a fact seems to be only possible given the pre-existence of institutionalized channels of citizen participation in the Legislative process, as discussed earlier.

Thus, the interactivity traits of the Legislative website, albeit nascent, appear as the expression of the very institutional design of the Legislature. Career civil servants in charge of the website will tend to refute the notion of individualized interactivity between MPs and citizens in the Legislative website: such a fact is perceived as a menace to the institutional focus of the website. Moreover, providing the MPs with personalized means of interactivity could represent an increase in the workload of civil servants. Conversely, members of the IT and Communications Division perceive that some level of interactivity is necessary in the website in order to keep up with the prospects offered by the Internet. The use of interactive tools is thus made possible as it is added to pre-existing (offline) channels of interaction between citizens and the Legislature. If citizens are unable to find the Facebook profile of their MPs in the Legislative website, they are increasingly able to influence the politics of their state online. The institutional design that preceded the arrival of the Internet in the Legislature is, ultimately, what shapes the interactive features of the Legislative website.

Thoughtful Innovation: the Sustainable Effects of Administrative Continuity

As we have mentioned, already in 1998 in a report for the Interamerican Development Bank (IDB) the Legislature was considered, in terms of ICT usage, even more advanced than the National Congress itself (Fleischer 1998). Moreover, in a research led by career civil servants of the Legislature in 2005, Minas Gerais Legislative website was ranked 2nd (after Rio Grande

⁸² See, for instance, Pratchett et al. (2009), Glencross (2009), Smith (2009).

do Sul) when compared to other state Legislatures (Mello et al. 2007). In a study conducted in 2006 by political scientist Sérgio Braga, Minas Gerais Legislative website was considered as one of the most developed ones in Brazil, within a select group formed by the National Congress and Rio Grande do Sul state Legislature (Braga 2007). Minas Gerais Legislature career civil servants are not only aware of these studies and their position of leadership; they are keen on mentioning and emphasizing it. The pride taken on the website and the IT services is diffuse, going beyond staff members of the IT and Communications Division. Different servants convey a sense of competition with other Legislatures.

We consider our website one of the best ones, amongst the state Legislatures we are probably the best. We have the habit of checking out other Legislatures website, even the Federal Senate, the National House of Representatives... and in many things, we are still the best.

(Supervisor of Information and Documentation Services)

If there is a well settled perception of the Legislature website as being one of the most developed ones in the country amongst the civil servants, the same applies for the reasons of such a fact. In other words, civil servants from across different sectors will link their success to the administrative professionalism of the Legislature, simultaneously rendering evident the attachment to their statute of ‘professionals’ and technical capacity.

This difference that exists amongst the website of different state Legislatures is just a reflex of the difference that exists among the different IT Departments and the rest of the administrative services of each Legislature. The website is just another aspect of differences that have their origin in the administrative structure of each House. We have, since the 1980s and 1990s gone through a great process of professionalization of the administration. We are professionals.

(Director of IT Division)

Also, as pointed out in the beginning of this section, the attempts from the political sphere on intervening in the administrative sphere are minimal. The members from the political sphere refrain from rent-seeking the administration of the House for individual or partisan advantages with the risk of undermining the benefits that are produced by a professional administration. In this sense, the “clear and irreversible”(Assis 1997) separation between the

political and administrative spheres of the House appears as a concept intrinsically linked to the capacity of the administration to provide a highly developed website.

An important factor is that, neither the Speakers' Cabinet nor MPs individually has a direct say over administrative issues. So, the Internet, it is those from the administration who knows how things should be done, and who gives the tone of how things should go.

(Legislative School Director)

We have also noticed earlier that the Division directors – as well as the Secretary General himself - tend to be maintained through changes in political offices. Such an administrative stability is perceived by servants as what enables technological projects to be planned in the long term. Conversely, the comparative low-quality of the majority of other state Assemblies' websites is perceived as the result of short-term planning caused by administrative instability. Noteworthy, the role of access to financial resources is nuanced as a determinant of success, *per se*, of a Legislative website.

We do have continuity. On the other hand, we see Houses where the administration changes every two, four years, and with this they change Directors, Managers and even the team! So we have seen assemblies even with more resources than us, having to stop projects, changing the approach completely, instead of investing in something that takes some time to mature and flourish. This is because of this lack of direction in the long-term; this lack of common strategy.

(Director of IT Division)

Indeed, as we have described, a great amount of the features of the Legislative website are the fruit of internal systems that preceded that website itself. The existence of these systems is conceived as the fruit of an accumulative course of action, the result of a long-term investment of the Legislature, portrayed as a “stable and well constructed” process.

The website comes from an accumulation... the computerization of the Assembly started back in the 80's. We started in 85, and invested heavily in the 90's. So we have nearly 30 years of a stable and well constructed process.

(Secretary General)

The absence of strategic alignment and short-term ICT policies are often described as generators of interoperability problems in public institutions (Doty and Erdelez 2002, Gottschalk 2009). Unsurprisingly, in Minas Gerais state Legislature interoperability issues do not arise particularly as a major setback. Obviously, the fact that some systems running are still based on relatively old technologies present some problems in terms of interoperability, given the incremental pattern of technological development of the Legislature. However, these problems are seen as being outweighed by the benefits generated by the deployment of long-term ICT policies. Far from a problem perceived as beyond control, interoperability problems are perceived as residual as they are not accumulated and have been continuously addressed over time.

Of course, we pay a price for the longevity of our systems, with things built in different periods, but it is a compromise. There are trade-offs that are unavoidable, but the long-term investment pays off. But we did not let things get out of hand.

(Secretary General)

With a redesign of the website in course, the Director of the IT Division admits that some minor interoperability problems have to be addressed, even though they are not evoked as particularly challenging. In other words, the website and the IT systems of the Legislature as a whole emerge as a highly sustainable technological model.

Concluding remarks

Despite the context of coalescent pluralism in the state, Minas Gerais Legislature is far from playing a minor role as a mere *chambre d'enregistrement* vis-à-vis the Executive. Such a counter-intuitive fact, numerous researchers have noted (Santos 2001, Anastasia 2001, Lima 2005, Fleury 2007), is related to the institutional capacity of the Legislature, that is, the organizational and institutional capacity to perform the roles of representation, oversight and lawmaking. Such a capacity, we have shown, was the fruit of a deliberate process of institutional innovation that had as cornerstone the combination of participatory and representative models of political participation. In this respect, reinforcing the technical and political capacity of MPs and civil servants was perceived as an essential measure to cope with the demands entailed by the institutional redesign taking course by then. Towards

achieving this goal of enhanced capacity of Legislative actors, two measures were underlined: the creation of the Legislative school and the clear separation between the political and administrative spheres of the House. The results of such measures were, we have described, the consolidation of a highly professionalized administration that achieves— almost to perfection – equilibrium between bureaucratic responsiveness and legislative professionalism. Such equilibrium leads to a non-zero-sum game where the administration benefits from a non-interventionism from the political sphere and, this later, benefits from excellence in services provided by the administration.

Such arrangement reflects on the management of the Legislative website, perceived by the political sphere as a reserved domain of the administration. Within the administration, despite a decentralization of tasks with regard to the management of the website (e.g. micro-sites decentralization), the IT and Communications Division are the sectors of the administration that ensure respectively the interoperability of systems and the institutional character of contents that are generated within this website. If the ‘shared paternity’ of the website between the Communications and IT Divisions appears as a source of conflict between these two, it also fosters the creation of strategic alliances towards the achievement of common goals, such as increased resources for the website and, consequently, to the Divisions. Furthermore, this shared ownership of the website reinforces the authority of both departments with regard to their authority over the use of the Internet in relation to other sectors within the Legislature. Such pattern of semi-centralization with regard to the management of the website appears as a factor that renders possible an effective coordination towards the development of the website.

We have seen the majority of features of the website are fruit of pre-existing systems created, originally, to address internal needs, which has led, incrementally to a high degree of ICT usage in administrative processes. In this sense, the marginal efforts for transferring contents and features to an external environment (i.e. the website) are lowered, affecting positively in the quality of the website. The downside of such an approach becomes the bureaucratization of the website with regard to its architecture, tending to reflect internal processes that are unfamiliar to external audiences. Usability problems are addressed by the IT and Communication Division on a permanent basis, with the website standing half way between the needs of internal and external users. The interactivity features of the website – still in their infancy – resemble the institutional design of the Legislature with regard to its participatory

dimension. Interactivity with MPs individually is perceived with resistance, as it might jeopardize the institutional focus of the Legislative website. In this sense, the use of interactivity is done through pre-existing channels of citizen participation in the Legislative process.

Finally, Minas Gerais state Legislature website features are the byproduct of strategic alignment and the compliance with long-term ICT usage policies. As a consequence, interoperability problems do not emerge as a major concern. To conclude, in coherence with the long-term perspective of the state Legislature, an anecdote is worth mentioning. In 2010 the administrative strategic planning of the state Legislature has been approved⁸³. Within such legislation, which sets out the overarching lines of action of the Legislature for the 2011-2020 periods, a substantial part of the document is dedicated to an ambitious strategy for the use of ICT as a means to increase Legislative efficiency and to “promote and disseminate good practices of electronic democracy”⁸⁴. The model of long-term planning of Minas Gerais state Legislature in ICT policies is thus not only reinforced, but also formally institutionalized. The first step towards achieving this goal has been a partnership between the state federal university (UFMG) and the Legislative School, creating a group for the monitoring of e-democracy practices around the world in the Legislative branch. The future of Minas Gerais Legislature website, as well as its sustainability is, in the vision of the stakeholders, dependent on administrative continuity and long-term planning: as it has been until now.

10.5 Rio Grande do Norte

10.5.1 Politics and Administration in Rio Grande do Norte Legislature

Rio Grande do Norte's Oligarchic Factionalism

Located in the northeast region of Brazil, Rio Grande do Norte shares with other states of its region a nation-wide reputation for the quality of its landscape, culinary and local artisanship. Another image that Brazilians often associate to the states in the northeast region, often pictured in literature, music and soap-operas, regards the particular (although not exclusive) oligarchic and clientelist politics of the region. More specifically with regard Rio Grande do Norte's politics, Spinelli (2006) underscores three overarching political characteristics that persisted in the state following the democratization period in the country in the 1980's. The

⁸³ Projeto de Resolução, (PRE) 4.615/10

⁸⁴ Projeto de Resolução, (PRE) 4.615/10, ANEXO I

first one refers to a pattern of oligarchic political competition, dominated by a small number of political parties. The second characteristic is that of a highly personalized model of political dispute amongst a limited number of charismatic personalities who are “owners of the political game and party structures” (Spinelli 2006:6). Finally, the third characteristic of Rio Grande do Norte’s politics refers to the usage of traditional mechanisms of reproduction and perpetuation of political control, achieved through systematic practices of clientelism and nepotism carried out by the state’s political elite. In a similar vein, building upon models of political competition in different Brazilian states, Borges (2007) classifies the state of Rio Grande do Norte as falling in the category of “oligarchic factionalism”, defined by the author as a political system where:

“Elite circulation and renovation in these polities was dependent on the changing coalitions and conflicts involving competing factions led by a very small clique of political bosses. (...) This definition follows of state control based on clientelism and corporatism, and severe restrictions to effective political competition” (Borges 2007:111)

During the fieldwork conducted in Rio Grande do Norte state Legislature, the qualitative data gathered confirms the existence of most of the traits associated with the model of oligarchic factionalism. For instance, the evidence of a strong link between family ties and political domination is abundant, a typical characteristic of Brazilian oligarchic and clientelist contexts (Carvalho 1997, Santos and Capparelli 2005). On a number of occasions the fact that political power is transferred from one generation to another is unscrupulously evoked by different interviewees: politics appear as a family vocation.

I have always been an MP, for a political tradition, since 1986. My grandfather was city councilor here in the capital, and then my uncle, who was city councilor and then succeeded another uncle of mine as a state MP and then as a federal MP. And there was also my beloved father, who was [amongst others] vice-governor of the state. (...) The majority of our MPs come from families that are traditional in the politics of the state. We have colleagues many colleagues where the father, the grandfather was an MP.

(Member of Parliament)

Clientelist practices, understood here as a *relationship bound by reciprocity ties between two political actors involving the concession of benefits in exchange for political support* (Carvalho 1997, Kitschelt 2000, Chandra 2007), appear as a constant in the politics led by Rio Grande do Norte's Legislators. To explain the reason for the MPs offices being most of the times crowded by individuals of visible lower socio-economic conditions, bystanders do not hesitate to verbalize it: they are there to ask the MP for 'help', a 'favour'. Interestingly, the benefits provided to the requesters do not always imply privileged access to public services. In many cases MPs are paying 'from their own pocket' for the access to private services. The numbers, in some cases, are impressive.

I provide the people with 50 dentist sessions a day. I also have physiotherapy services. I am not a physiotherapist; I pay for a person to take care of the poor people. To the elder people who break a femur, a leg... they will have the treatment and will pay absolutely nothing! Nowadays we make 100 eye exams a week for the people who cannot pay an ophthalmologist

(Member of Parliament)

If the provision of private medical services is a constant in clientelist relations in the region (Potter and Caetano 1998), the favours conceded by MPs are not limited to it by any means: employment, housing material, food and even cash are amongst many of the requests that MPs respond to. Creative – and maybe more cost-effective - forms of providing services to constituents are also found, as vividly explains an MP who is also a local celebrity as a singer:

I made a commitment with God: as long as I am holding a public office I will not sing for money! And I make free concerts weekly on the streets of the city. My concerts are paid only if the money goes for the church: catholic or evangelic. Only if it is to benefit a religious institution or a hospital for children with cancer... then I make the concert and the money is theirs. I don't even charge the taxi or the car that I might use to come to the venue.

(Member of Parliament)

With regard to legal issues, when the clientelist relationship becomes evident (e.g. buying votes), in a limited number of cases the *Public Ministry* - i.e. public prosecutors - attempts to intervene. In practice, however, legal trials related to clientelist crimes very rarely lead to a

conviction (Speck 2003). Thus interventions of public prosecutors appear as a minor event that, albeit inconvenient, does not seem to inhibit MPs behaviour.

(...) unfortunately there is a Public Ministry that does not like you to help the poor. So it is forbidden to help the poor, but I am going to die helping the poor. So I am always upsetting the Public Ministry.

(Member of Parliament)

If clientelism is accepted as a common practice amongst those who benefit from it, political elites from Rio Grande do Norte are aware that, for outsiders, clientelism is considered neither as a legal practice nor as natural social event (Andrade 2002). Thus, whereas on legal grounds clientelism does not appear as a source of any major inconvenience to its perpetrators, on normative terms a common rhetoric of blame avoidance is adopted: that of claiming that the actions performed are made necessary by the action (or inaction) of a third party (Weaver 1986). The frequent justification for clientelist practices amongst the MPs refers to the insufficiency of public services provided by the Executive.

Public health services unfortunately are a disaster... it does not provide services. I do not solve the problem, I am a palliative, I ease the suffering of people.

(Member of Parliament)

Indeed, as other authors have noticed, the incentives to clientelist practices are proportional to the level of dependency of citizens on third parties (e.g. government) for their welfare (Stokes 2005, Kitschelt and Wilkinson 2007). As a consequence, it is the very insufficiency of regular access to public services that makes clientelist practices more rewarding. As the benefits of 'favours' provided are higher (Borges 2010), the terms of the clientelist exchange become more favourable to those who are granting privileged access to services. Hence, despite the regretful tone adopted by the MP in the quote above, in a clientelist context, improving the quality of the provision of public services is not in the best interest of the Legislator. It means undermining the very system that ensures the MP's electoral success: the mediation of access to services in exchange for political support. By consequence, the act of legislating towards an overall improvement of public services becomes, if not undesirable, secondary at least.

Because the truth is that an MP, in an underdeveloped country like ours, he is a social assistant. If we were making politics in Sweden, we would exist to make laws. Just propositions, requirements, struggle for health, for education... but we are now as social assistants.

(Member of Parliament)

If the lawmaking role of the Legislators is minored in a clientelist context, it also neutralizes the system of representation and Legislative oversight (O'Donnel 1996, Roniger 2004, Desposato 2008). This is so – among other reasons - because the patterns of relationship between the Executive and Legislative are themselves mediated by the very clientelist nature: access to discretionary resources in exchange of political support (Ames 1995, Mainwaring and Samuels 1997). When in relationship with the Executive, MPs shift from the condition of 'patrons' to that of 'clients'. Thus, as a significant part of the patronage resources are under the control of the Executive, political opposition in the Legislative tends to be co-opted by the governing party or coalition through a strategic distribution of resources and political offices (Borges 2007, Indriadson 2005, Borges 2010). It is at this point that MPs regain an interest in the act of Legislating, as they may provide political support to the Executive in exchange for the execution of pork-barrel projects (presented by MPs) in the form of amendments to the state budget (Alston and Mueller 2005). In Rio Grande do Norte context, the ensemble of clientelist relationships that are established between the Legislative and Executive has led to the identification of a systematic shift of MPs political positioning towards the winning coalitions shortly after the electoral period (Spinelli 2006). Resonating with the literature on the subject, former opposition MPs do not hesitate to explain the reasons for alternating their behaviour, as their political preferences are variable with the terms of the clientelist exchange with the Executive (Indriadson 2005).

I was probably one of the strongest oppositions to the governor. But nowadays we have a partnership, we are... I'm a part of... I support the government. Because the governor answered to my requests, it was my obligation; it is not a favour... I started to have an administrative partnership with the governor and a deep respect for her.

(Member of Parliament)

The accounts provided above, although brief, show the extent to which Rio Grande do Norte Legislature reproduces patterns of political behaviour that are typical of the oligarchic-

factionalist model of political competition (Borges 2007). A first element that was rendered evident was the persistence of a strong linkage between political authority and family domination, a mechanism contributing to the perpetuation of political control in the hands of a small number of actors (Santos and Capparelli 2005). Moreover, clientelist practices appear as endemic phenomenon, with MPs devoting most of their resources to the concession of benefits in exchange for political support from their constituents (Carvalho 1997, Kitschelt 2000). The lawmaking role expected to be played by Legislators is thus diminished, as the political dividends obtained by clientelist practices are higher than those derived from lawmaking. From this perspective, the very act of legislating is against the interest of MPs: legislating towards the achievement of improved access to public services would weaken the source of clientelist practices, which are determinant for the electoral success of the majority of Rio Grande do Norte's MPs (Spinelli 2006). We have also shown how the roles of representation and oversight of the Legislature are equally affected in such a context as a clientelist relationship is established between the Legislative and the Executive. Given the latter strategically provides access to discretionary resources, even those who enter the Legislature as opposition MPs end-up by supporting the governing party or coalition through co-option processes (Spinelli 2006). In the following section, the impacts of this particular type of political arrangements on the organizational and institutional framework of Rio Grande do Norte Legislature are approached.

The Administration of the Legislature: Mirroring Politics

As we have shown in the previous section, following a typical pattern of oligarchic clientelism, Rio Grande do Norte Legislative is characterized, amongst others, by lowered political competition and pervasive clientelism. With regard to the administration of the Legislature, there are two distinctive features that, in a reciprocal dynamic, reinforce (and are reinforced by) the political model of the Legislature. The first one refers to the absence of institutional settings promoting the professionalization of its administrative services. The second particular trait of Rio Grande's Legislature concerns the instrumental role played by its very administrative structure to further the practices of clientelism carried out in the institution.

Concerning the first feature, a noticeable factor in the organizational setting of the Legislature was the absence of a Legislative School, an exception in the Brazilian landscape. Indeed,

during the fieldwork a Legislative school was under implementation, although not fully functional. In practice, Rio Grande do Norte Legislature can be described as a late-adopter of such a policy in the national context.

Noteworthy, the late implementation of the school appears as motivated by external factors, in a policy emulation process (Levi-Faur 2002, Holzinger 2005) where the sheer number of previous adopters of the policy led to a herding behaviour of Rio Grande do Norte's Legislature. This phenomenon of institutional isomorphism (Di Maggio and Powel 1991) appears as an obvious attempt to increase Rio Grande do Norte House's legitimacy in the broader context of Brazilian Legislatures. The fact that most Legislatures in the country already had their Legislative schools is explicitly evoked as the main reason for the implementation of the same practice in Rio Grande do Norte.

What is the motivation for implementing the school? First because nowadays it is a national reality. Almost every assembly has their Legislative School.

(Legislative School Director)

Nonetheless, in practical terms, if a school was under implementation, no structure of training on legislative action and institutional practice was provided to the functionaries of the House until then, with the Legislative School still in its very early stages of implementation. Consequently, the effects of such a policy in the overall professionalism of the servants of the House can be considered in the analysis carried out here as being null.

These considerations aside, another relevant element concerning the professionalism of civil servants was the absence of formal mechanisms of recruitment of its administrative body. In other words, no evidence of public entrance exams could be identified. The term 'evidence' is employed, in this case, with a precise purpose. This is so because whenever questions regarding modalities of entrance in the Legislative administration were evoked, all of the interviewees provided evasive answers. The matter of the public exams was avoided to the extent that, in a number of cases, interviews were abruptly interrupted once the matter was brought to light. When this was not the case, the subject of public entrance exams was vaguely mentioned as something that "hasn't happened in a long time." As generic as it could be, no interviewee could point out a moment in time when the latest entrance exam to the

Legislative administration has taken place. The possibility of having exams in the future is equally the object of unclear references.

In truth, it's been quite a while we do not have any entrance exams. I don't remember when... We are working on this... to have one soon...

(Legislative School Director)⁸⁵

It's been a long time we don't have any entrance exam here in the Assembly... There is this study by our legal department, towards this kind of thing, towards making this public exam.

(Vice-Speaker of the House)

In short, apart unclear references to public exams taken in the past, no more concrete evidence of their existence could be found. Nonetheless, as vague as these references appear, they do suggest that public exams, even if they were to have taken place at a certain moment in the past, they are far from being the predominant mechanism of recruitment of staff. Given the political context of the Legislature, this fact should not come across as particularly surprising. In clientelist settings such as that of Rio Grande do Norte there is little incentive for admission of civil servants under the universalistic principles that guide entrance public exams⁸⁶ (Nunes 1997). In this sense, integration into the Legislature's administrative body is *de facto*⁸⁷ free from formal requirements with regard to professional skills, with the criteria of professional qualification playing a minor - if any - role. Nominated by political actors, it is political allegiance that plays the determinant role, with positions in the administration of the Legislature functioning as an additional and important currency for clientelist and nepotistic practices. Amongst the few interviewees who would provide a more straightforward description of their entrance process in the Legislative administration, references to being “nominated” after a “recommendation” or an “invitation” are made.

(Q: How did you get this position?)

⁸⁵ Even though there is no Legislative School, a Director has been nominated for its implementation.

⁸⁶ For instance, public entrance exams are opened to every qualified citizen (e.g. university title) where the grade obtained by each candidate is the only criterion for the selection process.

⁸⁷ No Legislation could be found regarding requirements for hiring personnel in the administration of the Legislature.

I was nominated... the Speaker was elected and the Cabinet invited me to organize the Communications Division.

(Director of Communications Division)

As a consequence, another characteristic of the Legislature concerns the frequent changes of individuals who occupy key positions in the administration. This is so because, despite the low competition level within the Legislature, it does not mean necessarily that the same individual MPs are occupying for long periods the positions in the Speaker's Cabinet. Positions within the politico-administrative body of the Legislature (i.e. Speaker's Cabinet) are alternated through internal negotiations. Thus, every change in the members of the Speaker's Cabinet corresponds to new placements of political appointees within key administrative positions.

While this Speaker is there, the directors remain pretty much the same. But when the Speaker leaves they lose their positions. These are appointed positions...

(Head of Ceremonial and Public Relations Services)

Important to notice, these nominations do not always follow the legal determination of officially publicizing the administrative acts and registering the nominations in the State Audit Court. For instance, according to an organization composed by Public Prosecutors and members of the Judiciary in the state⁸⁸, in the period between 1990 and 2002 at least 193 individuals (e.g. politicians' relatives, magistrates, and journalists) were 'secretly' nominated to positions in the administration of the Legislature without complying with the legal requirements. In other words, these were 'ghost' nominations where no oversight by public authorities or the society is possible. Noteworthy, during the fieldwork it was not possible to have access to any precise information concerning the number of individuals working in the administration of the Legislature, with evasive answers provided on every occasion the subject was brought up.

Bearing these considerations in mind, interviewees refer to two types of functionaries in the administration of the Assembly: the "commissioned" and "permanent" staff. To the commissioned staff, they refer to political appointees who are nominated on a temporary basis

⁸⁸ MARCCO – Movimento Articulado de Combate à Corrupção. Source: http://www.agu.gov.br/sistemas/site/TemplateTexto.aspx?idConteudo=148779&id_site=1108

and whose permanence in the administration is subject to political fluctuations within the Assembly.

The Communications Division Director, he was named by the Speaker. So while the Speaker is there, he is in that position. When the Speaker leaves, they lose the position. These are commissioned positions

(Head of Ceremonial and Public Relations Services)

To permanent staff interviewees refer to servants who, through administrative measures, were granted a status as permanent members in the administrative body of the Legislature. If the position of permanent staff in principle resembles to that of a typical career civil servant, the differences among the former and the latter deserve further examination. As conceived in this research, an essential characteristic of what is considered as a career civil servant concerns those individuals who enter the public service through entrance exams. However, in the case of Rio Grande do Norte, no permanent staff members who were admitted through public exams could be found. These permanent staff members are former political appointees who, through politico-administrative measures, were granted functional stability. That is, their recruitment was made through political appointments that are, as discussed, in most of the cases fruit of clientelist exchanges. Moreover, it is important to underline, permanent staff members will often declare that their permanent statute was granted in function of their time served in the Legislature. In this case, one could hypothesize that permanent staff members are precisely those political appointees who are rewarded by successively engaging in clientelist relationships over an extended period of time. Permanent staff, in this logic, appears as privileged political appointees as opposed to professional career civil servants.

Furthermore, as pointed out earlier, statutory stability – such as that of career civil servants – does not mean that staff members are immune to political influence. The relative autonomy that can be provided by career stability varies to the extent that the system of internal rewards is dependent or not on political interference and particularistic interests (Pfiffner 1987, Peters 2001, Mulgan 2006, Eichbaum and Shaw 2008). The institutional design of the administration could not be any more prone to political interference. In an extreme amalgamation between the political and administrative spheres in Rio Grande do Norte's Legislature, the creation of administrative positions, system of rewards and promotions within the administration are the

competence of the Speakers' Cabinet⁸⁹. As a consequence, permanent staff members, similarly to any other political appointee, have strong incentives to strategically orient their behaviour towards compliance with particularistic interests from the political sphere. Rio Grande do Norte's Administrative services ends up by reproducing traditional patterns of public administration in clientelist contexts. It simultaneously neutralizes systems of merit and professional entitlement (Roniger 2004) and undermines any prospect for the existence of *de facto* professional services.

The absence of professional administrative services and the ambiguous interplay between the political and administrative spheres of the Legislature lead to another distinctive feature of the administration of Rio Grande do Norte's Legislative. The administrative machine and resources of the House are systematically used to further the clientelist practices led by the members of the political sphere. Apart from the use of positions in the Legislative administration as a mechanism of exchange of favours, a number of activities performed by the administrative body are towards the promotion of clientelist practices.

A salient issue identified in the qualitative data collected during fieldwork concerns the number of events promoted by the Legislature that have little or nothing to do with the core activities of a Legislature. For instance, substantial importance is given to cultural events financed entirely or partially by the assembly. The fact that the Legislature is one of the few in the country that engages in the provision of entertainment to the citizens, rather than seen as an anomaly, it is pompously emphasized.

Here at the assembly we have free cinema, it is a partnership with the CineClub, and without expenses... the only expense is the auditorium of the assembly, and the tickets for the students. We also have the song festival, where we have also partnership with other institutions, like Banespa⁹⁰, which co-sponsors it. (...) So I see it, as I know every state Legislature in the country, I see that are few assemblies that have these projects.

(Head of Ceremonial and Public Relations)

⁸⁹ Article 69 of Internal House Rules.

⁹⁰ Private Bank (Santander Group)

In the light of these observations, with regard to cultural events, in a first moment it is not clear to what extent MPs can benefit individually from the delivery of these ‘public services’ that, one would expect, falls into the competence of the Executive. This particularly given that the access to these services seems to be based upon universal principles. In other words, there is no indication that the access to these different events is mediated by privileges in exchange of political support to individual MPs. However, it is important to notice, particularly with the lowered competition of an oligarchic factionalist context, MPs are not necessarily competing amongst themselves. Thus, as the Legislature sponsors these activities – in many cases taking place within the Legislature premises - all the members of the Legislature benefit from a positive association of the public with the House. As the person responsible for running these activities explains, the ultimate goal is that of fostering not only a good image of the Legislature, but also that of MPs.

Precisely because it is a Legislature, the MP needs to have a positive image, so in the majority of events we try to show a bit of our Legislature...

(Head of Ceremonial and Public Relations)

The benefits that MPs can reap from the administration of the Legislature and its resources (e.g. budgetary), however, go further than the simple promotion of a positive image of the Legislature and its respective MPs. This is so for on other occasions the access to services is mediated by the MPs themselves. For instance, the Legislative services of the House provide free legal counseling to low-income citizens of the state. The access to such services, limited in numbers, is channeled through MPs Offices. In other words, a citizen who would like to benefit from such a service has necessarily to go through an MP Office to be granted the access to it. Also, apart the medical services that are provided by MPs themselves on an individual basis, as shown in the previous section, the Legislature itself allocates part of its resources to the management and provision of external private medical services to the public. Similar to the legal counseling services, the access to these benefits are channeled through the MPs Offices, that make the selection of those entitled to the benefits.

We provide, for example, medical assistance and legal services to the population. So it is an Assembly that the people know, that the population knows. It is the only state Legislature in the country that has this legal counseling! It is the MPs Offices that

channel these demands to these services. It is for the poor people, who do not have the means.

(Head of Ceremonial and Public Relations)

As the examples show above, not only do the MPs engage in clientelist practices on an individual basis, but the Legislative administration and its resources are systematically deployed to further the clientelist practices of the MPs. Relevant to notice, while medical services are provided by third parties, the legal counseling services are provided by the Division of Legislative Services of the House, whose time could be entirely dedicated to providing legal support to the MPs in the lawmaking process. Nonetheless, as we have shown earlier, apart from pork-barrel projects, MPs have a minor incentive to engage in lawmaking activities. As the incentives for clientelist practices are higher, the legal expertise of the members of the administration is thus channeled to the provision of services to the population mediated by political actors.

Finally, recent evidence suggests that the incipient structure of the Legislative School in Rio Grande do Norte's Legislature will itself be used to foster clientelist practices. Shortly after the fieldwork carried out in the Legislature the first courses of the Legislative school started to be offered. Reproducing practices of nepotism frequently associated with clientelist environments, the Legislative School extended the benefits of attending the courses also to the members of the families of administrative personnel⁹¹.

In conclusion, the administration of Rio Grande do Norte's Legislature mirrors the practices that are associated with the political model of oligarchic factionalism in the Legislative. The incompatibility between typical bureaucratic systems based on professional merit and entitlement reduces the incentives for a professionalized bureaucracy. Symptomatic of the incongruity of this model is the late adoption of a system that promotes the professionalism of the legislative servants (i.e. Legislative School). In the absence of public entrance exams, the predominant modality of recruitment to the Legislative services is through political appointment: technical expertise is replaced by political allegiance. Moreover, the incentives of permanent servants to behave in accordance with basic principles of public administration are undermined by the fact that the internal system of promotions of the Legislative

⁹¹ Source: http://www.al.rn.gov.br/assembleia/navegacao/ver_noticia.asp?idnoticia=1708 last accessed 15/09/1010.

administration is entirely controlled by the political arena. Hence, political allegiance of permanent staff members remains the strategy that maximizes their chances of pay-off within the administration of the House. The permanent staff member, despite the statutory stability, resembles more the image of a stable political appointee than that of a career civil servant in the strictest sense.

An ambiguous interplay is thus established between the political and administrative spheres of the House. This configuration leads to a systematic instrumentalization of the administration of the Assembly and its resources. Therefore, human and budgetary resources are mobilized in order to promote MPs and leverage their opportunities to intensify clientelist practices. The series of cultural and entertainment events promoted by the Legislature are created with the ultimate purpose to generate a positive perception of the population towards the MPs. Furthermore, circumventing the public services provided by the Executive, the Legislature engages in the provision of services such as health and legal counseling to low-income citizens who are, in their turn, more prone to enter clientelist relationships (Stokes 2005, Borges 2007). The case of the Legislative school appears as an instructive one with regard to the manner in which the administrative structure is appropriated by clientelist practices. It is important to remind, Legislative Schools appear in the Brazilian context as an institutional innovation that has amongst its roles that of instilling on servants principles commonly associated with modern public administration, such as accountability, expertise and impersonality. However, in Rio Grande do Norte's Legislature, the very access to the services of the Legislative School to third parties (other than staff) is formally based on particularistic benefits. The Legislative administration as a whole emerges as a structure that, ultimately, reproduces the practices that are associated with the model of oligarchic factionalism. In the next sections, we shall see how the politico-administrative configuration of Rio Grande do Norte's state Legislature shapes the process of technological enactment in the institution.

10.5.2 Website Contents as an Expression of Political Configuration

Perceptions of actors towards ICT, the Internet and the Legislative Website

An important element for understanding the process of technological enactment that takes place in the Legislature, concerns the perceptions and attitudes of different actors towards ICT in general and, more particularly, the Legislative website. Thus, in this section, we shall see

how ICT is perceived by members of the administration as well as those from the political sphere, that is, MPs and their personal staff.

MPs from Rio Grande do Norte interviewed had very little to say about technology, Internet and ICT related subjects in general. Their interest in these issues appeared as minimal. A common denominator amongst the interviewees from the political sphere is their perception of the Internet as a restricted means of communication to reach broader audiences, given the low level of Internet penetration in the state. Such a limited reach of the Internet is described by some of the parliamentarians interviewed as the main reason for their secondary interest on the usage of web-based communications. In a similar manner, amongst the MPs interviewed, the usage of computers and Internet appeared as extremely limited.

Look, to the majority of the electors this access is still very limited. And this is not me who am saying this, but the statistics. (...) Books are still my main companions... after the wife. My wife comes first, and then the books. This story of computers comes in 70th position more or less...

(Member of Parliament)

While the Internet does not seem to draw any particular attention to MPs, the importance of the legislative TV channel is remarkably brought up during their interviews. The legislative television is perceived as a source of visibility for MPs particularly during the broadcast of plenary sessions, when interventions are opened to every parliamentarian.

My main means of contact with the elector is through the Legislative TV. I have a presence on the TV, during the plenary sessions.

(Member of Parliament)

If politicians are normally seduced by the potential of the television as a means to reach large audiences (Schutz 1995), in Rio Grande do Norte such a phenomenon is particularly salient. The attractiveness exerted by television on the local politicians is such that it even reflects the structure of the television market in the state: in Rio Grande do Norte 86% of open TV broadcasting licenses is controlled by politicians, the second highest level of political control of open TV channels in the country (Santos and Capparelli 2005). Reflecting this trend, Rio Grande do Norte's Legislature television channel is one of the few in the country with an

open TV channel, thus reaching a broader audience than the majority of other Legislative channels available only via cable TV. Also noteworthy, and in agreement with the literature specialized on Legislative television broadcasting (Maigret and Monnoyer-Smith 2000, Mixon et al. 2003, Queiroz 2007, and Cohen et al. 2008); the introduction of the TV cameras in the plenary sessions seems to have altered the behaviour of the MPs, as they become more vigilant towards their interventions during plenary sessions.

And nowadays with the Legislative television the participation of all parliamentarians is there, visible to everyone. So what we see now is that the MP is more careful about what he is going to talk about, and he spends more time on thinking how he will present his projects in the plenary.

(Head of Ceremonial and Public Relations)

The importance given to the Legislative television in Rio Grande do Norte's House does not mean that MPs are entirely apathetic to the potential of the Internet. A small number of MPs (3) who have personal websites could be identified. In this case however, it can be observed that the usage of these personal websites constitutes basically a means of promotion of the image of the politician, where almost no information concerning the Legislative action of the MP is conveyed. Furthermore, the low quality of these personal websites, as well as the reduced number of updates leads to consider that these tools have a secondary importance in the communication strategy of this minority of MPs. In other words, even in these cases, the Internet plays a minor role in the view of those from the political sphere.

The usage of the Internet as a means of establishing a two-way communication between the political sphere and constituents is also described as extremely limited by those in the political sphere. Postal mail remains the essential means of communication between MPs and constituents, with MPs offices receiving a reducing number of emails. Noteworthy, actors from the political sphere notice a difference with regard to the contents of postal letters and e-mails. These latter are perceived as being sent by a minority of educated users who manifest their position with regard to general political issues, whereas postal letters refer to individual demands, favours, typical of a clientelist relation.

I have an email account; but I receive few emails from electors... just of people who are more educated, to give their opinion, to state a position, things like that. But I

receive very few emails, it is really a minority. But letters I do receive, then they are always asking for favours, for help. Emails that asking for favours, I almost never receive them.

(Member of Parliament)

Another common usage of emails concerns the contact amongst local political leaders in the interior of state (e.g. mayors) and the MPs offices. However, in this case the usage of emails is limited as a means of booking face-to-face meetings between the MPs and political leaders. Given the very personalistic nature of political relationships in Rio Grande do Norte, political figures from the interior prefer to displace to the capital of the state to present their demands in person.

We get emails from local administrations, political leaders in the interior of the country. But in most cases they come here afterwards, they want to deliver it personally to the MP; they want to have a direct contact with the MP.

(Head of MP Cabinet)

If the Internet usage appears as unimportant in the overall functioning of MPs offices, in a limited number of cases MPs staff mention the use of search engines as a means to find examples and ideas of legal propositions. In this case, a small number of MP staff members have referred to the Internet as a support for the drafting process of legal propositions.

I don't work without the Internet; researching legal propositions... if you do a search on Google nowadays you find interesting things. Not in every state assembly, but in some of them... Some of the assemblies do not show everything, they kind of make it secretly somehow...

(Head of MP Cabinet)

Nonetheless, the overall importance given to the Internet from the perspective of the political sphere, MPs and their staff altogether, appears as marginal. In a similar vein, such a pattern of mild interest towards the ICT is also repeated on the part of members of the administration of the House: the Internet is perceived as a secondary means of communication when compared to the Legislative TV channel. Once again, the preponderant role of the TV is evoked when the potential of the Internet is brought up by interviewees from the administrative sphere.

Mainly in our House, I don't think the Internet plays an important role with regard to the audience. From the means of communication the more... important is our open channel. Our biggest audience comes from the TV. A very big audience...

(Head of Ceremonial and Public Relations)

Bearing this in mind, amongst those from the IT Division, there is a shared perception of an increasing importance of ICT within the Legislature. Such a process is thus described as the fruit of a - rather late - process of technological diffusion whereby both the political and administrative sectors of the house increasingly use computers to perform basic tasks such as text editing and sending emails. If technological diffusion takes place within the Legislature, it simultaneously renders evident the extreme low level of computer skills among the majority of servants working in the administration of the House, as continuously remarked by a number of interviewees. In fact, an internal survey previous to the implementation of the Legislative School confirms this fact. Aiming to assess the needs of the administrative body, the survey indicated a general low level of computer skills of the servants.

We made an assessment of needs within the Divisions... And from this we could see that it is precisely with regard to informatics where the biggest problem lies, with an extreme deficiency of knowledge and skills with computers.

(Legislative School Director)

Such a fact should not be surprising: professional skills – including basic computing knowledge – in most of the cases do not constitute the criteria for the recruitment of servants in the administration. The situation is further perpetuated by the absence of any structure to provide training to address this deficiency in terms of computer skills in the administrative sphere of the House. As a consequence, the majority of servants in the House appear as indifferent vis-à-vis the potential of the use of technologies in the Legislative context. In this sense, one would expect a more enthusiastic attitude towards ICT from the part of the members of the IT Division. Nevertheless, a few points have to be taken into account before reaching any conclusions concerning the perceptions of members of the IT Division.

In a previous section, we have shown how, in a clientelist context like the one of Rio Grande Legislature, nomination of servants take place without necessarily following the criteria of

technical expertise. This, we argue, ultimately leads to unqualified or inadequate individuals assuming strategic positions within the public administrating (Roniger 2004). In the case of the IT Division such a fact is not different: no specific requirement for such position is existent. The director of the division, a young lawyer with no training or previous experience in the IT sector was “indicated” by a third party to assume the position.

Q: How were you recruited, public entrance exam?

No, no, commissioned positions works in the normal process of... indication of a person. My name was indicated, then I brought a CV, and then I came... But I work with law... I have knowledge [of informatics] but I am not trained in...in... the field. But before I worked with legal counseling...

(Director of IT Division)

In a similar vein, amongst the “about 15”⁹² members of the IT Division, no person recruited under a public entrance exam could be identified, following the overall pattern of recruitment of the House. Nevertheless, the same political appointees who are members of the Division agree that such a system leads to a high turnover among staff members as political changes occur, ultimately jeopardizing the continuity of IT projects.

It depends on the manager, sometime one opts for keeping the same team, but others don't, and it is there where lies the difficulty: you change everybody, then what? There is a project ongoing, what you do with it?

(Director of IT Division)

Apart from the problems associated with the high turnover in the House, the IT Division is described as a unit that, over the years, has played a minor role within the administration of the House. This reaches a point where the Director of the IT Division herself claims that the Division was practically non-existent previous to her arrival.

We are trying to restructure things, because we arrive here and the Division was much unstructured, actually it did not exist, it was very inactive... so much that many of the things related to informatics have been done independently, without the IT Division, with external providers, isolated initiative of each sector of the House...

⁹² The Director of the IT Division did not provide a precise number of employees, mentioning “about 15 members”.

(Director of IT Division)

The statement above highlights a number of characteristics with regard to the IT Division and its place within the administration of the House. First, as the quote above shows, the Director of the IT Division, who previously criticized the lack of continuity of projects, is the first one to disqualify the previous activities of the IT Division (to the visible dismay of older staff members in her presence). Such a fact illustrates well the frequent effect that is caused by new-arrivals in the management of the Division, where previous projects and activities – as small as they may hypothetically be - are likely to be disregarded. Continuity is therefore systematically disrupted. Moreover, the absence of professional requirements for assuming positions within the Division, leads to an endemic presence of under-qualified political appointees. The high-turnover of staff associated with the low-qualification of its staff undermines any possibility for the development of technical capacity of the IT Division. Consequently, as the quote above suggests, fruit of the low technical capability withheld by the Division, the different services in the House frequently bypass the Division's services, giving priority to hiring external providers. The role of the IT Division is hence reduced to that of carrying out menial tasks within the administration. Thus, given the overall low level of computer skills of the personnel of the House, members of the IT Division will spend a considerable amount of time in providing support related to computer usage, such as printer problems, and explaining usage of basic office software. The second main activity described by the members of the IT Division refers to the simple and routinely maintenance of IT equipment: a certain sense of resignation is conveyed.

Here, we provide support to the personnel, their doubts... even for problems with printers. Technical support, fixing the computers... unless when it is something more serious we send it to external IT service providers... So it is basically maintenance and technical support... we have many people here with doubts, silly ones...

(Director of IT Division)

Consequently, the perception of members (and their enthusiasm) towards the potential of ICT is nuanced by an awareness of their marginal role within the administration of the House. The incentives for any move towards increasing the role of the IT Division within the administration are entirely absent. First, in the absence of any setting that fosters administrative and operational continuity, members of the IT Division know that medium and

long-term projects are deemed to fail. Such a fact becomes aggravated by the absence of political buy-in towards the promotion of ICT within the Legislature. Last, but not least, members of the IT Division are aware that, in the context of Rio Grande do Norte's Legislature, permanence in a position of the administration or promotion to another one, it is more a matter of political allegiance than one of professional achievements. The IT Division, in this sense, appears as a very byproduct of its politico-administrative context.

To summarize this section, a few traits concerning the perception and attitudes from the different actors in the Legislature are worth underscoring. For the political sphere, the Internet does not appear as an essential means of communication given its low penetration in the state context. Conversely, the Legislative television, one of the few ones with open channel in Brazil, appears as a much more attractive media for the Legislators in the sense of reaching broader audiences⁹³. Such a perception of the Internet as a minor means of communication is also shared by those in the administrative sphere of the House. This problem is aggravated by the low familiarity and ICT skills of the administrative body and the simultaneous absence of any training to address this deficiency. Finally, the perception of the members of the IT Division themselves towards the potential of ICT usage is limited by inherent constraints posed by the politico-administrative contexts. Rio Grande do Norte Legislative seems to be, at least at first, as an infertile ground for ICT usage. In the next section we shall see how these perceptions, combined with the organizational and institutional traits of the Legislature, lead to a unique form of technological enactment.

10.5.3 The Website Contents as an Expression of Oligarchic Factionalism

Throughout this study we have been referring to contents as all of the information that a user can have access to when navigating on the legislative website and the manner in which this information is presented and organized. As we shall see in this section, in Rio Grande do Norte's Legislative website, the information available in it – as well as its presentation – reflects the institutional and organizational traits of the Legislative environment.

First, as we have seen, the Internet is viewed by the ensemble of actors from the Legislature as a means of communication secondary to the television. Such a fact is strongly reflected in

⁹³ Moreover, considering the extraordinary control of local politicians over television in the state, one could also hypothesize that, when compared to the Internet, television constitutes a type of media to which politicians are much more used to and, thus, more comfortable in engaging in its intensive use.

the contents of the website: at any moment the website is visited, most of the contents that are given the highest visibility concern advertising for the contents to be broadcast by the Legislative television. The programs of the Legislative television, it is important to notice, are not always directly related to Legislative activities or issues. Some programs are dedicated, for instance, to interviewing local artists (e.g. writers, musicians), documentaries and even sport news. This does not mean that Legislative activities are not broadcast through the Legislative television: such a fact would be against the interest of MPs for increased visibility. A number of activities (e.g. plenary meetings) are broadcast live or recorded throughout the day. Nonetheless, by frequently relaying information about contents of the Legislative television in the website, visitors to the website are likely to, at any given time, come across contents that have little or nothing to do with Legislative activities⁹⁴. Finally, a prominently displayed link in the initial page of the website invites users to watch live-streaming of the legislative channel. As a direct impact of the perception of the main actors of the House towards the Internet and television, the Legislative website appears, in part, as a vector to relay the contents of the television.

Another relevant aspect when considering Rio Grande do Norte's House concerns the significant engagement of its administrative structure in the promotion of events that are not related to the core activities of a Legislative institution. These events are equally highlighted in the website. For instance, in the main menu in the first page of the website is found the link to the section 'cultural activities'. By clicking on this section users can find, among others, extensive information about the free cinema program of the Legislature, the choir of the Legislature and the popular songs festival yearly held by the Assembly. An image of a House that provides services to the public is conveyed.

We have also drawn attention to the fact that the Legislature engages in furthering clientelist practices by providing services (e.g. legal, medical) that are channeled through the MPs offices. However, if these services are mentioned in the website as well, this information is available in a much more discrete manner. For instance, to find a reference to the legal counseling services users have to click through the link to the 'structure of the assembly', and then access the list of 'administrative services' to finally click on the section 'legal

⁹⁴ For instance, when the website was accessed in October 13th, one of the highlighted news concerned an interview in the Legislative channel with a local writer.

department⁹⁵. At first, this rather discrete and counter-intuitive placement of such information in the website appears as a paradox when one considers the resources that are actually devoted to these services and the importance that interviewees seem to attach to these practices. Nonetheless, such a fact acquires meaning if one considers the stronger clientelist nature of these practices if compared to other ‘cultural’ services provided by the Legislature. We have mentioned before, those who engage in clientelism are aware that the practice is not considered, in the public sphere, neither a legal action nor a natural social event (Andrade 2002). Simultaneously, the Internet is probably the most effective means for external audiences (e.g. from other states, judiciary) to have access to information (and traceable evidence) about the activities of the Legislative. In this respect, actors from the state Legislature have little incentives to highlight in their website information that could raise suspicions about the existence of clientelist practices. As highlighted before, while the access to events (e.g. cultural) promoted by the assembly can be considered as following more or less universal principles, the same cannot be said about the medical and legal services that are directly mediated by MPs offices. It is the very fact that there is a limited access to services what renders the clientelist exchange possible. In this case, highlighting to broader audiences a service that is provided on a one-by-one basis could generate an undesirable increase of demand that, in due course, could lead to questioning the nature of the services provided. The difference of visibility given in the website to the cultural events and to the legal and medical services appears to be, in this sense, conditioned by the different modalities of access (i.e. universal *versus* personal) to these services.

Having considered these marked particularities of the website’s contents, at this point we pass to the contents concerning the Legislative action of the parliament. The section of main visibility in the website is the section ‘highlights’, situated at the top centre of the initial page. This section also represents the most dynamic part of the website, frequently updated. A significant part of the contents in this section refers to current news in the Legislative, such as laws passed, plenary debates and speeches. If the contents, in this case, refer to Legislative activity and in some cases to collective outputs (e.g. laws passed), there is a clear editorial effort to give visibility to MPs in an individual basis. For instance, to every article highlighted is associated the picture of an individual MP. The texts of the journalist articles produced are by no means different. Even when considering a law passed, the text will give emphasis to the

⁹⁵ Translated from Portuguese “procuradoria”.

speech of an MP over another. In this context, the name of MPs replaces the name of instances of the Legislative that generate collective outputs (e.g. committee, plenary), the reference to this latter normally associated to texts of institutional character. Bearing this in mind, there does not seem to be any evidence that preferences are given to some MPs over the others. Given the high number of updates, it is possible that every MP benefits from the visibility given by the website. Moreover, the highlighted articles are automatically changed every few seconds on an alternate basis, ensuring over time an equal distribution of visibility amongst the several ‘news’ contents displayed in the website. While the coverage of the day-by-day activities of the Legislature is updated with some frequency, these contents are limited to a journalistic, immediate nature. To illustrate this situation, the majority of the voted Legislation mentioned in the ‘highlights’ section of the website cannot be found archived in their original, official version. In a similar vein, only a very limited number of legal propositions, committee reports, amendments and other official documents are available on the site, apparently randomly uploaded on an occasional basis. In other words, the website does not provide, in any manner, systematic information concerning the Legislative activities of the parliament apart from those of journalist character. Interestingly, an exception to this systematic absence of official information concerns the ‘transparency’ section of the website, which provides a certain amount of information with regard to the finances (e.g. spending, contracts) of the Legislature and MPs offices. As we shall discuss later, such transparency with regard to finances is due to federal Legislation on the issue⁹⁶ passed in 2009 obliging every branch of government at all levels to post its finances online.

Bearing these considerations in mind, an interpretation for the causes of the discrepancy between the presence of ‘current’ news on Legislative activities and the absence of archived official documents would directly relate it to political manipulation, as a direct result of the political model of oligarchic factionalism. That is, through the promotion of a manipulated transparency, averse to accountability, the contents of the Legislative website are subject to a selective process where only the most convenient events are communicated, with the exception of those mandated by law (i.e. financial transparency). However, based on the qualitative evidence collected during the fieldwork, no evidence of direct action towards avoiding a better provision of Legislative information could be found. Conversely, there is no evidence of pressures from the political sphere aiming to influence the contents (e.g. news)

⁹⁶ Federal amendment (lei complementar) number 131, also known as Lei Capiberibe.

that are provided on the website. Such a fact, in itself, is not surprising. Members from the political sphere appear as having a minor interest on the Internet, which makes it less likely that MPs and their aides will devote their time to monitor the contents of the Legislative website or try to influence its contents. Second, given that in the House those responsible for the contents generated are – all of them – political appointees automatically leads to the production of contents that promote the visibility of MPs. In a context of low competition amongst MPs as Rio Grande do Norte's Legislature, members from the political sphere are less inclined to monitor to what extent the image of an MP is favoured over the other.

Having considered this, institutional factors associated to a model of oligarchic factionalism do seem to appear as having a considerable impact in the contents of the website, as well as in its features. This is so to the extent that the political model of the Legislature influences its techno-organizational traits. In other words, the administrative organization and technological enactment that takes place in the Legislature are, ultimately, intrinsically related to the dominant political model of the House, as we shall see in the following section.

Oligarchic Factionalism and Technological Enactment: Contents and Meta-Features of the Website

The launch of Rio Grande do Norte's Legislative website in 2003 was, in its very origin, associated to practices associated to oligarchic factionalism. Following the personalistic relations that are associated to Rio Grande Norte's politics, the first version of the Legislative website was created by the nephew of a public servant. Such a fact is described with resignation by a staff member of IT Division.

When I entered in 2003 there was a version of the website. It was the nephew of a servant here in the House did it...

(IT Division Programmer)

Apart from this information, with regard to this first version of the website, very little information can be found. Members from both the political and administrative spheres interviewed claim not to know or not to remember whose initiative it was, neither what the drivers for the creation of the website were. Moreover, no official records can be found

concerning the creation of the website. In the absence of *organizational memory*⁹⁷, the only traceable evidence concerning the early stages of the website refers to the archived version of the first website of the Legislature⁹⁸. An analysis of this first version of the website presents limited information to its users, such as name of MPs, history of the Assembly and a news section. The first version of the website appears as a mere information tool. Between the launch of the website and the first half of 2005 the website remains basically the same, with no significant changes in terms of features or contents carried out in the website⁹⁹. In the second half of 2005, a brand new version of the website is launched, this time under the responsibility of the IT Division. According to staff members of the IT Division the website was moved to their responsibility due to updating problems.

The website was being run externally for over a year... but people were a bit unhappy with the lack of updating in the site, and in the end we made a new website here, and hosted here as well...

(IT Division Programmer)

The new website appears with similar functionalities: most of the changes identified are of cosmetic order. Interestingly, the first noticeable change in the website during this period is the inclusion of a link to the Legislative TV channel, showing the early vocation of the Legislative assembly to use the website as a vector to relay contents produced by the TV. Despite frequent minor changes of the website in the course of the next 2 years, the features of the website remain practically the same. In December 2007 the management of the website is once more transferred, this time under responsibility of the Communications Division. The motivation for the transfer of responsibility over the website is a subject frequently avoided by interviewees, both from the Communications and the IT Division. The only exception to this was a consideration from an IT Division programmer, who claims that this change was motivated by “political reasons”. Unfortunately, these political reasons could not be elucidated, with the IT programmer immediately reprehended by the IT Director after his statement.

[Q: Why has the website moved from here to the Communications department?]

⁹⁷ See Walsh and Ungson (1991).

⁹⁸ Archived versions of the website can be found online through the usage of the “Way Back Machine” tool.

⁹⁹ Internet archive does not indicate any update in the URL between 2003 and July 2005.

From my knowledge of the functioning of the House it was for political reasons... it is complicated... [Interruption by Director]

(IT Programmer)

A new version of the website is then created, again, starting from zero. Once more, one of the major changes in the website was of cosmetic order, considered one of the priorities during the designing process.

This project started in 2007... they wanted a site that... they wanted to improve the way it looked...

(External IT provider)

Important to notice, if the management of the website passes to the auspices of the Communications Division, the design and development of the website is then made by an external IT service provider “Maxmeans”¹⁰⁰. In other words, while the core technological structure is made available by an external provider, within the administration the new relevant unit in the management of website is the Communications Division. This division is also the internal unit responsible for mediating the frequent contacts with Maxmeans for requesting services (e.g. maintenance, training) as well as generating contents of the website. Maxmeans’ personnel, on their turn, are also responsible for providing training to the Legislative staff in the usage of the current website, as well as for its maintenance and structural changes (i.e. non-contents related). Unsurprisingly, the IT Division appears as entirely excluded from any process regarding the website. Similar to other services in the administration of the House, to their dismay, members of the IT Division perceive the Legislative website as a reserved domain of the Communications Division and its external provider.

From what I heard from the previous Director [IT Division], even the hiring process was totally independent of us. (...) It seems that we didn’t give any opinion on that. (...) It is Maxmeans that was hired to make the site, and all this was made through the Communications Division. Maxmeans nowadays is the responsible one.

(Director of IT Division)

¹⁰⁰ From original in Portuguese, MaxMeio.

If the Communications Division is at the core of the management of the website, it will privilege the insertion of contents related to its activity. The Director of the Communications Division – a political appointee since 2007 – and his team composed by journalists and interns are, in practice, the responsible ones for generating the day-by-day contents of the website. Such a fact explains, partially, the high amount of journalist contents in the website: those running the website are, in their majority, responsible for the journalistic coverage of the House. This does not mean, however, that the members of the Communications Division are the only ones entitled to upload contents in the website. In fact, one of the few novelties of the new website from its previous version is the fact that, through a system of decentralization of content management created by Maxmeans, the different units within the Legislature are also entitled to upload contents for their specific section on the website.

(...) they wanted a more participative website, for a better division of tasks amongst the people here. So each one could enter the system and feed the website so that contents are available to the public as fast as possible. So, nowadays we have a website that is a one hundred per cent dynamic, entirely fed by the people of the assembly.

(Maxmeans Personnel)

As mentioned previously, IT skills of the servants of the Rio Grande do Norte's House are systematically low. To reduce this problem, Maxmeio personnel provides training to staff members from the different services of the House. Nonetheless, the effects of the decentralized management of contents are extremely limited: in the overwhelming majority of cases the Communications Division is the only one to provide updates (i.e. news) to the website. If the causes for the failure of such a system of decentralization of contents provision seem to be manifold, a few are worth mentioning.

First, as described earlier, there is an overall lack of interest in the part of servants on the Internet as a means of communication. Consequently, the motivation for other services in the House to post contents online is limited. Secondly, even if services were motivated to post contents online, given the high turnover amongst the different political appointees in the Legislature, training servants has a limited effect. Such a fact becomes aggravated when one considering that in the majority of the sectors of the House training to the website usage is provided only to interns, a result of the low interest that services have on using the website.

The even higher turnover amongst interns renders the effects of training only temporary, with different services often lacking trained personnel to post contents online. Training in the usage of the decentralized system becomes a permanent and non-cumulative process in the different services of the House. The exception to this is the Communications Division staff, who are submitted to a more intensive training and thus, more capable of using the website on an intensive basis.

There are lots of changes in staff, and this is normal. So most of the times that we are coming here to the Assembly is precisely for training... we train one person... and then if we need to train another one we do it again... The staff and the interns, because in Brazil we have this problem with interns, public organizations hire too many interns (...) For the website administrators of the Communication's Division we give a more specific training, and for the journalists, we give training for filing pictures, news, contents related to the press service...

(Maxmeans Personnel)

If the Communications Division is responsible internally for the website, this does not lead its staff members to perceive themselves as accountable for the overall quality of the website in terms of its contents. In this respect, the decentralization of content management – as ineffective as it might be – appears as sufficient for the Communications Division to exempt itself of any responsibility for the poor performance of the site in terms of contents provided.

For instance, the Legislative Division, that takes care of propositions, requirements, and these kinds of things. They indicate someone they consider trustworthy and this person has a login and a password to upload their material. If you go to the section of Legislation, whatever is there, has been uploaded by them, they have trained personnel for that. (...) So here at the Communications Division, we are directly responsible for the journalistic content, and all the rest, is up to the different sectors that are included in the website.

(Director of Communications Division)

Apart from a visible unwillingness towards improvements in the decentralized management of contents of the website, members from the Communications Division convey a sense of discomfort with regard to asking other services to engage more actively with the provision of

contents in the website. The extent to which the Communications Division is likely to engage in cooperation with other services of the House is dependent on the level of personal relationship that its personnel entertain with members from other services. In other words, members from the Communication Division are unlikely to work with other services whose staff they do not have a personal relationship with. The example of the relationship between the Communications and Legislative Divisions towards the production of contents is illustrative of this aspect.

As described before, an evident deficiency of Rio Grande do Norte's website is the absence of official information concerning the Legislative process, such as propositions, bills passed and committee reports. According to the Communications Director, in the past he had the intention to try to "improve the situation" through a closer cooperation with the Legislative Division for the provision of legal contents online, the latter responsible for documenting and processing the Legislative process. The Communications Director claims that such an informal project was considered in the past due to his friendship with the former Legislative Division Director. However, with the arrival of a new Director those plans were abandoned, given the lack of interpersonal relationship.

The previous Legislation Director was a guy who I was friends with, we worked together in the past... He left, and now this new person I do not have lots of intimacy with... The former Director would call me and say "What are you up to?" Then I would go to his office and say "Look, that project of ours, about the website..." Then it was easier you see? When he left... now I just know a girl who works there...

(Director of Communications Division)

Thus, in the absence of institutionalized channels of interaction amongst the different services, more complex projects that involve cooperation are determined by the pre-existing level of personal relationship among the actors. The margin of influence that an actor perceives to have on the behaviour of another is then directly related to the level of personal affinity and not the fruit of professional attributions. Such a pattern is by no means strange to public administration in clientelist contexts, where formal bureaucracy tends to be combined with personalized and informal manners of dealing with routine activities (Oliven 2002). In a context of high turnover of political appointees, long-term projects, if considered, are deemed to fail, as the example above shows.

Finally, a third problem for the low level of contents generated in the Legislative website is of technological infrastructure order, that is, the absence of automated networked systems as a means to support the day-by-day activities carried out by the different services in the House. In a number of Legislatures, daily activities performed by different services (e.g. committee meetings, drafting of propositions) are supported by specific networked and automated systems¹⁰¹. For instance, whenever a new committee meeting is booked or a new proposition is enacted, such a system is automatically updated in a networked system¹⁰² as well as in the Legislative website. In short, with the existence of automated systems, the marginal effort for servants to upload contents online is, in most cases, null. In Rio Grande do Norte, however, no specific IT systems of this sort are used by the different services of the administration. By consequence, every time a new content has to be uploaded in the website, such as a new legislation that has been passed, it has to be done manually in a one-by-one basis, as described by an employee of Maxmeans.

The user opens the program. For instance, I saved my proposition in the desktop. Then I open the administrator and I insert the name of the file, for instance "proposition 100.085". Then I browse the file that is in my desktop in Word or PDF, click in the file selected and uploaded it. Then it appears in the website. Ours does not pull information from an Intranet, you have to go in the website and do one by one.

(Maxmeans Staff)

In other words, despite the decentralization of the system of contents upload, the non-existence of a networked and automated system in the Legislature renders the activity of updating contexts extremely time consuming. It is important to underline, in a few cases interviewees mentioned the existence of an integrated system which supports the works carried out by Legislative Division with regard to the lawmaking process. Evidence of the existence of this system could also be found following an extensive search in the 'transparency' section of the website. In a document from 2008 a summary of a contract of renewal between the House and an external IT service provider can be found, with the object

¹⁰¹ See, for instance, *World e-Parliament Report 2008*.

¹⁰² Thus available to every user connected in the network.

of it being the “provision of services of development and maintenance of integrated system for the control of the Legislative process.”¹⁰³

Nonetheless, despite numerous attempts, no interview was possible with members of the Legislative Division to find out further details about the functioning of such system. Even so, based on interviews with other actors from the assembly it becomes clear that the access to such a system is limited to those in the Legislative services. Neither the different services in the House, nor those from the political sphere have access to the system. Noteworthy, the absence of a networked system widely available to the different sectors of the House ultimately hinders the lawmaking process itself. For instance, as described by the Head of an MP office, a high number of similar legal propositions are produced by different MPs offices, as MP staff members are unable to consult whether a proposition on an issue are already existent or not. The absence of an integrated system available to other spheres of the House is thus depicted as counter-productive to the legislative process.

(...) this would make my work much easier... sometimes an MP will present a proposition and this has already been presented by someone else. A system like this should exist, either just for us... or even in the website. I would make a search and find what exists... this would avoid this repetition of propositions...

(Head of MP Office)

This consideration aside, if a system actually exists within the Legislative Division and it is fully operational, it is not integrated to the Legislative website. Such a fact can be justified, among others, by the limited prospects for cooperation between the Communications Division (in charge of the website) and the Legislative Division (in charge of the Legislative system), as we have described above. Based on the qualitative data collected, this absence of coordination amongst the different services with regard to IT usage, rather than the exception, constitutes the rule in the Legislature. In other words, the organizational settings of the House are unlikely to promote the existence of networked systems which could lead to an improved performance of the Legislative website.

¹⁰³ Official Note (Boletim Oficial) 2433, 17-04-2008.

Indeed, under normal circumstances, one could expect that the IT Division could play such as the role of integration of systems and coordination amongst different services¹⁰⁴. Nevertheless, as previously discussed, the IT Division lacks both the inclination and the technical capability to do so. This leads to another issue that concerns the features of the website. As the attentive reader might have noticed, the distinction between contents and features in this analysis is somewhat blurred. This so far, in most of the cases, Rio Grande do Norte's Legislative website functions essentially as means of provision of contents (in their majority journalistic ones). In this respect, no other relevant features (e.g. related to interactivity, automated services to the user) appear on the website. The only feature of the website that could be potentially worth mentioning would concern the legislation search engine. However, for the reasons explicated above, such a search engine functions in an extremely limited basis, with a very small number of documents uploaded (manually) in the website.

To sum up, the poor performance of Rio Grande do Norte's website can be explained, in technological terms, by the absence of pre-existing networked systems that could function as the core providers for contents and features of the Legislative website. In a broader perspective, the technological limits, as we have shown, find their roots in the very administrative system of the House. For instance, although difficult to identify during the field work, it might well be that the different services use, to some extent, technologies (e.g. software) for the management of their daily work: accountancy, legislative process, journalistic editing and so on¹⁰⁵. Even if these systems were present, a fact is undeniable in the light of the evidence gathered: these different systems, if existent, are not integrated and, most likely, not interoperable. Even if they were to be interoperable, the absence of an institutional environment supportive of cooperation amongst the different sectors functions as a constraint for the development of networked information systems (e.g. Intranet) within the Legislature. In this respect, an ensemble of organizational and administrative traits associated to the clientelist practices, as shown above; emerge as non-conducive to the technological enactment towards the realization of democratic goods such as transparency, accountability and citizen participation (Honig 2007, Smith 2009).

¹⁰⁴ For instance, according to a survey carried out by the Global Center for ICT in Parliaments, 73% of overarching goals and projects concerning ICT usage in parliaments are defined by the ICT staff. See, *World Parliament Report, 2010 pp. 178*.

¹⁰⁵ However, such a possibility should be nuanced given, amongst others, the systematic low computer skills amongst the different servants in the House.

e-Clientelism: Practices of Digital Clientelism

Based on the analysis carried out thus far, Rio Grande do Norte's Legislature appears portrayed as an infertile ground for the usage of technologies. The practices associated with oligarchic factionalism appear to undermine any hope for technological enactment towards the promotion of the public good. The absence of qualified personnel, the high turnover amongst the appointees and the overall disregard for the Internet seems to go against the promotion of e-democracy *tout court*.

If this is the case, most of the descriptive analysis carried out until this moment refer more to the non-usage of technologies by the different actors in the House than to the usage of technologies. For instance, decentralized system of feeding contents do not work to the extent that individuals do not upload contents, networked systems are absent, and possible ICT projects are not carried out. Thus far, the instrumentalisation of ICT in the Legislature by clientelist practices is described as limited to a few minor uses of the website as a secondary means to promote personalistic visibility of MPs and to draw attention to the events that are promoted by the House. Indeed, such a low degree of advantage taken from the usage of ICT by the political sphere appear coherent when one takes into account intrinsic characteristics of clientelist practices, such as the informal, personal and affective nature of patron-client relations (Lemarchand and Legg 1972, Auyero 1999). In other words, the characteristics of standardization, impersonality and automation often associated to the use of ICT in public organizations seem incompatible with clientelist relations. Under this logic, the low usage of ICT in the Legislature as a means to foster patron-client exchanges seems to make perfect sense.

Conversely, such a low instrumental usage of ICT by the different actors within the Legislature should raise suspicions if one bears in mind an essential trait associated with clientelist practices: a refined sense of opportunism (Hopkin and Mastropaolo 2001, De Sousa 2008). Putting it in other terms, it also appears as counter-intuitive the fact that actors from Rio Grande do Norte's Legislative do not take further advantage of ICT tools by enacting them to their benefit with regard to the promotion and support of clientelist practices. In fact, apart from the instrumental use of the website by the Legislature as previously described, two

other IT usages can be described as active processes of technological enactment that are intrinsically related to the oligarchic factionalism context of the Legislature.

As we have noticed before, one of the marking features of clientelist practices refers to the lack of a clear division between the public and private spheres as a guiding principle for public action (Hallin and Papathanassopoulos 2002). In this respect, the first evidence of clientelist type of technological enactment refers to the email accounts used by the members of the administration of the House: in the overwhelming majority of cases civil servants make use of their personal email when conducting their professional affairs, with the very website of the Legislature providing the personal email of servants in the House.

From what I've heard from other servants, the people are using more their personal email [in professional communications]
(Legislative School Director)

As the quote indicates above, the use of the personal email comes from a choice of the servants, as an institutional email accounts ‘.gov’¹⁰⁶ are available to the servants. The reasons for the privileging of professional email accounts as a means of communication are described as being manifold.

Many people don't know how to create a .gov account, some don't want to have it, and others find it unnecessary...
(Director of IT Division)

Whatever the reasons for the low usage of the institutional email account as a means of communication may be; the unclear division between the public and private is reflected on the way technology is enacted: despite the existence of institutional email accounts, the use of personal email to conduct professional affairs is the standard practice amongst the servants of the House. Such a fact becomes even more interesting when one takes into account the use of emails by the members of the political sphere (i.e. MPs and their staff). In this case,

¹⁰⁶ Email account provided by the Executive, a common practice amongst Legislatures as it could be identified during the coding of the 93 state Legislature websites.

surprisingly, the situation verified is exactly the opposite: the majority of actors from the political sphere privilege the use of the institutional email for their communications.

(...) the servants use their personal email. But the MPs Offices don't. The MPs Offices, I think the majority of them, if not all of them, use the .gov email account.

(Director of IT Division)

The fact that the members of the administration give priority to their personal emails while actors from the political sphere do so to the usage of institutional emails appear as a puzzling event: why do members of the political sphere go through the hurdle of creating official email accounts where members from the administration don't? A possible explanation is that the use of the institutional email by actors from the political sphere constitutes a means to confer a veneer of officialdom to the contents of their messages. In other words, by using 'official' email accounts, members from the political sphere underline their position of authority when engaging in online communications, thus reinforcing the asymmetry of exchange that is typical of patron-client relations. Even so, the use of email as a means to promote the image of MPs still appear as a fairly weak instrumentalisation of the potential provided by ICT as a means to leverage clientelist practices. The political sphere, so far, appears as leveraging technology in quite a rudimentary manner, mainly, to reinforce their authority through the website and by using institutional email accounts. This brings to a second technological enactment illustrated in this section, the 'Virtual MP Office'.

As described earlier, the engagement of MPs in exchange-relations constitutes of an activity that is both time-consuming and intensive on resources. For instance, on a monthly basis, MPs respond to thousands of requests from their constituents, ranging from private medical consultations, to housing materials and payments of debts to cite a few. Moreover, apart from the favours provided by each of parliamentarians based on their individual resources, MPs Offices are also mediators of other services provided by the administration of the Legislature, such as medical consultations and legal counseling. To summarize, the management of the demands from citizens and the response to these demands by no means constitute a trivial task to be performed by MPs Offices. Therefore, to support the management of the flow of information that is associated with the requests made by citizens, an IT system has been

exclusively designed and developed for the state Legislature: the ‘Virtual MP Office’¹⁰⁷. The system developed by *Maxmeans* – the same external provider responsible for the website – is thus described:

The virtual offices are management systems, internal ones, for the MPs offices. For requests that are made... So, for instance, you go visit an MP office, they see what you request and they store that information. The main focus of the system is that of organizing requests. For example, the guy comes from the countryside. He asks for a medical consultation. So I go there, I create his personal file; I get his data such as name, address, phone for contact, and upload this information.

(Maxmeans Personnel)

In sum, the Virtual Cabinet consists of an ICT system with the ultimate purpose to effectively manage the dynamics of patron-client relationships led by the different MP offices in the House. Given to the veiled character of patron-client relations, obviously, the information stored in such systems are available only internally to the different offices, being inaccessible to the external public.

This is an internal system... it is for the management of the offices... it is like an Intranet.

(Maxmeans Personnel)

Unsurprisingly, the staff members from *Maxmeans* do not hesitate to claim that the process is considered a successful IT venture within the state Legislature. Furthermore, interviewees from *Maxmeans* convey a sense that such a system enjoys more appreciation from the political sphere than the Legislative website itself.

Indeed, an analysis of some numbers obtained with regard to the contracts between *Maxmeio* and the state Legislature seem to suggest a disproportionate importance given to the Virtual Cabinet when compared to that given to the Legislature website. For instance, according to official documentation of the Legislature, for the period 2009 – 2010 the state Legislature

¹⁰⁷ Translation from Portuguese, “gabinete virtual”.

spends merely R\$8,700.00 (US\$5,100.00) on its website¹⁰⁸. Conversely, for the same period, the contract between Maxmeio and the Legislature for the Virtual Cabinet amounts to R\$ 104,400.00 (US\$61,300.00). In other words, according to these numbers, for the period 2009-2010 Rio Grande do Norte state Legislature has spend 12 times more with the Virtual Cabinet than with the Legislative website.

Consequently, the Virtual MP Office appears as one of the few intensive usages of ICT within the Legislature, ultimately optimizing the management of clientelist relations. When taking such a fact into consideration, the technological enactment process within Rio Grande do Norte's Legislature acquire a new meaning. While ICT usage was described mainly through its absence (e.g. absence of internal systems) in the beginning of this section, as the analysis is developed it becomes clear that at least some process of technological appropriation takes place within the Legislature. Such a phenomenon becomes entirely evident when the case of the Virtual Cabinet is brought to light. The process of technological enactment of Rio Grande do Norte's Legislature appears, ultimately, as the byproduct of its politico-administrative framework.

Concluding remarks

This case study started by providing an account of how Rio Grande do Norte Legislature reproduces patterns of political behaviour associated to oligarchic-factionalist models of political competition. In this respect, we have shown the extent to which clientelist practices affect the administrative dimension of the Legislature. Two distinctive characteristics of the administration arise as a resultant of its political context. First, we identify the entire absence of institutional settings to promote the professionalization of the administrative services. Second, the administrative structure of the Legislature itself is used towards the reproduction of clientelist practices, particularly through the use of political criteria for the appointment of positions within the Legislature. These factors combined, we demonstrated, leads to the systematic occupation of key positions within the Legislature by under-qualified political appointees. Furthermore, such a system characterized by a high turnover of appointees undermines any prospect for the development of long-term projects within the Legislature.

¹⁰⁸Source: Boletim Oficial 2590 (<http://www.al.rn.gov.br/assembleia/arearestrita/upload/bo%202590.pdf>) last accessed in 11/2010.

Furthermore, human and budgetary resources of the Legislative are mobilize towards the promotion of MPs visibility and to enhance their clientelist practices.

These factors ultimately affect the process of technological enactment that takes place within the Legislature. First, the absence of professionalized personnel and the high turnover, particularly in the IT Division, has led to the nearly total absence of ICT supported procedures at the interior of the Legislature. In the absence of networked systems to support routine activities of the different services in the House, the automated generation of contents (e.g. legislation) which could potentially be uploaded to the website is nearly absent. The process of uploading contents on the website becomes a time-consuming activity that only a few members of the administration bother to engage with. Such a fact is aggravated by the secondary perception that actors have of the Internet as a means of communication. The Internet is, *tout court*, unimportant in the eyes of the actors of the state Legislature.

Any attempt of enhanced use of ICT with regard to the Internet, in this context, appears as doomed. For instance, if the decentralization of IT systems can be considered a means of improved management of websites (Franzel and Coursey 2004, Seifert and McLoughlin 2007) and content generation, such an assumption does not translate into practice in Rio Grande do Norte's Legislature. On the contrary, such a solution only comes as a justification for the members of the Communications Division to position themselves as unaccountable for the poor quantity of contents uploaded in the Legislative website.

We have seen, however, that a minimal level of instrumentalisation of the Internet can be found. It is used, for instance, to promote the visibility of the different MPs and events of populist character that are promoted by the Legislature (e.g. concerts). Furthermore, the Legislative website mirrors the importance that is given to the other means of communication, functioning as a relay of contents generated by the Legislative radio and TV channel. Nonetheless, if the technological enactment processes of Rio Grande do Norte's Legislature appear at first as merely rudimentary, this analysis has identified further instrumentalisation of technology that fits within the system of action of the Legislature. In this respect, the 'Virtual Cabinet' appears as the most sophisticated ICT usage within the Legislature. Such ICT usage, we have shown, comes with the sole purpose of optimizing the dynamics of patron-client relationships carried out by the different MP offices. In other words, in such a context, the most intensive use of technology is towards the reinforcement of clientelist practices. The

process of technological enactment that takes place in Rio Grande do Norte Legislature is the fruit of its actors' strategies, mediated by its political context and institutional framework.

10.6 Analytical Overview of Qualitative Analysis

In strict accordance with an institutional perspective of technology usage by public organizations, the three case studies above focused on the “internal workings” (Fountain 2010:99) of each of the state Legislatures and the respective processes of technological enactment that take place within each of the organizations. In other words, the aim of the analysis carried out here was that of rendering evident patterns of behaviour of Legislative actors within institutional settings (Fountain 2010), thus enabling an understanding of the system of action that encompasses actors' strategies (Crozier and Friedberg 1977). To this effect, we have highlighted in detail a series of institutional arrangements (formal and informal) and attitudinal patterns that are either directly or indirectly related to the process of technological enactment within the Legislatures. Such a microcosmic perspective was complemented by the consideration of the broader contextual settings in which each of the state Legislatures is inserted. In this respect, by taking into account the models of political competition prevalent in each of the states (e.g. pluralism, factionalism) we were also able to highlight how actors' strategies can be informed (although not conditioned) by the environment of which they are a part. A major importance of the analytical framework adopted was to keep us from falling into simplistic interpretations – commonly found in the e-government literature – that precipitate to link technological development within organizations to a certain kind of mindset or culture¹⁰⁹. Putting it bluntly, the qualitative analysis carried out enabled us to go beyond a simple descriptive effort and the commonplace culturalistic approach that case studies of this type generally involve. For each of the cases studied, the analysis carried out elucidated the role that actors' strategies – mediated by institutional settings – play in the development of state Legislature websites.

Leaving these preliminary considerations aside, a first relevant observation that emerges from the case studies concerns the sources of innovation within state Legislatures. In the case of Rio Grande do Sul, we have seen that, periodically, the will of newly elected Speakers to ‘leave their mark’ on the administration will lead innovations to be ‘forced’ into the system. With respect to this finding, it becomes evident that members of the political sphere play a

¹⁰⁹ See, for instance, Heeks 2002, Ndou 2004, Kubicek and Cimander 2005, Schuppan 2010.

role in accelerating the pace of the innovation process. Nonetheless, we have shown that Rio Grande do Sul's career civil servants systematically mobilize their technical superiority as a means to conform political demands to their agenda on technology usage. It is important to highlight that this renders evident the role that civil servants – despite their responsiveness – play in shaping ICT policy implementation. Nevertheless, when comparing the different cases, the most evident element with regard to drivers for innovation concerns the role that is played by internal needs. We have shown, both in the cases of Rio Grande do Sul and Minas Gerais, that most of the features present on the websites are better understood as the externalization of early innovations that were created as a means to address internal needs, that is, internal demand. In other words, in their origin, many of the innovations taking place had little or nothing to do with the promotion of democratic goods (i.e. transparency, participation). Rather, they were put in place as a means to render routine activities carried out within the parliament more effective (e.g. less time-consuming). If, as we have shown, career civil servants possess a considerable degree of attachment to values of public services such as transparency and accountability, these values will translate into actions (e.g. putting information online) only when their marginal effort for doing so is lowered. These marginal efforts are lowered when internal IT systems are already available. In this respect, the websites emerge as part of a broader IT ecosystem that is conceived with the aim of supporting activities carried out within parliaments. With regard to Rio Grande do Norte, due to the secondary role of the act of legislating itself, the demand for IT systems to support the legislative process is next to nothing, leading to the non-existence of such systems. Conversely, as clientelism becomes *de facto* the core activity of Rio Grande do Norte's Legislative, ICT usage (i.e. the Virtual Cabinet) becomes a means to address a demand that is associated with patron-client relationships.

The capacity to address internal demands, however, is linked to the resources available at the interior of each Legislature's administrative settings. This brings us to another element that can be drawn from the case studies with regard to the role that is played by *the professionalization levels of career civil servants and the organizational settings of the administrative sphere* of the different Legislatures. Concerning the career civil servants, a first element that can be considered deals with the existence or non-existence of Legislative schools. These schools, we have shown, consist of capacity building structures where civil servants are provided with training that is specifically related to the legislative action and knowledge of institutional practice, such as lawmaking techniques and internal house rules.

The second element of the professionalization of Legislative staff refers to the modality of recruitment for the administration of the Legislature, which led us to the distinction between career civil servants and political appointees. The former are permanent staff members who are selected through highly competitive entrance examinations that are specific to the different functions to be performed (e.g. legislative specialist, IT engineer), while the latter’s integration into the administrative body is free from formal requirements with regard to professional qualification, with nominations based mainly upon political allegiance.

With regard to the presence of Legislative schools, while Minas Gerais and Rio Grande do Sul were the first Legislatures in Brazil to create a structure for the capacity building of its administrative body in the 1990s, Rio Grande do Norte appears as a late adopter in the Brazilian context, where the process is currently still ongoing. In Minas Gerais state Legislature, following Internal House Rules, the administrative staff is entirely composed of career civil servants. In Rio Grande do Sul’s Legislature, despite a higher number of political appointees, exclusively career civil servants can occupy key positions within the administration. In Rio Grande do Norte, no career civil servants *stricto sensu* can be found, with an endemic presence of under-qualified political appointees in strategic positions within the administration of the Legislature. The presence or absence of a structure for the training of career civil servants, combined with recruiting processes based on professional entitlement, we argue, ultimately affects the overall quality of services within a Legislature.

Table 16. Professionalization Level in a Comparative Perspective

Professionalization			
State	Legislative School	Proportion of career civil servants in key positions	Professionalization level
Rio Grande do Sul	institutionalized	total	high
Minas Gerais	institutionalized	total	high
Rio Grande do Norte	ongoing implementation	none	absent

The impact of these different institutional arrangements on the process of technological enactment could not be any more obvious when the three cases are put in perspective. In the IT Divisions of Rio Grande do Sul and Minas Gerais Legislatures, both Directors are career

civil servants and IT engineers with over 15 years of experience in the field. Conversely, in Rio Grande do Norte, the Director of the IT Division is a young law graduate with no past qualification whatsoever in the field of ICT. With regard to other staff members in the same Divisions, in Rio Grande do Sul and Minas Gerais, all staff members are career civil servants with previous formal qualifications in the field (e.g. programmers, IT engineers), while in Rio Grande do Norte's Legislature, the staff is composed of political appointees with questionable qualifications in the field of informatics. In the case of Rio Grande do Norte, we have shown, the problem of under-qualification of staff becomes even more chronic as a high level of turnover of directors and staff is identified, undermining any prospect for the sustainability of IT projects in the long term.

This observation regarding turnover and sustainability of IT projects leads us to a second element that arises when comparing the different state Legislatures. It refers to the *different policy innovation cycles* of each of the Legislatures analysed. By policy innovation cycles we refer to the period by which policies' objectives and instruments are changed. Under a comparative perspective, the evidence gathered suggests that the cycles of policy change (e.g. website innovation) are strictly related to the political context and organizational settings.

In the case of Minas Gerais, members of the administration are willing to engage in long-term ICT projects. To some extent, the administrative sphere's policy-cycle seems to be even disconnected from that of the political sphere (e.g. changes of Speaker). This observation appears to be the byproduct of two different – although interrelated – factors. First, the organizational setting, which has been described as a “clear and irreversible separation” between the political and administrative spheres of the Legislature, we have shown, leads to a high degree of independence of the administrative sphere vis-à-vis the political arena of the House. Second, the very context of coalescent pluralism in the House is conducive to continuity in policies, hence reinforcing the vocation of the members of the administration to engage with long-term projects and thus longer policy cycles.

Conversely, in the case of Rio Grande do Sul, we have seen that the politico-administrative structure of the administration – i.e. the Speaker's Cabinet – is able to exert a considerable degree of influence over the actions of the administrative sphere, particularly through the distribution of gratified positions within the Legislative administration (e.g. Division Directors). Furthermore, Rio Grande do Sul's Legislature is also characterized by a model of

conflictive pluralism combined with a yearly configuration of the political forces composing the Speaker’s Cabinet. In such a competitive environment and with a degree of discretion over administrative policies, MPs taking the position of Speaker more often than not will request changes in ICT policies and innovations (e.g. new website features). As a consequence, in the Rio Grande do Sul Legislature, the combination of the factors above leads to shorter (yearly) cycles of innovation with regard to ICT usage. The disruptive effects of such a system, we have shown, are minimized as IT Division career civil servants mobilize their technical expertise to ensure the continuity of projects and interoperability of systems.

Rio Grande do Norte’s Legislature, however, is characterized by the absence of a clear definition between the political and administrative spheres, with an administration permanently usurped towards the promotion of clientelist practices, inherent in the model of oligarchic factionalism. The high level of turnover amongst staff members, due to events that are contingent in their nature, leads to an unidentifiable/random cycle of innovation.

Table 17. Innovation Cycles in a Comparative Perspective

Innovation Cycle				
State	Professionalization	Administrative autonomy	Political context	Innovation cycle
Rio Grande do Sul	high	medium-high	conflictive pluralism	short
Minas Gerais	high	high	coalescent pluralism	long
Rio Grande do Norte	absent	absent	Oligarchic factionalism	random

When comparing the three cases another factor that is rendered evident concerns the different types of innovation processes that occur. That is, the articulation among the different innovations (e.g. new features) that take place within each of the Legislatures. In the case of Rio Grande do Sul, due to the short cycles of IT innovation, we find the existence of concurrent technological solutions of a provisory nature. At any given moment in time, members of the IT Division appear to be coping with a series of issues in order to ensure the interoperability of systems (and continuity of old projects) and to respond to new demands

from the political sphere. In other words, the different innovations that take place within the Legislature are articulated in a *cumulative process* that takes place *simultaneously*, resulting in a rather feeble articulation among large numbers of pieces loosely joined together.

Conversely, in Minas Gerais state's Legislature, innovations are the fruit of a long-term reflection, where the achievement of innovations follows a rationale where each innovation is preceded and conditioned by another. For instance, with regard to interactivity, Minas Gerais Legislature's actors in charge of the website take a cautious approach to the adoption of social networks (e.g. Facebook, Twitter) within their website. To this effect, Minas Gerais' actors consider the previous online consultations carried out – carefully crafted – as a learning phase for the adoption of other technologies (e.g. social networks) that foster interactivity. In a similar vein, the ongoing project of redesign of the website lays down a series of technological steps to be taken towards the optimization of the website, such as the correction of minor interoperability issues and indexation of contents of different formats. In other words, unlike Rio Grande do Sul's Legislative, in Minas Gerais innovations are articulated in a *sequential and incremental* manner, ensuring the overall interoperability and sustainability of its ICT systems.

Finally, in Rio Grande do Norte Legislature, we have shown, since the creation of the website in 2003 and in its current version, the core of its features and contents remains the same. Indeed, the absence of ICT supported procedures at the interior of the Legislature, the high level of turnover within the Legislature and the under-qualification of the servants renders any substantial improvement in the website nearly impossible. In this respect, most of the changes in the Legislative website in Rio Grande do Norte have been, throughout its history, of cosmetic order. To this effect, Rio Grande do Norte's innovation follows a *circular* pattern of innovation randomly distributed in time, where each innovation brings the website back to its initial point of departure.

The objective of the different considerations made above goes beyond that of a mere typological exercise. On the contrary, the different factors highlighted ultimately impact the very design of the websites of each of the state Legislatures. Starting with Minas Gerais for instance, its contents are dense, with legal and procedural information abundantly available. The functionalities of the website associated with the Legislative process (e.g. thematic searches) are extremely sophisticated by any means and standards. Furthermore, a

standardization of contents and utilities on each page of the website conveys to the user a sense of coherence and uniformity that is rarely found on websites of a similar size. Nonetheless, given that most of the contents and features are fruit of the externalization of internal services, the overall architecture of the website tends to reflect the organizational structure of the administration. For instance, on the one hand, information about MPs' expenditures is counter-intuitively – to an external user – placed under the 'administration' section of the website. On the other hand, a circumspect graphic identity can be identified, and the most modern interactive utilities (e.g. social networks) are absent. The overall configuration of the website, in this sense, appears to be a result of its drivers for innovation, its innovation cycle and its pattern of articulation between the different innovations. The cycles of innovation being characterized as long-term, sequential and incremental, renders possible systems that are nearly perfectly interoperable. This interoperability enables the existence of sophisticated features within the website (e.g. search engines, tracking systems for legislation). In the same manner, this long-term and sequential nature of technological enactment in Minas Gerais Legislature is ultimately reflected in a coherent standardization of contents and utilities. Nevertheless, if the website is perceived by many servants as a 'working tool' and many of its utilities are internal systems that have been externalized (i.e. put online) the notion of rendering the website usable and/or attractive to external users tends to become secondary. Furthermore, the long-term policy cycles and the religiously adopted sequential approach leads the website to be rather limited in terms of the use of interactivity features and the adoption of external innovations (e.g. social networks). In sum, this ensemble of factors is what led Minas Gerais state Legislature website to be previously described as a 'professional-bureaucratic' type of website.

Rio Grande do Sul website, on the other hand, appears as an extremely dynamic website. A wealth of information is conveyed, with contents in text often accompanied by images. Information concerning MPs and their actions (e.g. roll-call votes, attendance) is presented in a creative manner, and users are even able to take a 'virtual tour' within the Legislature as they learn more about the institution. A prominent link leads the user to the 'transparency portal', where information is richly conveyed through visualizations and graphs. Finally, the website presents the latest functionalities with regard to interactivity with chats and use of social networks. Rio Grande do Sul's Legislative website is by any standards a dynamic website. However, contrasting with these positive characteristics, problems of interoperability are a constant, with members of the IT Division often referring to the systems as a

Frankenstein. Indicative of these problems, whenever navigating from one page to another within the same website, the user experiences the sensation of being directed to another website. Features and graphic identity abruptly change from one page to another. The websites resembles the fruit of a *bricolage* that has been hastily put together. In a similar manner to Minas Gerais, the final configuration of the website is the product of a series of factors. For instance, the demands for changes that come from the political sphere on a yearly basis lead to a high number of sudden innovations in the website, some of them even resembling the role of ‘gadgets’ to the external public. Indeed, the short-term cycle of innovation renders possible the incorporation of the latest novelties with regard to technology usage, such as virtual tours and social networks. Nevertheless, the simultaneous and cumulative nature of the different innovations being incorporated leads to temporary solutions that culminate in interoperability problems as well as a lack of standardization of features across the website. This ensemble of factors leads to a type of website that, albeit lively, appears as a *patchwork* with a high number of small innovations, although with permanent interoperability problems that are addressed on an ongoing basis.

Finally, Rio Grande do Norte’s website, we have shown, appears to be characterized by the lack of contents and features associated with e-democracy. A noteworthy constant in Rio Grande do Norte’s website over the years is a number of sections indicating that certain features or contents will be available ‘soon’. In the absence of drivers for innovation, however, very little contributes to the development of the website. With a circular pattern of innovation, Rio Grande do Norte’s website is similar to the image of Sisyphus who, throughout eternity, rolls a boulder up a mountain, only to watch it roll back down. For each innovation, the website starts ‘from scratch’, with changes of cosmetic order leading to an underdeveloped website.

Table 18. Factors and Final Configuration of Websites

Factors and Final Configuration of Websites					
State	Admin. autonomy	Drivers	Innovation cycle	Innovations process	Final configuration
Rio Grande do Sul	medium-high	internal needs political demands	short	cumulative / simultaneous	lively-patchwork

Minas Gerais	high	internal needs	long	incremental / sequential	professional-bureaucratic
Rio Grande do Norte	absent	absent	random	circular	underdeveloped

The table above summarizes how the different factors, in a causality chain, affect the final configuration of a Legislative website. For instance, in the case of Rio Grande do Sul, despite a certain degree of administrative autonomy, members of the political sphere are able to exert influence in the technological process. With short innovation cycles, innovations are made simultaneously and in a cumulative manner. The final result is that of a lively patchwork website, with a number of interoperability problems. Conversely, Minas Gerais Legislature is characterized by a highly autonomous administration, with no interference from the political sphere of the House with regard to the website. This leads the website to be the fruit of internal drivers only, and the website ends up ‘resembling’ its creators, the administration. The long-term cycles in a sequential manner lead the website, to some extent, to lag behind with regard to a number of features, particularly those related to interactivity features and social media usage. Finally, in Rio Grande do Norte, with an absence of administrative autonomy and random cycles of circular innovation, the website appears to be permanently starting from zero. This interpretation of the factors that affect the final configuration of websites becomes particularly interesting when a reversed logic is applied to it. In other words, one could hypothesize that by simply analysing the configuration of a website it is possible to predict a number of traits of any given Legislature, such as the levels of political interference in the administration, the innovation cycles and processes¹¹⁰.

Finally, it is important to note that the websites of Minas Gerais and Rio Grande do Sul attained the highest e-democracy scores, with both of the websites providing the user with a wealth of contents and features even when compared to websites from the other countries analysed. Nonetheless, as we can see, the final results are achieved by the different websites through strikingly different paths, with differences in administrative autonomy, drivers for innovation, policy cycles and processes and, last but not least, different political contexts. In this respect, the only constant across the two Legislatures is the existence of a

¹¹⁰ If such a hypothesis cannot be fully confirmed by this present research, it offers indications of promising directions for further research in the field.

professionalized body of career civil servants who are able to ensure, across time, the development of Legislative websites. The superiority of career civil servants over political appointees – broadly theorized and tested (Hecl 1977, Smith 1987, Pfiffer 1988, Lewis 2008, Lewis and Kelman 2009) – is confirmed by the cases studied. While the extent to which such findings can be generalized is rather limited and should be the object of further research, these findings offer promising paths for exploration in the field of e-democracy.

11. CONCLUSION

This thesis started with a rather simple research question: *in a context where the costs of access to ICTs are relatively low, why do parliaments that share the same level of functions and competences (i.e. symmetric federations) produce different results regarding the level of development of their websites?* In order to respond to this question, the research was divided into three major phases: comparative website analysis, quantitative analysis and qualitative case studies. The aim of such a comprehensive research design was that of enabling a more accurate understanding of the impact of social phenomena on the e-democracy traits of state Legislative websites.

In the first phase, a comprehensive and systematic comparison of 93 state (regional) parliaments' websites from three different federations was carried out: two symmetrical federations (Brazil and the United States) and one asymmetric federation (Spain). In this respect, 93 websites were analysed according to their e-democracy features, leading to a classification of these websites according to their level of development (i.e. e-democracy score). The major overarching finding, rather unsurprisingly, was the existence of variance in the level of development of the different Legislative websites both at the intra- and inter-federal levels. Patterns of ICT use amongst parliaments were also identified. We have shown, for instance, that the majority of Legislative websites, when providing information, privilege the provision of static rather than dynamic information. Also, a systematic and extremely low level of ICT use as a means to promote multilateral interactivity was identified. Finally, albeit in an inconclusive manner, we suggested the role that electoral systems may play in the prioritisation of some kinds of information over others, such as closed list PR systems leading to an increased visibility of parties as opposed to MPs individually. At this point however, apart from a few punctual questions of speculative order, no systematic approach was taken to identify which factors were related to the level of development of Legislative websites.

With regard to predicting factors, based on a model built upon the existing literature in the field, a clear set of four hypotheses was generated, as shown below:

Hypothesis 1 (leading hypothesis) – actors' strategies: according to this analytical framework, it is the relationships among civil servants and MPs, and the relationships between the two groups – mediated by institutional arrangements – that will affect the

level of development of parliamentary websites, where the strategies and technical expertise of civil servants play a determinant role. In this respect, the more professionalized civil services within parliaments are, the more developed the websites are.

Hypothesis 2 – political context/ideology: in accordance with previous findings on parliamentary websites, their level of development will be ultimately defined by political factors and, more particularly, partisanship. Under this perspective, the development of parliamentary websites will be affected by the partisan orientation within parliaments.

Hypothesis 3 – resources: traditionally associated with policy innovation, these will be the main factors affecting the level of development of parliamentary websites. In this context, the higher the amount of resources and economic wealth, the more developed parliamentary websites will be.

Hypothesis 4 – technological development: according to this hypothesis, the level of development of e-democracy policies will be determined by the level of technological development of their context, that is to say, technological development is the determinant factor for the outcomes in e-democracy. Thus, for instance, in contexts of higher technological development, a higher level of development in the use of ICTs related to democratic practices should be identified.

In order to verify the validity of these hypotheses and possible explanatory models for the intra- and inter-federation variances, a series of quantitative analyses was carried out. In the Brazilian case, when controlling for other factors, e-democracy scores appeared positively correlated with both the age of the websites and the population size of the states. These variables, we suggest, are related to a question of demand: the larger the population, the more incentives parliaments have to become early adopters of technology, which leads to an incremental development of the Legislative websites over time. In the Spanish case, two factors appear as significantly related to the level of parliamentary websites' development: levels of Internet access and autonomy of the Spanish regions. With regard to the Spanish case, we suggest, the latter finding constitutes the most important one, as it is the first study that empirically suggests an impact of federal arrangements upon Legislative websites'

development. In the case of the United States, the level of Internet access constitutes the only factor related to the level of e-democracy development in state Legislatures. Despite the relevance of findings following the analysis of each country individually, among the three countries no common factor functions as a predictor of the level of development of Legislative websites. In this respect, a subsequent analysis was carried out across the three countries, taking into account the 93 state Legislative websites. In this case, population size and Internet access appear as determinants of website development. These findings, in accordance with our fourth hypothesis (i.e. technological development), resonate with previous findings by Norris (2001) which posit technological diffusion as the predictor for Legislative website development. Nonetheless, and particularly given the relationship between Internet access and population size, we suggest that rather than being linked to technological diffusion *per se*, the development of websites is linked to demand for Internet services, which is higher in more populated states with higher Internet access levels. From this perspective, this research resonates with more recent studies that associate demand for Internet services with development of ICT usage by public organizations. It is important to note that our quantitative analysis did not show any relationship between e-democracy levels and political factors (hypothesis 2), nor with factors related to resources (hypothesis 3). Bearing these considerations in mind, the results presented by the brief quantitative analysis were far from conclusive, with a high number of outliers indicating the need for identification of better explanatory factors that could not be assessed in the quantitative phase, such as actors' strategies (hypothesis 1) and other institutional (formal and informal) settings. To this effect, we proceeded to the case studies.

The case studies constitute the core of this research: both in their analytical depth and breadth, which is reflected in the length of the studies. Following an institutional approach to the process of ICT usage within public organizations, we were able to show how a number of factors – largely ignored by e-democracy studies – ultimately have an impact on the development of Legislative websites. For instance, in the case of Rio Grande do Sul, we were able to show how the combination of political conflictive pluralism and particular institutional arrangements – e.g. nomination of Speakers and Division Directors – leads to a process of *unbridled innovation*. We have also been able to show how the competition amongst political elites – mediated by organizational arrangements – affects the contents of the website both quantitatively and qualitatively. In a similar vein, by showing how career civil servants mobilize their expertise to resist political pressure, we clearly demonstrated the impact that

actors' strategies have on the final technological enactment process. Our analysis even demonstrates how the yearly changes of Speaker of the House impact the interoperability of ICT systems. Through the case study, Rio Grande do Sul's website emerges as a mixed expression of internal needs and politico-bureaucratic interactions.

The Minas Gerais case study enabled us to show how a process of institutional reform that started in the mid 80s still shapes the process of technological enactment that takes place within the Legislative. The separation between the political and administrative spheres of the House, structured as a non-zero-sum game leads to a *de facto* autonomy of career civil servants with regard to the management of the Legislative website. The contents of the website are thus focused on collective outputs, as a result of the attachment of career civil servants towards the view of the Legislature as an institution as a whole, and not only a sum of individual MPs. The contents, we have shown, are also the fruit of organizational and institutional designs, while actors' strategies are rendered evident through, for instance, the efforts deployed by the IT and Communications Divisions to maintain their hegemonic control over the website. Finally, we have shown how the architecture of the website and its features are determined by internal organizational needs, while interactivity is directly influenced by the institutional design of the Legislature with regard to its participatory instances.

Conversely, in Rio Grande do Norte we have shown how the context of oligarchic factionalism ultimately shapes the institutional design of the Legislature as a whole and, consequently, the process of technological enactment that takes place within the Legislature. In this respect, the personalism that is associated with the context reflects the contents of the website, privileging, above all, the promotion of the image of MPs on an individual basis. The secondary role given to the act of legislating and the grasp on the administration by clientelist interests undermines any prospect for the development of ICT supported services within the Legislature. Rio Grande do Norte's case study calls for a cautious note with regard to the potential of ICT as a means to promote democratic goods. In the case of Rio Grande do Norte, while ICT has not been used to foster increased transparency and participation, it has been efficiently deployed to further the clientelist practices that take place in the state.

The comparison between the cases brings analytical thrust to the study. For instance, when comparing the Legislatures, we elucidated how the different institutional arrangements

ultimately shape the very configuration of the websites, with each of the websites presenting differences in terms of their features and contents. By reversing this interpretation, we surmise, the configuration of Legislative websites *per se* may provide external observers with information regarding institutional arrangements and policy-innovation cycles and processes within a Legislature. Such an assumption – yet to be validated on a larger scale – suggests new paths for future research.

Finally, the comparative perspective taken here renders evident the role that is played by career civil servants in the technological enactment that takes place within Legislatures. As suggested by Heclo (1977), at least with regard to e-democracy policies, career civil servants seem to matter more than parties and politicians. The leading hypothesis of this research stands out: *it is the relationships among civil servants and among MPs, and the relationships between the two groups – mediated by institutional arrangements – that affect the level of development of parliamentary websites, where the strategies and technical expertise of civil servants play a determinant role.*

LIST OF REFERENCES

- Aberbach, J. and Rockman, B., 2000. *In the Web of Politics: Three Decades of the U.S. Federal Executive*. Washington, DC: The Brookings Institution.
- Alston, L. J. and Mueller, B., 2005. Pork for Policy: Executive and Legislative Exchange in Brazil. *Journal of Law, Economics, and Organization*, 22(1), pp.87-114.
- Alt et al., 2006. *The Causes of Fiscal Transparency: Evidence from the US States*. IMF Staff Papers, Vol. 53, Special Issue.
- Alvarez, M. R., Hall, T., and Trechsel, A. H., 2009. "Internet Voting in Comparative Perspective: The Case of Estonia", *PS: Political Science & Politics* 42(3): 497-505.
- Ames, B., 1995. Electoral Rules, Constituency Pressures, and Pork Barrel: Bases of Voting in the Brazilian Congress. *The Journal of Politics*, 57(2), pp.324–343.
- Anastasia, F., 2001. Transformando o Legislativo: a experiência da Assembléia Legislativa de Minas Gerais. In: Santos, F., ed. 1st ed. *O Poder Legislativo nos Estados: Diversidade e Convergência*. Rio de Janeiro: Editora FGV, pp.23-83.
- Andrade, C. A., 2005. *Planejamento educacional, neopatrimonialismo e hegemonia política: RN, 1995-2002*. São Paulo: Annablume.
- Anttiroiko, A., 2003. Building Strong E-Democracy—The Role of Technology in Developing Democracy for the Information Age. *Communications of the ACM*, 46(9), pp.121-128.
- Arnstein, S. R., 1969. A ladder of citizen participation. *Journal of the American Planning Association*, 35(4), pp.216–224.
- Arterton, F.C., 1987. *Teledemocracy: Can Technology Protect Democracy?* Newbury Park, CA: Sage.
- Assis, L. F. De, 1997. Educando para a cidadania: A experiência da escolar do Legislativo. *Educação & Sociedade*, 18(59), pp.367-385.
- Auyero, J., 1999. From the Client's Point(s) of View: How Poor People Perceive and Evaluate Political Clientelism. *Theory and Society*, 28(2), pp.297-334.
- Banting, G., and Corbett, S., eds. 2002. *Health Policy and Federalism. A Comparative Perspective on Multi-Level Governance*. Montreal: McGill-Queen's University Press.
- Barber, B., 1984. *Strong Democracy: Participatory Politics for a New Age*. Berkeley: University of California Press.
- Barr, S., 2001. President searching for a few good e-government ideas. *Washington Post*, 10 August.

- Becker, T.L., 1998. Transforming Representative Democracy : Four Real Life Experiments in Teledemocracy. In : Transformational Politics : Theory., Study and Practice.
- Becker, T.L. & Slaton, C.D., 2000. The Future of Teledemocracy. Westport, CT: Praeger.
- Beer, S., 1973. Fanfare for Effective Freedom: Cybernetics Praxis in Government. The Third Richard Goodman Memorial Lecture, delivered at Brighton Polytechnic, Moulsecoomb, Brighton, 14 Feb.
- Beise, M. and Rennings, K., 2003. *Lead Markets for Environmental Innovations: A Framework for Innovation and Environmental Economics*. Mannheim: ZEW.
- V. Bekkers & V. Homburg (Eds.), The Information Ecology of E-Government, IOS Press, Amsterdam etc., 2005.
- Benkler, Y. and Shaw, A., 2010. A Tale of Two Blogospheres: Discursive Practices on the Left and Right. Berkman Center Research Publication No. 2010-6; Harvard Public Law Working Paper No. 10-33.
- Bertot, J. C., Jaeger, P. T., & Grimes, J. M. Using ICTs to create a culture of transparency: E-government and social media as openness and anti-corruption tools for societies. *Government Information Quarterly*, In Press, Corrected Proof.
- Boens, M. and Stavros, Z., 2002. From Street-Level to System-Level Bureaucracies: How Information and Communication Technology Is Transforming Administrative Discretion and Constitutional Control. *Public Administration Review*, 62(2), pp.174-184.
- Borges, A., 2010. Já não se fazem máquinas políticas como antigamente: competição vertical e mudança eleitoral nos estados brasileiros. *Revista de Sociologia e Política*, 18(35), pp.167-188.
- Bozeman, B. and Bretschneider, S. O., 1986. Public management information systems: Theory and prescription. *Public Administration Review*, 46 (November), pp.475-487.
- Braga, S. O papel das TICs na institucionalização das democracias; um estudo sobre a informatização dos órgãos legislativos na América do Sul com destaque para o Brasil. Brasília: Plenarium/CEDI, 2007.
- Braun, D., ed. 2000. *Public Policy and Federalism*. Aldershot: Ashgate.
- Breton, P., 1992. *L'utopie de la communication*. Paris: La Découverte.
- Breton, P. and Proulx, S., 1993. *L'explosion de la communication*. Paris: La Découverte.
- Brousselle, A., 2004. What Counts is not Falling... but Landing: Strategic Analysis: An Adapted Model for Implementation Evaluation. *Evaluation*, 10(2), 155-173.

- Brynjolfsson, E. and Kahin, B., eds. *Understanding the Digital Economy. Data, Tools, and Research*. Cambridge, MA: The MIT Press.
- Burns, N., Evans, L., Gamm, G. and McConaughy, C., 2008. Pockets of Expertise: Institutional Capacity in Twentieth-Century State Legislatures. *Studies in American Political Development*, 22(2), pp.229–248.
- Bussell, J., 2011. Explaining Cross-National Variation in Government Adoption of New Technologies. *International Studies Quarterly*, 55: 267–280.
- Caddy, J., 2005. The role of technologies in democracy. In: Coleman, S., Norris, D., A new agenda for e-Democracy. *International Journal of Electronic Government Research*, 1(3), pp.69-82.
- Carvalho, J. M., 1997. Mandonismo, Coronelismo e Clientelismo: Uma Discussão Conceitual. *Dados*, 40:2, pp.229-250.
- Castells, M., 2003. *The Internet Galaxy: reflections on the Internet, business and society*. Oxford University Press, 2003.
- Chadwick, A. 2011. Explaining the Failure of an Online Citizen Engagement Initiative: The Role of Internal Institutional Variables. *Journal of Information Technology and Politics* 8 (1).
- Chadwick, A. and Howard, P. N., eds. *The Handbook of Internet Politics*. New York: Routledge.
- Chandra, K., 2007. Counting Heads: A Theory of Voter and Elite Behaviour in Patronage Democracies. In: Kitschelt, H., and Wilkinson, S., eds. *Patrons, Clients, and Policies: Patterns of Democratic Accountability and Political Competition*. Cambridge, UK; New York: Cambridge University Press, pp.84-109.
- Chaves, M. and Stoller R., 2002. Organizational Empowerment versus Clientelism. *Latin American Perspectives*, 29(5), pp.7-19.
- Chen, D.-Y., Huang, T.-Y. and Hsiao, N., 2003. The Management of Citizen Participation in Taiwan: A Case Study of Taipei City Government's Citizen Complaints System. *International Journal of Public Administration*. 26(5), pp.525-547.
- Chou, T.-C., Chen, J.-R. and Pu, C.-K., 2008. Exploring the collective actions of public servants in e-Government development. *Decision Support Systems*, vol. 45, pp. 251-265.
- Clark, T. N., 1994. Clientelism, U.S.A.: The Dynamics of Change. In: Roniger, L. and Gunes-Ayata, A., eds. *Democracy, Clientelism, and Civil Society* Boulder, Colorado: Lynne Rienner Publishers, pp.121-144.

- Clift, S., 2003. *E-democracy, E-Governance and Public Net-Work*. Available at: www.publicus.net
- Cohen, J., Tsfati, Y. and Sheafer, T., 2008. The Influence of Presumed Media Influence in Politics: Do Politicians' Perceptions of Media Power Matter? *Public Opinion Quarterly*, 72(2), pp.331-344.
- Coleman, S., 2001. *Democracy Online*. London: Hansard Society.
- Coleman, S., 2009. Making parliamentary democracy visible: Speaking to, with and for the public in the age of interactive technology. In: Chadwick A and Howard P (eds) *Handbook of Internet Politics*. London: Routledge, 86–99.
- Coleman, S. and Gotze, J., 2001. *Bowling Together: Online Public Engagement in Policy Deliberation*. Available at: www.bowlingtogether.net
- Coleman, S. and Norris, D., 2005. A new agenda for e-Democracy. *International Journal of Electronic Government Research*, 1(3), pp.69-82.
- Crozier, M. and Friedberg, E., 1977. *L'Acteur et le Système*. Paris: Seuil.
- Dahl, R. A., 1998. *On Democracy*. New Haven: Yale University Press.
- Danziger, J., 2004. Innovation in Innovation? The Technology Enactment Framework. *Social Science Computer Review*, 22(1), pp.100-110.
- Davis, R., 1999. *The Web of Politics*. Oxford: Oxford University Press.
- Dawes, S. S., 2009. Governance in the digital age: A research and action framework for an uncertain future. *Government Information Quarterly*, 26(2), pp.257-264.
- De Sousa, L., 2008. Clientelism and the Quality(ies) of Democracy. Public and Policy Aspects. DIS Working Paper 2008/2, Center for the Study of Imperfections in Democracy, Central European University, Budapest
- Desposato, S. W., 2008. Explaining Patterns of Oversight in Brazilian Subnational Governments. In: Staphenurst, R., Pelizzo, R., Olson, D., and von Trapp, L., eds. *Oversight and Budgeting: A World Perspective*. Washington DC: The World Bank, pp.193-200.
- DiMaggio, P. J. and Powell, W. W., 1991. The iron cage revisited. Institutionalized isomorphism and collective rationality in organizational fields. In: Powell, W. W. and DiMaggio, P. J., eds. *The New Institutionalism in Organizational Analysis*. Chicago: Chicago University Press, pp.63–82.
- Doty, P. and Erdelez, S., 2002. Information micropractices in Texas rural courts: methods and issues for E-Government. *Government Information Quarterly*, 19(1), pp.369-387.
- Downs, A., 1957. *An Economic Theory of Democracy*. New York: Harper and Row.

- Dumoulin, M., 2003. *Les forums électroniques: délibératifs et démocratiques?* Available at: http://www.erudit.org/livre/moniered/2002/livrel5_div11.pdf
- Dutton, William H., 1992. Political science research on teledemocracy, *Social Science Computer Review* 10(4): 55-61.
- Edler, J. and Georghiou, L., 2007. Public procurement and innovation – Resurrecting the demand side. *Research Policy*, 36(7), pp. 949-963.
- Edquist, C. and Hommen, L., 2000. Public Technology Procurement and Innovation Theory. In: Edquist, C., Hommen, L., and Tsipouri, L., eds. *Public Technology Procurement and Innovation, Economics of Science, Technology, and Innovation*. Boston, MA: Kluwer.
- Eichbaum, C. and Shaw, R., 2008. Revisiting Politicisation: Political Advisers and Public Servants in Westminster Systems. *Governance: An International Journal of Policy, Administration, and Institutions*, 21(3), pp. 337–363.
- Eisenberg, J., 1999. Internet popular e democracia nas cidades. *Informática Pública*, 1(1), pp. 43-56.
- Eisenberg, J. and Cepik, M., eds. 2005. *Internet e Política: teoria e prática da democracia eletrônica*. Belo Horizonte: UFMG.
- Elazar, J., 1987. *Federalism As Grand Design: Political Philosophers and the Federal Principle*. Lanham, MD: University Press of America.
- Elliot, K. A., ed. *Corruption and the Global Economy*. Washington DC: Institute for International Economics.
- Esterling, K.; Lazer, D.; and Neblo, M., 2012. Connecting to Constituents: The Diffusion of Representation Practices among Congressional Websites Political Research Quarterly, January 31.
- Fagerberg, J., Mowery, D. C. and Nelson, R. R., eds. 2005. *The Oxford Handbook of Innovation*. Oxford: Oxford University Press.
- Farrell, H. J., Lawrence, E. and Sides, J., 2008. Self-Segregation or Deliberation? Blog Readership, Participation and Polarization in American Politics. Available at SSRN: <http://ssrn.com/abstract=1151490>
- Ferber, P., Foltz, F., and Pugliese, R. (2004, September). Cyberdemocracy v. egovernment: The degree of interactivity on state legislative websites. Paper prepared for delivery at the 2004 Annual Meeting of the American Political Science Association, Chicago.

- Fleischer, D., 1998. *Casas legislativas e seus Poderes: avaliação de quatro assembléias estaduais e sete câmaras municipais*. Relatório para o Banco Interamericano de Desenvolvimento. Brasília: mimeografado.
- Fleury, S. J., 2007. *A inovação institucional nas atividades do Poder Legislativo estadual: o caso da Assembléia Legislativa de Minas Gerais*. Cadernos ASLEGIS / Associação dos Consultores Legislativos e de Orçamento e Fiscalização Financeira da Câmara dos Deputados, 1(1). Brasília: ASLEGIS.
- Fountain, J., 2001. *Building the Virtual State: Informational Technology and Institutional Change*. Washington: The Brookings Institution.
- Fountain, J., 2010. Bureaucratic Reform and E-Government in the United States: An Institutional Perspective. In: Chadwick, A. and Howard, P. N., eds. *The Handbook of Internet Politics*. New York: Routledge, pp.99-113.
- Fountain, J., 2005. "Enacting Technology in Networked Governance: Developmental Processes of Cross-Agency Arrangements," Working Paper. Bond University, School of Business, Queensland, Australia, December 2, 2005.
- Franzel, J. M. and Coursey, D. H., 2004. Government Web Portals: Management Issues and the Approaches of Five States. In David G. Garson and Alexei Pavlichev, eds. *Digital Government: Principles and Best Practices*. Hershey, PA: Idea Group Publishing, pp.63-77.
- Frick, M., 2005. *Parliaments in the Digital Age. Exploring Latin America*. University of Geneva: e-Working Paper 01, E-Democracy Centre.
- Friedberg, E., 1993. *Le pouvoir et la règle*. Paris: Seuil.
- Fuks, M. and Fialho, F., 2007. *Mudança institucional e cultura política: um estudo da imagem pública da Assembléia Legislativa de Minas Gerais (1993- 2006)*. II Congresso da Associação Brasileira de Pesquisadores em Comunicação e Política. Belo Horizonte.
- Gailmard, S. and Patty, J., 2007. Slackers and zealots: Civil service, policy discretion, and bureaucratic expertise. *American Journal of Political Science*, 51(4), pp.873–889.
- Garson, G. D., ed. *The Handbook of Public Information Systems*. New York: Marcel Dekker, Inc.
- Gartner Group, 2000. Key issues in e-government strategy and management. *Research Notes, Key Issues*, 23 May.
- Geddes, B., 1994. *Politician's Dilemma: Building State Capacity in Latin America*. Berkeley: University of California Press.

- Gil-Garcia, J. R. *Enacting State Websites: A Mixed Method Study Exploring E-Government Success in Multi-Organizational Settings*. Unpublished Doctoral Dissertation, University at Albany, State University of New York, Albany, NY.
- Gil-Garcia, J. R. and Moyano, M., 2005. *Exploring E-Government Evolution: The Influence of Systems of Rules on Organizational Action*. National Center for Digital Government, Working Paper No.05-001. Submitted 04/11/2005.
- Golden, M. M., 2000. *What Motivates Bureaucrats? Politics and Administration during the Reagan Years*. New York: Columbia University Press.
- Goodin, R. E. and Pettit, P., eds. *A Companion to Contemporary Political Philosophy*. Oxford: Blackwell.
- Gottschalk, P., 2009. Maturity levels for interoperability in digital government. *Government Information Quarterly*, 26(1), pp.75-81.
- Green, R. T., Keller, L. F. and Wamsley, G. L., 1993. Reconstituting a Profession for American Public Administration. *Public Administration Review*, 53(6), pp.516-524.
- Gronke, P., 2008. Convenience Voting. *Annual Review of Political Science*, Vol. 11, June 2008.
- Grossman, L., 1995. *The Electronic Republic*. New York: Viking.
- Gunday, G., Ulusoy, G., Kilic, K., Alpkan, L., 2008. Modeling Innovation: Determinants of Innovativeness and the Impact of Innovation on Firm Performance. *Proceedings of the 4th IEEE International Conference on Management of Innovation and Technology*, 776-771, Piscataway, New Jersey.
- Gurstein, M., 2010a. 'Open Data: Empowering the Empowered or Effective Data Use for Everyone? First Monday.
- Habermas, J., 1968. *Knowledge and Human Interest*. Cambridge: Polity Press, 1987.
- Hage, J., 1999. Organizational Innovation and Organizational Change. *Annual Review of Sociology*, 25: 597-622.
- Hallin, D. and Papathanassopoulos, S., 2002. Political clientelism and the media: southern Europe and Latin America in comparative perspective. *Media, Culture and Society*, 24(2), pp.175-195.
- Hambloch, E., 2000. *Sua Magestade o Presidente do Brasil - Um estudo do Brasil Constitucional*. Brasília: Senado Federal.
- Hammond, T. H., 1996. Formal Theory and the Institutions of Governance. *Governance*, 9(2), pp.107-185.
- Hansen, K., 1994. Our Beleaguered Institution. *State Legislatures*, 20(1).

- Hayek, F.A., 1960. *The Constitution of Liberty*. London: Routledge.
- Hecló, H., 1977. *A government of strangers: Executive politics in Washington*. Washington DC: The Brookings Institution.
- Hedlund et al., 2008. Capacity Building in Parliaments and Legislatures: Institutionalization, Professionalization and Evolutionary Institutionalism. Paper presented in the Levels of Governance and Public Policies panel, at the International Political Science Association Conference *International Political Science: New Theoretical and Regional Perspectives*, April 30 - May 2, 2008, Montreal, Canada.
- Heeks, R., 2002. E-Government in Africa: Promise and Practice. Institute for Development Policy and Management, Paper No. 13, University of Manchester, UK.
- Ho, A. T-K., 2002. Reinventing Local Governments and the E-Government Initiative. *Public Administration Review*, 62(4), pp.434–44.
- Hoff, J., 2004. Members of parliaments' use of IT in a comparative European perspective. *Information Polity*, 5-1.
- Holzinger, K. and Knill, C., 2005. Causes and conditions of cross-national policy convergence. *Journal of European Public Policy*, 12(5), pp.795-796.
- Honig, B., 2007. Between decision and deliberation: political paradox in democratic theory. *American Political Science Review*, 101(1), pp.1–17.
- Hopkin, J. and Mastropaolo, A., 2001. From Patronage to Clientelism: Comparing the Italian and Spanish Experiences. In: Piattoni, S., ed. *Clientelism, Interests, and Democratic Representation*. Cambridge: Cambridge University Press, pp.152-171.
- Huber, J. and McCarty, N., 2001. Legislative Organization, Bureaucratic Capacity and Delegation in Latin American Democracies. Mimeo.
- Huber, J. and McCarty, N., 2004. Bureaucratic Capacity, Delegation, and Political Reform. *American Political Science Review*, 98(3), pp.481-94.
- Huber, J. and Shipan, C. R., 2002. *Deliberate discretion? The institutional foundations of bureaucratic autonomy*. New York: Cambridge University Press.
- Huntington, S. P., 1971. The Change to Change: Modernization, Development and Politics. *Comparative Politics*, 3(3), pp.283-322.
- Indridason, I., 2005. A theory of coalitions and clientelism: Coalition politics in Iceland, 1945 -2000. *European Journal of Political Research*, 44(3), pp.439-464.
- Jacobson, G. C., 1992. *The Politics of Congressional Elections*. 3rd ed. New York: Harper Collins.

- Jardim, Márcia de Almeida, 2006. O Mapa da Mídia Eletrônica Legislativa na América Latina. *III Congresso Latino-Americano de Ciência Política*. Campinas: Universidade de Campinas.
- Jardim, Márcia de Almeida., 2008. *Antenas do Legislativo: Uma análise dos canais de televisão do Poder Legislativo no Brasil*. PhD thesis. Universidade Estadual de Campinas.
- Keating, M. and Wilson, A., 2009. ‘Renegotiating the Statute of Autonomies: Statute Reform and Multi-level Politics in Spain’, *West European Politics*, Vol.32, No.3, pp.536-558)
- Kies, R., 2010. *Promises and Limits of Web deliberation*, New York: Palgrave
- Kelman, S. and Myers, J., 2009. *Successfully Executing Ambitious Strategies in Government: An Empirical Analysis*. Harvard Kennedy School Working Paper No. RWP09-009.
- King, P., 1982. *Federalism and Federation*. Baltimore: Johns Hopkins, and London: Croom Helm.
- Kitschelt, H., 2000. Linkages between citizens and politicians in democratic polities. *Comparative Political Studies*, 33(6-7), pp.845-879.
- Kitschelt, H., and Wilkinson, S., 2007. *Patrons, Clients, and Policies: Patterns of Democratic Accountability and Political Competition*. Cambridge, UK; New York: Cambridge University Press.
- Klein, M., 2007. The MIT Collaboratorium: Enabling Effective Large-Scale Deliberation for Complex Problems. MIT Sloan Research Paper No. 4679-08. Available at SSRN: <http://ssrn.com/abstract=1085295>
- Kling, R. and Lamb, R., 2000. IT and Organizational Change in Digital Economies: A Sociotechnical Approach. In: Brynjolfsson, E. and Kahin, B., eds. *Understanding the Digital Economy. Data, Tools, and Research*. Cambridge, MA: The MIT Press.
- Kubicek, H., and Cimander, R., 2005. Interoperability in eGovernment – A Survey on Information Needs of Different EU Stakeholders. *European Review of Political Technologies*, Vol. 3, pp.59-74.
- Lacity, M. and Hirschheim, R., 1995. Benchmarking as a Strategy for Managing Conflicting Stakeholder Perceptions of Information Systems. *Journal of Strategic Information Systems*, 4(2), pp.165-185.
- Lamb, R. and Kling, R., 2003. Reconceptualizing users as social actors. *MIS Quarterly*, 27(2), pp.197-235.
- Lassen, D. and Brown, A., 2010. Twitter: The Electoral Connection? Paper presented at the Meeting of the Midwest Political Science Association, Chicago, Illinois, April 21-25

- 2010.
- Laudon, K., 1977. *Communication Technology and Democratic Participation*. London: Sage.
- Lawrence, E., Sides, J. and Farrell, H., 2010. Self-segregation or deliberation? Blog readership, participation and polarization in American politics. *Perspectives on Politics* 8, no. 1, 141-15.
- Lemarchand, R. and Legg, K., 1972. Political Clientelism and Development: A Preliminary Analysis. *Comparative Politics*, 4(2), pp.149-178.
- Leston-Bandeira, C. 2007. ‘‘The impact of the internet on parliaments: A legislative studies framework.’’ *Parliamentary Affairs* 60 (4) October: 655–74.
- Levi-Faur, D., 2002. Herding towards a new convention. On herds, shepherds and lost sheep in the liberalization of the telecommunications and electricity industries. Paper presented at the workshop *Theories of Regulation*, Nuffield College, University of Oxford.
- Levy, P., 1997. *Cyberculture: Rapport au Conseil de l’Europe*. Paris: Odile Jacob.
- Levy, P., 2002. *La Cyberdémocratie*. Paris: Odile Jacob.
- Lewis, D. E., 2008. *Politics of Presidential Appointments: Political Control and Bureaucratic Performance*. Princeton, NJ: Princeton University Press.
- Lima, E. M., 2005. *Produção Legislativa*. In: *Revista Estudos Legislativos*, Número 39 – janeiro/dezembro de 2005 *Parlamento e Sociedade (A construção de uma cultura democrática)*.
- Lyrantzis, C., 1996. Political parties in Post-Junta Greece: A Case of ‘‘Bureaucratic Clientelism’’? *West European Politics*, 7(2), pp.99-118.
- Maigret, E. and Monnoyer-Smith, L., 2000. *Des Caméras dans un Conseil Municipal: Portées et Limites de l’Expérience d’Issy-les-Moulineaux*. Paris: Hermès. 26-27.
- Mainwaring, S., 1991. Politicians, Parties, and Electoral Systems: Brazil in Comparative Perspective. *Comparative Politics*, 24(1), pp.21-43.
- Mainwaring, S. and Samuels, D., 1997. *Presidentialism and Democracy in Latin America*. Cambridge: Cambridge University Press.
- Maldonado, T., 1997. *Critica della ragione informatica*. Milano: Feltrinelli.
- Manz, M. and Trechsel, A., 2004. *Multi-level e-Governance: the impact of ICTs on social security implementation within a federal government*. University of Geneva: e-Working Paper 02, E-Democracy Centre.
- Martin, J. and Norman, R. D., 1970. *The Computerised Society*. London: Prentice Hall.

- Maxfield, S., 1997. *Gatekeepers of growth: the international political economy of central banking in developing countries*. Princeton: Princeton University Press.
- Mayhew, D., 1974. *Congress: The electoral connection*. New Haven: Yale University Press.
- McLendon, M. K., Heller, D. E., Young, S. P., 2005. State Postsecondary Policy Innovation: Politics, Competition, and the Interstate Migration of Policy Ideas. *The Journal of Higher Education*, 76(4), pp.363-400.
- Medeiros, J. 1990. *Pensando a Política Mineira*. Anal. e Conj. Belo Horizonte, v.5 – n 1
- Melucci, A., 1996. *Challenging Codes: Collective Action in the Information Age*. Cambridge: Cambridge University Press.
- Meynaud, J., 1964. *La technocratie, mythe ou réalité*. Paris: Payot.
- Miles, I., 2005. Innovation in services. In: Fagerberg, J., Mowery, D. C., Nelson, R. R., eds. *The Oxford Handbook of Innovation*. Oxford: Oxford University Press, pp.433-458.
- Mixon, F. G., Gibson, T. M. and Upadhyaya, K. P., 2003. Has Legislative Television Changed Legislator Behaviour? C-SPAN2 and the Frequency of Senate Filibustering. *Public Choice*, 115(1-2), pp.139-62.
- Moe, T. M., 2005. Power and Political Institutions. *Perspectives on Politics*, 3(2), pp.215-233. American Political Science Association.
- Moon, M. J., 2002. The evolution of e-government among municipalities: Rhetoric or reality? *Public Administration Review*, 62(4), pp.424-433.
- Mooney, C. Z. and Lee, M., 1995. Legislating morality in the American states: The case of pre-Roe abortion regulation reform. *American Journal of Political Science*, 39(3), pp.599-627.
- Mulgan, R., 2006. Truth in Government and the Politicisation of Public Service Advice. *Policy and Governance Discussion Papers 06-02*. Canberra: The Australian National University.
- Musso, J., Weare, C. and Hale, M., 2000. Designing Web Technologies for Local Governance Reform: Good Management or Good Democracy? *Political Communication*, 17(1), pp.1-19.
- Ndou, V. D., 2004. E-Government for Developing Countries: Opportunities and Challenges. *The Electronic Journal of Information Systems in Developing Countries*, 18(1), pp.1-24.
- Niskanen, W. A., Jr. 1968. The Peculiar Economics of Bureaucracy. *American Economic Review*, 58(2), pp.293-305.

- Niskanen, W. A., Jr., 1971. *Bureaucracy and Representative Government*. Chicago: Aldine-Atherton.
- Norris, P., 2001. *Digital Divide*. Cambridge: Cambridge University Press.
- Norris, P., 2004. *Democratic Divide? The Impact of the Internet on Parliaments Worldwide*. Annual Meeting of the American Political Science Association, Washington DC, 31 August-3rd September 2000.
- Norris, P., 2004. *Internet World: Parties, Governments and online Democracy*; John F. Kennedy School of Government, Harvard University, 2004.
- Norris, P., 2004. 'If you build a community website will they come? The supply and demand model of new technology, social capital and civic engagement in Britain.' Paper for the American Political Science Association annual meeting, Chicago 2-5 August 2004.
- Nunes, E., 1997. *A gramática Política do Brasil* (Brazilian political grammar). Rio de Janeiro: Zahar, Fundação ENAP.
- O'Donnell, G., 1996. Another institutionalization: Latin America and elsewhere. Kellogg Institute Working Paper 222. Notre Dame, IN: Kellogg Institute for International Studies.
- Oliven, R. G., 2002. Cultura Brasileira e Identidade Nacional. In: Miceli, S., ed. *O que ler na Ciência Social Brasileira (1970-2002)*. São Paulo: Sumaré, pp.15-43.
- Olsen, J. P., 2009. Change and Continuity: An Institutional Approach to Institutions of Democratic Government. *European Political Science Review*, 1(1), pp.3-32.
- Olson, M., 1965. *The Logic of Collective Action: Public Goods and the Theory of Groups*. Cambridge: Harvard University Press.
- Osorio, J., 2009. Why Politicians Choose Transparency? Explaining Local Laws of Information Access in Mexico. In: University of Notre Dame, *XXVIII International Congress of the Latin American Studies Association*. Rio de Janeiro, Brazil 11-14 June.
- O'Sullivan, P. B., 1995. Computer networks and political participation: Santa Monica's teledemocracy project. *Journal of Applied Communication Research*, 23(2), 93-107.
- Papaloi, A. and Gouscos, D., 2011. E-Parliaments and Novel Parliament-to-Citizen Services. *eJournal of eDemocracy, JeDEM* 3(1): 80-98.
- Pavlichev, A. and Garson, G. D., eds. *Digital government: principles and best practices*. Hershey, PA: Idea Group Press.
- Perrineau, P., ed. *Le désenchantement démocratique*. La Tour d'Aigues: Editions de l'aube.
- Peters, B. G., 2001. *The Politics of Bureaucracy*. 5th ed. London: Routledge.

- Pettigrew, A. M., 1987. Context and Action in the Transformation of the Firm. *Journal of Management Studies*, 24(6), pp.649-670.
- Pfiffner, J. P., 1987. Political Appointees and Career Executives: The Democracy-Bureaucracy Nexus in the Third Century. *Public Administration Review*, 47(1), pp.57-65.
- Piattoni, S., ed. *Clientelism, Interests, and Democratic Representation*. Cambridge: Cambridge University Press.
- Powell, W. W. and DiMaggio, P. J., eds. *The New Institutionalism in Organizational Analysis*. Chicago: Chicago University Press.
- Practchett, L., 2006. Making Local e-Democracy Work. In: Virapatirin, M. and Peixoto, T., eds. *The White Book on Local e-Democracy*. Issy-les-Moulineaux: SEM Issy-Media.
- Price, D. K., 1965. *The Scientific Estate*. Cambridge, MA: Harvard University Press.
- Queiroz, D., 2007. *Jornalismo Institucional nas TVs Legislativas: Os Casos do Brasil e do México*. Masters thesis. Universidade de Brasília.
- Reddick, C. G., 2005. Citizen Interaction with E-government: From the Streets to Servers? *Government Information Quarterly*, 22(1), pp.38-57.
- Relyea, H. C. and Hogue, H. B., 2004. A brief history of the emergence of digital government in the United States. In: Pavlichev, A. and Garson, G. D., eds. *Digital government: principles and best practices*. Hershey, PA: Idea Group Press.
- Renault, L., 2004. *Comunicação e Política nos canais de televisão do Poder Legislativo no Brasil*. Belo Horizonte: Assembléia Legislativa do Estado de Minas Gerais.
- Riker, H., 1993. Federalism. In: Goodin, R. E. and Pettit, P., eds. *A Companion to Contemporary Political Philosophy*. Oxford: Blackwell, pp.508-14.
- Robinson, D., Yu, H., Zeller, W. P., & Felten, E. W., 2008. Government data and the invisible hand. *Yale Journal of Law and Technology*, 11, 160–175.
- Roniger, L., 2004. Political Clientelism, Democracy, and Market Economy. *Comparative Politics*, 36(3), pp.353-375.
- Roniger, L. and Gunes-Ayata, A., eds. *Democracy, Clientelism, and Civil Society* Boulder, Colorado: Lynne Rienner Publishers.
- Rose-Ackerman, S., 1997. The Political Economy of Corruption. In: Elliot, K. A., ed. *Corruption and the Global Economy*. Washington DC: Institute for International Economics.

- Rosenthal, A., 1996. State Legislative Development: Observations from Three Perspectives. *Legislative Studies Quarterly*, 21(2), pp.169-184.
- Santos, F., 2001. *O Poder Legislativo nos Estados: Diversidade e Convergência*. Rio de Janeiro: Editora FGV.
- Santos, S. and Capparelli, S., 2005. Coronelismo, radiodifusão e voto: a nova face de um velho conceito. In: Brittos, V. C. and Bolano, C. R. S., eds. *Rede Globo: 40 anos de poder e hegemonia*. 1st ed. São Paulo: Paulus, pp.77-102.
- Sartori, G., 1976. *Parties and party systems: a framework for analysis*. Cambridge: Cambridge University Press.
- Scavo, C. and Shi, Y., 2000. The Role of IT in the Reinventing Government Paradigm – Normative Predicates and Practical Challenges. *Social Science Computer Review*, 18(2), pp.166-178.
- Schelin, S. H., 2003. E-Government: An Overview. In: Garson, G. D., ed. *Public Information Technology: Policy and Management Issues*. Hershey, PA: Idea Group, pp.120–29.
- Schmidt, S. W., 1972. Bureaucrats as Modernizing Brokers? Clientelism in Colombia. Paper presented at the meeting of the Wisconsin Council of Latin Americanists, Marquette, Wisconsin, April 14-15, 1972.
- Schuppan, T., 2009. E-government in developing countries: Experiences from sub-Saharan Africa. *Government Information Quarterly*, 26(1), pp.118-127.
- Schutz, A., 1995. Entertainers, experts, or public servants? Politicians' self-presentation on television talk shows. *Political Communication*, 12(2), pp.211–221.
- Seifert, J. and McLoughlin, G. J., 2007. *State eGovernment Strategies: Identifying Best Practices and Applications*. Paper prepared for the Congressional Research Service by the Lyndon Baines Johnson School of Public Policy at the University of Texas at Austin.
- Seifert, J. and Peterson, E., 2002. Expectations and challenges of emergent electronic government: The promise of all things. *Perspectives on Global Development and Technology*, 1(2), pp.193-212.
- Seifert, J. and Relyea, H., 2004. Considering e-Government from the U.S. Federal Perspective: an evolving concept, a developing practice. *Journal of E-Government*, 1(1), pp.7-15.
- Shapiro, A., 1999. *The Control Revolution*. New York: Public Affairs.
- Silveira, R., 2008. *Linha editorial e poder legislativo: o jornal Estado de Minas e a Assembléia Legislativa de Minas Gerais*. Masters thesis. UFMG, Belo Horizonte.

- Smith, B. V., 1987. The Costs of Participation and the Role of Bureaucracy in a Democracy. Paper presented at the 1987 meeting of the Southwestern Political Science Association, Dallas, Texas.
- Snider, J.H. 2009. Would You Ask Turkeys To Mandate Thanksgiving? The Dismal Politics of Legislative Transparency. *Journal of Information Technology and Politics* 6 (2).
- Speck, B. W., 2003. A compra de votos – uma aproximação empírica. *Opinião Pública*, 9(1), pp.148- 169.
- Spinelli, J. A., 2006. Oligarquias e legitimidade democrática: A experiência potiguar de democratização. [online] Available at: <http://www.fundaj.gov.br/geral/observanordeste/spinelli.pdf>
- Squire, P., 1998. Membership Turnover and the Efficient Processing of Legislation. *Legislative Studies Quarterly*, 23(1), pp.23–32.
- Stapenhurst, R., Pelizzo, R., Olson, D., and von Trapp, L., eds. *Oversight and Budgeting: A World Perspective*. Washington DC: The World Bank.
- Stevens, M., 1977. Asymmetrical Federalism: The Federal Principle and the Survival of the Small Republic. *Publius: The Journal of Federalism*, 7(4), pp.177-204.
- Stokes, S. C., 2005. Perverse Accountability: a Formal Model of Machine Politics with Evidence from Argentina. *American Political Science Review*, 99(3), pp.315-325.
- Sunstein, C., 2001. *Republic.com*. Princeton, NJ: Princeton University Press.
- Surman, M. and Reilly, K., 2003. *Appropriating the Internet for social change: towards the strategic use of networked technologies by transnational civil society organizations*. New York: Social Science Research Council.
- Taylor, A., 2004. *The Organization of Information*. 2nd ed. Westport, CN: Libraries Unlimited.
- Tolbert, C. J. and McNeal, R. S., 2003. Unraveling the effects of the Internet on political participation? *Political Research Quarterly*, 56(2), pp.175–185.
- Tolbert, C. J., Mossberger, K. and McNeal, R. S., 2008. Institutions, policy innovation, and e-government in the American states. *Public Administration Review*, 68(3), pp.549-563.
- Trechsel, A. H., 2007. ‘E-voting and electoral participation’, in de Vreese, C. (Ed.): *Dynamics of Referendum Campaign – An International Perspective*, Palgrave, London, pp.159–182.
- Trechsel, A., Kies, R., Mendez, F. and Schmitter, P., 2003. *Evaluation of the Use of New Technologies in Order to Facilitate Democracy in Europe*. European Parliament, STOA, Strasbourg.

- Trechsel, A.H and F. Mendez, eds, 2004. *The European Union and E-voting*, Routledge, London.
- Vedel, T., 2003. L'idée de démocratie électronique: origines, visions, questions. In: Perrineau, P., ed. *Le désenchantement démocratique*. La Tour d'Aigues: Editions de l'aube, pp.243-266.
- Virapatirin, M. and Peixoto, T., eds. *The White Book on Local e-Democracy*. Issy-les-Moulineaux: SEM Issy-Media.
- Wachendorfer-Schmidt, U., ed. 2000. *Federalism and Political Performance*. London: Routledge.
- Walsh, J. P., and Ungson, G. R., 1991. Organizational memory. *Academy of Management Review*, 16(1), pp.57-91.
- Watts, R., 1998. Federalism, Federal Political Systems, and Federations. *Annual Review of Political Science*, 1, pp.117-137.
- Weaver, R. K., 1986. The Politics of Blame Avoidance', *Journal of Public Policy*, 6:4.
- Welch, E. and Hinnant, C., 2003. *Internet Use, Transparency, and Interactivity Effects on Trust in Government*. Proceedings of the 36th Hawaii International Conference on System Sciences (HICSS'03).
- Welch, E. and Wong, W., 2001. Global Information Technology Pressure and Government Accountability: The Mediating Effect of the Domestic Context on Website Openness. *Journal of Public Administration Theory and Research*, 11(4), pp.509-538.
- Weyland, K., 1996. *Democracy Without Equity: Failures of Reform in Brazil*. Pittsburgh: University of Pittsburgh Press.
- Wheare, C., 1964. *Federal Government*, 4th ed. Oxford: Oxford University Press.
- Wiener, N., 1948. *Cybernetics, or control and communication in the animal and the machine*. Cambridge, Massachusetts: The Technology Press; New York: John Wiley & Sons, Inc.
- Wild, D., 2004. The essential elements of a definition of e-Government. *Journal of E-Government*, 1(1), pp.17-22.
- Wright, R. and Kaplan, R., 2001. Mr. Order Meets Mr. Chaos. *Foreign Policy*, 124, pp.50-60.
- Yuhang, S. and Scavo, C., 2000. Citizen Participation and Direct Democracy Through Computer Networking. In: Garson, G. D., ed. *The Handbook of Public Information Systems*. New York: Marcel Dekker, Inc., pp.247-263.
- Yun, J. Y. and Opeim, C., 2010. Building on Success: The Diffusion of e-Government in the American States. *Electronic Journal of e-Government*, 8(1), pp.71-82.

Zhang, J., 2001. China's "Government Online" and attempts to gain technical legitimacy. *Asien*, 80, pp.93-115.

Zhou, X., 2004. E-Government in China: A content analysis of national and provincial websites. *Journal of Computer-Mediated Communication*, 9(4).

World e-Parliament Report 2008. (2008). United Nations, Inter-Parliamentary Union and Global Center ICT Parliament.

Electronic resources

<http://www.al.rs.gov.br/?Transparencia/quadro.asp>

<http://www.juryteam.org/p14-reduce-mps.php>

http://www.riogrande.com.br/rio_grande_do_sul_politica_celso_bernardi_entre_as_funcoes_q_ue_me_orgulham_esta_a_de_ter_sido_deputado_estadual-o160477-en.html

MARCCO – Movimento Articulado de Combate à Corrupção. Source:

http://www.agu.gov.br/sistemas/site/TemplateTexto.aspx?idConteudo=148779&id_site=1108

http://www.al.rn.gov.br/assembleia/navegacao/ver_noticia.asp?idnoticia=1708

[Last accessed 15/09/2010]

Boletim Oficial 2590, available at:

<http://www.al.rn.gov.br/assembleia/arearestrita/upload/bo%202590.pdf>

[Last accessed in 11/2010].

http://www.al.rn.gov.br/assembleia/navegacao/retorno_transparencia_contrato.asp

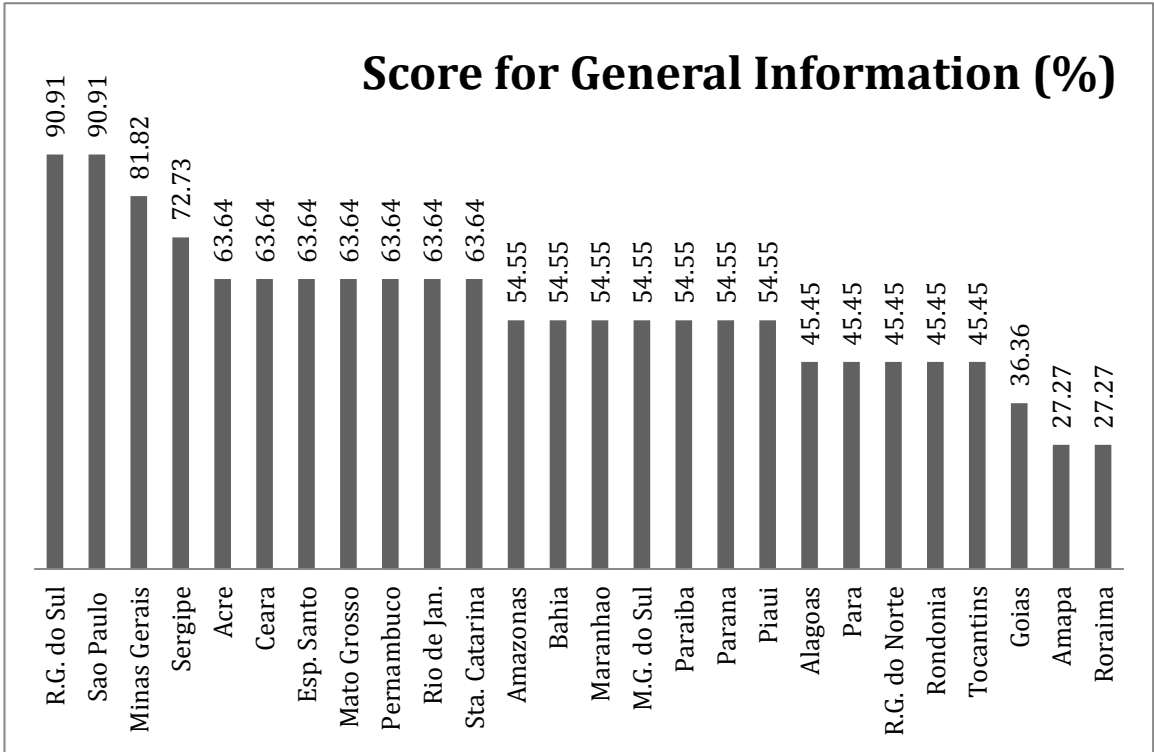
ANNEX 1: DETAILED DESCRIPTION OF E-DEMOCRACY SCORES & FEATURES

Brazil

I) Information provision

a) General Information (average 56.99%)

In the Brazilian case, 11 of the 26 states score above the average. The outstanding cases regarding the provision of general information on the state parliaments are R.G. do Sul and Sao Paulo (90.9), followed by Minas Gerais (81.8). At the bottom of the ranking we find the two northern states of Roraima and Amapa (27.3).



Almost all of the states (25) provide a ‘what is new’ section. The Para state website presents summaries of actions taken in the parliament and, in these summaries, there is visible an effort to transmit the information in a clear and accessible manner. Of these 24 websites, 13 provide an audio link to the press section and 17 provide a video link. The state of Ceara website

offers an online radio where citizens can access the most recent news of the activities of the house. The Maranhao state website goes further and provides links to a few TV programs produced by the 'House Channel'. This tendency to provide live TV streaming can also be identified in the Minas Gerais state website, where TV programs (live and recorded) about the plenary sessions and other activities of the legislature are streamed 18 hours a day, while the website of Sao Paulo state streams news and programs nonstop (24hs). In the Minas Gerais website a specific news search engine is provided by subject, whereas the Acre legislature website enables users to post comments for their text/audio news session. Only 9 websites provide the chance to subscribe by e-mail to receive news updates (e.g. R.G. do Sul, Minas Gerais). A useful tool for the users, in the Rio Grande do Sul website the citizens can choose the type of information they want to receive by e-mail, being able to select it by different criteria: subject, political party, commission, and general news.

Almost all of the states (24) provide contact information for the organization and 23 give a general introduction to the chamber. Along with Rio Grande do Sul and Bahia, Sao Paulo is one of the few websites to provide an online or virtual panorama of the Parliament. The Rio Grande do Sul legislature stands out by making available a well produced video that takes the user to a 'virtual tour' of the assembly building while the activities that are led by the house are explained in an accessible manner. Over two thirds of the websites have a link to assemblies at the local level i.e. municipalities, but only five provide links to other state legislatures. The Minas Gerais legislature website goes further and provides links to several governmental institutions and offers extensive and detailed socio-economic information on each of the municipalities in the state. As to the traffic of each website, a functionality that can be easily implemented in any website, Brazilian legislatures neglect the provision of such information, with only two websites providing information about their number of hits (Acre and Sao Paulo).

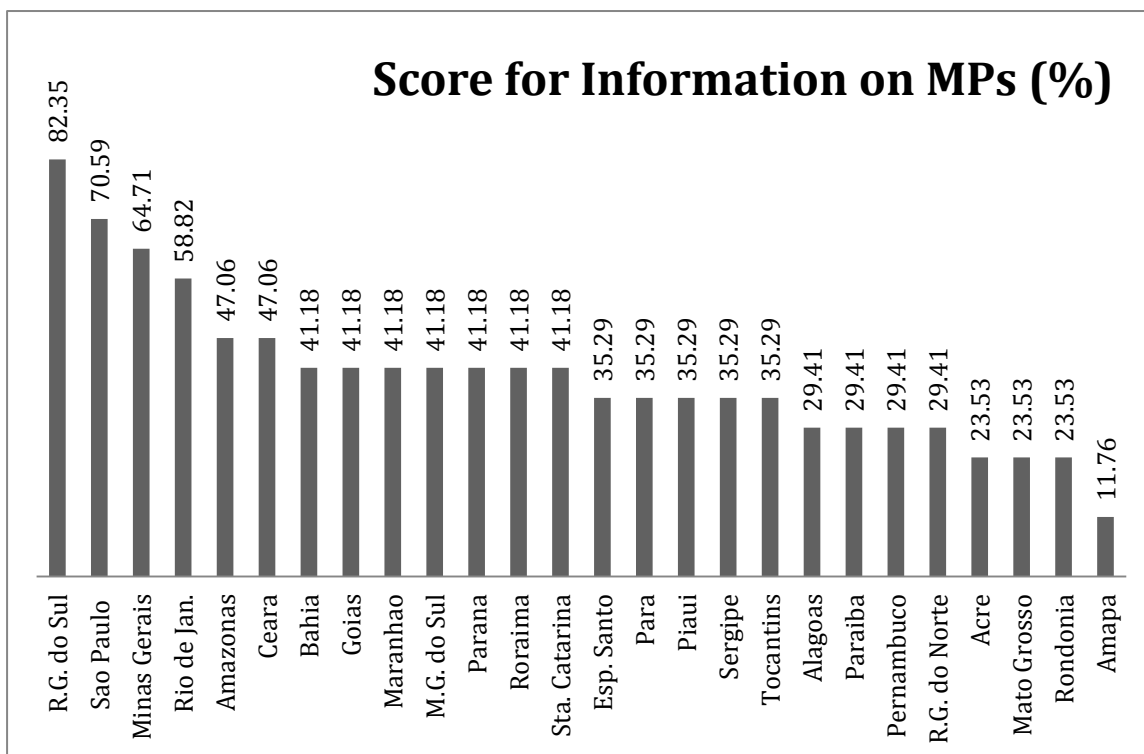
Finally, as to the budgetary transparency of legislatures concerning their revenues and expenses, there is a surprising evidence of the will of some parliaments in providing transparency on their budgetary expenses. Nonetheless, the discrepancy on the amount of information that is disclosed and how it is presented is noteworthy. For example, the Parana state legislature does not seem to take Thomas Jefferson's advice that information about public expenditures should be as "clear and intelligible as a merchant's book" and accessible to "every man of any mind": it presents a very discrete link to a section where citizens have

access to the expenses of the house in PDF format where the information disclosed is only intelligible to those familiar with accountancy presentation standards. On the other hand, Espirito Santo legislature presents the house budget in a format that, despite being more detailed, is more accessible and self-explanatory. The legislature of the state of Rio Grande do Sul, in its 'transparency portal' takes one step ahead, by adding explanatory texts graphs and charts for the budget of the house, where the information on the budget is updated monthly. The Legislature also presents, in a monthly basis, a graph illustrating the difference between the expected and consolidated expenditures, putting in evidence when the legislature spends more or less than the expected. Citizens also can find the number of civil servants and political appointees working for the legislature and their respective salaries. Concerning the spending of the legislatures, online information about public procurement processes engaged by the legislature is provided by the legislatures of Espirito Santo, Rio Grande do Norte and Rio Grande do Sul and Minas Gerais. In fact, in the website of Rio Grande do Sul, bidders of public procurement processes can download documents, register their bids, follow up the public procurement process and be notified of new procurement processes. Finally, given that a few legislatures fund academic research in the field of legislative studies, the Minas Gerais legislature website, for instance, presents a specific section with all of the outputs (e.g. thesis, articles) of the academic works that have been financed by the legislature.

If there is evidence that some legislatures are making efforts to put general information on the websites that might be relevant to the users, in some cases the usefulness of the information provided seems doubtful. For instance, in the states of Maranhao, Parana and Amazonas a weather forecast section is prominently displayed in the initial page of the legislative website. If the relevance of this information is questionable per se, particularly in the state of Amazonas there seems to be little utility for such a section: of equatorial climate, throughout the year rainfall is heavy on the afternoon on an almost daily basis. On the state of Piaui, Rio Grande do Norte and Rio Grande do Sul, concerned citizens can find information about the latest activities of the choir of the legislative staff in a section specifically dedicated to this end. Finally, in the State of Amapa, lowest score on provision of general information, citizens might not get much of the information they look for when they access the legislative website, but they are still able to listen to the Anthem of the state.

b) Information on members of the parliament (average 39.82%)

Out of the 26 countries, 13 score above the average, with a visible variance between the highest and lowest scores. The high score achieved by the state of R.G. do Sul (82.35) concerning provision of information on MPs is particularly notable. The state of Sao Paulo (70.59) and the state of Minas Gerais (64.71) boast high scores if compared to the average score. The parliament websites that provide the least information on MPs are those from the states of Acre, Mato Grosso and Rondonia (23.53), followed by the lowest score of Amapa (11.76).



While less than half of the websites (12) provide a guide on the role of members, every website includes a list of members, where 12 websites list members by political group and 4 list them by constituency (e.g. Minas Gerais, R.G. do Sul). The majority of websites (22) include biographies of members and in all cases except that of Parana, a biography is included for the majority of members. In 22 cases, the websites include links to the personal websites of members; however it is only in 8 cases that the majority of members have such a link (e.g. Minas Gerais, Sao Paulo). Such a fact seems to suggest that, even though opportunities may be offered to MPs to get in touch with their constituencies, a minority of MPs seem to be taking advantage of the prospects of the Internet by adding a link to a personal website where

they could, for instance, better communicate their actions and get feedback from their constituencies at relatively low costs.

Only the websites of Parana, Santa Catarina and Maranhao include the interventions from members. The state of Maranhao also provides in the section of each MP quick links to some of the speeches of the MPs in audio format. While over two thirds of websites provide contact information (other than an e-mail address) for the majority of MPs, only 7 provide general information regarding members' pay and conditions and the same number provide web services such as MPs' websites. In the states of Santa Catarina, Para, Paraiba and Mato Grosso do Sul legislative websites, on each MP's section there is a link to the news associated to them and the current state of laws sponsored by them. On the Rio Grande do Sul legislative website, added to these features, one can find in each MP page articles written (supposedly) by them and a video message addressed to their constituents.

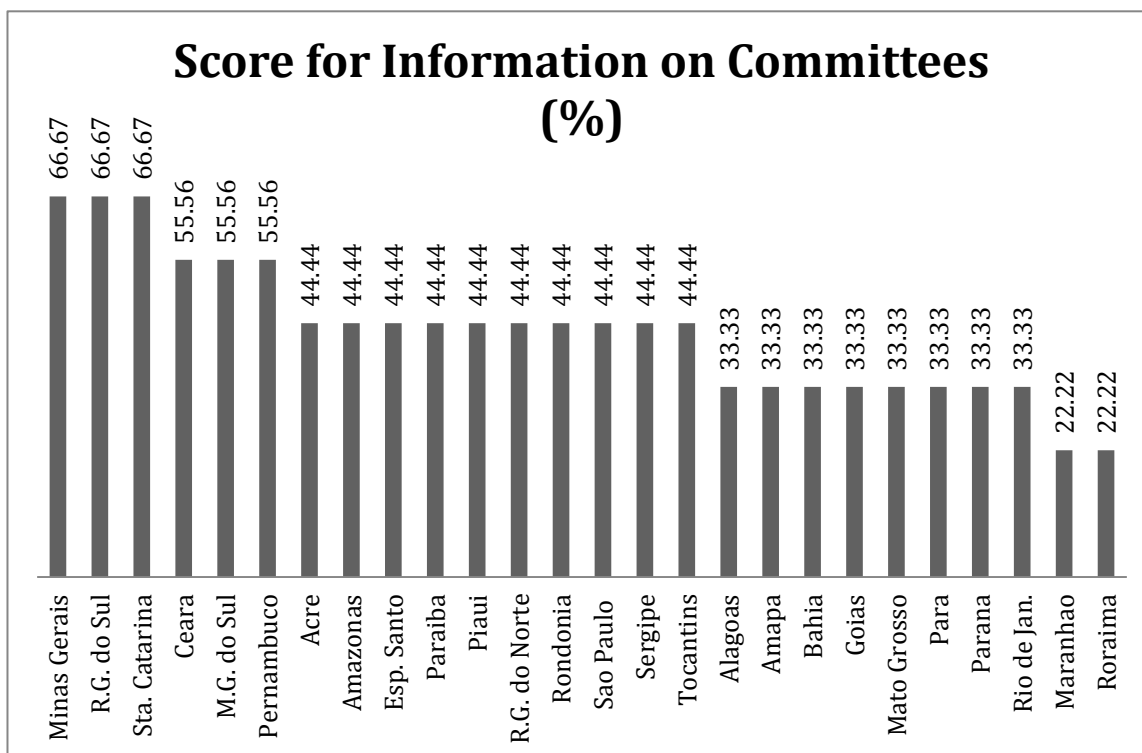
Less than half of the websites (8) supply information regarding the individual level of attendance at plenary sessions, only 4 websites divulge how members voted on particular issues (e.g. Rio de Janeiro, R.G. do Sul) and only the websites of R.G. do Sul and Sao Paulo divulge how members voted on commissions. Noteworthy is the website of Rio Grande do Sul: the level of attendance of all the MPs is presented in one single table that allows the user to easily compare the attendance level among the different MPs in plenary sessions and committee meetings. Also, in the same comparative table, the user is able to verify if the absences were justified or not (for medical reasons or professional mission). Furthermore, if other few state legislatures enable the user to see how votes were cast by MPs on particular issues, the Rio Grande do Sul website stands out for the ease with which users can access the information: votes can be found by date, sponsor, MP and type of legislation.

In the previous section, we have approached how legislatures provide information concerning their general resources and expenditures. Nonetheless, even if a legislature might disclose information on the general expenses of the house, this does not mean necessarily that citizen are able to have a clear view on the salaries and benefits of MPs, given that in many cases the information of the general expenses of the legislature is provided in aggregated values. The Bahia legislature website, even though does not provide details on the salaries and benefits of MPs, it does present the expenses of the cabinet of each MPs, as for instance, expenses with consultancies. Another 7 legislatures' websites present specific information on the

remuneration and benefits of MPs, such as Minas Gerais, Rio Grande do Sul, and Espirito Santo. Despite the low number of websites presenting particular information on the salaries and benefits of MPs, the level of details with which some of these websites provide about other expenses of MPs is surprisingly good. For instance, in Rio de Janeiro, since 2004 all of the travels that are made by the MPs under the finance of the house are disclosed online. In Rio Grande do Sul legislature, for any MP that does an official international travel, one can find for each MP the dates of the travel, the destination, the number of per diems received, a justification for the reason of being of the travel and a final report by the MP on the outcomes of his international mission. As to cabinet expenses for instance, in Espirito Santo and Sao Paulo, legislative website one can easily find monthly reports on MPs refundable expenses such as phone bills, subscription to printed material and gasoline. Finally, the legislative website of Rio Grande do Sul, the one that provides the most detailed amount of information – and in the most accessible way - shows even what portion of MPs salaries goes to their respective parties as part of their compulsory party contribution .

c) Information on committees (average 43.16%)

If parliaments are to disclose relevant information on their website, the provision of information on committees – one of the most important instances of legislative organization (Strom, 1998) – should be of utmost importance. In Brazil, most state parliaments' (16) websites score above the average, where the most outstanding websites concerning the provision of information on committees' routines and actions are those of Minas Gerais, R.G. do Sul and Santa Catarina, each scoring 66.67 points. The websites with the least information about committees are those from the states of Maranhao and Roraima.

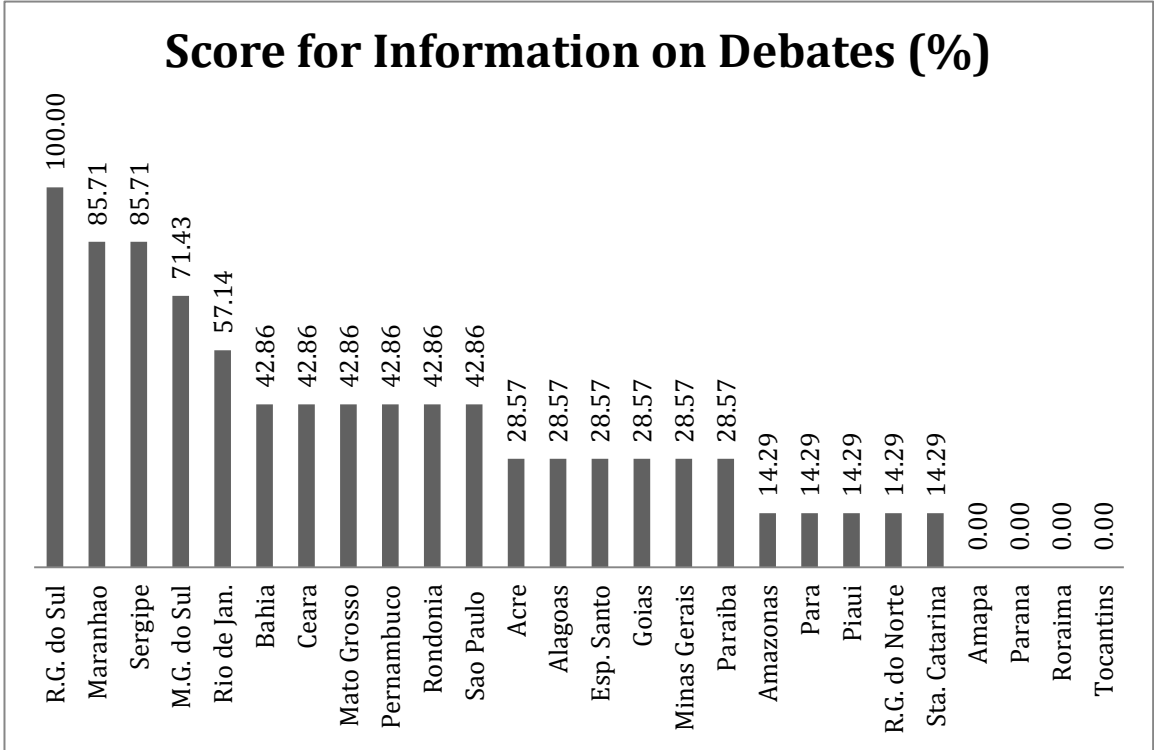


A reasonable number of websites (20) provide a guide to the role of committees, whilst every website except that of Maranhao provides a list of committees and a list of committee members. Furthermore, very few websites (4) give information about committee members' interventions and the level of attendance of the MPs in their respective committees. As to publications and specific reports issued by the committees, only those of Minas Gerais, R.G. do Sul and Sao Paulo give a list of committee publications. Minas Gerais, in fact, is one of the websites that provides more detailed and accessible information on committees, their agendas and minutes. Only 6 websites include a schedule for future committee meetings and only those of Bahia and R.G. do Sul provide contact information for the majority of committees. With regard to links to committees, 6 include an audio link and more than one third (10) include a video link (e.g. Santa Catarina, Ceara). Finally, in Sao Paulo, since 2007 the users are able to access to the attendance level of MPs as well as the vote cast by each of them on the different issues treated by the committees.

d) Information on debates (average 34.62%)

11 countries score above the average, with the striking score of the parliament website of R. G. do Sul that provides 100% of information on debates for its citizens. Also the states of Sergipe and Maranhao tend to provide a high amount of information on parliamentary debates, both

scoring as highly as 85.71 points. Nonetheless, if on one hand we find scores as high as 100 points for this sub-dimension of information on debates, the lowest possible score is quite common, with four websites – Amapa, Parana, Roraima and Tocantins – scoring zero, that is, no information whatsoever concerning the parliamentary debates of their respective parliaments is provided.



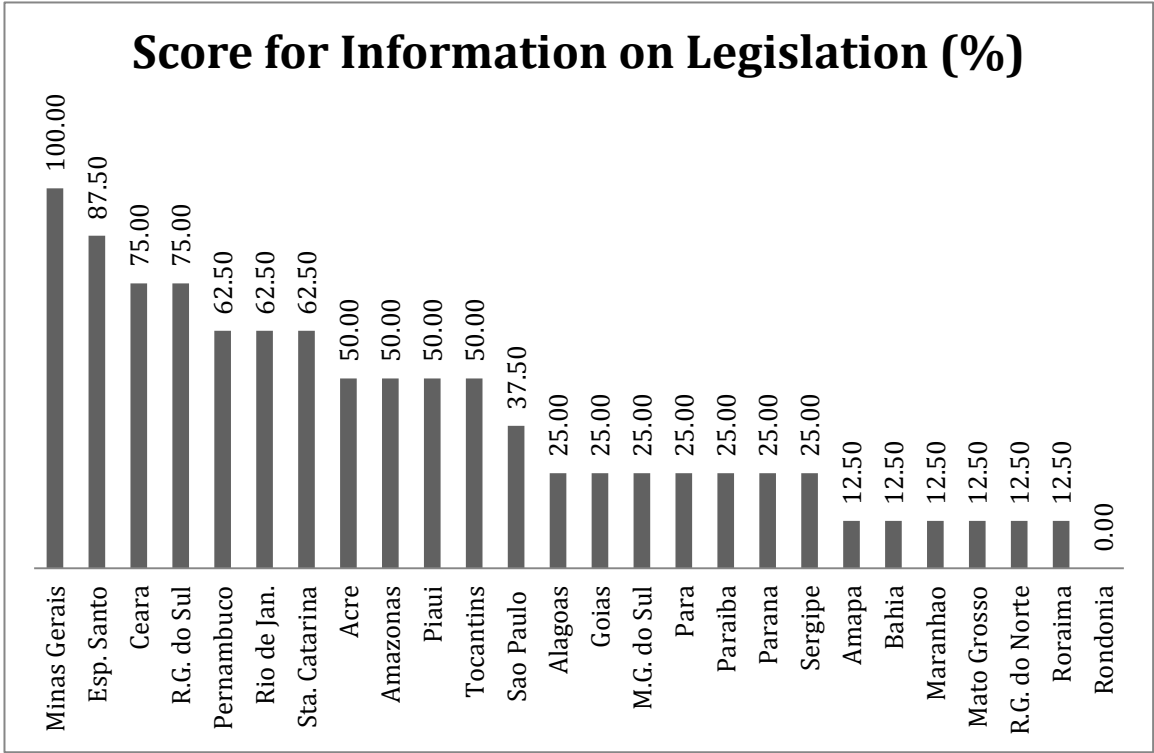
Less than half of the websites (9) present a schedule for parliament debates. Less than a third of websites (7) allow online access to the full text of debates but of these, all are archived. In this case, the state of Sao Paulo innovates by providing the plenary transcripts in two formats: one integral version and another summary of the discussion.

Exactly half of the websites provide an audio facility for listening to debates (e.g. Sergipe, Maranhao), but only 7 of these are archived. In this aspect, the Rio Grande do Sul website has archived audios since 2005 in a specific section of the website where users can rely on a search engine to perform searches based on different criteria: date, name of MP, number of legislation, subject and type of plenary session (e.g. ordinary, extraordinary). A reasonable number of websites (16) provide a live video facility for watching debates, but of these only those of Mato Grosso, M.G. do Sul, R.G. do Sul and Sergipe include a video archive.

The usefulness of having archived videos is obvious, given that it gives the chance to the citizen to watch the video of the plenary session of his interest whenever it is most convenient to him. Some legislative websites opt for archiving only a selection of plenary sessions, where the criteria used for archiving video files is many times questionable. For instance, in the Goias assembly website, most of the archived video files refer to speeches of MPs rendering homage to different personalities and professional categories. Even though at this point of the research this cannot be verified, the example of Goias suggests how MPs might try to instrumentalize the use of parliamentary websites on their advantage: by interfering on the selection of videos to be selected, MPs would privilege videos that are considered to be more appealing to their constituencies.

e) Information on legislation (average 38.94%)

11 states score above the average for information on legislation, with the outstanding results of the state of Minas Gerais, which scored the maximum possible points (100) in this sub-dimension. The Minas Gerais parliamentary website is then followed by Espirito Santo (87.5), Ceara and R.G. do Sul (75). Six states – Amapa, Bahia, Maranhao, Mato Grosso, R.G. do Norte and Roraima – score well below the average with 12.5 points. The state of Rondonia scores no points, meaning that its parliamentary website does not provide any information about ongoing or passed legislation in its parliament.



Regarding the provision of legislative information, around half (12) of the websites offer a guide to the legislative process. However, there is an evident difference on how such information is presented. For instance, while some websites presents simplified texts or illustrated schemes to represent the legislative process (e.g. Sao Paulo), in Rio de Janeiro legislative website, if a citizen wants to find information about the process, in order to do so it is necessary to download a PDF file and go through 48 pages of a text that is far from being accessible to the general public.

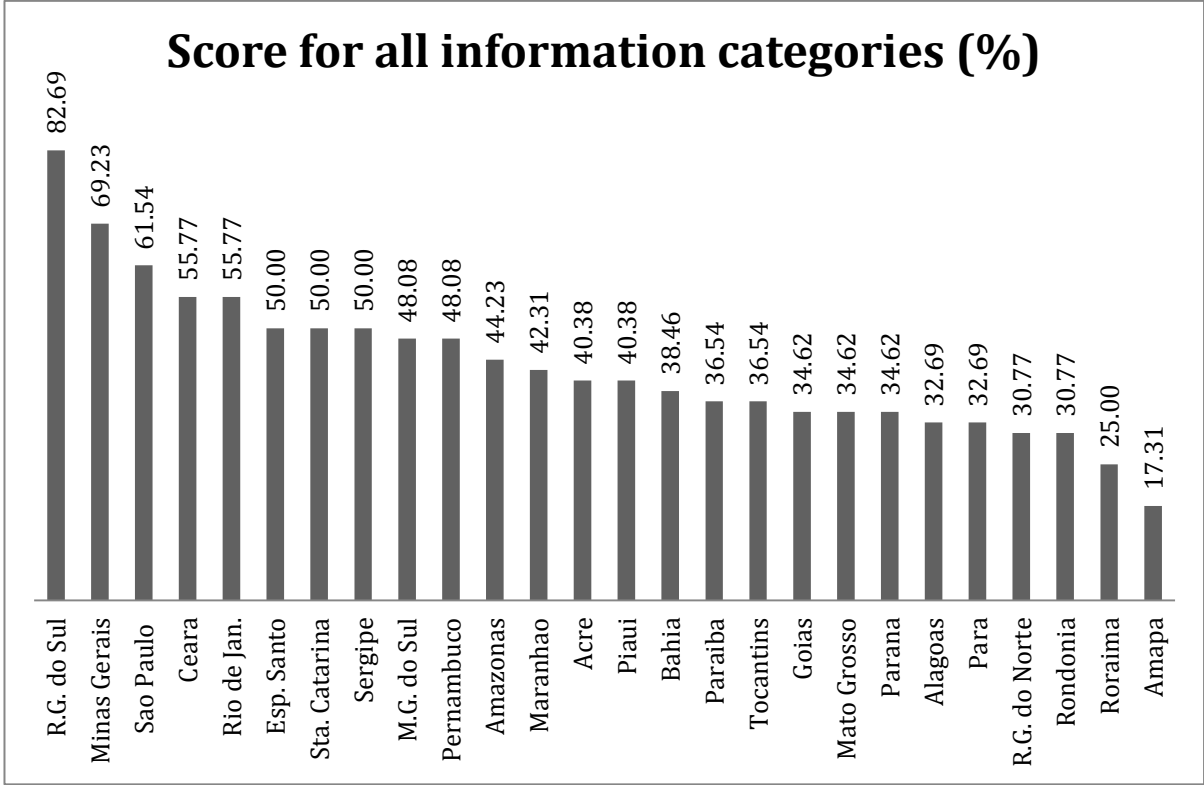
Concerning pending or ongoing legislation, 10 websites include a list, 5 include an index list and over half (15) provide a search facility. With regard to passed legislation, 16 websites provide a list, 4 provide an index list and 15 provide a search facility. For instance, the websites of Minas Gerais, Rio Grande do Sul and Santa Catarina offers specific search sections where users can search legislation by different criteria such as keywords, sponsors, date and type of legislation (e.g. constitutional amendment, decree). The legislative website of Minas Gerais also allows its users to track particular legislation as it goes through the legislative process: by choosing a specific legislation and providing a valid e-mail address, the user can be alerted by e-mail whenever there is a new development about the ongoing legislation that has been selected. Noteworthy is an anecdotal evidence of demand for this provision of information on legislation on legislative websites. In the state of Mato Grosso, even though such a functionality is not available, the website displayed in its news section a request from an agricultural association that, during its visit to the legislature, asked to the MPs to start provide the ongoing legislation online so that they could give MPs inputs on the legislative processes that were related to their sector of activity.

In Paraiba's legislative website, a specific section of the website aimed at reaching a particular public, provided information concerning state legislation that concerned children, women and the elder. In this respect, a link to a section called 'did you know' allows the user to find legislation that is of interest to the selected target group, such as gratuity of public transport to the elder and creation of shelters to women and children victims of violence. The Rio de Janeiro website provides a link to a section named 'accountability', where the user can find a summary of the main legislation – considered to be of interest of the larger public - that has been lately approved by the state assembly. Finally, the legislative website of Sergipe, which scores low (25%) in the provision of information on legislation, does provide a unique and creative tool concerning the use of the website. Even though the legislative website does not

provide any information concerning the total number of accesses made to the legislative website, statistics are provided on the number of times the text of each law has been accessed. In this respect, a ranking in decreasing order of access to the different laws indicates the user of the website – e.g. MPs, citizens – the general level of interest of other users on different legislation.

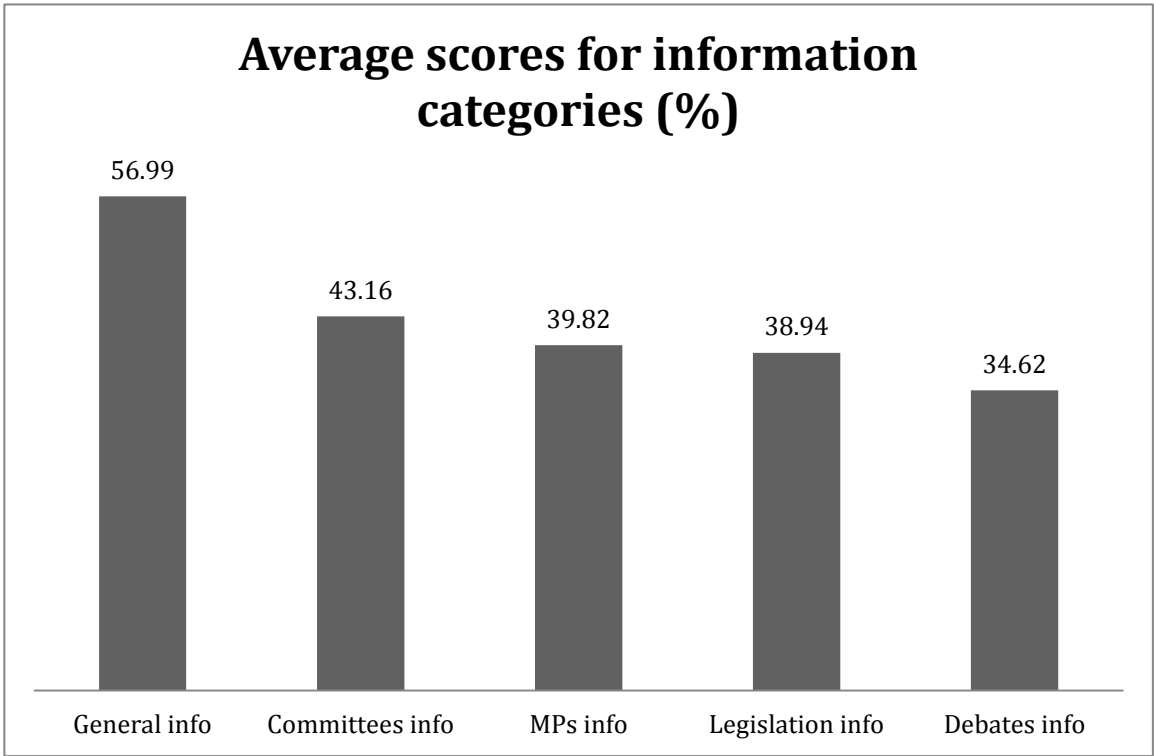
f) Overall score for provision of information (average 43.20%)

11 state parliament websites score above the average, with R.G. do Sul boasting 82.69 points in provision of information, followed by Minas Gerais with 69.23. Also a cluster of values reasonably placed above the average is formed by the states of Sao Paulo (61.54), Ceara (55.77) and Rio de Janeiro (55.77). There is visible variance in the amount of information provided by Brazilian parliamentary state websites, which can be illustrated by the difference of 65.38 points between the highest (R.G. do Sul) and the lowest (Amapa) score. The figure below shows the overall scores for the provision of information in Brazilian parliamentary websites.



In a country perspective, it can be said that Brazilian state parliament websites are more inclined to provide *general information* about the parliament, reaching an average of 56.99 points, with the outstanding cases of Rio Grande do Sul and Sao Paulo (90.91).

Secondly, the *committee information* dimension tends to reach reasonable scores, with an average of 43.16, with most states providing simple committee information (e.g. list of committees and members) and less countries providing information concerning the actions of the committees and behaviour of its members (e.g. publications, minutes). In this category, the websites of the parliaments of Minas Gerais, R.G. do Sul and Santa Catarina are noteworthy (66.67).



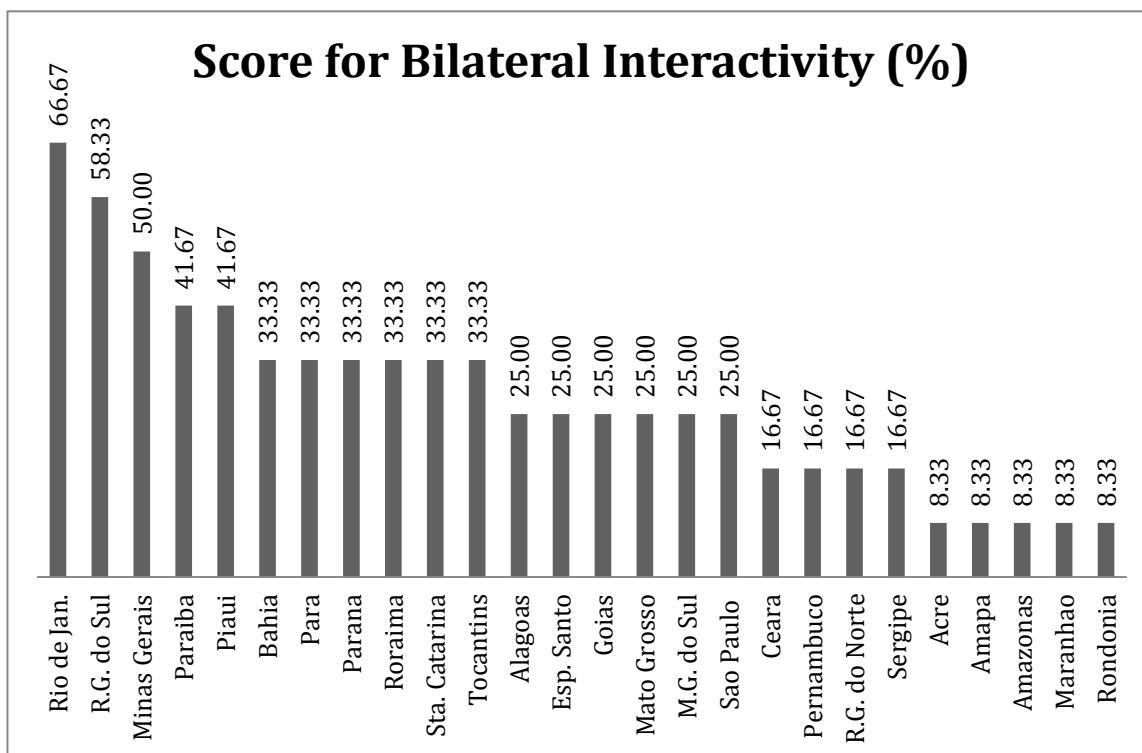
Information about the members of Brazilian parliaments reaches the average score of 39.82, with most of the websites providing static (or quasi) information about the MPs, such as a list of members and their respective biographies. A reduced number of websites will provide more dynamic information concerning members' behaviours (e.g. voting records), and provide tools for individual provision of information (e.g. personal websites). In this perspective, the website of the state of R.G. do Sul stands out with a total of 82.35 points.

Less information is provided on *legislation*, reaching an average of 38.94, with the most current information of a static (or quasi) nature, such as general info for the legislative process (e.g. guide) and lists of passed legislation. A minority of parliament websites will provide citizens with more in-depth and dynamic information about the legislative process, such as indexed lists and search engines for ongoing legislation and the possibility for concerned citizens to receive the latest information (e.g. e-mail notifications) for ongoing legislation. In this respect, Minas Gerais detaches itself from the average and its peers, achieving the remarkable score of 100 points.

Lastly, the least information provided relates to the *parliamentary debates*, achieving the lowest score of 34.62 points. Whilst many websites provide live video/audio of debates, less present an archive of these audio/video debates or a facility to access the full online text of the debates. The parliamentary website of R.G. do Sul is an exception, reaching the notable score of 100 points.

II) Bilateral Interactivity (average 27.56%)

11 Websites score above the average for the provision of bilateral interactivity (e.g. e-mail addresses of MPs), where the highest score belongs to the state of Rio de Janeiro. These results are followed by the scores of the states of Rio Grande do Sul and Minas Gerais, with scores of 58.33 and 50.00 respectively and the two states of Paraíba and Piauí both scoring 41.67. A remaining cluster of 5 websites – Bahia, Pará, Paraná, Roraima, Santa Catarina and Tocantins – shows the score of 33.33, slightly above the average. Finally, there is a noticeable group of states with a particularly low score (8.33) – Acre, Amapá, Amazonas, Maranhão and Rondonia.



With regard to factors that explain difference in bilateral interactivity scores, around a quarter of the websites (6) provide a facility for notifying the webmaster of website problems (e.g. R.G. do Sul, Minas Gerais), while more than twice as many (13) provide a link to an official/officer (e.g. ombudsman) that investigates complaints from members of the public about government. Nonetheless, the visibility that is given to the links where citizens can file complaints and denounce failings varies among the different websites. For example, in the legislative website of Piaui, the ombudsman link is indicated with the smallest letters of the website, written in black in a small corner of the website where the background color is dark gray: in other words there are few chances that a regular user would be aware of such a section unless he was actively looking for it. Other legislative websites, such as those of Minas Gerais and Paraiba will give more visibility to the Ombudsman section and, once the webpage is accessed more information is provided, such as contact details and competences of the ombudsman, with the Rio Grande do Sul website providing also detailed expenses of the Ombudsman office. More than half of the websites (16) offer a link to a responsible official for making general enquiries, and 19 websites provide guidelines on submitting enquiries or feedback.

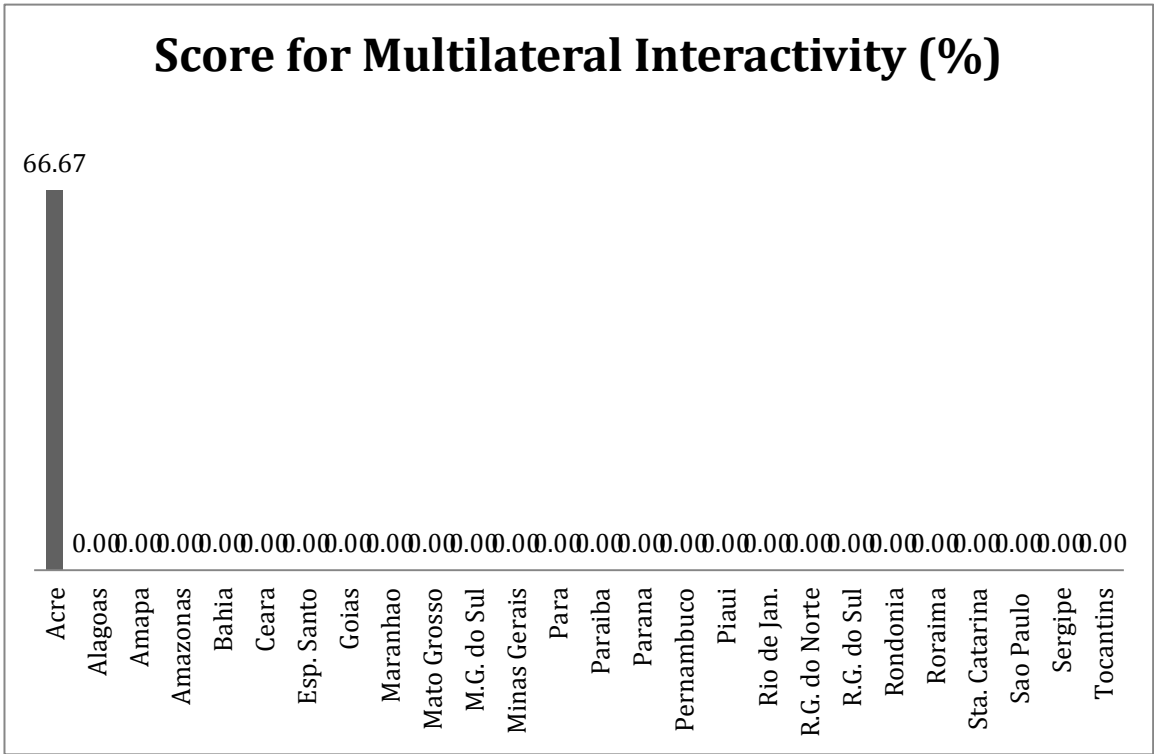
Very few websites (5) allow citizens to suggest new discussion topics or issues and only those of Rio de Janeiro and R.G. do Sul allow citizens to comment on the website. In the legislative

website of Rio Grande do Sul, in its section called ‘transparency portal’, where users can find extensive information on legislative activities and expenditures, an online form is available so that users can suggest how the section of the website be improved, be it in technological terms be in terms of suggestions of information that users think that should be disclosed online. In Rio de Janeiro legislative website, there is a link to an Online Participatory Budgeting. Participatory Budgeting, an initiative well spread over 350 municipalities in Brazil, can be broadly defined as the participation of citizens in the decision-making process of budget allocation and monitoring public spending. Participation may take various forms, from effective decision-making power in the allocation of resources to more modest initiatives that confer voice during the development of the budget. In the section of the Online Participatory Budgeting of Rio de Janeiro legislative website, in order to suggest proposals for the allocation of the state budget, citizens must choose among one of the 24 topics indicated on the website, these topics ranging from issues like culture to public administration, security and health. Once a topic is chosen the user then can insert the suggestion and, before submitting it, fill in obligatory fields such as e-mail, address and zip code. Interestingly, the website user who submits his proposal has the option of signing in to receive feedback from the legislature on his option. The suggestions that are made, once they have passed moderation, are then anonymously displayed in the website. However, there is no information whatsoever on how citizen’s input is taken by the legislature, for instance, if the suggestions made through the website are presented to MPs or to specific commissions. In addition to that, in the section no information is provided with regard to the budgetary conditions of the state, which makes one wonder how the general public can make any suggestion concerning budgetary resources if it does not have any substantive information on the budget and its process. In short, the flaws general design of this section raises the question of to which extent the legislature is actually interested in citizen’s inputs in the budgetary process. In the case these initiatives are simply a publicity tool to legitimate the parliament as an institution that is looking for citizens’ feedback, rather than reinforcing patterns of citizen participation, such initiatives tend to generate cynicism on the general user who takes his time to provide suggestion. In fact, given the low number of suggestions posted in the section of the website¹¹¹ (12 suggestions) seems to suggest that citizens, rather from being apathetic, are skeptical about the impact they might have through the use of such online facility.

¹¹¹ Last accessed, February 13th 2009

III) Multilateral Interactivity (average 2.56)

Only the legislative website of Acre offers opportunities for multilateral interaction. Such a finding is particularly interesting given that the legislative website of this rather economically poor northern state does not stand out in any of the previous dimensions described above. In the center of the initial page of the website, there is a news section prominently displayed with the most recent news on the top. On the bottom of each of the news citizens can visualize the number of hits of each of the news (i.e. the number of access that have been made online) and post comments, which allows for citizens to debate among themselves as their comments are posted on the different subjects.



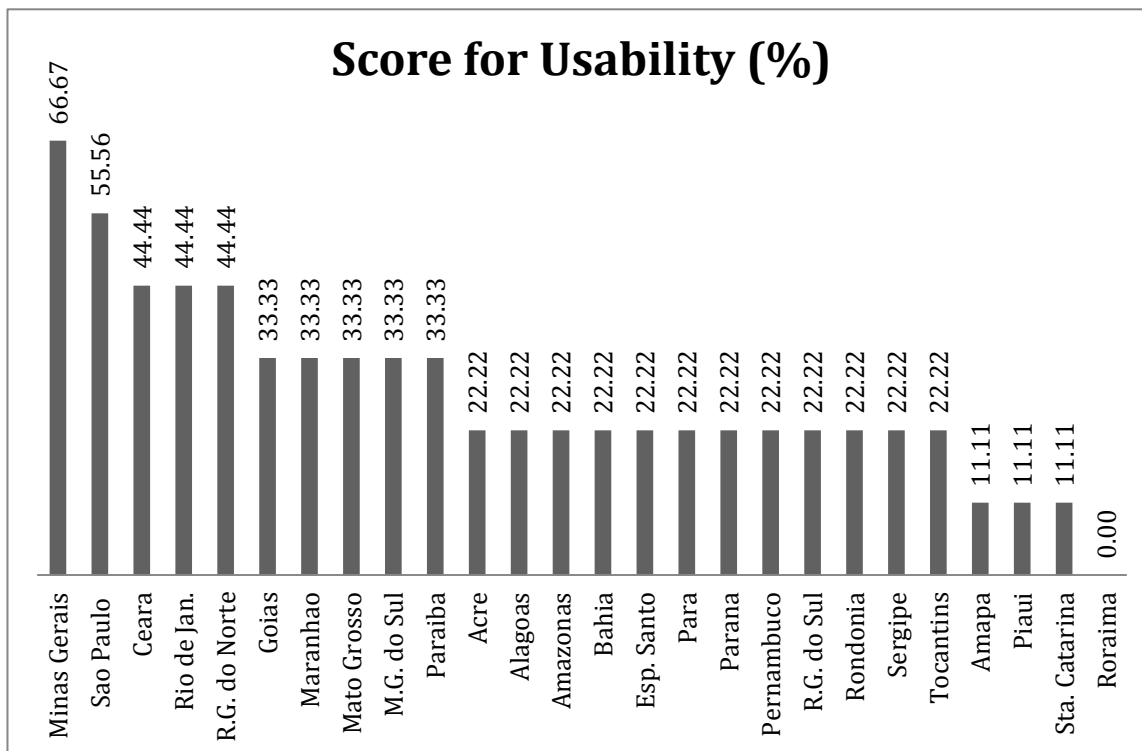
However, more interesting is the fact that, on the left site of the initial page of Acre’s legislative website, a link is available to the different Web logs (blogs) for the different MPs of the Assembly. In this case, these blogs – surprisingly modern and well designed in terms of layout - provide an enhanced opportunity to MPs to engage on a dialogue with its constituents. However, not all MPs seem to be exploiting such a prospect. A closer look at these blogs shows that the majority of MPs have disabled the comments section of their blogs, which keeps constituents from providing public comments to the contents that are displayed in the blog. That is, despite the potential of blogs to provide a platform for online dialogue, by having

disabled the comments functionality of the blogs most MPs use this tool as a simple one-way communication/publicity tool. On the other hand, a few MPs show their verve and the originality on the usage of weblogs. One MP¹¹² for instance in the period of a year has made over 900 posts in his blog and, despite the fact the majority of the posts are of political/legislative character, the legislator does not hesitate to give a personal vein to his texts and to upload videos and pictures. It is important to underline as well, that the MP does not hesitate to engage in a dialogue with the public that, very often, makes comments to his posts. Nonetheless, there is a significant variance on the type and intensity of the use that is made of the tool by the MPs: in other words, different MPs will enact the weblog technology in different manners and with diverse purposes.

IV) Usability (average 27.78)

The average usability score for Brazilian parliamentary websites is quite low, and 10 of the states score above the average, led by Minas Gerais with a score of 66.67 points. Subsequent to Minas Gerais there is the state of Sao Paulo with a score of 55.56, and then a grouping made up of Ceara, Rio de Janeiro and Rio Grande do Norte, all with a score of 44.44. It is interesting to note that the websites that have scored well in most of the previous dimensions do not score so well in usability. The most illustrative case is the state of R.G. do Sul: its usability score is particularly low, at 22.22 points. The lowest scores belong to Amapa, Piaui, and Santa Catarina, each with just 11.11 points, while Roraima scores zero.

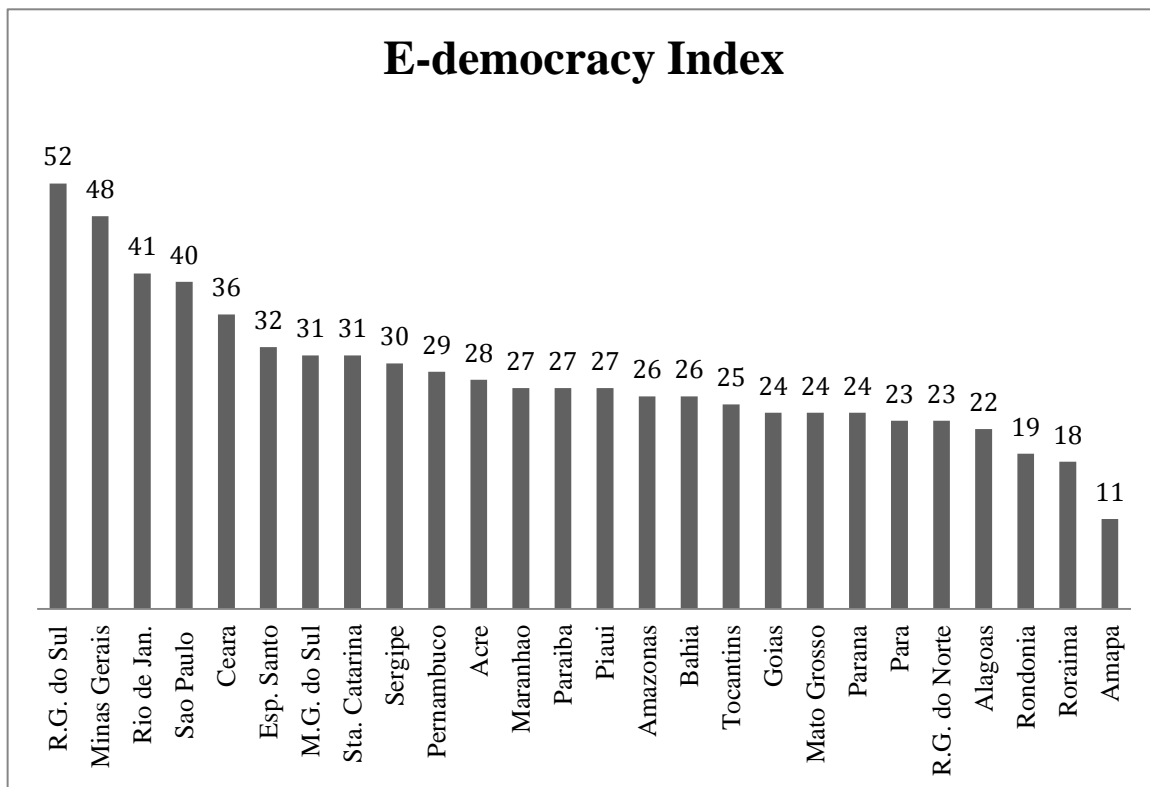
¹¹² MP Edvaldo Magalhães blog, period March 2008/March 2009



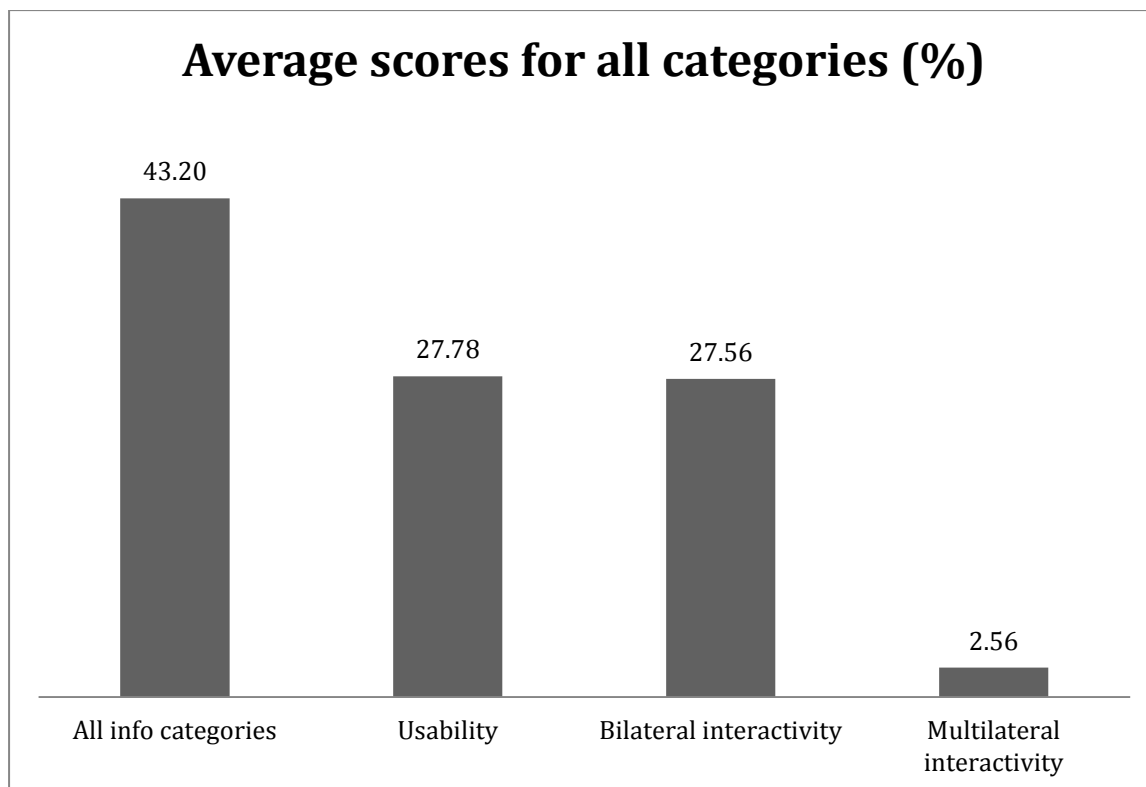
With regard to the usability of the websites, variance can be explained by a series of factors. While only 12 have an internal search facility for the site, almost all of the websites (22) have separate search facilities for specific sections of the site. Less than half of the websites include a site map, only those of Amapa and Minas Gerais offer a FAQ section and only the website of Minas Gerais includes an A-Z index. Last, but not least, a reasonable number of the websites (16) boast activity of all of their links (e.g. Ceara and Minas Gerais).

V) Overall e-Democracy score (average 28.6)

11 parliamentary websites score above the average score, with two states standing out far above the average: Rio Grande do Sul (52) and Minas Gerais (48). In third position we find the parliamentary website of the state of Rio de Janeiro (41), which discretely scored well in all of the categories with the exception of multilateral interactivity. In fourth place we find the Sao Paulo (40), followed by the state of Ceara (36). These scores are followed by the states of Esp. Santo (32), and Mato Grosso do Sul (31). The lowest scores are those from the state of Rondonia (19) and the northern states of Roraima (18) and Amapa (11). The figure below shows the overall results for on e-democracy traits for Brazilian parliamentary websites.



In a country perspective, it can be said that Brazilian state parliament websites are above all using the prospects offered by the Internet to *provide information* about their parliaments, with an average score of 43.2 (see figure below). Nonetheless, the amount of information and how this information is presented and accessed varies as we have seen before. One can identify a general trend where most parliaments present general information of a static character and few websites allow citizens to access detailed information concerning the quotidian functioning of the parliaments and their institutions (e.g. committees). This information is even scarcer when it comes to individual level information concerning the political behaviour of the elected representatives (e.g. voting records).



Usability, or user-friendliness, reaches the second highest average score with 27.8 points, with the particular finding that many countries that score well in other dimensions have poor results in usability. Such a fact means that, in practice, even when contents and tools are provided, these are not always accessible for the average Internet user and even less to those with lower skills in computing. In other words, there is little use for a parliamentary website that scores very highly on all other dimensions when these are not accessible to the general public. In this respect, usability becomes a significant constraint on the use of the Internet for Brazilian parliaments.

Thirdly, and with the average score of 27.6, websites seem to be used as means to enhance *bilateral interactivity*, understood here as the possibility for citizens to access general contact information (e.g. e-mail addresses) and to interact with parliaments' representatives and personnel by directly contacting them and receiving feedback. If most websites offer the possibility for users to directly contact their MPs, few websites allow these users to suggest legislative discussion topics or issues, and even fewer allow citizens to post their comments on the website. Last, but not least, if most websites offer tools for contact with MPs and staff, the idea of interaction only makes sense to the extent that feedback is given to citizens in an

adequate manner. In this respect, despite the existence of contact facilities, the level of responsiveness of these parliaments remains a question to be answered.

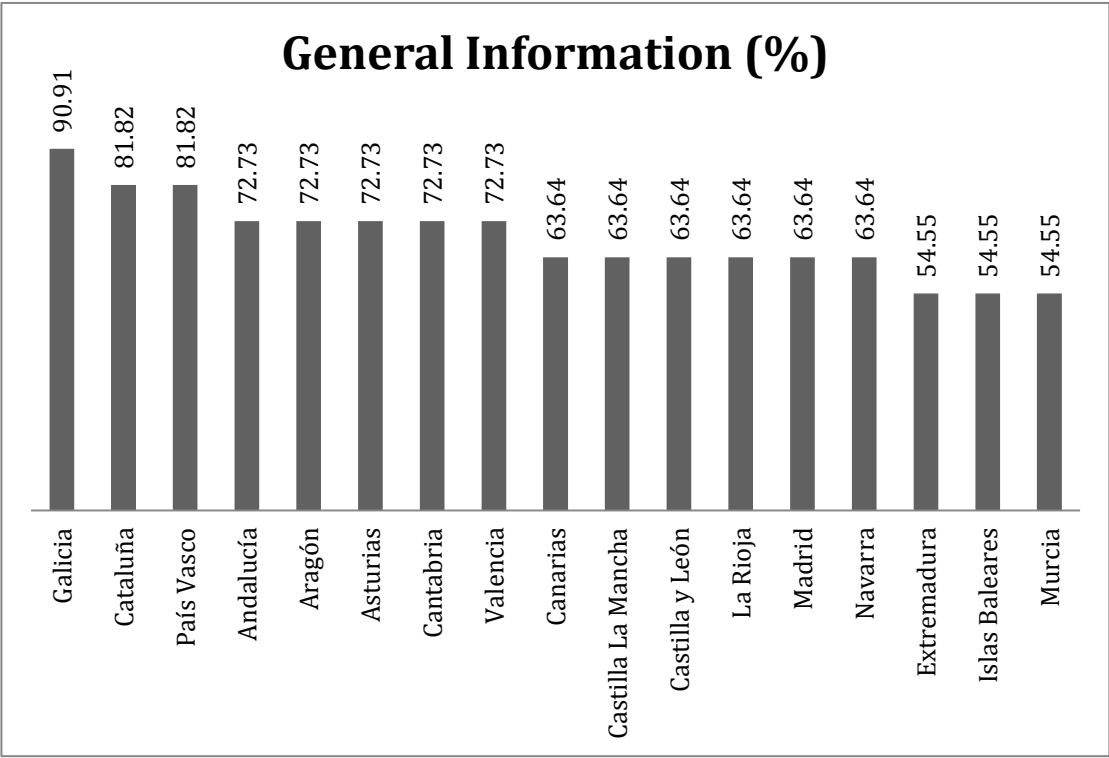
Unfortunately, there is little to be said about *multilateral interaction* on Brazilian parliamentary websites. Acre, the only state that scored on the multilateral dimension did not promote deliberation itself, but rather offered users the possibility to comment on news generated by the House administration and on MPs blogs. In this sense, the extent to which these tools to actually enable online deliberation should be nuanced. With an average score of only 2.7 percent, this leads us to the finding that the vast majority of Brazilian parliamentary websites are not using the prospects of ICTs to promote online deliberation, with only one Legislative website using tools that could – potentially – lead to some kind of online deliberation.

Spain

D) Information provision

a) General information (average 68.5)

The average score for the regions is 69.23 with eight regions scoring above the average. The highest scores are those from Galicia (90.9), Catalonia and Basque Country (81.2 each). Behind these two, five other regions score above the average, Andalucia, Aragon, Asturias, Cantabria and Valencia. The lowest scores (54.5) belong to a group of three regions, composed by Extremadura, Islas Baleares and Murcia.



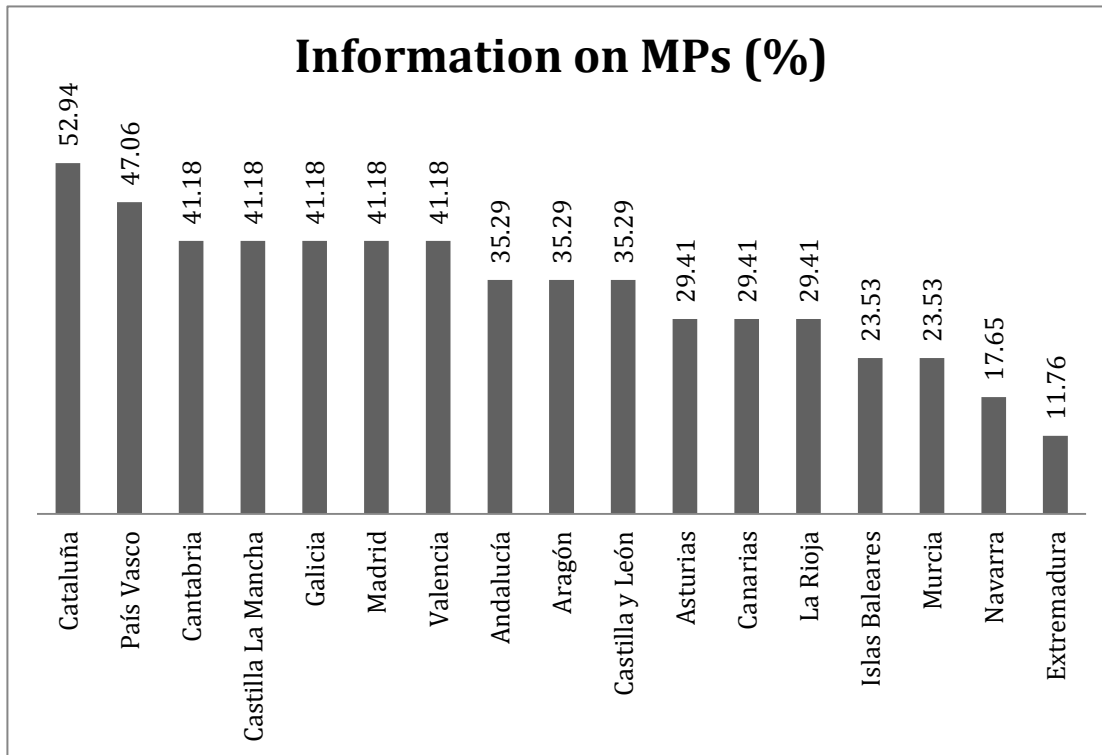
Most of the 17 regions' websites tend to offer basic information such as an introduction/overview of the parliament (16 regions). In this respect, Navarra legislature website promotes a virtual visit to the parliament in an interactive format that allows the average user to learn basic facts of the parliament, ranging from the history of the parliament to a brief and accessible explanation of the current legislative process. A majority of the websites provides a section with news updates (16 regions). Nonetheless, more sophisticated

means of provision of information such as e-mail and feeds subscription tend to explain the disparity amongst the scores. For instance, some websites tend to provide facilities similar to the one from the Parliament of Andalusia, where users can personalize their subscription to RSS feeds by selecting different criteria such as general news, agenda, and news on legislation. Nonetheless, only five regions offer multimedia resources (e.g. video and audio) concerning general (Cantabria, Cataluña, Galicia, Navarra and País Vasco), with Catalonia state legislature offering a broad selection of feeds for audio content on news about the parliament.

Noteworthy, is the rather recurrent reference that Spanish regional parliamentary websites make to European Institutions and its respective member countries. In this case, regions such as Asturias, Castilla la Mancha, Galicia and Canarias will provide extensive sections with links to parliaments of other EU member countries, to the European Parliament and the Commission. The Basque Country website goes further and even provides a specific service to subscribe by mail or RSS to news on EU matters. If the European dimension is contemplated in regional parliamentary websites, subjects of local interest that go beyond the exclusive legislative arena are also found in the websites. This is particularly so for regions with a strong regionalist vein. For instance the website of the Basque legislature provides a visible link to a website with educative purposes on the negative impacts of operations led by the ETA terrorist group. Conversely, other subjects of strong popular appeal, and particularly to the most nationalist sections of society, are also highlighted in the website, such as local culture and human rights. Finally it is important to underline a general lack of transparency concerning the websites' traffic: only one website provides statistics regarding the number of hits on the website.

b) Information on members of parliament (average 33.9)

The average score for the regions is 33.9 with ten regions scoring above the average: Catalonia (52.9), Basque Country (47), Cantabria (41.2), Castilla La Mancha (41.2), Galicia (41.2), Madrid (41.2), Valencia (41.2), Andalusia (35.3), Aragon (35.3), and Castilla y Leon (35.3). The lowest scores are identified in the websites of Navarra (17.7) and Extremadura (11.8). The figure below shows the overall results for the score in information on members of parliament.

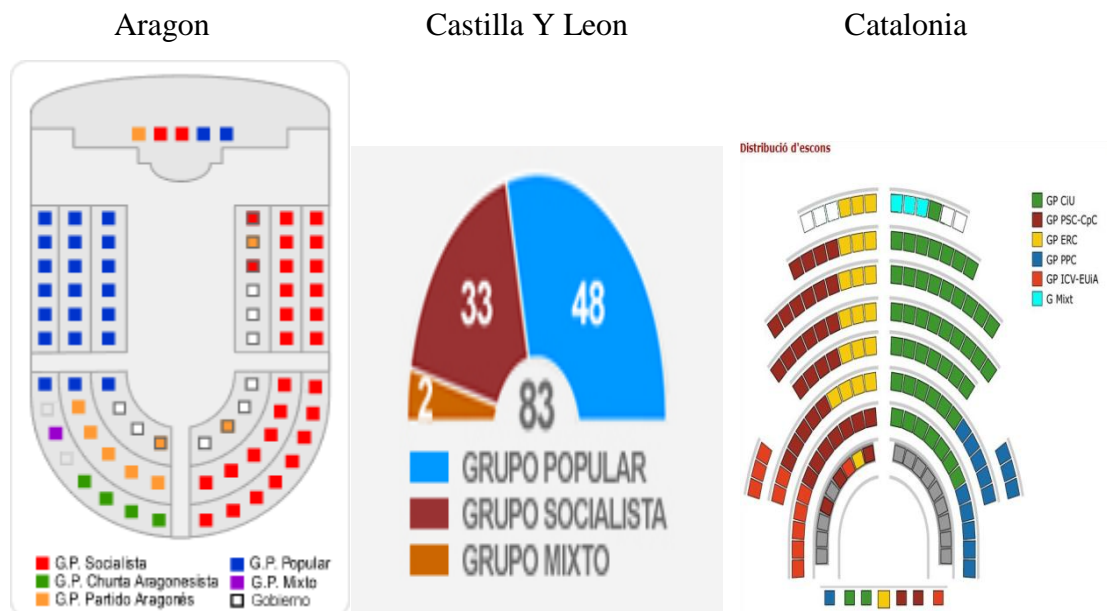


As the figure shows, if a great number of regions scored above the average, a great disparity is identifiable between those that scored above the average and those that scored well below it. Most of the 19 websites show basic information such as a list of members (17), a list of members according to political group (16) and information concerning the role of members of parliament (16). Interesting to notice is the fact that a minority of the websites (2) provide information contacts for MPs other than mail. Still, the fact that the regional parliamentary websites provide the possibility for MPs to add their mail to their contact references does not mean that all MPs will do so. For instance, in Galicia, out of 75 MPs, only 16 provide mail addresses. Even worst, in Navarra, MPs seem to be reluctant to provide their contact details: only a list of names is provided, and no information whatsoever can be found on how to contact MPs.

As to other information concerning MPs parliamentary action, some interesting initiatives can be found in a minority of parties. For instance, in the Basque Country, on the section dedicated to MPs, for each MP all of their interventions both in commissions and plenary sessions are listed in text and video format. Similarly, Extremadura's MPs section presents edited videos of their interventions in plenary sessions, such as speeches and replicas. As to the some of the core of the activities of MPs as such, e.g. sponsoring bills and voting on

proposals the information is provided is extremely poor, punctuated by very few exceptions such as Madrid and Canarias, which provide lists of legislation sponsored by MPs.

Of all the traits that concern the information that is provided on MPs by regional parliamentary websites, the most salient and noteworthy is the provision of information on partisanship of MPs. That is, all of the legislative websites, without any exception, provides a list of MPs by political group and/or electoral coalitions. In this respect, distinct regions such as Basque Country, Canarias and Islas Baleares will provide, besides a list on alphabetic order and by constituencies, a list by parties and electoral coalitions. Cantabria will even provide a unique mail to each parliamentary group so that citizens can reach simultaneously all the members of a parliamentary group by using a single mail address. Conversely, websites that are providing links to political parties websites (e.g. Castilla y Leon) or political parties blogs (Catalonia) is a more common phenomenon than an external observer would expect. In this sense, it is noteworthy to mention that the omnipresent graphic representation of the different political parties and their respective seats in the legislature in Spanish legislative websites, as illustrated below.

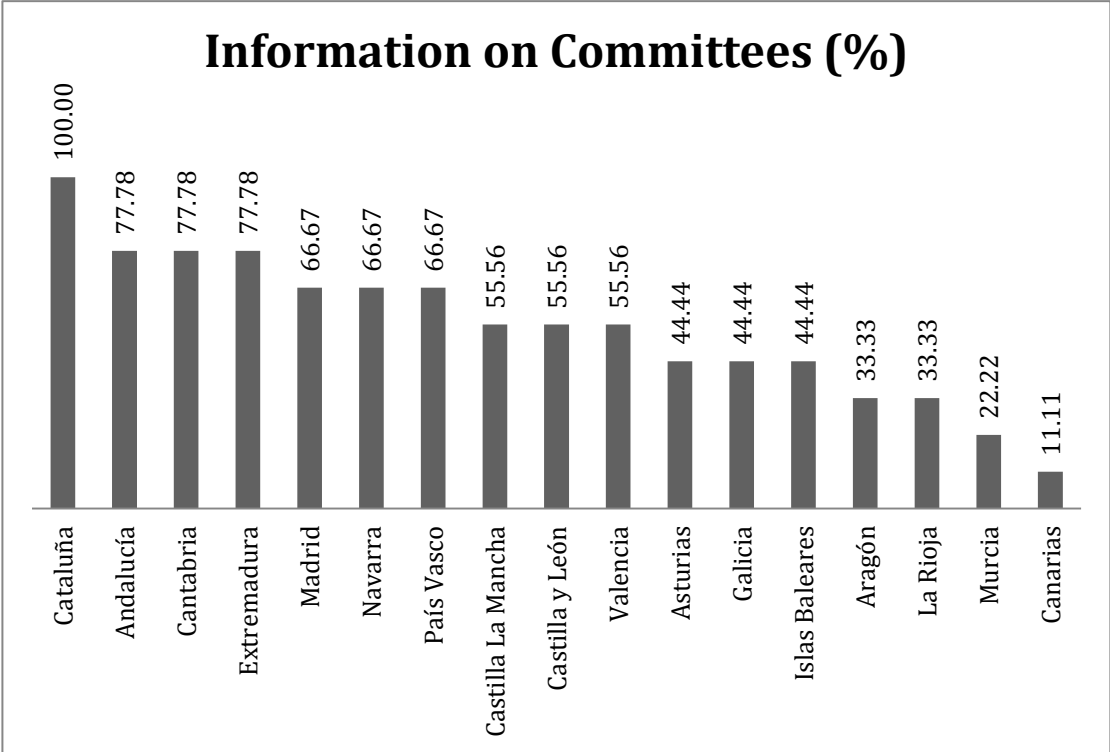


For instance, Andalucia and Catalonia will present interactive maps that show how the seats in parliament are distributed according to parties and, as the user browses over the different seats more information for each of the MPs is provided. Conversely, Andalucia will also provide on the bio section of each MP the same map illustrating where his seat is putting in

perspective to which group he belongs. To sum up this description, in Spanish legislative websites, stands out the marked tendency to give a prominent visibility to political parties and groups, a phenomenon that is not so evident in other countries. The reasons for such a fact will be discussed later on this section.

c) Committees information (average 54.9)

Most regions' websites (10) score above the average. The region of Cataluña scores the total 100 points, followed by Andalucía, Cantabria and Extremadura with an equal score among them (77.8). In third come the websites of Basque Country, Navarra and Madrid (66.7), followed in fourth by Castilla La Mancha, Castilla y León and Valencia (55.56). The lowest scores are given to the websites of Murcia (22.2) and Canarias (11.1). The figure below shows the results concerning committee information.

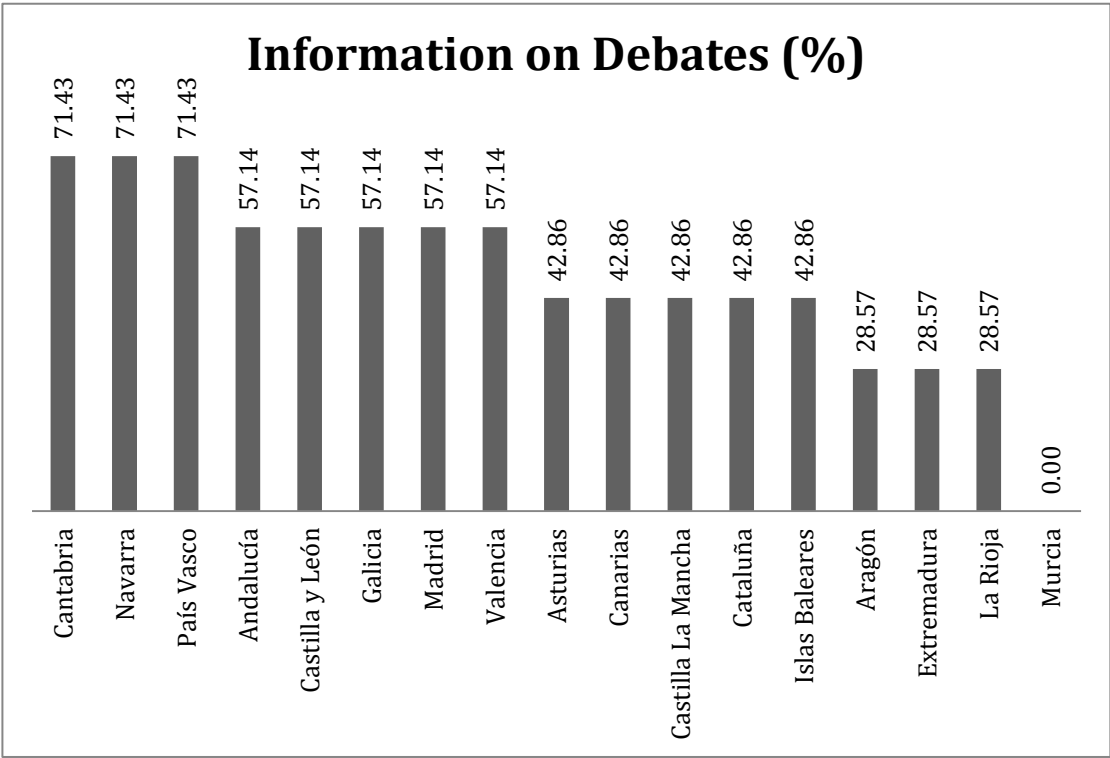


Most websites present basic information concerning the committees, such as a briefing on the role of committees (17), a list of existing committees (16) and a list of members of each committee (15). Nonetheless, such a provision of information decreases when it concerns the dynamic of committees, their functioning and the actions taken by the members: 12 websites provide information on the intervention of the members in the committees (e.g. transcriptions, minutes), and 7 websites provide a list of committee reports and the schedules of future

committee meetings. Multimedia resources such as video links are also provided by 7 websites only (e.g. Catalonia, Andalucia).

d) Parliamentary debates (average 47.1)

Eight regions score above the average led by Cantabria, Navarra and Basque Country, scoring 71.4 each. Andalucia, Castilla y Leon, Galicia, Madrid and Valencia score 57.1, followed by Asturias, Canarias, Castilla La Mancha, Catalonia and Islas Baleares (42.9). The lowest scores is Murcia (0.00), with a complete absence of information on debates. The figure bellow shows the overall results for information on deliberation.

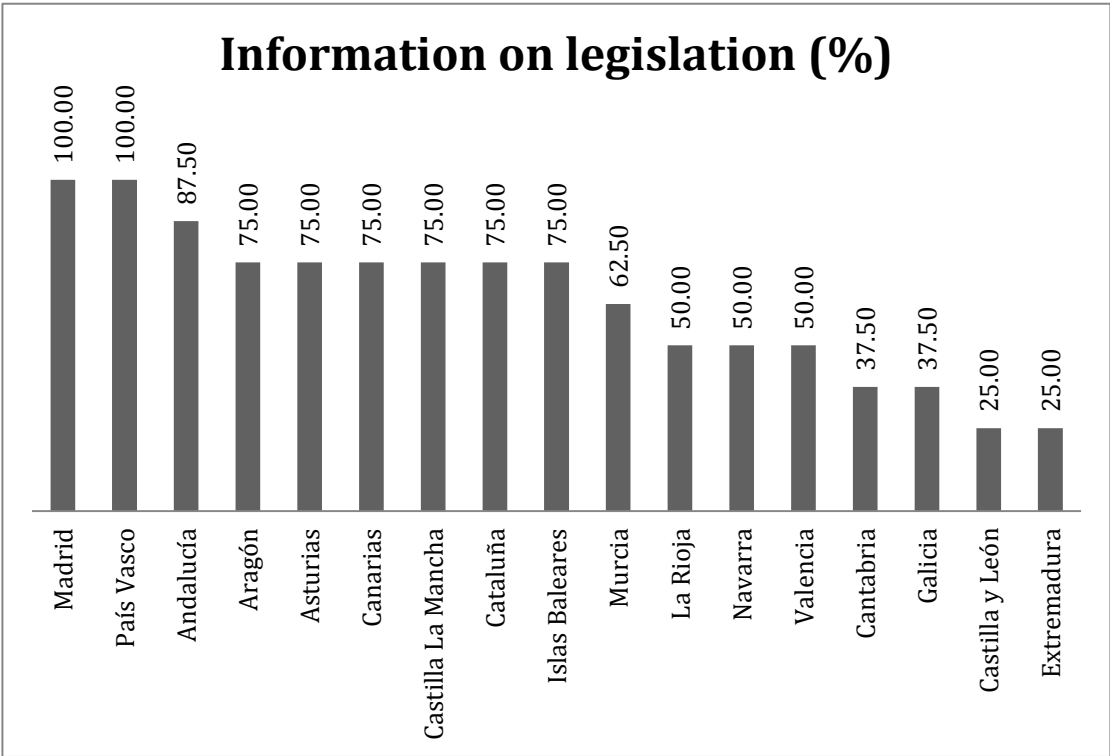


While most websites (16) provide a facility for accessing online the full text of debates, only 8 provide a schedule of plenary sessions (e.g. Navarra, Basque Country). The differences in score are also due to the existence of multimedia content, with 11 websites providing a link to watch live video of debates, where Asturias and Navarra for example, live streaming sessions of the parliamentary sessions are available . Out of these, 6 websites (e.g. Cantabria, Basque Country) archive these contents, which in practice means that users are not obliged to watch the debates at a certain date and time, enabling users to access videos of the debates after these have taken place whenever it is more convenient for them. Galicia website, for instance,

presents several archived videos of debates that are listed and edited according to a diversity of themes of interest, such as budget allocation and renewable energy sources.

e) Information on legislation (average 63.2)

Overall Spanish regions scored well on the provision of information about legislation, reaching an average of 63.2 points and with nine regions scoring above this average. Madrid and Basque Country scored the total number of points in this category (100) followed by Andalućia (87.5), and six countries scoring 75 points: Aragon, Asturias, Canarias, Castilla La Mancha, Catalonia, and Islas Baleares. The lowest scores are identified in Cantabria and Galicia (37.5) followed by Extremadura (25.00).

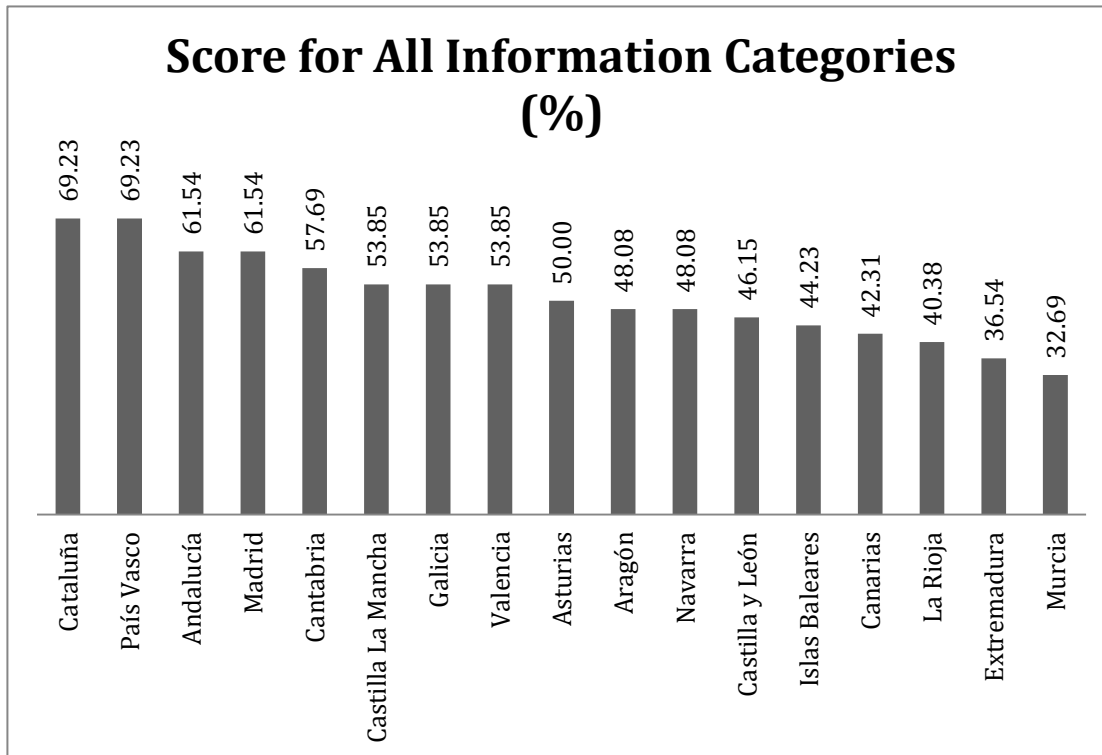


14 websites present basic information concerning the legislative process and 13 websites provide lists of ongoing legislation. In this respect Navarra provides a rather creative graphic illustration explaining the legislative process, from the moment that an MP starts a proposition to its final approval. For those interested in deepening their knowledge on the subject, the Basque Country website provides a session with links to online resources on legislative studies, national and international legislation, legal dictionaries and so on.

Out of these 13 websites, 8 (e.g. Madrid, Basque Country) also provide an index list of ongoing legislation, by providing an alphabetical or thematic index, facilitating access to the legislation relevant to the user. Andalusia innovates by providing an easy link to a weekly calendar with the legislation that will be dealt with during the period. In this respect, 9 websites also provide a search facility for ongoing legislation (e.g. Andalusia, Catalonia, Madrid). Concerning passed legislation, 16 websites present a list, with 8 of these websites providing also an index list. 12 websites also provide a search function for legislation that has been passed. However, as expected, these search facilities present differing degrees of ease with each the average user has to deal with. For instance, even though Asturias offers a search engine, it does not provide a thematic search. That is, the average user, before looking for a piece of legislation, needs to know either the reference date, number or author in order to search for it. Madrid, on the opposite direction, presents one of the easiest bills search engines, given that no field is obligatory to be filled. By a simple click the user is provided with a user-friendly visualization of all of the initiatives of the ongoing legislature or past legislature. Afterwards, citizens can refine their search by dates, type of initiative, keyword, legislation status (approved, ongoing) and author. As to enabling the user to follow-up a particular piece of legislation through the legislative process, 6 websites provide a facility to receive the latest information on a specific legislation through registration of email address or RSS feeds (e.g. Basque Country, Andalusia, Catalonia). For example, Madrid users registered in the website can be notified by e-mail on updates on different types of legislation and subjects. Finally, a few websites such as Cantabria and Extremadura will present reports of their parliamentary activities with easily and accessible statistics on the activities, giving the user an overview of the legislative output.

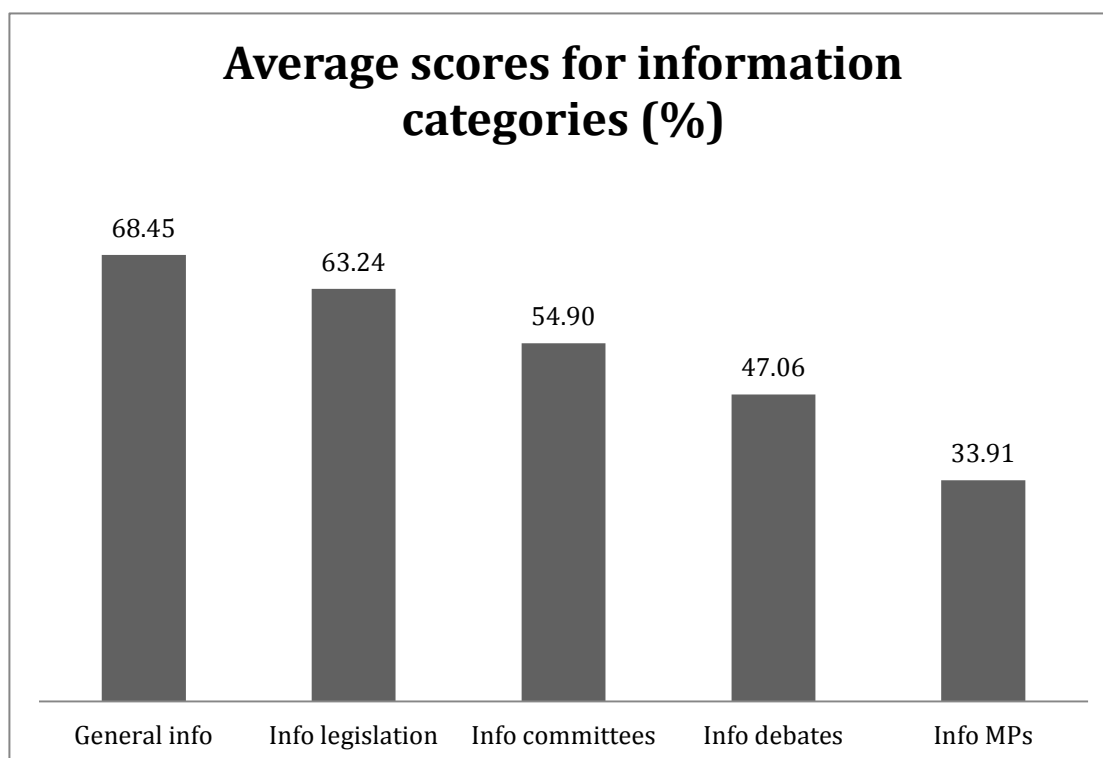
f) Overall score for information provision (average 51.1)

Eight countries score above the average on the overall score for information provision. Catalonia and Basque Country scored 69.2, followed by Andalusia and Madrid with 61.5 points each. The lowest scores are those of the websites from Extremadura (36.5) and Murcia (32.7). There is a notable variance in the amount of information provided by Spanish parliamentary websites, which can be exemplified by the difference of 36.5 points between the highest (Catalonia) and lowest (Murcia) scores. The figure below shows the overall score for the provision of information in Spanish parliamentary websites.



In an overall perspective, it can be said that Spanish parliamentary websites tend to provide more *general information* for their users, with an average of 68.4 points. The case of the Galicia is remarkable in this category, with a total score of 90.9 points. Nonetheless, one could identify that not all regions provide the same amount of information and in the same way, with few regions providing, for instance, e-mail subscription to news and multimedia resources.

Secondly, we find the *provision of legislation information* as the second most recurrent information in Spanish parliamentary websites, reaching an average of 63.24 points, with the outstanding cases of Madrid and Basque Country that reach the total score of 100 points. The most common type of information in this sub-dimension tends to be of a static nature, that does not do not require constant data management or regular updating, such as general information on the legislative process (e.g. functioning of the legislative process). A smaller number of websites provide more dynamic information concerning ongoing and passed legislation, as well as search engines and indexed list of legislation, thus facilitating navigation for the user. Finally, the minority of websites enables users to follow up ongoing legislation through facilities such as e-mail notifications and RSS feeds.



Thirdly, we find the provision of committees' information, with an average of 54.90 points and the noteworthy case of the region of Catalonia as the only Spanish parliamentary website that reached the total score of 100 points. Once again in this sub-dimension, the provision of information of a static (or quasi) nature tends to be privileged, such as list of committees and their members. Few websites provide further information concerning committees' routine functioning and the actions taken by their members, such as previous publication of committee schedules and minutes and/or archived multimedia files (e.g. video) of committee meetings.

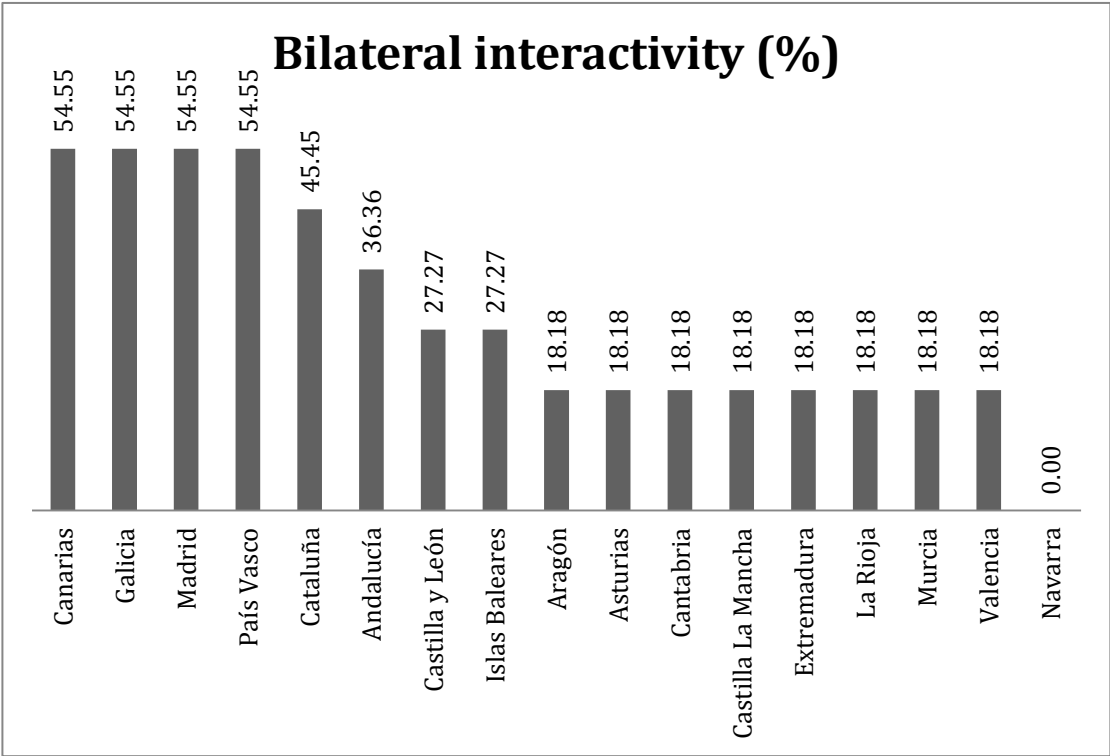
Less information is provided on *parliamentary debates*, with an average score of 47.06 points and a cluster of 3 regions reaching the score of 71.4 points: Cantabria, Navarra and Basque Country. Even though most of the parliamentary websites provide facilities for accessing online the full text of debates, the use of multimedia resources is what generated most of the variance in score in this sub-dimension, with a reduced number of parliamentary websites offering links to watch live videos of debates and an even smaller number providing archived files of these debates.

Finally, the information that is least provided by Spanish parliamentary websites concerns the *information on members of the parliament*, with an average of 33.56 points, with Catalonia reaching the highest score achieved in this sub-dimension: 52.94 points. While most websites

tend to present information of more static nature (e.g. list of MPs according to political groups) a minority of websites present individual level information, thus enabling users to individually access the voting behaviour of MPs.

II) Bilateral Interactivity (average 29.4)

Six regions score above the average for bilateral interaction. Canarias, Galicia, Madrid and Basque country compose the first group with 54.5 points, followed by Catalonia (45.4) and Andalucia (36.3). The lowest scores are composed by a large group composed by Aragon, Asturias, Cantabria, Castilla la Mancha, Extremadura, La Rioja, Murcia and Valencia. Finally, the lowest score of all, Navarra, with no points in terms of bilateral interactivity whatsoever.



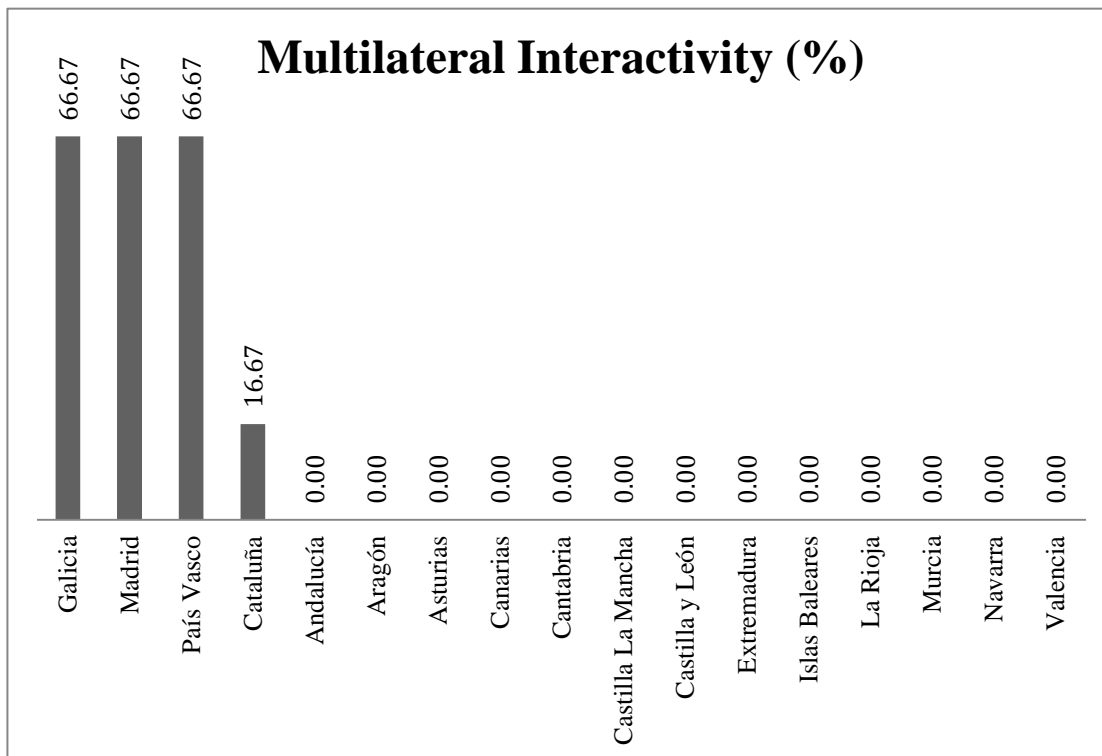
All of the websites with the exception of Navarra provide users with guidelines for submitting feedback or enquiries, with 13 websites also offering a link to an office or responsible official for answering general questions. 8 websites provide a facility for notifying the Webmaster about website problems (e.g. Canarias, Catalonia, Basque Country) and 6 websites provide a facility for commenting on the website (e.g. suggestions). Having said that, it is important to underline that, many times, it is not clear to the average user whether these contacts that are

provided are referring to the webmasters' address (to notify problems) or if it is a general mail to contact the legislature for general information. Only 6 websites provide links so that members are able to contact MPs individually (e.g. mail address), and only 4 websites provide a link to an official or office that investigates complaints from members of the public about government (e.g. ombudsman). Only three regions (Madrid, Catalonia and Basque Country) allow citizens to suggest new discussions/issues. For instance, on Madrid's website, registered citizens can participate by giving their own opinion on issues, suggesting new issues to be discussed and have their questions/comments answered by MPs. For instance, Catalonia website provides a section denominated 'talk to the president', where citizens can post their comments to be answered by 'the president'. Canarias website also provides a similar section, but on two occasions during this research, even though there were questions no answers from the president to the questions were found.

Another that legislative websites normally offer to its users is to provide information on what is the procedure for citizens who want to attend (i.e. observe) parliamentary sessions *in loco*. For instance, Canarias legislature, the website informs that even though citizens can render to the parliament to follow up the activities of the plenary sessions, they have to send a written request by postal mail and a photocopy of their ID at least 48 hours in advance. Other legislatures such as Andalucia, Extremadura will provide its users with the opportunity to register online for attendance at the plenary sessions. By simply providing a message specifying the session one wants to attend, and a valid ID number, the burden is lowered to citizens who want to render to the legislature that represents them.

III) Multilateral interactivity (average 12.7)

The multilateral dimension for Spanish websites reaches the lowest average of all the dimensions considered in this analysis. To the exception of four regions, no other Legislative website provided facilities for multilateral interaction, scoring no points on this dimension. The score for the region of Basque Country is due to the fact that its website provides a virtual environment for deliberation amongst its users. The website of the region of Catalonia if, on one hand does not allow any deliberation on its website, does provide an external link to another website held by Catalonia University which provides citizens with a platform for online deliberation on parliamentary affairs.



The Basque Country website, provides a link to a section called ‘Parte Arku’, meaning ‘citizen participation’ in Basque. In this section, consisting of an online forum, in order to participate citizens must register to the website. With the aim to avoid frauds (e.g. similar posts under different names) and to hold users accountable for the use that they make of the facility, prior to registering users need to provide personal information (e.g. name, zip code) and a valid ID number that is recognized by the systems as being authentic.

The citizens who register can engage with the online debate in diverse forms with different participation costs. Firstly, they can post a comment that is intended to the general public or by addressing questions directly to the parliamentary groups. They can also rate comments and questions by simply clicking on the ‘approval’ or ‘disapproval’ button that is located next to each comment. Each comment displays the amount of approval or disapproval that it has received from other users. In this respect readers can easily see how much support each of the arguments got from other participants. Last, they have the option to send via e-mail the posted items to other citizens, who, upon reception of an email are encouraged to register in the website. In this case, the recipients of the mail can approve, disapprove or simply ignore the mail from the politically engaged acquaintance at the origin of the mail. It is worth noticing how the

interactivity between users of these platforms (i.e. citizens) and the political sphere is structured. In this sense, whenever making a question or comment, users are not able to make it to individual MPs, but rather to political parties. In this sense, the communication is structured in a manner that citizens interact with the parties, and not the individuals. Having made this consideration, parties seem to react fairly well to the answers, giving reasonable well-informed answers that are far from resembling a standardized generic replies. Part of that might be due to the fact that the website also displays information on which parliamentary groups has answered or not. On the top of each question a message is displayed with the names of the parties to which the questions were addressed and the names of the parties that have answered to the questions. Having observed the forums, it seems that such a creatively designed system, besides of giving visibility to the parties that have responded and to the ones that have not, has the virtue of generating a virtuous competition among parties. That is, parties that do not answer a question tend to do so once an opposition party does it.

Catalonia website, on its turn, provides a ‘blog of the president’ where citizens can post comments and supposedly, engage in a debate among themselves and with the president. However, despite of the potential of the tool, an overview of the posts shows that, even though the comments are enabled, this facility is rather used unilaterally as a means of institutional information. The format as well as the contents of the blog, are impersonal and eventual comments from users are not responded. In short, despite the fact that the Catalonia website provides a facility with the potential for deliberation, such a possibility does not turn into practice. The website, also provides a link to two external websites for online deliberation on parliamentary matters of the region called ‘Parlament Obert’ (Open Parliament) and Democraciaweb. However, the link to such a website is not prominently indicated. To find such a link in a rather big and dense website, users need to access the discrete section “links” and from there to access the section ‘projects of citizen participation’. In short, these projects are 3 links away from the initial page and are unlikely to be found by serendipity. In short, the rather flawed use that is made by the ‘blog of the President’ and the links to online deliberation platforms in quite obscure parts of the website evince the lack of priority that is given to these facilities that enable deliberation.

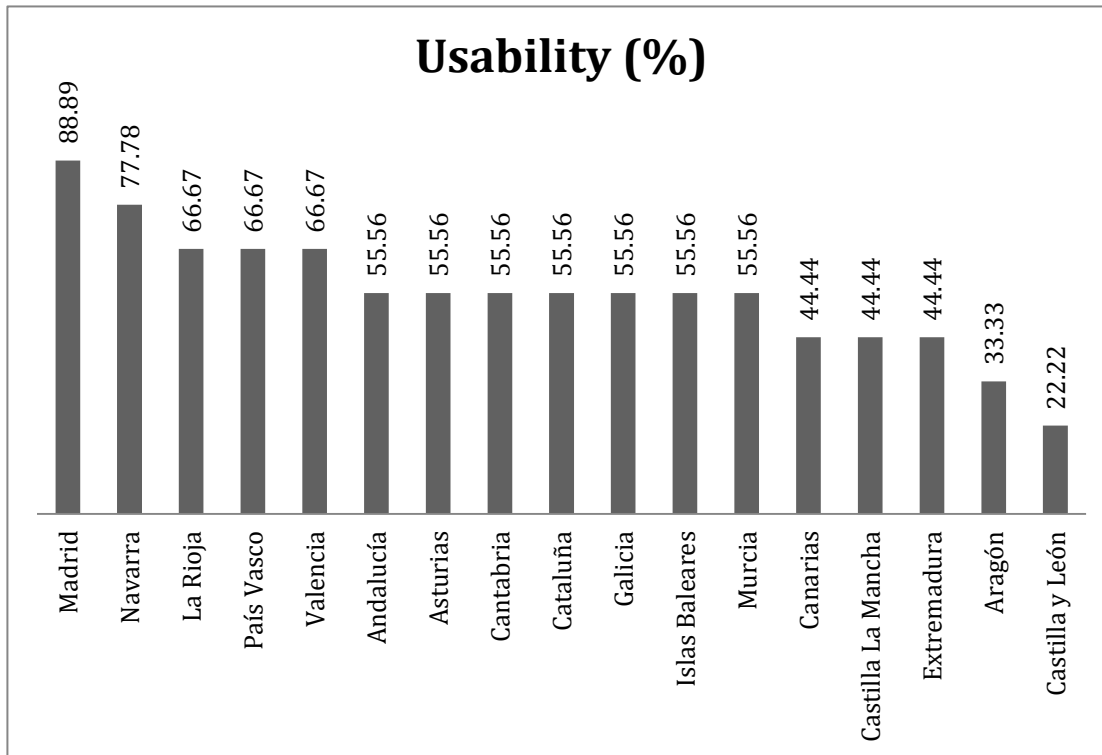
Conversely, Madrid’s legislature shows a more appropriate use of blogs as a means for interacting with the users. Already in the first page, a large link on the website is provided to the ‘blog of the President’. The contents and format of the posts that are made in the blog are

by far less institutional than the Catalanian experience in a personalized and friendly text in first person and informal language. This fairly suitable use of the tools does translate, for instance, in an increased number of comments where the citizens post one after the other and tend to engage into a dialogue. Also making proof of openness in the use of tool, it is possible not only comments of appraisal are found, but also harsh criticisms to policies and positions of the president and the parliament. Equally a link is provided to the blogs of MPs, which are grouped under list of blogs by political groups. Nonetheless, even if the prospect of having a blog is offered to every MP, only a minority will use such a facility, which reveals different perceptions that MPs have on the usefulness of such a tool as a means to engage with their constituents. In the end, only 5 out of 121 MPs will use their blogs and perceive it as an alternative channel, such as the young MP David Perez to whom blogs are “a great opportunity to share visions out of traditional media channels and with a more personal and less institutional and partisan perspective”¹¹³.

IV) Usability (average 55.5)

11 regions score above the average for usability, led by Madrid (88.9) and Navarra (77.8). The regions of La Rioja, Basque Country, follow these scores and Valencia, with 66.7 points each one of them. The lowest score identifiable on usability is for the region of Castilla y Leon (22.2).

¹¹³ Source: El Mundo “Los politicos madrilenos se lanzan a la guerra de los blogs”. January 2007. Available at: <http://www.elmundo.es/elmundo/2007/01/27/madrid/1169902792.html>

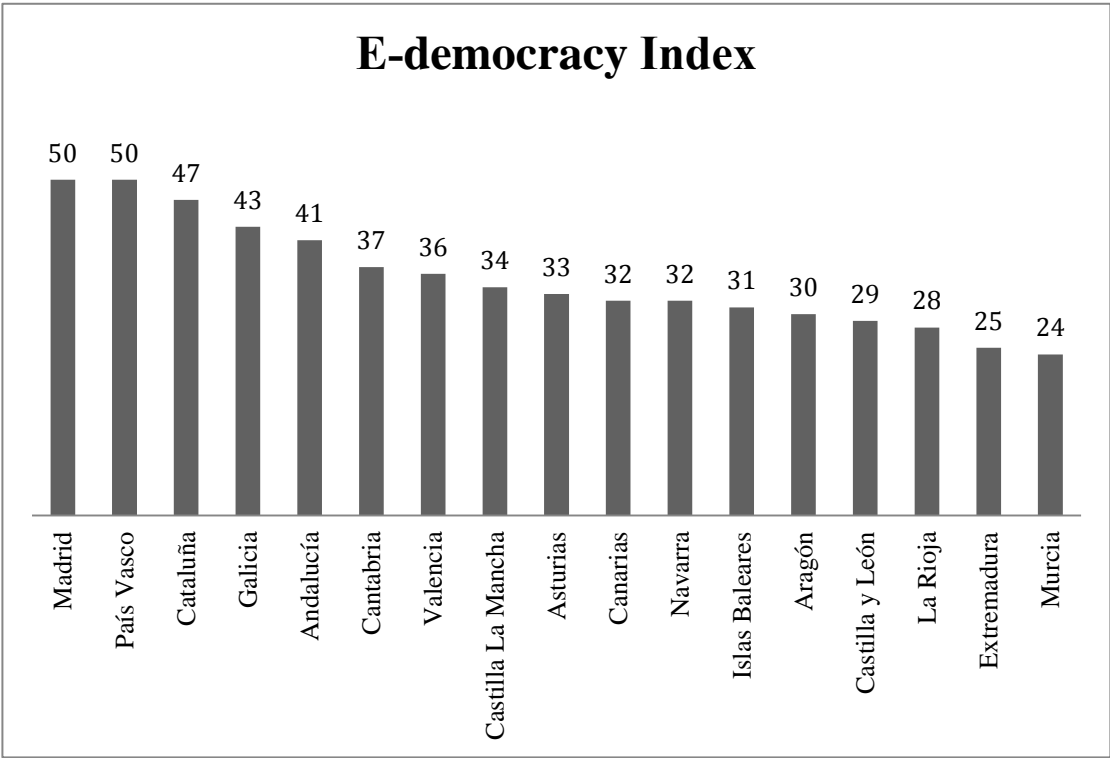


Most websites provide traditional usability tools such as search facilities and a site map (16), and a reasonable amount of websites had all links active (13), thus avoiding frustration on the part of the user when navigating the websites. The disparity found is mainly explained by the low number of websites that present sections aimed at reaching hard to reach groups such as children (9), or additional sections aimed at facilitating navigation by providing a ‘help’ or ‘how to use website’ (5) link. However, even though websites provide sections for hard to reach groups such as children, it does not mean that the facility provides an appropriate format. For example, whereas the Basque country provides a section with interactive and informative games for different ages and Cantabria provides didactical material to educators on the role of the regional parliament, Canarias provide only a PDF file called “Statute of Canarias autonomy for kids” with 32 pages! As to user-friendliness, Navarra provides an interesting tutorial for users with lower technological skills, with sections such as ‘how to watch videos’ and ‘how to use the tools on the website’. A more technological solution, Andalucía allows the users to create an account that permits them to personalize the website according to their interest in the contents of the website. Similarly, Catalonia offers over 70 options for RSS feeds and email updates, where citizens can tailor the notification service, selecting from a wide range of content that is provided in the website.

Finally, noteworthy is the effort that the majorities (11) of websites do in providing contents in more than one language. In this respect, all of the historic communities will provide a multilingual version of the website with the regional language as an option. Last, but not least, some websites will provide content in more than 2 languages, such as the Catalan website that provides information in Spanish, Catalan, Basque, Gallego, English and Occitan.

V) Overall e-democracy score (average 35.4)

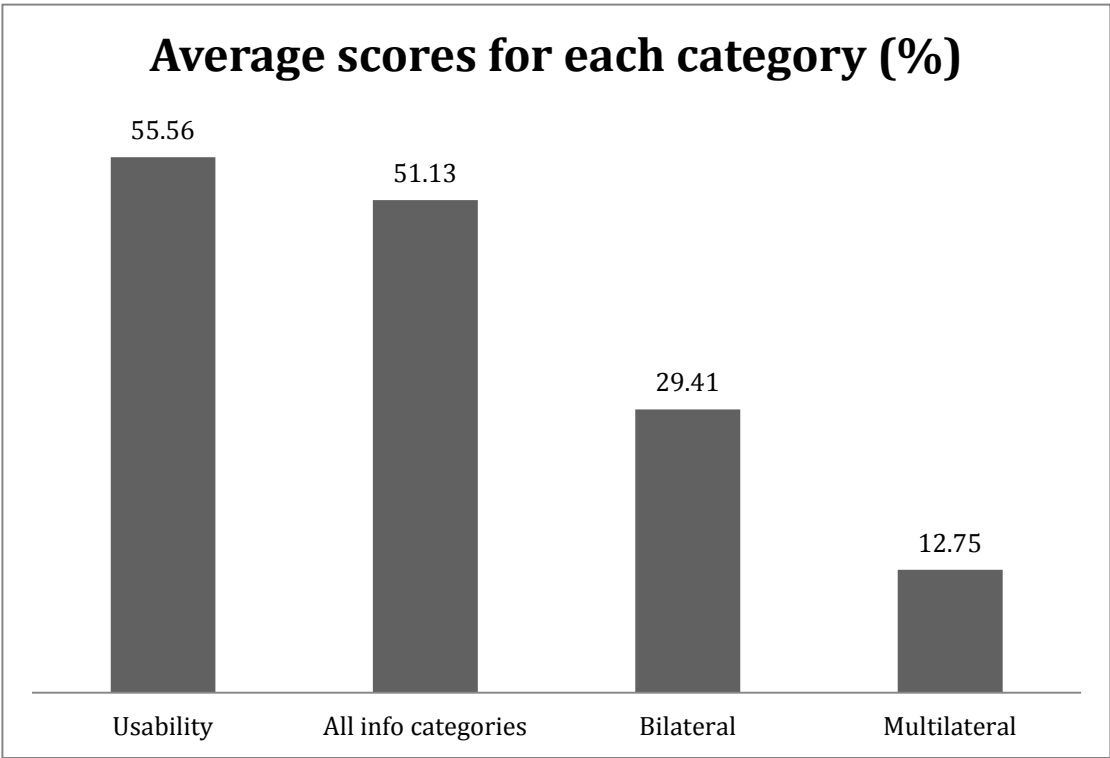
Seven parliamentary websites score above the average e-democracy score, with Madrid and Basque Country standing out well above the average (50). In third place we find Catalonia (47), which scored particularly well in provision of information and multilateral interactivity. The lowest scores are identified in the parliament websites of La Rioja (28), Extremadura (25) and Murcia (24). Needless to say, there is visible variance among the different regions, a variance that is a response to the different scores in each of the dimensions previously considered. The figure below shows the overall scores for e-democracy traits for all Spanish regional parliamentary websites.



Spanish parliamentary websites tend to privilege, by far, their *usability*. With an average of 55.5 points, the majority of Spanish websites provide traditional usability tools such as search facilities and site maps. Generally speaking, such a finding shows an overall positive trend for

making parliamentary website navigation less restrictive for the average user, allowing citizens to better benefit from the facilities provided by the websites.

The *provision of information* comes second in Spanish parliamentary websites, with an average of 51.1 points. Nonetheless, as explained before, there is significant variance concerning the type and amount of information provided, as well as how this information is provided/presented to its users. The provision of general information tends to be privileged above all other types of information, followed by the provision of legislation information. In both cases we find a general trend where most websites tend to privilege the provision of information of a static nature (e.g. the role of parliament, the legislative process) rather than more dynamic and frequently updated information. The same tendency is identified in the sub-dimension of committees' information, with few websites providing information concerning committees' routine functioning and the actions taken by its members. Considering the variance in how information is provided/presented, such a fact becomes more visible in the parliamentary debates sub-dimension where, for instance, a reduced number of websites provide archived multimedia files of the parliamentary debates. Lastly, there is an evident scarcity in the amount of information on the members of parliament, and the information that is provided still tends to be of a very static nature, with the majority of websites being characterized by the absence of individual level information on MPs.



Bilateral interactivity scores relatively low if compared to the dimensions considered above, with an average score of 29.4 points. Noteworthy is the surprisingly low number of websites that provide links to contact MPs directly (6). This trend is even lower when it concerns allowing citizens to give their opinions on issues and having their comments/questions answered by MPs or their staff. In other words, there is a less generalized trend of using the prospects of the Internet as a means to provide citizens with access to facilities that allow them to interact with parliamentary representatives and to receive feedback, which is one of the most promising possibilities offered by the Internet with regard to e-democracy.

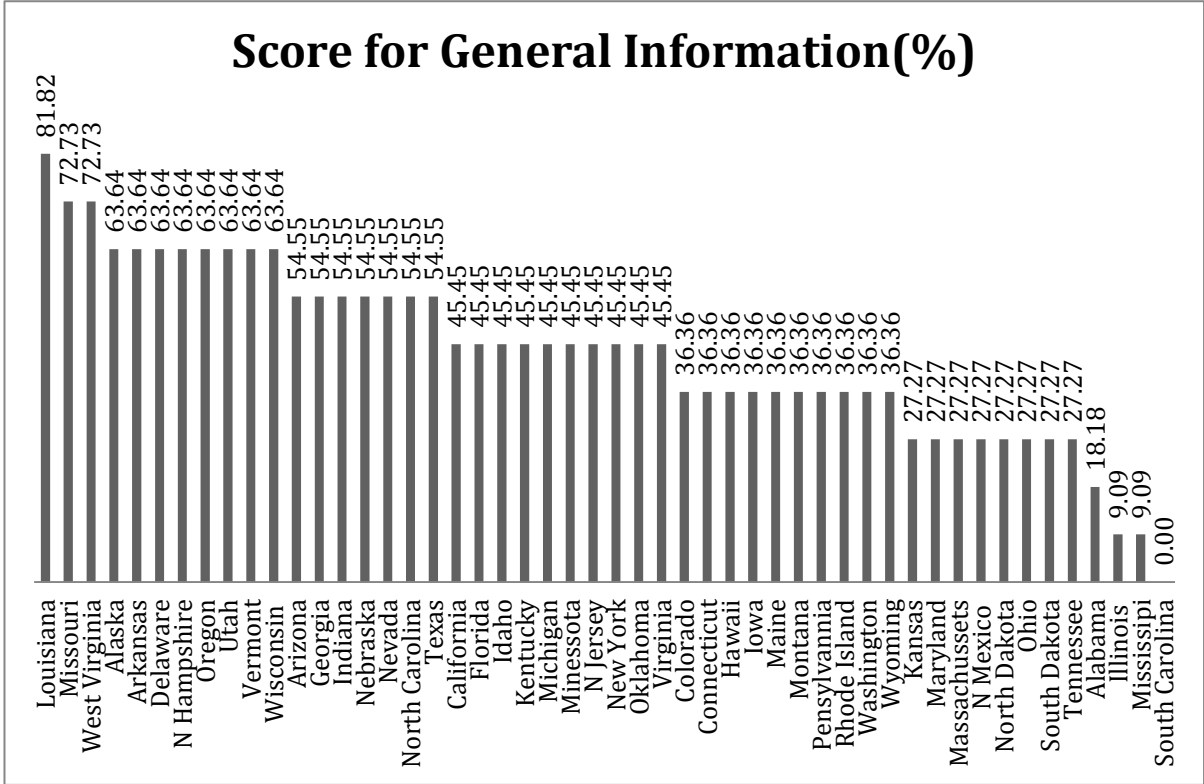
Finally, and not so unexpected, the lowest score concerns *multilateral interactivity*, with an average score of only 12.7 points. Overall, only four regions use the prospects of the Internet to allow for deliberation amongst users on parliamentary issues, with each of the regions providing distinctive prospects for online deliberation to take place.

United States

D) Information provision

a) General Information (average 43.8%)

18 websites score above the average, with the case of Louisiana distancing itself from its peers with the score of 81.82 points. Following fairly closely behind Louisiana are Missouri and West Virginia with 72.73. Below this we find a cluster of eight states – Alaska, Arkansas, Delaware, North Hampshire, Oregon, Utah, Vermont and Wisconsin– with an equal score of 63.64 points. The lowest scores are those from Illinois and Mississippi (9.09), followed by the parliamentary website of South Carolina, which provides no general information whatsoever about its parliament. The figure below shows the scores on provision of general information.

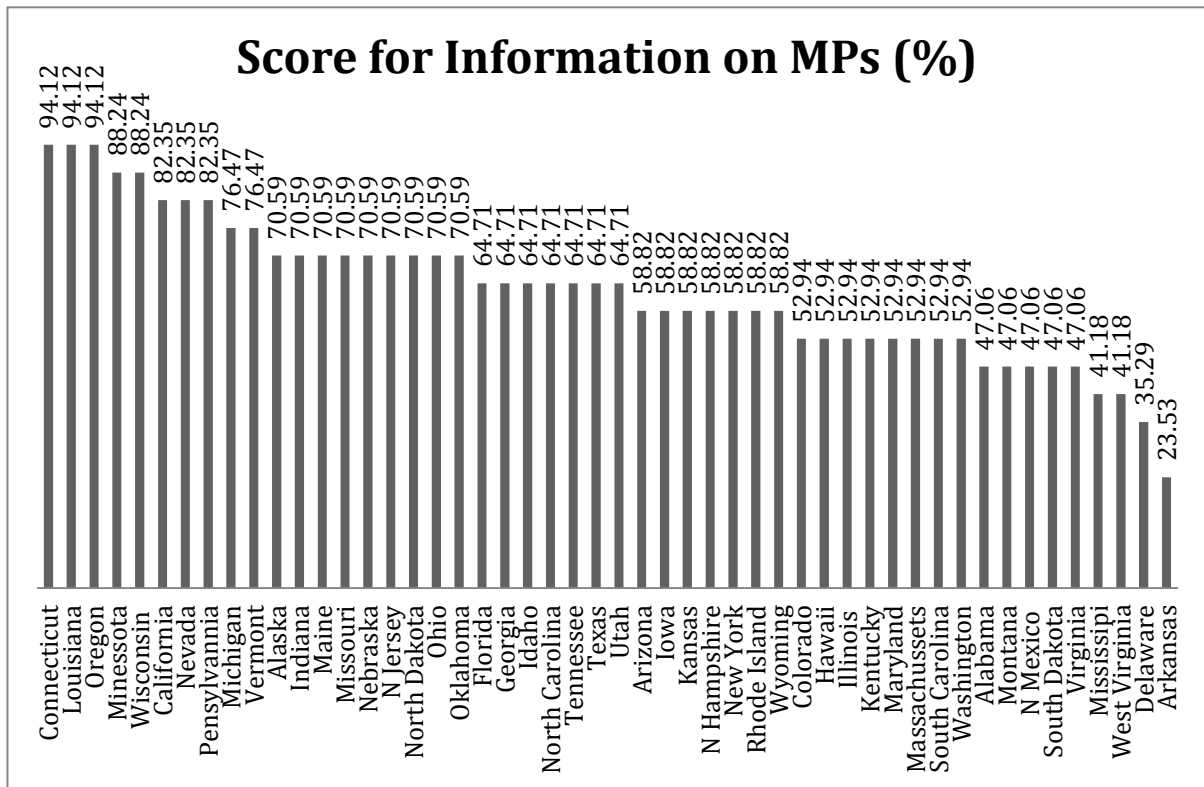


Almost all of the state websites (41) contain contact information for the parliament, (42) include a ‘what is new’ section, and 38 include a general overview or introduction to the chamber. 18 websites include a press or media section, 14 have an audio link to a news section (e.g. Kentucky, Utah, Wyoming) and 11 have a video link to such a section. The legislature of

Arkansas website innovates in this respect, presenting a weekly audio program where speaker of the house provides news and comments the latest activities of the legislatures. However, the same application is inexistent to the MPs, which leads one to question such a tool is a means of provision of institutional information or an isolated initiative of self-promotion by the part of the speaker of the house. Almost half of the websites (23) offer the opportunity to subscribe to receive the latest news via e-mail (e.g. Kentucky, Iowa, Louisiana). 28 websites provide a virtual panorama of the parliament. In this category of virtual visit the Utah legislature website allows citizens to literally effectuate a virtual visit on the different spaces of the legislature as they learn more about the activities of the Parliament in a rather accessible and entertaining manner. As to the traffic of legislature websites i.e. the number of accesses that are made to the websites, only 3 include statistics regarding the number of hits on the website (Louisiana, Pennsylvania and Rhode Island). Even though we do not aim to speculate the reasons for the majority of websites of not providing the users with the number of accesses, there is evidence that most legislatures refrain from providing evidence on the demand side of the legislative website, that is, to what extent a website is accessed. 12 websites provide links to other legislatures and fewer (11) provide a link to local assemblies/governments (e.g. Wisconsin, Louisiana and Minnesota). Interestingly, the state of Wisconsin also provides a rather unexpected link to a watchdog organization that aims to track lobbying initiatives in the legislature. Finally, the Washington state legislature website renders service by providing a link to a website where the request for voter registration can be made online.

b) Information on members of the parliament (average 63.18%)

26 parliamentary websites score above the average, with three states scoring as high as 94.12 points: Connecticut, Louisiana and Oregon. Minnesota and Wisconsin state parliaments come in joint second place with a score of 88.24 points, followed by a cluster of three parliamentary websites with an equal score of 82.35 points: California, Nevada, and Pennsylvania. The lowest scores are those from Delaware (35.29) and Arkansas (23.53). The figure below shows the scores for information on members of the parliament.



All 50 states include a list of members and of these, 46 include a list by constituency, 32 by political group, and 2 include a list by gender (Idaho and Nevada), where this prominence of listing by constituency rather than by political group might be explained by the electoral system of single-member district system used in the majority of U.S. states. In fact, the territorial dimension of constituencies is reflected in the majority of websites that provide information on MPs based on geographic information systems, such as finding MPs by providing postal codes to the website, or through interactive maps where citizens can find their state representatives by clicking in their area (district) of residency (e.g. Delaware, Minnesota, Montana and Wisconsin).

The vast majority of websites (39) contain a guide to the role of the parliamentary members and even more (43) contain biographies of the members. Most of the personal information is provided on text format, even though some states innovate on how this information is provided. In the Wisconsin state legislature website, added to the bio information on text format for each MP, there is also a ‘greeting from your MP’ in audio format. For Minnesota and Georgia each MP can have a video with a personal message that is available in their bio section. In this respect it is important to underline that when a website offer the possibility for MPs to have their personal information (bios) online, not all MPs have their bio online, even

though in the majority of websites (42) most MPs include their biographies(e.g. Kentucky, Louisiana). Even though we are not approaching this matter at this specific section of the work, one can hypothesize that the explanation for why not all MPs disclose their personal information online might be a result of the different perceptions among MPs on the importance of the legislative website as a means for provision of information and communication. Just over a third of the websites (16) include links to the personal websites of MPs and, of these, 12 websites have links to the personal websites of the majority of members.

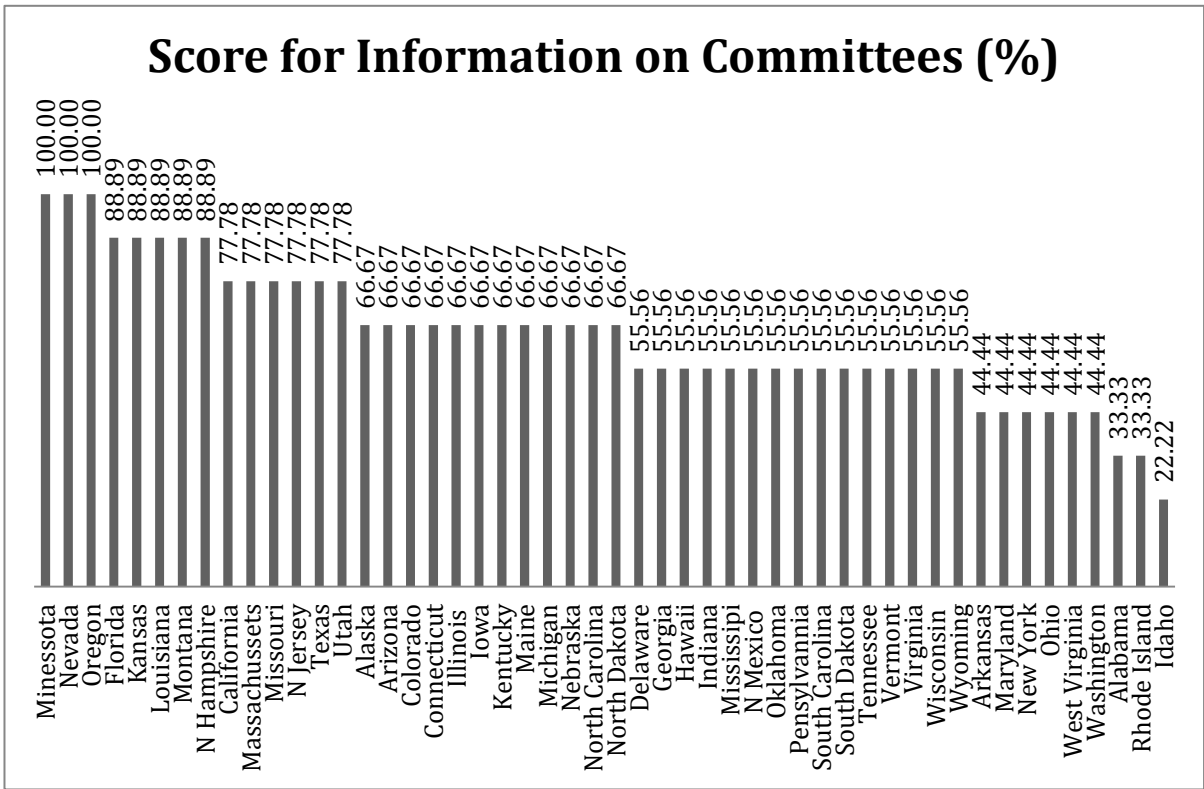
A great number of the websites (37) include interventions from the members (e.g. California, Connecticut, Louisiana, Michigan) and in most cases this applies to the majority of members of a given legislature. The Minnesota website provides also the opportunity to follow news about the MPs by subscribing to a mail/RSS feeds systems. A great number of the websites (41) provide information on how members have voted on particular issues and a similar number (32) permit users to find out how members have voted on commissions (e.g. Louisiana, Connecticut and Minnesota), while 33 of the websites allow the user to identify members' individual level of attendance at plenary sessions. However, there is clear difference among the websites on whether this information is easily accessible or not. For instance in some cases the user must check all the bills in order to single out those that have been sponsored by his MP, whereas in other cases this information is listed directly on the MP's section (e.g. Washington, Wisconsin). In North Carolina and New Hampshire websites for instance, by navigating on MPs section users can see all the bills that have been sponsored by the MP and their status. Also, in an easy and accessible format, citizens can visualize all the votes cast by the MP, the subject, the date and also if the bills/motions were passed or not and with which score. If the MP was absent during the voting the websites show it in red and indicates if the absence was excused or not.

While almost all of the websites (49) provide contact information such as a street address or a phone number for most MPs, only 12 provide web services such as individual MPs' blogs (e.g. Wisconsin, Oregon). As to the transparency concerning information on pay and conditions of members, most of legislatures seem to be reluctant to present such information, with only 14 include information about members' pay and conditions (e.g. Connecticut, Minnesota).

c) Information on committees (average: 64.00%)

26 countries score above the average, with Minnesota, Nevada and Oregon achieving the noteworthy score of 100 points. Secondly, we find a cluster of five parliamentary websites – Florida, Kansas, Louisiana, Montana, and North Hampshire – with scores around 25 points above the average (88.89). The parliamentary website that provides the least information on its committees is Idaho, scoring just 22.22 points. The figure bellows shows the score for parliamentary websites on the provision of information on committees.

Florida presents a visible section of podcasts (audio files) of most of the committees meeting that is permanently updated, allowing the interested user to download the committee sections and listening to these files on their convenience, be either through a PC or an audio player (e.g. cellphone)

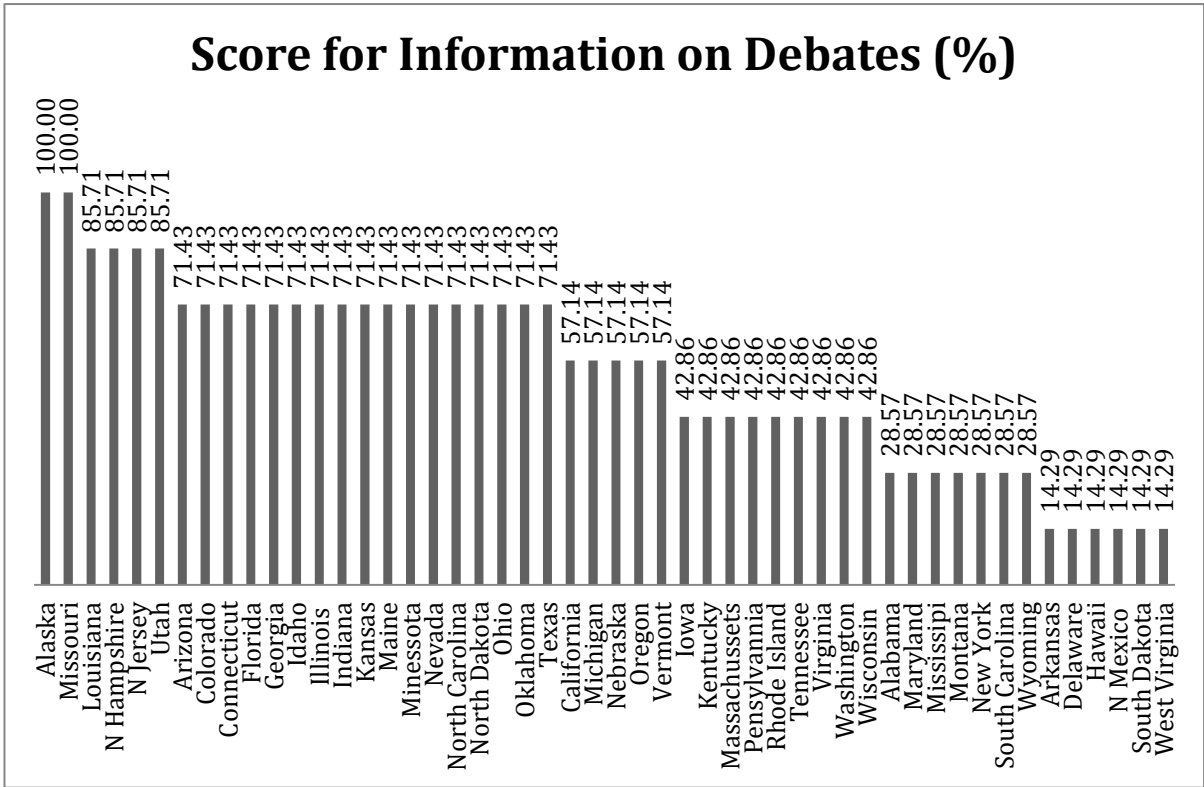


All 50 of the parliamentary websites provide a list of committees. The vast majority of the websites (49) also list the members of the committees, and 25 of these provide information about members’ interventions in the committees (e.g. Nevada, New Jersey, Wyoming). Around two thirds of the websites (36) provide a guide to the role of the committees and a similar number (38) include a list of committee publications or reports (e.g. Louisiana, Nevada, New Jersey). Almost all of the websites (48) include a schedule for future committee meetings. In

Hawaii state legislature website a feature is available that enables the user, by simply entering a bill number, to easily find access to documentations on previous committee hearings and to be notified on upcoming hearings. Also, by clicking on the ‘Show Hearing Notices’ link at the top of every bill status page, previous and upcoming hearing notices and reports are shown. Nearly a third of the websites (14) contain an audio link to committees and a similar number (15) contain a video link to committees (e.g. Oregon, Tennessee, Texas). For instance, Arizona legislature website provides a system that will search relevant videos on committee hearings by simply entering bill numbers or keywords.

d) Information on parliamentary debates (average 54.3%)

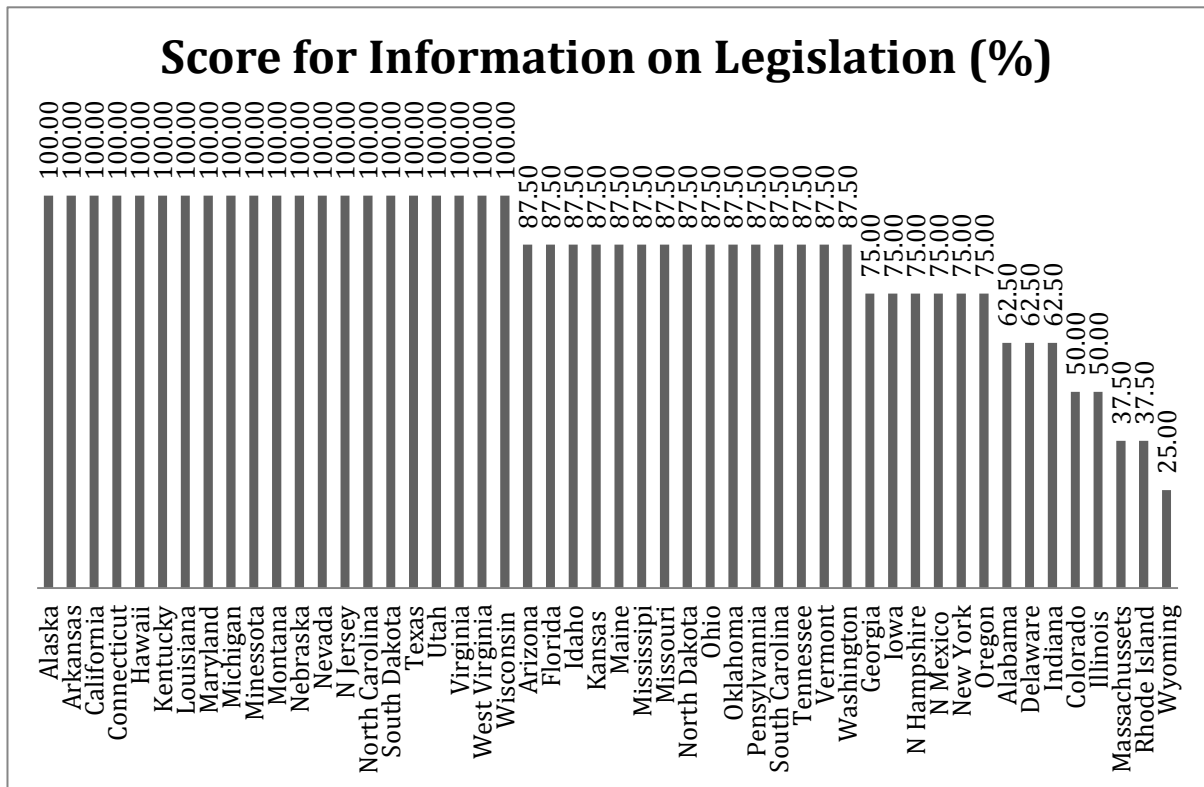
28 parliamentary websites score above the average, with the websites of Alaska and Missouri scoring 100 points in provision of information on parliamentary debates. Far below these, the parliamentary websites of Louisiana, North Hampshire, New Jersey and Utah come in second with 85.71 points, followed by a cluster of 17 websites (e.g. Florida, Minnesota) with 71.43 points. A cluster of 6 websites represents the lowest scores, with just 14.29 points: Arkansas, Delaware, Hawaii, New Mexico, South Dakota and West Virginia.



Almost all of the websites (48) include a schedule of parliamentary debates. 31 websites provide a facility for accessing online the full text of debates (e.g. Alaska, Louisiana, Missouri, New Jersey), and in all cases these texts are archived. A great number of the websites (27) provide an audio facility for listening to debates, of which 10 include audio archives (e.g. Alaska, New Jersey, Texas), and 32 provide a live video facility for watching debates, of which 12 include video archives (e.g. Arizona, Tennessee, Missouri). Here again, Arizona legislature website renders easier to its users the access to relevant multimedia files: by simply entering keywords or bill numbers a system will retrieve videos on debates that have taken place on the floor.

e) Provision of information on legislation (average 85%):

An outstanding average is identified in the sub-dimension of provision of information on legislation, with an average score of 85.00. Even more surprising, a total of 21 parliamentary websites score the total of 100 points (e.g. California, Texas). These numbers are followed by a cluster of 15 parliamentary websites that score a total of 87.5 points, such as Florida, Maine and Vermont. This means that, in the majority of the cases, users across different states in the United States can have access – despite different degrees of accessibility – to all or most of the information regarding legislation in their states. The lowest scores are those of Massachusetts and Rhode Island (37.5), followed by Wyoming (25). The figure below shows the overall results of provision of information on legislation.

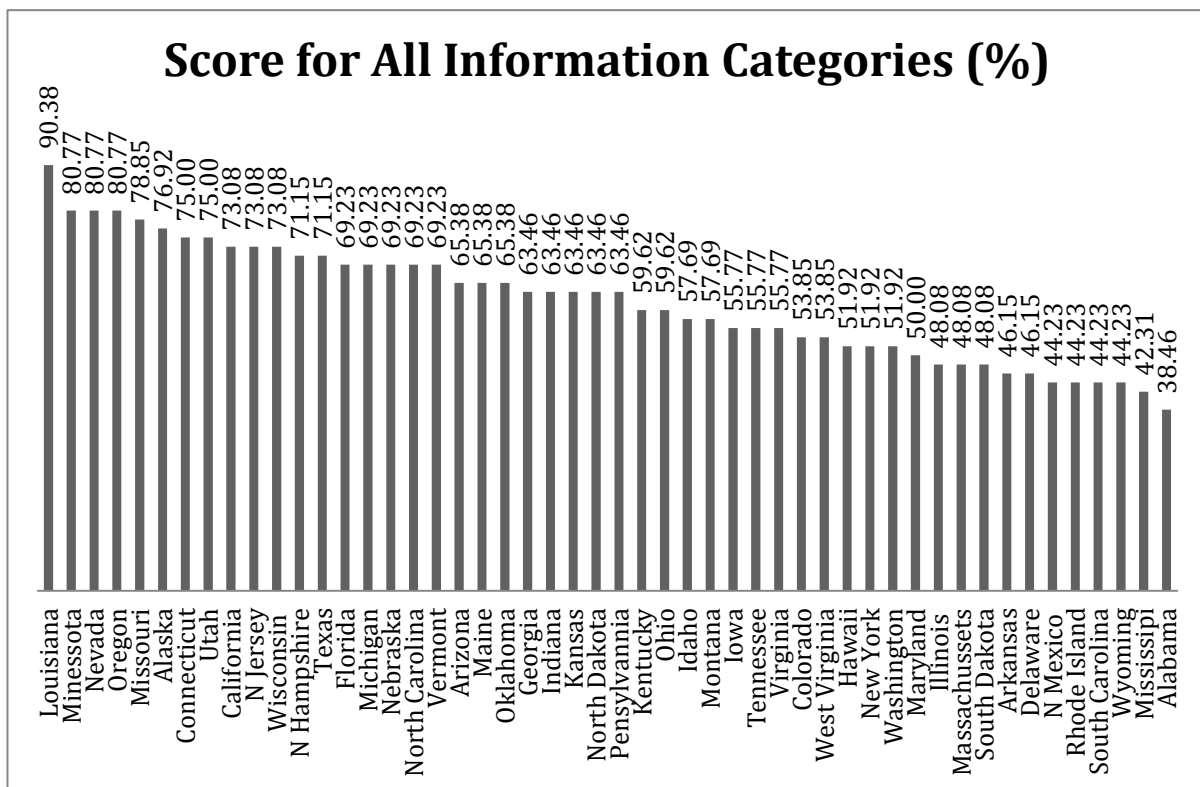


Almost all of the websites (48) include a list of pending or ongoing legislation, where 41 provide an indexed list and 46 provide a search facility for such legislation (e.g. Kentucky, Louisiana, Michigan). In the New Hampshire website citizens can also access the roll call of votes by MP, bill or keywords. The same number (46) provide a list of passed legislation, where 42 include an indexed list and 47 include a search facility for passed legislation (e.g. Hawaii, Iowa, Maryland). The website of Utah state legislature provide audio clips for each of the bills: by simply entering a bill number or a subject, excerpts from committee and floor debates concerning the bill are displayed. These audio links are complemented by links to other relevant information such as fiscal notes, minutes, reports and votes' roll call.

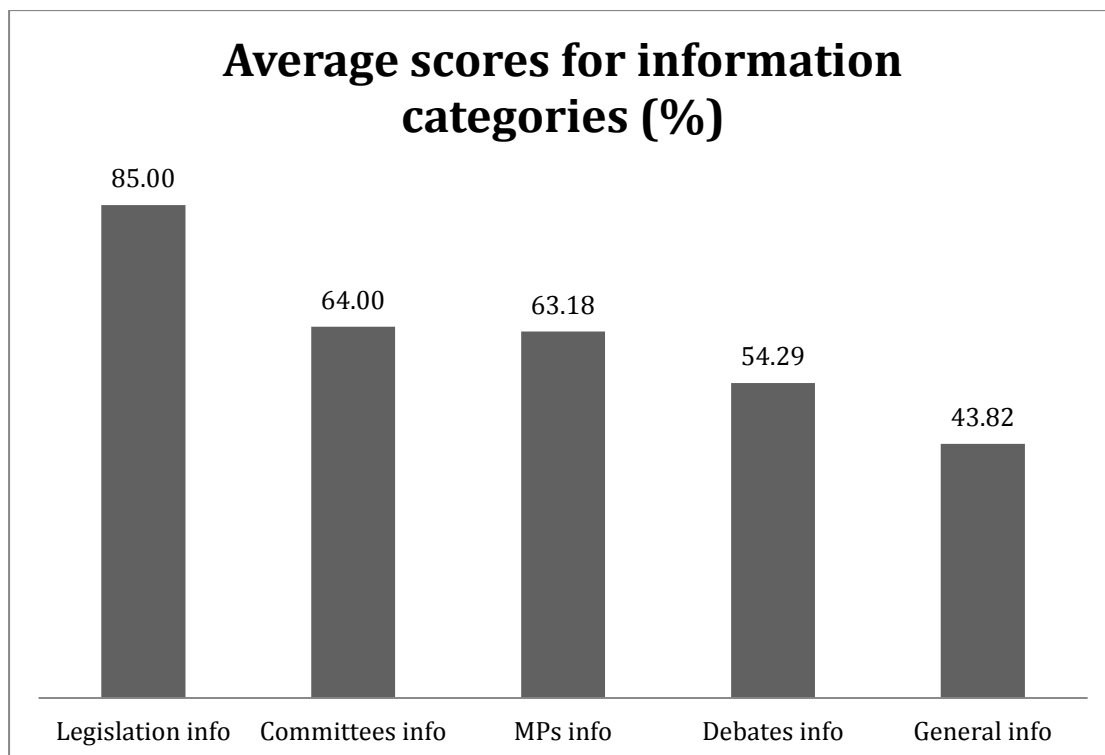
Finally, 41 websites provide a guide to the legislative process and 29 offer the opportunity to subscribe to news updates concerning ongoing legislation via e-mail (e.g., North Carolina, Montana). For any other information that might not be available online, New Jersey legislature website provides an online request form for legislative records. Other legislature websites such as the one from Michigan contains a personal page where citizens can save the legislation of their interested which is automatically updated as new legislative procedures take place (e.g. voting, hearings).

g) Overall score for the provision of information dimension (average 61.4%)

A total of 26 state parliament websites scored above the average, with Louisiana standing out with the notable score of 90.38 points, followed by Minnesota, Nevada and Oregon with 80.77 points each. The lowest scores are represented by Mississippi (42.31) and Alabama (38.46). The figure below shows the overall scores for the provision of information on parliamentary websites in the US.



In an overall perspective, it can be said that the parliamentary websites of the United States tend to provide more *information on legislation*, with an average score of 85.00 points and with over one third of the websites (21) scoring the total possible points. In this sub-dimension the different scores are explained mainly by the existence or lack of tools that enable users to be notified on updates concerning particular legislative actions.



Secondly, we find *information on committees'* actions as the second most recurrent type of information available on the U.S. parliamentary websites, with an average of 64.00 points. In this case, the difference among the different scores is explained mainly by the use of multimedia tools for accessing the debates, particularly with a reduced number of websites providing archived audio/video files.

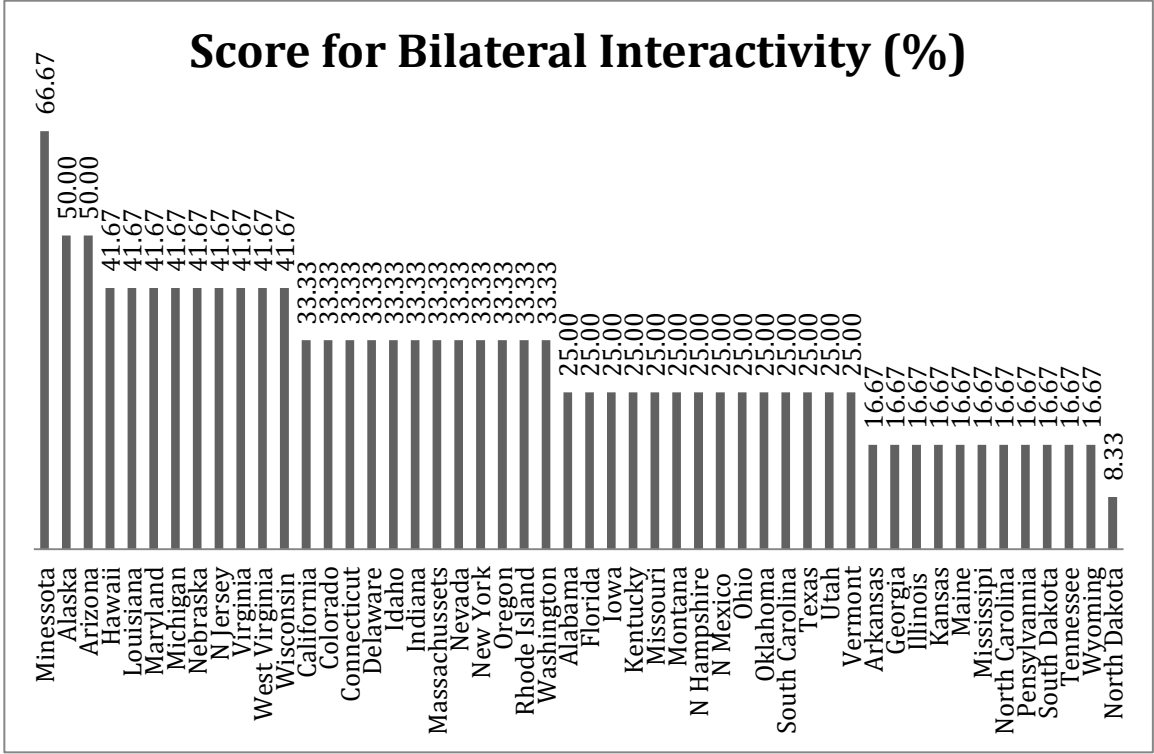
The third most common kind of information to be found on U.S. parliamentary websites is *information on members of the parliament*. In this case, but to a lesser degree, one finds the general trend of privileging the provision of static information, such as lists of MPs by constituency and political group. Still, an elevated number of websites provides information about the interventions of MPs in Parliament. A reduced number of websites however will provide facilities such as links to MPs' individual websites. It is also worth noting that a very reduced number of websites (14), provide information about the pay and conditions of MPs.

Information on debates, in fourth, also reaches a very reasonable score of 54.29 points. Similar to the case of *information on committees*, the verified discrepancy in scores refers ultimately to the use of multimedia tools and to whether they are archived or not.

Finally, the lowest score refers to the provision of *general information*, with a total of 43.82 points. In this case variance is explained by a series of factors such as multimedia links to news sections and the provision of information such as the number of hits on the website.

II) Bilateral Interactivity (average 29.7%)

If compared to information provision, a much lower average is identified in the bilateral interactivity (e.g. e-mail addresses of MPs and staff) dimension. The highest score belongs to the parliamentary website of Minnesota (66.67), followed by the states of Alaska and Arizona, with 50.00 points each. Thirdly, a cluster of nine parliamentary websites score well above the average with a total score of 41.67 points: Hawaii, Louisiana, Maryland, Michigan, Nebraska, New Jersey Virginia, West Virginia and Wisconsin. In fourth place, a cluster of 12 parliamentary websites reasonably situated above the average (33.33) is noticeable. The parliamentary website of North Dakota is the one that offers the least opportunities for bilateral interactivity, with the score of 8.33 points. The figure below shows the overall results of the bilateral interactivity dimension.



Almost all of the websites (49) have a facility for notifying the webmaster of problems with the website and 21 websites provide a link to an office responsible for responding to general or political enquiries.

22 provide a link to an office that investigates complaints from members of the public about the government (e.g. Nebraska, New Jersey, Texas), Only 13 websites provide any guidelines for submitting such enquiries or feedback and only six permit feedback on issues to be given online (e.g. Indiana, Minnesota, Nevada). On none of the websites can citizens suggest new discussion topics or issues, although 4 give citizens a facility for commenting on the website. While almost all of the websites (46) provide a link for contacting MPs individually, only 10 provide a link for contacting the commissions (e.g. Hawaii, Maryland, Minnesota). Very few websites (5) allow citizens to register for committee hearing testimony online (e.g. New York, Arizona), and even fewer (2) allow citizens to submit committee hearing testimony online (Alaska and Hawaii).

In most cases citizens have to comply with rather heavy procedures to be able to testify, such as writing a postal letter with photocopies of the ID, which might discourage citizens who might be willing to take a stand. However, a few (5) legislatures have used their websites to lower the costs of participation for citizens willing to testify on committee hearings. For instance the state legislature websites of Arizona, Hawaii and Massachusetts websites allows for simple and accessible online registration for budget hearings, which might have an effect on encouraging citizens other than the 'usual suspects' to take part in the process. The Hawaii state legislature websites goes further and since 2002 has offered citizens the possibility to submit testimony to the committees online. Besides of providing an email for the submission of the testimony, in the Hawaiian website useful information for citizen participation and a guide on how to testify to the committee is provided. In this respect, as a means to assist citizens in a didactical way in their testimony, legislature websites such as those of Connecticut and Oregon offer videos guides on 'how to testify' on hearings.

In order to allow better interaction between citizens and MPs during the period that the legislature is in session, Alaska state legislature website provides an interesting tool denominated POM (public opinion messaging). POM is described as short messages (50 words max) that allow registered voters in the state to express to legislators and committees "an opinion on a matter facing the legislature". Even though the website does not disclose to the

public the messages that are sent to the MPs and the number of messages that are sent, a simple search on the Internet reveals the popularity of the system among certain civil society and advocacy groups, that on their websites provide links to the service followed by instructions on how to use it effectively and strongly encouraging their supporters to use the POM system¹¹⁴.

In a similar system the California legislature website offers a system where citizens can provide input on ongoing legislation. In order to do so, citizens must enter a bill number and to enter their comments – opposition, support, suggestions for amendments – and the website deliver the comments to the author of the bill. Here, similar as the Hawaiian POM system, the comments that are made are not displayed to the public, and there is no mention to the possibility of citizens getting feedback on their comments, which might lead some mores skeptical citizens to question the validity of taking their time on using such systems.

Another interesting case is the Nevada state legislature website and its online poll which enables Nevada constituents to support or oppose a bill and to justify their positions. By simply providing a bill number the original summary of the bill and its current title is displayed. Given the fact that in order to indicate their position towards a bill the constituents must provide their address “in order to accurately determine the legislative district in which you (i.e. the constituent) reside”, allows legislators to single out in the myriad of feedback that is offered the positions on legislation from those of their own constituencies. This information is also displayed on the legislative website, i.e. users can see the numbers of support and oppositions to bills and the respective comments classified by different criteria, such as by city, by district or by bill. The fact that the feedback provided by citizens is displayed for the users is by no means trivial. Compared to the websites of the legislatures of California and Alaska where citizens feedback on legislation is provided but users are not able to see the position of others, Nevada state legislature polls takes one step further towards transparency on the comments, criticisms and appraisals that are received by the legislative website. Besides, publicizing comments might have an effect on encouraging other users to take action in stating their position towards legislation. Last, but not least, once it is quite evident to the general public the take up that some positions/opinions may have might generate an additional incentive to reactivity, with MPs or the legislature providing feedback on the subject.

¹¹⁴ See for example <http://www.akvoters.org/action.htm>

Particular interesting is the fact that, in a context of economic crisis where the majority of U.S. states are facing budget gaps, it is possible to identify some incipient ICT mediated initiatives taking place in United States' aiming – at least supposedly – to increase transparency and get citizens involved in the budgetary process. In this respect, the use of websites by governments as a means to increase budgetary transparency by providing easily accessible information is a recent phenomenon in the United States, as documented by *The Center for Fiscal Accountability*¹¹⁵ which provides a listing of 26 state websites that have gone live between mid 2007 and march 2008 with the aim of providing more transparency and get feedback from citizens on budgetary issues. A few legislatures also seem to start to follow this path.

For instance, Nevada State Legislature has also made available on its website a link to a section called 'Public Suggestions Concerning Budget Reductions'. According to the website "The Legislature would like to invite the public to submit comments and suggestions for budget reductions and savings." As support information to users who might want to provide their feedback, a link is also provided to the summary minutes of *Town Hall Meetings on the State Budget* held by the legislators with their constituents. A special link is also provided to a section dedicated to the theme of The American Recovery and Reinvestment Act, commonly referred as 'federal stimulus' legislation. This link provides information concerning Nevada's legislation and legislative hearings on the subject; describe the components of the Act, and links to other useful sites.

The Minnesota House of Representatives website has also set up a section where citizens are able to suggest alternatives on how to confront Minnesota's budget deficit. However, in both the Minnesota initiative, no information whatsoever is provided with regard to the budgetary conditions of the state. The fact that a legislature ask the general public to come up with suggestions concerning budgetary resources when no substantive information on the budget and its process is provided raises the question of to what extent these initiatives are being taken seriously by those who design them.

Even though in this research we look specifically at legislature websites, in Iowa State it is possible to identify an interesting phenomenon that takes place that is indirectly linked to the use of websites by state legislature and worth mentioning. The Democratic Caucus of Iowa

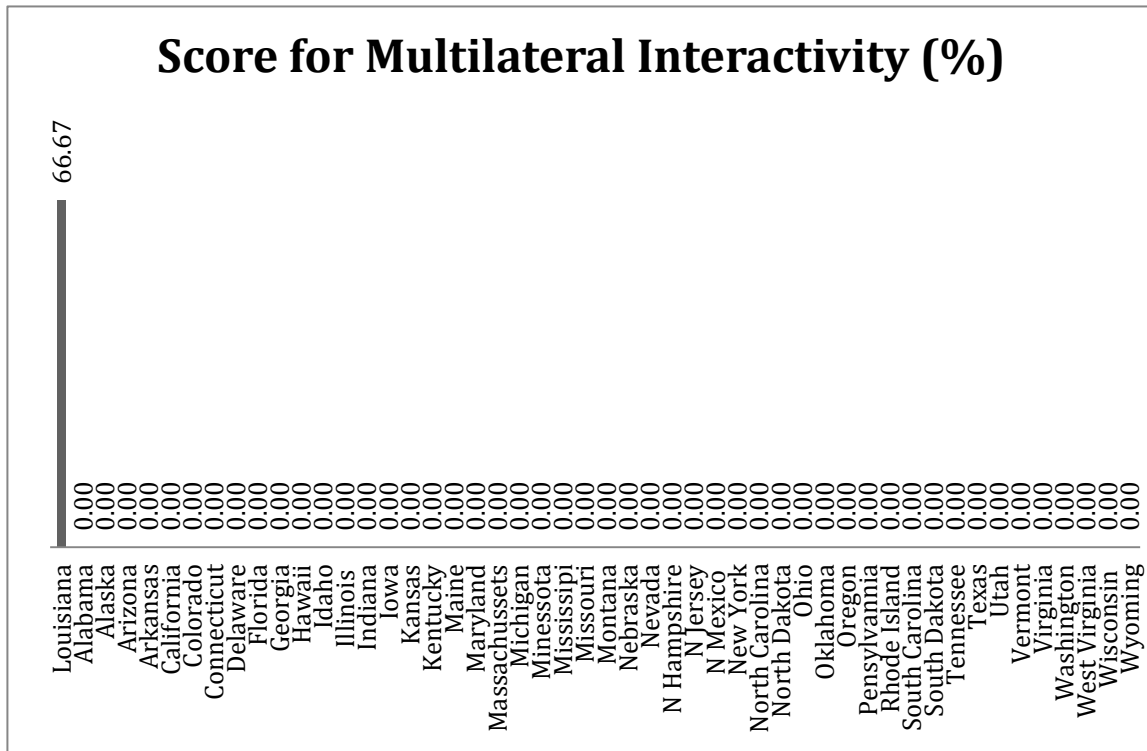
¹¹⁵ <http://www.fiscalaccountability.org/userfiles/021809ot-cfa-4pager.pdf> (last accessed march 2009)

House of Representatives launched in January 2009 a website called ‘Open Budget Project’¹¹⁶ a website that, according to its description, “seeks to bring some transparency and public input into the budgeting process in a difficult budget year.” The democratic caucus’ website, besides of giving users the possibility of giving feedback on various budgetary issues, presents in an easy and accessible manner the information concerning the state budget. Also, the website links back to official resources such as legislative staff and official fiscal analysis prepared by legislative staff, in an apparent attempt to give a veneer of nonpartisanship (even though most of the analysis presented are clearly from the perspective of the Democratic Party). Interestingly, such an initiative contrasts with the website of the Iowa Legislature where the same democrats are the majority in both houses: no feedback can be provided by citizens on any section of the website and the provision of information on budgetary issues is, despite its availability, poorly accessible and counter-intuitively spread across different sections of the website. The reasons for such a disparity between the legislature website and the one of the party that holds majority in the legislature is rather intriguing. Even though we do not aim to solve this puzzle at this moment of the research, we suspect that such disparity might somehow be related to the role that civil servants of the legislature might have on the enactment of technologies, a subject that is explored further on this research.

III) Multilateral Interactivity (average 1.3%)

Compared to the previous dimensions considered, the average score for multilateral interactivity is extremely low at just one point. Out of the 50 parliamentary websites, only one – Louisiana – uses the prospects of the Internet to support multilateral interactivity. Worth noticing, even though such a finding might appear as counter-intuitive to external observers, previous studies have already underlined Louisiana’s prominent role on promoting online Interactivity (Ferber 2003, 2005).

¹¹⁶ <http://iowahouse.org/open-budget/>



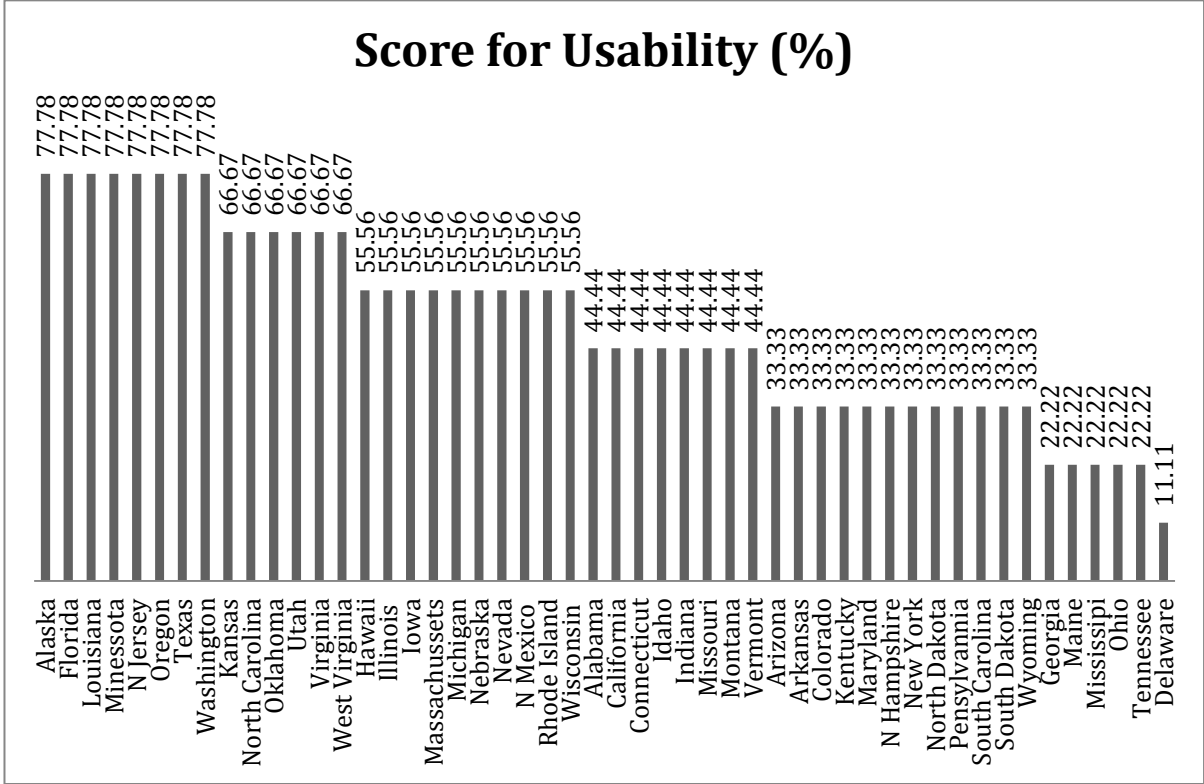
Louisiana is the only website that, by providing a blog with comments that can be archived allows the website users to debate among themselves as their comments are posted. However, if the blog is available and the comments function is enabled the low number of visitors is clear. For instance, between 2008 and 2009 the website registered a number inferior to 4.000 visitors¹¹⁷. Also, a very low number of comments to the posts made in the blog are evident, with more than 95% of the posts without any comment made. Even though with the amount of information that we dispose it is not possible to explain the reasons for such a low traffic and number of comments, it is likely that the rather institutional language and contents of the posts, which are inappropriate for a tool as a blog, are one of the reasons to which users have not been drawn to the legislature blog and to post comments whenever accessing it.

IV) Usability (average 49.1%)

24 websites score above the average of 49.11, with the parliamentary websites of Alaska, Florida, Louisiana, Minnesota, New Jersey, Oregon, Texas and Washington being the most user-friendly (77.78). In second place, a cluster of six parliamentary websites also score well above the average with a total of 66.67 points each: Kansas, North Carolina, Oklahoma, Utah,

¹¹⁷ Measured from 4th April 2008 to 4th April 2009. Last accessed 07/04/09

Virginia and West Virginia. Thirdly, we find another cluster of 10 parliamentary websites fairly above the average with 55.56 points each. The website that is the least user-friendly is that of Delaware (11.11). The figure below shows the overall results for the usability of the parliamentary websites.



31 websites include an internal search facility for the site whereas 42 contain separate search facilities for specific sections of the site. Over half of the websites (29) include a site map, while only four have an A-Z index (e.g. Oregon, Washington). On most of the websites (32) all of the links are active, and on 30 websites a FAQ section is available. Half of the websites (25) provide a ‘help’ or ‘how to use’ section. However, if different websites make different efforts to make sure that citizens can find the information they are looking for whenever online, Virginia state legislature website provides by far the most innovative and useful resource on this matter. While a few states provide a number of ‘hotlines’ so that the constituent can contact by phone the legislature for inquiries on legislative information, Virginia legislature website has taken this function online: by simply clicking on a ‘Live Help’ button situated at the bottom of the first page of the website, citizens can actually have a live ‘chat’ with a member of the legislative staff who is trained to provide all the information that an average citizen might want to find about the Virginia General Assembly and the contents of the website

itself. Given that this functionality is available only during weekdays from 9.am to 4.pm, whenever a citizen contacts the service on a time that the service is not available, there is the option to leave a message that is later replied by a member of the staff. On three occasions we have tested this functionality and during the ‘live chat’ the answers provided by the staff member were precise and in a friendly tone, which one would assume makes the navigation of the website not only easier but also an agreeable and surprising experience.

Around half of the websites (22) have facilities for difficult to reach groups, such as children (e.g. Louisiana, Washington). For instance, Florida State Legislature offer a broad section specifically designed for kids, where illustrated information and online games can be used by professors as a didactic tool in classrooms to teach children on the role of the state legislature. Finally, as to the provision of information in other language than English, only the websites of Colorado, New Jersey, New Mexico, Oregon, Rhode Island and Washington provide any information in Spanish. Having said that, it is important to underline that when websites provided information in Spanish, these websites did not provide any extensive in information in Spanish, with only small sections such as ‘who we are’ and ‘how a bill becomes law’ being translated from English. The fact that most websites do not provide any information in Spanish seems to be somehow disconnected from the linguistic context of the country, where 12.3% of the population has Spanish as a first language¹¹⁸. This is particularly striking for the websites of Texas Legislature and California Legislature, where respectively 29.3 and 28.5 percent of the population speaks Spanish as a first language¹¹⁹ and where the ‘latino voter’ is particularly courted – at least during election periods.

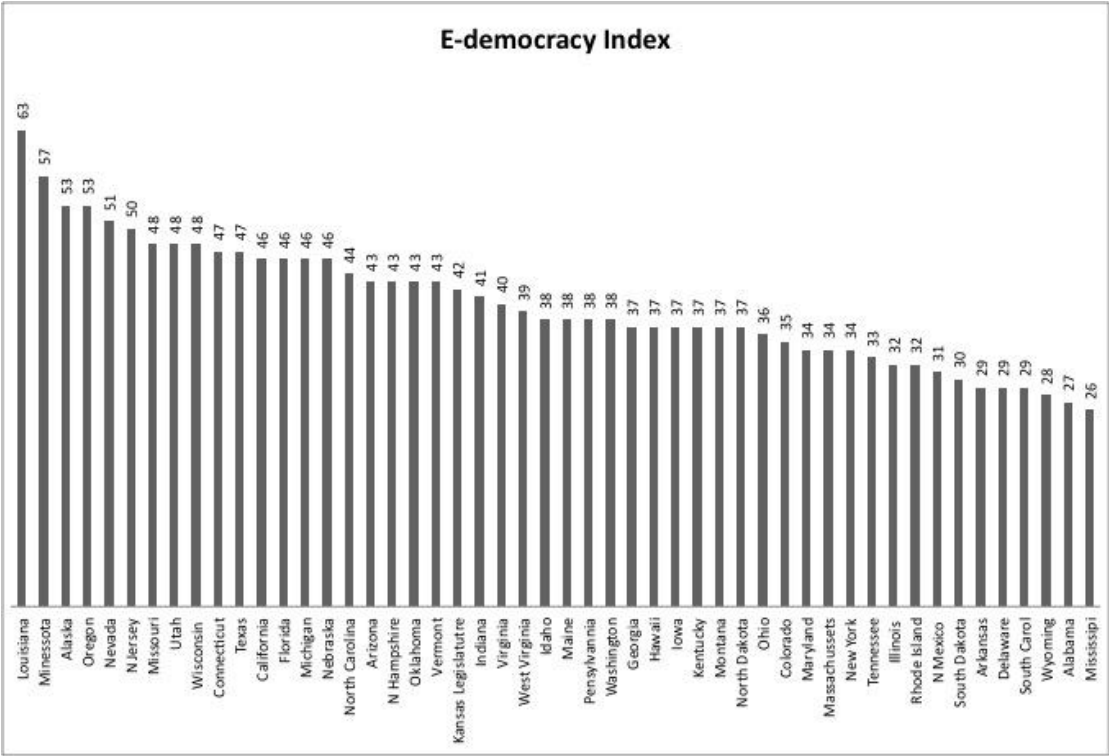
V) Overall e-democracy score (average 40)

23 parliamentary websites score above the average, with the case of Louisiana boasting above all the others a total of 62 points, having scored well above the average in every dimension taken into account in this analysis. In second, we find the parliamentary website of the state of Minnesota, which also presented significant scores above the average in the previous dimensions considered. In third place we find the states of Alaska and Oregon (53), followed closely by the state of Nevada. (51). While the state Legislature of Louisiana scores the

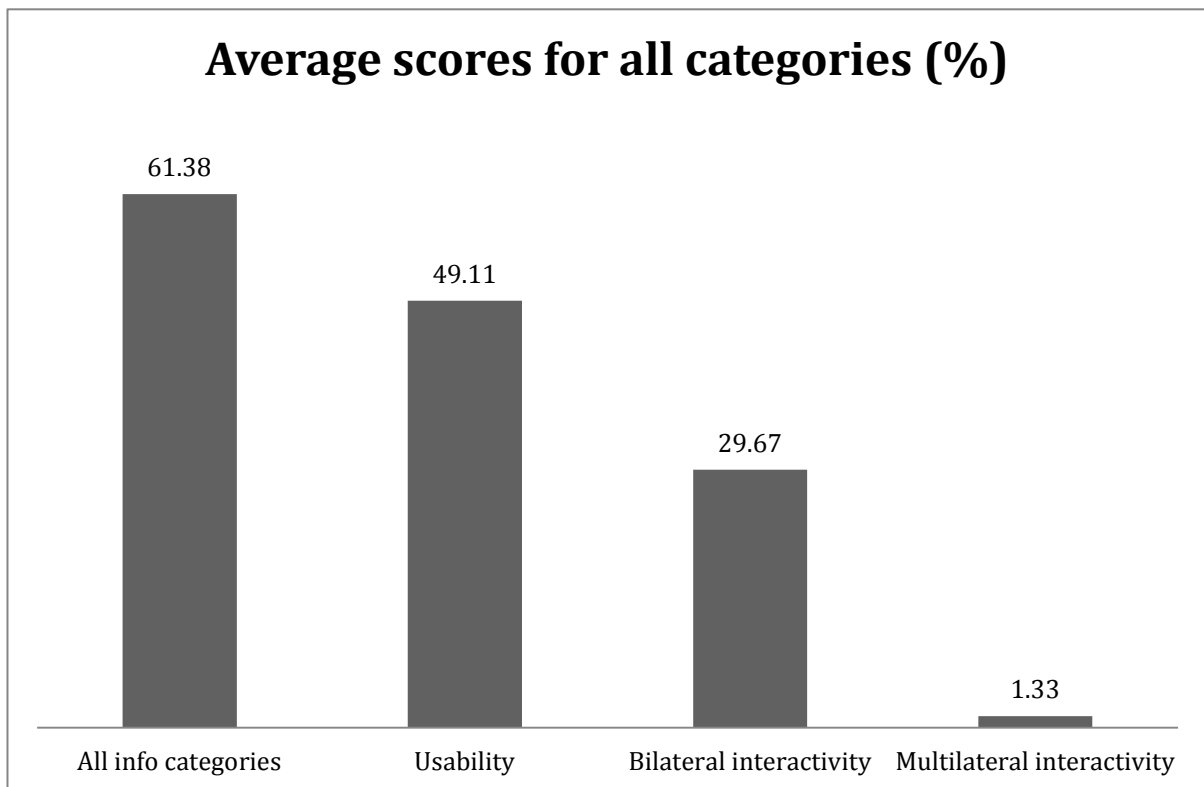
¹¹⁸ Source: “Percent of People 5 Years and Over Who Speak Spanish at Home” 2007 American Community Survey

¹¹⁹ Idem

highest, its southern peers from Mississippi and Alabama present the lowest e-democracy scores, with 26 and 27 points respectively.



In an overall perspective, there is a prominence of provision of information over the other dimensions. Nonetheless, as we have shown before, there is a reasonable variance concerning what information is provided and how it is provided. In this dimension, noteworthy is the high level of provision of static and dynamic information concerning the legislative process, with an average of 85.00 points. Interesting also is the fact that general information scores the lowest in the U.S. case, whereas this sub-dimension was the one with the highest scores in the Brazilian and Spanish cases.



Usability is the second dimension to be generally privileged by U.S. websites, reaching an average of 49.11 points. In other words, most of the websites provide enough resources to make the navigation of an average user as friendly and intuitive as possible. Variance in this case will correspond mostly to the existence of ‘how to use the website’ sections and specific facilities for difficult to reach groups such as a ‘children’ section.

Bilateral interactivity in U.S. parliamentary websites scores fairly slow if compared to the previous dimensions analysed, with an average of 29.67 points. While most websites provide links to for contacting MPs individually, a much smaller number of cases provide tools that enable more sophisticated forms of interaction, such as facilities for commenting on issues. Particularly interesting, despite their reduced numbers, are the websites that allow citizens to register and/or submit hearing testimonies online.

Lastly, the lowest score concerns *multilateral interactivity*, with an average score of only one point. These low multilateral interactivity levels of US state Legislature websites are consistent with previous findings by Ferber et al. (2003, 2005). In other words, apart from the Louisiana exception, US Legislatures are systematically neglecting the prospects for ICT

tools to further mechanisms that can potentially lead to more deliberative models of interaction.

ANNEX 2: DESCRIPTION OF CODEBOOK & CONSTRUCTS

Information Provision

a. General information

General information refers to a subcategory of the information dimension that is related to broader information concerning the parliament as well as information aiming to familiarize the user with the role of the parliament in general. In this respect, this dimension intends to look at the existence of simple information such as ‘about us’, ‘who we are’ and so on.

This dimension also contemplates the extent to which general news about the activities of the parliament are provided periodically for the interested user. Also, the means and the varieties of means through which news is provided are also taken into account. For instance, general information considers whether or not citizens are able to receive ‘news’ by mail, and if there are audio or video links to a news section. The table below shows the set of 13 indicators that compose the general information dimension:

GENERAL INFORMATION	
	Is there a general introduction / overview of the chamber?
	Does it have a monthly / weekly newsletter / bulletin?
	Does website provide an online / virtual panorama of the Parliament?
	Is there a ‘what is new’ or ‘what is on’ section?
	Is there a link to other devolved / regional assemblies?
	Are there links to other legislatures?
	Is there a press (or media) section?
	Is there an audio link to news (or media) section?
	Is there a video link to news (or media) section?
	Is there any facility to receive news and latest information through registration of e-mail address (e.g.) subscription?
	Is there any section containing basic information on the group (‘about us’, ‘who we are’, etc.) present in more than one language?
	Are there any statistics regarding the number of hits of the website?
	Does the site contain information on how to reach the organization ?

b. Information about members of the parliament

Information about MPs concerns the provision of facts and details concerning MPs as well as their activities. In this respect, with regard to MPs as a whole, a primary aspect to be considered is whether or not there is information provided regarding the roles of MPs and their expected actions/behaviours are. Another aspect taken into account here is individual features concerning the MPs. For instance, MP information looks at whether there are biographies for the members or if details of their interventions in parliament are shown. This dimension also takes into account the way in which such information is displayed, for example whether there are lists of MPs according to their constituency or according to their party, or both. Furthermore, it looks at the opportunities given to MPs to express themselves through the website and to communicate with their constituents. For example, this dimension looks at the provision of web services such as individual MPs' websites.

The table below indicates the set of indicators used to measure the information on MPs dimension.

INFORMATION ON MPs	
	Is there a guide (e.g. factsheet or summary) on the role of members?
	Is there a list of members?
	Is there a list by constituency?
	Is there a list by political group?
	Is there a list by gender?
	Does it include biographies?
	If so does this apply to the majority of members?
	Does it include links to personal website?
	If so do most members have a personal website?
	Does it include interventions from members?
	Can you find out general information about the pay and conditions of members?
	Does the website provide web services such as individual MPs' Websites (e.g. blogs)
	Does the site contain information about how to reach of the majority of MPs besides e-mail: (street address, phone or fax numbers, office hours, etc.)?

c. Information on parliamentary committees

Considering that much parliamentary action takes place in the committees, this section aims to assess the quality of information that is provided about the committees' routines and actions. Firstly, it identifies if any information is provided for the general user concerning the roles of the committees in the law-making process. It also looks at the transparency of the committees, for instance whether or not interventions (e.g. transcriptions) of MPs can be found and the different means and availability of reports and publications. The table below shows the indicators used in this section.

INFORMATION ON COMMITTEES
Is there a guide (e.g. factsheet or summary) on the role of committees?
Is there a list of committees?
Is there a list of members of committees?
Can you find the interventions of members in the committees?
Is there a list of committee publications/reports?
Is there a timetable/schedule for future committee meetings?
Is there an audio link to committees?
Is there a video link to committees?
Does the website contain information about how to reach the majority of committees (staff)?

d. Information on floor debates

The availability of information regarding actions that take place on the house floor is also of utmost importance to the provision of parliamentary information. As with the assessment of information regarding the committees, the availability of schedules and the transcription of debates are taken into account. See the table below:

INFORMATION ON DEBATES
Is there a parliament debates schedule?
Is there a facility for accessing online the full text of debates?
Are these archived?
Is there an audio link to listen to the debates?

Are these archived?
Is there a link to watch live video of debates?
Are these archived?

e. Information on the legislative process

The understanding of the legislative process and its transparency are indispensable requirements for a website that intends to explore the prospect of using ICTs to provide information for the constituents. In this respect, a first concern is to assess the existence of accessible information regarding the legislative process, such as a guide or a summary of it. Additional aspects include access to legislation in different stages of the legislative process (e.g. commissions, plenary vote). The various possibilities for organizing and accessing information related to the legislative process are also taken into account, for example the possibility for the general user to carry out thematic searches of the website and searches according to the status of legislation. The table below shows the set of indicators used.

INFORMATION ON LEGISLATION
Is there a guide (e.g. fact sheet or summary) to the legislative process?
Is there a list of pending or ongoing legislation?
Is there an index list of pending or ongoing legislation (e.g. alphabetical or thematic)?
Is there a search facility for pending or ongoing legislation?
Is there a list of legislation passed?
Is there an index list of legislation passed (e.g. alphabetical or thematic)?
Is there a search facility for legislation passed?
Is there any facility to receive the latest information on a specific legislation through registration (e.g. mail subscription, RSS feeds)?

Bilateral Interactivity

As previously explained, bilateral interactivity is understood in this research as the characteristic of parliaments' websites that allows citizens to access general contact information (e.g. e-mail) and to interact with parliamentary representatives and personnel by directly contacting them and receiving feedback. In this respect, the variables that compose this section are essentially related to the extent to which opportunities are offered to citizens to,

through the Internet, interact and engage in a dialogue with MPs and other actors directly and/or indirectly related to legislative activities. The table below indicates the set of indicators used to measure bilateral interactivity.

BILATERAL INTERACTIVITY
Is there a facility for notifying webmaster of website problems?
Is there a link to an Ombudsman or another official that investigates complaints from members of the public about the government/parliament?
Is there a link to an office or responsible for making general (e.g. political) enquiries?
Are there any guidelines for submitting feedback or enquiries?
Can feedback on issues be given online?
Can citizens suggest new discussion issues?
Is there a facility for commenting on the website?
Is there a link to contact MPs individually?
Is there a link to contact the commissions?

Multilateral Interactivity

Multilateral interactivity is the dimension that takes into account the possibility of debate and/or interaction offered by a website (Moska, 2004), for instance through online forums, polls and chats. As mentioned before, creating the possibility of debate is the most important characteristic of a website - from an e-democracy point of view - given that it potentially reinforces the deliberative aspects of citizen participation (Trechsel et al. 2003). As mentioned above, the theme of deliberation is one of the widely debated subjects concerning e-democracy practices and one of the most difficult practices to be achieved effectively. Nonetheless, this present research does not intend to assess the level/quality of deliberation on its quantitative part. Rather, it aims to assess to what extent parliaments’ websites offer possibilities of multilateral interactivity. See table below.

MULTILATERAL INTERACTIVITY
Are there any online opinion polls?
Is there any attempt to link with other consultation exercises outside the parliament?
Can you register for committee hearing online?

Can citizens submit committee hearing testimony online?
Is there an online forum?
If so, how many issues are being discussed?
Indicate the number of interventions in the website.
Is there any attempt to link with other discussion groups outside the parliament?

Usability

A parliament's successful website application will depend on well-designed interfaces that support the effective performance of an average user. Thus, the indicators used for the dimension of usability are related to the features of a website that make it accessible for a general user, allowing the user to "find what he needs and to understand what he finds" (Schneiderman, 2005). To determine the level of usability of parliaments' websites, user-friendly tools such as 'frequently asked questions' sections, illustrations, statistical graphics, content indexes, among other indicators, are used.

The table below indicates the set of indicators that compose the usability dimension.

USABILITY
Is there a FAQ (frequently asked questions) section?
Is there an internal search facility for the site?
Are there separate search facilities for specific sections of the site?
Is there a site map?
Is there a content index?
Is there an A-Z index?
It is possible to zoom in / zoom out on the contents of the website?
Are all links active?
Is there any information or facility for difficult to reach groups such as children?
Is there a 'help' or 'how to use website' section?
Is there information in any other language?
How many languages?