

# From data to information: a meta-legal framework to political-juridical analysis of digital transformation\*

*Dos dados à informação: um marco metajurídico à análise político-jurídica da transformação digital*

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**Abstract:** The digital revolution has brought about challenges for the legal domain. Traditional legal frameworks struggle to address issues such as data privacy and security in the online environment. One problematic can be found in the limitation of the analysis of cyberspace, as well as the nature of the elements that compose it, as these are limited to binary classifications. This essay argues that a deeper understanding of the digital world, including the nature of data, information, and knowledge, is crucial for effective legal and policy analysis. By drawing on interdisciplinary perspectives, the essay proposes a richer and more nuanced approach to data governance, moving beyond the binary limitations of traditional legal frameworks. It highlights the importance of recognizing data as a relational and socio-technical value, with implications for both public and private actors.

**Keywords:** Digital revolution. Data governance. Relational data. Sociotechnical data. Value of data.

**Resumo:** A revolução digital trouxe desafios inéditos para o Direito. As estruturas jurídicas tradicionais enfrentam dificuldades para lidar com questões como privacidade e segurança de dados no ambiente online. Uma das hipóteses dessa problemática reside na limitação na análise do ciberespaço, bem como da natureza dos elementos que o compõem, limitados a classificações binárias. O presente

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artigo argumenta que uma compreensão mais profunda do mundo digital, notadamente acerca da natureza dos dados, da informação e do conhecimento, é crucial para uma análise jurídica e política eficaz. Deste modo, por meio da adoção de perspectivas interdisciplinares, o ensaio propõe uma abordagem mais matizada para a governança de dados, buscando superar as limitações binárias dos marcos jurídicos tradicionais. O trabalho busca destacar a importância de reconhecer os dados como um valor relacional e sociotécnico, com implicações para atores públicos e privados.

**Palavras-chave:** Revolução digital. Governança de dados. Dados relacionais. Dados sociotécnicos. Valor dos dados.

**Contents:** 1 Introduction – 2 Data: a taxonomy – 3 The information, a path – 4 Datafication, a process – 5 Final considerations – References

## 1 Introduction

A click, an action, a dialogue. One element: Data. Life in the artificial world is comprised of data in its many forms. In sum: *Data* constitutes the digital ecosystem.<sup>1</sup> It is widely accepted that the digital revolution has had a profound impact on society. The digital ecosystem is built on data, which takes many forms and serves as the foundation of an artificial world.<sup>2</sup> Nevertheless, the definition of data can be complex and its extraction, creation, nature, and use can often result in a mismatch between the data and the information it contains. To effectively navigate and utilize cyberspace, it is essential to not only have a strong technical foundation but also to understand how the digital world works.<sup>3</sup>

Still, commonly legal scholars approach the digital era in the same manner as the physical world, which results in significant gaps and regulatory shortcomings,<sup>4</sup> as Marcel Leonardi points out.<sup>5</sup> A jurist who specializes in airspace, for example, does not necessarily need to understand how an airplane operates. In contrast, a comprehensive understanding of cyberspace is necessary to effectively regulate the protection and security of individuals in a networked environment, as well as the access and ownership of open data.<sup>6</sup>

<sup>1</sup> LEMBERGER, Pirmin; BATTY, Marc; MOREL, Médéric; et al. *Big data et machine learning: les concepts et les outils de la data science*. 3 éd. Malakoff: Dunod, 2019. (InfoPro).

<sup>2</sup> As states Boot Lee “*Data is now becoming a proxy for reality itself—beyond everywhere, it is becoming everything*”. BOOT, Lee. Lisa Gitelman’s Raw Data Is an Oxymoron Revisited for a Pandemic. *Rhizomes: Cultural Studies in Emerging Knowledge*, n. 36, 2020. Available at: <<http://rhizomes.net/issue36/boot.html>>. Accessed 27 oct. 2023.

<sup>3</sup> LEMBERGER, Pirmin; BATTY, Marc; MOREL, Médéric; et al. *Big data et machine learning: les concepts et les outils de la data science*. 3 éd. Malakoff: Dunod, 2019. (InfoPro).

<sup>4</sup> Sofia Ranchordás explains that Smart urban solutions are typically essentially predictive, as they aim to foresee, for instance, crime, transportation congestion, and pollution. In contrast, public law principles and methods remain reactive or responsive, failing to regulate possible harm from predictive systems. RANCHORDAS, Sofia. Smart Cities, *Artificial Intelligence and Public Law: An Unchained Melody*. 2022. Available at: <<https://papers.ssrn.com/abstract=4229327>>. Accessed 28 oct. 2023.

<sup>5</sup> LEONARDI, Marcel. *Fundamentos de Direito Digital*. São Paulo: RT, 2019. p. 95.

<sup>6</sup> LEONARDI, Marcel. *Fundamentos de Direito Digital*. São Paulo: RT, 2019. p.95.

This raises questions about the nature of data, information, and knowledge, and whether these terms are interchangeable or have distinct effects. Hence, the present article aims to utilize interdisciplinary contributions to provide a clearer understanding of fundamental concepts in the online realm, namely *data*, *information*, and *knowledge*. By conducting a meta-legal analysis, the aim is to assess the perception of these concepts in order to facilitate legal and political analyses that encompass a more comprehensive perspective of the universe of data.

This proposal is seen as being significant in offering new insights into legal debates, as well as enhancing the ways in which the limitations and potential of data usage and exchange in the online environment are interpreted. As legal scholar Julie Cohen has previously highlighted, isolated studies in cyberspace legal analysis are disconnected with the data environment. Furthermore, an interdisciplinary investigation should be conducted in order to avoid research shortcomings.<sup>7</sup> The absence of such an approach runs the risk to isolate the discipline and impede the development of richer research.

The essay is organized as follows. Initially, a taxonomy of data is presented, focusing on its perception within the legal sphere. This is followed by an examination of data in its relational and sociotechnical context. Further, the essay distinguishes between data, information, and knowledge. Finally, the particular process of datafication is presented, exposing its socio-technical and context-dependent character, thus identifying relational models of data analysis.

## 2 Data: a taxonomy

As stated, studying the digital universe requires an interdisciplinary examination that spans multiple domains of knowledge to facilitate its evaluation from the perspective of public law. Hence, the fundamental basis of the research is initiated by the data society. The internet, speed, depth, connection, information accumulation, data recording and extraction, robotics, algorithms, artificial intelligence, cybernetics, biotechnology, and robotics are all accommodated in the list of elements that constitute this new era, which has specific characteristics and dynamics.<sup>8</sup>

<sup>7</sup> Julie Cohen points out that the literature on cyberlaw has developed in almost complete isolation from the literature on the digital. According to the author, due to this isolation, cyberlaw analysis of the network is poorer, which leads to a misreading of cyberspace and causes anachronistic legal protections. COHEN, Julie. Studying Law Studying Surveillance. *Surveillance & Society*, v. 13, n. 1, p. 91–101, 2014. Available at: <<https://ojs.library.queensu.ca/index.php/surveillance-and-society/article/view/law>>. Accessed 9 feb. 2024.

<sup>8</sup> The dynamics driven by the digital revolution lie in the *multitude*, *Moore's Law*, and *data*. Moore's law has witnessed the power of microprocessors grow vigorously and steadily over the past forty years. The founder of Intel, Gordon Earle Moore, predicted in April 1965 that computer processing power would double every 18 months at the same price. As a result, those who own smartphones now have processors that are more powerful than the group of computers that sent the man to the moon, demonstrating the influence of Moore's law. Peter diamonds. The future is faster than you think.

The system runs within a specific ecosystem, with a specific “*material*,” the *data*, combined with other technologies, enhances the production of knowledge. Described technically as a binary element, data represents a sequence of bits, which can circulate, be stored, and be analyzed.<sup>9</sup> The phenomenon of the world’s digitalization lead to the conversion of analog information into binary code that computers can manipulate. The digitization of any event implies converting or coding it into a binary language of “*zeros*” and “*ones*”. Each *zero* or *one* represents a bit of machine-readable information, which is the smallest piece digitally readable. These can be seen as the “*virtual*” representation of “*real*” life. The translation of real-life events into machine-readable codes is made through software, and the coded events are transmitted through and stored in the hardware (e.g. submarine cables and data centers).<sup>10</sup>

In brief, *data* are units or morsels that, when combined, form the foundation of cyberspace.<sup>11</sup> *Data* come in many forms and can be classified using taxonomies. The three categories of *data* that are often addressed by analysis are trade, business, and personal. Research focuses on the exchange of products, services, and digital services, frequently attempting to quantify the “*data flows*” in some manner.<sup>12</sup> Another relevant issue concerning data refers to its stages, which can be identified from production and circulation (for its use).

Regarding its nature, a first relevant approximation is that the *data* is arguably *immaterial*. Reinforcing the information paradigms central factor, the conversion of the material to the immaterial world. In *informationalism*, the mode of production of work is immaterial, as Castells has stated.<sup>13</sup> Its advantage is that it is not linked to a physical medium, which facilitates, a priori, its duplication and its circulation. Nevertheless, it is important to highlight that Data is not all immaterial. As Anne Beaulieu and Sabina Leonelli say: “*The production and use of data requires a bandwidth that depends on physical infrastructures, serves requires energy to run and be kept cool, devices must be produced and there is also a limit to human attention that is not endlessly expendable*”.<sup>14</sup>

<sup>9</sup> COURMONT, Antoine. *Quand la donnée arrive en ville: open data et gouvernance urbaine*. Fontaine: Presses universitaires de Grenoble, 2021. 1v. (Libres cours). .p. 8.

<sup>10</sup> NATIONS, United. *Digital Economy Report 2021*. [s.l.: s.n.], 2021. Available at: <[https://unctad.org/system/files/official-document/der2021\\_en.pdf](https://unctad.org/system/files/official-document/der2021_en.pdf)>. Accessed 18 oct. 2023.

<sup>11</sup> BOOT, Lee. Lisa Gitelman’s Raw Data Is an Oxymoron Revisited For a Pandemic. *Rhizomes: Cultural Studies in Emerging Knowledge*, n. 36, 2020. Available at: <<http://rhizomes.net/issue36/boot.html>>. Accessed 27 oct. 2023.

<sup>12</sup> VAN, José. *Platform Mechanisms*. [s.l.]: Oxford University Press, 2018. Available at: <<https://academic.oup.com/book/12378/chapter/161973335>>. Accessed 27 oct. 2023.

<sup>13</sup> CASTELLS, Manuel; MAJER, Roneide Venancio; CARDOSO, Fernando Henrique. *A sociedade em rede*. 23 ed. Rio de Janeiro: Paz e Terra, 2021. (A era da informação: economia, sociedade e cultura, 1).

<sup>14</sup> BEAULIEU, Anne; LEONELLI, Sabina. *Data and society: a critical introduction*. London: Sage, 2022. 1v.

Data also cannot be compared to “oil” or other metaphors, as well as the trade in goods and services or international financial flows, and thus must be approached from a different, broader perspective. Data cannot simply be treated as other economic resources - such as infrastructure, labor, or capital – as data is a by-product of life, which has implications for how to regulate and govern data flows.<sup>15</sup> In fact, *data* is an intangible asset with distinctive characteristics. Most importantly, is *non-rival*: unlike many conventional goods (such as apples) or assets (such as machine tools), many can use the same data simultaneously without depleting it.<sup>16</sup> Hence initial use does not preclude the possibility of different later use. *Data* is therefore shared to varying degrees, or its use is licensed. It should not be conceived of as being owned or exchanged. Hence, personal ‘ownership’ is an inappropriate concept for *data*.<sup>17</sup>

Unctad points out several existing taxonomies of data aiming to delineate characteristics relevant to valuation. Hence, it is possible to observe which characteristics institutions highlight to classify data (the sensitivity, the subject, the context, the identifiable, and the collection), by its origin (provided, derived, observed, or inferred); by its usage (corporate, technical); and feature. This is presented in the table below.<sup>18</sup>

Characteristics	Origin	Usage	Feature
OECD 2013	OECD 2013	Sweden National Board of Trade	Nguyen & Paczos 2018
Sensitivity	Provided	Corporate	Public or private
Subject	Observed	B2B	Proprietary or public domain
Context	Derived	Human resources	Personal or not
Identifiability	Inferred	B2B	User-created machine-generated
Indirectly collected		Technical	Administrative
			Actively or passively created

Source: United Nations.<sup>19</sup>

<sup>15</sup> NATIONS, United. *Digital Economy Report 2021*. [s.l.: s.n.], 2021. Available at: <[https://unctad.org/system/files/official-document/der2021\\_en.pdf](https://unctad.org/system/files/official-document/der2021_en.pdf)>. Accessed 18 oct. 2023.

<sup>16</sup> NATIONS, United. *Digital Economy Report 2021*. [s.l.: s.n.], 2021. Available at: <[https://unctad.org/system/files/official-document/der2021\\_en.pdf](https://unctad.org/system/files/official-document/der2021_en.pdf)>. Accessed 18 oct. 2023.

<sup>17</sup> BENNETT INSTITUTE FOR PUBLIC POLICY. *The Value of Data - Policy Implications*. Available at: <<https://www.bennettinstitute.cam.ac.uk/publications/value-data-policy-implications/>>. Accessed 27 oct. 2023.

<sup>18</sup> NATIONS, United. *Digital Economy Report 2021*. [s.l.: s.n.], 2021. Available at: <[https://unctad.org/system/files/official-document/der2021\\_en.pdf](https://unctad.org/system/files/official-document/der2021_en.pdf)>. Accessed 18 oct. 2023.

<sup>19</sup> NATIONS, United. *Digital Economy Report 2021*. [s.l.: s.n.], 2021. Available at: <[https://unctad.org/system/files/official-document/der2021\\_en.pdf](https://unctad.org/system/files/official-document/der2021_en.pdf)>. Accessed 18 oct. 2023.

The table summarizes how data is examined by the countries which use it for policy incorporation and normative protection. For example, by *their origin*, *volunteered* data is information that a user intentionally provides, such as personal information shared on a social media platform or credit card information for online purchases. *Location data* and web usage behavior are examples of *observed* data collected by an application or third-party software with or without the user's knowledge or consent. Another key distinction is between *structured* and *unstructured* data.<sup>20</sup> The latter being more common in the case of big data.

Thus, another distinction is also the subject of legal and political examination related the delimitation between accessibility, use, and sharing. The first step is getting *access* to data, access, distinct from use, is making data available to persons, which affects data governance. *Data Sharing* is data that is shared and that complies with guidelines, policies, and other tools, as well as data protection and privacy.<sup>21</sup> *Data Exchange* is a combination of one or more of the elements listed above. Thus, open and publicly available data can come in various formats. Finally, *Likability* is the ability of a record in one dataset to be connected to additional data in another dataset through the usage of common identifiers within the dataset.<sup>22</sup>

The literature also points to distinctions between the moment of data creation and the moment of circulation of that data. Regarding creation, it is important to observe that *data* can be processed in *large* or *small quantities*. First, when commercial transactions are international, data and information associated with them, such as billing data, banking data, name, delivery address, and so on, can flow across borders. This data is not to be commercialized per se, whether in the physical or digital world, and transferred as part of normal commercial practices and codes of conduct.<sup>23</sup> Whereas in the past a few legitimate content producers addressed a fairly small audience, everyone is now a consumer, creator, and source of data simultaneously. This "data" can be considered as all the elements linked to the action - voluntary or otherwise - of a user and stored on a computer.

Thus, new paradigms are becoming more firmly established because of the volumes of data achieved.<sup>24</sup> *Big data* refers to massive amounts of information

<sup>20</sup> Structured data is the easiest to search and organize because it is typically organized in rows and columns and its elements can be mapped into fixed predefined fields. Unstructured data cannot be stored in a row-column database and does not have a corresponding data model. NATIONS, United. *Digital Economy Report 2021*. [s.l.: s.n.], 2021. Available at: <[https://unctad.org/system/files/official-document/der2021\\_en.pdf](https://unctad.org/system/files/official-document/der2021_en.pdf)>. Accessed 18 oct. 2023.

<sup>21</sup> NATIONS, United. *Digital Economy Report 2021*. [s.l.: s.n.], 2021. Available at: <[https://unctad.org/system/files/official-document/der2021\\_en.pdf](https://unctad.org/system/files/official-document/der2021_en.pdf)>. Accessed 18 oct. 2023.

<sup>22</sup> BENNETT INSTITUTE FOR PUBLIC POLICY. *The Value of Data - Policy Implications*. Available at: <<https://www.bennettinstitute.cam.ac.uk/publications/value-data-policy-implications/>>. Accessed 27 oct. 2023.

<sup>23</sup> NATIONS, United. *Digital Economy Report 2021*. [s.l.: s.n.], 2021. Available at: <[https://unctad.org/system/files/official-document/der2021\\_en.pdf](https://unctad.org/system/files/official-document/der2021_en.pdf)>. Accessed 18 oct. 2023.

<sup>24</sup> ANTONIN, G. Les enjeux du grand bouleversement. *Pouvoirs*, v. 1, n. 164, 2018, p. 7-18. DOI: 10.3917/pouv.164.0007.

gathered on technological, social, economic, and environmental systems and activities. The term<sup>25</sup> was coined to describe data sets that are so large that they can no longer be analyzed using standard computational methods.<sup>26</sup> The traditional definition of *Big Data*<sup>27</sup> brings four major new challenges (the “four V’s”).<sup>28</sup> *Big Data* could be also identified by its functionalities, those are: variety, (quality and dependability), validity (appropriate use of the gift), volatility (where it is available, and re-introduced), and value, as in which way value can be generated in different aspects.<sup>29</sup>

Further, it is possible to separate the analysis of data through an “informational” or “economic” perspective. Most of the literature employs economic perspectives which are based -to some extent- on issues of information theory, such as the question of information hierarchy. This is the case for the UN and the IMF.

Legal studies rapport three broad domains concerning this theme: trade, personal vs non-personal data, and examinations of alternative data-flow regimes. The fact that personal data is out of the hands of accountable parties is frequently brought up as a defense against open data flows. As a result, a sizable portion of the research examines various global data limitation regimes.<sup>30</sup> Despite this, most data legal studies do not include deeper analyses of the stages or mode of production of data in cyberspace. Most emphasize the protection of personal data, especially in the aspect of retrieving data, omitting the other processes of datafication,<sup>31</sup> such as the production of information.<sup>32</sup> The effects of using data as a raw material, as prediction systems must be subject to public law examination.

<sup>25</sup> MAYER-SCHÖNBERGER, Viktor; CUKIER, Kenneth. *Big data: la révolution des données est en marche*. Trad. Hayet Dhifallah. Paris: R. Laffont, 2014. 1v.

<sup>26</sup> Viktor Mayer-Schönberger and Kenneth Cukier point out that there isn't a strict definition of what big data is. It is a notion that states that because of a large amount of information, engineers match their tools to analyze the data in its entirety because the memory capacities of computers needed to execute their treatments exceed many capacities. MAYER-SCHÖNBERGER, Viktor; CUKIER, Kenneth. *Big data: la révolution des données est en marche*. Trad. Hayet Dhifallah. Paris: R. Laffont, 2014. 1v.

<sup>27</sup> DELORT, P. Big Data: concepts et définition. *Le Big Data*, Presses Universitaires de France, 2018, p. 30-47.

<sup>28</sup> MAYER-SCHÖNBERGER, Viktor; CUKIER, Kenneth. *Big data: la révolution des données est en marche*. Trad. Hayet Dhifallah. Paris: R. Laffont, 2014. 1v.

<sup>29</sup> BEAULIEU, Anne; LEONELLI, Sabina. *Data and society: a critical introduction*. London: Sage, 2022. 1v.

<sup>30</sup> NATIONS, United. *Digital Economy Report 2021*. [s.l.: s.n.], 2021. Available at: <[https://unctad.org/system/files/official-document/der2021\\_en.pdf](https://unctad.org/system/files/official-document/der2021_en.pdf)>. Accessed 18 oct. 2023.

<sup>31</sup> As observed by Sofia Ranchordás, “public law principles and tools remain reactive or responsive, failing to regulate potential harms caused by predictive systems”. RANCHORDÁS. Sofia. Forthcoming in J. Temperman & A. Quintavalla (Eds), *Human Rights and Artificial Intelligence* (Oxford University Press 2023).

<sup>32</sup> COHEN, Julie. Studying Law Studying Surveillance. *Surveillance & Society*, v. 13, n. 1, p. 91–101, 2014. Available at: <<https://ojs.library.queensu.ca/index.php/surveillance-and-society/article/view/law>>. Accessed 9 feb. 2024.



### 3 The information, a path

For The Bennett Institute for Public Policy at the University of Cambridge, rather than taxonomies, it is necessary to define how value<sup>33</sup> is created from various types of data, how it is captured by various entities, and how it is distributed. The Institute states that when thinking about the value of data in the broad sense relevant here, two lenses need to be employed for data: one is the *economic lens*; the other is the *information lens*.

The economic lens describes questions about excludability; externalities; increasing returns; option value; high fixed, marginal costs; and complementary investments. This is the first one we apply to consider the *value of data*.<sup>34</sup> Data is commonly “collected,” “entered,” “compiled,” “stored,” “processed,” “mined,” and “interpreted.” How the last term in this sequence — interpretation — haunts its predecessors is not obvious. Data must be imagined as data to exist and function and data imagination causes an interpretive foundation. That’s why the relationship between these notions is regularly presented as a pyramid of knowledge that organizes them hierarchically.<sup>35</sup>

In information theory, data is an elementary description of a reality that it objectifies.<sup>36</sup> In the same way that information theory itself works with the distinction between knowledge and information, placing knowledge in technological resources that spread knowledge and the mode of production which result from the application of these technologies. Relevant here is the broad literature which examines the processing and use of data in networked environments while making a hierarchy-based distinction. As a result, the information is the informational base, followed by the process of knowledge, and finally wisdom.

Hence, *data* exists first, then *information*, and finally *knowledge*, the passage from one level to the other being carried out by “*distillation*” operations.<sup>37</sup> Ordinarily, they assert that “*raw data are oxymorons*”. It can be good or bad or simply insufficient,

<sup>33</sup> BENNETT INSTITUTE FOR PUBLIC POLICY. *The Value of Data - Policy Implications*. Available at: <<https://www.bennettinstitute.cam.ac.uk/publications/value-data-policy-implications/>>. Accessed 27 oct. 2023.

<sup>34</sup> By “value,” authors mean the economic notion of “social welfare”: the general economic well-being of all of society, including the success of enterprises, individual incomes and needs, and non-cash rewards like comfort or health. BENNETT INSTITUTE FOR PUBLIC POLICY. *The Value of Data - Policy Implications*. Available at: <<https://www.bennettinstitute.cam.ac.uk/publications/value-data-policy-implications/>>. Accessed 27 oct. 2023.

<sup>35</sup> GITLEMAN L. Raw Data is an Oxymoron. *The MIT Press*, 2013. p.1.

<sup>36</sup> However, data might be meaningless without context. For instance, 12012012 is just a series of numbers that seem to have no significance. However, if we consider it in the context of “this is a date,” we can quickly identify January 12, 2012. The statistics now have greater meaning because of the context and value that have been added. ONTOTEXT. *What is the Data, Information, Knowledge, Wisdom (DIKW) Pyramid?* Available at: <<https://www.ontotext.com/knowledgehub/fundamentals/dikw-pyramid/>>. Accessed 30. sep. 2022.

<sup>37</sup> COURMONT, Antoine. *Quand la donnée arrive en ville: open data et gouvernance urbaine*. Fontaine: Presses universitaires de Grenoble, 2021. 1v. (Libres cours).



depending on the extraction and subsequent processing of the information and transformation into knowledge.<sup>38</sup> While extraction is the ocean, data is the drop of water. Information is *data* that gains meaning.

Etymologically, information comes from the Latin *in forma*. Hence, information is characterized by a “*formatting of data*”. In this sense, the OECD describes this process of data as a group of unprocessed points that, after being processed and analyzed, produce information.<sup>39</sup>

Further, knowledge is an interpretation of information. Like any “*investment of form*”, the passage from data to information and then to knowledge can be characterized as a dialectic of loss and gain. In the passage from one category to another, what the data gains in meaning, it loses in objectification.<sup>40</sup> Information becomes knowledge when it is able to accomplish goal, instead of simply existing as a description of amassed facts. Businesses frequently enjoy an advantage over their rivals thanks to “knowledge”. Finally, wisdom is knowledge in action.<sup>41</sup>



Source: UNCTAD, based on United States Chamber of Commerce Foundation (2014).

The pyramid depicts the relationships between facts, information, knowledge, and wisdom. Each component of the structure is a step up the ladder. Each stage adds value to the initial data and provides answers to various inquiries regarding it<sup>42</sup>. Knowing and reflecting on the material enables one to build knowledge about a subject by sharing it with others as their experiences, goals, and skills grow. This

<sup>38</sup> “Data is a collection of facts, while information puts those facts into context. While data is raw and unorganized, information is organized. Data points are individual and sometimes unrelated. Information maps out that data to provide a big-picture view of how it all fits together. Data, on its own, is meaningless. When it’s analyzed and interpreted, it becomes meaningful information. Data does not depend on information; however, information depends on data”. HILL, J. *Data vs Information: What’s the Difference?* Available at: <https://bloomfire.com/blog/data-vs-information/>. Accessed 30. sep. 2022.

<sup>39</sup> CASALINI, F.; GONZÁLEZ, J. L. Trade and Cross-Border Data Flows. *OECD Trade Policy Papers*, n. 220, OECD Publishing, Paris, 2019. DOI: <https://doi.org/10.1787/b2023a47-en>.

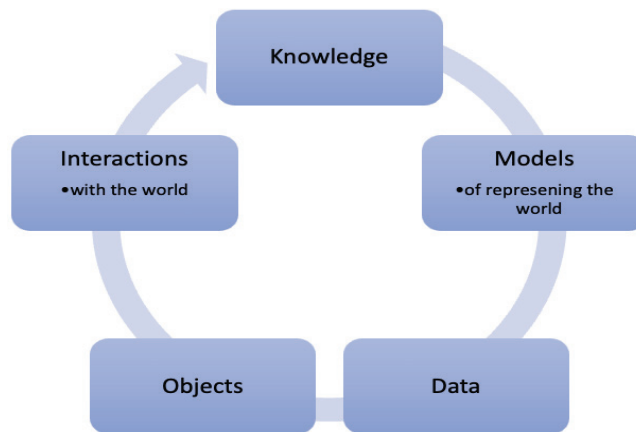
<sup>40</sup> COURMONT, Antoine. *Quand la donnée arrive en ville: open data et gouvernance urbaine*. Fontaine: Presses universitaires de Grenoble, 2021. 1v. (Libres cours). p.8.

<sup>41</sup> ONTOTEXT. *What is the Data, Information, Knowledge, Wisdom (DIKW) Pyramid?* Available at: <https://www.ontotext.com/knowledgehub/fundamentals/dikw-pyramid/>. Accessed 30. sep. 2022.

<sup>42</sup> ONTOTEXT. *What is the Data, Information, Knowledge, Wisdom (DIKW) Pyramid?* Available at: <https://www.ontotext.com/knowledgehub/fundamentals/dikw-pyramid/>. Accessed 30. sep. 2022.

understanding places the information in the community's context or the territorial setting and enables one to define the information's application domain. This final knowledge conversion will aid in strategic decision-making.<sup>43</sup>

Most *data* studies focus on the hierarchical representation beginning in data and continuing towards wisdom.<sup>44</sup> For Anne Beaulieu and Sabina Leonelli, this can be called a representational view of data, which puts *data* as the starting point for empirical knowledge; the more data, the more information. The task then becomes one of cleaning up the noise that may have resulted from faulty human measuring procedures. They propose viewing data from a *relational* perspective, which focuses on understanding data based on its *relationship* to many components of knowledge generation, such as current knowledge, social context, and human agency. Human interactions with the world produce data. They argue that people produce by *interaction*.<sup>45</sup>



Source: Anne Beaulieu and Sabina Leonelli.<sup>46</sup>

A cycle of knowledge views data processed as models for interactions with the outside world that brought the creation of new objects. The relational perspective conflicts with the pyramid because it rejects a hierarchical structure in which data, evidence, and knowledge are the foundation. Though the analyses comprise different approaches to the relationships between data, information, and knowledge, both describe the existence of a datafication process.<sup>47</sup> In fact, the entire process is a part of the data-gathering operation, that leads a data-driven society.

<sup>43</sup> BARNOIN B. et al. *Open data et collectivités territoriales. reussir sa demarche*. Éditeur: Territorial.Collection: Dossier d'experts, 2021.

<sup>44</sup> CASALINI, F.; GONZÁLEZ, J. L. Trade and Cross-Border Data Flows. *OECD Trade Policy Papers*, n. 220, OECD Publishing, Paris, 2019. DOI: <https://doi.org/10.1787/b2023a47-en>.

<sup>45</sup> BEAULIEU, Anne; LEONELLI, Sabina. *Data and society: a critical introduction*. London: Sage, 2022. 1v.

<sup>46</sup> BEAULIEU, Anne; LEONELLI, Sabina. *Data and society: a critical introduction*. London: Sage, 2022. 1v.

<sup>47</sup> BEAULIEU, Anne; LEONELLI, Sabina. *Data and society: a critical introduction*. London: Sage, 2022. 1v.

## 4 Datafication, a process

Social networks, mobile applications, and trading, notably for marketing purposes, have all contributed to the vast data collection that is now a part of everyday life. Big Data results in the phenomenon of “*datafication*”. The datafication concept developed by Viktor Mayer-Schönberger and Kenneth Cukier means the process of digitalization of “life”, which differs from physical given its construction by “correlations” and “probabilities”. It does not include teaching a computer to think like a human but applying mathematical rules to a collection of data to estimate *probabilities*. If the systems can produce excellent results, it is because it makes predictions regarding the exploration of a large volumes of data.<sup>48</sup>

The authors explain that most institutions were founded on the principle that human decisions are supported by a relatively negligible amount of precise casual information, however this view changes when data becomes massive since it can be handled quickly and have a certain tolerance for irrationality. With a large amount of data, the key isn't to be exact but to follow a general trend, which alters both the necessity and the practice of getting exact results. The shift in causality, *correlation*, transformation, extraction of data, and the individual collection of data may include hidden and unrecognized values which must be discovered. Individual activities and interactions generate data. Including two interconnected elements: the creation of the recording that is made and distributed outside of that specific time, and the subsequent use of that recording as something significant to another process.<sup>49</sup>

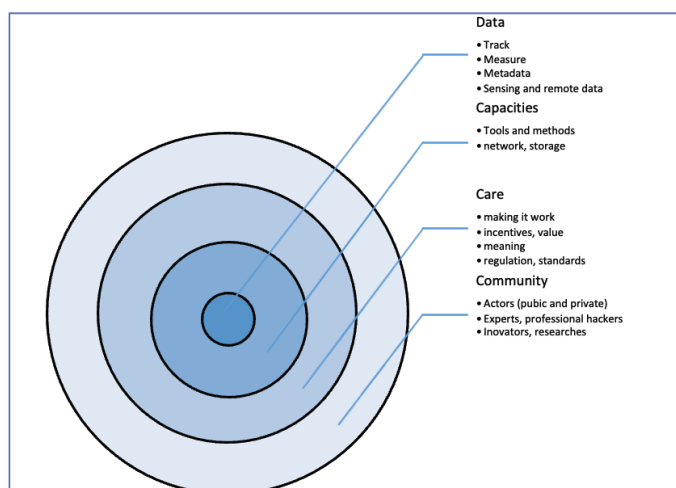
Concerning “*datafication*”, actions are converted into online processes, furthermore as quantified data that allows for real-time streaming and predictive analysis.<sup>50</sup> The predictive analysis means that Big Data allows for a *correlation*, the key to functioning of such systems.<sup>51</sup>

<sup>48</sup> MAYER-SCHÖNBERGER, Viktor; CUKIER, Kenneth. *Big data: la révolution des données est en marche*. Trad. Hayet Dhifallah. Paris: R. Laffont, 2014. 1v.

<sup>49</sup> BEAULIEU, Anne; LEONELLI, Sabina. *Data and society: a critical introduction*. London: Sage, 2022. 1v.

<sup>50</sup> J.V. DIJCK. Datafication, dataism, and dataveillance: Big Data between scientific paradigm and ideology. *Surveillance & Society*12(2): 197-208.

<sup>51</sup> BEAULIEU, Anne; LEONELLI, Sabina. *Data and society: a critical introduction*. London: Sage, 2022. 1v.



Source: Data & Society.<sup>52</sup>

The process of datafication depends on at least four factors: 1. the group of people and organizations that are connected to the subject. The ways to engage in conversation. 2. the methods used to give each data point a purpose and meaning, in other words how it is taken care of, 3. the capabilities of the people or machines handling the data, 4. Data in its most varied forms.<sup>53</sup> Therefore, the process of datafication is systematic and socially relative.

The process of datafication is important to show that *data* is a societal phenomenon. It has little isolated value because it is used in plurals and assemblages, which are fundamental aspects of how it is created, extracted, and put into circulation.<sup>54</sup> As it was possible to observe, data is *multi-dimensional*. Economically, it can provide not only private value to those who collect and control data but also social value to the entire economy. It also has *relational* value, so many types of data become more valuable when combined with others.<sup>55</sup>

*A priori* individual data has no value as it only materializes once data is aggregated, processed, and used; thus, individual sources of data will have significant “*option*” use or potential value, so it may become valuable if new issues that did not previously exist can be addressed using this data. The more detailed and granular the data, the more applications it can serve because it can be filtered, aggregated,

<sup>52</sup> BEAULIEU, Anne; LEONELLI, Sabina. *Data and society: a critical introduction*. London: Sage, 2022. 1v.

<sup>53</sup> BEAULIEU, Anne; LEONELLI, Sabina. *Data and society: a critical introduction*. London: Sage, 2022. 1v.

<sup>54</sup> BEAULIEU, Anne; LEONELLI, Sabina. *Data and society: a critical introduction*. London: Sage, 2022. 1v.

<sup>55</sup> Google Maps, credit card, parking, scrolled social media, send money to a friend. A most common definition of BD. 3V. data environment made possible by the mass digitalization of information and associated with the use of advanced analytics, including network analysis and machine learning algorithms. BRAYNE, S. Predict and surveil. Data, Discretion, and the Future of Policing. *Oxford Scholarship Online*, 2021. p. 3

and combined in various ways. Because the value is in its assessment, it depends highly on the context.<sup>56</sup>

Nowadays, the most common data aggregation structures are computational forms known as *relational databases*.<sup>57</sup> Relational databases, which have been described and developed since 1970, organize data into separate tables (relational variables) in such a way that new data and new types of data can be added or subtracted without rendering the previous arrangement obsolete. Someone effectively separated such data from its organization, and users who perform logical operations on said data are thus “protected” from having to know how the data was organized.<sup>58</sup>

Moreover, the various stages by which data moves from collection to use can be referred to as the “*Data Journey*.” Data is first gathered, then aggregated, and finally stored. The information can be used or even shared later. This journey needs to be broken down so specifically as each of these phases has compliance and technological requirements. Hence, the Data Journey describes the movement of data from one place to another where it is processed, mobilized, and re-proposed. The journey comprises phases, each of which works with the data. It is the work that is done in each phase that allows each piece of data to travel and become useful for analyses and discoveries. These journeys aren’t linear, and the data process includes many operations. Data Journey helps us to understand which conceptual judgments and background knowledge are involved; therefore, data is not neutral. Finally, it can be stated that *data* has the *following traits*: it is created, not discovered; it is partial; constrained; shaped by technology; contextual; not neutral; it contains assumptions; is flexible and not fixed.<sup>59</sup> Data is a whole new field of production that highlights the needs for it to be regulated and protected.

Hence, the digital revolution emerges through a specific ecosystem (cyberspace), a networked reticular environment. It has as its base element *data*, elements that need to be “*read*” for their utility to be understood and used for various purposes. The process of datafication (conversion into data for the world of cyberspace or the digitalization of the world) involves steps. It has a “*journey*” beyond nomenclatures

<sup>56</sup> NATIONS, United. *Digital Economy Report 2021*. [s.l.: s.n.], 2021. Available at: <[https://unctad.org/system/files/official-document/der2021\\_en.pdf](https://unctad.org/system/files/official-document/der2021_en.pdf)>. Accessed 18 oct. 2023.

<sup>57</sup> A relational database is a collection of data that organizes data in predefined relationships. Data is stored in one or more tables (or “relations”) of columns and rows. Relationships are logical connections that are made as a result of how these tables interact with one another. *Google Cloud*. [cloud.google.com, https://cloud.google.com/learn/what-is-a-relational-database](https://cloud.google.com/learn/what-is-a-relational-database). Accessed 5 Aug. 2022.

<sup>58</sup> GITLEMAN L. *Raw Data is an Oxymoron*. *The MIT Press*, 2013.

<sup>59</sup> Good data science requires careful consideration of how to contextualize the data that is being analyzed. Understanding the problem and/or situation being studied, as well as the potential effects of the processes of datafication, are all enhanced by taking context into account when analyzing data. Because the abilities, knowledge, and circumstances of the analysts involved frequently affect how data are interpreted, looking at the same dataset from various angles can reveal new insights BEAULIEU, Anne; LEONELLI, Sabina. *Data and society: a critical introduction*. London: Sage, 2022. 1v.

that distinguishes not only its functionality but also its quality. Datafication not only comprises stages of data collection, storage, and management but is enhanced by intelligent machines, the ethical use of which is questionable. Thus, the fundamental elements that characterize the “*informational*” civilization are highlighted as to the characteristics of the paradigm itself and concern the digital age.

Moreover, it is a global, flexible environment without established borders. It is important to remember that the digital state emerges in this paradigm and must adapt to the revolution. Because of the networked environment, space/time is not described geometrically but is observed in the literature relatively as a relationship in the face of interaction. This is, therefore, the way to identify space/time in a networked environment like cyberspace, the environment, as seen, where the digital state emerges. This cyberspace has a fundamental element, which is data.

*Data* has several stages of creation, a process, a journey, and qualitative distinctions between the raw element (known as data), information and knowledge. The technologies of the digital revolution spurred the development this environment to its fullest extent (especially Big Data and artificial intelligence). It was also identified that data, although described within a “*pyramid*”, placing data at the bottom and knowledge at the top, can also be examined within a relational perspective, which is treated according to interactions, considering, once again, the reticular nature of the ecosystem.

These definitions highlight that the interaction and process of data must be examined throughout the “*personal data*” retrieval process. These considerations are relevant because they highlight the existing regulations that are also lacking for the journeys of the data process.

## 5 Final considerations

Digital government transformation is a reality. The use of data in its various facets is no longer a hypothesis for the future, but a daily activity of private companies, users, and also the public sector. Even so, there is still a fruitful debate about data and its various facets, especially its distinctions from other concepts, such as information and knowledge.

On the other hand, meta-legal literature reveals that data, information, and even knowledge have a rather broad path that is not limited to taxonomic delimitations aimed at defining data as personal property. On the contrary, data is a socio-technical and relational element. Although often examined from an economic lens (private data and protection of private personal data), it extends to a wider range of definitions, the center of which lies in the perception of data as a value. It is understood that this point cannot be ignored in studies related to digital transformation in public

administration, which privileges individual data protection over an examination of them as an element of value.

In addition, data is constructed relationally, that is, dependent on a context, so that this characteristic may be relevant in studies of public policies and law. This is because, when considering data not as an element of ownership and limited property to collect, but instead as a context-dependent process, its spectrum of protection, use, and even regulation expands. Thus, it is understood that the examination of the online space from informationalist readings can be useful in assisting in broader regulations for the use and production of data, allowing for examination of data as values, always context-dependent.

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# Sobre a Revista

## IJDL – INTERNATIONAL JOURNAL OF DIGITAL LAW

### Objetivo

O International Journal of Digital Law é um periódico científico eletrônico de acesso aberto e periodicidade quadrimestral promovido pelo **Núcleo de Pesquisas em Políticas Públicas e Desenvolvimento Humano (NUPED)**, do Programa de Pós-Graduação em Direito da Pontifícia Universidade Católica do Paraná.

O Conselho Editorial é composto por renomados professores vinculados a instituições de ensino superior do Brasil, Argentina, Austrália, Colômbia, Espanha, Egito, França, Holanda e Índia. A linha editorial segue o eixo das atividades de pesquisa do NUPED, um grupo inscrito no diretório do CNPq e filiado à **Rede de Pesquisa em Direito Administrativo Social (REDAS)**. Seu enfoque é o estudo crítico das instituições jurídico-políticas típicas do Estado de Direito, notadamente as voltadas à inovação e ao desenvolvimento humano por intermédio da revolução digital.

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- 6.6.6.** Indicação de 6 palavras-chave no idioma do artigo (em letras minúsculas e separadas por ponto vírgula), antecidas da expressão “Palavras-chave” redigida no idioma do artigo.
- 6.6.7.** Resumo em inglês (Fonte Times New Roman 12, espaçamento entre linhas simples, sem parágrafo ou citações e referências, com até 200 palavras), antecedido da palavra “Abstract”. No caso de artigos redigidos em inglês, este elemento deverá ser substituído pelo resumo em português.
- 6.6.8.** Indicação de seis palavras-chave em inglês (em letras minúsculas e separadas por ponto e vírgula), antecidas da expressão “Keywords”. No caso de artigos redigidos em inglês, este elemento deverá ser substituído pelas palavras-chave em português.
- 6.6.9.** Sumário com a identificação dos títulos das seções e das subseções, com numeração progressiva, separados por ponto vírgula, sequencialmente e em parágrafo único.
- 6.6.10.** Desenvolvimento do trabalho científico: a numeração progressiva, em números arábicos, deve ser utilizada para evidenciar a sistematização do conteúdo do trabalho.
- 6.6.11.** Lista das referências bibliográficas efetivamente utilizadas no artigo, ao final do trabalho, separadas por um espaço simples, alinhadas à margem esquerda (sem recuo).
- 6.6.12.** Aplicam-se, para os demais aspectos de formatação, as normas técnicas brasileiras (ABNT NBR 10520:2002 e 14724:2011).
- 6.6.13.** No caso de artigos com 4 ou mais autores, é necessário incluir uma nota de rodapé indicando qual foi a contribuição de cada um.
- 6.7.** Todo destaque que se queira dar ao texto deve ser feito com o uso de itálico, ficando vedada a utilização de negrito, sublinhado ou caixa alta para fins de dar destaque ao texto.
- 6.8.** Figuras e tabelas devem estar inseridas no texto, e não no final do documento na forma de anexos.

## **7. Metodologia científica**

**7.1.** As referências dos livros, capítulos de obras coletivas, artigos, teses, dissertações e monografias de conclusão de curso de autores citados ou utilizados como base

para a redação do texto devem constar em nota de rodapé, com todas as informações do texto, em observância às normas técnicas brasileiras (ABNT NBR 6023:2018), e, especialmente, com a indicação da página da qual se tirou a informação apresentada no texto logo após a referência.

**7.1.1.** O destaque dado ao título dos livros (ou revistas) citados deverá constar em itálico, ficando vedada a utilização de negrito.

**7.1.2.** Os artigos redigidos com citação no formato AUTOR-DATA não serão aceitos para publicação, somente o sistema de chamadas numérico exposto nas notas de rodapé.

**7.1.3.** As referências deverão constar da seguinte forma:

**7.1.3.1. Livros:**

SOBRENOME, Nome. *Título da obra em itálico*: subtítulo sem itálico. número da edição. Cidade: Editora, ano.

Exemplo:

KEEN, Andrew. *Vertigem digital*: por que as redes sociais estão nos dividindo, diminuindo e desorientando. Trad. Alexandre Martins, Rio de Janeiro: Zahar, 2012. 254p.

**7.1.3.2. Capítulos de livros coletivos:**

SOBRENOME, Nome. Título do capítulo sem itálico. In: SOBRENOME DO 1º ORGANIZADOR, Nome do organizador; SOBRENOME DO 2º ORGANIZADOR, Nome do 2º organizador e assim sucessivamente, separados por ponto vírgula (Org. ou Coord.). *Título da obra ou coletânea em itálico*: subtítulo sem itálico. número da edição. Cidade: Editora, ano. página inicial-página final [antecedidas de “p.”].

Exemplo:

DOTTA, Alexandre Godoy. Derechos de la Población LGBT+ en Brasil: Vulnerabilidad Social entre Avances y Retrocesos. In: BRAVO, Álvaro Sánches; CASIMIRO, Ligia Melo de; GABARDO, Emerson. (Org.). *Estado Social Y Derechos Fundamentales en Tiempos de Retroceso*. Sevilla: Ponto Rojo, 2019. p. 203-228.

**7.1.3.3. Artigos em revistas:**

SOBRENOME, Nome. Título do artigo sem itálico. *Título da Revista em itálico*, cidade, volume, número, página inicial-página final [antecedidas de “p.”], meses da publicação [abreviados com as três primeiras letras do mês seguidas de ponto e separados por barra]. ano.

Exemplo:

GABARDO, Emerson; SAIKALI, Lucas Bossoni. A prescritibilidade da ação de ressarcimento ao erário em razão de atos de improbidade administrativa. *Revista Jurídica – Unicuritiba*, Curitiba, v. 1, p. 514-543, 2018.

**7.1.3.4. Teses de Titularidade, Livre-Docência, Doutorado, Dissertações de Mestrado, Monografias de Conclusão de Curso de Graduação e Pós-Graduação:**

SOBRENOME, Nome. *Título do trabalho em itálico*: subtítulo sem itálico. Cidade, ano. número de folhas seguido de “f”. Modalidade do trabalho (Grau obtido com a defesa) – Órgão perante o qual o trabalho foi defendido, Nome da instituição.

Exemplo:

SANTOS, Fábio de Sousa. *Análise Comparada da Competição na Contratação Pública Brasileira e Estadunidense*. Curitiba, 2018. 134f. Dissertação (Mestrado em Mestrado em Direito) – Pontifícia Universidade Católica do Paraná. Curitiba: 2018.



**7.1.3.5 DOI – Digital object identifier:** Caso o documento consultado na pesquisa tenha o número de DOI recomenda-se a inclusão, de modo complementar, do número após o término de cada referência.

Exemplo:

DOTTA, Alexandre Godoy. Public policies for the assessment of quality of the Brazilian higher education system. *Revista de Investigações Constitucionais*, Curitiba, v. 3, p. 53-69, 2016. DOI. [10.5380/rinc.v3i3.49033](https://doi.org/10.5380/rinc.v3i3.49033).

**7.1.3.6. Documentos em meio eletrônico:** Documentos extraídos do meio eletrônico deverão apresentar após o término de cada referência o local da rede onde foi encontrado e apresentado da seguinte maneira.

Exemplo:

IJDL. International Journal of Digital Law. *Regras para a submissão de artigos*. Disponível em: <https://journal.nuped.com.br/index.php/revista/about/submissions>. Acesso em: 12 fev. 2020.

**7.1.4.** Os elementos das referências devem observar o seguinte padrão:

**7.1.4.1. Autor:** SOBRENOME em maiúsculas, vírgula, Nome com as iniciais em maiúsculas, seguido de ponto final.

**7.1.4.2. Edição:** deve ser incluída a informação somente a partir da segunda edição, sem ordinal, seguido de ponto e “ed.”. Exemplo: 2. ed.

**7.1.4.3. Ano:** grafado com algarismos arábicos, sem ponto no milhar, antecedido de vírgula e seguido de ponto.

**7.1.5.** Nos casos em que for absolutamente impossível obter alguma das informações acima, a ausência deverá ser suprida da seguinte forma:

**7.1.5.1.** Ausência de cidade: substituir por [S.I.].

**7.1.5.2.** Ausência de editora: substituir por [s.n.].

**7.1.5.3.** Ausência de ano: indicar entre colchetes o ano aproximado, seguido de ponto de interrogação. Exemplo: [1998?].

**7.2.** As citações (palavras, expressões, períodos) deverão ser cuidadosamente conferidas aos textos originais.

**7.2.1.** Citações diretas devem seguir o seguinte padrão de registro: transcrição com até quatro linhas devem constar do corpo do texto, com letra e espaçamento normais, e estar entre aspas.

**7.2.2.** Recomenda-se fortemente que citações textuais longas (mais de quatro linhas) não sejam utilizadas. Entretanto, se imprescindíveis, deverão constituir um parágrafo independente, com recuo de 1,5 cm em relação à margem esquerda (alinhamento justificado), utilizando-se espaçamento entre linhas simples e tamanho da fonte 10. Neste caso, aspas não devem ser utilizadas.

**7.2.3.** Fica vedado o uso do op. cit., loc. cit., ibidem e idem nas notas bibliográficas, que deverão ser substituídas pela referência completa, por extenso.

**7.2.4.** Para menção de autores no corpo do texto, fica vedada sua utilização em caixa alta (ex.: para Nome SOBRENOME...). Nestes casos todas as menções devem ser feitas apenas com a primeira letra maiúscula (ex.: para Nome Sobrenome...).

## 8. Redação

**8.1.** Os textos devem ser revisados, além de terem sua linguagem adequada a uma publicação editorial científica.

**8.2.** No caso de artigos redigidos na língua portuguesa, a escrita deve obedecer às regras ortográficas em vigor desde a promulgação do ACORDO ORTOGRÁFICO DA LÍNGUA PORTUGUESA, a partir de 1º de janeiro de 2009.

**8.3.** As citações de textos anteriores ao ACORDO devem respeitar a ortografia original.

### **9. Artigos resultantes de pesquisas financiadas**

Os artigos resultantes de projetos de pesquisa financiados deverão indicar em nota de rodapé, situada ao final do título do artigo no idioma do texto, a informação relativa ao financiamento da pesquisa.

### **10. Declaração de direitos autorais**

Autores que publicam nesta revista concordam com os seguintes termos:

**10.1.** Não serão devidos direitos autorais ou qualquer outra remuneração pela publicação dos trabalhos.

**10.2.** Autores mantêm os direitos autorais e concedem à *IJD* o direito de primeira publicação, com o trabalho simultaneamente licenciado sob a [Licença Creative Commons Attribution](#) que permite o compartilhamento do trabalho com reconhecimento da autoria e publicação inicial nesta revista. Ainda, em virtude de aparecerem nesta revista de acesso público, os artigos são de uso gratuito, com atribuições próprias, com aplicações educacionais e não comerciais.

**10.3.** Autores têm permissão e são estimulados a publicar e distribuir seu trabalho online (ex.: em repositórios institucionais ou na sua página pessoal) a qualquer ponto antes ou durante o processo editorial, já que isso pode gerar alterações produtivas, bem como aumentar o impacto e a citação do trabalho publicado (ver [O Efeito do Acesso Livre](#)).

### **11. Responsabilidade dos autores**

**11.1.** Autores são responsáveis pelo conteúdo publicado, comprometendo-se, assim, a participar ativamente da discussão dos resultados de sua pesquisa científica, bem como do processo de revisão e aprovação da versão final do trabalho.

**11.2.** Autores são responsáveis pela condução, resultados e validade de toda investigação científica.

**11.3.** Autores devem noticiar a revista sobre qualquer conflito de interesse.

**11.4.** As opiniões emitidas pelos autores dos artigos são de sua exclusiva responsabilidade.

**11.5.** Ao submeter o artigo, o autor atesta que todas as afirmações contidas no manuscrito são verdadeiras ou baseadas em pesquisa com razoável exatidão.

### **12. Conflito de interesses**

A confiabilidade pública no processo de revisão por pares e a credibilidade de artigos publicados dependem em parte de como os conflitos de interesses são administrados durante a redação, revisão por pares e tomada de decisões pelos editores.

**12.1.** É obrigatório que o autor do manuscrito declare a existência ou não de conflitos de interesse. Mesmo julgando não haver conflitos de interesse, o autor deve declarar essa informação no ato de submissão do artigo, marcando esse campo específico.

**12.2.** Conflitos de interesses podem surgir quando autores, pareceristas ou editores possuem interesses que, aparentes ou não, podem influenciar a elaboração ou avaliação

de manuscritos. O conflito de interesses pode ser de natureza pessoal, comercial, política, acadêmica ou financeira.

**12.3.** Quando os autores submetem um manuscrito, eles são responsáveis por reconhecer e revelar conflitos financeiros ou de outra natureza que possam ter influenciado seu trabalho.

**12.4.** Os autores devem reconhecer no manuscrito todo o apoio financeiro para o trabalho e outras conexões financeiras ou pessoais com relação à pesquisa. As contribuições de pessoas que são mencionadas nos agradecimentos por sua assistência na pesquisa devem ser descritas, e seu consentimento para publicação deve ser documentado.

**12.5.** Manuscritos não serão rejeitados simplesmente por haver um conflito de interesses, mas deverá ser feita uma declaração de que há ou não conflito de interesses.

**12.6.** Os pareceristas devem, igualmente, revelar aos editores quaisquer conflitos de interesse que poderiam influir em suas opiniões sobre o manuscrito, e devem declarar-se não qualificados para revisar originais específicos se acreditarem que esse procedimento é apropriado. Assim como no caso dos autores, se houver silêncio por parte dos pareceristas sobre conflitos potenciais, isso significará que os conflitos não existem.

**12.7.** No caso da identificação de conflito de interesse da parte dos pareceristas, o Conselho Editorial encaminhará o manuscrito a outro parecerista *ad hoc*.

**12.8.** Se os autores não tiverem certeza do que pode constituir um potencial conflito de interesses, devem contatar o Coordenador Editorial da Revista.

**12.9.** Para os casos em que editores ou algum outro membro publiquem com frequência na Revista, não serão atribuídos tratamentos especiais ou diferenciados. Todos os artigos submetidos serão avaliados através do procedimento *double blind peer review*.

### **13. Outras informações**

**13.1.** Os trabalhos serão selecionados pelo Coordenador Editorial e pelo Conselho Editorial da Revista, que entrarão em contato com os respectivos autores para confirmar o recebimento dos textos, e em seguida os remeterão para análise de dois pareceristas do Conselho de Pareceristas.

**13.2.** Os originais recebidos e não publicados não serão devolvidos.

**13.3.** Asseguram-se aos autores o direito de recurso das decisões editoriais.

**13.3.1.** Serão concedidos 5 (cinco) dias, contados da data da decisão final do Conselho Editorial.

**13.3.2.** O arrazoado escrito deverá ser enviado para o e-mail: [journal@nuped.com.br](mailto:journal@nuped.com.br).

**13.3.3.** O recurso será analisado pelo Conselho Editorial no prazo de 30 (trinta) dias.

### **CONDIÇÕES PARA SUBMISSÕES**

Como parte do processo de submissão, os autores são obrigados a verificar a conformidade da submissão em relação a todos os itens listados a seguir. As submissões que não estiverem de acordo com as normas serão devolvidas aos autores.

1. A contribuição é original e inédita (salvo em caso de artigos em língua estrangeira publicados no exterior), e não está sendo avaliada para publicação por outra revista; caso contrário, deve-se justificar em “Comentários ao editor”.
2. O arquivo da submissão está em formato Microsoft Word.
3. URLs para as referências foram informadas quando possível.

4. O texto possui entre 15 e 30 páginas (tamanho A4 – 21 cm x 29,7 cm), compreendendo a introdução, desenvolvimento, conclusão (não necessariamente com esses títulos) e uma lista de referências bibliográficas; as margens utilizadas são: esquerda e superior de 3 cm e direita e inferior de 2 cm; no corpo do texto utilizou-se Fonte Times New Roman, tamanho 12, espaçamento entre linhas de 1,5, e espaçamento de 0 pt antes e depois dos parágrafos; nas notas de rodapé utilizou-se Fonte Times New Roman, tamanho 10, espaçamento simples entre linhas; no desenvolvimento do texto, os parágrafos contêm recuo de 1,5 cm em relação à margem esquerda; títulos e subtítulos estão alinhados à margem esquerda, sem recuo; as figuras e tabelas estão inseridas no texto, não no final do documento na forma de anexos.
5. O texto segue os padrões de estilo e requisitos bibliográficos descritos em [Diretrizes para Autores](#), na [página para submissão](#).
6. Em caso de submissão a uma seção com avaliação pelos pares (ex.: artigos), as instruções disponíveis em [Assegurando a avaliação pelos pares cega](#) foram seguidas.
7. O autor declara que, com exceção das citações diretas e indiretas claramente indicadas e referenciadas, este artigo é de sua autoria e, portanto, não contém plágio. Declara, ainda, que está ciente das implicações legais que a utilização de material de terceiros acarreta.
8. O autor declara que participou suficientemente do trabalho para tornar pública sua responsabilidade pelo conteúdo e que todas as afirmações contidas no manuscrito são verdadeiras ou baseadas em pesquisa com razoável exatidão.
9. O autor concorda com a política de responsabilidade estabelecida no item 10. Responsabilidade dos autores das [Diretrizes para Autores](#).

## POLÍTICA DE PRIVACIDADE

Os nomes e endereços informados nesta revista serão usados exclusivamente para os serviços prestados por esta publicação, não sendo disponibilizados para outras finalidades ou a terceiros.

Este periódico tem um compromisso com a ética e a qualidade das publicações, seguindo padrões internacionais de publicação científica. Defendemos um comportamento ético de todas as partes envolvidas na publicação em nosso periódico: autores, editor, pareceristas, Equipe Editorial e a Editora. Não aceitamos plágio ou qualquer outro comportamento antiético. Para isso, são seguidas as diretrizes do [2nd World Conference on Research Integrity](#), Singapore, July 22-24, 2010.

## Deveres do Editor

- **Decisão de publicação:** o editor é responsável por decidir quais artigos submetidos à revista devem ser publicados. O editor é guiado pelas políticas decididas pelo Conselho Editorial. Essas políticas devem obedecer às exigências legais em vigor sobre difamação, violação de direitos autorais e plágio. Para tomada de decisões o editor pode consultar o Conselho Editorial e os pareceristas.
- **Transparência e respeito:** o editor deve avaliar os manuscritos submetidos sem levar em conta a raça, sexo, a orientação sexual, a crença religiosa, a origem étnica, a nacionalidade ou a filosofia política dos autores.

- **Confidencialidade:** o editor e demais membros da equipe editorial não devem divulgar qualquer informação sobre um manuscrito submetido, a não ser aos pareceristas e os conselheiros editoriais.
- **Divulgação e conflitos de interesse:** O editor não deve utilizar materiais inéditos divulgados em um manuscrito submetido em pesquisas próprias sem o consentimento expresso e por escrito do autor. O editor deve recusar avaliar os manuscritos em que tenha conflitos de interesse por questões competitivas, colaborativas ou outros relacionamentos ou ligações com qualquer um dos autores, empresas ou (possivelmente) instituições ligadas aos manuscritos.
- **Envolvimento e cooperação em investigações:** o editor deve tomar medidas necessárias cabíveis quando foram apresentadas reclamações éticas a respeito de um manuscrito submetido ou artigo publicado.

### Deveres dos Pareceristas

- **Contribuição para as decisões editoriais:** a revisão dos pareceristas auxilia o editor na tomada de decisões editoriais e por meio das comunicações com o autor também pode auxiliar o mesmo na melhora do artigo.
- **Pontualidade:** qualquer avaliador de artigo que não se sinta qualificado para analisar o artigo ou sabe que a sua imediata leitura será impossível deve notificar imediatamente o editor.
- **Confidencialidade:** os trabalhos recebidos para análise devem ser tratados como documentos confidenciais. Eles não devem ser mostrados ou discutidos com os outros.
- **Padrões de objetividade:** os pareceres devem ser conduzidos de forma objetiva. Os pareceristas devem expressar seus pontos de vista de maneira clara e apoiados em argumentos.
- **Sobre as fontes:** os pareceristas devem identificar trabalhos publicados relevantes que não foram citados pelos autores. O parecerista deve chamar a atenção do editor sobre qualquer semelhança substancial ou sobreposição entre o manuscrito em questão e qualquer outro *artigo* publicado de que tenha conhecimento pessoal.
- **Divulgação e conflito de interesses:** informações privilegiadas ou ideias obtidas pelo parecerista por meio da leitura dos manuscritos devem ser mantidas em sigilo e não devem utilizadas para proveito pessoal. O parecerista não deve avaliar manuscritos em que tenha conflitos de interesse por questões competitivas, colaborativas ou outros relacionamentos ou ligações com qualquer um dos autores, empresas ou instituições ligadas aos manuscritos.

### Deveres dos Autores

- **Normas gerais:** os autores de trabalhos que se referem a pesquisas originais devem apresentar um relato preciso do trabalho realizado, bem como uma discussão objetiva sobre o seu significado. Dados complementares devem ser representados com precisão no artigo. O documento deve conter detalhes suficientes e referências que permitam que outros possam replicar o trabalho. Declarações fraudulentas ou intencionalmente imprecisas constituem um comportamento antiético e são inaceitáveis.

- **Originalidade e plágio:** os autores devem garantir que as obras são inteiramente originais e se eles utilizam o trabalho e/ou textos dos outros que isso seja devidamente citado. Plágio em todas as suas formas constitui um comportamento editorial antiético e é inaceitável.
- **Publicação múltipla ou redundante:** um autor não deve publicar manuscritos que descrevam essencialmente a mesma pesquisa em mais de um periódico. Publicar o mesmo artigo em mais de um periódico sem informar os editores e obter seu consentimento constitui um comportamento editorial antiético e é inaceitável.
- **Sobre as fontes:** o trabalho de outros autores deve sempre ser reconhecido. Os autores devem citar as publicações que foram importantes na determinação da natureza do trabalho relatado. As informações obtidas em particular, como em uma conversa, correspondência, ou discussão com terceiros, não devem ser utilizadas ou relatadas sem a permissão explícita por escrito da fonte. As informações obtidas por meio de serviços confidenciais, tais como arbitragem manuscritos ou pedidos de bolsas, não devem ser utilizadas sem a permissão explícita por escrito do autor do trabalho envolvido nestes serviços.
- **Autoria:** a autoria do trabalho deve ser restrita àqueles que fizeram uma contribuição significativa para a concepção, projeto, execução ou interpretação do estudo relatado. Todos aqueles que fizeram contribuições significativas devem ser listados como coautores. Pessoas que participaram em certos aspectos do projeto de pesquisa devem ser listadas como colaboradores. O autor principal deve garantir que todos os coautores apropriados estejam incluídos no artigo. O autor principal também deve certificar-se que todos os coautores viram e aprovaram a versão final do manuscrito e que concordaram com sua submissão para publicação.
- **Divulgação e conflitos de interesses:** todos os autores devem divulgar no manuscrito qualquer conflito financeiro ou de outra natureza que possa influenciar os resultados ou a interpretação de seu manuscrito. Todas as fontes de apoio financeiro para o projeto devem ser divulgadas.
- **Erros fundamentais em trabalhos publicados:** quando um autor descobre um erro significativo ou imprecisão em seu trabalho publicado é obrigação do autor informar imediatamente o editor da revista ou a Editoria de Periódicos e cooperar com o editor para corrigir o artigo.

### Deveres da Editora

Estamos empenhados em garantir que publicidade, reimpressão ou qualquer outra fonte de receita comercial não tenha qualquer impacto ou influência sobre as decisões editoriais.

Nossos artigos são avaliados por pares para garantir a qualidade da publicação científica. Este periódico utiliza o CrossCheck (software antiplágio da CrossRef).

\* Esta declaração se baseia nas recomendações da Elsevier e no *Best Practice Guidelines for Journal Editors* do Committee on Publication Ethics – COPE.

# Author Guidelines

## 1. Article Submission

Article propositions for publishing on the International Journal of Digital Law must be sent through the electronic submission system (free of cost) and access through login and password. Propositions sent by e-mail will not be accepted. The Journal has the right to accept or reject any originals received, according to its Editorial Board's recommendations, including the inadequacy of the article's theme to the journal's editorial profile, as well as the right to propose modifications.

## 2. Author Qualification

At least one of the authors must own either a PhD degree or a Doctor of Juridical Science (J.S.D. or S.J.D), Doctor juris (Dr. iur. or Dr. jur.), Doctor of Philosophy (Ph.D.) ou Legum Doctor (LL.D.) degree. This requirement can be relativized, never exceeding 30% of the articles per edition, in exceptional cases of: (i) authors affiliated to foreign institutions; (ii) articles written in English.

## 3. Originality and exclusivity

Articles for publication in the International Journal of Digital Law must be original and exclusive, except in case of articles written in a foreign language and published outside Brazil. After the publication of the article in this journal, it can also be published in books and compilations, as long as the original publication is mentioned. We ask the authors to commit to not publish the article in other journals or reviews, as well as not to submit it to other journals at the same time.

## 4. Languages

Articles can be submitted in English, Portuguese, and Spanish.

## 5. Registration of the metadata in the electronic submission system

**5.1.** At the time of submission of the article to the electronic system, the metadata fields must be filled in according to these guidelines, under penalty of preliminary rejection of the submission.

### 5.2. Authors

**5.2.1.** *First name/Middle name/Last name:* indication of the full name of the author(s) with only the initials of each name in capital letter. In case of articles in co-authorship, the names of all coauthors must be inserted in the system in the order that should appear at the time of publication.

**5.2.2.** *E-mail:* indication of the e-mail address of the author(s) for contact, which will mandatorily appear in the published version of the article.

**5.2.3.** *ORCID iD:* indication of the number of the author's ORCID identifier (for further information [click here](#)). The ORCID identifier can be obtained in [ORCID register](#). Authors must have to accept the patterns for presentation of ORCID iD and include the full URL (e.g.: <https://orcid.org/0000-0003-1781-1726>).

**5.2.4.** *URL:* link to the author's full curriculum. In the case of Brazilian authors, the link to the Lattes Curriculum should be indicated.



**5.2.5. Affiliation:** indication of the author's main institutional affiliation (or two main affiliations if both of the links with them have the same importance). The main institution is where the author is professor or student, or, in case of not being professor or student anymore, the institution where the authors obtained their major academic title (PhD, J.S.D., LL.M, B.A., etc.). The institution's name must be written in full (not abbreviated) and in the original language of the institution (or in English for non-Latin languages), followed by an indication of the country of origin of the institution between parentheses. If the author is a professor and also a PhD, J.S.D or LL.M candidate in another institution, the main affiliation will be the institution where the author is candidate.

**5.2.6. Country:** indication of the country of the author's main institutional affiliation.

**5.2.7. Bio Statement:** indication of the author's abbreviated CV, with the information organized in the following sequence: first, the indication of the institution to which the author is affiliated as a professor; second, between parentheses, the city, state/province (if applicable) and country of the institution; third, indication of academic titles (starting with the highest); fourth, other bonds with scientific associations; fifth, profession; etc.

### **5.3. Title and Abstract**

**5.3.1. Title:** title in the language of the article, with only the first letter of the sentence in capital letter.

**5.3.2. Abstract:** abstract in the language of the article, without paragraph or citations and references, with up to 200 words.

### **5.4. Indexing**

**5.4.1. Keywords:** indication of 5 keywords in the language of the article (in lower case and separated by semicolons).

**5.4.2. Language:** indicate the acronym corresponding to the language of the article (Português=pt; English=en; Español=es).

**5.5. Supporting Agencies:** articles resulting from funded research projects should indicate in this field the source of funding.

**5.6. References:** insert the complete list of references cited in the article, with a space of one line between them.

### **6. Text Presentation and pre-textual elements**

**6.1.** The article must have between 15 and 30 pages (size A4 – 21 cm × 29,7 cm), including introduction, development and conclusion (not necessarily with these titles) and a bibliographic reference list. The maximum number of pages can be relativized in exceptional cases, decided by the Editorial team.

**6.2.** Edges (margins) must be: top and left with 3 cm, bottom and right with 2 cm.

**6.3.** The text must use Font Times New Roman, size 12, line spacing 1.5, and spacing 0 pt before and after paragraphs.

**6.4.** References must use Font Times New Roman, size 10, simple space between lines.

**6.5.** In the development of the text, the paragraphs must contain decrease of 1.5 cm from the left margin. Titles and subtitles must be aligned with the left margin without decrease.

**6.6.** The structure should observe the following order:

- 6.6.1.** Title in the article's language, in bold, centralized, with the first letter of the sentence in capital letter.
- 6.6.2.** In case of indicating information related to the article (financing from sponsoring agencies, acknowledgments, translators, etc.), it is necessary to insert a footnote with an asterisk (not number) on the right side of the title in the article's language.
- 6.6.3.** Title in English, with only the first letter in capital letter, in bold and in italic, centralized. In the case of articles written in English, this element must be substituted by the title in Portuguese.
- 6.6.4.** The article must not include the names of the author(s). The information for publication purposes will be taken from the metadata entered by the author(s) in the journal's electronic system at the time of submission.
- 6.6.5.** Abstract in the article's language (font Times New Roman, 12, simple lines, without paragraph or quotations and references, until 200 words), preceded by the word "Abstract" written in the article's language.
- 6.6.6.** Indication of five keywords in the article's language (in lower case and separated by semicolon), preceded by the expression "Keywords" written in the article's language.
- 6.6.7.** Abstract in English (font Times New Roman, 12, simple lines, without paragraph or quotations and references, up to 200 words), preceded by the word "Abstract". In case of articles written in English, this element must be replaced by the abstract ("*resumo*") in Portuguese.
- 6.6.8.** Indication of five keywords in English (in lower case and separated by semicolon), preceded by the expression "Keywords". In case of articles written in English, this element must be replaced by keywords ("*palavras-chave*") in Portuguese.
- 6.6.9.** Table of contents, indicating the titles of the sections and subsections, with progressive numbering in Arabic numbers.
- 6.6.10.** Development of the scientific article: progressive numbering, in Arabic numbers, must be used to make clear the content's systematization.
- 6.6.11.** Bibliographic references list must bring only sources that were really used, located in the end of the article, separated by a simple space, lined to the left margin (no indent).
- 6.6.12.** For other aspects, apply Brazilian technical norms (ABNT NBR 10520:2002 e 14724:2011).
- 6.6.13.** In the case of articles with 4 or more authors, it is necessary to include a footnote indicating the contribution of each one to the article.
- 6.7.** Highlights must be made only in italics, meaning that bold, underlined or caps lock, cannot be used to highlight.
- 6.8.** Images and boards must be inserted in the text, not in the end in form of attachments.

## **7. Scientific Methodology**

**7.1.** The references of books, chapters in collective books, articles, theses, dissertations/essays, monographs of quoted authors used as base to write the text must be mentioned as a reference on the footnotes, with all the information about the text, according to the Brazilian technical norms (ABNT NBR 6023:2018 – summarized in the item 7.1.3 below), and especially, indicating the page of which the information written on the text was taken, right after the reference.

**7.1.1.** Book's title (or journal's title) must be highlighted in italics (bold shall not be used for that purpose).

**7.1.2.** Articles written in the format AUTHOR-YEAR will not be accepted for publishing.

**7.1.3.** References shall appear as follows:

**7.1.3.1. Books:**

LAST NAME, Name Middle Name. *Title of the book in italics*: subtitle not in italics. Number of the edition. City: Publisher, Year.

Example:

KEEN, Andrew. *Vertigem digital*: por que as redes sociais estão nos dividindo, diminuindo e desorientando. Trad. Alexandre Martins, Rio de Janeiro: Zahar, 2012. 254p.

**7.1.3.2. Chapter in a collective book:**

LAST NAME, Name Middle Name. Title of the Chapter not in bold. In: ORGANIZER'S LAST NAME, Name Middle Name; 2<sup>ND</sup> ORGANIZER'S LAST NAME, Name Middle Name, and so on, separated by semicolon (Org. or Coord.). *Title of the book in italics*: subtitle not in Italics. Number of the edition. City: Publisher, Year. first page-last page [preceded by "p."].

Example:

DOTTA, Alexandre Godoy. Derechos de la Población LGBT+ en Brasil: Vulnerabilidad Social entre Avances y Retrocesos. In: BRAVO, Álvaro Sánchez; CASIMIRO, Ligia Melo de; GABARDO, Emerson. (Org.). *Estado Social Y Derechos Fundamentales en Tiempos de Retroceso*. Sevilha: Ponto Rojo, 2019. p. 203-228.

**7.1.3.3. Articles in journals:**

LAST NAME, Name Middle Name. Title of the article not in bold. *Title of the journal in italics*, city, volume, number, first page-last page [preceded by "p."], months of publishing [abbreviated with the first three letters of the month followed by dot and separated by a slash]. Year.

Example:

GABARDO, Emerson; SAIKALI, Lucas Bossoni. A prescritibilidade da ação de ressarcimento ao erário em razão de atos de improbidade administrativa. *Revista Jurídica – Unicuritiba*, Curitiba, v. 1, p. 514-543, 2018.

**7.1.3.4. Theses of Full Professor contests, Doctoral theses, Master's dissertations/ essays, Undergraduate and Graduate courses monographs:**

LAST NAME, Name Middle Name. *Title in italics*: subtitle. City, year. number of pages followed by "f". Kind of the work (Degree obtained with the defense) – Department or Sector, Name of the institution.

Example:

SANTOS, Fábio de Sousa. *Análise Comparada da Competição na Contratação Pública Brasileira e Estadunidense*. Curitiba, 2018. 134f. Dissertação (Mestrado em Mestrado em Direito) – Pontifícia Universidade Católica do Paraná. Curitiba: 2018.

**7.1.3.5. DOI – Digital object identifier:** If the document consulted in the research has the DOI number, it is recommended to include, in a complementary way, the number after the end of each reference. Example:

DOTTA, Alexandre Godoy. Public policies for the assessment of quality of the Brazilian higher education system. *Revista de Investigações Constitucionais*, Curitiba, v. 3, p. 53-69, 2016. DOI. [10.5380/rinc.v3i3.49033](https://doi.org/10.5380/rinc.v3i3.49033).

**7.1.3.6. Documents in electronic media:** Documents extracted from electronic media must present after the end of each reference the location of the network where it was found and presented as follows. Example:

DIJDL. International Journal of Digital Law. *Regras para a submissão de artigos*. Disponível em: <https://journal.nuped.com.br/index.php/revista/about/submissions>. Acesso em: 12 fev. 2020.

**7.1.4.** The elements of references must observe the following model:

**7.1.4.1. Author:** LAST NAME in capital letters, comma, Name with the initials in capital letters, Middle Name with the initials in capital letters, followed by a dot.

**7.1.4.2. Edition:** the information must only be included after the second edition of the book, without ordinal, followed by a dot and “ed.”. Example: 2. ed.

**7.1.4.3. Year:** it must be written with Arabic numerals, without dot in thousand, preceded by comma, and followed by a dot. Example: 1997.

**7.1.5.** In case of being impossible to find one of those elements, the absence must be resolved in the following manner:

**7.1.5.1.** Absence of city: replace for [S.I.].

**7.1.5.2.** Absence of publisher: replace for [s.n.].

**7.1.5.3.** Absence of year: the approximated year must be indicated between brackets, followed by a question mark. Example: [1998?].

**7.2.** The quotations (words, expressions, sentences) must be carefully reviewed by the authors and/or translators.

**7.2.1.** The direct quotations must follow this pattern: transcription until four lines should fit in the text body, with normal letter, normal spacing and quotation marks.

**7.2.2.** It is strongly recommended that long textual quotations (more than four lines) are not used. However, if indispensable, they shall constitute an independent paragraph, with 1,5 cm of decrease related to the left margin (justified alignment), with simple lines and font 10. In that situation, quotation marks must not be used.

**7.2.3.** It is forbidden the use of “op. cit.”, “loc. cit.”, “ibidem” and “idem” in the footnotes. The references in footnote must be complete and written out.

**7.2.4.** For the mention of authors in the text body, it is forbidden the use of capital letters (e.g. for Name LAST NAME...). In this case all mentions shall be written only with the first letter in capital letter (ex.: for Name Last Name...).

## **8. Composition**

**8.1.** Apart from having an adequate scientific language for an editorial publication, the text must be reviewed.

**8.2.** In the case of articles written in Portuguese, the writing must obey the new orthographic rules in force since the promulgation of the Portuguese Language Orthographic Agreement, from January 1<sup>st</sup>, 2009.

**8.3.** Citations of texts that precede the Agreement must respect the original spelling.

## **9. Articles resulted from funded researches**

Articles resulted from funded research projects shall indicate in a footnote, located at the end of the article title in the original language, the information related to the research financing.

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**11.3.** Authors should report the Journal about any conflict of interest.

**11.4.** Authors are fully and exclusively responsible for the opinions expressed in their articles.

**11.5.** When submitting the articles, authors recognize that all statements contained in the manuscript are true or based on research with reasonable accuracy.

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The public confidence in the double-blind peer review process and the credibility of published articles depend in part on how conflicts of interest are managed during manuscript writing, peer review and decision making by the editors.

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**12.2.** Conflicts of interest may appear when authors, reviewers or editors have interests that, apparently or not, may influence the development or evaluation of manuscripts.

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**12.4.** Authors must recognize all the financial support for the work and other financial or personal connections related to the research. The contributions of people who are mentioned in the acknowledgments for their assistance in the research must be described, and its consent to publication should be documented.

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case of the authors, if there is silence from the peer reviewers about potential conflicts, it will mean that conflicts do not exist.

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### **13. Other information**

**13.1.** The articles will be selected by the Editor-in-Chief and the Editorial Board of the Journal, which will contact the respective authors to confirm the text reception, and then forward them to the two ad hoc reviewers' analysis.

**13.2.** The received and not published originals will not be given back.

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**13.3.1.** They will be granted five (5) days from the date of the final decision of the Editorial Board to appeal.

**13.3.2.** The written appeal must be sent to the e-mail: <journal@nuped.com.br>.

**13.3.3.** The appeal will be examined by the Editorial Board within thirty (30) days

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2. The submission file is in Microsoft Word, OpenOffice or RTF.
3. URLs for the references have been informed when possible.
4. The text has between 15 and 30 pages (A4 size – 21 cm by 29.7 cm), including the introduction, development, conclusion (not necessarily with these titles) and a list of references; margins used are: left and top of 3 cm and right and bottom of 2 cm; the text is written in Times New Roman format, size 12, line spacing 1.5, and spacing 0 pt. before and after paragraphs; in the footnotes it was used Times New Roman, size 10, 1 pt. spacing; in the text development, paragraphs have an indent of 1.5 cm from the left margin; headings and subheadings are aligned on the left margin; figures and tables are inserted in the text, not in the end of the document as attachments.
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