

ELETRONIC DATA GOVERNANCE IN THE PUBLIC ADMINISTRATION**Tulio Henrique Carvalho**

ABSTRACT: The aim of this research is the approaching of the electronic data governance with emphasis in the Public Administration topic, providing contribution to the enhancement of the research in this area. Even though the issue is new, the ONU has already set in its Sustainable Development Goals for 2030, that the Public Administration must find a way to afford to the citizens the opportunity to access the governmental datas, providing not just access to the public information but also define methods for promoting the participation of the citizens in public environment decisions, once the correct using of the electronic sources is one of the most advisable means for the approaching between the citizen and the government. This reaserch is supported by the impact and benefit that this matter and its development has forward the society. As its developing, it has approached indispensable importance for the understanding of it and complement each other, such as the legislation that regulate the access to the public datas, in order to controle the administration and the electronic data governance. Therefore, due to the fact that it requires an amount of knoledge to discuss it, and as said before, is still new and theres is not much cientific knoledge, the main research method was taking part in distance learning courses, providing by the Escola Nacional de Administração (ENAP), which daily followed this researcher with ideologic knowhow and supporting while writtining about electronic data governace in a solid way, putting apart the common sense.

Key-words: Governance; Data; Controls; Participation; Transparency.

1. INTRODUCTION

The electronic governance of the date's public administration appears to emphasize that control and social participation in public politics are essential elements for good administration, the principles of access to public information, transparency and social control are instruments that strengthen democratic participation in administration, achieving control and participation in the acts practiced by public managers within the scope of Public Administration in all its spheres.

The purpose of electronic governance of date's public administration is to promote satisfaction and social well-being, having as main tool for this the adequate use of all available electronic means and resources, according to the legal provision found in the Federal Constitution (CF), Fiscal Responsibility Law (LRF), Access to Information Law (LAI), Open Government Law (LGA).

The preparation of the article was based on Distance Learning Courses made available by the National School of Public Administration (ENAP), which was present in the daily life of this researcher during a good part of the work elaboration period, collaborating with the structure and ideological formation to write about electronic data governance in a solid manner, according to the Digital Governance Law, decree 10.332 of April 28, 2020, which in its article 6, item VII, provides:

Art. 6 It is incumbent upon the Secretariat of Digital Government of the Special Secretariat for Debureaucratization, Management and Digital Government of the Ministry of Economy: [...] **VII - to develop the capacities required for the teams of digital transformation, together with the National School of Administration Public.** (BRASIL, 2020, online) (emphasis added).

The implementation of electronic data governance is justified, as it is an effective public instrument in guaranteeing an increase in the levels of transparency, control, social participation, and gives effect to the democratic Constitutional right of access to information, and publicity of the data of government entities, with control and social participation, through management data, with due control of the risks that the implementation of electronic governance methods may cause for public administration.

2 ELETRONIC GOVERNANCE OF DATES ON PUBLIC MANAGEMENT

In an initial plan, it should be noted that the term electronic governance of public administration's data refers to the use of data in the channels where Public Management uses the available electronic means.

The "citizen constitution", through its innovative and democratic text, started to guarantee everyone, without any distinction, access to public information, regardless of their interest in the information, safeguarding the confidentiality of the source, thus breaking a social paradigm. precepts the constitutional text in its items XIV and XXXIII of art. 5th CF/88:

Art. 5 All are equal before the law, without distinction of any kind, guaranteeing to Brazilians and foreigners residing in the Country the inviolability of the right to life, freedom, equality, security and property, in the following terms: [...] XIV - access to information is guaranteed to all and confidentiality of the source is safeguarded, when necessary for professional practice; (BRASIL, 1988, p.18). [...] XXXIII - everyone

has the right to receive from public bodies information of their particular interest, or of collective or general interest, which will be provided within the term of the law, under penalty of liability, except for those whose secrecy is essential to the security of society and the State; (emphasis added). (BRASIL, 1988, pg. 20).

Through the guaranteeing access to information, in addition to making it possible to constantly reduce the diversion of resources, it is also one of the main means of real matching of revenues with public expenditures, which may be better destined, for the benefit of citizens, through the right to access to information, which is undoubtedly one of the main means of social evolution. Also according to Constitutional Articles 37 and 216:

Art. 37. The direct and indirect public administration of any of the Powers of the Union, the States, the Federal District and the Municipalities will obey the principles of legality, impersonality, morality, publicity and efficiency and, also, the following: [...] § 3 The law will regulate the forms of user participation in direct and indirect public administration, regulating especially: [...] II - Users' access to administrative records and information about government acts, subject to the provisions of art. 5th, X and XXXIII. (BRASIL, 1988, pg.35).

Art. 216. Property of a material and immaterial nature, taken individually or together, bearers of reference to the identity, to the action, to the memory of the different groups forming Brazilian society, which include: [...] § 2. Public administration, under the terms of the law, is responsible for the management of governmental documentation and the **measures to open its consultation to those who need it. (emphasis added)**. (BRASIL, 1988, p.74).

It is observed through the aforementioned device that is the competence of the public administration of the Union, States, the Federal District and Municipalities to discipline the forms of participation of users and provide ways to open the consultation to those who need it and the documentary management, having to keep under its control the administrative records and government acts, being subsequently made available to the citizen.

In the Fiscal Responsibility Law (Complementary Law 101/2000), incentives for popular participation ensured by law, including in electronic media, are ensured and it also defines which instruments should be the target of wide electronic dissemination, as shown below:

Art. 48. They are instruments of transparency of fiscal management, which will be given wide dissemination, including in electronic means of public access: the plans, budgets and laws of budgetary guidelines; the rendering of accounts and the respective prior opinion; the Budget Execution Summary Report and the Fiscal Management Report; and simplified versions of these documents. (BRASIL, 2000, pg. 1988).

The sole Paragraph of article 48 also provides other means of transparency, in item I, it provides for the “Incentive to popular participation and holding of public hearings, during the processes of elaboration and discussion of plans, budget guidelines law and budgets”. (BRASIL, 2000, pg. 1988). The citizen is invited to participate in hearings, during the process of preparing and discussing budget plans that will guide public spending throughout the fiscal year. For some authors, the public hearing is, “mandatory condition as a validity requirement for approval of budget texts [...] Without hearing from the people inadmissible the approval of the budget, which can be questioned in court”(OLIVEIRA apud. MOTTA, p. 11).

According to the provisions of item II, the same article is also a means to guarantee transparency "release to society full knowledge and monitoring, in real time, of detailed information on budgetary and financial execution, in publicly accessible electronic media" . (BRASIL, 2000, pg. 1988). This article is related to the provisions of the law on access to

information, but it is even more guaranteeing when it provides for the release of information in real time, of detailed information on budgetary and financial execution, with the proper use of the available electronic means, it can be an important instrument of social control, because [...] even with the laws and constitutions emphatically enshrining the principle of publicity of government acts and also the most unrestricted access by interested parties to administrative actions [...] the truth is that, in practice, these provisions will never be enforced easily. (GORDILLO apud. MOTTA, 2008, p. 6).

According to the provision in item III, of article 48 of the BRAZILIAN Fiscal Responsibility Law, (2000, pg. 1988) it is the duty of the public power to adopt an integrated financial management and control system, meeting a minimum quality standard in addition to provide information to any natural or legal person about public revenues and expenses.

It is important to emphasize that the text was replaced by the amendment brought by complementary law No. 131, of May 27, 2009, which brought important provisions, imposing the duty of public managers to bring public information, the launch and the receipt of all revenue from the management unit, including those related to extraordinary resources, as well as all acts performed in relation to public administration expenses:

"Art. 48-A. For the purposes referred to in item II of the sole paragraph of art. 48, the entities of the Federation shall provide access to information regarding: I - Regarding the expense: all the acts performed by the management units during the execution of the expense, at the time of its realization, with the minimum availability of data referring to the number of the corresponding process, the good provided or the service provided, to the individual or legal beneficiary of the payment and, when applicable, the bidding procedure carried out; II - As for revenue: the entry and receipt of all revenue from the management units, including those related to extraordinary resources. (BRAZIL, 2009, online)."

It is important to note that the deadline for complying with the provisions of items II and III of art. 48 and art. 48-A is 1 year for the Union, States, Federal District and Municipalities with more than one hundred thousand inhabitants, 2 years for Municipalities that have between fifty thousand and one hundred thousand inhabitants and 4 years for municipalities with up to fifty thousand inhabitants (BRASIL, 2009, online).

The information taken to any natural or legal person gives meaning and guarantees effectiveness to the principle of transparency, which is able to "provide subsidies for the debate about public finances, which allows a greater inspection of public accounts by Organs competent bodies and more widely, society itself". (MENDES apud. MOTTA, p.8).

The legislation in question deals with the duty of the Federation entities to render accounts through the provision of information regarding their expenses and revenues, in this sense "accountability is a final instrument for the tax management process, however, the system must provide for ways of monitoring compliance with the relevant legislation". (MENINI, 2003, p.110).

The fiscal responsibility law "offers means for Brazilian citizens to not only understand the management of public resources, but to effectively participate in this administrative process". (FIGUEIREDO apud. MOTTA, p.8). These means are the dissemination of information regarding the treatment of public affairs such as income and expenses, and plans and projects regarding budget execution, guaranteeing the effectiveness of the principles of advertising, impersonality and transparency, which in themselves promote control and instigate participation in Public Administration.

The Access to Information Law (nº 12.527 / 2011) deals with the State's duty to guarantee the right of access to information, through objective and agile procedures, in a transparent, clear

and easy to understand language, but for the realization of this right it is essential that the Brazilian population is interested in control and values evolution in terms of guaranteeing their rights, participating in search of knowledge about policies and the way in which they can contribute to the improvement in the use of resources, including preventing their deviations, by the governance.

According to art. 7 of Law 12.527 / 2011 “Access to the information covered by this Law includes, among others, the rights to obtain: [...] IV - Primary, complete, authentic and updated information” (BRASIL, 2011, p. 1529). There is a reason for the need to keep the citizen guided by the original sense of the information, when changing the information there is also a change in the sense given to it, so it is advised to the public manager, to publish the information in its raw form, and if there is a change, the publication must accompany the original text. Updates are essential for the interested party to maintain control over the data.

Under the terms of subparagraph V of art. 7 of Law 12,527 / 2011 it is also the citizen's right to obtain: “Information on activities carried out by the organizations and entities, including those related to their policy, organization and services” (BRASIL, 2011, p. 1529). The aforementioned item includes the schedule of commitments, plans for the elaboration of projects and services, trips scheduled by public administrators if they are carried out at the service of the public administration, among others.

According to subparagraph VI of art. 7 of Law 12.527 / 2011 the public administration must provide information “pertinent to the administration of public assets, use of public resources, bidding, administrative contracts” (BRASIL, 2011, p. 1529). Information related to assets, resources, bidding and public contracts are essential to guarantee transparency in the public administration, and increase the confidence of the governed with the public administration.

In the form of paragraph, a) of subparagraph VII, it is the duty of the government to provide information related to the “implementation, monitoring and results of the programs, projects and actions of public bodies and entities, as well as proposed goals and indicators” (BRASIL, 2011, p. 1529).

As a guarantee of the principle of active transparency, which provides for the provision of information regarding the patrimony and implementation, monitoring and results of programs, projects and actions, regardless of requirements, it is the way to bring management closer to those administered, and should also be applied regionally, as examples: how much public money was spent on public safety in the neighborhood? Or, how much public money does your municipality spend each month to maintain the local futsal team? These are some of the different ways of guaranteeing the law and the principles of transparency, control and social participation.

For the Federal Attorney and a specialist in State Law at the Federal University of Rio Grande do Sul Marinês Restelatto Dotti, electronic governance:

It is a condition for the State to legitimize politically and socially the incorporation of citizens into business and public policies, offering them opportunities to access government information. This proposal supposes that the more citizens get involved in the debate and create channels for social participation, the more the public sector will see its capacity for action expanded and the recognition of citizens for the seriousness of their options (DOTTI, 2017, p.84).

Electronic governance aims to include citizens in public administration, allowing them to choose how, when and where they want to reach government information and services, according to (RUELAS et al. Apud DE MOURA et.al. 2015, p.2) e-governance “[...] refers to the continuous optimization of public services, the participation of citizens and government

through the transformation of internal and external relations through technology and the internet”.

Brazil adopted the e-government policy, as extracted from the teachings of the National School of Public Administration (ENAP) "The Digital Governance Strategy has, among its principles, the exploration of digital government platforms". (BRASIL, 2017, p.34).

The Digital Governance policy is regulated by Decree nº 10.332, of April 28, 2020, which establishes the objectives of the digital government strategy in its article 9, which should be highlighted for the purposes of this paper:

Offer simple and intuitive digital public services, consolidated in a single platform and with available satisfaction assessment; grant broad access to information and open government data, to enable the exercise of citizenship and innovation in digital technologies; [...] promote public policies based on data and evidence and on predictive and personalized services, using emerging technologies; [...] adopt process technology and government services in the cloud as part of the technological structure of services and sectors of the federal public administration; optimize information and communication technology infrastructures; [...]. (BRASIL, 2020, online).

The objectives mentioned above appear as instruments capable of, together with the effective use of the various electronic means available, locating the citizen at the center of power, guaranteeing the same access to various public data in all areas of administration as guaranteed by law. It is known that the electronic system enables, with greater efficiency, the citizen's right to monitor public contracts by society, in addition to monitoring bids and all phases of the procedure, giving effect to the principle of social control of public administration, for DOTTI, (2017, p.72) e-governance, rekindling hopes, changing realities and also building myths.

Geovanne Dias de Moura (RUELAS et al. Apud. MOURA et.al. 2015, p.2) defines electronic governance as a public instrument capable of contributing to increasing the efficiency and transparency of public administration, as well as improving the institutional internal performance.

Electronic governance practices are the result of the mechanisms of the E-Gov (electronic government), which grants citizens direct participation in the management of activities carried out in subnational governments, on the other hand, requires the disclosure of information, as well as government services through electronic devices (MELLO, apud MOURA et.al. 2015, p.2).

The Federal Court of Accounts (BRASIL, 2014, p.5), in the document entitled “Basic Governance Framework Applicable to Public Administration Bodies and Entities” (RBG), defines that Governance in the public sector essentially comprises leadership mechanisms, strategy and control put in place to evaluate, direct and monitor the performance of management, with a view to conducting public policies and providing services of interest to society.

It is concluded that it is necessary that the information be made available on websites and several other electronic means available for the exercise of electronic governance in a clear way so that there is an easy understanding of the public information released on the network, making everyone, regardless of the condition that occupy can access aforementioned data.

For the formation of an effective electronic government, it is also necessary to have means to ensure that citizens who do not have access to technological means can be integrated with technological resources, in public squares, kiosks, among others, in addition to ensuring compliance with the models of accessibility so that people with disabilities also have access to data.

2.1 GOVERNMENT OPEN DATA

Open government data is data from any sphere of public administration, accessible to any person or company and which can be reusable for them, enacted on May 11, 2016, Decree-Law no. 8,777 / 2016, provides for the open data policy which is still an innovative concept in our country, the government open data policy:

It was marked by the announcement of the creation of the Partnership for Open Government, or OGP (OpenGovernmentPartnership) involving eight countries (South Africa, Brazil, United States, Philippines, Indonesia, Mexico, Norway and the United Kingdom) and nine civil society organizations, who signed the so-called Open Government Declaration, with commitments assumed for the strengthening of democracies and human rights, in the fight against corruption and in the promotion of innovations and technologies to transform the governance of the 21st century (ENAP, 2020, online).

It is important to conceptualize what “open data” is, according to the National School of Public Administration (ENAP, 2020, online) are: “data accessible to the public, represented in digital media, structured in an open format, processable by machine, referenced on the internet and made available under an open license that allows its free use, consumption or crossing [...]”.

Transparency differs from open data, since they have as specific objectives to provide detailed information on the budgetary and financial execution of the Union, while open data are able to provide information on any and all public subjects or categories, because, still according to the National School of Public Administration: “with government data being opened, the public administration becomes more transparent and, thus, it has greater control over the monitoring of its actions by citizens, a fact that has been increasingly demanded by society” (ENAP, 2020, online).

The intention is that data from all sectors of administration will be made available to the citizen, through the use of electronic means so that he asks the system a question and this provides the answer, or in some cases the question does not even need to be done, providing citizens with real-time information of interest "with more transparent administration and a more active society, government services tend to become more efficient and have a greater impact across the country" (ENAP, 2020, online).

Through open government, citizens who have a certain challenge, problem or need and want to solve it, find ways to solve their questions in an easy way, in all areas of public administration, because “each agency is responsible for publishing the data sets public in their possession or responsibility” (ENAP, 2020, online).

Public information made available by the Federal Executive Branch should be governed by observing data advertising, and interested parties unrestricted access to readable data, in an open and easy to understand format, so that any and all citizens can, in addition to access, understand the data provided, observing the quality and integrity of the forms of availability, from which the citizen may even proceed to use data.

The said data must be updated periodically, with servers responsible for the maintenance, updating and evolution of each database, including providing assistance. The legal system in question is gradually evolving, “the term” open data ” itself is recent, gaining popularity with the emergence of the Internet, as well as with the growth and massification of information technology in public institutions” (ENAP, 2020, online).

As we have already seen, it is necessary that the legislation assures the citizen of continuity to these new principles of transparency, control and participation, and in return, there is an interest in the population in participating in government actions, observing the principles of the Open Data Policy that are ensured by law in article 3 and items of Decree-Law no. 8.777/2016.

In the terms of item I of article 3 of Decree-Law nº 8.777 / 2016, the principle of the National Open Data Policy is “observance of database advertising as a general precept and secrecy as an exception” (BRASIL, 2016, online).

Publicity is an administrative principle and a rule for any information, except for those that must remain confidential. The rule of secrecy is the same as the law on access to information already detailed in detail at work, with those classified as confidential, classified by law, or classified as follows:

For the classification of information in a certain degree of confidentiality, it is necessary to ask what is the public interest of the information. Above all, the least restrictive criterion possible should be used, considering: the severity of the risk or damage to the security of society and the State and the maximum term or event that defines the end of the access restriction (BRASIL, 2018, p. 22).

According to the provisions of item II, of art. 3, of the decree we are working on, the person interested in the data has “guarantee of unrestricted access to the databases, which must be machine-readable and available in open format” (BRASIL, 2016, online).

Another major concern when establishing an open government is that some restrictions for the use of data such as previous registrations, or questionnaires and with the data format are not used in any way, because to be open they must also be reusable, according to the law, according to the provisions of item III, of art. 3, the principle of open data policy is the “description of the databases, with sufficient information to understand any reservations regarding their quality and integrity” (BRASIL, 2016, online). Therefore, it is the duty of the Public Power to inform the interested party in the public information about the set of files made available on the network, including regarding their quality and integrity, under the terms of the law.

According to item IV, of art. 3, published in BRAZIL (2016, online), everyone is allowed to reutilization the data in an open format in an unrestricted way, encouraging, with this principle of the national open data policy, the dissemination of information, and its use in a constructive by the interested party, be it citizen, politician or application developer using open government data.

According to the text of item V of art. 3, DL nº 8.777 / 2016 the government must provide:

Completeness and interoperability of the databases, which must be made available in their primary form, with the highest degree of granularity possible, or refer to the primary databases, when made available in aggregate (BRASIL, 2016, online).

In other words, the set of files made available by the government in an open format, must be exposed in its rawest form, the primary, advisable without modifications, or when the necessary alteration is required, the altered file should also be made available, together it is necessary to at least reference where the original file is located, it is important to highlight the item VI of art. 3rd. It provides for “periodic updating, in order to guarantee the continuity of data, the standardization of information structures and the value of data to society and to meet the needs of its users” (BRASIL, 2016, online).

The goal is to find ways to facilitate citizens' access to public content, through the adoption by the State of more cyber services, adding public value to this action, and carrying out the exercise of participatory democracy, providing citizens with more and more means so that we can reach objectives long sought after “citizens have a fundamental participation in public consultations promoted by the organizations or entities with the aim of promoting the publication of their most relevant data for society (ENAP, 2020, online)”.

According to what inc. VII of art. 3rd of the national open data policy, according to BRASIL (2016, online) it is necessary that, together with the release of data that may belong to different public organizations, who are responsible for the publication, updating, evolution and maintenance must be clearly designated of each open database, including the provision of assistance in the use of data.

For the British researcher Berners Lee, there are suitable forms of data to be made available on the world wide web. The researcher is the creator of the 5-star method to define the appropriate means of disseminating the data, below we will comment on each level of this process.

The first level is the lowest level, it contains “data made available on the internet in any format with an open license such as PDF¹ files or scanned images in a table” (BERNERS-LEE, 2015). These data are at the lowest level, as they are difficult to reuse by interested users.

In the second level are the “data made available as data structured in an Excel or XLS² structure” (BERNERS-LEE, 2015), these data can be used, although they are more complex to work with, as there is a need to add the correct description of the spreadsheet columns to find the desired result.

The third level contains “data made available in non-proprietary open format, such as CSV³” (BERNERS-LEE, 2015), although this standard that uses tabulated data is not the most recommended, it is sometimes used “the CSV file format stores tabulated data in a text file whose values are separated by a common delimiter (W3C ESCRITÓRIO BRASIL, 2011, p. 27) ”.

At the four-star level “data made available using Uniform Resource Identifiers, or URIs, to stipulate things. The URIs⁴ allow people to consult specific data sets” (BERNERS-LEE, 2015). The URIs, are able to relate a set of data allowing their interaction through the network.

At the five-star level “open data is linked to other data to provide context, such as, for example, through the Source Description Framework or RDF” (BERNERS-LEE, 2015), these are the recommended file formats for having open data because they can be easily reused, “the main concept of the design of this framework, based on URI and XML. In other words, RDF documents can be simple to use and with a unified data organization” (W3C ESCRITÓRIO BRASIL, 2011, p. 27).

In order to implement such methods, efforts by all interested parties in open data are required. They are the data user, the public official who provides the data to the network, the developer of the system and applications related to the data, or even the politicians who have the power to provide resources and other means necessary for the improvement of Open Government.

Data governance, is a concept that refers to the way in which the public law entity manages the available and relevant data that they have in their possession. Since this should be adopted as a rule in all Public organizations in order that open public data can be used

¹ In English: Portable Document Format, the translation means portable file format.

² The XLS model is implemented by older versions of Microsoft Excel.

³ The CSV data model, in English, means Comma-separated values, and is a tabulated data format.

⁴ The URI data model in English means Uniform Resource Identifier, and means Uniform Resource Identifier.

efficiently, its concept is defined in Section VI of art. 2 of the Ordinance of the Secretary for Technology and Information, nº 425, as being:

The set of policies, processes, people and technologies that aim to structure and manage information assets, with the objective of improving the efficiency of management processes and data quality, in order to promote operational efficiency, as well as guarantee reliability information that supports decision making (BRASIL, 2016, online).

According to the author (BARBIERI, 2013, p. 7) data governance is still evolving, and its process involves the meeting of several areas that focus on generating and maintaining quality data, which undergo periodic evaluations, management, improvement, monitoring of their use, as well as security and privacy aspects associated with them.

According to the Open Data Working Group of the International Web Standards Consortium for the Brazil Office, cited by the National School of Public Administration in the course, elaboration of the open data plan, found in BRASIL (2017, p.8) such data can be characterized as "[...] the publication and dissemination of information on the internet, shared in open formats; readable by machines, and that can be freely reused in an automated way by society".

However, not all data that is available to the public authorities is open, and the provisions of Law No. 13,709 / 2018, which provides for the protection of personal data and the data that may be made available to the administration, in this sense must be respected. Also according to the National School of Public Administration (ENAP):

It is important to understand that not all public data is open data. "Public data" means any data, generated by the government or under its custody, that is not restricted by specific legislation (BRASIL, 2017, p.8).

In order for the said protected data to remain under the control of the administration, it is necessary to have public employees committed to the management and governance of data, being aware of the importance that these data have in the relationship of trust between the administration and those administered and in the use of knowledge exposed in the data to make evidence-based decisions, according to the National School of Public Administration (ENAP):

Effective data management involves a set of interrelated processes that allow the organization to use its data to achieve strategic goals. Data management includes the ability to design data to develop applications, store and access them safely, share them properly and learn from them to meet strategic and operational objectives (BRASIL, 2019, p.17).

There is no other way to guarantee democracy capable of guaranteeing citizens access to public data, transparency in administration and the establishment of a digital government, but the seriousness on the part of administrators with regard to data management, establishing which data is really useful and add value to the work of a specific agency, also according to the National School of Public Administration (ENAP):

The long-term success of the data quality improvement program depends on an organization changing its culture and adopting a quality mindset. As stated in the Leader Data Manifesto: fundamental and lasting changes require committed

leadership and involvement from people at all levels of an organization (BRASIL, 2019, p.21).

Therefore, for there to be an improvement in data quality, it is not enough for the administration to simply provide any data open to the user, as this would make access difficult and lose the relevance of providing data. Therefore, it is necessary to prioritize the quality of the public data provided, meeting the wishes of the citizen who uses data, since the sense of implementing open government data management has always been social welfare and policies must always be implemented in order to achieve that ideal.

2.1.1. DAMA MODEL (The Data Management Association)

In order to establish requirements that may impact on data quality, a group of researchers from the United Kingdom formed the DAMA (The Data Management Association), which in Portuguese means data management association and proposes essential functions for the good performance of the data. According to Carlos Barbieri, the DAMA model:

“It is a responsibility both for a company's Information Technology sector and for its internal and external customers and involves from senior management, which uses data to generate strategic information, to professionals at the operational level, who are often responsible for collecting and data production”. (BARBIERI, 2013, p. 5).

The work of the aforementioned group is adopted as a guide for Data Governance in Public Administration in Brazil, the work proposes a set of ten essential functions to obtain quality in Data Governance, among which we will adopt eight to fulfill the purposes of this article.

2.1.1.1 Data Architecture

Since most government organizations have a lot of open public data, the data architecture represents how the data is made available. For senior management the definition of what data is really relevant, it is necessary that the data are always updated and prepared to be inserted in new technological platforms that may possibly arise and be implemented Public Administration, for the National School of Public Administration:

The design of a business data architecture includes the representation of business data as such, encompassing the collection, storage, integration, movement and distribution of data. The corporate data architecture allows for consistent standardization and integration of data across the organization (BRASIL, 2019, p. 28).

For (BARBIERI, 2013, p.12) the work of the data architecture “Includes the involvement of systems / applications where data is generated, transformed, consumed, eliminated, within the concept of data lineage”. Therefore, having a well-defined data architecture is essential, because, in addition to adding value to the organization's data, it serves as a bridge between data storage and its implementation in technologies that allow them to be accessible to interested parties. Enabling compliance with the constitutional foundations that guarantee

citizens public access to information regardless of requirements, through the work of data architects, in this sense according to the National School of Public Administration (ENAP):

Architects seek to design in a way that adds value to the organization. This value is achieved through optimal technical presence, operational and project efficiencies, and the organization's greater ability to use its data. To get there, you need: good design, planning and the ability to ensure that projects and plans are carried out effectively (BRASIL, 2019, p.29).

Therefore, in order to achieve value with the public data made available, it is necessary that the organization that has the power of these, remains concerned with building mechanisms capable of managing the data from end to end, that is, from its entry into the administration, until the availability of said data for use in information technology.

2.1.1.2. Modeling and Data Design

When dealing with the data model, we can say that they refer to a data pattern that should be used to represent how the data of a particular organization fits or else how it should fit when in contact with information technologies.

According to the lessons learned from the National School of Public Administration (ENAP), data modeling “requires organizations to discover and document how their data fits together. Data models allow an organization to understand its data assets” (BRASIL, 2019, p. 35).

According to BARBIERI, the data modeling process: also includes versioning management, is part of configuration management, ensuring model integrity, with versioning controls, change controls (who did it, why, when, and what?), (BARBIERI, 2013, p.16).

Also according to the National School of Public Administration (ENAP), which can be found in BRAZIL (2019, p. 35), the purpose of data modeling is to provide a common understanding about them. Through the analysis of different perspectives on data, confirming and documenting, establishing requirements for current and future applications. Such an understanding leads administration to low support costs, and increases the possibilities of reuse for future initiatives, also reducing the costs of this data for new applications, becoming such an essential element for electronic data governance.

2.1.1.3. Operations and Data's Storage.

Data storage and operations are essential for public organizations that rely on data to carry out their routine activities. Therefore, care must be taken when dealing with the storage and operation of data, as they must always be available and perform well to ensure the normal functioning of the organization.

According to the lessons learned by the School of Public Administration (ENAP), found in BRAZIL (2019, p. 41) the work of data storage and operation is highly technical and performed by database administrators, in English called Data Base Administrators - DBAs and network storage administrators, in English called Network Storage Administrators - NSAs, whose function is to ensure that data storage systems are accessible, with good performance and that their integrity is maintained.

According to the work of (BARBIERI, 2013, p. 18) "planning the form, time and type of retention, transfer to secondary media and data elimination, according to data governance

policies and / or regulatory aspects”. The author establishes in his text below ways for a better performance in data storage and operations. Also according to ENAP:

With the advent of new technologies, DBAs and NSAs are responsible for creating and managing virtual environments (cloud computing). As data storage environments are quite complex, DBAs look for ways to reduce or at least manage complexity through automation, reuse and application of standards and best practices (BRASIL, 2019, p. 41).

Here it is necessary to relate the data management model that serves as an aid to DBAs so that they can create virtual environments mechanisms in public agencies, increasing the data to the new and existing technologies used for the benefit of the administration, following the data throughout its entire cycle life.

2.1.1.4. Data Security

As it has been previously discussed, there are open public data, which are characterized by the possibility and mandatory availability to the public, and data that are public and not open. These, in turn, are those protected by law and must remain confidential, and can be accessed only by the administrators who have the legitimacy to do so.

Data security ensures that data that could harm personal information and the smooth running of the administration remains protected. Therefore, according to the National School of Public Administration (ENAP) “Ensuring the security of an organization's data reduces risks and adds competitive edge. Security itself is a high-value asset and there is also an ethical imperative to protect data” (BRASIL, 2019, p. 71).

For Barbieri, data management must follow security standards, which are always defined taking into account:

“Password standards, user groups, encryption standards, external access guidelines, internet transmission protocols, security information, documentation requirements, remote access standards, security incident reporting procedures, storage and access standards data for portables and disposal of these types of equipment” (BARBIERI, 2013, p.21).

Thus, the initiative to protect data must come from the administration entity itself. In order to guarantee their security, organizations can adopt measures to keep them in compliance with the regulations that restrict access to information, including:

Employee training: Creation of standards through training in security initiatives at all levels of the organization. Training is followed by assessment mechanisms, such as online tests focused on improving employee awareness. This training and testing should be mandatory and a prerequisite for assessing the performance of employees (BRASIL, 2019, p. 79).

According to the National School of Public Administration, in order to achieve the objectives of data security, it is extremely necessary that public officials responsible for

protected data be equipped with adequate training and be aware of the importance that non-public data, remain in this condition. It is necessary to pay attention to the practice of:

Consistent policies: Definition of data security policies and regulatory compliance policies for workgroups and departments that complement and align with the organization's policies. The adoption of an "act locally" mentality helps to involve people in a more active way (BRASIL, 2019, p. 79).

For the National School of Public Administration (ENAP), a tool that makes data security easier is the establishment of policies capable of making public administration employees aware of the importance that security of data has in alignment with the policies of each organization. We have as a tool to facilitate data security, as well:

Assessment of security benefits: Link the benefits of data security to organizational initiatives. Organizations must include objective metrics for data security activities in their metrics and project evaluations (BRASIL, 2019, p. 79).

An important tool for achieving data security is the evaluation of security benefits, as it is able to strengthen the understanding that, besides strengthening trust in the relationship between management and associates, data security avoids questioning the importance of implementation of public policies within the scope of open government data. In this sense we can also highlight:

Continuous communications: Support for an ongoing employee security training program, informing them of current safe computing practices and threats. A program in progress communicates that secure computing is important enough to be supported by management (BRASIL, 2019, p. 80).

Here it is important to note that as far as data security is concerned, we are also referring to the protection that non-open public data needs to have against hacker invasion of government programs, since they are constantly finding new ways to gain access to the electronic systems available to management. Therefore, in addition to other instruments, it is essential that public offices and agents constantly communicate with one another about safe practices and get informed about possible threats to data security.

2.1.1.5. Data Integration and Interoperability

Data integration and interoperability processes are essential tools to, among others, improve efficiency, effectiveness and economy to achieve governmental objectives. According to legal instruments that provide for access to information, whose purpose is to ensure that the administrative principles of transparency and publicity are met with the help of the available electronic means.

The data integration process has to do with the connection between two or more organizations, generating a link between the data held by them. According to the National School of Public Administration (ENAP), data integration can be defined as the "process of connecting two or more systems generating a technological dependence between them" (BRASIL, 2019, p.46).

Integration consolidates data in consistent, physical or virtual ways. Data interoperability is the ability of multiple systems to communicate. The data to be integrated generally originates

from different systems within an organization. Increasingly, organizations also integrate external data to the data they produce (BRASIL, 2019, p. 43).

In the words of BARBIERI Data integration:

“is concerned with the arrival of new data sources that ought to be integrated into the existing environment. This involves: analyzing the requests made for integration, the complexity and cost of their integration and evaluating the quality of the incoming data” (BARBIERI, 2013, p. 27).

Thus, it appears that the data integration process requires an analysis of the environment in which the data will be integrated, so that an analysis is made of the incoming data, where they contribute to the quality of the data of the administrative body and if the cost of implementation and maintenance are in line with the public interest in a given database.

Interoperability refers to the communication process between data from different government agencies, where the aim is to avoid workforce expenditure and unnecessary service time in the data collection and delivery procedure. For the National School of Public Administration (ENAP), data interoperability can be defined as “the process of communicating two or more systems without generating a technological dependence between them” (BRASIL, 2019, p.46).

The interoperability process was created by the electronic government department, managed by the Logistics and Information Technology office, coordinated by the Ministry of Planning. However, it has the purpose of making government systems follow technical standards that regulate the use of information technologies in electronic government, defining a minimum set of standards, capable of establishing patterns of interaction between federal government agencies and other areas of society. According to the National School of Public Administration (ENAP):

Interoperability can be understood as a characteristic that refers to the ability of different systems and organizations to work together (interoperate) in order to ensure that people, organizations and computer systems interact to exchange information effectively and efficiently (BRASIL, 2019, p 45).

Therefore, the set of technological tools capable of operating in a coordinated manner can be understood as interoperability. To define standards of interaction and organization so that there can be an effective exchange of information between the areas available in electronic government. For the National School of Public Administration (ENAP):

ICT Governance related to the issue of interoperability addresses the “ICT principles” and “IT architecture” with the objective of defining the conceptual and technological approach to interoperate government systems in the most efficient, effective and economical way, for the achievement of the goals of the Federal Government in meeting the needs of society (BRASIL, 2019, p. 46).

Efficiency, effectiveness and economy are necessary to provide a connection between the government, both between the other bodies internally, as well as in connection with other areas of society, integrating the electronic systems of the government with the other systems of companies operating in the world market. Also, according to the National School of Public Administration (ENAP):

An important challenge for e-government is to provide public services with greater efficiency and effectiveness for citizens. Interoperability generates tools for managers for better decision making, better coordination of government programs and services and cost reduction, through an integrated view of government processes and the reuse of technological solutions (BRASIL, 2019, p. 46).

In order to improve decision-making, program coordination, services and cost reduction (reuse), there is a need for interoperability of the organs of the federal executive branch, including entities, autarchies and public foundations belonging to the federal executive branch. Being voluntary the adherence of the other organs of the public power according to the National School of Public Administration (ENAP):

Interoperability also assists in the fulfillment of Decree nº 9.723/2019, which provides for the simplification of the service provided to users of public services, establishes the Individual Taxpayer Register - CPF as a sufficient and substitute instrument for the presentation of citizen data in the exercise of obligations and rights and obtaining benefits, ratifies the exemption of signature verification and authentication in documents produced in the country and institutes the User Service Chart (BRASIL, 2019, p. 46).

The Register of Individuals is a sufficient instrument for the exercise of rights, facilitating them within the scope of data interoperability, as it allows the consistent replacement of similar databases, provided that their use does not compromise the databases already existing. Government data interoperability is divided into three spheres: organizational, semantic and technical.

Organizational interoperability aims to answer why and when data will be integrated between government entities from different areas, with internal structures and varied business processes interrelating, as extracted from the teachings of the National School of Public Administration (ENAP):

Organizational interoperability is about collaboration between organizations that want to exchange information while maintaining different internal structures and varied business processes. Even with the standardization of concepts, organizations have different operating models, or work processes. This means that they carry out their activities at different times and in different ways (BRASIL, 2019, p. 47).

Semantic interoperability refers to what the data is about, so that the system is able to adapt it so that sharing is done accurately. Even if the internal systems of the agencies are different, the data is interpreted in the same way between the system that provides and the system that receives the data, according to the National School of Public Administration (ENAP):

Semantic interoperability is the ability of two or more heterogeneous and distributed systems to work together, sharing information with each other with a common understanding of its meaning (BURANARACH apud BRASIL, 2019, p. 47).

Finally, there is the technical interoperability that refers to the ways in which the agencies will use data interoperability, seeking to ensure that the services for their use accompany the evolution of the available electronic media, walking along with the development, without harming the already existing standards:

Technical interoperability addresses the connection between computer systems and services by using standards for presenting, collecting, exchanging, processing and transporting data. These standards can cover hardware, software, protocols and business processes. Once the appropriate reasons and moments for interoperating have been identified, and common vocabulary has been established, there must also be a standard to do this, that is, to deal with “how to do” (BRASIL, 2019, p. 47).

Data integration and interoperability are, therefore, as worked on, essential means to guarantee the efficiency of public agencies when working with them, in addition to being a facilitating instrument for achieving efficiency and optimization in public services available in electronic media.

2.1.1.6. Document and Content Management

Electronic document management has as its main function the optimization of document management in an agile manner, without neglecting security and quality in the context of the control of data exposed in documents and content. For the National School of Public Administration (ENAP):

Managing documents, records and content involves controlling the capture, storage, access and use of data and information stored outside relational databases. Like other types of data, documents, records and unstructured content are expected to be safe and of high quality. Ensuring their safety and quality requires governance, reliable architecture and well-managed metadata (BRASIL, 2019, p. 55).

Content management, on the other hand, is the structure that helps users find the disclosed information in data of their interest. The main facilitating means for good content management on electronic platforms is the use of keywords.

For BARBIERI (2013, p.33) the purpose of document and content management "is to provide a form of documentation and understanding of the content architecture through constituent elements, relationships (links), attributes and instances". Thus, according to ENAP, content management:

It refers to the processes, techniques and technologies for organizing, categorizing and structuring information resources so that they can be stored, published and reused in various ways. The content can be volatile or static (documents and other digital assets, such as videos, photographs, etc.). It can be formally managed (strictly stored, managed, audited, retained or discarded) or informally through *ad hoc* updates. Content management is particularly important on websites and portals, but indexing techniques based on keywords and organization based on taxonomies can be applied on technological platforms (BRASIL, 2019, p. 56).

In this way, it is possible to define the management of documents and content as the digitalization technique, or data virtualization, transforming them from physical to digital in

order to improve and optimize their use, for documents and contents when digitalized become permanent documents and facilitate the use of the data exposed therein.

2.1.1.7 Reference and Master Data Management

Reference data is characterized by being a data format whose function is to make sense of others. Reference data governance is able to provide identity to other data. Meanwhile, master data refers to the main, indispensable and immutable data for the management of the organization's data.

In his work Barbieri defines reference data as being:

elements with characteristics more focused on encoding values, such as code and description, for instance. They serve to categorize other data. They represent types of data that serve as a reference for some context, such as zip code, geographic codes (city, state, etc.), accounting codes, list of values for certain domains, among others (BARBIERI, 2013, p.25).

With the definition previously given, we can conclude that reference data appear as essential elements for the definition of other databases, such as exchange rate data and reference data in tables or codes, even for the National School of Public Administration (ENAP):

It is a shared resource that must be managed at the organization level. Having multiple instances of the same Reference Data is inefficient and inevitably leads to inconsistency between them. Inconsistency leads to ambiguity and ambiguity introduces risks for an organization (BRASIL, 2019, p. 53).

In the words of Barbieri (2013, p. 25), “the masters are those central data of the company, with a certain characteristic of immutability. They represent vital business entities of the company, such as customers, suppliers, employees, locations, among others”. Therefore, unlike the master data that we will deal with next, the reference data represents for the data consumer, only data that allows, through the available electronic means, to visualize the data that are of interest, guaranteeing the fulfillment of its purposes, also for the National School of Public Administration (ENAP):

In order for reference data management to be effective (consistent and updated values across multiple applications and uses), it needs to be managed through technology that allows consumers of human and system data to access it in a timely and efficient manner across multiple platforms (BRASIL, 2019, p. 53).

While reference data is used to characterize other types of data, master data has a unique format, indispensable to any business. Therefore, it does not suffer any or very little change over time, as it adjusts to the organization as data that provides essential support.

For the National School of Public Administration (ENAP), “Master data is data about the entities that provide context for transactions and business analysis. An entity is an object of the real world (as a person, organization, place or thing)” (BRASIL, 2019, p. 54).

For Barbieri, the master data:

“is the fundamental data of a company and involve customers, suppliers, employees, accounts, locations, among others. Reference data are data related to codes, such as state, country, status of an order, among others, and serve as elements to categorize/classify other data” (DMBOK, apud BARBIERI, 2013, p.24).

Still according to the National School of Public Administration (ENAP), which can be found in BRASIL (2019, p. 54) “When well managed the values of the Master Data are reliable and can be used with confidence”. In this way, master data, if well ruled and always used in its main version, represent crucial data for any business, as it is necessary to conquer and keep the confidence and approval of the citizen in its open data policies.

2.1.1.8 Data Quality Management

Data quality management can be defined as the act of seeking, evaluating, monitoring, reporting and identifying problems with data quality, for the quality and relevance of data are essential for the management of data governance. For the National School of Public Administration (ENAP):

During the data life cycle, data quality management activities help an organization to define and measure expectations related to its data. These expectations can change over time as the organizational uses of the data evolve (BRASIL, 2019, p.23).

According to Barbieri (2013, p.41), the management of data quality "implies the analysis of the fundamental business rules of the processes and the discovery of data that may imply in eventual breaches of their compliance". Therefore, managing data quality requires data administrators to be willing to constantly evolve towards improving data quality, assessing whether the database remains adequate and meets the expectations of the citizen. For the National School of Public Administration (ENAP) “Governance and data management, data modeling and metadata management have direct effects in defining high quality data. If these are not well executed, it is very difficult to have reliable data” (BRASIL, 2019, p.23).

According to GRUPO MULT (2020, online) it is important to identify what critical data is and which should be adjusted with priority both during the adaptation period and after when processes are established to ensure that quality is maintained continuously, for the National School of Public Administration (ENAP):

Data is of high quality, as it meets the expectations and needs of data consumers. When this purpose is not met or partially met, we can evaluate it as low-quality data. The quality of the data therefore depends on the context and the needs of the data consumers (BRASIL, 2019, p.18).

It is concluded that the management of data quality must, therefore, have two phases, which are planning and implementation of means capable of defining quality, and when establishing acceptable levels of data quality, it is necessary that the public administration entity direct or indirect keep them with the same performance throughout the data life cycle, that is, as long as they have social relevance. It is essential for data quality management that those in charge are willing to update and improve them, routinely defining whether the data remains with acceptable levels of quality.

2.2 GOVERNAMENTAL OPEN DATA PLAN

The government open data plan aims to organize the way in which the data of a given government organization will be used to comply with the administrative and constitutional principles of access to information. For the National School of Public Administration (ENAP):

The establishment of an Open Data Policy in Brazil, to promote and organize the availability of data produced by the government in a format that allows its use and reuse, plays a fundamental role in democracy, since it unites digital government, active transparency and channels of dialogue with society (BRASIL, 2017, p.9).

The elaboration of the open data plan defines and guides the way in which a specific office promotes the documents and contents it holds in its possession. Therefore, it must be prepared individually by each body or entity of the public administration. For the National School of Public Administration (ENAP):

The Open Data Plan (PDA) is the document that will guide, in each office, the implementation and promotion of data opening actions, including geospatialized ones. The data must comply with the minimum quality standards, in order to make their understanding and reuse easier (BRASIL, 2017, p.5).

The moment when the open data plan is prepared is where the organization determines which data deserve to be made public. Since, as previously discussed, each organization has an extremely high number of data and if all of them become public, it will inevitably end up causing confusion in the understanding of the data stakeholders, and, the data that are considered of quality would lose relevance. For the National School of Public Administration (ENAP):

The PDA is a management tool that organizes planning regarding the implementation and rationalization of the processes of publishing open data in public organizations. It is an institutional planning document that public agencies use to include the theme Government Open Data (DAG) in their activities (BRASIL, 2017, p.5).

Despite being a mandatory instrument, to date not all public administration bodies have submitted their government open data plans, disclosing the disagreement and lack of relevance of the plan for the organization, which goes in the opposite direction of the laws that guarantee information to citizens. Also, according to the National School of Public Administration (ENAP):

The updating of the data should preferably occur through automatic synchronization, establishing a continuous process, especially in the case of structuring systems, with efficiency gains compared to specific extractions (BRASIL, 2017, p.18).

It can be seen from the analysis of the passage cited above that the bodies, when working with open government data, must observe a process of continuous updating in their data plans, because data that today can be considered relevant and characterized as quality data, in the future they may no longer have this condition, according to ENAP:

Another aspect that is considered fundamental is the provision of communication channels to receive suggestions for improving what is provided

for in the PDA or for collaboration with other bodies and with society. The idea is to foster the social participation required by EGD, in compliance with the principles of transparency and publicity (BRASIL, 2017, p.18).

That said, Decree nº 8.777 / 2016, which deals with the open data plan in its article 5, regulates the mandatory production and publication of an open data plan in all Federal Public Administration bodies: direct, autarchic and foundational, being coordinated by the federal General Comptroller's Office. Under the terms of § 2 of the aforementioned provision are the minimum requirements of the plan, which we will deal with below:

I - creation and maintenance of corporate data inventories and catalogs; II - transparent mechanisms for prioritizing the opening of databases, which will obey the criteria established by INDA and consider the potential for the use and reuse of data by both the Government and civil society; III - schedule related to the procedures for opening the databases, updating and improving them; IV - clear specification of the roles and responsibilities of the units of the federal public administration body or entity related to the publication, updating, evolution and maintenance of the databases; V - creation of processes for the engagement of citizens, with the objective of facilitating and prioritizing the opening of data, clarifying doubts of interpretation in the use and correcting problems in the data already made available; and VI - other mechanisms for the incentive, promotion and efficient and effective use of databases by society and the Government (BRASIL, 2016, online).

In its third paragraph, the above-mentioned article establishes that the national open data infrastructure may also establish complementary rules related to the preparation of the Open Data Plan, in addition to rules related to the protection of personal information. Such information can be found in BRASIL (2016, online).



Figure 1: Structure of an open data plan (PDA).

The moment the open data plan is presented is when the plan is exposed, demonstrating the organization's focus and objectives with the use of the database and also exposing the social relevance of the database. For the National School of Public Administration (ENAP) "This phase introduces the document presenting an executive summary with the main focus of the plan, which must be society" (BRASIL, 2016, p. 14).

In a second step, in the Introduction of the plan we have the exposure of specific objectives and the alignment of the open data plan with the management tools, which are laws, decrees, normative instructions, ordinances and internal regulations of the organization that regulate access to information, for the National School of Public Administration (ENAP):

In this part of the PDA, general and specific objectives are set out. The first concerns the principles of advertising, transparency and efficiency, aiming at increasing the dissemination of data and information to society in general. The latter, on the other hand, are more related to the activities that the agency will carry out to comply with the PDA (BRASIL, 2016, p. 14).

Afterwards, the databases to be opened will be defined, that is, the set of data that the agency has committed to open, and a demonstration of the relevance that the opening and publication of a certain database has for the organization and for the public interest in general. For the National School of Public Administration (ENAP):

Here is presented the data set that the agency has committed to open and those with the possibility of opening, as well as the criteria for use to prioritize these data sets (BRASIL, 2016, p.15).

In the strategy for opening, there is a demonstration of the path to be taken by the agency for the execution of the data publication process to be well designed. For the National School of Public Administration (ENAP):

This section presents the steps that the agency will take to execute the data publication process, as well as the entity. Additionally, the minimum quality requirements related to the opening process are explained (BRASIL, 2016, p. 16).

In the phase of cataloging data on the Brazilian open data portal and geospatial data at INDE (National Geospatial Data Infrastructure) for ENAP: “those responsible for the publication process on the Brazilian Open Data Portal are defined, as well as those who will be maintainers of metadata on the portal” (BRASIL, 2016, p. 18).

Within the scope of monitoring and control, there is the demonstration of responsibilities taken on by the organization, so that they are able to work their governance in the most efficient way possible. For ENAP “the objective of this phase is to monitor the actions foreseen in the PDA and the report of accountability” (BRASIL, 2016, p. 18).

Support, as in any environment, in public administration represents the basis, or else, the continuity of the process of opening the data within the organization's routine. For ENAP, the support process refers to the “incorporation of the data opening process within the organ's routine” (BRASIL, 2016, p. 19).

The process of sustaining the data also matches the evolution and growing improvement, both in programs and applications and in the dissemination of open data. In order to always serve the public interest, for ENAP the support process refers to “sustainability and continuous improvement of data that have been published and properly cataloged” (BRASIL, 2016, p. 19).

Still for the National School of Public Administration (ENAP) “in it, the roles and responsibilities for the main actors involved are presented in a structured way” (BRASIL, 2016, p. 19). Thus, it is inferred that sustainability in the open data plan is an element that acts after the definition of the data to be opened, and ensures continuity and evolution to the work of data quality treatment over time.

The action plan of the administrative body is exposed through the definition of which activities, in which deadlines, who will be the responsible managers and finally the periodicity in which the data will be updated. For the National School of Public Administration (ENAP), in the plan of action:

The activities divided by theme will be detailed, as well as the products that will emerge from the implementation of these activities. Goals, deadlines and data update frequency will also be defined for each set of activities. Finally, it is also prudent to highlight the unit of the body responsible for data on a set of themes, as well as the focal point (BRASIL, 2016, p. 20).

The access to information law (BRAZIL, 2011, online), deals in its article 40 with the competence of the maximum authority of each body to designate a representative who, within the scope of open data, has the following attributions defined by the items of § 4, of article 5 of Law 8777/2016:

I - Guide the units on compliance with the rules regarding open data; II - Ensure compliance with the rules for the publication of open data, in an efficient and appropriate manner; III - Monitor the implementation of Open Data Plans; and IV - Present periodic reports on the compliance with the Open Data Plans, with recommendations on the indispensable measures for the implementation and improvement of the Open Data Policy (BRASIL, 2016, online).

Based on the above considerations, it is important for a better visualization of the format of an open government data plan to research on plans that already exist in the federal government in accordance with current legislation on the subject.

3 FINAL CONSIDERATIONS

This paper and its contents analyzed the fundamental legislation on access to information, bringing up concepts from the Federal Constitution of the Republic, the Law on Access to Information, the Open Data Law and the Strategy Plan for Data Governance. It aimed at demonstrating the importance of electronic governance of public administration data within the scope of internal, external and social control of public administration, being an extremely important mechanism for management to base its practices on evidence.

Accordingly, data may be able to represent all public administration practices. The research has shown the structure and format of open data plans, which government bodies and entities are required by law to prepare verifying the progress of government policies and legislation related to access to information, in order to contribute, identify and propose effective adaptation methods of the state to technological innovation, based on data governance so that the State can comply with the constitutional principles of advertising and efficiency.

Public power is the agent responsible for the expansion of social control to sectors that do not yet have these mechanisms, such as tax incentives given to industries and trade, policies for generating employment and income. To date, there is not space for social control over economic policies, which greatly influence our daily lives and social well-being, although some laws already provide for this concept.

A brief analysis was also carried out on how managers and others responsible for control have been using electronic means, through the use of data to approach society and guarantee the right of access to information, through the increasing government investment in the creation and adequacy of new public mechanisms capable of integrating the citizen in instruments of representative, direct and participatory democracy over the most diverse areas of administration.

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