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**Parliaments in the Digital Age.  
Exploring Latin America**

**By**

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### ***Acknowledgement:***

I want to especially thank Mr. Alexander H. Trechsel and the working team at the University of Geneva and the European University Institute who have kindly allowed me to apply the index developed by them in assessing the use of new technologies for democratic strengthening. This has simplified both the drawing up of this paper and – most important – the achievement of comparative results regarding a recent topic of interest as electronic democracy.

## Governance in the Digital Age

The new information and communication technologies along with, especially, the expansion of online activities, produce an impact on democratic governance insofar as they create new mechanisms for the flow of information among political actors. With the advent of new technologies, citizens, parties and organizations acquire new interaction mechanisms along with the possibility of using new paths to access and influence the governing process. This possibility entails the potential to reconfigure the forms in which power is both organized and exercised and to redimension the mechanisms, processes and institutions through which representatives, officers and citizens articulate their interests and influence the decision-making process. The concept of electronic governance or e-governance arises as a reflection of this scenery, and it refers basically to the utilization of the new information and communication technologies (ICTs) in the governing processes, as well as to the effects that these may possess on the functioning of a system.

Electronic governance comprises - although with conceptual limits still unclear and a theoretical polarized debate – two expressions in fashion: electronic government and electronic democracy. Despite the fact that generally these terms refer to the utilization of new electronic data exchange technologies, both notions have experienced their own development, dissimilar to a certain extent, though often overlapped.

Electronic government refers to the use of informatics' networks and information protocols in the state administration process; it associates new technologies to inherited systems and links information infrastructures to public administration citizens, taxpayers, suppliers and customers. The principles that rule the application thereof respond to the search for administration efficiency and effectiveness along with higher administrative transparency levels and accountability before citizens<sup>2</sup>.

Electronic democracy - under the same technological basis - consists of all the electronic means of communication that empower citizens to ensure responsibility of legislators and politicians regarding their actions in the public sphere. This is achieved either through the strengthening of the political process' transparency, the quality enhancement of the formation and opinion instances or an increase in the involvement and participation of citizens in the decision-making process<sup>3</sup>.

Although these concepts bear a common origin associated to the expansion of the Information Society, the electronic government conception has experienced a more marked development hand in hand with the administrative reform movements. The development of electronic democracy – except for specific initiatives – has been less significant and accounts for a marginal presence in government agendas.

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<sup>2</sup> María Magdalena Frick; "The new bureaucracy"; on "Informatics, the Internet and Politics", Gerardo Caetano and Rubén Perina (Publishers); Latin American Centre for Human Economics (CLAEH) and Organization of American States (OPD-OAS); Montevideo, 2003.

<sup>3</sup> Trechsel, Kies, Méndez and Schmitter; "Evaluation of the Use of New Technologies in Order to Facilitate Democracy in Europe. E-Democratizing the Parliaments and Parties of Europe"; Research and Documentation Centre on Direct Democracy (C2D), University of Geneva; October, 2003. Page 10.

However, before the diagnosis of a “democratic crisis” characterized by a reduction in political participation and an increase in the number of citizens in disagreement with the functioning of representative government institutions, this conception has gained promising strength, thus dividing opinions in the academic sphere.

The most optimistic trend views new technologies as tools which act as catalysers of a higher articulation and mobilisation of citizens regarding government issues. Under the existing assumption that citizens are demanding higher participation in the political process, “cyberoptimistics” state that the possibilities currently offered by the Internet regarding information access could result in higher civic participation and political activism as, they would facilitate the generation of more informed citizens along with new spontaneous interaction means<sup>4</sup>.

Another less encouraging position suggests that the expansion of the Internet shall strengthen but not transform the existing patterns within political communications and democratic participation. This position states that the net provides new information sources to those already interested in public affairs and that it shall neither transform citizens’ participation or imply a democratic rebirth<sup>5</sup>. This position also claims the unequal access to the new means of communication, thus warning us about the risks of an online community that expands the voice of the most privileged<sup>6</sup>.

Following the steps of those who avoid polarization of the established debate, this paper states that the impact of new technologies lies mainly in the strengthening of political institutions and of medium-level actors within representative democracies<sup>7 8</sup>. The applications of new information and communication technologies are added to the traditional mechanisms and channels, thus allowing for qualitative improvements in the efficiency and effectiveness of organizations, further facilitating new access forms to the information and services provided. This acceleration of communication means, the opening of information sources and the new interaction possibilities, relate directly to the fundamental principles of freedom of information and expression. In this sense, new technologies not only entail the potential to benefit Western democracies’ representative governments, but also promise to be particularly important in their opposition to authoritarian regimes and in the consolidation of regimes in transition process<sup>9</sup>.

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<sup>4</sup> For a detailed description of the academic debate see Norris; “Democratic Divide? The Impact of the Internet on Parliaments Worldwide”; Page 2.

<sup>5</sup> Riley, Thomas and Gilbert Riley, Cathia; “e-Governance to e-Democracy: Examining the Evolution”; International Tracking Survey Report 2003, Number Five; Commonwealth Centre for e-Governance; June, 2003. Page 7.

<sup>6</sup> For a detailed description of the academic debate see Pippa Norris; “Democratic Divide? The Impact of the Internet on Parliaments Worldwide”; Page 2.

<sup>7</sup> Pippa Norris; “Democratic Divide? The Impact of the Internet on Parliaments Worldwide”; Page 2.

<sup>8</sup> New technologies could potentially favour pluralist competition, but for the time being there is no empiric evidence to confirm this assumption. Although online interaction among organizations of interest may be considered as an indirect effect of the impact of information access and dissemination through the new electronic means, the same has failed to achieve significant repercussions on political systems; however, the relationship between the organizations of interest and the public accounts for a large technological impact, especially regarding information and mobilisation.

Raymund Werle; “The Impact of Information Networks on the Structure of Political Systems”; Dresden, 1999.

<sup>9</sup> Pippa Norris; “Democratic Divide? The Impact of the Internet on Parliaments Worldwide”; Page 2.

With the aim of achieving balance among the most generalized positions, this hypothesis enables the acknowledgement of new technologies' potential, bearing in mind the elasticity of democratic regimes, which operation principles have remained intact before the emergence in history of new technological mechanisms. From this point of view, it is expected that the development of new technologies does not alter the regimes' nature at their bases. Further, that the path to be covered by technology implementation is to be closely linked to the current political structures and to the forms in which societies administer and adapt new technologies<sup>10</sup>. Despite its informatics' component, electronic democracy is not technologically determined. Electronic governance refers to the movement of governments towards the virtual sphere and constitutes an incipient field with many possible conduits, which gradual materialization and potentialities shall depend on political actors' conceptual innovation, creativity and initiative.

Therefore, the question about the ways in which new tools are being used within the different democratic systems becomes unavoidable. There are various initiatives, especially regarding strategies to increase political participation. Countries with low participation levels see in the easy operation of new applications an alternative to apathy and the possibility of relegitimizing political activity. Thus, they have developed projects for the creation of opinion and participation spaces along with the implementation of online voting initiatives.

However, while Information Society is being disseminated and citizens are incorporating applications thereof to their daily lives, one of the institutions of representative democracy that has acquired little space in the new virtual arena is Parliament. Despite its significance in democratic systems and its weak status in terms of credibility and reliability, the possibilities of using technology in the functioning of Parliaments do not seem to have captured actors' interest. The possibilities offered by new technologies to parliamentary activities – though less visible than quantifiable results of the administrative reform undertakings and not as amazing as the hope for direct democracy – are, however, silently promising.

Within the framework of incipient electronic governance, this article aims at exploring the ways in which Latin American parliamentary actors use new technologies, especially the Internet. Therefore, regional modalities regarding the use of this means for the strengthening of democratic institutions shall be outlined herein. Thus, upon the introduction of electronic parliaments, we shall proceed to identify development patterns regarding the initiatives of parliaments and political parties with parliamentary representation on the Internet. Further, we shall register the features thereof, evaluate their properties according to their potential in terms of electronic democracy and eventually, we shall analyse the variables of influence within the different paths chosen.

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<sup>10</sup> Alexander Trechsel, Raphael Kies, Fernando Méndez and Philippe Schmitter; "Evaluation of the Use of New Technologies in Order to Facilitate Democracy in Europe. E-Democratizing the Parliaments and Parties of Europe"; Research and Documentation Centre on Direct Democracy (C2D), University of Geneva; October, 2003. Page 8.

## Electronic Parliaments

The incorporation of new technologies to parliamentary activities possesses its own characteristics with significant benefits for democratic systems. In first place, from the perspective of institutional management, the incorporation of technology to Parliaments bears the potential of accelerating information flows within the decision-making process. Before the increasing number of demands, complexity and diversity of the issues to be considered along with the excessive documentation involved, new technologies enable the creation of internal management systems that handle the information in an agile, consistent and integrated manner. In this way, parliamentarians come closer to citizens' demands as their job becomes more efficient, thus favouring the approach thereof to a proactive attitude in the decision-making process<sup>11</sup>.

Whenever these internal management systems are linked to strategies regarding presence on the *World Wide Web*, the benefits of new technologies are thus enhanced. The Internet constitutes an extremely effective mechanism for dissemination of detailed and comprehensive information on parliamentary processes and activities. The net enables both publication and consultation of documents and government activity agendas along with multimedia access to debates in parliament chambers and premises. Under a user-friendly format, the web enables citizens' access to legislative activity and vote counting of parliamentary process, thus fostering accountability of representatives<sup>12</sup>.

Further, the Internet offers significant benefits regarding interaction between representatives and citizens represented. New technologies constitute a fast and inexpensive communication alternative, which adds to traditional means (telephones, faxes, requests and meetings), thus enabling citizens and electors to be in contact with their representatives. The most popular modality in this sense is electronic mail<sup>13</sup>. An example of its impact on Parliaments can be observed in the United States of America's Congress: in two years, the House of Representatives went from receiving a few dozens of e-mails weekly to seven million messages monthly in the year 2000<sup>14</sup>, thus proving the communication potential of this tool.

Additionally, the web offers benefits in terms of citizens' participation in the parliamentary process by providing tools for the creation of opinion survey instances and group discussions. The understanding of communication as a means of interaction enables the overcoming of the announcement phase and the substantial improvement of parliamentary process inputs, through the incorporation of new voices to the decision-making process.

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<sup>11</sup> Ignace Snellen; "Electronic governance: implications for citizens, politicians and public servants"; International Review Of Administrative Science, Vol. 68; London.

<sup>12</sup> Norris, Pippa; "Democratic Divide? The Impact of the Internet on Parliaments Worldwide"; John F. Kennedy School of Government, Harvard University. Page 7.

<sup>13</sup> UNESCO/ COMNET-IT; "Worldwide Study on the Exercising of Online Government"; 2000. Page 38/39.

<sup>14</sup> Congress on Line Project; "E-Mail Overload in Congress. Managing a Communication Crisis".

At an institutional level, this communicational outburst in terms of both interaction and participation, poses a serious challenge to parliamentary institutions, which should be capable of covering the demands timely so as to avoid destroying citizens' expectations. However, from the perspective of democratic regimes, said communication increase suggests significant possibilities: it bears the potential to strengthen both interaction among representatives and their accountability before the electorate, who acquires in turn higher possibilities of expression and influence during government cycles.

However, parliaments find themselves at an initial stage regarding this potential scenery. For the time being, the use of the Internet is confined to political and legislative activities. Parliamentary institutions still account for a top-down approach in the use of new applications and a reactive participation of citizens before government action.

The incorporation of technology has not resulted, up to date, in an increase in the effective participation of citizens<sup>15</sup>. Although the net reduces transaction costs, the creation of debate and participation spaces has failed to arise sufficient interest in both representatives and represented citizens<sup>16</sup>. With the exception of isolated initiatives, these spaces tend to locate themselves spontaneously on non-government sites<sup>17</sup>. Both activists and interested persons are developing - through forums and discussion lists - their own virtual influence and participation methodologies regarding the political agenda<sup>18</sup>.

Before the growing expansion of Information Society and the potential offered by new technologies, their possible utilization for the strengthening of representative regimes' institutions requires further development, debate and analysis. The key questions that arise are: in what way do parliamentary actors profit nowadays from the opportunities that these tools offer? And, how can these be used in future to strengthen government institutions and bring citizens closer to the legislative process?<sup>19</sup>.

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<sup>15</sup> Tess Kingham; "[e-Parliaments](#)"; World Bank Institute; 2003. Page 26.

<sup>16</sup> Stephen Coleman and John Gotze; "[Bowling together: online public engagement in policy deliberation](#)"; Hansard Society & BT.

<sup>17</sup> European Union; "[European governance and cyberdemocracy](#)"; Page 13.

<sup>18</sup> Riley, Thomas & Riley, Cathia; "eGovernance to eDemocracy: Examining the Evolution"; Commonwealth Secretariat & Telecommunications and Informatics Program, Public Works and Government Services Canada; June, 2003.

<sup>19</sup> Norris, Pippa; "[Democratic Divide?...](#)". Page 5.

## Parliaments and Members of Parliament (MPs): exploring Latin America

In order to analyse the use of the new opportunities offered within the region by information and communication technologies to representative democracies and institutions, the application of the evaluation index to measure the use of new technologies for democracy is of the utmost interest. This index – developed by the University of Geneva along with the European University Institute<sup>20</sup> - aims at assessing the impact of the incorporation and dissemination of technology on democratic practices within the European Union member countries and among candidate states. Basically, it aims at identifying the development patterns of sites of parliaments and political parties with parliamentary representation, both in terms of the information offered and regarding the possibilities of interaction. In this sense, the index enables recording of not only the websites' characteristics but also the assessment of the properties of these sites pursuant to their potential in terms of electronic democracy.

In the case of parliamentary sites, the index is composed of 76 variables divided into four evaluation dimensions: information provision, bilateral interactivity, multilateral interactivity and user-friendliness<sup>21</sup>.

In Latin America, except for Ecuador and Belize, every country has got its own legislative portal (see Table 1)<sup>22</sup>. Upon application of the index developed by the University of Geneva and the European University Institute<sup>23</sup>, an average value of 34.78 percentage score can be observed regarding general development (see Figure 1). At continental level, Brazil is the leading country (57.24) followed by Peru (55.53). Further, in a second level, we find the cases of Mexico (46.78) and Chile (46.32). Above average we find Argentina (38.82), Venezuela (38.16) and Colombia (36.13).

Initially, there appears a marked difference between the South and Central regions. South American sites account for an average score of 40.39 that in Central America corresponds to 25.44.

Secondly, if regional data are observed according to the type of regime, except in the cases of Venezuela and Peru, unicameral systems account for a slightly lower development than bicameral systems. The

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<sup>20</sup> Treschsel, Kies, Méndez and Schmitter; "Evaluation Use of the New Technologies in Order to Facilitate Democracy in Europe. E-democratizing the Parliaments and Parties of Europe"; University of Geneva / European University Institute.

<sup>21</sup> The dimension "information provision" measures general information according to four categories: (1) general information about the institutions' activities, links and news, (2) information about parliamentary representatives and their political performance, (3) information about legislative commissions and (4) information about legislation. The dimension "bilateral interactivity" measures the possibilities offered by a site to users thereof in order to: (1) notify about problems with the site itself, (2) express their opinions on political affairs and (3) submit claims and consultations. The "multilateral interactivity" dimension assesses the possibilities offered by a site along with success in the generation of online debate spaces<sup>21</sup>. The "user-friendliness" dimension is composed of three variables: (1) easy access and navigation, (2) design sophistication and (3) site's attractiveness. Among features under analysis we find, e.g. deadlinks, publication of a site map and search mechanisms along with easy access for the disabled, among others.

<sup>22</sup> Information gathering was conducted in January 2004. The sources used for both parliamentary sites and political party sites were Google and Yahoo searchers and Georgetown University (<http://www.georgetown.edu/pdba>) and Binghamton University (<http://cdp.binghamton.edu/eva>) databases. Collection of information was performed only on sites available and published under their own and official URL.

<sup>23</sup> Two of the indicators proposed for the European case were amended for their application within the Latin American region. In the cases of confirmation of the existence of links to the European Parliament, an evaluation of links to the Latin American Parliament was conducted. In the cases of confirmation of the existence of deadlinks, the evaluation was, as in the other cases, dichotomic. Although the cases of Chile and Bolivia exhibit common access portals, sites differentiate from each other in content and structure, whereby they were taken as independent sites.



average score equals 30.79 for unicameral systems while in bicameral regimes it corresponds to 38.78, with similar values for each chamber.

Upon the breaking down of values in the cases of bicameral systems according to total amounts per Chamber, it is possible to observe the specific features of the different developments (see Figure 2). In the case of Brazil, the difference between each Chamber's websites is of 5.27, with a slight superiority of the House of Representatives. This superiority is maintained in the case of Chile, with an 8.94-score difference, and a 34.09-score difference in the case of Colombia. Contrary to these countries, in Argentina and in Uruguay the highest development is exhibited in the Senate, with a margin score of 11.85 and 25 respectively.

If these regional values are compared to those of European sites, there is a 12.92-score difference in favour of the old continent, the regional average score being of 47.7, the average for European Union member countries being of 51.3 and 40.3 for candidate states.

Regarding the higher development of the Houses of Representatives within our region, which coincides with the leadership of countries such as Brazil, Chile and Colombia, it could be stated that within the region, there is a wider use of technology in the areas accounting for greater representation; and, in general, the Houses of Representatives are considered as being the closest to citizens. In this sense, one could assume the existence of a gradual development strategy in the parliamentary sphere of new online mechanisms and opportunities. However, the absence of previous information records prevents us from learning about the development trends within the region and from detecting, at an initial phase, the influence of institutional variables, such as the type of system, on said strategies. Currently, just as in the European case, it seems convenient to retain that sophistication of initiatives depends on the organizational resources and strategies of each administration. Therefore, one can expect unequal development not only among systems but also within the same.

At continental level, the application of the index allows us to confirm that the development of parliamentary websites bears a marked trend towards information publication (see Figure 3). The analysis of the volume of information provided (see Figure 4) confirms the priority of information access to legislation passed or pending (58.26) and to the work carried out by committees (51.17) vis-à-vis dissemination of general information on the institution (46.15) and information on parliamentary representatives (39.18). Also, there is little information on legislative debates (32.14).

Country	Legislative Body	Website
Argentina	House of Representatives	<a href="http://www.hndc.gov.ar">http://www.hndc.gov.ar</a>
Argentina	Senate	<a href="http://www.semado.gov.ar">http://www.semado.gov.ar</a>
Brazil	House of Representatives	<a href="http://www.camara.gov.br">http://www.camara.gov.br</a>
Brazil	Senate	<a href="http://www.senado.gov.br">http://www.senado.gov.br</a>
Bolivia	House of Representatives	<a href="http://www.congreso.gov.bo/4diputados">http://www.congreso.gov.bo/4diputados</a>
Bolivia	Senate	<a href="http://www.congreso.gov.bo/3senadores">http://www.congreso.gov.bo/3senadores</a>
Chile	House of Representatives	<a href="http://www.camara.cl">http://www.camara.cl</a>
Chile	Senate	<a href="http://www.senado.cl">http://www.senado.cl</a>
Colombia	House of Representatives	<a href="http://www.camararep.gov.co">http://www.camararep.gov.co</a>
Colombia	Senate	<a href="http://www.senado.gov.co">http://www.senado.gov.co</a>
Paraguay	House of Representatives	<a href="http://www.camaradip.gov.py">http://www.camaradip.gov.py</a>
Paraguay	Senate	<a href="http://www.senado.gov.py">http://www.senado.gov.py</a>
Mexico	House of Representatives	<a href="http://www.diputados.gob.mx">http://www.diputados.gob.mx</a>
Mexico	Senate	<a href="http://www.senado.gob.mx">http://www.senado.gob.mx</a>
Uruguay	House of Representatives	<a href="http://www.diputados.gub.uy">http://www.diputados.gub.uy</a>
Uruguay	Senate	<a href="http://www.parlamento.gub.uy">http://www.parlamento.gub.uy</a>
Peru	Congress	<a href="http://www.congreso.gob.pe">http://www.congreso.gob.pe</a>
Venezuela	Congress	<a href="http://www.asambleanacional.gov.ve">http://www.asambleanacional.gov.ve</a>
Guatemala	Congress	<a href="http://www.congreso.gob.gt">http://www.congreso.gob.gt</a>
Honduras	Congress	<a href="http://www.congreso.gob.hn">http://www.congreso.gob.hn</a>
Nicaragua	Congress	<a href="http://asamblea.gob.ni">http://asamblea.gob.ni</a>
Costa Rica	Congress	<a href="http://asamblea.racsa.cr">http://asamblea.racsa.cr</a>
Panama	Congress	<a href="http://www.asamblea.gob.pa">http://www.asamblea.gob.pa</a>
El Salvador	Congress	<a href="http://www.asamblea.gob.sv">http://www.asamblea.gob.sv</a>

Figure 1: Legislature Index for Latin America  
National Values (%)  
(Regional Mean: 34.78)

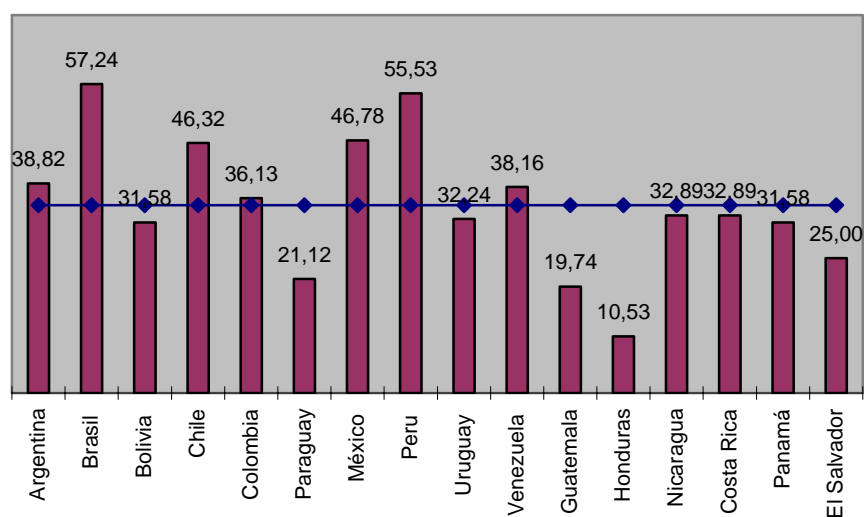
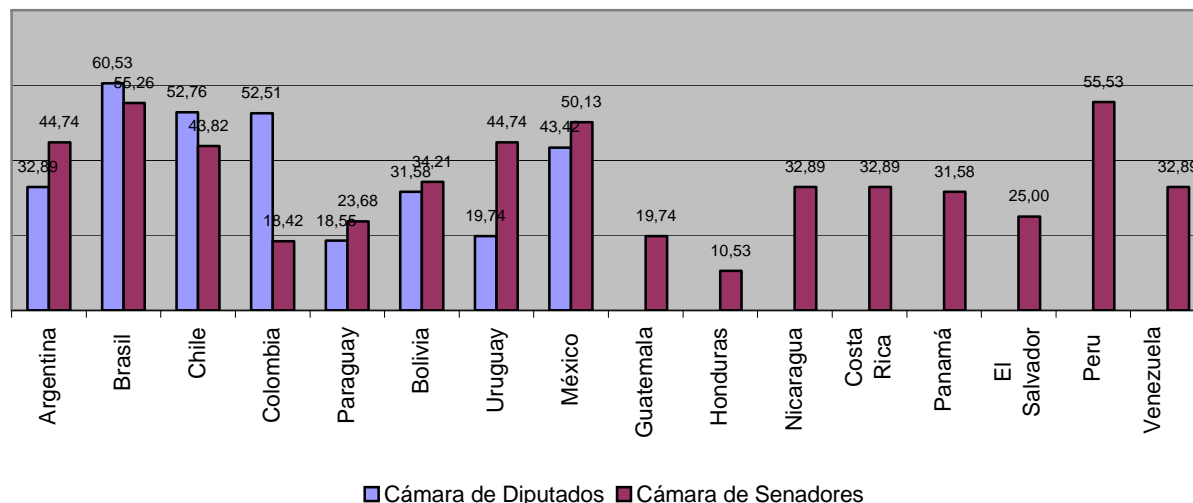


Figure 2: Legislature Index – Broken-down values per Chamber (%)  
(House of Representatives and Senate)



The outstanding cases regarding publication of information on legislative duties are the sites of Peru and Nicaragua Congresses and the pages of the Senate in Argentina along with the Colombian House of Representatives (100). These sites provide a guide of the legislative process and an index of legislation passed and pending, further facilitating access to data through search engines and indexes.

Regarding dissemination of Commissions' activities, the site of the House of Representatives in Brazil stands out (87.50). The same offers a guide on the role of Committees along with a list of members thereof. Likewise, it enables access to publications and reports files as well as to government activities' agendas.

Legislative information on the rest of the sites consists of, except for some cases, an outline of the legislative process' features. In many cases, this information is accompanied by a search list or search facilitation tools on legislation passed; however, access to bills submitted or under study is less common. Following this trend, information on the Committees' tasks consists of an outline of the roles of the same, their list and particulars of members along with contact information. Information on publications and reports thereof along with their working agenda is less generalized, as well as the use of audio or video links.

The most outstanding cases in terms of general information are the Peruvian Parliament site and the Mexican House of Representatives' site, which score 84.62 and 76.92 respectively. The homepages thereof offer access to a general introduction on Parliament and, in the Peruvian case, this page offers a virtual view of the parliament premises. Further, there is access to a news section, a press section, contact information regarding webmasters and the possibility to subscribe to a weekly news bulletin. Navigation links to other assemblies and parliaments are published along with statistics relative to portal access.

Figure 3: Legislature Index – Online development features of Latin American Parliaments (%)

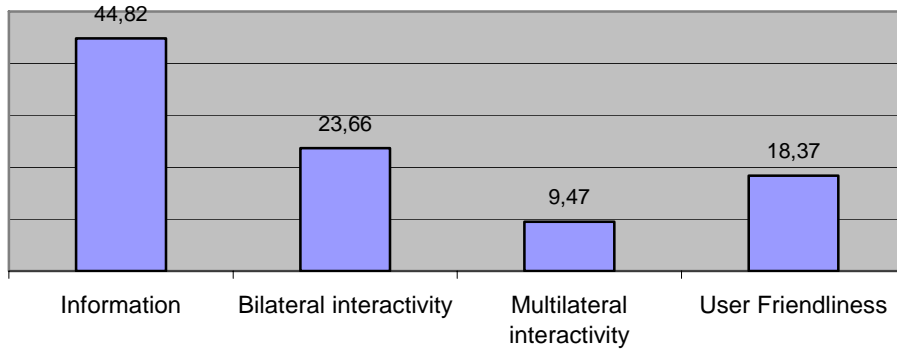
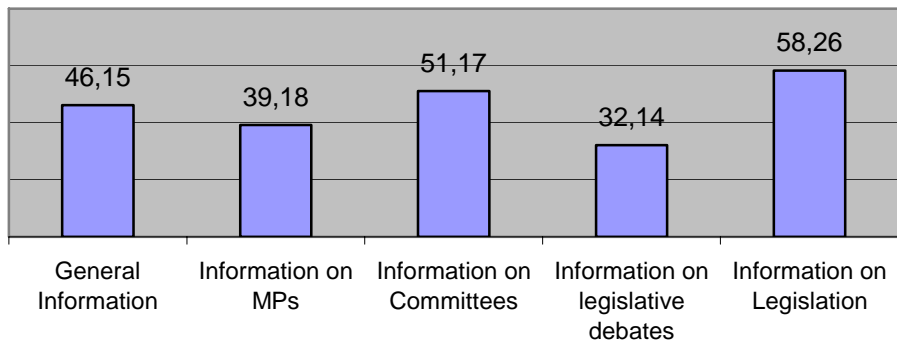


Figure 4: Legislature Index – Regional sites' potential provision of information features (%)



With reference to the information about representatives, the cases that stand out are Brazil (with an 84.62 score at the House of Representatives and 76.92 at the Senate) and the Mexican Senate's site (76.92). These sites offer a guide containing the roles of MPs, listed by district and by political group. Presentations include biographies, links for access to personal websites, bills submitted and interventions during sessions. Access to a guide containing the role of MPs is not generalized throughout the region and only rarely are parliamentarians' interventions or voting choices disclosed; thus, the Mexican House of Representatives' site constitutes an innovation thereof. On the other hand, the absence of information about salaries and terms of the legislature's duties is evident.

Finally, information on parliamentary debates in the region is reduced in general to access to the minutes of meetings; only in a few cases, an updated agenda or access to video or audio versions is provided. Once again, Brazil is the leading country regarding this matter, accounting for a marked difference with the rest of the region. Brazil scores 100 points, thus detaching itself from the average value which corresponds to 32.14 and from the development of its peers. Both chambers offer access to an updated agenda of parliamentary debates and the full texts thereof are also easily available. Additionally, citizens may have access to audio and video versions of parliamentary sessions.

If regional trends stand out in terms of information dissemination under the characteristics adopted by European parliamentary sites, it can be confirmed that, although with different development levels, both regions share prioritisation of information on legislative duties (Europe: 80.2) and Commissions' activities (Europe: 68.3). However, on European sites, information on legislative debates' development is in third place (66.5), this being the last dimension in importance at regional level. Besides, provision of general information (64.4) and introduction of members (61.2) constitute the fourth and fifth development phases in Europe, while in Latin America information dissemination is the third developed variable and information about parliamentary representatives is ranked as the last variable in importance.

Regarding the remaining index variables, it can be evidenced that user-friendliness is the third dimension within development (18.37). The same refers to facilitation of site navigation to users along with mechanisms implemented by webmasters to enable easy access to contents and services published. Basically, this variable implies the incorporation of help and frequently asked questions' sections, search mechanisms, site maps and content indexes, information in other languages and easy access for the disabled.

Although this dimension is third within development, in absolute terms, prioritisation of this issue still seems to be unimportant. Additionally, if we consider that information provision constitutes the most emphasized aspect regarding online parliamentary initiatives, it could be deducted that electronic parliaments are still at an initial phase; thus, development is currently focused on online presence, without stressing yet, interaction applications or implementation of transactions with citizens.

Following the diagnosis of a presence-based phase, it could be stated that the future development of sites and the implementation of new virtual interaction areas could lead in the mid-term to a reappraisal of structuring schemes for the use of portals. In the meantime, the most outstanding cases within the region are the sites of the Senate in Uruguay and Mexico, with values of 57.14 and 50.71, respectively. Likewise, it should be highlighted, beyond the site's general development, the initiative of the Mexican House of Representatives' Vulnerable Groups Assistance Commission regarding the incorporation of special applications for the visually challenged.

Interactivity is evidenced in the application of the index as a strategy still absent from parliamentary initiatives within the region; however, a higher development may be observed regarding applications relative to bilateral interactivity (23.66) on the possibilities of site utilization for multilateral interaction (9.47).

Bilateral interactivity refers basically to the use of interaction mechanisms between site users and parliamentary institutions such as, publication of contact information with the page webmaster and with a claims office, an Ombudsman or administrative officer and the alternative of filing online inquiries or suggestions<sup>24</sup>. Regarding this aspect, the most developed sites are the Houses of Representatives of Brazil (71.43) and Chile (71.43) and, in second instance, the House of Representatives of Colombia (57.14) and the Peruvian parliamentary site (57.14). Despite the apparent simplicity of mechanisms employed, in general, none of these possibilities has been fully incorporated yet within the other sites of the region.

Multilateral interactivity, which accounts for higher sophistication regarding its implementation and mechanisms, refers to online participation and debate possibilities offered by sites and to the effectiveness of the same regarding effective participation. It involves applications such as online surveys and debate forums. Within the reduced group formed by the four regional sites that have incorporated these applications, Chile's initiative should be pointed out (11.30). The Chilean Senate publishes an online survey and online debate forums with a remarkable participation of citizens.

In this regard, differences arise once again between regional and European parliamentary sites. Unlike the Latin American region, in European sites, the most developed dimension is bilateral interactivity (69.2), followed by information provision (68.1). On the other hand, the remaining dimensions coincide in their relative development. User-friendliness is situated in third place (42.5), with a reduced presence of the multilateral interactivity dimension (13.5).

Under a comparative analysis, assuming an earlier development in the European continent due to a prior awakening of the Information Society, the following diagnosis may be made for the Latin American region: an electronic parliament in its initial development phase devoted, at this first stage, to online presence and to the generation of information instances. Up to date, there is no outstanding trend within our region regarding strategies for the strengthening of parliamentary duties' transparency in terms of full use of technological tools in the increase of involvement and effective participation of citizens in the decision-making process. Although bilateral interactivity is undoubtedly a dimension with great potential with respect to interaction between representatives and citizens, it cannot achieve by itself the strengthening of political links and it may be considered, if not employed at its best, as another dimension within general information. Comparatively speaking, there are still some elements to be developed in each dimension under analysis.

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<sup>24</sup> Within the European research, regarding the bilateral interactivity dimension, in addition to the application of the index, an evaluation of the "real" interactivity of sites was conducted. For this test, identical e-mails were sent to the e-mail addresses published on the sites for a subsequent comparison with response rates. Unfortunately for this publication, this type of information is not available yet for the Latin American region.

In order to answer the question on how parliamentary actors take advantage nowadays of the opportunities offered by new technologies, it is necessary to analyse the initiatives of political parties with parliamentary representation. In this case, the index developed by the University of Geneva and the European University Institute considers 72 analysis variables, which are applied to the parties' sites that have won three per cent of seats in the last legislative elections.

Variables are divided into the following dimensions: provision of information, networking, bilateral interactivity, multilateral interactivity, mobilisation potential and user-friendliness<sup>25</sup>.

In the continent, of a total of 81 parties with three per cent of parliament seats, only 28 percent thereof possesses an official website (see Table 2). The 16-country sample is reduced within the political party sphere to a group of 9.

The regional mean for site development is of 43.07, which is lower than the mean for European Union countries (45.8). The leading countries are Mexico (67.76) and Costa Rica (59.86) and, in second place, Colombia (48.19).

Following the trend of parliamentary sites, party sites tend to prioritise the provision of information over the other analysis dimensions (see Figure 6). In this regard, out of a regional mean of 50.89, the outstanding cases are those of the Mexican Institutional Revolutionary Party (PRI) and Democratic Revolution Party (PDR) and the Chilean Independent Democratic Union (UDI) with a score of 81.25 in the first case and 75 in the following two. These sites exhibit the party's background, an organizational scheme and the biography and pictures of party leaders. Likewise, information on party congresses is published along with the texts of political speeches, an agenda of events and news, links to the press and a section of political bibliography.

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<sup>25</sup> The "provision of information" dimension aims at measuring the following aspects: 1) the level of information regarding internal organization, members and party activities, 2) information published relative to the party's national and international actions or links, 3) the presence of "ideological" information or political texts. The "networking" dimension is divided into three analysis variables: 1) internal and external connections established by the party, 2) provision of information on specific party activities and tasks and 3) the opening of the party to links with other organizations. The "bilateral interactivity" dimension refers to the presence of contact links with party leaders and staff, and the "multilateral interactivity" dimension refers to the use of online survey and forum applications. The "mobilisation potential" dimension is divided into four aspects: 1) online affiliation possibility, 2) the possibility of sending and receiving information on campaigns, 3) the possibility of active participation in party activities (exhibitions, petitions, etc) and 4) the possibility of making online donations. Finally, the "user-friendliness" activity is composed of three variables: (1) easy access and navigation, (2) design sophistication and (3) site attractiveness. Among the characteristics analysed herein we find, e.g., the presence of deadlinks, publication of a site map and search mechanisms along with facilitation of access to the disabled, among others.

Table 2: Political sites Surveyed (January 2004)

Argentina	Radical Civic Union (UCR)	<a href="http://www.ucr.org.ar">http://www.ucr.org.ar</a>
Argentina	Alternative for a Republic of Equals (ARI)	<a href="http://www.ari.org.ar">http://www.ari.org.ar</a>
Brazil	Brazilian Democratic Movement Party (PMDB)	<a href="http://www.pmdb.org.br">http://www.pmdb.org.br</a>
Brazil	Liberal Front Party (PFL)	<a href="http://www.pfl.org.br">http://www.pfl.org.br</a>
Brazil	Workers' Party (PT)	<a href="http://www.pt.org.br">http://www.pt.org.br</a>
Brazil	Brazilian Social Democracy Party (PSDB)	<a href="http://www.psdb.org.br">http://www.psdb.org.br</a>
Brazil	Democratic Working Party (PDT)	<a href="http://www.pdt.org.br">http://www.pdt.org.br</a>
Brazil	Brazilian Socialist Party (PSB)	<a href="http://www.psb.org.br">http://www.psb.org.br</a>
Brazil	Liberal Party (PL)	<a href="http://www.pl.org.br">http://www.pl.org.br</a>
Brazil	Brazilian Progressist Party (PPB)	<a href="http://www.ppb.org.br">http://www.ppb.org.br</a>
Chile	Christian Democratic Party (PDC)	<a href="http://www.pdc.cl">http://www.pdc.cl</a>
Chile	Socialist Party of Chile (PS)	<a href="http://www.pschile.cl">http://www.pschile.cl</a>
Chile	Independent Democratic Union (UDI)	<a href="http://www.udi.cl">http://www.udi.cl</a>
Chile	National Renovation (RN) – Alliance for Chile	<a href="http://www.rn.cl">http://www.rn.cl</a>
Colombia	Colombian Conservative Party (PCC)	<a href="http://www.conservatismocolombiano.org">http://www.conservatismocolombiano.org</a>
Colombia	Colombian Liberal Party (PLC)	<a href="http://www.partidoliberal.org.co">http://www.partidoliberal.org.co</a>
Uruguay	National Party (PN)	<a href="http://www.partidonacional.com">http://www.partidonacional.com</a>
Uruguay	New Space (NE)	<a href="http://www.nuevoespacio.org.uy">http://www.nuevoespacio.org.uy</a>
Uruguay	Socialist Party (PS)**	<a href="http://www.ps.org.uy">http://www.ps.org.uy</a>
Venezuela	First Justice Party (PJ)	<a href="http://www.primerojusticia.org.ve">http://www.primerojusticia.org.ve</a>
Mexico	Institutional Revolutionary Party (PRI)	<a href="http://www.pri.or.mx">http://www.pri.or.mx</a>
Mexico	National Action Party (PAN)	<a href="http://www.pan.org.mx">http://www.pan.org.mx</a>
Mexico	Democratic Revolution Party (PRD)	<a href="http://www.pdr.org.mx">http://www.pdr.org.mx</a>
Costa Rica	National Liberation Party (PLN)	<a href="http://pln.or.cr">http://pln.or.cr</a>
Costa Rica	Libertarian Movement Party (PML)	<a href="http://www.libertario.org">http://www.libertario.org</a>
Peru	We Are Peru (SP)	<a href="http://www.somosperu.org.pe">http://www.somosperu.org.pe</a>
Peru	Peruvian Aprist Party (APRA)	<a href="http://www.apra.org.pe">http://www.apra.org.pe</a>
Peru	Peru Possible Party (PP)	<a href="http://www.peruposible.org.pe">http://www.peruposible.org.pe</a>

\*\* In the case of Uruguay, the Frente Amplio Party does not account for an official site, whereby the Socialist Party's site was surveyed, being the party with higher percentage of seats in Parliament within the Frente Amplio.

Figure 5: Party Index for Latin America  
National Values (%)  
(Regional mean: 43.7)

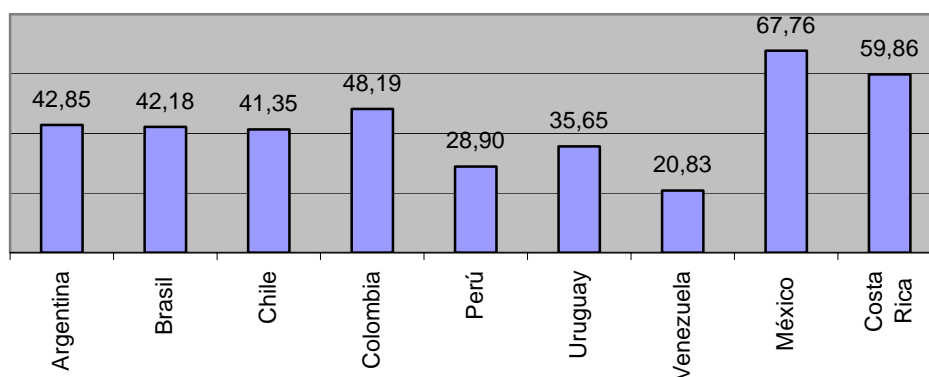
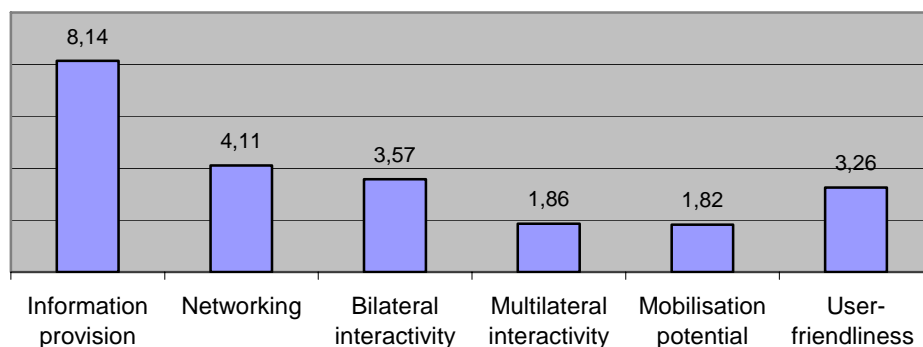




Figure 6: Online Development Features of Political Parties with Parliamentary Representation in Latin America (%)



Bilateral interactivity is the second most developed dimension within the region and it refers to the use of sites to respond to navigators' inputs. Within this dimension, the leading sites are those of the Brazilian Workers' Party (PT) and the Brazilian Progressist Party (PPB), with an 87.5-score each, situated above an average score of 44.64. Both cases provide for, in addition to a general contact e-mail box, the e-mail addresses of parliamentary representatives, local representatives, webmasters and party officers and leaders.

The third most developed dimension within sites is networking. Regarding this dimension, the leading sites are those of Mexican Institutional Revolutionary Party (PRI), Brazilian Workers' Party (PT) and Argentine Radical Civic Union (UCR), with a 50-score each, situated above the 29.34-score regional average. These initiatives are characterized by use of sites to increase party activity through internal and external connections thereto. Thus, they exhibit links to regional divisions, allied parties and organizations and parliamentary sectors. Additionally, they account for restricted access sections for members and sections devoted to the young and to women.

The fourth dimension developed is multilateral interactivity and it refers to the use of Internet's potential to conduct surveys, forums, and opinion chats. In this case, the leading sites are those of Costa Rican National Liberation Party (PLN) and Mexican Democratic Revolution Party (PRD), with a 100-score respectively, situated above an average score of 26.55. The National Liberation Party's site offers a chat room and the Democratic Revolution Party provides for an online survey space. In both cases, discussion forums are available, with an outstanding participation of electors.

User-friendliness (20.36) refers, as in the case of parliaments, to site navigation facilitation to users and to the mechanisms implemented by webmasters to enable access to contents and services published therein. In the case of parties with parliamentary representation, this item constitutes the fifth dimension regarding development and the outstanding case is that of the Costa Rica Libertarian Movement (PML) (38.13) The site provides navigators with a search mechanism, uses audio and video materials, possesses cultural and recreation sections and enables downloading of entertainment images and files. Further, information is also available in English.

Following user-friendliness, the least developed dimension within the Latin American region refers to the use of mobilisation potential applications such as online registration with parties, the possibility of making donations or buying advertising spaces or merchandising products, participate in or sign petitions. The outstanding cases within this dimension are the Brazilian Social Democracy Party (PSDB), the Workers' Party (PT) and the Democratic Working Party (PDT), all with a 33.3-score, situated above an average score of 15.18. These sites allow users to subscribe online to the party, make electronic purchases of merchandising products, download material on campaigns and receive news by electronic mail.

Comparing these trends to the European development pattern, there is a confirmation of the existing trends in the case of parliamentary sites; further, it is observed that both regions situate information dissemination (Europe: 59.9) and bilateral interactivity (Europe: 53.2) above the development of the remaining dimensions.

User-friendliness (36.6), networking (35.5), multilateral interactivity (33.8) and mobilisation potential (24.4) follow one another – in this order - in the development of sites within the old continent. Regional cases distinguish themselves from European ones regarding the importance granted to networking (the second most developed dimension) and coincide with them regarding development of bilateral interactivity.

In general, it could be stated, as in the case of parliamentary sites that, – except for specific cases – the region is at an initial phase regarding parties' sites, which consists in the use of new technologies and their advantages by parliamentary representatives<sup>26</sup>. For the time being, initiatives aim at improving the instances of information and citizens and electors' opinions, and only in exceptional cases, do these aim at strengthening transparency of the political process and electors' effective involvement and participation. Bilateral interaction is undoubtedly a dimension with great potential regarding interaction between representatives and citizens represented. However, mere publication of e-mail addresses and contact information is not enough to achieve strengthening of political and electoral links.

Nonetheless, although Europe is situated at a more advanced level regarding the use of the latest technologies for democratic strengthening, Latin America – with a still incipient Information Society – seems to follow its steps and to have undertaken its path towards the use of the benefits offered by these applications to government systems. The region is still at an initial phase and, future benefits and impacts shall depend on the full incorporation of these opportunities and on the trends and characteristics adopted by the newly bred phenomenon of electronic democracy.

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<sup>26</sup> This paper does not consider for analysis neither websites of different parliamentary sectors or personal pages of parliamentary representatives. These two types of initiatives are less generalized within the region and imply a more advanced development. It has been considered as a priority, on this occasion, to submit the first and most general results of the ongoing research, so as to initiate and contribute to both development and debate of this issue within the region.

## Variables of incidence in online development of parliamentary actors

It can be stated that parliaments within the Latin American region exhibit a higher degree of development regarding Internet applications than political parties with parliamentary representation. Political parties with current online access show a considerable development of web applications; however, upon incorporation to the party index of those countries which, despite possessing parliaments with virtual presence, they lack political parties with parliamentary representation that are able to take advantage of the new technological possibilities, the average score goes down from 43.07 to 24.22.

Also, it may be observed that, the highest parliamentary web development accounts for the highest development of online political party presence and vice versa. The index covariation is reflected in a Pearson coefficient of 0.65 with a 0.01 level of statistic significance.

However, although the confirmation of a positive linking trend between online initiatives of both representative institutions seems certain, given the absence of prior data collection and historical data to confirm these virtual development trends of regional institutions, we cannot suppose the existence of a causal relationship. Thus, the possibility of influence of other factors such as the characteristics of national political systems and the Information Society's dissemination patterns must be proved. (see Table 3)<sup>27</sup>.

An initial observation of correlation indicators of independent variables shown reveals the neutrality of political factors over the existence of parliament and party online initiatives. The effective number of political parties, the institutionalisation or polarization of the party system, electoral volatility and trust for democratic institutions lack relevance in the migration of political actors towards the virtual space.

In the analysis of the influence of socio-economic variables, what seems certain, on the other hand, is the difference between parliamentary actors and party members regarding development of applications of new technologies. Although the demographic factor seems to determine innovation on the Internet for both cases, the human development rate and the income per capita, only appear as significant factors in the case of political parties. Parliaments, on the contrary, are not influenced at all by determination of these factors.

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<sup>27</sup> Taking into consideration the European study, here follow the variables analysed by the University of Geneva and the European University Institute in their regional values. The aim of this attempt is to generate comparative results and to do research in a subject still new in the Latin American continent.

Table 3: Variables of incidence in virtual development of representative institutions

Independent variables	Legislature Index			Party Index		
	r	Sig.	N	R	Sig.	N
Party system institutionalisation (1)	-0.25	n. s.	11	0.43	n. s.	11
Effective number of political parties (2)	0.17	n. s.	11	-0.2	n. s.	11
Electoral volatility (3)	-0.58	n. s.	11	-0.5	n. s.	11
Trust for democracy (4)	0.12	n. s.	16	0.32	n. s.	16
System's ideological polarization (5)	-0.36	n. s.	11	0.26	n. s.	11
Human Development Index (PPP) (6)	0.22	n. s.	16	0.58	0.05	16
Income Per Capita (7)	0.49	n. s.	16	0.8	0.01	16
Population (8)	0.6	0.05	16	0.51	0.05	16
Electronic government development (8)	0.77	0.01	16	0.62	0.01	16
Internet presence (9)	0.67	0.01	16	0.66	0.01	16
Internet dissemination (10)	0.51	0.05	16	0.52	0.05	16
NRI (11)	0.7	0.01	16	0.79	0.01	16
ERI (12)	0.67	0.05	9	0.88	0.01	9

(1) Source: Mainwaring and Scully (Eds); "Brazil: Weak Parties, Feckless Democracy"; on "Building Democratic Institutions"; Stanford: Stanford University Press, 1995.

(2) Source: Cynthia McClintock; "Latin America's Third Wave: Measuring and Explaining Variations Across Seventeen Nations"; George Washington University; Washington, D.C., 2001.

(3) Pedersen's V coefficient was used as an indicator of the system's electoral volatility, pursuant to data generously published by Michael Coppedge on his Internet website (<http://www.nd.edu/~mcoppedg/crd/ddlaps.htm>).

(4) As an indicator of parties' systems ideological polarization, Michael Coppedge's work was used, "The Dynamic Diversity of Latin American Party Systems"; Kellogg Institute, Hesburgh Centre; University of Notre Dame.

(5) Source: Latinobarómetro 2002.

(6) Source: United Nations Human Development Report, 2003.

(7) Source: United Nations Human Development Report, 2003.

(8) Source: Stephen A. Ronaghan; "Benchmarking e-Government: A Global Perspective"; American Society for Public Administration (ASPA) & United Nations Division for Public Economics and Public Administration; April, 2001; New York.

(9) Source: Stephen A. Ronaghan; "Benchmarking e-Government: A Global Perspective"; American Society for Public Administration (ASPA) & United Nations Division for Public Economics and Public Administration; April, 2001; New York.

(10) Source: Institute for Connectivity in the Americas.

(11) The "Networked Readiness Index" was developed by the *World Economic Forum* to measure a community or nation's degree of preparation

to take part in and benefit from information and communication technologies' development.

<http://www.weforum.org>

(12) The ERI is an index developed by the Economist Intelligence Unit (EIU) to measure a community or nation's degree of preparation to take part in and benefit from information and communication technologies' development from an economic perspective.

[http://www.ebusinessforum.com/index.asp?layout=rich\\_story&doc\\_id=367](http://www.ebusinessforum.com/index.asp?layout=rich_story&doc_id=367)

The incidence of the demographic factor in the parliamentary strategy involving the use of Internet advantages can be considered causality. In first place, it could be assumed that national differences regarding parliamentary institutions' organizational scales and resources can determine different potential levels in terms of innovation. Secondly, it can be stated that territorial expansion may influence communication and relationship with citizens' policies by government institutions; the latter are bound to use technological improvements available in order to access the different locations within the national territory. In this sense, it may be stated that in the case of parliaments, simplification in terms of communication and massive reach provided by new applications constitute dynamizing reasons for innovation. Thus, it is observed that parliaments with a higher level of online development are those belonging to countries with the highest demographic density within the region: Brazil, Mexico, Colombia, Argentina, Chile, Venezuela and Peru.

In the case of political parties, the weight of the demographic factor is added to the influence of "human development" and "income per capita" variables. With political purposes that differ from those of parliamentary sites, the influence of these two variables seems to be an incidence factor in the decision of making use of competitive advantages on the web, to the extent that these converge as determining factors of a potential electoral market within the virtual space. Just as in the case of parliaments where, new technologies enable closer access to citizens, in the case of political parties, the Internet enables them to approach the electorate. However, given that parties act according to the logic of competition, although in the case of parliaments human development and income per capita indicators are irrelevant, in the case of political parties they become relevant as they determine the potential level of success of an electoral strategy. Low indicators of human development and income per capita reveal the absence of a critical mass of Internet users to justify virtual space innovation. Therefore, in general, countries with Internet use by political parties with parliamentary representation with values that differ the most from the regional average, are linked to human development values below a 67-score and an income per capita which does not exceed 6 US\$ PPP.

Table 4: Correlation of Party Index with human development indicators

	PP Index	HDI	IPC
Mexico	67.76	73.1	8.43
Costa Rica	59.86	77.9	9.46
Colombia	48.19	71.8	7.04
Argentina	42.85	73.9	11.32
Brazil	42.18	67.8	7.36
Chile	41.35	75.8	9.19
Uruguay	35.65	75	8.4
Peru	28.90	69.4	4.57
Venezuela	20.83	73.5	5.67
Bolivia	0	63.3	2.3
Paraguay	0	70.5	5.21
Panama	0	47.4	5.75
Nicaragua	0	69.1	2.45
Honduras	0	68.8	2.38
Guatemala	0	65.3	4.4
El Salvador	0	70.4	5.26

This hypothesis is confirmed when analysing correlation values of parliamentary and party indexes with variables relative to information society development. It is at this stage that relevant statistic correlation indexes may be observed.

The “electronic government” variable is contained under the “Benchmarking e-Government: A Global Perspective” study submitted by the American Society for Public Administration (ASPA) and the United Nations’ Division for Public Economics and Public Administration. This study establishes an electronic government measurement index, which emphasizes and weighs the most representative qualities regarding a country’s ability to develop and maintain promotion strategies regarding citizens’ access to government information and services<sup>28</sup>.

Generally speaking, it has been confirmed that there is a positive incidence relationship between electronic government development and virtual development of representation institutions, as the correlation between development of parliamentary initiatives and political party initiatives is of 0.77 and 0.62 respectively. This fact reveals the existence of national strategies for electronic government that tend to favour innovation of representative actors in the use of new technologies. It seems that, although electronic democracy has not had the same emphasis and development as electronic government initiatives, we could expect the same to foster their establishment upon development of a critical mass of citizens that make use of the virtual space.

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<sup>28</sup> The index is based on three key dimensions: presence on the Internet, telecommunications’ infrastructure and human capital. Stephen A. Ronaghan; “Benchmarking e-Government: A Global Perspective”; American Society for Public Administration (ASPA) & United Nations Division for Public Economics and Public Administration; April, 2001; New York.

The second variable analysed within the group of factors relative to Information Society development is "Internet presence". This variable is one of the indicators used by the electronic government development index established by ASPA and United Nations. It measures the sophistication level along with the development stages regarding Internet use by governments.

According to the sites' features, this indicator classifies electronic government initiatives into emerging, in progress, interactive, transactional or integrated. Generally speaking, emerging initiatives are characterized by online presence of governments, in-progress initiatives refer to sites with dynamic information; and interactive sites enable downloading of documents, access to staff e-mail boxes and interaction through the net. Within a more advanced level, transactional sites allow for online payments and transactions and integrated sites enable complete integration of electronic services with traditional administration mechanisms of the public sector.

Pursuant to the above index, El Salvador, Guatemala, Honduras, Ecuador and Belize are at an emerging stage: online government presence has begun to expand and information has become more dynamic and specialized. Sites exhibit publications and legislation along with information about institutional news and e-mail addresses of administrative officers.

Argentina, Bolivia, Chile, Colombia, Costa Rica, Panama, Paraguay, Peru, Uruguay and Venezuela are at an interactive stage. These countries exhibit an online expansion of institutions and services offered by them, and Internet presence is characterized by a formal interaction between institutions and citizens; this enables the conduction of information searches on databases, sending of comments via e-mail and downloading of forms and data.

Finally, Brazil and Mexico are at a more advanced development stage, with sites that enable to obtain licences and authorizations online, as well as payment of services and taxes using electronic signature systems and specific security mechanisms.

Pursuant to an initial analysis, except for Bolivia, Panama and Paraguay (which exhibit a far lower level of virtual development of their representative government institutions before that of the central administration) this categorization is linked to the national averages of representative institutions' online presence. Under a general mean score of 19.5, Mexico and Brazil stand out with values of 57.27 and 49.71 respectively. In second place we find Argentina, Chile, Colombia, Costa Rica, Peru, Uruguay and Venezuela, with scores that range from 46.37 to 29.49. Finally, under a far lower degree of development, we find the group formed by El Salvador, Guatemala and Honduras along with the outstanding lack of development of Ecuador and Belize.

Following the categorization of electronic government initiatives within the Latin American region, we may thus establish three development stages for the case of representative institutions. Given that it is not possible to use the same type of categorization of phases as the dimensions for electronic government measurement do not correspond themselves fully with potential uses of new technologies by parliaments and political parties, it is then suggested – until the development of a more in-depth analysis on the subject– the use of the following categories: emerging, in development process, advanced (see Table 6).

With reference to this categorization and its possible dynamics, we should consider one of the indicators used by the electronic government index: nations' human capital. Under this category, the index integrates human development indicators, information access and percentage of urban population.

Special attention should be drawn towards this dimension as, although countries like Brazil exhibit a high score regarding electronic government general development, such value is achieved, to a great extent, due to a high online presence of its institutions. However, countries like Argentina and Uruguay, despite bearing a lower online presence, they possess higher indicators in terms of infrastructure and human capital. Uruguay in particular bears the highest regional index regarding information access. For the purposes of this article, this observation suggests these countries' potential to develop online citizen participation applications. In the mid-term, high indicators in terms of human capital and infrastructure may revert current innovation trends on the Internet.

Figure 7: Virtual development of representative institutions. Legislature and party index average (Mean: 29.55)

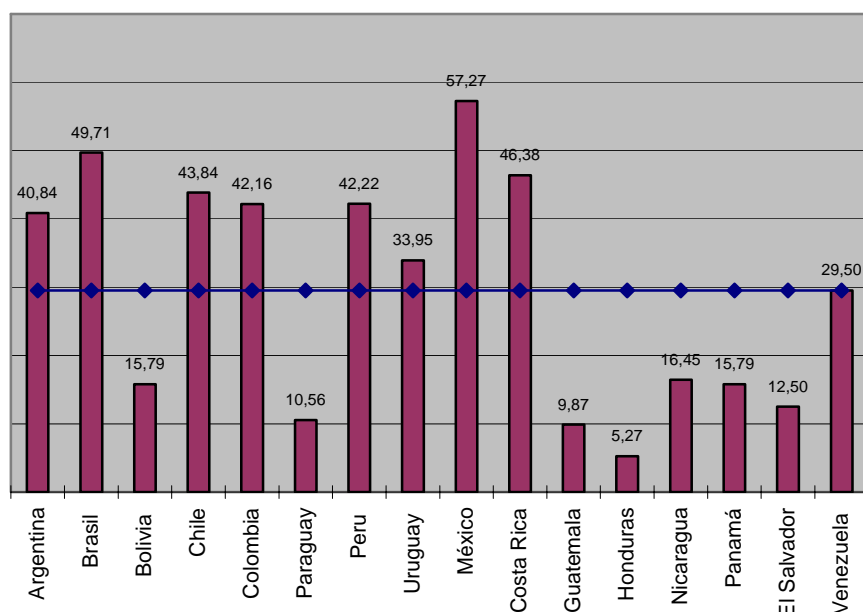


Table 5: National values	
<b>Advanced</b>	
Mexico	57.27
Brazil	49.71
<b>In development process</b>	
Costa Rica	46.37
Chile	43.84
Peru	42.22
Colombia	42.16
Argentina	40.84
Uruguay	33.95
Venezuela	29.49
<b>Emerging</b>	
Nicaragua	16.44
Panamá	15.79
Bolivia	15.79
El Salvador	12.5
Paraguay	12
Paraguay	10.56
Guatemala	9.87
Honduras	5.26



The third variable within the group of factors relative to information society development is the level of dissemination on the Internet. Generally speaking, the analysis of the influence of the number of Internet users reveals a significant correlation with the online presence of parliaments ( $r = 0.51$ ) and parties with parliamentary representation ( $r = 0.52$ ). This correlation reinforces the hypothesis that the previous existence of a potential public determines the decision for virtual space innovation.

However, there are two exceptions that deserve clarification. Brazil and Mexico, the leading countries regarding the application of new technologies, do not exhibit, under comparative terms, high Internet access rates. In these cases, the influence of a second variable is decisive: political commitment to technological incorporation strategies. Thus, Brazil and Mexico have achieved high indicators in terms of electronic government and parliament and policies implemented have been strong enough so as to overcome limitations relative to infrastructure and access to new technologies<sup>29</sup>.

Finally, within the group of independent variables that may influence parliaments and parties' decision of Internet innovation, it is worth highlighting NRI and ERI indexes.

The Networked Readiness Index (NRI) has been developed by the World Economic Forum to measure a nation or community's degree of preparation to take part in and benefit from the development of information and communication technologies. This indicator bears marked policy guidelines and is based on three analysis dimensions related to new technologies: environment, readiness and usage. The "environment" dimension measures the degree to which a country's market, political and regulatory systems along with technological infrastructure bear development and use of new technologies. The "readiness" dimension refers to the capability of economic agents (individuals, businesses and governments) to capitalize the use of new technologies. And the "usage" dimension measures the degree of technological utilization by these agents.

The ERI in turn, is an index developed by the Economist Intelligence Unit (EIU) to measure a community or nation's degree of preparation to take part in and benefit from the development of communication and information technologies from an economic perspective. Specifically, this index measures the extent to which the market favours Internet-based opportunities. The same is composed of six weighed indicators: connectivity (30%), economic environment (20%), electronic government development (20%), legal and regulatory environment (15%), development of support services to electronic initiatives (10%) and social and cultural infrastructure (5%).

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<sup>29</sup> Stephen A. Ronaghan; "[Benchmarking e-Government: A Global Perspective](#)"; American Society for Public Administration (ASPA) & United Nations Division for Public Economics and Public Administration; April, 2001; New York.

In both cases, there is a significant similar correlation between parliamentary and party actors, with a marked major influence of ERI on political parties. These indicators are added to the analysis of dimensions corresponding to social and economic development around new technologies and thus reinforce the hypothesis dealt with up to date. Unfortunately, there is no historic record on this phenomenon and the number of cases along with recentness of initiatives within the region do not enable the establishment of general trends; however, it may be stated that, on a global basis, the way in which parliaments and parliamentary representatives employ nowadays the opportunities offered by new technologies does not relate in most cases to political factors but to the prior existence of an action and virtual competitiveness arena.

Furthermore, the difference between the continent's South and Central regions could be explained from this perspective. Apparently, the covariance between parliamentary and party developments begins as from the existence of a certain development level of the Information Society. It could be assumed that parliamentary institutions possess greater pressures, potential benefits and resources available for Internet innovation, while political parties depend on the previous generation of a competitiveness space.

For the time being, the Latin American region exhibits - with an Information Society in dissemination process and despite the existence of a potential covariance relationship – a greater development of parliamentary sites; also, a higher dependence of parliamentary representation political parties' strategies regarding the establishment of a competitiveness arena on the net. In the meantime, Internet use is confined to political and legislative activity control and it fails to increase citizens' participation. For Latin America, contrary to what happens in Europe where none of the factors analysed entails an explanatory power, this possibility seems feasible upon the clearing of obstacles for universal access to new technologies; also upon the overcoming of difficulties regarding the development of national electronic government strategies that result in the application of long-term actions to favour both organizational effectiveness and efficiency along with innovation in terms of transparency and interactivity.

## Conclusions

Upon the exploration of the ways in which Parliamentary actors use new technologies, especially the Internet, we may anticipate the diagnosis of a quite incipient online presence of representation institutions within the Latin American region. Parliaments and political parties are at an initial stage regarding the process of taking advantage of new technologies. For the time being, initiatives respond to the object of enhancing information and opinion instances of both citizens and electors; only exceptionally, do these initiatives respond to the strengthening of the political process' transparency or to higher effective involvement and participation of citizens in the decision-making process.

Despite the fact that the scope and possibilities of electronic democracy still remain unclear, the region exhibits some trends regarding potential development of the same which, in the mid-term, may become proposals for action. Although the development of new technologies does not entail fundamental alteration of the nature of the democratic system, the agilization of communication paths, the opening of information sources and the new interaction possibilities exert a direct influence on democracy's fundamental principles; further, these factors bear the potential of contributing to the consolidation of this system. Latin America has achieved the expansion of democracy and is currently struggling to attain consolidation of this regime. Thus, the Internet may become one of the mechanisms for democracy strengthening, to the extent that it adds to and complements traditional access paths to power; further, it enables higher transparency and accountability levels of both representatives and the political process. In this regard, the latest communication and information means are at democracy's service when used as potential information, interaction and control tools.

The guiding question to the drawing up of this article refers to the way in which parliamentary actors currently profit from the opportunities offered by these tools and to how the same may be used in future to strengthen government institutions and to draw citizens near to the legislative process. Although we are witnessing the first steps of an incomplete and, to a great extent, uncertain process, the possibilities for the use of new tools in the mid-term may be found in the strengthening of parliamentary duties' transparency; also, in the increase of citizens' involvement and participation in the decision-making process. Regarding the use of the website arena, it shall be necessary to enhance information provided to citizens and the forms used for this purpose, as well as to improve the new interaction ways and possibilities available nowadays. Thus, it may be stated that the Internet shall become a technological solution at the service of politics, insofar as it is understood and administered as such.

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