# Open Government: technology contributing to promote closer relations between the State and Society



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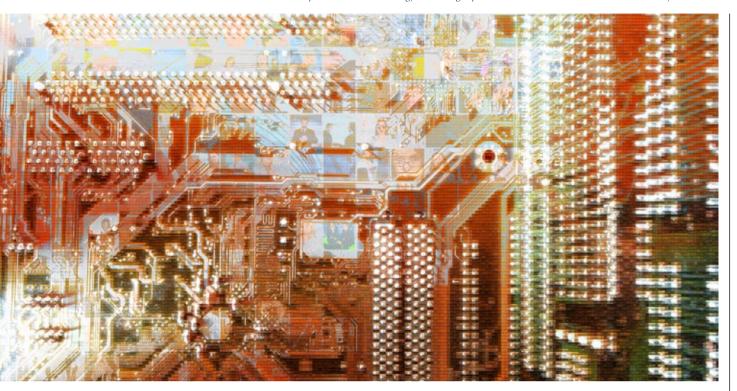
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#### **ABSTRACT**

Openness, transparency, collaboration and social participation are some of the topics covered in this paper, the object of study of which is Open Government and the contribution of information and communication technology to promoting closer relations between the state and society. In methodological terms, it is a descriptive study based on a literature review, analysis and summarized information provided by organizations committed to transparency. Throughout this paper, the Open Government concept, its purpose, principles and pillars will be discussed. The US experience, one of the benchmark countries in this area, and that of Brazil will be presented. Detailed information will be provided on how the education sector has been using the technology and foundations of Open Government to provide new and better solutions. Certain challenges faced in the data opening process will be pointed out, and the final section will present a reflection on the performance and role of Brazil's Federal Court of Accounts (TCU) in stimulating and controlling Open Government practices, data and information and in promoting government transparency, collaboration and social participation.

**Keywords:** Open Government; E-Government; Information and Communication Technology. Education; Good Practices; Participatory Democracy; Transparency; Social Participation; Collaboration.



#### 1. INTRODUCTION

New technology platforms, their expansion, cost reductions and ease of access have contributed to the development of a new information and knowledge-based model of society. In this environment, ways of interacting between individuals and organizations have changed, bringing about new challenges and opportunities for public-sector action. One of these challenges is meeting an increasing demand for new mechanisms for developing closer relations between government and society, involving not only the provision of data and information, but also the actual participation of society in government decision-making and actions.

In this context, Open Government solutions, particularly those based on information technology, have been adopted by national and foreign governments with the aim of bringing the state closer to citizens and of facilitating their relationship. Many of these initiatives are designed to facilitate services, speed up processes and increase transparency and social participation.

This study began with a survey of the Scopus database, which indicated an increase of over 400 percent in the number of scientific articles on the subject published between 2000 and 2013. In that same survey, it was seen that the United States and England lead the ranking of published studies, followed by Australia,

China, Canada and Germany. This fact led to the need of understanding this movement toward openness and the contribution of information and communication technology (ICT) to achieving the potential outcomes of such an initiative – Open Government.

# 2. FROM E-GOVERNMENT TO OPEN GOVERNMENT

There is a global trend toward using technological resources and adopting policies that can facilitate the implementation of an "information society." In public administration, this is happening not only because it is a tool that can enhance government efficiency, but also due to the potential of technology to create new conditions for the exercise of citizenship (CARDOSO, 2003).

E-Government emerged as part of this evolution in technology use and expansion of the Internet. "In its narrowest definition, E-Government refers to making more tools available to government through technology" (RAMINELLI, 2014 p. 2). It includes, for example, replacing hard-copy forms with electronic versions and the provision of public services using the Internet. It also includes replacing over-the-counter services with services provided through the Internet (BRANCO, 2014). E-Government is intended to streamline services and ensure universal access to them, as well as to increase the transparency of government actions.

More generally, it is a way of organizing knowledge that allows for merely bureaucratic acts and structures to simply disappear and for tasks requiring more complex human activity to be facilitated (ROVER, 2005).

Over time, it was seen that simply using technology without an actual corresponding dialogue with citizens is insufficient to produce effective results. This is how the Open Government topic emerged (RAMI-NELLI, 2014). Although seemingly modern, it is not a new concept. Actually, it is something that has been evolving in society since the last century, when we began to rely on social capacity to demand the right to public information, accountability and government transparency (OSIMO, 2008). Initially seen as a mechanism for making government information under public domain available to be freely used by society (AGUNE, et al., 2010), it now comprises new elements beyond the opening of data, namely: transparency, collaboration and social participation.

In relation to ICT and in a narrow sense, Open Government refers to the adoption of interactive and participatory practices that allow for the population, on a collaborative basis, to act as an active subject in building and monitoring public policies, using the Internet and social media as a support platform. It should be observed that this concept has become more popular and feasible due to the recent development of technologies that enhance transparency and the availability of public data that enable and facilitate the availability of information and access to it, especially through the Internet (MATHEUS, et al., 2012).

The difference between E-Government and Open Government is not a detail. In general terms, Open Government is expected to change the status quo and operation of the administrative machinery, empowering citizens, challenging the limits of representative democracy and creating new channels of participation and support to decision-making, using social media and the Internet as a platform for this purpose (BRANCO, 2014). Thus, unlike E-Government, which is focused on process automation and on enhancing the efficiency of public administration, Open Government practices are intended to increase the transparency of government actions for the purpose of promoting access to public information, encouraging social participation and fighting corruption with the ultimate goal of stimulating economic growth (BRASIL, 2014).

The benefits afforded by Open Government in terms of transparency and social control are, at least theoretically, evident: the availability of public data tends to contribute to increasing government transparency, creating better opportunities for social control over government actions. It can also increase citizen participation and the creation of new information and applications based on government data made available initially. Under the Open Government initiative, new data and even services can be created from the interaction between government and society, as citizens are treated as much more than just passive receivers of information (MATHEUS, et al., 2012).

#### 3. THE U.S. EXPERIENCE

The United States lead the ranking of publications on Open Government. This is why we were motivated to reflect on what that country has been doing in this area, with the aim of seeking best practices and both lessons for Brazil and opportunities for TCU's action.

Access to information and data opening have been the subject of debate in the U.S. for several years. More recently, in January 2009, President Barack Obama issued a Memorandum on Transparency and Open Government, which gave rise to the Open Government Directive. This action had a huge effect on the country's initiatives in terms of data opening.

The memorandum and directive laid the three pillars of Open Government that are used as a benchmark in this area today: Transparency, Participation and Collaboration. Transparency promotes accountability and provides information to citizens on what government is doing. Participation improves the effectiveness of government and the quality of its decisions and collaboration involves citizens in government actions actively (EUA, 2009).

The directive guides and regulates the provision of information by U.S. government agencies to the public and guides the use of new technologies. The directive provides that government should offer more opportunities for citizens to participate in policy-making, including by requesting suggestions from citizens on how to increase public participation in government. The law provides that executive departments and agencies should use technology in innovative ways to create methods and forms of cooperation between all levels of government and with non-profit organizations, businesses, and private-sector entities (EUA, 2009).

It is crucial to understand that the innovations introduced by the Obama administration were based on several laws and regulations that had existed in

the U.S. for several years. As a result of this track record of promoting transparency and of more recent actions taken by the Obama administration, agencies have been making a lot of financial and non-financial information available to the public. Federal agencies have done more than publishing information and have launched initiatives to improve the availability and reliability of data on federal spending.

In December 2001, a board was set up (GAT - Government Accountability and Transparency Board) to challenge the government to "do better." This board standardizes key elements of information with the aim of ensuring the integrity and credibility of published data. GAT's plans are incremental and are intended to leverage initiatives of agencies to improve existing business processes and increase the transparency of data. These initiatives are at an early stage and some progress has been made to increase the consistency of published data (GAO, 2013).

The GAO - Government Accountability Office, the oversight agency of the U.S., has been actively involved in implementing the transparency, participation and collaboration proposed by President Obama. Several reports check the data provided by agencies. The focus of these evaluations has been on measuring whether the agencies are reporting the required information and if the data made available on their websites are consistent with official records. Because of these reports, the GAO points out the need to improve the reliability of the information posted on those websites. For this purpose, it issues recommendations (1) for improving the guidance provided on how information is to be disseminated and records supporting it kept and (2) for developing and implementing monitoring processes to ensure that the data are consistent with the agency's records (GAO, 2012).

The GAO supports the initiative and recommends necessary improvements. As a result, the most important and relevant data is made available to the public in an accessible, organized and reliable way. It should be noted, however, that many challenges remain improving data consistency and the actual participation of society are goals that the U.S. is still striving to achieve.

## 4. OPEN GOVERNMENT AND THE BRAZILIAN EXPERIENCE

The movement for opening data and implementing the Open Government concept is a worldwide

phenomenon, as governments and local authorities in countries such as the U.S., Australia, New Zealand, the Netherlands, Sweden, Spain, Denmark and Austria are making their data accessible to the public by publishing it on the web.

In Brazil, the discussion on the right and access to information is not new. Article 5 of Brazil's Federal Constitution provides that "all persons have the right to receive, from the public agencies, information of private interest to such persons, or of collective or general interest" (CF, 1988).

In May 2000, Complementary Law No. 101, the Fiscal Responsibility Law, introduced the concept of fiscal transparency. It provides for public finance rules designed to ensure accountability in fiscal management.

The Office of the Comptroller General of Brazil (CGU) has also launched major initiatives in Open Government and for promoting transparency. It manages the Transparency Portal of the Federal Government, launched in November 2004, a channel through which citizens can monitor the financial implementation of government programs at federal level. The portal provides information on federal public funds transferred by the federal administration to states, municipalities, the Federal District and directly to citizens, as well as data on federal government spending with procurement, construction projects and services.

Law No. 12,527 of November 18, 2011, which regulates the right to access information provided for in Article 37, Item XIV, Paragraph 3, and Article 216, Paragraph 2, of the Constitution, is another major milestone in promoting transparency in Brazil. Known as the Access to Information Act (LAI, in its Portuguese acronym), this law came into force on May 16, 2012 and created mechanisms that make it possible for all citizens to receive public information requested from agencies and entities without the need to explain why.

CGU also created the Transparent Brazil program, which helps states and municipalities to implement transparent government measures set out in the Access to Information Act. The goal is to join efforts around the process of increasing public transparency and adopting Open Government measures (CGU, 2014).

As part of other Open Government initiatives, the federal government launched the Brazilian Open Data Portal (dados.gov.br) in December 2010. This website is the central point for browsing and accessing Brazil's public data. Its aim is to organize and provide

reliable government information that can be accessed easily and is useful for both government and society. The data is provided by federal government agencies, ministries and other public agencies and are open to anyone interested in accessing them. The Ministry of Planning (MP) is in charge of managing the portal and has invited all federal agencies to publish data and information on this portal. (BRASIL, 2014).

The Brazilian Open Data Portal is part of the National Open Data Infrastructure (IN SLTI MP 4/2012 INDA). The National Open Data Infrastructure (INDA) constitutes the government policy for open data and is made up of a set of standards, technologies, procedures and control mechanisms required to meet the conditions for disseminating and sharing public data and information in the Open Data model.

The Open Government Partnership (OGP) was launched in 2011 with the commitment to make governments more transparent, reliable and responsive to citizens (OGP, 2014).

Brazil has been taking part in the OGP since it was created and took on the commitment to strengthen practices related to promoting transparency in government acts, preventing and fighting corruption, improving the delivery of public services and promoting access to public information and social participation in government.

Brazil's action plan in connection with the OGP is publicly available and is coordinated by the Inter-Ministerial Committee on Open Government (Ciga), made up of representatives from 18 ministries and the Civil House (Office of the Chief of Staff). The Ciga committee has an Executive Group made up of representatives from seven ministries that is coordinated by CGU. The first Brazilian action plan, launched in September 2011, included 32 commitments. In a review carried out in October 2012, it was seen that 21 actions had been completed, 4 were in progress, 5 were behind schedule and 2 had not been initiated. After this review was published, the Federal Government started to develop a second action plan with greater participation of society: CGU set up a working group with the General Secretariat of the Presidency (SGPR) and 10 Brazilian civil society organizations to draft this second action plan (NEVES, 2013).

The progress made by the Brazilian government to increase transparency and make public information more accessible was significant. Over the past 10 years, Brazil has built its active transparency framework and consolidated social participation mechanisms. To-

day, several federal and state agencies keep transparency pages and websites where information can be accessed, contribute to ensure compliance with OGP commitments and hold conferences to discuss topics of interest to society (NEVES, 2013). However, many challenges remain in relation to Open Government in Brazil: there are several gaps to be filled to migrate from the model in which citizens are mere consumers of government solutions to one in which citizens act as partners in building these solutions.

# 5. THE PRACTICE OF OPEN GOVERNMENT AND THE EXAMPLE IN EDUCATION

For one to better understand, in practical terms, the motivation of citizens and how they collaborate with and participate in the Open Government (OG) initiative, it will now be analyzed how the area of Education has been developing and implementing its actions. Practical data opening applications in education, both in Brazil and in other countries, confirm the full materialization of the Open Government initiative through three pillars: transparency, participation and collaboration. The increasing number of academic papers on the subject and competitions for publications on educational data (hackathons) are examples of the relevance of the subject for Open Government in Education.

#### 5.1 TRANSPARENCY

Transparency provides information to citizens on what governments are doing and, therefore, allows them to have an informed participation in their actions. It also increases the level of accountability of governments and creates economic opportunities (McDER-MOTT, 2010). Transparency mechanisms are designed to make available information being generated, managed and stored by a specific entity, in a relevant way, including information on decision-making processes, procedures and performance. Thus, transparency mechanisms can allow for value creation and reduce asymmetries in information (JETZEK, et al., 2013).

The area of Education is one that has been making a large amount of information available both in Brazil and abroad. According to Meijer (2009), publishing information on the performance of schools on the Internet has become a trend worldwide. Many countries publish such information because they believe that it can be beneficial for schools and parents. However, this expectation does not necessarily reflect reality. Despite

increased transparency and several data on schools being published, performance indicators are not always used by parents to support their final decision as to the school where they want their children to study. This does not mean that publishing data on school performance on the Internet has no results. School managers often refer to this information to find out what is happening in other schools. They interpret and analyze this information with the aim of competing, comparing and learning from the experiences of other institutions.

After the Access to Information Act was passed, Brazilian public organizations operating in the area of education promoted access to evaluation data for the Brazilian education system. Table 1 lists some examples of open education data available in Brazil. The same data can also be found on the Open Data portal of the federal government, facilitating the gathering of all educational information in a single email address.

Much of this data is made available in its basic form and citizens have a hard time understanding it due to their lack of analytical capacity or knowledge of the database semantics. There are websites with the required granularity to provide information about public education institutions across the country. However, due to how the data is presented, this information does not always create value for citizens, since they need to have the technical knowledge required for understanding and analyzing the data. Contents are often not appropriate for the target audience, making it difficult for society to consume the information. In other cases, depending on the desired information, citizens would need to combine data from several public websites to be able to get to the information they want.

A positive evolution was observed in the area of education in terms of Open Government, for which a large number of data is available. However, for actual results to be achieved, for transparency to be actually exercised, and for collaboration and participation to exist between the relevant areas, many challenges remain to be overcome.

#### 5.2 COLLABORATION

Collaboration is the bridge between transparency and participation that allows for agents of the Public Administration to either act or not act in order to turn public data into information for citizens. Collaboration takes place within the Public Administration, with agents validating and promoting improvements in the quality of such data, and outside it, with other agents translating public data into tangible information for ordinary citizens.

Jetzek explains that the number of agents who access data generated by transparency mechanisms has been growing and that they need to have the ability to process that information, as well as an opportunity and incentive to act upon it. In this context, collaboration among the various actors involved in the information value chain is a must (JETZEK, et al., 2013). The value chain for producing useful information for citizens is dynamic and needs to be constantly re-evaluated, and this is why the cost for producing and maintaining it is too high to be borne by the Public Administration alone. This scenario suggests that the best path to be followed is that of encouraging collaboration within and without the Public Administration with the aim of turning public data into relevant information. In the case of Education, organizations have been adopting collaborative solutions, combining and translating data into information for specific target audiences.

In Brazil, competitions for publications on educational data (hackathons) have been held (2014). Relying on the support from the Lemann Foundation, Inepheld the 1st edition of the Educational Data Hackathon. In the marathon, 30 hackers from around the country worked for 36 hours straight and developed applications, websites and platforms using data from the Brazil Test and from the Brazilian National System for the Evaluation of Basic Education (Saeb). The purpose of the softwares produced during the Hackathon is to disseminate educational information, helping to mobilize

Table 1:
Examples of Open
Data for Education

Institution	Description
Anisio Teixeira National Institute for Educational Studies and Research (INEP)	School census in basic and higher education nationwide. The School Census collects data on institutions, enrollment, teaching functions, school movement and performance.
National Fund for Education Development (ENDF)	Data from the information system for public education budgets (SIOPE). The data available refer to education budgets of the Federal Administration, states, the Federal District and municipalities.
National Treasury Secretariat (STN)	Data from the accounting and tax information system for the Brazilian public sector (SICONFI). This system was set up to receive accounting and financial information and fiscal statistics from 5,564 municipalities, 26 states, the Federal District and the Federal Administration. This data makes it possible to evaluate the budget execution in the area of Education.

Table 2:
Examples of websites
created by agents
who are not of the
Public Administration
consuming open
data education

Name of the website	Description	Information used
The School we want — www.aes-colaquequeremos.org.br	Promotes social participation with the aim of improving the quality of public schools. Citizens can compare the performance of their school with the Basic Education Development Index (IDEB) and act to improve their educational institution.	Data from INEP
www.Qedu.org.br	Open and free website where citizens can find information on the quality of learning in each school, municipality and state in Brazil. Through the Qedu website, we want Brazilian society as a whole to be afforded opportunities to learn more about education in Brazil.	Data from Ideb/Inep; school census/Inep
PNE (National Education Plan) Observatory	The PNE Observatory is an online platform designed to monitor indicators for each of the 20 goals of the National Education Plan (PNE) and their respective strategies and to analyze public educational policies already implemented or that will still be implemented over the ten-year period covered by the Plan.	Uses various public data. For example: IBGE/Pnad
Fora da escola não pode! (Staying out of school is not an option!)	The web documentary Fora da escola não pode! provides data on children out of school in all Brazilian municipalities.	2011 Demographic Census carried out by the Brazilian Institute for Geography and Statistics (IBGE).

society in support of quality public education. In this first competition, the winner was the website called The School we want. These competitions are great examples of the application of the collaboration pillar of the Open Government framework. Table 2 shows this and other examples of public education data turned into information that can be easily consumed by citizens:

#### 5.3 PARTICIPATION

Actual use of data provided by the Public Administration to promote citizen involvement in the management of public affairs translates the idea of the participation expected under the Open Government initiative. However, going beyond the mere publication of data and actually promoting citizen participation is not an easy task. If the goal of open government is to ensure the engagement of citizens, initiatives under way should be reassessed and new approaches explored beyond the provision of data (EVANS, et al., 2013). Participation consists in enabling citizens to become protagonists in the management of public affairs, allowing them to take part in decisions and in control and management mechanisms related to public spending in all its aspects. According to Jetzek, participation mechanisms are designed to enable and encourage public participation in government through voluntary contributions of ideas. These mechanisms afford citizens opportunities to influence public policy directly (JETZEK, et al., 2013).

In Brazil, the website The School we want (2013) is an example of an initiative designed to promote citizen participation. In the application, citizens are guided on how to demand better performance of a given school. This guidance ranges from showing them how

to work with the school for this purpose to teaching them how to report undesired situations to the Public Prosecutor's Office.

Open Education is another global movement in favor of participation in the area of education. Much more than freely sharing educational content, open education involves experts, stakeholders and students in a virtual environment, generating knowledge and innovation dynamically. According to Adler (2008), open education benefits from the new version of the Internet - the Web 2.0 version. The differences between this new Internet and the previous one lie in the use of tools such as blogs, wikis, social media, identification systems and websites for sharing content, which are examples of a new information infrastructure focused on users. Participation usually takes place around a content/prior presentation that stimulates focused and direct conversations (often using informal, less technical language), instead of traditional posts, facilitating innovative exploration and experimentation, which often form the basis for a better action-oriented understanding of issues, instead of promoting passivity.

The initial movement and some examples of Brazilian websites that discuss education-related issues and share ideas are: www.educacaoaberta.org and www.convivaeducacao.org.br.

# 6. CHALLENGES FOR IMPLEMENTING THE OPEN GOVERNMENT INITIATIVE

The Open Government concept and its application have grown considerably over the past few years. This topic has been widely debated by scholars. Many academic papers and also those published in the media

highlight the challenges faced in this regard and also those that must be overcome to ensure transparency, participation and collaboration.

# 6.1 TECHNOLOGICAL CHALLENGE: GOVERNMENT 2.0

How can the Open Government initiative be promoted and the Web 2.0 features used? The Government 2.0 concept answers this question. According to Teixeira (2011), the term Web 2.0 was first used in 2005 by O'Reill, based on the perception that an "architecture of participation" was emerging as a major facilitator for the co-production of information, social media and spaces for individuals to interact for different reasons. Unlike the Web 1.0 version, the new version of the Web has the ability to build networks that connect individuals and organizations within a community in which information is shared, adapted and updated by all members who choose to take part in it, leading to the democratization of information online. The main innovation is not the programming techniques and the tools themselves. It is how users generate content and influence its organization according to their preferences. Facebook, Blogs, GoogleDocs and Wikipedia are examples of Web 2.0 tools, among others.

According to Nam (2012), Government 2.0 refers to using Web 2.0 technologies to share government data, processes and services. Collaborative tools will allow a two-way interaction between government and citizens through online comments, live chats and messaging. Nam also explains that information privacy, security and standards are factors that influence the slow pace of use of Web 2.0 resources by government.

## 6.2 LEGAL, ADMINISTRATIVE AND CONFIDENTIALITY CHALLENGE

Full implementation of the Open Government initiative has high costs and depends on sound strategy and clear regulation. In this context, legal support is fundamental and constitutes a critical initial step to motivate the Public Administration to manage and know the information under its responsibility.

Initiatives of the Obama administration such as the Memorandum on Transparency and Open Government (White House, 2009) and the Open Government Directive (Office of Management and Budget, 2009) have been often cited in discussions on legal support for Open Government. These are consistent standards,

as they were built based on several previously existing laws and regulations.

The history of relevant laws in the United States is extensive. The Freedom of Information Act (FOIA, 1966) was a milestone. It provided for the right to obtain information from federal agencies and was intended to ensure an informed citizenry, vital to the functioning of a democratic society, needed to check against corruption and to hold the governors accountable to the governed. The Red Tape Reduction Act of 1995 and the Paperwork Reduction Act (PRA, 1980) were also passed with the aim of reducing paperwork in government processes and maximizing the use of information. More recently, the E-Government Act of 2002 changed the way that government identified and made information available. In 2007, after many years, amendments were made to the FOIA through the Open Government Act.

However, legal support alone is not enough to ensure a dialogue between citizens and policymakers. Despite the existence of normative acts that represent a critical first step to motivate the Public Administration to manage and know information under its responsibility, the challenge of promoting its engagement should be considered. Information management is critical for ensuring access to it: the public cannot ask for something that it does not even know exists and government cannot disseminate or even find what it doesn't know (McDERMOTT, 2010). According to Ganapati (GANAPATI, et al., 2012), political and organizational dynamics can undermine open government efforts. Organizations can employ several strategies to avoid opening data and adopt a false pro-transparency stance that hides information.

In addition, striking a balance between open government and security is a difficult task. Despite the existence of a legal framework that promotes freedom of information and, consequently, transparency, the issue of confidentiality and privacy should not be disregarded (GANAPATI, et al., 2012). As an additional contribution, Evans and Fields (2013) explain that as a result of comprehensive directives on data opening, U.S. agencies have made an effort to ensure the availability of data and information that do not pose confidentiality and privacy risks as a means of achieving the Open Government Directive's objectives.

We see that legal support alone cannot ensure the success of the Open Government initiative. The action of both government and non-government agents is necessary to overcome the administrative challenges

involved and ensure the correct and safe publication of data.

# 6.3 THE CHALLENGE OF CREATING VALUE FOR CITIZENS

One of the greatest challenges for Open Government is ensuring the integration of data for them to become information of value for citizens. Many data have been published, but several authors have been challenging the real value of making them available. The National Audit Office (NAO), the UK's watchdog, issued several reports analyzing the return on investing in Open Government.

The difficulty lies in providing information that is of interest to citizens in their everyday life. According to Jetzek (2013), in order to encourage citizens to participate by expressing their opinions on policy-making or participating in projects directly, they must have access to specific information on an issue under discussion. In the opinion of Evans and Campos (2013), the ability of agencies to use technologies has a bearing on civic engagement. In their assessment, they reached the conclusion that processing and incorporating suggestions from citizens into Open Government projects has been a challenge for government agencies.

Table 3 presents a list of practical examples in the area of Education that show how citizens are motivated to participate when information relevant to their daily lives is provided. Support for these initiatives is presented in the publication of the UK government called Open Public Services (Cabinet Office, 2011), which presents a government reform program designed to ensure that key data on public services is publicly available and accessible. This program includes a component of dissemination of data on user satisfaction, spending, performance and equality of all public service providers in all government sectors.

When information creates value for citizens, it is useful and tangible for their everyday life and more substantially consumed. This is what the British report Implementing Transparency (NAO, 2012) points out, confirming an increase of 84% in viewership on the

website that provides school performance information as compared to the same period the year before.

Finally, publishing information is not enough, as there must be a direct relationship between data that is disseminated and the interests of citizens in their daily life. This is the only way to promote citizen engagement, participation and collaboration with government, so as to generate better and more effective results for society.

#### 6.4 THE CHALLENGE OF MEASURING RESULTS

Measuring the effects of Open Government is a complex task. According to Meijer (2012), the direct and indirect effects of Open Government make it difficult to analyze the synergistic and complementary links between transparency and participation. Access to information can facilitate participation, but it can also lead to a risk aversion behavior within government. On the other hand, the mere fact that citizens are entitled to participate can actually lead to greater transparency directly.

Hubbard provides a practical example of the difficulties involved in measuring the results of Open Government (2007) after he analyzed the role of information in reducing corruption in the education sector in Uganda. Disseminating information contributes to reducing corruption, but a more detailed study points out that this result is not achieved simply by disseminating information. At the same time, Meijer (2012) warns that corruption can be reduced simply by making it compulsory for public officials to provide information about their actions on the Internet. Even if no one accesses this public information, its public nature can still inhibit corruption due to the effects of the expected social control over it.

# 7. REFLECTION ON THE ROLE OF TCU IN THE OPEN GOVERNMENT INITIATIVE

Open Government is a comprehensive and new topic for the global society. Many governments invest in implementing an Open Government that promotes

Table 3: Examples of
British websites - the
National Audit Office (NAO)
report - Implementing
transparency (NAO, 2012)

Name of the website	Description
http://parentview.ofsted.gov.uk/	Website that collects and reports opinions of parents on schools
www.education.gov.uk/schools/performance	Website that publishes data that is useful for parents to choose schools
http://www.police.uk/	Website that disseminates public safety information by region

transparency, participation and collaboration. There are no ready-made paths or clear expectations as to its desired results, but there is international consensus around the importance of this initiative for building a truly democratic society.

This is an area in which the Brazilian Federal Court of Accounts (TCU) can act and take part in efforts to stimulate and control Open Government practices, data and information, as well as to promote transparency, collaboration and social participation.

In fact, TCU's strategic map includes the objective of "contributing to transparency in Public Administration." The map shows two other objectives related to data opening, participation and collaboration: "inducing Public Administration to disseminate information about its management" and "facilitating social control."

TCU's actions to validate, develop, and ensure the convergence of Open Data initiatives can speed up greater social participation in government, similarly to what GAO and NAO have been doing. GAO reviews published information and their reliability, while NAO focuses on analyzing the benefits generated by the Open Government initiative in England.

After discussing and understanding the magnitude and importance that the Open Government initiative has been gaining, it is time to reflect on how the Court could be even more proactive and efficient when guiding those under its jurisdiction - that have budgetary and accounting data - regarding how such data should be published and validated. The Court should also analyze the data and contribute to the added value for citizens and society.

#### 8. CONCLUSION

Among the challenges mentioned here for building the Open Government initiative, producing information of value that promotes society's participation in the actions of governors is the main goal to be achieved. Publishing specific data on issues of national interest, ranging from public policy indicators to budget and accounting data, with the granularity and language required for citizens to materialize such information in their daily lives, promotes social participation and thus helps to control and ensure sound management of public funds while inhibiting corruption.

Both in the academic context and in the context of foreign governments, discussions and investment in Open Government have been growing significantly. In Brazil, the topic has not gone unnoticed. The area of education provides examples of what can be done and achieved by promoting Open Government. The information made available by Inep to create the The School we want website provides a good example of how Open Data can be used to promote civic engagement. On this website, citizens can easily access evaluative data for a given school and compare them with the national index. Additionally, if citizens had access to education budgets by municipality, they could carry out comparative analysis between the quality of schools and the budgets made available to municipalities. Expanding horizons, data on topics such as health, safety and urban planning, among others, could also be disseminated, benefiting projects in these areas. There are also opportunities for expanding the actions of the Federal Court of Accounts with the aim of validating and stimulating the publication of public data on budgets and accounting in these areas and, ultimately, of promoting transparency.

On the other hand, the challenges mentioned here illustrate part of the actions to be taken. Taking a careful look at published data and providing advice on coordinated initiatives at the local, state and federal levels are major steps for ensuring the successful implementation of Open Government in Brazil.

We hope that this paper fulfilled its objective of shedding some light on the Open Government topic and contributing to a Public Administration that strengthens democracy by ensuring greater citizen participation in the responsibility of governing.

