# Information Science and Public Administration: an approach to Information Governance using the Mediation Law as a facilitator in improving the efficiency of information management



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### **ABSTRACT**

Information is an essential element in the formulation of organizational policies to obtain favorable economic results. This article aims to review, in the Public Administration, some aspects of Information Governance and Information Science, with which methods of mediation can be used among users of information, including for the conflict resolution addressed by Brazilian Law 13,140/2015, in order to improve the Information Management process.

**Keywords**: Governance; Information Science; Information Management; Mediation; Law.

## 1. INTRODUCTION

For the study of sciences, information is a meaning transmitted to a conscious being by a message inscribed in a time-space material support, which can be printed, electromagnetic signals, and sound wave. To this end, signs and symbols are used to associate a concrete element, the signifier, to a representative element, the signified.

This article aims to review some aspects of Information Governance and Information Science in the Public Administration. Methods of mediation



can be used with these aspects among users of information to improve the Information Management process, including for conflict resolution, as established by the Mediation Law (13,140/2015) and by the new Civil Procedure Code (Law 13,105/2015).

# 2. INFORMATION SCIENCE – PUBLIC ADMINISTRATION

One observed in the Brazilian Public Administration that every governmental action for implementing and developing policies is strictly related to the use of technology resources. This enables, among other things, efficient information management, reducing operational costs and improving the control of processes and activities whose results seek the wellbeing of society.

This way, the importance of streamlining state administrative actions increases, which encourages the conscious use of information resources by regulating and standardizing procedures.

In this context, information science appears as an assistant in understanding those aspects related to information management in the Public Administration, as it can be understood as an interdisciplinary area by nature, with investigative and analytical purposes. Its objective is to study the phenomena correlated to information production, organization, dissemination, and use in all fields of knowledge.

For Information Science, the use of the word "information" indicates a specific perspective based on which the concept of communication of knowledge has been determined. This perspective comprises characteristics such as innovation and relevance, that is, it refers to the process of transformation of knowledge and, particularly, to its selection and interpretation within a specific context.

In Capurro's perspective (2003), the concept of information as we use it in everyday English in the sense *knowledge communicated* plays a central role in today's society... "it is commonplace to consider information as a basic condition for economic development together with capital, labor, and raw material;". However, when quoting Bogdan (1994), we see that the concept of "information" goes beyond the field of sciences, that is:

(...) The notion of information has been taken to characterize a measure of physical organization (or decrease in entropy), a pattern of communication between source and the receiver, a form of control and feedback, the probability of a message being transmitted over a communication channel, the content of a cognitive state, the meaning of a linguistic form, or the reduction of an uncertainty. There seems to be no unique idea of information upon which these various concepts converge and hence no proprietary theory of information (CAPURRO, 2003)

Nonetheless, "information" is better defined when one understands its useful character for human beings. In this sense, Capurro (2003) writes about Machlup and Mansfield (1983). In "The study of information: interdisciplinary messages", they collect views on the interdisciplinary controversy in computer science, artificial intelligence, library and information science, linguistics, physics, and in the social sciences. The controversy is inferred from the use of the information concept in the context of signal transmission, when stating that the basic sense of information is directed to and received by human minds. Hence, all other senses, including its use with regard to nonhuman organisms as well as to society as a whole, are metaphoric and, as in the case of cybernetics, anthropomorphic. In short, for Machlup, information is "a human phenomenon. It involves individuals transmitting and receiving messages in the context of their possible actions".

On the other hand, Buckland (1991) presents three meanings for the term "information" in Information Science, distinguishing with regard to:

- Information-as-process, where the act of informing changes initial knowledge;
- Information-as-knowledge: where the communicated knowledge concerning some particular fact, subject, or event, having the characteristics of being intangible and hard to measure, as it is personal and conceptual;
- Information-as-thing: this is used attributively for objects, such as data and documents that are referred to as "information" because they are regarded as being informative.

Hence, he reaffirms the concept of documents (information-as-thing), indicates the subjective nature of information, and supports the idea that

anything can be informative within a context for representative use. Figure 1 shows these relations that information assumes in four aspects.

According to the definition set forth in Law 12,527/2011 – Law of Information Access, information is "data, processed or not, in any media, support or format, that may be used for production and transmission of knowledge".

It is verified, therefore, that for an information system, "data" are raw elements represented by symbols that may be quantified, structurally organized, and mathematically described.

When focusing on these concepts, we verify the importance of information as an indispensable object in the production and transmission of knowledge, which, in turn, has become essential for the formation of a person and of the society with which they relate.

# 3. GOVERNANCE – INFORMATION MANAGEMENT

The Federal Public Administration has attempted to develop their actions within a managerial framework in order to contribute to the efficient and economic use of resources and to reach a higher number of beneficiaries. That means that society's consciousness is more and more notorious, participative and demanding so that public assets can be accessible and used for everyone's benefit. This challenges public managers to be more qualified and engaged in the search for improvements in processes for which they are responsible.

The issue that the Administration currently faces is how to overcome the barriers to the implementation of the Public Management's managerial model and to support the initiatives to develop an efficient information and communication structure, without compromising the necessary state controls

**Figure 1:** Four Aspects of Information

Intangible	Tangible
Information-as-knowledge - knowledge	Information-as-thing — Data, Documents
Information-as-process — Effect of transmitting knowled- ge, becoming informed	Information processing — treatment of data, documents

Source: Buckland (1991)



that ensure that there is no embezzlement when applying public policies and resources.

According to an article by Borges and Serrão (*apud* Romilson Pereira) published in the Journal of the Federal Court of Accounts – TCU, the origin of governance is attributed to the movement that happened in the United States in the 1980s. Big investors were against corporations that were being managed in a way that did not meet the interest of shareholders. "The subject would become notorious with the financial scandals that broke in several corporations of that country" (Magazine TCU, no. 122, page 120, 2011).

Jessop (*apud* Pereira) clarifies that the term was already used in the 1940s and that governance arose from the need, attempt and hope to minimize risks, reduce the inherent complexity, in other words, to govern and control phenomena and events in the real world, which would naturally be necessary and contingent. Therefore, what happened in the mid-80s was the discovery of governance by corporations.

Thus, we can consider that governance in the public sector is founded basically on the principles of transparency, integrity and accountability, the same ones suggested for corporate governance. Due to its particularities, governance in the public sector must be connected to behavioral patterns, well-defined organizational processes and structu-

res, control networks, and management reports intended for the external public.

These concepts are connected to those of governance, including corporate and information governance. They comprise several fields of interest, such as technology, security, communication, and knowledge, and require constant improvements and maturity in the Public Administration before becoming effective and permanent.

Therefore, as a development of governance, information governance may be established consisting of aspects of leadership, organizational structure, and processes that ensure that the duties/responsibilities of information management support and improve the organization's objectives and strategies.

In this sense, the management and formation of knowledge are closely linked to information management itself. Among others, the aspects of security and resource control inherent to the knowledge dissemination process must be observed, constituting an integrated and harmonic system.

According to Simch and Tonetto (2007), other aspects that are part of an Information System environment and are disseminated by professional practices classify the information by priority levels. They respect the needs of each company, as well as the importance of information classification, for the maintenance of the company's activities.

For Eluzia (SILVA, 2009), the importance of the information systems available in the Public Sector is intended to support their operational conditions and, at the same time, they are also used "to support the sector activities in agencies and entities, becoming more objective, complete, fast, and transparent".

Although this kind of management is similar to what is called corporate governance in the private sector, there is still a lot to improve in the public sector, especially regarding information management. The main agents, responsible for making decisions, generally have little knowledge of the technical aspects that this type of management comprises, even though information must necessarily be the intrinsic and indispensable element throughout the formal process that enables making the right decision.

In this context, it is emphasized that the decisions made must target the inherent role of the Public Administration or of the State itself, which is to meet the needs of society and citizens, given that it is this same society that establishes the conditions and limits for the State to exercise its power.

Nevertheless, the conflict of interests is also present in this relation, as this is a characteristic element in human beings that intend to constantly satisfy their needs while also observing the limits established by social interaction.

In this aspect, in a systemic view, the organization must consider the constituent parts of the entire organizational framework, as well as the relationship between these parts, so that conflicts may be satisfactorily resolved. For this purpose, it will be necessary to use structured methods and objective techniques that may be applied whenever different interests arise when serving citizens. One example is alternative dispute resolution methods, that is, mediation and conciliation used as facilitators in the dialogue between the interests of the Administration and service users.

### 4. MEDIATION IN INFORMATION SCIENCE

According to Almeida Junior (2009), mediation can be understood as "every action of interference taken by the information professional, whether it is direct or indirect, conscious or unconscious, singular or plural, individual or collective, which enables the appropriation of information to fully or partially meet an informational need".



Considering the scope of information treatment, going from storage to dissemination, such mediation has started to play not a supporting role in Information Science, but it effectively interferes in its own object – information.

Practically speaking, mediation of information is only understood as linked to the information service or, more specifically, to spaces and actions that target customer services. However, it is implicitly present in some other actions, even though by guiding and directing all activities being conducted. This makes the idea of work that is not directed to satisfying information needs unconceivable. In these cases, the following can be mentioned: information storage, which is updated according to users' interests and demands; the selection policy, discussed in the development of informational collections, which has the final user as supporting ground. The same applies to the works of information processing: its actions aim to recover information that meets and satisfies the users' needs.

Still according to Almeida Junior (2009), there is a distinction between implicit and explicit mediation. The former is held in spaces with informational equipment, where actions are developed without the immediate presence of users. In these spaces, are information selection, storage and processing. On the other hand, the explicit mediation occurs in spaces where the presence of users

is inevitable, "even if this presence is not physical, such as in long distance accesses in which a concrete and on-site interference of a professional is not required".

In this context, it is established that mediation comprises consciously developed actions that are based on knowledge dominated and externalized with reasonable control. It also includes actions that allow unconscious knowledge to emerge, which cannot be controlled and is interconnected with conscious knowledge.

(...) the mediation of information enables users to be the protagonist in the appropriation process, as they determine the existence or not of the information that arises from knowledge modification, reorganization, re-structuring, and transformation. Ultimately, the one who determines the existence of the information is the user, that person who uses the contents of information supports (ALMEIDA JUNIOR, 2009).

Another aspect highlighted by Information Science is that neutrality and impartiality, although sought, are not accomplished in the mediation process because information itself is not neutral, it is immersed in ideologies and in several interests, such as economic, political, cultural, and formation interests.

Therefore, we notice that information is not simply transferred and transmitted, which would imply an exchange, a change of place. Information is present in supports and needs to be appropriated by interested parties that is when it will begin to belong to the reconstructed knowledge.

This understanding is especially important for the Public Administration. It enables the increase of efficiency in information services and resource management, as the process of receiving information is no longer addressed as a simple activity of transference, dissemination and availability; it becomes embedded in and interdependent of a wider process, that is, information mediation.

In this sense, taking into account that appropriation and interference occur in various fields, from information production to its final destination, going through informational support (media, equipment, tools) and agents to the citizen-user, managers and agents are no longer seen as direct trustees of information, but they play the role of mediators. They interfere in the entire process of information appropriation of citizen-users in an undoubtable and determining manner and allow them to become active parts in this mediation.

Seen this way, as an object of interest to parties, information is the basis of knowledge reconstruction as it deals with uncertainties and, as a



substitute, it begins to generate conflicts between these same parties.

# 5. MEDIATION LAW – ALTERNATIVE DISPUTE RESOLUTION IN PUBLIC ADMINISTRATION

In the conception of Luiz Guilherme (Marinoni et al., 2015), mediation consists of "the inclusion of a neutral third person to assist in the negotiation between the parties. The intention is to collaborate so that the parties may reach an agreement on their own".

According to Rodrigo Cardoso Magno (2013), the reputable mediation characteristics may "point to an apparent conflict with the principles of administrative law, which lays down its roots on state sovereignty and on the vertical relation between State and those being administered – historically known as subject". In mediation, the parties are placed in a horizontal position and seek to meet their needs and interests in a harmonic manner, upholding a customized way of justice".

Nevertheless, it is verified that when the public interest is above private interest, the promotion of individual rights must be observed with proportional consideration, guided by the principle of human dignity.

Within the juridical scope, legality would comprise both an imperative action from the administration as a consensual performance. The principle of legality does not hinder managers from adopting consensual solutions for dispute resolution. Therefore, "it must be assessed if the selected option – whether imperative or consensual – may result in maximum effectiveness of the principle of efficiency, thus respecting the fundamental rights" (MAGNO, 2013).

Law 13,140/2015 (Mediation Law) provides for mediation between private parties as a way of dispute resolution and for the alternative dispute resolution in the public administration. Article 1, sole paragraph, defines mediation as "the technical activity conducted by a neutral third person without any decision-making power, who, after being chosen or accepted by the parties, assists them and encourages the identification or development of consensual solutions for the dispute".

This law is extremely relevant as it regulates out-of-court mediation and also has some aspects

of court mediation. That is why it is important to interpret it along with the Civil Procedure Code – CPC, which introduces public mediation and conciliation that are being used in direct and indirect Public Administration.

In these terms, the New Civil Procedure Code sets forth the following in its Article 174:

The Federal Government, States, Federal District, and Municipalities shall create mediation and conciliation councils with the following duties related to the consensual resolution of disputes at administrative level: I – settle conflicts involving public administration bodies and entities; II – assess the admissibility of conflict resolution requests in the public administration by conciliation; III – promote the execution of the Conduct Adjustment Term (TAC), when applicable. (Law 13,105/2015)

In the Public Administration, it is possible to apply alternative dispute resolution methods, such as mediation and conciliation, but they are subject to the possibility of using such methods in the area of public interests. It is also possible to apply other techniques when alternative dispute resolution methods are not feasible, such as the execution of the Conduct Adjustment Term – TAC, in case of conflicts involving Public Administration bodies and entities.

The parties are not restricted to only mediation and conciliation. Based on each case, the judge may grant to the involved parties the possibility of using other alternative dispute resolution techniques.

According to Law no. 13,140/2015, the mediation and conciliation procedure is permeated with norms, rules, and principles that must be informed to the parties at the beginning of a session. Other constitutional principles of Brazilian proceedings must also be observed:

- Independence freedom to act, without being internally or externally pressured, being allowed to reject, suspend or interrupt the session if the conditions required for a good progression are lacking;
- Isonomy equal treatment of parties, prevailing the random distribution of proceedings to mediators and conciliators;

- Freedom of will respect to the parties' different points of view, ensuring they make a voluntary and non-coercive decision, with freedom to make their own decisions during or at the end of the proceedings, or even to interrupt it at any time;
- Search for consensus maintenance of a favorable environment so that the parties may reach a satisfactory agreement;
- Confidentiality non-disclosure of any information obtained in the session, unless explicitly authorized by the parties, required by law, or necessary for honoring the agreement reached by the mediation;
- Orality and informality maintenance of the cohesion with objectivity and avoidance of unnecessary formalities and excess of bureaucracy;
- Informed decision to keep the parties fully informed as to their rights and the factual context they are in; and
- Impartiality lack of favoritism, preference, or prejudice, ensuring that personal values and concepts do not interfere in the result.

Impartiality permeates the entire mediation and conciliation procedure. Mediators and conciliators are subject to this, which is also mandatory in conciliation and mediation in private councils (Article 170, 172, and 173 of CPC).

In this sense, mediation in the scope of administrative law can still be held in the administrative dispute phase – administrative mediation, in which the administrative authority elects the cases eligible for mediation and proposes to the parties the adoption of an alternative solution (out of court). It can also be held in the judicial phase, in which there is the commencement of proceedings at court; this is called mediation "attached to the court". Therefore, the phase in which mediation will be proposed and used depends on the administrative and judicial procedures adopted by the Public Sector.

According to Magno (2013), when quoting Brazilian scholars, the principles of consensus and efficiency in the Public Administration as well as the

interest for adopting a "Preventive Advocacy" have become more important in Administrative Law. It endows, thus, the "State attorney with a proactive attitude that seeks conflict resolution".

# 6. APPLICATION OF CONFLICT RESOLUTION

Some aspects may arise when evaluating an internal environment of a public body that provides services to society related to delivery and provision of information or products such as transparency and effectiveness regarding the obligation of making information accessible to the public, as per Law 12,527/2011 (Law of Information Access).

It should be noted that an internal environment is influenced by the relationship between people, who are responsible for the performance of activities that contribute to the efficacy of business.





Therefore, for mediating the information and the conflicts resulting from the relation between people, one can infer a model of event application that may be used in the Public Administration as basis for the improvement of information management and its connection with good governance. The use of models helps in the comprehension and scaling of actions that enable efficiency in resource allocation. It is also a relative parameter of a situation lived in the organizational environment and directs the efforts towards the improvement of the institutional performance when achieving established goals.

When observing some departments of a typical public institution that have specific characteristics when dealing with information (such as the document registration and distribution department), as well as those departments that have relationships with external users (with typical customer service activities), one can verify the possibility of conflicts. This includes conflicts resulting from mistakes in the institution's internal management, which generates resistance and compromises the service quality. One example is when a public servant must treat some information deemed important, but does not have the knowledge nor the proper tools to do so. The trend, in this case, is to be resistant in face of the risk of having to accoun-

ted for possible damages caused to the institution because of inadequate use of the information they had access to.

In this context, considering that the level of demand of people is variable due to the influence of their culture, history, beliefs, ideology, and experiences - which affect the relations developed in customer service and in information service provision to citizen-users - it is appropriate to understand that when providing a service to society, the "service" concerns the satisfaction of demands for information, product, and service of the citizen. On the other hand, "treatment" concerns the way the user is received and served. These integrated and complementary actions make up a service of excellence.

Thus, a good "service" refers to quality, which includes a good "treatment" and the sufficient and timely satisfaction of the demands for information, product, and service.

Thus, it is possible to imagine a situation in which the user is not satisfied with the results obtained from the service. One example is when the user requests information on public services concessions aiming to obtain a detailed analysis of the financial and economic status of the concessionaire companies, as well as the registry data of their co-owners. In this situation, the Public Admi-

nistration denies the request explaining that this information is exclusive to the government entity connected to its administrative performance.

It may be inferred that when an information request is denied, the citizen-user tends to depreciate the service received from the Administration, even if this denial has been legally justified. This may figure as a conflict between the involved parties with consequences, sometimes unpredictable, to the Public Administration. In any case, however, the treatment provided to the citizen must always be respectful and helpful, regardless of being considered satisfactory in the citizen-user's opinion.

A good practice adopted as a measure for efficiency and quality in order to monitor the range and the impact of the service provided by the Administration is to implement communication channels so that citizen-users may record their demands, whether for information or products, as well as their opinion about the service.

In the case of the example above, the user, unhappy with the rejection from the Administration, may claim his rights to have access to that information based on the democratic principles of transparency and publicity of administrative acts, which are essential for the exercise of social control.

Suppose that, in this situation, the user appeals against the decision to the competent department. There will be a bureaucratic procedure, such as the completion of forms and submission of copies of the documents containing the notification and formalization of the administrative proceedings. The user will have the impression that his request will follow a more strict process, and will be better reviewed and certainly granted. Nevertheless, should the request be once again denied, the user's dissatisfaction will be so deep that he will be constrained to appeal to court against the administrative decision.

In the hypothetical situation above, one notices that the efficiency and economy in public management acts tend to be compromised, as the Administration will be obligated to allocate resources for its representation in court. On the other hand, the court will put in efforts to satisfy society's desire before a governmental entity.

Situations that involve conflicts to be analyzed and deliberated in court are recurrent in the Public Administration and many initiatives of out-of-court settlements are undertaken in seve-

ral public sector institutions. This seeks economy when using resources as well as to expedite the proceedings.

In this sense, Law 13,105/2015 (New Civil Procedure Code) brings important guidance for the structure and management of state activities. Article 174 indicates the Public Administration as the protagonist in the resolution of conflicts between parties by creating mediation and conciliation councils with duties related to the consensual resolution of disputes at administrative level. This guidance is specified in Law 13,140/2015 (Mediation Law), listing activities regulated and supervised by the Public Entity, and enables the reduction of bureaucracy by allowing the use of technology as a conflict resolution instrument

Article 43. The public administration institutions and entities may create councils to resolve disputes between private parties, if conflicts are related to the activities regulated or supervised by them.

Article 46. Mediation may be held over the Internet or through other communication channels that enable this to be long distance, provided that the parties agree with such.

Sole Paragraph. The party residing overseas may choose to be subject to the mediation as per the provisions of this Law. (Law 13,140/2015)

Given the above and taking into consideration the example presented, one can provide a possible solution for the conflict that led the citizen-user to seek court to have his demand satisfied. Firstly, this solution would comprise the creation of a mediation and conciliation council in the respective public institution, with duties related to the consensual resolution of disputes at the administrative level. Alternately and without compromising the functions of this council, the Administration can seek assistance from the existing Mediation and Conciliation Centers at Courts through a covenant or a cooperation term.

In any case, with the Mediation Law, it is necessary to train servants regarding the conciliation and mediation techniques so they may be able to resolve the conflicts that arise in the everyday life of existing relations with society in state activities. Some entities have provided this capacity building,



such as the National Mediation and Conciliation School (ENAM), of the Judicial Renovation Secretariat, Ministry of Justice (SRJ/MJ), and the National Justice Council (CNJ).

# 7. CONCLUSION

In the Brazilian Public Administration, the importance of streamlining information management is connected to the conscious use of information resources and aims to improve the efficiency and results when providing services to society.

In this context, information science appears as an assistant in understanding those aspects related to information management in the Public Administration, as it can be understood as an interdisciplinary area by nature. Its objective is to study the phenomena correlated to information production, organization, dissemination, and use in all fields of knowledge.

Through aspects of leadership, organizational structure and processes, governance enables the information management responsibilities to support and improve the organization's objectives and strategies. However, when dealing with the needs of society and citizens, one must be aware of the conflicts of interests that are a characteristic element in human beings who constantly intend to satisfy

their needs while observing the limits established by social interaction.

In order to resolve conflicts in a satisfactory manner, it is necessary to use structured methods and objective techniques, among which there are alternative dispute resolution methods (mediation and conciliation).

With the Mediation Law, alternative dispute resolution method have become important in the public administration, as it re-establishes communication and trust between the parties, who have a collaborative attitude towards an agreement or social pacification of the conflict. In this sense, mediation can still be held in the administrative dispute phase – administrative mediation, in which the administrative authority elects the cases eligible for mediation and proposes to the parties the adoption of an alternative solution (out of court). It can also be held in the judicial phase, in which there is the commencement of proceedings at court.

This article aimed to present the reasonableness of applying adequate conflict resolution to improve information management as a good practice towards governance in the Public Sector. It took into account that the level of demand from people is variable and this is reflected in the relations developed in customer service and when the Administration provides information services.

In this sense, Law 13,105/2015 (New Civil Procedure Code) and Law 13,140/2015 (Mediation Law) bring important guidance for the structure and management of state activities. They indicate the Public Administration as the protagonist in the resolution of conflicts between parties by creating mediation and conciliation councils with duties related to the consensual resolution of disputes at administrative level. This improves resource management and the satisfaction of society's needs.

Finally, it has been verified that the analysis performed refers to one of the immensurable aspects of the information mediation process. It is necessary to improve this practice with new studies and guidance.

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