

Algorithmic Transparency from the South

Examining the state of algorithmic transparency in Chile's public administration algorithms

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ABSTRACT

This paper presents the results and conclusions of the study on algorithmic transparency in public Administration and the use of automated decision systems within the State of Chile, carried out by the Public Innovation Laboratory of the Universidad Adolfo Ibáñez in alliance with the Chilean Transparency Council. In the first part we delimit the concept of algorithmic transparency, and the different considerations that can derive from this concept. We detail the information gathering procedure carried out on the use of automated decision systems in the public administration and evaluate its status according to a defined transparency framework. It then examines the state of administrative regulation and access to public information in Chile and how algorithmic transparency could be included within the current legal norms in Chile. The results of this study show that there is a use of automated decision systems in critical operations in the Chilean public Administration and that the current legal framework enables the implementation of an algorithmic transparency standard for the public administration, in a flexible, scaled way and with criteria that allow citizens to evaluate their interaction with these systems. Building on the results of this research, in 2022 the Transparency Council piloted a draft algorithmic transparency standard with seven algorithms from four public agencies. A public consultation and the publication of the final standard is expected in 2023.

CCS CONCEPTS

• **Computers and Society**; • **Public Policy issues**; • **decision-support**; • **public Administration**; • **Computing in government**;

KEYWORDS

Algorithmic Transparency, Public Administration, Chile

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1 INTRODUCTION

The transparency of automated decision systems (hereinafter ADS) that support or replace human decision, in government Administration is a new challenge linked not only to the laws of Personal Data Protection, from where the language of a right to explanation linked to the use of personal data in automated decisions has emerged, but also to the laws of transparency and Access to Public Information, laws against discrimination, citizen participation and general management of Public Administration [16].

Chile has a weak culture of data protection and a strong law on access to information, also known as the Transparency Law, that was enacted in 2009. It has gradually succeeded in installing a policy of transparency in public institutions, linked to legal obligations, through formal and institutional channels for opening information mainly related to acts and documents. This has contributed to a cultural change compared to the secrecy prevailing until then in the country's public agencies.

This Transparency Law is part of the set of laws for the modernization of the Public Administration, which began to be enacted in 2000 and allow citizens to access information held by the public agencies, providing tools that contribute to control and limit the exercise of public power. Transparency is a foundational principle of good governance and public management, but it is also a foundational principle of trust in automation technologies such as Artificial Intelligence (hereafter AI). It is also part of the principles of data ethics, an emerging branch of applied ethics that describes the value judgments and approaches we make in generating, analyzing, and disseminating data [12]. This discipline examines the problems, processes, and concepts that arise in the implementation, design, and creation of these systems, and solutions are offered for them. The guidelines of data ethics incorporate traditional principles of applied ethics such as beneficence, nonmaleficence, autonomy, and justice, which are presented and developed for specific application to AI [14] [15]. Naturally, as this is a novel phenomenon in its development, principles with their own meaning are generated, in which the most prominent and distinctive of algorithmic systems is the principle of transparency [9].

The following is a qualitative exploratory study carried out by the School of Government of the Universidad Adolfo Ibáñez, through its public innovation laboratory GobLab, in conjunction with the Transparency Council in Chile. The goal of this research in a first stage was to know the state of the art of the use of these systems in Chile's public administration, starting with the basic information regarding their existence, identification, purpose, the data used and the public information available. The scope included both sequential algorithm systems and artificial intelligence in use in the public sector. In a second stage, a sample systems were analyzed against a selected algorithmic transparency framework. Finally, a

normative standard was proposed, indicating which aspects should be contained in it and therefore should be known by citizens, users and people impacted.

2 ALGORITHMIC TRANSPARENCY WITH A FOCUS ON PUBLIC ADMINISTRATION

Algorithmic transparency is situated within the technical-conceptual developments that people have to deal with when facing ADS. It has the indeterminacy of a novel concept, whose limits and contours are not clearly established. But what is determined, at least in a preliminary approximation, is the object of these regulations, which are the digital algorithmic systems. Among them we can find ADS.

One of the purposes of algorithmic transparency is to deal with a certain opacity with which ADSs operate. In this sense, in our opinion, Burrel presents a systematization of the different types of algorithmic opacity. Thus, we may encounter: (1) opacity as self-protection and intentional corporate or institutional concealment and, along with it, the possibility of knowing deception; (2) opacity derived from the current state of affairs in which writing (and reading) code is a specialized skill and; (3) an opacity that derives from the mismatch between the high-dimensional mathematical optimization characteristic of machine learning and the demands of human-scale reasoning and semantics styles [25]. It is not the purpose of this paper to delve into this categorization, but this is an adequate scheme to frame the difficulties.

The question then arises: what do we mean by algorithmic transparency and when is the claim for transparency satisfied? The answers to these questions are not univocal [12] but deserve special consideration according to the interlocutors who demand transparency of the operation of a system (citizens or consumers or public or private institutions) [22].

Robert Brauneis and Ellen P.Goodman during 2018 published the academic work "*Transparency for the Smart City*", which has influenced the conceptualization of algorithmic transparency, coining the concept of meaningful transparency. Although the research is bounded to smart cities the contribution of this concept has been key, since it implies recognizing what people need to know and thus combating opacity. Brauneis and Goodman propose parameters for the minimum desirable information and the reflection of the algorithm's "political judgment", what people need to know, considering that transparency cannot be total. These authors take into special consideration the possibility of disputing the resolutions adopted by the ADS and whether the difference in criteria that might exist between an official versus the algorithm can lead to limiting the decision-making capacity of officials who relate to these systems [6].

Another frame of reference for understanding algorithmic transparency can be found in Margot Kaminsky's proposal, Understanding Transparency in Algorithmic Accountability, which provides an all-encompassing conceptual framework for the interaction between the individual and the organization [24].

The work contains a good criterion of generality, but loses precision in its observations when addressing a broad universe of transparency issues, in fact the author addresses central aspects of algorithmic transparency but does not focus on transparency applied to the specific case, but describes and delimits the elementary aspects that distinguish algorithmic transparency in a general way. The criteria proposed allow for an adequate adjustment of meta-criteria, but they are not adequate for more functional questions of implementation, since they are formulated as general criteria, but not focused on a specific implementation of algorithmic transparency, characterizing it in a conceptual way, not delimiting its application in a specific and delimited field.

The author builds from previous proposals of algorithmic transparency two meta-criteria of transparency.

- Individualized transparency: Consists of information flows directed to the individual impacted by the algorithmic decision, when required by him/her. The objective of this kind of transparency is not only to provide information about the decision that has been made about her, but also to empower her so that she can dispute the decision that has been made about her.
- Systemic transparency: Consists of documentary information flows that the organization publishes proactively. It seeks to make visible errors and biases in both digital and human systems, so that they can be mitigated and corrected.

This classification makes it possible to distinguish subjects of transparency and objectives associated with different implementations of algorithmic transparency. The author's purpose is linked to the necessary design of algorithmic transparency systems that must achieve the standards she proposes in order to be satisfactory.

For example, in the public sphere, a request for transparency could be unfounded, in others well-founded. Different will be the answer given to a person in a court, an administrative body or in the private sphere. Transparency issues cannot be solved categorically before the interaction of systems with their environment, but a clear point in this issue is the object that needs to be made transparent, the computer systems that interact and intervene on a daily basis with citizens. Algorithmic transparency in public Administration has encountered two models of development, a "registry algorithmic transparency " as opposed to "jurisdictional algorithmic transparency".

The former seeks the publication of certain information either by legal means, as in the French case, which has a legal framework that requires open algorithms, so that the scope of what should or should not be made transparent is in the law [13]. A similar case is the Canadian case through a Directive issued by a federal government committee that sets requirements on how algorithms can be used to support the delivery of services to citizens, which includes registering the system with the federal government, mandatory compliance for federal government departments [11]. There are also voluntary initiatives, such as the case of the Algorithm Charter of New Zealand, whose approach to algorithms is based on a public commitment from government agencies [19]. Among the tools that we can identify as jurisdictional, the most distinctive for dealing with these systems is the one contained in the European Data Protection Regulation (GDPR) art. 3, 15 and 22 on the right to transparency of automated decisions [23] [21]. These precepts make available to citizens a jurisdictional action that enables them, on the one hand, to challenge automated decisions in certain cases;

and, on the other hand, it is possible to demand from the controller of an automated data processing system the "logic involved in the decision" that affects him.

In Chile there is no obligation equivalent to any of the aforementioned models. In both the private and public spheres there are no specific transparency obligations regarding ADS. What exists is an indirect configuration of transparency of these systems, either by means of contractual obligations between private parties, or in the public sphere because they are configured as relevant elements within state acts or activities on which transparency obligations fall.

In order to advance in algorithmic transparency in Chile, it is necessary to invoke basic regulatory bodies of the public Administration, which have been naturally oriented to a documentary, active and passive transparency.

The lack of clarity regarding the application of transparency laws to ADS and the lack of empirical information on their actual use is problematic given the expansive nature of these tools. Addressing algorithmic transparency becomes an indispensable element to make accountability effective in the exercise of the public function, since, as we shall see, these systems are beginning to assume an increasingly relevant role, participating in the decision and resolution of various issues in the Administration, which impact on the life and rights of the people.

3 PREPARATION OF THE NATIONAL SURVEY

During the year 2021, the School of Government of the Adolfo Ibáñez University, through its public innovation laboratory GobLab, together with the Transparency Council conducted an exploratory study on the existence and use of automated decision systems in the Chilean public sector. This research began with a national survey of automated or semi-automated decision systems existing in public agencies subject to the control of the Transparency Council, partner entity of the project and guarantor of access to public information in Chile.

This survey is the first step to evaluate the transparency of these systems and to develop a concrete proposal for an algorithmic transparency standard for public agencies in Chile. The second step was to evaluate a sample of systems against an algorithmic transparency framework using publicly available information.

3.1 Methodology:

The systems registry was carried out by means of a voluntary questionnaire, sent through an official request in January 2021 addressed to the 870 public agencies under the supervision of the Transparency Council. A total of 284 entities participated by sending information on their ADS.

The letter attached a form to be sent to the Council or GobLab UAI within 10 working days. During the first week of March, a reminder was sent in the same terms as the first request. The total deadline for receiving responses was from January 15 to March 31, 2021.

The information requested included the name of the system, its purpose, whether it uses personal data or not, what personal data it uses, the unit responsible within the agency and links to publicly available information on the system.

A number of questions were received requesting clarification regarding the scope of the systems to be reported. The queries included topics such as:

- Whether online planning systems, such as SAP or ERP, should be considered.
- If open data repositories, or observatories with aggregate statistics are included.
- If online payment automation systems are included (fines, permits, fees, etc.), among others.
- If only artificial intelligence systems and not other types of systems should be reported on.
- If workflow systems are included in the classification.
- If systems that only perform validations, for example checking data in a database, are considered an ADS.
- Whether only systems that process personal data should be reported.

To help respond to those queries, researchers created a set of frequently asked questions and answers, which would be used for the clarification process explained above.

All negative responses were checked with a standardized web review. Using the google.cl search engine and defined keywords, we reviewed five pages of results and after that generic search, this was repeated using the parameter "site: institutional website" in the search engine with the same keywords. For the cases in which search results indicated the public agency had an existing ADS, we prepared and sent a standard response. The communication included the publicly available information found, giving the possibility to update the survey response, if pertinent. The communication was sent by the University, only to those who had responded through email. It should be noted that none of the replies were answered.

It is also relevant to point out that the public entities related to financial control, national security and intelligence, when responding to the official letter, indicated that, although they relied on this type of systems for their work, these could not be individualized or disclosed even in the terms indicated in the survey.

3.2 Overall results

The overall results of the first part of the study are as follows:

Finally, of the 285 services that validly participated in the request for information, 92 ADS were found to be operating in the Public Administration.

3.3 Findings

The results of the survey showed the growing use of ADS in the Chilean Public Administration. It was possible to verify a greater use than publicly known, in areas of immense relevance such as health, agriculture, education, delivery of social benefits, prisons, migration, among others. Additionally, a high number of ADS use personal data and sensitive personal data in their operation.

The results also revealed a dispersion in what is understood as an automated decision system. Systems that were not ADS were identified as such and systems that were ADS were omitted from the survey. Other insights of the survey were the lack of a common language or nomenclature on the operation of ADS in the public sector, which posed a problem in explaining and clarifying the scope

Table 1: Overall figures

Type of entity	Number of services surveyed	Valid responses received	Percentage of responses received
Totals	870	285	33%
Central Level	340	132	38,5%
Municipalities	442	131	29,9%
Health care services	60	14	23,3%
Education centers	28	8	28,6%

Table 2: Negative and positive responses

Valid responses received	Total quantities	Percentage
Negative responses	231	81,1%
Positive responses	54	18,9%

Table 3: Systems corresponding to ADS by type of entity

Type of entity	Percentage
Central level	55,9%
Municipalities	34,4%
Health care services	7,5%
Education centers	2,2%

Table 4: Systems that make use of personal data

Reply	Percentage
Yes	77,4%
No	18,3%
No response	4,3%

Table 5: Systems that have institutional information available

Reply	Percentage
No	80,6%
Yes	19,4%

Available institutional information is the information published by the public agency on its institutional website where it informs about the purpose and existence of the ADS. Excluded from these links are the procurement agency website, institutional intranet, and social media

of the operation of the systems. Also, there were several agencies that denied the use of these systems in their official response to the survey but when checking their response, presented obvious use of these systems. Another finding was the use of centrally managed ADS that are massified at the local level, through municipalities or regional departments of agencies. Finally, only a minority of agencies had publicly available information on the operation of ADS in their organization.

4 ANALYSIS OF A SAMPLE OF SYSTEMS

The second phase of the research consisted in an analysis of twelve systems reported by public agencies. The sample was built intentionally by ADS that had public information available. This was necessary in order to assess if information available meets the criteria of meaningful transparency of the chosen standard. The systems were chosen in a variety of key policy areas such as health, housing, education, immigration and agriculture.

4.1 Adaptation of a framework

The research team evaluated five possible frameworks of algorithmic transparency for the assessment, including the Ada Lovelace framework [1]. The team chose this framework as a basis because of the following reason:

4.1.1 Organic regulatory scenario similar to the Chilean scenario. The present scenario in terms of transparency and the consequent questions and criteria provided by this framework, modeled under UK legislation, is similar to the current regulatory scenario in Chile with respect to the obligations that are fulfilled by different public bodies in terms of transparency. One of the main differences lies in the regulation of personal data and its associated mandatory documentation, such as Data Protection Impact Assessments, which are non-existent in Chile. However, in terms of the right of access to information, it is possible to satisfy some degree of transparency.

4.1.2 Clear regulatory criteria to be met. The questions on the ADS are objective, clear, and posed in such a way as to achieve a meaningful framework of transparency [20]. This has been understood as providing the public with the tools and information necessary to evaluate and interact with ADS as public services. In practical terms, this means extending the existing mechanisms that keep public services under control and making information available to the public with the genuine intention that they can be involved in the decision-making processes. It thus provides a clear normative criterion that makes it possible to qualify whether the documentation that is submitted for transparency obligations by the various public agencies satisfies it.

Table 6: Analysis of sample of systems

N°	Organization	System	Goal
1	National Health Fund	Neural network analysis of medical licenses	Decrease medical license processing times, through the identification of correctly issued licenses. Licenses with anomalies are sent to a medical professional for review. This helps shorten the term of payment by the Preventive Medicine and Disability Commission. **Although the system was implemented and coordinated by the National Health Fund, it is currently under the control and operation of the Commission of Preventive Medicine and Disability.
2	Ministry of Health	DART	Prevent the development of diabetic retinopathy and improve the availability of ophthalmologists.
3	Municipality of Pedro Aguirre Cerda	RAYEN	To stratify risk in patients by calculating parameterized fields/Calculate delivery date by calculating parameterized fields/Weight/Age Classification According to N.C.H.S. That allow to alert nutritional problems.
4	Municipality of Renca	Sentinel	Record, monitor and alert on the health status of the neighbors of the commune who have undergone PCR tests and their close contacts.
5	Provincial Government of San Antonio	Alien time booking algorithm	Systematize in an orderly manner the booking of appointments for foreign citizens, and safeguard, through their reservations within the time limit that are not sanctioned for irregular residence.
6	Ministry of Education	School Admission System	To reduce social segregation among schools and to generate socially more heterogeneous educational spaces. Eliminate arbitrary discrimination and decrease waiting times for enrollment in the school admission process.
7	University of Aysén	Early warning system	Detect the risk of first year students dropping out of the program.
8	Agricultural Research Institute	Predial Plan	Free access platform, which allows planning system production, land use and crop rotations, giving answer to what, how much, how and when to produce, to to increase revenues of agricultural seasons, in the areas of Vegetables, Fruits, Cereals, Lupine, Potatoes and Sheep, for the Araucanía region.
9	Agricultural and Livestock Service	Forecast Network Phytosanitary	Determine opportune moments and/or give alerts for control or application of pesticides through phenological modeling of an agricultural pest through climatic data (currently only available for the pest grapevine moth Lobesia botrana).
10	Ministry of Housing	Middle class subsidy	Allow the entry and validation of applications for housing subsidies.
11	Ministry of Housing	Lease benefit selection	Allow automatic approval or rejection of subsidy applications DS-01 middle class.
12	Solidarity and Social Investment Fund	Virtual assistant	Increase communication channels to provide automated and remote assistance to people who want to participate in FOSIS programs.

Table 7: Results of analysis

Item/System	FONASA -Neural networks	MINSAL-DART	M. PAC-IRIS	M.Renca-Centinela	GPSA -Time	MINEDUC - SAE	U.Ayséen - SAT	INIA-Property Plan	SAG - RPF	MINVU - SCM	MINVU - SAH	FOSIS -Virtual A.
1	X	-	-	-	-	-	-	-	-	-	-	-
2	X	X	-	X	-	X	X	X	X	X	X	X
3	X	X	X	X	X	X	X	X	X	X	X	X
4	X	X	X	X	X	X	X	X	X	X	X	X
5	X	X	X	X	-	X	-	X	X	-	-	X
6	X	X	X	X	X	X	X	X	X	X	X	X
7	X	X	-	X	-	-	X	-	-	-	-	X
8	X	X	X	X	-	X	-	X	X	-	-	X
9	-	X	-	X	-	-	-	X	X	-	-	-
10	-	X	X	X	-	X	-	X	X	-	-	X
11	X	X	X	X	X	X	X	X	X	X	X	X
12	X	X	-	-	-	-	-	X	X	-	-	X
13	X	X	-	-	-	X	-	X	X	-	-	X
Total	11	12	7	10	4	9	6	11	11	5	5	11

4.1.3 Pragmatic. The questions proposed by the Ada Lovelace framework are intended for organizations that currently do not explicitly meet the algorithmic transparency framework but do meet some transparency framework. This allows for general criteria that can be satisfied with generic transparency obligations.

4.1.4 Formulation as a question. The criteria of the Ada Lovelace framework are posed as a question and in a general way, which facilitates understanding by non-specialists.

4.1.5 Generality of the criteria. The criteria are sufficiently general to be reasonably associated with the transparency criteria present in our legislation.

4.1.6 Margin for action - Obligations and commitments. It is a demanding and complete framework, so that according to the results of the examination it was possible to properly qualify the performance of the public agencies that participated and propose a reasonable framework that is in line with the Chilean reality.

4.1.7 Not bound by an express legal rule. As this framework is associated with a normative criterion (meaningful transparency) other than that present in a legislation, it allows to dissociate itself from a specific implementation limited to a legal norm and the country or group of countries that implement it.

All these elements made it possible to position the Ada Lovelace framework as an option that could be adjusted to a scenario in which there is no express rule on algorithmic transparency in the public sector.

We complemented the questions included in the original framework with certain clarifications necessary to contextualize the operation of the ADS within the Public Administration in Chile. The final list of questions used to assess the sample of sytems were the following:

- What is the legal authorization that allows the use of the system?
- What are the government policies you implement? If you implement a
- What are the sources of the data?
- Who is operating the ADS?
- What is the purpose? What are the conditions before the delivery of a new purpose or its use in other areas?
- Why is the system being developed, what are the alternatives and how was a ADS selected?
- What is the logic of the system?
- Who built them?
- How much did it cost?
- Are there private actors involved?
- What are the impacts, are there specific groups impacted, who are they and how are they impacted?
- What actions have been taken to mitigate risks?
- How are the results monitored?

Results of the analysis. In the table below we present the results of the assessment that we carried out. We mark with X the item where information from a source was found. If no information was found, it is marked with -.

Based on the examination described in the previous section, the following was found:

- The sample of systems reveal a fortuitous advance in algorithmic transparency driven by access to information and citizen participation in public management laws.
- The information, although available, is scattered.
- The information presented does not have a defined audience, it is casuistic and responds to different publication objectives.
- An effort was required to systematize the available information in order to present it in a coherent manner and in accordance with the algorithmic transparency framework.
- In most cases, the public information of the ADS was prepared by public agencies themselves, which shows that it

would be possible to take advantage of the internal capacities of the agencies to comply with algorithmic transparency requirements. In other cases, the source of the information was found in private providers of the systems in a fairly complete manner.
- As there is a disparate universe of results found in ADS implemented in the Public Administration, it is necessary, at least in a first stage, to focus transparency efforts on systems that develop critical operations or those of greater relevance and impact on people's lives.

5 LEGAL ENABLING OF ALGORITHMIC TRANSPARENCY IN CHILE

In order to be able to operate and interact within the Chilean legal system, ADS must have a basic legal status that allows them to be the object of legal relations. Although in popular parlance they are usually described as "algorithms", the means by which ADS are usually related to the legal system is through the legal status of property for intangible assets [3]. Although the subject status of these systems is debated, the current situation allows us to qualify them as objects of rights in legal relations held by legal subjects and subordinate to the objective law that regulates legal relations [18].

Thus, by having this constitutive legal regime that enables them to enter and participate as objects of law in the different legal relationships is where we can begin to verify the relationship with other provisions of the current legal system. They can be included or be considered within the statutes of law of the relationships that are maintained over them. Therefore, if an ADS enters a private relationship it will be maintained within the legal rules that are established for this type of legal relationships. For example, within a consumer relationship a system can be considered a product or service, such as the case of an ADS that grants credit ratings after contracting the service and entering the consumer's personal data. Subsequent interactions with the supplier will necessarily be adapted to the provisions in force in this matter and the activity developed by the supplier through the system will be examined according to them.

If an ADS operates within the public administration, it will be subject to the corresponding administrative and public law rules. This leads to a logical conclusion. ADS operating within the public administration are subject to the rules in force in the administration. The service operating the ADS and the ADS as an object governed by administrative law are subject to the rules and principles governing the actions of the administration.

Among the rules governing the administration are the rules and principles that establish administrative transparency as a structural element of public administration. Different normative provisions in Chile, starting with the Constitution through an implicit recognition, continuing with developments in special laws and specific sections of certain laws establish Transparency as a general principle in public administration.

Transparency is a general principle with rules that address the way in which the various actions of the Public Administration are publicized [2]. But it is also associated not only with these special rules of transparency, but the entire activity of the administration tends to the publicity and justification of its actions. Indeed, the Constitution establishes that:

> "*The acts and resolutions of the organs of the State are public, as well as their foundations and the procedures they use. However, only a law of qualified quorum may establish the reserve or secrecy of such acts or resolutions, when the publicity would affect the due fulfillment of the functions of such organs, the rights of individuals, the security of the Nation or the national interest*" [4].

Therefore, on a constitutional basis, it is possible to state that the procedures used as the basis for an administrative decision are public, extending to physical, manual, digital, and certainly automated procedures supported by ADS.

In Chile, the Transparency Council is an independent agency charged with the oversight of transparency and access to public information since 2009. Its functions are to promote transparency in public service, monitor compliance with the rules on transparency and publicity of information of public administration agencies, and ensure the right of access to information [2]. Although the transparency that has been developed so far has been naturally oriented to the transparency of information understood as "Acts of the State", which constitutes documentary transparency, the transparency of processes or objects of law is fully applicable to the deployment of ADS when they support acts of the administration.

Transparency is a legal concept that is extensively developed in the access to information law, which contains the basic regulation of transparency and the way in which it is to be developed and implemented within the public administration. The duties of transparency are part of the realization of the right to information of the people regarding the pblic administration, which are legally and constitutionally enshrined in the aforementioned norms.

The Inter-American Court of Human Rights, interpreting the American Convention on Human Rights, has stated that the right of access to information is a fundamental right enshrined in Article 13 of the Convention and recognizes the freedom to seek and receive information [17]. The right to information thus finds an aspect of transparency and access, which leads then to the need to develop minimum principles and rules required of any government in terms of access to information and transparency.

Within the Chilean Transparency Law this publicity is made through two aspects. First, the one made by the agency itself ex officio, by publishing information on a monthly basis. The second is through the request of a person. This is the distinction between active transparency and passive transparency or right of access to public information.

The law is in charge of specifying active conducts for the public agencies. This type of information precedes people's interaction with the organ so that it is possible to know relevant aspects of the constitution, operation and composition of the public administration with which people interact. Active transparency is the obligation of the Public Administration to keep certain updated information permanently available to the public through their websites, at least once a month.

On the other hand, passive transparency is the one that allows the materialization of the right of access to information. It is related

to the access requests that people may make requiring information from the Public Administration.

Consequently, except for the exceptions established in the Law on Transparency of the Civil Service and Access to Information of the Public Administration and in other legal provisions, the acts and resolutions of public administration agencies are public, as well as their foundations and documents in which they are contained, and the procedures used in their preparation or issuance.

For practical purposes then, this principle means that there is an obligation to publicize the actions of the organs. The people then have an effective possibility of knowing the different manifestations through which the organs of the Public Administration develop their actions. These actions can be carried out through documents, resolutions, acts or procedures, depending on the norms that govern the specific actions of the organ, being able to find special and general norms that regulate these matters.

The principle of transparency applies broadly to actions, procedures and documents within the Administration. Two of these categories involve decisions that may have different normative hierarchy: acts and procedures.

Administrative acts may be formal, i.e. with a normative manifestation, such as unilateral resolutions (measures or decisions) of the Administration in the exercise of public power for the specific case. Transparency extends to the grounds for the acts, i.e. the reasons that were taken into account or considered for the purpose of adopting the specific action of the body, i.e. those actions of the administration that certify, interpret, propose, inform, etc.

The procedures, as we have just pointed out, are the actions that precede and prepare a decision of the public administration, whose publicity may be simultaneous to the succession of stages or subsequent to each one of them. They are organized sequences of obtaining and processing information under the responsibility of an administrative body. The principle of transparency also extends to the file, made up of the documents that give rise to the act or resolution.

A classification according to the function of administrative acts in the procedure distinguishes between procedural acts and decisional or final acts. The procedural act is in principle not subject to challenge unless it ends the procedure or makes its continuation impossible. The final act is the one that contains the decision of the issue raised.

Finally, and considering the intensive use that ADS make in many cases of citizens' information or personal data, the Constitution guarantees that this data processing is carried out in accordance with and under the conditions established by law. Among these conditions, the personal data protection provides that the person who authorizes or otherwise whose data is processed on grounds other than consent, must be duly informed of the purpose of the storage of their personal data along with the rights to correction, deletion and access. In other words, the processing of their data is an act that must be transparent and informed, at least in its purposes and types of data that will be processed.

It is possible to see from this brief review of the consecration of transparency within the Chilean legal system that the default situation is the general transparency of the actions of the public administration and the means by which this activity is developed. Among the actions (acts and procedures) that the public administration can develop is the use in the processes and decision making.

5.1 Proposal of a standard

An algorithmic transparency standard for the public sector must take into account that we can know things about the public agency and things about the system. When these systems act in the operation of law enforcement, these are activities that are essentially public and that respond to knowing matters of the operation of the ADS linked to legal obligations currently in force. Relevant information affecting a person cannot be denied on the basis of the complexity or inability of the public agency to understand the operation of an ADS. The necessary means must be adopted to satisfy the expectations of transparency associated with the operation of the ADS. The information provided must be defined, understandable and meet people's expectations when interacting with the entity. We will outline the criteria of the proposed legal standard and then develop a brief justification for its inclusion, which we propose to be considered within a normative action by the Transparency Council.

5.1.1 Legal powers enabling implementation of an ADS and policies it supports or implements. When participating in the public administration, the publicity of certain elements of a system put into operation by an agency is a constitutive issue. Indicating the legal powers is a requirement of the law, which requires detailing the powers, functions and attributions of each of its agencies [5]. Within these, the powers that enable the implementation of an ADS must be detailed.

5.1.2 Effects of ADS deployment and how it operates. The ADS are a means by which the public administration acts, and these generate an effect, and support a process (procedure, act, decree, resolutions) that impacts a person or entity. These are matters that can and should be known by virtue of the principle of administrative transparency and the publicity inherent to the law and its execution, and are associated or intimately linked to the requirements or demands of algorithmic transparency.

5.1.3 Purpose of the ADS. The indication of the purpose of the ADS arises within the transparency obligations, rules that require the explanation of the policies, functions and actions that the agency deploys, and it is in these matters that the operation of the ADS intervenes. When an ADS processes personal data, its purpose must make the purpose of the processing explicit in accordance with the law.

5.1.4 The processed data. Data (personal or otherwise) is a central component in the operation of an ADS and will often be associated with the processing of personal data, which makes the rules on the subject applicable. It becomes a fundamental issue to know what data or what information about individuals is being processed by the ADS. Those responsible for the processing of personal data have a general obligation to make available information on personal data in the face of requests that may be made by any person and an obligation to register the databases they handle.

5.1.5 Methods, means or possibilities of challenge or complaint. The possibility of disputing, claiming or objecting against decisions

that affect the rights of third parties is a basic element of any legal system. When an ADS operates within a public agency, the operation developed by the latter intervenes in a substantive manner in the performance of the public administration, resulting in actions, resolutions or procedures that are part of the entity's performance. Therefore, the complaint or challenge procedures against the actions of the agency are means to dispute the results of the ADS operations that should be known by the citizenry.

5.1.6 Cost, implementation and construction. It is a requirement of the entire public administration to publicize the expenditure it makes and those who provide services to it. As the ADS is an object of law, the costs associated with its implementation are found in administrative contracts with third parties outside the public administration that develops and implements it, or in internal developments within the agency where this type of tool can be used.

5.1.7 Contact information. The possibility of consulting or requesting additional information on an ADS is essential. This requires the provision of means of contact through which people can make inquiries and interact with the organization implementing an ADS. Therefore, the provision of contact information that allows efficient contact is a central issue of algorithmic transparency.

6 CONCLUSIONS

In this paper we present a qualitative study conducted in partnership with the public agency that oversees transparency in the public sector in Chile. This allowed us to learn about the use of ADS within the Chilean Public Administration. We verified an intensive use in critical functions, such as assistance in the diagnosis of diseases, allocation of social aid, scheduling of hours of attention for migratory issues, among other matters. Additionally, 80% of the systems used personal data. Despite that, the level of transparency was extremely low, as less than 20% of the systems had information available on the institutional websites.

A transparency framework was used to rate the level of transparency of a sample of the ADS that were identified. This revealed a heterogeneous scenario of information available to the public. The existing information was in a disparate manner, which did not always allow a complete understanding of the operation of the ADS.

Finally, based on the information received and the review carried out, we proposed an algorithmic transparency standard adapted to Chile's access to information legislation. The Transparency Council, taking the recommendations of this study, decided in late 2021 to advance towards a mandatory regulatory standard of active algorithmic transparency for the Public Administration. In 2022 the Council piloted a draft standard with seven algorithms from four public agencies. A public consultation and the publication of the final standard is expected in 2023 [7].

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