

# ACCOUNTABILITY E INTERNET NUMA PERSPECTIVA COMPARADA: A ATUAÇÃO DIGITAL DAS CONTROLADORIAS PÚBLICAS NA AMÉRICA LATINA

## ACCOUNTABILITY AND INTERNET IN A COMPARATIVE PERSPECTIVE: THE DIGITAL PERFORMANCE OF PUBLIC CONTROLLERSHIPS IN LATIN AMERICA

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**Resumo:** Este artigo apresenta os resultados da análise comparada sobre os mecanismos de responsividade digital operados pelas controladorias governamentais em países da América Latina. Analisamos os sites e páginas de mídia social que essas controladorias disponibilizam ao público de acordo com os princípios de governo aberto. Nosso estudo aborda a principal questão de pesquisa: até que ponto as controladorias governamentais na América Latina estão utilizando a Internet como ferramenta para aprimorar os mecanismos de responsividade e accountability? Para alcançar os objetivos da pesquisa, desenvolvemos um índice para medir o desempenho das funções de accountability no ambiente digital: o Índice de Controladoria Digital (ICD). O ICD agrega duas dimensões analíticas: (i) informação e legitimidade e (ii) controle popular e educação. Os resultados dos testes estatísticos mostraram que fatores políticos influenciam o desempenho das controladorias governamentais latino-americanas no que diz respeito ao uso das tecnologias digitais para o aumento da accountability.

**Palavras-chave:** Responsividade. Transparência. Governo Aberto.

**Abstract:** This paper presents the results of the comparative analysis on the digital accountability mechanisms the government comptroller offices in Latin American countries operate. We analyze the websites and social media pages that those comptroller offices provide to the public due to the principles of open government. Our study addresses the main research question: to what extent the government comptroller offices in Latin America are using the Internet as a tool to enhance the accountability mechanisms? To accomplish the research objectives, we developed an index to measure the performance of the accountability functions in the digital environment: the Digital Comptroller Index (DCI). The DCI aggregates two analytical dimensions: (i) information and legitimacy and (ii) popular control and education. The results of the statistical tests showed that political factors do influence the performance of Latin American government comptroller offices concerning the use of digital technologies to improve their accountability.

**Keywords:** Accountability. Transparency. Open Government.

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## Introduction

In recent years, researchers and practitioners have become increasingly aware of the importance of accountability, transparency, and civic engagement as the foundation for a democratic government. Especially if we consider the effects of the Internet on democratic citizenship as it strongly improves the capability of citizens to access government information (Margetts, 2011; Meijer, 2009; Norris, 2001; Noveck, 2008). Hence, from the perspective of the principal-agent theory, a large body of literature explores accountability and transparency as mechanisms of the actor-forum relationships that occur in modern representative democracies (Bovens, 2007; Dubnick, 2002; Dunn, 1999; Elster, 1999; Gailmard, 2014; March; Olsen, 1995; Margetts, 2013; Meijer, 2009, 2014; Meijer, Hart; Worthy, 2015; Mulgan, 2003; Przeworski, Stokes; Manin, 1999; Romzek; Dubnick, 1987; Schedler, 1999).

Several studies have supported the idea that openness and transparency in governments play a leading role towards democratic governance (Heald, 2006a, 2006b; Hood, 2006; Margetts, 2011; Meijer, 2009, 2014; Meijer *et al.*, 2015). The lessons from Meijer (2014) teach us that transparency facilitates accountability when it actually presents a significant increase in the available information, when there are actors capable of processing the information, and when exposure has a direct or indirect impact on the government.

There is no doubt that democratic states should assure the fundamental right of access to information to empower citizens. Researchers have described how Freedom of Information (FOI) as an idea and a practice has spread around the world in the past decades. The Open Government movement is directly related to the FOI laws. Lately, open government policies have proliferated in national and subnational governments of countries considered full democracies. The reasoning behind the idea of such strengthened transparency is that once governmental action is openly revealed, wrongdoing will come to light (Meijer *et al.*, 2015).

Among the seminal studies on open government, Dawes and Helbig's idea of transparency as an instrumental tool towards accountability and public value is an essential concept to highlight

[...] transparency initiatives generally serve one of two goals. The first is to provide e-citizens and other stakeholders with a 'window' into what government is doing and how it works in order to hold elected officials and public agencies accountable for their decisions and actions. The second goal is to release government data to the public so that taxpayer-supported digital information can be used to generate social and economic value (Dawes; Helbig, 2010, p. 50).

However, accountability and transparency initiatives in Latin American countries have not received a lot of research attention. A few empirical studies have targeted that subject matter in the region although the demand for accountability and higher standards of integrity in government is a growing movement in new or flawed democracies.

Indeed, emerging countries like Brazil have only recently fully entered the right to know era. The *Brazilian Freedom of Information Law*<sup>1</sup> was enacted in 2011 and the situation in other main Latin American countries is not quite different. The first two countries that issued a FOI law in the region were Mexico and Peru – both in 2002. Other major Latin American countries have just enacted their FOI laws – Colombia and Paraguay in 2014, and Argentina in 2016. In this sense, Fung and Weil argue that the open government implementation challenges arise from policies' issues rather than from lack of technology

[...] in essence, we need transparency that provides a full accounting of the benefits as well as the costs of government activities. The information technologies are readily available; what we need is the political drive to foster a more complete form of open government (Fung; Weil, 2010, kindle loc. 2659-2661).

<sup>1</sup> Law no. 12.527/2011 ([http://www.planalto.gov.br/ccivil\\_03/\\_ato2011-2014/2011/lei/l12527.htm](http://www.planalto.gov.br/ccivil_03/_ato2011-2014/2011/lei/l12527.htm)).

Our research performs a comparative analysis on the digital accountability mechanisms the government comptroller offices in Latin American countries operate. We explore the political dimension of accountability and how the information and communication technologies can hold officials accountable. Ultimately, the study is an attempt to provide researchers and practitioners with an empirical-based understanding about the differences and similarities of the digital initiatives on government accountability and transparency in Latin America.

In addition, we analyze the institutional, socioeconomic, and political factors that affect the observed variations and test the following hypotheses:

(H1) Most of the digital accountability initiatives concentrate on providing information to the public rather than fostering popular control and citizen education;

(H2) Political and institutional factors have a major influence on the performance of government comptrollerships concerning the use of digital accountability tools compared to socioeconomic factors;

(H3) Countries with authoritarian regimes or flawed democracies tend to neglect the use of digital accountability mechanisms.

Our study addresses the main research question: To what extent the government comptroller offices in Latin America use the Internet as a tool to enhance the accountability mechanisms? Other secondary issues also imply the conduct of the research: Which factors might be associated with the use of the Internet by government comptrollers in Latin American countries? Do they follow any pattern of Internet usage? Which of these comptrollers stand out for good practices in the usage of digital technologies?

## Methodology

To accomplish the research objectives, we develop an index to measure the performance of the accountability functions through the Internet: *The Digital Comptroller Index* (DCI). The DCI evaluation criteria are based on the studies of Bovens (2007a); Bovens, Goodin and Schillemans (2014); Brandsma & Schillemans (2013) on the accountability components – *information, discussion and sanctions* – concerning the accountant - account-holder relations.

The DCI aggregates two dimensions of analysis: *information and legitimacy* and *citizen education and popular control*, each of them consisting of a set of independent variables.

On one hand, the *information and legitimacy* dimension analyzes the digital accountability mechanisms in the sense of effective countermeasures against fraud, waste and abuse in the public sector. The idea of ‘the more strictly we are watched, the better we behave’ is expected to result in norm compliance and ultimately in an instrument to curb corruption.

**Table 1.** Information and Legitimacy dimension variables

DIMENSION	INDEPENDENT VARIABLES
INFORMATION AND LEGITIMACY	Audit reports are published on the website
	Imposed sanctions are available on the website
	Online complaints
	Online complaint follow-up
	Complaint investigation reports are published on the website
	Link to transparency portal on the website
	Link to access of information (FOI) on the website

Source: Authors (2023).

On the other hand, the citizen education and popular control dimension examines the use of innovative digital tools to foster citizen engagement and participation.

**Table 2.** Citizen Education and Popular Control and dimension variables

DIMENSION	INDEPENDENT VARIABLES
CITIZEN EDUCATION AND POPULAR CONTROL	Online ombudsman channel
	Online access of information request
	Online access of information request follow-up
	Online access of information attendance
	Open Government Data
	Social Media pages
	e-Learning tools

Source: Authors (2023).

The investigation consists of a content analysis of the websites and social media pages the comptroller offices in Latin America provide to the public due to the principles of open government.

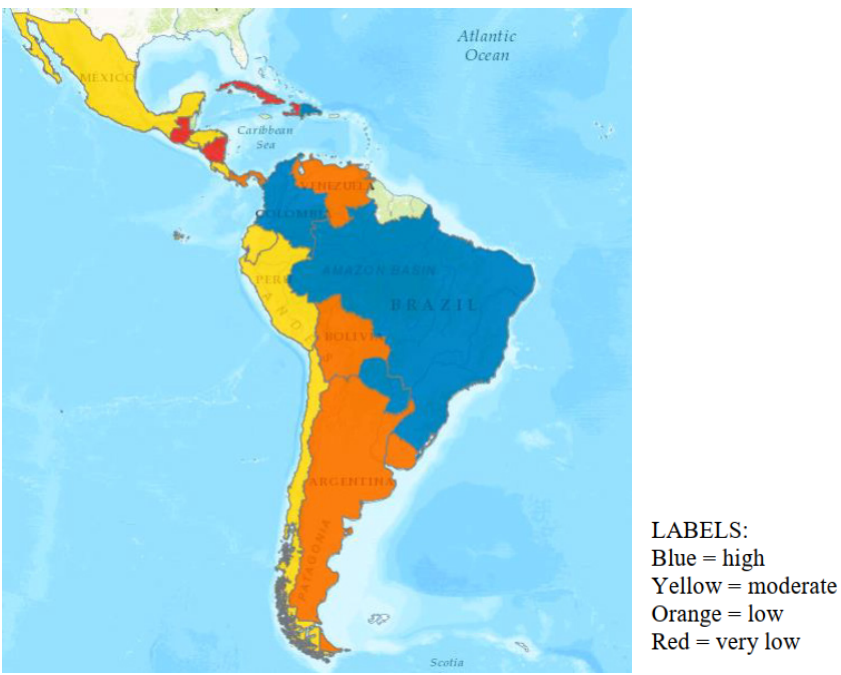
A combination of quantitative and qualitative methods is used in the investigation: statistical significance and correlation tests with SPSS; document analysis on transparency policies and procedures; content analysis of websites and social media pages (*Facebook, Twitter and Youtube*).

The research data sources are essentially the official Internet portals of the twenty national governments in Latin America, during the year 2019.

**Results and discussion**

We analyzed the digital accountability tools that the thirty comptroller offices within the twenty Latin American national governments offer on their websites and social media pages. The following map shows the findings based on the DCI scores.

**Figure 1.** Latin American comptrollerships DCI performance



Source: Authors (2017) with arcgis office app.

On the following tables 3 and 4, we can find how the independent variables of each analytical dimension have impacted the DCI scores:

**Table 3.** Independent Variables Frequency Distribution

<b>I</b>	<b>DIMENSÃO I – INFORMAÇÃO &amp; LEGITIMIDADE</b>		
1	Audit reports are published on the website	16	53,3
2	Imposed sanctions are available on the website	7	23,3
3	Online complaints	18	60,0
4	Online complaint follow-up	12	40,0
5	Complaint investigation reports are published on the website	5	16,7
6	Link to transparency portal on the website	26	86,7
7	Link to access of information (FOI) on the website	20	66,7
<b>MEAN – DIMENSION I</b>			<b>47,9</b>
<b>II</b>	<b>DIMENSÃO II – CONTROLE SOCIAL E EDUCAÇÃO</b>		
1	Online ombudsman channel	17	56,7
2	Online access of information request	14	46,7
3	Online access of information request follow-up	7	23,3
4	Online access of information attendance	3	10,0
5	Open Government Data	3	10,0
6	Social Media pages	24	80,0
7	e-Learning tools	11	36,7
<b>MEAN – DIMENSION II</b>			<b>45,2</b>

**Source:** Authors (2019).

From the information presented in the table, confirmation of the first hypothesis (H1) is observed; that is, the websites of control agencies prioritize providing information to citizens at the expense of increasing possibilities for social control or political education through digital platforms. This is due to the high percentage of items such as ‘transparency link’ (87%) and ‘access to information link’ (67%) on the analyzed websites. Regarding items that are more concerned with social control and education, the percentages are much lower, except for presence on social networks (80% of cases). For instance, only 10% of the examined websites are concerned with publishing responses to access to information requests granted by the relevant authorities. Another example: only 10% of the examined portals offer any kind of information in the form of open data.

**Table 4.** DCI and independent variables correlation

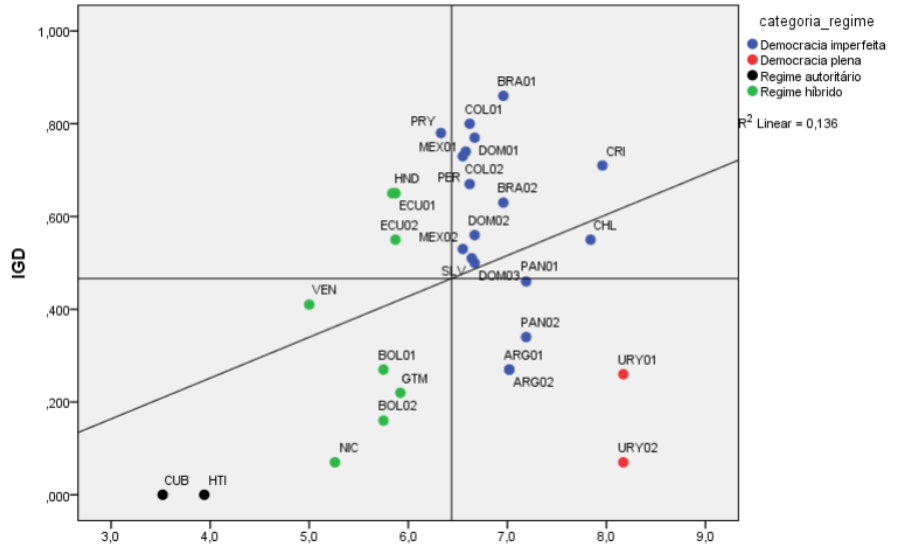
VARIABLE	PEARSON COEF.
Online complaints	0,757
Audit reports are published on the website	0,606
Social Media pages	0,585
Online access of information request	0,583
e-Learning tools	0,448
Imposed sanctions are available on the website	0,401

**Source:** Authors (2019).

Below, figure 2 illustrates the relation between the DCI and The Democracy Index (2015); while figure 3 shows how the DCI relates with The Government Effectiveness Index (2015); when

controlled by The HDI (2014). Below, figure 2 illustrates the relation

**Figure 2.** DCI and democracy index



Source: Authors (2019).

The data reflects that, in general, political factors are more closely associated with the performance of the comptrollerships in the DCI than socioeconomic factors. However, only two of the associated political factors show a stronger relationship: the Government Effectiveness Index (The Worldwide Governance Indicators (WGI) 2015, formulated by the World Bank) and the Electoral Pluralism sub-index of the Democracy Index (Democracy Index 2015, formulated by The Economist).

On the other hand, although the association of the use of digital technologies by public comptrollerships in Latin America with political factors such as freedom index, government functionality, political participation, civil liberties, and quality of democracy is weak, it does exist and is positive, indicating that there are strong political determinants of the policies regarding the use of these technologies.

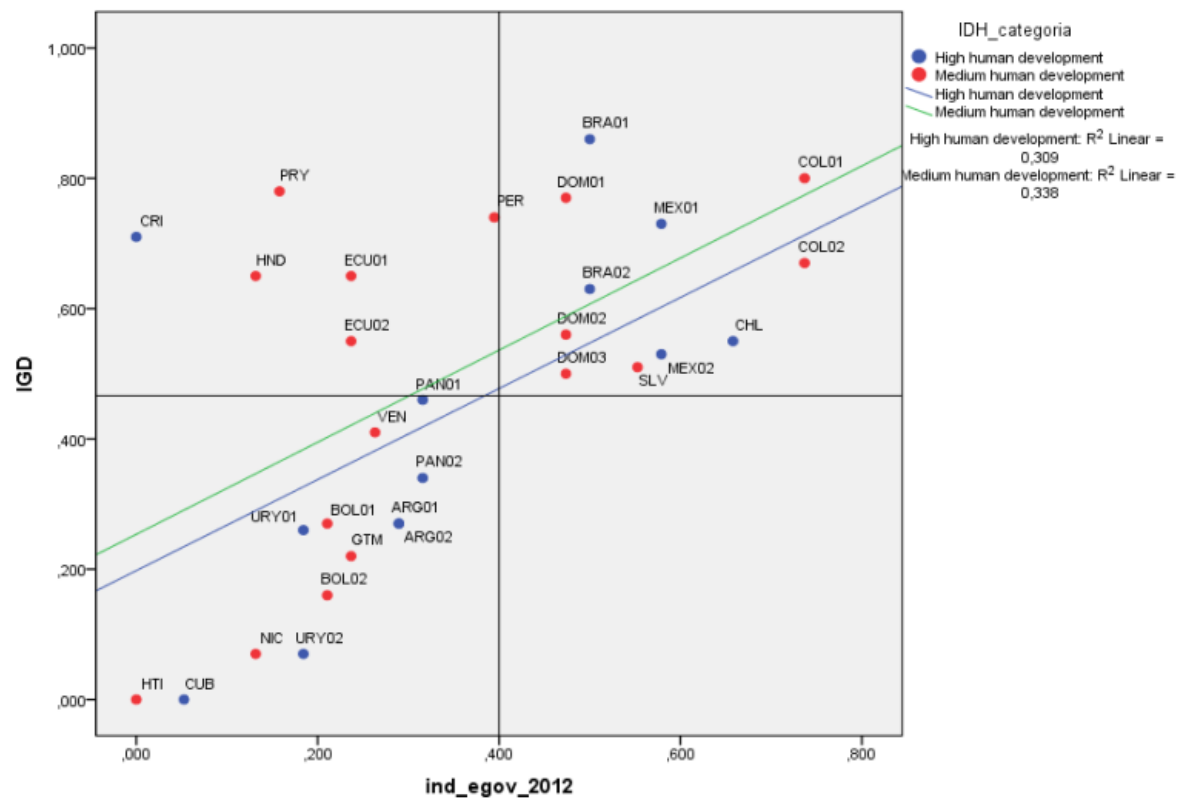
An examination of the Pearson coefficient relating to the Democracy Index shows a moderate positive relationship between this type of regime and the use of digital technologies by public comptrollerships in Latin America. For example, the “flawed democracies,” according to The Economist’s classification, or those in a consolidation stage, were the ones that scored the highest in the DCI, demonstrating their greater concern for the use of digital tools in accountability and public transparency actions. This trend holds true except for the cases of Argentina and Panama, which diverge from this tendency.

Among the “hybrid democracies,” or those in the process of institutionalization, the positive performance of Honduras and Ecuador stands out in comparison to the others in the group, which remained in the third quadrant of the graph as expected. The two dictatorships in the region showed a null performance in the DCI.

It is interesting to note the unique situation of Uruguay, the only “mature democracy” in the region according to The Economist’s classification, which exhibits a low performance in the DCI. This might indicate that institutionalization could discourage the use of digital technologies by public comptrollerships in the case of Latin America.

Next, we present the World Bank’s Government Effectiveness Index and the intensity of the use of digital tools by comptrollerships, controlled by countries with high and medium IDH.

**Figure 3.** DCI and government effectiveness (controlled by IDH)



Source: Authors (2019).

At the outset, a high degree of consistency between the two indices is evident, as there is no country with a high Government Effectiveness Index and low performance in the DCI. This indicates that there is a correlation between the digital government policies adopted by countries and the use of digital technologies by comptrollerships, although this relationship is not perfect and there are some discrepant cases.

Furthermore, it is observed that countries with a high HDI had low performance in both the Government Effectiveness Index and the DCI, indicating that these countries indeed have poor performance in utilizing digital tools for open government initiatives. Once again, Colombia stands out as a positive example, with a high level of performance in both indices. There is also a group of countries whose comptrollerships' performance in the DCI is higher than the Government Effectiveness Index: Costa Rica, Honduras, Paraguay, and Ecuador.

In this context, the hypothesis is confirmed that there is an association of political factors with the intensity of the use of digital technologies by public comptrollerships in Latin America. With the exception of the discrepant cases (Argentina, Panama, and Uruguay), it can be asserted that the new democracies, those in a consolidation stage, prioritize the use of digital technologies by comptrollership agencies the most, as seen in the examples of Brazil and Colombia. A trend of using digital tools by democracies in the process of institutionalization, such as Honduras and Ecuador, can also be observed, indicating a pursuit of greater transparency and accountability.

**Conclusions**

This article aimed to undertake a comparative examination of the digital performance of public comptrollerships in Latin America. The research was theoretically grounded in studies

of public accountability from the perspective of principal-agent theory and the forum-actor relationships characteristic of modern representative democracies.

The study focused on the accountability functions carried out through the Internet and covered the websites and social media pages (Facebook, Twitter, and Youtube) of the comptrollerships of Latin American national governments, with the intention of answering the following research question: To what extent do public comptrollerships in Latin America use the Internet as a means for operationalizing accountability functions?

The assessment of the functions performed by comptrollerships in the digital environment considered two dimensions of analysis: Information and Legitimacy, and Social Control and Education, which together formed the proposed index: the e-Comptrollership Index or Digital Comptrollership Index (DCI). In general terms, the DCI considered the following independent variables: the publication of audit reports on the website, the existence of a software tool for online complaints, the disclosure of applied sanctions, the possibility of requesting access to information through the website, the existence of a reporting channel, e-learning, and presence on social media.

Out of the thirty agencies surveyed, four comptrollerships achieved a “high” performance in the DCI: the Office of the Comptroller General (Brazil); the Auditoría General de la República de Colombia; the Contraloría General de la República del Paraguay; and the Cámara de Cuentas de la República Dominicana. Thirteen comptrollerships showed a “medium” performance on the index. Another seven exhibited “low” performance, and six comptrollerships demonstrated a “very low” performance on the DCI, of which two did not score (Contraloría General de la República de Cuba and La Cour Supérieure des Comptes et du Contentieux Administratif d’Haiti).

Correlation tests demonstrated that the variable that contributed the most to explaining the comptrollerships’ performance in the DCI is the provision of a dedicated digital tool for “submitting complaints on the website.” Next in contribution was the variable “publication of audit reports on the website.” Both belong to the Information and Legitimacy sub-index and exhibited a strong correlation with the overall performance of comptrollerships in the DCI. The other tested variables showed a moderate correlation with the index. The research showed that although almost all Latin American government comptroller offices have daily postings in their social media pages, most of their websites only publish basic accountability information. This finding confirms hypothesis (H1). The results of the statistical tests showed that political factors do influence the performance of the Latin American government comptroller offices concerning the use of the digital technologies. However, those same results demonstrate that there are no strong correlations between institutional and socioeconomic factors and the Digital Comptroller Index (DCI). Therefore, hypothesis (H2) is only partially confirmed.

The study concluded that in general comptrollership institutions in Latin America remain in an early stage of the digital tools’ usage. The technologically innovative resources available for the development of accountability and public transparency have been underutilized if not neglected in countries with authoritarian or hybrid regimes, or countries with new or flawed democracies, as hypothesized (H3).

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