# **Brazil: The Transparency Portal of the Federal Government**

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# 1 Introduction

For the past 15 years, Brazil has achieved a prominent position in the international community by strengthening its economy and as a founding member of the BRICS (with Russia, India, China, and South Africa) group of significant emerging global economies. During this time, the country has also been moving towards expanding its policies on information technology, transparency and accountability to provide better services for its citizens. This change has been mostly driven by legislation implemented by the federal government. The Brazilian Transparency Portal is the primary example of such institutional evolution and of the challenges it embodies.

The Portal is a website that provides detailed information on the revenues and expenditures of the Brazilian Federal government and it is available at the URL transparencia.gov.br. It was created by the Office of the Comptroller General (in Portuguese "Controladoria Geral da União" or CGU)<sup>1</sup> in 2004 and consolidated in 2005 through the enactment of a legislation that mandated the online publication of detailed information concerning certain federal public expenditures. The Portal provides information on all federal government agencies and reached the mark of more than one million accesses per month. Following the national movement, the Portal has evolved over the last 10 years due to both the enhancements of policy and regulation, and the introduction of new technologies.

This case study focuses on the implementation of the Brazilian Transparency Portal and its relevance to the country's digital government strategy. Through the study, we provide an overview of the Portal's development process, investigate the

<sup>&</sup>lt;sup>1</sup>For additional information on the context of the creation of CGU in 2002 and the change in institutional paradigm it represented, see Vieira (2013).

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Portal's relationship with the broader e-government strategy, and address the challenges concerning the Portal's implementation process. To better understand and report differing views, usage patterns, and implementation of related policies, we reviewed available documents, analyzed the current use of the Transparency Portal, and conducted interviews with relevant stakeholders such as scholars, activists, government officials, and NGO representatives.

## 2 Context

## 2.1 Brazil: Economic and Political Background

To understand Brazil's movement towards transparency and accountability, it is critical to understand the country's recent economic and political history. Brazil is currently the seventh largest economy in the world,<sup>2</sup> a significant achievement for a country that lived under a military dictatorship until 1985 (information on Brazil's current context from the economic and e-government perspectives are presented in Fig. 1). The re-democratization process followed by the country's New Constitution of 1988 was the turning point for re-establishing economic and social rights, and building the basis for a lasting democracy. During this transition in the late 1980s and early 1990s, Brazil had to cope with issues inherited from its military dictatorship: a closed economy, low credibility in the international community, a scrapped industrial sector, and hyperinflation.

Starting in 1994, Brazil implemented major economic, monetary, and fiscal policy reforms, which were consolidated under President Fernando Henrique Cardoso's administration (1995–2002). These actions regained the trust of the international community and managed to stabilize the country's economy. Part of this process included transparency as a tool to contribute to macroeconomic adjustment, particularly by imposing fiscal responsibility to all levels of government as a way to reduce public debt and by ensuring public accountability on the revenues and expenditures (Alves and Heller 2013). In 2002, following the election of President Luiz Inácio Lula da Silva, the Brazilian government instituted several public policies focused on social development, inequality reduction, and promoting mechanisms to increase citizen's participation. These changes enhanced government transparency, participation, and accountability, and became the general orientation for the development of public policies during the presidential terms of da Silva and his successor, Dilma Rousseff.

<sup>&</sup>lt;sup>2</sup>The World Bank. (n.d.). Brazil Overview. Retrieved April 21, 2015, from http://www.worldbank. org/en/country/brazil/overview

Estimated Population (2014)<sup>1</sup>: 202,656,788 Population Density (2014)<sup>2</sup>: 23.8/km<sup>2</sup> (62/sq. mi) Geographic area<sup>3</sup>: 8,514,877 km<sup>2</sup> (3,287,597 sq. mi) Gross Domestic Product (2014 estimate)<sup>4</sup>: US\$ 2.246 trillion GDP per capita (2014 estimate)<sup>5</sup>: US\$ 11,067.47 Internet users per 100 people (2013)<sup>6</sup>: 51.6. Rank in ITU Fixed Broadband Penetration (2013)<sup>7</sup>: 73 of 190. Rank in UN E-government Development Index (2014)<sup>8</sup>: 57 of 193. Rank in UN E-participation Index (2014)<sup>9</sup>: 24 of 193.

<sup>1</sup> Central Intelligence Agency. (2015, April 10). The World Factbook. Retrieved April 21, 2015, from https://www.cia.gov/library/publications/the-world-factbook/geos/br.html

<sup>3</sup> Ibid.

<sup>4</sup> The World Bank. (n.d.). Data by Country - Brazil. Retrieved April 21, 2015, from http://data.worldbank.org/country/brazil
<sup>5</sup> Ihid.

<sup>6</sup> The World Bank. (n.d.). Internet users (per 100 people). Retrieved April 21, 2015, from http://data.worldbank.org/indicator/IT.NET.USER.P2

<sup>7</sup> Biggs, P. (2014). The State of Broadband 2014: Broadband for All (p. 96). Geneva: International

Telecommunications Union (ITU) Broadband Commission for Digital Development. Retrieved May 4,2015 from http://www.broadbandcommission.org/Documents/reports/bb-annualreport2014.pdf

<sup>8</sup> UNPACS. (2014). EGOVKB | United Nations Data Country Information. Retrieved April 21, 2015, from

http://unpan3.un.org/egovkb/en-us/Data/Country-Information/id/24-Brazil

**Fig. 1** Information on Brazil's current context from the economic and e-government perspectives (*Source*: prepared by the authors with information provided by CIA (2015), The World Bank (n.d.), Biggs (2014) and UNPACS (2014). Map of Brazil with flag (Oliveira Junior and others 2007) provided under a Creative Commons CC-BY-SA 2.5 license)

Brazil has a complex political structure composed of 26 states and a Federal District, more than 5500 municipalities, 39 federal ministries,<sup>3</sup> 81 senators,<sup>4</sup> and 513 congressmen.<sup>5</sup> As a federal republic, states and municipalities have considerable autonomy and their own legislative branches. With this sovereignty, the mandated integration of information technology systems across different levels of government would not be possible (any such ruling would likely be considered unconstitutional by the Brazilian Supreme Court). Therefore, integration of federal and subnational government initiatives, which is a critical aspect in the implementation of e-government policies, depends on stakeholders' commitment and collaboration.

<sup>&</sup>lt;sup>2</sup>*Ibid.* 

<sup>&</sup>lt;sup>9</sup> Ibid.

<sup>&</sup>lt;sup>3</sup>Palácio do Planalto. (n.d.). Precedência—Ministros. Retrieved April 21, 2015, from http://www2. planalto.gov.br/presidencia/ministros

<sup>&</sup>lt;sup>4</sup>Senado Federal. (n.d.). Conheça o Senado. Retrieved April 21, 2015, from http://www.senado. gov.br/senado/

<sup>&</sup>lt;sup>5</sup>Câmara dos Deputados. (n.d.). Conheça a Câmara. Retrieved April 21, 2015, from http://www2. camara.leg.br/a-camara/conheca

# 2.2 The National E-Government Policy

The Brazilian Federal e-Government Program officially started in 2000, under the Cardoso administration, with the creation of the Executive Committee on Electronic Government,<sup>6</sup> which had the mission of "formulating policies, drafting guidelines, and coordinating the electronic government implementation activities", and was directly subordinated to the Brazilian Presidency. The Committee focused on rendering services and information to citizens through procurement rationalization, guidelines determination, and quality standards for e-services definition.<sup>7</sup> In general, this first institutional phase of the Brazilian e-government strategy was characterized by the creation of a governance system and by an emphasis on technology as a tool for a state reform, focused in reducing expenses and increasing efficiency (de Laia et al. 2010).

Starting in 2003, during the da Silva administration, the general e-government strategy was implemented through the development of an e-government program with clearly identified principles, such as: democratizing information access, amplifying public debates, and enhancing public service delivery. The e-government program defined priority areas for policy development, such as responsiveness to citizens, improvement of internal management, and integration with service providers and other policy stakeholders. Also, seven guidelines were established to inform e-government policies: (1) e-government should prioritize promoting citizenship; (2) digital inclusion is inseparable from e-government; (3) free software is a strategic resource for e-government implementation; (4) knowledge management is a strategic tool to the integration and management of e-government public policies; (5) e-government should rationalize the use of resources; (6) e-government should be based on a common and integrated set of policies, systems, standards and rules; (7) e-government initiatives should be integrated with initiatives both at state and municipal levels and with initiatives developed by the legislative and judiciary branches. Despite the absence of a document formally titled a "national digital strategy", the definition of goals, axes and guidelines for digital initiatives changed the way the federal government interacted with citizens, companies, and subnational governments by improving the quality of the services delivery, promoting better integration, and strengthening civic participation.<sup>8</sup>

This second phase of e-government also focused on the promotion of openness and civic participation. Digital inclusion became an important element of the government's digital strategy. It encompassed a national broadband plan that aimed at improving connectivity. The result was an 82 % increase in the number

<sup>&</sup>lt;sup>6</sup>Executive Order of October 18, 2000. Retrieved April 21, 2015, from http://www.planalto.gov.br/ccivil\_03/dnn/Dnn9067.htm

<sup>&</sup>lt;sup>7</sup>Ramos Medeiros and De Aquino Guimarães (2005).

<sup>&</sup>lt;sup>8</sup>Portal de Governo Eletrônico do Brasil. (n.d.). Conheça o Programa de Governo Eletrônico Brasileiro. Retrieved April 21, 2015, from http://governoeletronico.gov.br/o-gov.br

of fixed broadband subscribers and a 936% increase of mobile broadband subscribers in a 5-year period, by the end of 2014.<sup>9</sup>

During the 2011–2014 period, the Brazilian e-government program was augmented by new initiatives and subject-specific policies implemented by government agencies. For example, standards for the visual identity of websites were defined by the Office of Communications of the Presidency; information security guidelines were established by the Institutional Security Cabinet; transparency and open government directives were proposed by the CGU. While these policies were broadly inspired by the e-government program and by the prior waves of e-government policies, they added new layers of regulations and guidelines to be widely implemented by new initiatives, thus complementing the broader national digital strategy. In particular, general principles of transparency and open government had a strong influence in this third phase of e-government policies.

# 2.3 The Evolution of Transparency Policies

Contemporaneously to the creation of the national e-government policy, the institutional scope of transparency activities evolved over time as a result of improvements in Brazil's legal and regulatory framework. In this context, transparency means making information available to the broader public through various means and serving as a tool for greater public accountability and fighting corruption.<sup>10</sup>

Starting in 2000, the national legislature approved a series of measures to expand fiscal transparency in various government operations, e.g. budgeting, procurement. The responsibility law<sup>11</sup> mandated fiscal austerity and transparency at all federative levels, and through an amendment,<sup>12</sup> it also required the real time publication of detailed information on government's budget and spending. Finally, in 2011, the Brazilian Freedom of Information Law<sup>13</sup> completed the Brazilian legal framework for transparency and promoted the enhancement of transparency policies, which were expanded both in range (i.e., the law is applicable to states and municipalities within the country as well as to the Judiciary and Legislative branches) and in scope (i.e., the law imposes explicit provisions on open government data, mandates active transparency, and establishes procedures for freedom of information requests). In the same year, the National Action Plan on Open Government was proposed including several initiatives concerning increased transparency, enhanced public governance, broader access to public information, and greater public integrity.

<sup>&</sup>lt;sup>9</sup>Coimbra de Oliveira (2014).

<sup>&</sup>lt;sup>10</sup>Controladoria Geral da União. (n.d.). Portal da Transparência do Governo Federal. Retrieved April 21, 2015, from http://www.portaldatransparencia.gov.br/sobre/

<sup>&</sup>lt;sup>11</sup>Complementary Law 101/2000.

<sup>&</sup>lt;sup>12</sup>Complementary Law 131/2009.

<sup>&</sup>lt;sup>13</sup>The Brazilian Freedom of Information Law was proposed in 2009, enacted in 2011, and entered in force in 2012. The law is available at http://www.planalto.gov.br/ccivil\_03/\_ato2011-2014/ 2011/lei/l12527.htm

## **3** The Transparency Portal

The evolution of the Brazil's transparency regulation is closely related to the evolution of the Transparency Portal itself. The Transparency Portal was initially launched in November 2004 and later ratified, in June 2005, by Executive Order 5482, which acknowledged the Transparency Portal of the Federal Executive Branch as a "website available on the Internet with the goal of providing detailed data and information on the budgetary and financial execution of the Union, comprising, among others, the following procedures: (i) expenses incurred by federal government agencies and entities; (ii) transfers of federal financial resources to the States, to the Federal District, and to the Municipalities; (iii) transfers of budgetary resources in the benefit of natural persons or nongovernmental entities of any kind, and (iv) credit operations performed by official development financial institutions".<sup>14</sup>

The Federal Data Processing Service (SERPRO) developed the Portal. After the development phase, CGU's officials assumed responsibility for the Portal's management and administration. After this incorporation, there is no specific budget line concerning the Transparency Portal's activities, therefore the Portal's implementation costs related to hardware, personnel, and data link are absorbed by the CGU. One person coordinates the Portal with two managers to help the administration. Additionally, periodical meetings with a multidisciplinary group, composed of representatives from the information technology, communication, accounting, and strategic information offices of CGU, are conducted to determine future strategies, new demands, and other aspects of the future of the Portal.

## 3.1 Portal Goals and Structure

The initial goal of Brazilian Transparency Portal was to provide accurate information on public expenditures by publishing data on direct spending by federal government agencies and transfer of financial resources to states, municipalities and non-governmental entities. The scope of the Portal has evolved, however, from a strictly financial to a broader strategic approach that takes into consideration how public resources are utilized. The Portal allows a person to query and filter federal databases to obtain information on procurement, payments, transfer of resources and other financial liabilities incurred by the federal government. The system offers an expansive array of information, such as the salaries of public officials (including those working abroad), public properties being used by public officials as dwellings, not-for-profit entities debarment list, registry of expulsion penalties, and other relevant information. Figure 2 illustrates the range of available information.

<sup>&</sup>lt;sup>14</sup>Executive Order 5,482, of June 30, 2005. Retrieved April 21, 2015, from http://www.planalto.gov.br/ccivil\_03/\_Ato2004-2006/2005/Decreto/D5482.htm

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Database	Description	Source (Agency/database)	Updated	Date Added
Detailed Daily Expenses	Detailed information on budgetary/financial execution	Treasury Office (STN)/SIAFI	Daily	May/2010
Transfer of Financial Resources	Financial transfers to States, Municipalities, Companies, NGOs, individuals, and multilateral institutions	STN/SIAFI	Monthly	November/2004
Direct Expenses incurred by Federal Government	Expenses concerning construction contracts, government procurement, per diems paid, and government credit cards	STN/SIAFI	Monthly	June/2005 (December/2005 for credit cards)
Revenues	Estimated and realized revenues, including tax-related revenues.	STN/SIAFI	Daily	December/2009
Partnerships with NGOs and/or public entities	Financial transfers in the context of partnerships enacted between the federal government, NGOs and public entities.	STN/SIAFI and Ministry of Planning/SICONV <sup>1</sup>	Monthly	December/2008
National Debarment List	List of companies sanctioned with the prohibition on entering into contracts with the public administration.	CGU / CEIS-CNEP <sup>2</sup>	Daily	December/2008
National Debarment List / NGOs	List of not-for-profit entities sanctioned with the prohibition on contracting with or receiving financial transfers from the public administration.	CGU/CEPIM <sup>3</sup>	Daily	March//2012
Public Servants	List of active civil and military public servants for the Executive Federal Branch, including information regarding position, function, and remuneration.	Ministry of Planning/SIAPE <sup>4</sup> and other sources	Monthly	December/2009 (June/2012 for remuneration)
Removals from the civil service	List of civil servants expulsed sanctioned with the removal from their positions.	CGU/CEAF	Monthly	September/2012
State-owned real estate/residencies	List of state-owned residencies destined to occupation by civil servants, as well as their current occupants.	Ministry of Planning	Monthly	October/2012
Beneficiaries of conditional cash transfers	List of the persons receiving conditional cash transfers in Federal Programs, such as <i>Bolsa Familia</i> , eradication of child labor, fishing closure periods and discontinued programs, including name, amount received, and further related information.	Caixa Econômica Federal <sup>s</sup>	Monthly	Various dates, since 2006
Beneficiaries of Political Amnesty	List of the persons who received indemnifications or stipends from the Brazilian government derived from the recognition of political persecution during the military dictatorship.	Ministry of Planning	Monthly	January/2015
Beneficiaries of Garantia Safra	List of farmers who received a harvest insurance payment due to the loss of their harvest caused by climate reasons.	Caixa Econômica Federal	Monthly	December/2004
World Cup '14 and Olympic Games Rio '16	Estimated expenses of the 2014 World Cup and the 2016 Olympic Games	Various sources	Monthly	May/2010

<sup>1</sup> SICONV is the acronym for Resource Transfer Agreements and Contracts System, the e-government management platform

that centralizes the covenants and resource transfer agreements executed by the Federal Government. <sup>2</sup> CEIS is the acronym for the National Registry of Ineligible and Suspended Companies, a database maintained by CGU to

consolidate a list of companies and individuals that suffered penalties that hinder the participation on procurements and the

execution of contracts with the Public Administration. By its turn, CNEP is the acronym for the National Registry of

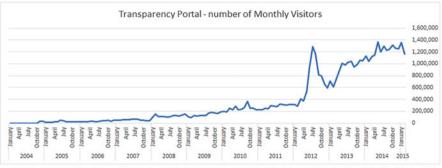
Punished Companies, which consolidates information related to penalties based on the Anti-Corruption Law enacted in 2013.

<sup>3</sup> CEPIM is the acronym for National Registry of Ineligible Not-for-profits.

<sup>4</sup> SIAPE is the acronym for the Integrated System of Management of Human Resources, the federal government information

system that centralizes the management of personnel-related information. <sup>5</sup> Caixa Econômica Federal is the Brazilian state-owned bank in charge of implementing cash transfer programs.

Fig. 2 Datasets available at the Transparency Portal as of April, 2015 (Source: prepared by the authors with information provided by Controladoria Geral da União. (n.d.). Portal da Transparência do Governo Federal)



Source: authors' own illustration with information provided by Controladoria Geral da União. (n.d.).

Fig. 3 Number of monthly visitors to the Transparency Portal (*Source*: authors' own illustration with information provided by Controladoria Geral da União. (n.d.))

In addition to the databases, the Portal provides direct links to transparency pages and transparency initiatives sponsored by other ministries, by states, and by municipalities. Through the Portal, a user can utilize data visualization tools, download databases in open data formats, and even signup to receive customized emails with information on the financial transfers to their municipalities. As of April 2015, the Portal holds nearly two billion data entries concerning expenditures, totaling an amount of more than 15 trillion Brazilian Reals (nearly five trillion U.S. dollars) in payments and transfers, since its inception. This corresponds to payments to nearly 35 million people (including 29.5 million beneficiaries of federal government programs), as well as to more than 660,000 legal entities. It also provides information on 1.13 million public servants, including civil and military personnel. The pattern of monthly visitors is illustrated in Fig. 3.<sup>15</sup> The Portal has shown steady growth in the number of monthly visitors, with spikes caused by the inclusion of new databases (for instance, the peak in June 2012 corresponds to the publication of public servants' salaries database). Notably, the Portal has kept an average of more than one million visitors per month for the latest years. The case examines further usage patterns of the Portal in Sect. 4.2.5.

## 3.2 Portal Management

The Secretariat of Transparency and Corruption Prevention, which is an office directly subordinated to the CGU, manages the Transparency Portal. Federal agencies are legally obligated to provide any requested information or databases, and facilitate the negotiation and inclusion of new databases by the Portal

<sup>&</sup>lt;sup>15</sup>Controladoria Geral da União (2015). Portal da Transparência do Governo Federal. Retrieved April 21, 2015, from http://transparencia.gov.br/sobre/Estatisticas\_visitacao/fevereiro-2015.xls

managers. The Portal's team establishes the format, frequency, and method of data transmission with relevant agencies to facilitate the process, as well as the future consolidation of databases.

As presented in Fig. 2 above, information comes from different sources: mainly, but not exclusively, from core government information management systems controlled by various federal offices. For instance, information on personnel and bidding procedures are sourced from databases managed by different offices within the Ministry of Planning; information on expenditures is sourced from the Treasury Secretariat, which is subordinate to the Ministry of Finance.<sup>16</sup> There are two main processes in acquiring data for the Portal. The first is based on the automated extraction or communication of information from internal structural government payment and information systems, such as those related to public expenditures and partnerships with NGOs and subnational governments. The second is implemented through manual extraction, transmission and upload of relevant databases. To ensure reliability, the Portal's management team checks each dataset's consistency through randomized tests before publishing data.<sup>17</sup>

Other than the Transparency Portal, the Brazilian federal transparency system also includes individual Transparency Pages, which are created by each federal government agency under the guidelines and standards provided by the CGU. The Transparency Portal provides mainly financial information on expenditures for the entire government. In turn, each agency's Transparency Page presents additional information on the corresponding programs and daily activities, such as detailed information on bidding procedures, agreements, and partnerships with civil society organization. Therefore, Transparency Pages complement the Transparency Portal; the former provides contextual information on the expenditures, the latter focuses on financial transactions.

Lastly, CGU also coordinates Brazil's participation in the Open Government Partnership (OGP), which is a "multilateral initiative that aims to secure concrete commitments from governments to promote transparency, empower citizens, fight corruption, and harness new technologies to strengthen governance".<sup>18</sup> In that capacity, the CGU coordinates the dialogue with the civil society in order to guide the implementation of open government policies and to decide on the Portal's evolution.

<sup>&</sup>lt;sup>16</sup>Secretaria de Prevenção da Corrupção e Informações Estratégicas, Souza, J., Augusto, C., Souza, L., & Kodama, R. (2013). *Guia de implantação de Portal da Transparência* (1a ed.) (L. Felix, O. Neves, & M. Costa, Eds.). Brasília, DF: Controladoria Geral da União (CGU). Retrieved April 18, 2015 from http://www.cgu.gov.br/Publicacoes/transparencia-publica/brasil-transparente/ arquivos/guia\_portaltransparencia.pdf

<sup>&</sup>lt;sup>17</sup>Castro Neves (2015).

<sup>&</sup>lt;sup>18</sup>Open Government Partnership. (n.d.). About—What is the Open Government Partnership? Retrieved April 21, 2015, from http://www.opengovpartnership.org/about

# 4 Findings

In many respects, the Transparency Portal is a classic example of digital governance in Brazil. It encompasses information from all federal government agencies and represents the Brazilian government's efforts to promote transparency. The case study established two approaches to anchor the research. The first was to review the relationship of the Portal to Brazil's broader digital strategic planning, also taking into consideration the challenges of implementing the website, and the second was to examine the utilization of the Portal by civil society. These two foci provide a holistic understanding of both the supply side and the demand side of transparency-related information.

The case also examines the Transparency Portal from two other perspectives: *drivers*, which describe the main motivations to the implementation of the Transparency Portal both from within the government and from external agents, and *challenges*, describing obstacles faced by the government's implementation team.

## 4.1 Drivers

Internal drivers correspond to incentives to government activities in promoting the transparency policy. These include:

#### 4.1.1 Legal Framework

Several governmental officials mentioned that the legal framework was crucial to the success of the initiative, because it gave legal support to the transparency initiative and it granted the CGU the necessary mandate to coordinate the gathering of information and the standardization of other agencies' transparency pages. As previously demonstrated, legislative evolution also promoted some breakthrough changes, such as the publication of the salaries of all federal executive government officials in 2012.<sup>19</sup> Furthermore, regulation also determined that transparency measures should be implemented proactively through the publication of data in open, machine-readable format, which has led to the implementation of a Federal open data portal (dados.gov.br) and information provision for download at the Transparency Portal.

<sup>&</sup>lt;sup>19</sup>This publication was determined by the Executive Order 7,724/2012, which detailed the necessary aspects in order to ensure the full enforceability of the Freedom of Information Law.

#### 4.1.2 Accountability and Open Government

The Portal is demonstratively a tool to promote government fiscal accountability. By providing data of all federal government expenditures in a proactive manner and independent of any requests, the government provides users with an effective instrument to monitor and to report governmental mismanagement. Moreover, because users may check any funds transferred to local governments, the Portal is also promoting state and municipalities' accountability.

A founding member of the OGP, Brazil has implemented an Open Government Action Plan, with transparency, social participation and accountability related activities proposed by several national agencies. Because of its transparency component, The Transparency Portal is a key initiative in this context. The CGU also coordinates the Inter-Ministry Committee on Open Government created to further implement such policies in a coordinated manner.

## 4.1.3 Fighting Corruption

Transparency should be considered in the context of corruption prevention policies. By making public expenditures more transparent, the CGU openly encourages the help of other organizations and citizens in its corruption prevention activities. The Portal has been used by civil society organizations, citizens, and media outlets, to uncover the misuse or misappropriation of public funds, to spot potential corruption scandals, and to question government expenditures. For instance, a minister was fired in 2008 because of the inappropriate use of a federal government corporate credit card for personal purchases. This case led to changes in transparency-related regulations, specifically to create further mechanisms to prevent unaccounted expenses and to enhance the transparency of smaller amount expenditures.

Accordingly, the Portal has been used by government officials to calculate the average price of goods and services to be acquired or hired by the government. Using such procedures, procurement agents were able to spot potential signs of inappropriate procurement activities, due to highly divergent prices. To foster similar control initiatives, the CGU has been providing training to Prosecution Attorneys to help them to identify signals of corruption and fraud.

Beyond the drivers related to the Brazilian government itself, there were other forces at play that promoted the need and utility for Transparency Portal:

#### 4.1.4 Citizen and Private Sector Demands

The implementation of open government policies has been debated within consolidated channels of citizen participation. There are a number of national and local non-governmental entities focusing their activities directly on public transparency and accountability. Moreover, there is a burgeoning development of civic tech applications that are mostly focused on addressing the problems of municipalities. Finally, the Brazilian media has learned to use the Transparency Portal as a source for investigative journalism. Enhanced media coverage of scandals uncovered by consultation of the Portal has led to greater attention to transparency data and to the Portal.

Datasets published in the Transparency Portal have also attracted the interest of private companies. For instance, since 2008, the Portal publishes a list of companies that have been banned from participating in bidding processes or entering into agreements with government entities due to contract breach or other administrative sanctioned behavior. Private companies have been using this information as a proxy to identify untrustworthy companies. Publicly available information has also been used by companies to analyze the performance of their competitors, or to verify if any notices have been issued by the Federal government concerning overdue payments.

## 4.1.5 State and Municipal Governments

State and municipality public officials have also used the information provided by the Portal as a tool for their internal financial management. Because the information posted on the Portal is provided in a complete and clear fashion, some local government officials prefer to use the Portal to check if transfers have already been performed, as well as to obtain direct information on the current standing of federally implemented regional policies.

### 4.1.6 International Commitments

Brazil has committed itself internationally with respect to the implementation of transparency and corruption prevention policies. Brazil is a party to the United Nations Convention against Corruption, and is also a founding member of the OGP. Brazilian transparency initiatives have been recognized by international organizations. In 2014, Brazil was ranked first in government budget transparency and third in government spending transparency in the Global Open Data Index, organized by the Open Knowledge Foundation, together with Mexico, India, the U.S., and other 12 countries.<sup>20</sup>

<sup>&</sup>lt;sup>20</sup>Open Knowledge. (n.d.). Global Open Data Index—Government Budget. Retrieved April 21, 2015, from http://index.okfn.org/dataset/budget/

# 4.2 Challenges

While the Transparency Portal has had many champions and drivers for meeting the Brazilian goal of a more transparent, accountable and open government, it has faced, and continues to face, a number of challenges. The concerns range from political disputes to technical issues.

#### 4.2.1 Political Disputes and Constant Negotiation

The difficulty in resolving political conflicts may delay the inclusion of new datasets in the Portal. In most cases, these inclusions require additional work by the agencies whose databases are to be extracted. The time and expense required to undertake this additional task can lead to some opposition for disclosure of information.

These additions are based on an analysis of the frequency and the kind of information requests made under the Freedom of Information Law. However, in order to implement new datasets, the CGU has to negotiate the format of databases and the provision terms with each corresponding agency. These inter-agency negotiations that may slow down the implementation process.

Additionally, the Transparency Portal focuses only on information from federal government entities that utilize the main central government management systems, such as SIAFI. Therefore, information from state-owned companies, which are not managed through those systems, and information originated from states or municipalities are not included.

### 4.2.2 Technology Standardization and Procurement

As long as information is produced and stored differently across various ministries, the standardization process is a bottleneck to the data uploading process: additional work is required in order to check the information, clean up databases, and cross-reference information before its publication. Data integration processes are not fully automatic. This has led to significant delays in the supply of information to the Portal. In some cases, such as in the microsites concerning the expenditures related to the World Cup 2014 and Olympic Games 2016, the process is even more complex because it requires the merging of information originated from the states and municipalities.

Future plans include restructuring the Portal, by implementing a data warehouse—a more integrated and reliable data center with additional capabilities. This would allow the unification of information that is only marginally connected now, such as the financial information provided in the Transparency Portal and the detailed transactions presented in the Transparency Pages. Such actions would provide stronger reporting and data analysis capabilities, enabling dynamic and integrated processing and handling of large data volumes. This would also lead to the development of new visualization and audit tools—thus making the Portal more interactive and accessible, and facilitating navigation to its users. However, implementing the data warehouse has proven to be a challenging task, particularly due to data standardization issues. Finally, the Portal is faced with several other technological issues: it is still pending integration with social media, such as Twitter and Facebook, and its design is not responsive to mobile devices, a critical failure to the Portal's goal of promoting accountability through enhanced social engagement.

With respect to procurement of services to support the Portal, its team has oscillated between outsourcing and insourcing experiences. Generally, complex software development requirements are outsourced and the corresponding maintenance activities are later insourced. The direct involvement of the Office of Communications of the Presidency, which is responsible for the definition of standards for governmental portals, has led to an improved scope of activities, including architecture and layout redesign. However, this process has also led to further procurement issues and implementation delays.

## 4.2.3 Jargon Complexity

For the Portal to be effective, it must be able to make its information understandable to the clientele that is trying to access the information. This is a constant challenge because the Portal provides complex information mostly related to budgeting (its original intent) that is not easily interpreted by individuals without technical knowledge. In most cases, the information details relate more to the particularities of the budget process than to the context of its execution, such as the project that it belongs to. The gap created by these issues excludes several stakeholders such as those with lower education levels or without proper budgetary knowledge. As mentioned, the process of implementing adaptations to solve these new demands is underway, but still pending conclusion.

## 4.2.4 Difficulty in Measuring Impact

There is no measurement and evaluation of the impact generated by the Portal. Measuring outputs (the website itself, or the number and size of available datasets) and outcomes (the number of visits) is relatively easy, but tracking impact (i.e., transparency itself) is less obvious because it is difficult to establish a causal relationship between the information posted and its impact on society. Currently, the proxies for success are the number of visits per month and the number of subscribers to periodicals from the Portal. Secondary measurements could possibly include the number of media reports and articles produced with information from the Portal, criminal complaints based on information from the Portal, and prizes that the Portal has received. Regardless, these are still only indirect measurements

of the Portal's impact. The current transparency policy is not measured in terms of outcomes (i.e. how much it has contributed to reduce corruption) but rather in terms of outputs (i.e. the number of datasets, accesses per month, and other objective indicators).

#### 4.2.5 Difficulty in Defining and Reaching All Users

In 2014, the CGU conducted an extensive survey on the Portal usage.<sup>21</sup> In general, most respondents had at least a college degree, and users were mostly public officials (41 %) and students (14 %). Most popular searches were related to "how much and in what government spends" (56 %). Criticism with the Portal concerned "difficulty in retrieving information" and "difficulty in understanding information". Anecdotal evidence reports a diverse usage pattern. For example, civil and military officials keeping track of career plans or information about peers; journalists looking for inconsistencies in expenditures; and the general public trying to obtain information on construction occurring in their neighborhoods. An on-going challenge is making Portal information easily understood by the general public. This difficulty is reflected in the number of information requests made under the Freedom of Information Law requiring data that was supposedly in the Portal, but was not discovered by the users. This may mean that part of the information may be out of reach and therefore not as accessible to citizens as expected.

# 5 Conclusion

With the evolution of national legislation and technology, and the strategy of increasing transparency, accountability, and public participation, the Transparency Portal has gained importance in the Brazilian vision for e-government. Through the Portal, citizens can monitor the financial implementation of the federal government programs and verify where and how public funds are being applied—an enhanced civic control of public spending.

The Brazilian Federal Government Transparency Portal is a successful example of digital government policy: it allows for government accountability, promotes effective operational integration, and incorporates relevant transparency trends, such as open data. The Portal has achieved both political and technical relevance. It is constantly referred to in presidential speeches as one of the key initiatives in combating corruption. Similarly, citizens and civil servants from municipalities are using the Portal to monitor government spending and to hold local governments accountable.

<sup>&</sup>lt;sup>21</sup>Batista and Freire (2014).

The relevance of the Portal and the information published there is not only recognized nationally,<sup>22</sup> but also internationally. Nationally, several Brazilian states have used the website as a guideline for their local implementations. Internationally, recognition has come in the form of awards earned by the Portal, such as the United Nations Office on Drugs and Crime (UNODC) award,<sup>23</sup> mention of the successful case to be followed and benchmarked, such as Brazilian leading position in the 2010 Revenue Watch Index<sup>24</sup> and in the 2014 Government Budget Global Open Data Index,<sup>25</sup> and the provision of technical assistance for the implementation of transparency portals by CGU in other countries, such as El Salvador.<sup>26</sup> Additionally, Brazil's co-foundation of the OGP gave the Transparency Portal further international visibility.

However, there are several challenges concerning the Portal's future development that are related to its internal functioning, management, and redefinition of scope and goals. First, there is still considerable work to be done on the technical integration and adequate management of datasets. Standardizing information collection, automatizing data transfers, and reorganizing and integrating databases in a data warehouse are goals that have been sought for a long time but not yet fully implemented. These processes would improve the management of both the Transparency Portal and all the Transparency Pages. However, their accomplishment relies on political coordination and partnership formation with the Legislative and Judicial branches, as well as with state and local governments, to create a comprehensive tool that will engage Brazilian society in fighting corruption and holding its public authorities accountable in all levels.

Secondly, in communicating information to its users, the Portal could be more accessible in language, visual, and interactive aspects. These changes should include the provision of data mining, data analytics, data visualization, and business intelligence tools, and should include a reformulation of the Portal's language, as information is currently based on budgetary language, which is often too cryptic to the broader population not allowing for public accountability. Furthermore, intensifying direct social participation in the definition of the Portal's activities and scope, through the engagement of the developer community, would bring the tool from an e-government perspective to that of a strong open government practice; thus increasing citizen participation in the governance process.

<sup>&</sup>lt;sup>22</sup>Controladoria Geral da União. (n.d.). Portal da Transparência do Governo Federal—Sobre o Portal—Portal Premiado. Retrieved April 21, 2015, from http://www.portaldatransparencia.gov. br/sobre/Premios.asp

<sup>&</sup>lt;sup>23</sup>UNODC (n.d.). United Nations Office on Drugs and Crime. Retrieved April 21, 2015, from http://www.unodc.org/lpo-brazil/en/corrupcao/acoes.html

<sup>&</sup>lt;sup>24</sup>Revenue Watch Institute and Transparency International. (2010). The Revenue Watch Index. Retrieved April 21, 2015, from http://www.revenuewatch.org/rwindex2010/pdf/ RevenueWatchIndex\_2010.pdf

<sup>&</sup>lt;sup>25</sup>Open Knowledge. (n.d.). Global Open Data Index—Government Budget—Brazil. Retrieved April 21, 2015, from http://index.okfn.org/place/brazil/budget/

<sup>&</sup>lt;sup>26</sup>Controladoria Geral da União (2014).

A third challenge is determining whether the Portal could serve as a tool to assist in the management of public policies, or if any similar initiative could be implemented by the federal government. In the former, specific tools for public officials could be developed, making the Portal more instrumental in procurement, planning, and management activities by adding public policy information. For instance, information concerning the results of policy implementation could be appended to the information related to the expenditures, thus providing more accurate information on the impact of public spending. In the latter, open data sections should be enhanced through the creation of application programming interfaces (APIs) that allow the direct use of information from the Portal in external applications, facilitating its integration with other systems. This would enhance significantly the accountability goal of the Portal, and potentially increase its use by society as a whole.

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