pensar
Revista de Ciências Jurídicas
Universidade de Fortaleza
e-ISSN:2317-2150
doi 10.5020/2317-2150.2024.16838

The accountability of digital platforms and the spread of harmful content: regulated self-regulation and the Internet Freedom, Responsibility and Transparency Bill *

A responsabilização das plataformas digitais e propagação de conteúdo danoso: autorregulação regulada e o Projeto de Lei de Liberdade, Responsabilidade e Transparência na Internet

La responsabilización de las plataformas digitales y difusión de contenido dañoso: autorregulación regulada y el Proyecto de Ley de Libertad, Responsabilidad y Transparencia en Internet

Rosane Leal da Silva**
Luiza Berger von Ende***
Isabela Quartieri da Rosa****

Abstract

Faced with a scenario in which digital platforms are the stage for the propagation of harmful content, as well as their business model generates profit from user publications, the debate about a new accountability of application providers emerges. In that way, the work aims to study the proposal of regulated self-regulation present in the Bill of Freedom, Responsibility and Transparency on the Internet, questioning: is the model of regulated self-regulation enough to restrain the problem of the propagation of harmful content on platforms? Using a hypothetical-deductive approach and the functionalist and comparative procedure methods, the article aims to understand the dynamics that occur on platforms and compares the recommendations made by the Internet Steering Committee in Brazil (CGI) and the Bill, in order to to understand if the problems can be addressed by the legal provision, as well as if the CGI guidelines were observed - all using the techniques of bibliographical and documental research. It is concluded that the regulated self-regulation model is partially sufficient to respond to the propagation of harmful content and that the Bill does not face important issues, as well as, in other respects, added little to what was already provided for by law. Furthermore, there are discrepancies regarding the understanding of the CGI and the final text of the Bill, and some indications established by the Committee had been met by the Bill but were withdrawn after parliamentary debate.

---

* Article developed as a final work of the discipline Rights in the Network Society, taught by Prof. Dr. Rosane Leal da Silva in the Program of Postgraduate Studies in Law at the Federal University of Santa Maria. Artigo traduzido por Inteligência Artificial.

** PhD from the Federal University of Santa Catarina, in the area of Law, State and Society, with research on children and adolescents in the informational society (2009), degree in Law from the University of the Campanha Region (1994), master's degree in Latin-American Integration from the Federal University of Santa Maria (2000). She is an associate professor at the Federal University of Santa Maria, in the Undergraduate and Master's courses in Law. He works in the Law Course at the Franciscan University Center, currently the Franciscan University (UFN). She is a researcher at the Antonio Meneghetti College. He has experience in the area of Law, at the undergraduate and graduate levels, with an emphasis on Civil Law from the Constitutional perspective, Consumer Law, Child and Adolescent Law and Information Law, where he develops several researches. She is currently the leader of the Legal Theory in the New Millennium Research Group (UFN) and the Information Law Center Research Group (UFSM), both registered with CNPq. She is a researcher, at the Center for Legal and Social Studies of Children and Adolescents, at the Federal University of Santa Catarina. He coordinates the Center for Informational Law at the Federal University of Santa Maria.

*** Master's student in the Graduate Program in Law at the Federal University of Santa Maria (PPGD/UFSM), with a CAPES scholarship, in the research line Rights in the Network Society: actors, factors and processes in globalization. Bachelor of Laws from UFSM. Researcher at the Center for Studies and Research in Law and Internet at UFSM (CEPEDI/UFSM), registered on the CNPq research platform. Member of the technical team of the Electronic Journal of the Law Course at UFSM.

**** Master's student in Law at the Federal University of Santa Maria (PPGD/UFSM) in the research line Rights of the Network Society: actors, factors and process in globalization; Specialist in Public Law from the University of Caxias do Sul (UCS) in partnership with the Superior School of Federal Magistracy of Rio Grande do Sul (ESMAFE); Bachelor of Laws from the Franciscan University (UFN); Researcher at the Center for Information Law (NUDI) of the Federal University of Santa Maria (UFSM) in the project Permanent Observatory of Hate Speech on the Internet, under the coordination of Prof. Dr. Rosane Leal da Silva.

Keywords: regulated self-regulation; internet damage; digital platforms; application providers; Bill of Freedom; responsibility and transparency on the internet.

Resumo

Diante de um cenário em que as plataformas digitais são palco de propagação de conteúdo danoso, bem como que seu modelo de negócio promove a geração de lucro a partir de publicações de usuários, emerge o debate sobre uma nova responsabilização de provedores de aplicação. Dessa forma, o trabalho objetiva estudar a proposta de autorregulação regulada presente no Projeto de Lei de Liberdade, Responsabilidade e Transparência na Internet, questionando: o modelo da autorregulação regulada é suficiente para conter o problema da propagação de conteúdo nocivo nas plataformas? Pela abordagem hipotético-dedutiva e pelos métodos de procedimento funcionalista e comparativo, o artigo propõe-se a compreender a dinâmica que ocorre nas plataformas e realiza uma comparação entre as recomendações feitas pelo Comitê Gestor da Internet no Brasil (CGI) e o Projeto de Lei, a fim de compreender se os problemas podem ser endereçados pela previsão legal, bem como se as diretrizes do CGI foram observadas - tudo a partir das técnicas de pesquisa bibliográfica e documental. Conclui-se que o modelo de autorregulação regulada é parcialmente suficiente para responder à propagação do conteúdo nocivo e que o Projeto de Lei não enfrenta questões importantes, bem como, em outros aspectos, pouco acrescentou do que já havia previsão legal. Existem, ainda, discrepâncias quanto ao entendimento do CGI e o texto final do Projeto de Lei e, algumas indicações estabelecidas pelo Comitê inicialmente atendidas pelo projeto foram retiradas após debate parlamentar.

Palavras-chave: *autorregulação regulada; danos na internet; plataformas digitais; provedores de aplicação; Projeto de Lei de Liberdade, Responsabilidade e Transparência na Internet.*

Resumen

Ante un escenario en el que las plataformas digitales son escena de propagación de contenido dañoso, y también que su modelo de negocio promueve la generación de lucro a partir de publicaciones de usuarios, surge el debate sobre una nueva responsabilización de proveedores de aplicación. De esta forma, el trabajo objetiva estudiar la propuesta de autorregulación regulada presente en el Proyecto de Ley de Libertad, Responsabilidad y Transparencia en Internet, cuestionando: ¿El modelo de autorregulación regulada es suficiente para contener el problema de la propagación de contenido nocivo en las plataformas? Por el enfoque hipotético-deductivo y por los métodos de procedimiento funcionalista y comparativo, el artículo se propone a comprender la dinámica que ocurre en las plataformas y realiza una comparación entre las recomendaciones hechas por el Comité Gestor de Internet en Brasil (CGI) y el Proyecto de Ley, con el objetivo de comprender si los problemas pueden ser enderezados por la previsión legal, como también si las directrices del CGI fueron observadas – todo a partir de las técnicas de investigación bibliográfica y documental. S e concluye que el modelo de autorregulación regulada es parcialmente suficiente para contestar a la propagación del contenido nocivo y que el Proyecto de Ley no enfrenta cuestiones importantes, como también, en otros aspectos, poco agregó a lo que ya tenía previsión legal. Existen, aún, discrepancias cuanto al entendimiento del CGI y el texto final del Proyecto de Ley y algunas indicaciones establecidas por el Comité inicialmente atendidas por el proyecto fueron retiradas pasado el debate parlamentar.

Palabras clave: *autorregulación regulada; daños en internet; plataformas digitales; proveedores de aplicación; Proyecto de Ley de Libertad; responsabilidad y transparencia en internet.*

1 Introduction

The phenomenon of platformization refers to the increase in the performance of activities of daily life through digital platforms, which, especially after the advent of Web 2.0 - when users became producers of information within the network itself - became protagonists in providing a structure on which interactions between people and other institutions take place. This event also concerns the power, concentrated in a few technology companies, to elaborate the algorithmic rules that form the foundation of a large part of the world wide web and manage the social, political, and economic relations and dynamics of these virtual spaces (Van Dijck; Poell; De Waal, 2018).

The intense informational flows that occur in these environments give way for problems that exist outside the internet[1] - such as the propagation of harmful content - to exist in increasing numbers within these digital networks. The great difference that the internet carries as a place of manifestation of these thoughts is marked, especially, because the rapid propagation of information on the network causes harmful content to spread and reach a large number of people, which ends up increasing the harmfulness of the conducts.

In recent decades, in Brazil, digital platforms have been the stage for the propagation of hate speech, disinformation, the planning of violent attacks in schools, the articulation of anti-democratic acts and other manifestations harmful to society and the State. This also raises questions about the possibility of repression of these activities by the platforms where such messages circulate, as well as a possible liability of application providers for the content they host and that propagates on them. It is in this context that proposals regulating the activities of digital platforms have emerged in the Brazilian legislative scenario, as is the case of Bill 2630/2020, which, to date, is being processed in the Chamber of Deputies and has had great repercussions, both among experts and in the social environment. This bill proposes the institution of the Law on Freedom, Responsibility and Transparency on the Internet, suggesting a model of regulated self-regulation to attribute responsibility to platforms for certain content that is broadcast on them. Thus, in view of the problem of the amplification of harmful content within digital platforms, the unique dynamics of the functioning of these environments, as well as the emergence of normative projects that aim to regulate platforms in Brazil, the question arises: would the regulated self-regulation model be sufficient to curb the problem of the spread of harmful content on platforms?

To answer the proposed research problem, the present work uses the hypothetical-deductive approach method, based on previous knowledge on the subject, which is falsified by testing the following hypotheses: a) the regulated self-regulation model is sufficient to contain the problem of the spread of harmful content on digital platforms; b) the model is partially sufficient to respond to the spread of harmful content, as it will not hold platforms adequately accountable; c) the model is insufficient to contain this problem. To this end, two methods of procedure are combined. The functionalist procedure method is used, in order to identify the role of digital platforms in the social, economic and political relations that permeate their use and elaboration, and the comparative method, from which the contrast will be made between the Bill of Law on Freedom, Responsibility and Transparency on the Internet[2]3 and the report of Actions and Guidelines for the Regulation of Digital Platforms in Brazil, held by the Brazilian Internet Steering Committee (CGI). The choice to compare it to the report

[1] The present work will use the term internet as a synonym for the World Wide Web.

[2] The last version available up to the date of preparation of this article was used, which is a Preliminary Plenary Opinion, dated April 27, 2023, whose rapporteur is Orlando Silva, which has 90 attached bills.

prepared by the CGI in 2022 is based on the Committee's national notoriety in establishing strategies related to the use and development of the Internet in Brazil. Finally, the research techniques employed are documentary and bibliographic, through the study of books, articles, documents, standards and reports related to digital platforms and the creation, dissemination and hosting of harmful content on the internet, as well as the functioning of these digital tools. The work uses as a theoretical framework the works of Pasquale about the automated public sphere and the functioning of digital platforms; Van Dijck, Poell and De Waal on platformization and the relations that result from it; as well as the concept and developments of a surveillance capitalism proposed by Zuboff, with the objective of providing theoretical subsidies for the construction of the research.

Based on these methodological choices, the article is divided into two parts. First, it proposes to understand the problems and dynamics that occur on the platforms and how the existing regulation, with a focus on the Brazilian one, deals with the theme. Next, the second part addresses the regulatory propositions brought by Bill 2630/2020 regarding regulated self-regulation and the responsibility of digital platforms, comparing it with the proposal made by the CGI report, which brings a set of actions and guidelines for the regulation of platforms in Brazil, verifying the alignment between the Committee's recommendations and possible national legislative practice.

2 Digital platforms: operating dynamics, harmful interactions and regulation

As in the physical environment, the internet is also a space where activities that violate rights occur, especially from harmful manifestations by users of digital platforms - such as hate speech, *bullying*, misinformation, discrimination, encouragement of violence and offenses to honor, dignity, privacy and image. The main difference in relation to the effects of the practice done by virtual means is that the extent of the damage is maximized due to the speed and ease of transmission and storage of such content, to which is added the possible difficulty in identifying the offender. For these reasons, it becomes very costly to fully repair the damage that occurred in this environment, in addition to the risk that the judicial response granted will be unsatisfactory to the victim, since it will always arrive late. In other words, the phenomenon that occurs online generates an "extraordinary expansion of the harmful potential of each individual", and the confrontation of the theme requires a differentiated approach on the part of the law, which is aware of the peculiarities of this conjuncture (Teffé, 2015, p. 4).

In order to be a guiding norm for judicial decisions involving conflicts on the internet, Law No. 12,965/2014 was published, called the Civil Rights Framework for the Internet (MCI), which has as its axiological tripod the values of net neutrality, non-imputability, privacy, and freedom of expression (Teffé, 2015; Brazil, 2014). Based on the need to regulate

the insertion of harmful content and the creation of fake profiles on digital social networks that may cause damage to another person, the rule deals, between articles 19 and 21, with the civil liability of the internet application provider for damages arising from content inserted by a third party. (Brazil, 2014). It should be noted that this responsibility of the platform concerns the unavailability of the content, since, if the author of the violation is identified, he will be held directly and personally liable in accordance with articles 186, 187 and 927 of the Civil Code (Teffé, 2015).

Article 19 of the MCI provides that the civil liability of the internet application provider resulting from damage caused by content produced by third parties may only occur if it fails to comply with a specific court order to remove the information (BRASIL, 2014). That is, the platform is not obliged to remove information published by third parties, except when provoked by the Judiciary to do so, and will only be held liable for the damage if it does not comply with the court order. The liability of the application provider is therefore not objective; in fact, joint and several liability will only occur from the judicial notification for the withdrawal of the publication, being of the subjective type (Responsabilidade [...], 2020).

On the other hand, it is perceived that the need to choose the judicial route to solve the problem may be unfavorable to the victim. Knowing that the judgment of lawsuits is slow, the speed of transmission of information over the internet would have already spread the damage to unimaginable dimensions. Still, in more serious situations, such as when there is a violation of the right to privacy, the delay in removing the content is capable of making it impossible to fully repair the damage (Teffé, 2015). Thus, it is noted that the disposition of the MCI is in a certain mismatch with some of the characteristics inherent to the propagation of information through the world wide web.

While the rule is the one in force in article 19, conditioning liability to inertia in the face of a court order, article 21 holds the provider liable after failure to comply with a simple extrajudicial notification if the platform makes available content, generated by third parties, related to the non-consensual dissemination of materials containing nude scenes or sexual acts of a private nature, that violates the right to intimacy (Brasil, 2014). In this bias, in order to carry out more detailed protection of privacy and sexual dignity, it is established that the violation of these rights must be ceased more quickly than in other cases, with the manifestation of the victim or her legal representative, without the need to resort to the Judiciary.

The majority understanding is that application providers do not have strict liability for third-party content, which is supported by an alien rule, based on *Section 230* of the *Communications Decency Act* of the United States, which provides that platforms cannot be compared to publishers (*publishers*) in relation to content produced by third parties. In view of this interpretation clearly favorable to providers, there would be no duty to monitor and select in advance what is published in their domain. This foreign rule was fundamental in the context

of the creation and expansion of the internet, as it allowed for innovation and rapid interaction between users of the platforms, since it did not require the exercise of prior control by the platforms over all material produced and published there. Even today, this characteristic promotes dynamism and instantaneity to information shared on the network, also reinforcing freedom of expression. It should be noted that the US rule is very important, as the companies that control the largest platforms used in Brazil and in the world originate from the United States: Amazon, Apple, Alphabet (Google), Meta (Facebook and Instagram) and Microsoft. Together, they control most of the traffic on the world wide web, offering varied services, including to other companies and institutions (Teffé, 2015; Van Dijck; Poell; De Waal, 2018).

However, in the second decade of the twenty-first century, there was a phenomenon of gigantic reach and power of the platforms, which remained in expansion and practically immune to regulation, without obstacles offered by the rule that exempted them from liability. In this lean period, large companies in the digital sector are no longer just *startups*, as they were when the rule was implemented, and have become significant social actors, boasting unprecedented power in managing the flow of information around the world. For Van Dijck, Poell and De Waal (2018), these companies are private in nature, but they have government-level responsibilities when it comes to obtaining public value from their activities. Therefore, they cannot continue to act with exemption from responsibility, which points to the need for legislative production that takes into account the complexities of its functioning and the defense of human rights and democracy itself. When reflecting on the subject, Teffé (2015) alludes to the understanding of the Superior Court of Justice, in which the need for providers to assume the risk for the service provided was recognized, that is, they would have a real social burden of ensuring the security of the service offered.

The interpretation given to article 19 of the MCI needs to be consistent with Brazilian legislation, its principles and values, especially with regard to the promotion of human dignity and consumer protection, constitutional promises. From this stems the understanding that providers, as suppliers, must also be reached by the movement to constitutionalize the right, which makes the interpretation that exempts them from any social responsibility unacceptable.

It is argued that the provision in question does not prevent content removals from being made by the provider, which does so when the content violates its terms of use and, also, in compliance with extrajudicial notifications (Teffé, 2015). From there, it can be seen that the terms of use of the platforms play an important role in the management of the content that remains and is shared.

The terms of use or service, together with the privacy policy, are the contracts that establish the rules of relationship between users and internet application providers. In addition, there are the community guidelines of certain platforms, in particular social networks, which

concern the standard of behavior expected by the company for the coexistence between online users, as well as the content published on the network. The user's consent to these documents - which are drafted unilaterally by the platforms themselves and are usually full of extensive clauses - is expressed by clicking on a simple checkbox, so that it is customary for them not to be read by users at the time of registration on the platform.

These rules of use also serve to establish limits on the privacy of users, as well as the powers of the platform in the relationships established therein. In view of these characteristics, it is clear that the system of rules that is established serves business purposes established by the companies, many of which are not explicit to the user who completes the task of carefully reading the clauses of the adhesion contract (Zuboff, 2020; Van Dijck; Poell; De Waal, 2018).

With the phenomenon of platformization, the social, political, and economic relations that take place in the physical world were not simply transported to the virtual environment. The means and the tools through which they manifest themselves are provided by private companies that, based on their algorithms, have the power to decide on the way in which this participation will be made possible. If, at first, they presented themselves as impartial transmitters of information, the customization of the service by directing content ended such neutrality (Van Dijck, 2013).

It is thus possible to interpret digital platforms as channels of expression that have value and public function, but whose guidelines are not democratically established - since the user is not allowed to deliberate on the terms of use contract, nor is it possible to give an opinion on how this platform will be operationalized. This means that it is a space that plays an important role as a channel for participation in life in society, but that it does not have democratic tools for its functioning (Pasquale, 2015). In the same sense, the algorithmization and filtering of content on these digital platforms "submit[s] pluralism and the democratic functions of public discourse to market interests, automating the public sphere" (Pasquale, 2017, p. 18). It is worth saying that the public value of political manifestation and social expression that the platforms carry is superimposed by the rules of an essentially advertising and commercial environment, whose freedom of information and expression is conditioned to compliance with economic rules and the profit that the discourse will generate for the platform, which occurs from the engagement of other Internet users.

This interest is evident considering that the main source of revenue for these platforms, especially social networks, comes from the advertising served. Thus, certain content has its reach expanded by monetary investment, and is, in most cases, inserted among the organic content, that is, those that the application provider's users expected to receive from their subscriptions. From profiling, that is, the creation of an individual profile of users through the collection of personal data, it is possible to predict the possible behavior of each person. This makes it possible to

target ads to the audience that is most likely to join it from their profile, and thus maximizes profits for platforms and advertisers (Zuboff, 2020).

Much of this data regarding the users in which profiling is done is collected from metadata, which is contextual data of other information. Thus, data about the device through which the communication was sent, time, location, IP address, content playback time, among many other characteristics about the environment and the conditions of production of information are collected and processed by the agent. It is the metadata, therefore, that allows the large-scale analysis of the behavior trend of a significant number of people (Menezes Neto; Moral; Bezerra, 2017).

Another way to generate income through the platforms is to make the user stay connected as long as possible, because in this way, they will be consuming more ads. It is known that content that generates negative emotions has a high engagement power, which not only keeps users hooked to the platform but also generates shares and greater reach. For this reason, harmful content, such as misinformation and hate speech, economically benefits the platforms, as they acquire popularity - in addition to the fact that they can be driven by advertising themselves. In this way, platforms cannot exempt themselves from full responsibility for third-party content, as they obtain benefits from targeted ads and content that generates engagement hosted by it (Zuboff, 2020; Pasquale, 2017; Pasquale, 2016; Empoli, 2019). In addition, another problem to be faced is the dissemination of information by automated accounts.

The incessant flow of information is taken advantage of, so that, through *bots*, the coherence of the data received by users on the network is further scrambled. This is capable of influencing thoughts, simulating an organic engagement of certain subjects, which can inflate opinions and campaigns; also, under anonymity, to propagate offenses, externalize harassment and carry out online persecutions. Even the most benign bots, which only serve to automate harmless actions, can contribute to misinformation, as they are accounts not verified by humans, which are susceptible to spreading incorrect information (Barbosa, 2018).

In view of this scenario in which the architecture of the platforms favors the dissemination of content that is harmful to fundamental values, such as privacy, freedom of information, and human dignity, there is a need to study legal mechanisms and strategies to prevent, mitigate, or contain the damage generated in this environment. To this end, even if there is no duty to monitor content on the part of the platforms - which could serve to carry out this prevention - it is necessary to pay attention to the harmful potential of the relationship between platforms and users, so that "it cannot be admitted that this private agent receives complete immunity and is never the holder of obligations or held responsible for any damages that may occur, directly or indirectly, in the activity he performs" (Teffé, 2015, p. 14).

With the emergence of the theme in recent years, legislative initiatives have been presented with the objective of overcoming the problems derived from the unrestrained

application of the principle of non-imputability of the network, which is part of the MCI. It is about these initiatives that the next section is about, which addresses the model proposed by Bill 2630/2020, comparing it with the guidelines suggested by the Internet Steering Committee in Brazil for the treatment of the subject.

3 Model of "regulated self-regulation" to combat the spread of harmful content: comparison with the guidelines of the Internet Steering Committee

In order to test the hypothetical propositions chosen in this research, which have a certain feasibility to respond to the scientific problem object of this study, we will compare the provisions of Bill 2630/2020 with the report containing actions and guidelines for the regulation of digital platforms in Brazil, carried out by the Brazilian Internet Steering Committee (CGI). This method of procedure was defined in order to, through comparison, falsify the hypotheses in order to prove them or not.

The CGI.br report and PL 2630/2020 have provisions on several types of issues. In order to synthesize the information and also focus on the proposed research axis, which is the accountability of platforms for hosting and propagating harmful content and regulated self-regulation, a comparison was made about the items in which the CGI.br report and PL 2630/2020 dealt with the object of the work (Brasil, 2020; CGI, 2022). In the first analysis, in order to understand the propositions and the purpose for which the Bill of Law on Freedom, Responsibility and Transparency on the Internet is intended, it is necessary to analyze the time lapse and the political moment-in which this legislative text was proposed. The project is the result of discussions about the need to provide punishments for the spread of false and misleading information that was about to degrade Brazilian democracy. This debate reached the Legislative Branch as a result of a sum of conditions established in a *sui generis* Brazilian social context. This is a moment when there was a surge of disinformation from the electoral process of 2018, as well as, in the following years, growth of disinformation related to the Covid-19 pandemic.

Based on this, the Bill dealt with regulating the behavior of digital platforms in the face of harmful content hosted and propagated in these virtual environments. As for the scope of application of the proposal, once approved, it will focus mainly on social networks, search engines, indexers, video platforms, and messaging services with more than 10 million users (Brasil, 2023a, p. 64).

During the processing of the Bill, the text initially filed underwent several interventions from numerous sectors. In June 2020, it was approved by the Federal Senate, being voted on only in April 2023 and approved the urgency regime in the Chamber of Deputies for analysis of the matter in plenary. During this period, it was modified and analyzed by the working group of the

Chamber of Deputies, where technical and deliberative meetings were held in person and remotely, as well as public hearings with the participation of several experts in the field (Brasil, 2023b).

The most recent text, which was filed in the opinion of rapporteur Orlando Silva, deals, in essence, with the transparency of providers in relation to their activities with the user, the establishment of criteria for the moderation and recommendation of content made by the platforms and the identification of advertising content. The Bill also aims to encourage the maintenance of a virtual environment free of harassment and discrimination (Brasil, 2023a).

With regard to the regulation of platforms on harmful content, the bill provides for civil and joint liability for the repair of damages caused in cases of content that are related to advertising on digital platforms. It is observed that there will only be this type of liability for content related to advertisements published on the platform; that is, it does not cover content created by the user, and as for these, the responsibility of the platforms will only occur when there is a breach of the duty of care (Brasil, 2023a).

In Section II of Chapter II, the Bill establishes that "providers must diligently identify, analyze, and assess the systemic risks arising from the design or operation of their services and their related systems" (Brasil, 2023a, p. 70). That is, the platforms must act in order to prevent the probable damage, being responsible for preparing their own risk assessment reports annually and adopting measures to mitigate the dangers. This systemic risk assessment should consider guidelines set out in regulations, which will also define the conditions and periods for platform companies to submit their reports. Failure to comply with the obligations to analyze and mitigate these risks may give rise to administrative liability, as provided for in article 6 (Brasil, 2023a).

> It is important to say that there is no clear definition in the text of the Bill for the expression "systemic risks"; however, it is known that this phrase originates from the financial sector and is very present in the *Digital Services Act* (DSA), a European Union regulation that strongly influenced the drafting of the Bill, as described in the bill report. Therefore, it is perceived that the aforementioned systemic risks are those arising from the business model of the platforms, which leads the focus to the social and economic dangers linked to the nature of the service provided by these digital companies (Campos; Saints; Oliveira, 2023). The DSA includes four main categories of systemic risk analysis, which are informed and replicated in the Bill, in article 7, paragraph 2, which adds and specifies a fifth factor of attention:
>
> I – the dissemination of illegal content within the scope of the services in accordance with the caput of article 11;
>
> II – the guarantee and promotion of the right to freedom of expression, information and the press and the
>
> media pluralism;
>
> III – relating to violence against women, racism, the protection of public health, children and adolescents, the elderly, and those with serious negative consequences for the physical and mental well-being of the

> person;
> IV – the democratic rule of law and the integrity of the electoral process; and
> V - the effects of illegal or abusive discrimination as a result of the use of sensitive personal data or disproportionate impacts due to personal characteristics (Brasil, 2023a, p. 70-71).

In this sense, when there is an imminence of systemic risks, negligence or insufficiency of the provider's action, by means of a reasoned decision, a "security protocol may be established for a period of up to 30 days, without prejudice to other applicable legal measures, a procedure of an administrative nature whose stages and objectives must be subject to regulation" (Brasil, 2023a, p. 74). When conducting its risk assessment, the provider should consider factors such as the *design* of the recommendation systems and any other relevant algorithmic systems (such as content moderation systems), terms of use, and the impact of malicious and intentional manipulation of the information. In the event of the existence of any of these factors, providers will take reasonable,[3]4 sufficient and effective measures to reduce systemic risks and adjust their obligations. These measures, if taken by automated tools, should have human supervision and verification to ensure accuracy, proportionality and non-discrimination on the part of the digital platform. In addition, to ensure the supervision of the actions of providers, digital platforms must grant access to data that contributes to the detection, identification, and understanding of systemic risks whenever requested (Brasil, 2023a, p. 48).

The CGI adduces that the impacts of the use of algorithmic systems in content moderation are severe, since they permeate "issues of racism, discrimination, increased polarization, extreme speech, hate speech, racial *washing*, among others". When programming both the algorithms and the *design* of the platforms, it is stated that it is necessary to encourage exposure to a diversity of content in general (CGI, 2022, p. 15). This indispensable plurality highlights the importance of the programming professionals who have the power to develop these systems to have the most diverse profiles, which is capable of introducing new worldviews for the elaboration of these platforms, as well as providing the identification of hidden biases for the group that programs. The lack of diversification of the technical team is directly linked to the question of who occupies the spaces of power, knowledge construction and production in the area of technology, which still reproduces historical ills of exclusion of social minorities - who are predominantly the most affected by the systemic risks arising from algorithms.

When investigating the text filed in the rapporteur's opinion, it is possible to observe

[3] It should be noted that the law also does not define what is meant by "reasonable measures", leaving it up to the application provider to assess what would be reasonable or not. It is therefore possible that this opening of the legal wording will lead to subsequent problems, opening up the debate on what behavior would be reasonably expected of the provider in the circumstances.

that the bill does not address some essential problems for the protection of users with regard to harmful content. The liability regime for harmful content established by the Brazilian Civil Rights Framework for the Internet remains the same, and, although transparency regarding the criteria for moderation and recommendation of content is one of the objectives of the bill, it does not define concrete measures regarding the behavior that should be adopted by platforms (Brasil, 2023a).

Such a position is in line with the first guideline established by the CGI.br which defines the need for a "clear delimitation of the responsibilities of those involved, as well as the maintenance of continuous and systematic assessment of the impacts of their activities" (CGI, 2022, p. 7). Furthermore, there is no need to speak of the absence of responsibility of the platforms in relation to the content posted on it, so it is necessary to discuss the separation between curatorship and hosting[4]5, as well as to clarify whether the model of civil liability of intermediaries, established by the MCI - and basically ratified by the Bill - would be sufficient to contain the spread of harmful content (CGI, 2022).

In the case of third-party content moderation, carried out by digital platforms, transparency is an attribute that protects everyone involved in this relationship. This is because transparency would act as part of a process of accountability to other sectors where the disclosure of information will occur that allows verifying whether or not there are irregularities on the part of digital platforms in the moderation of online content (Almeida, 2022).

It is necessary to consider that content moderation is mostly done by automated systems based on users' behavioral data. Thus, legislative and state action can be understood as a tool to reduce the informational asymmetry between platforms and users, aggravated by the concentration of economic and political power of these powerful global actors, which are companies in the technology segment (Almeida, 2022).

As for the responsibility of platforms for illegal content, the Bill does not establish specific criteria for liability, including for moderation or removal of illegal content; it only obliges to notify and justify the decision to the user who had the content removed (Brasil, 2023a, p.

[4] In a broad sense, unlike hosting, content curation refers to the process of systematizing and making sense of the information that the users of that network are producing. The curator will continuously locate, collate, organize, and share the best and most relevant online content on a specific subject. The curation of information in digital environments occurs, for the most part, through an automatic procedure of recommendation algorithms that use information filters, which enable the construction of profiles of interest (Bassani; Magnus, 2020). In a simplified way, the distinction between mere hosting and curation is because, in the former, the platform would only store the information, while in the latter, it would be responsible for making a prior analysis of the published content before storing and making it available. To make an analogy, one can compare mere lodging to the function of a bookstore and curatorship to the function of a media company, such as a newspaper. When the debate about the accountability of platforms for the content published on them began to emerge in the 1990s, the rule that guided the treatment of these companies was the *Section 230* of the US Congress, which established that platforms could not be compared to media companies, that is, they could not be held responsible for third-party content, as already discussed in the previous section. This understanding was replicated both in European directives and in Brazil, contained in article 19 of the Civil Rights Framework for the Internet.

76-78). This legal provision is on par with the existing provision in the MCI, which determines that, when requested by the user, the platform must replace the content made unavailable by the motivation or court order that caused the unavailability (Brasil, 2014). Thus, it appears that the Bill does not bring innovation or a clearer and more forceful position of the Legislative Branch in the sense of delimiting the behavior of platforms in the face of harmful content, which causes concern because the project, if approved, will serve as mere guidance and, it seems, with little coercive power over the performance of the platforms.

In addition, the Bill also does not establish redress measures for users who have been harmed by inadequate content moderation[5].[6] In this regard, the CGI opines on the importance of defining criteria for reparation proportional to the damage caused by this content moderation and that "the challenges of establishing sanctions related to the right of reply should be considered, given the technical difficulty of establishing the damage in relation to traditional media" (CGI, 2022, p. 23). Furthermore, it is important to think that the damages can reach the collectivity and the very bases that sustain the Democratic Rule of Law, which certainly goes beyond any individual damages.

Another problem concerns the lack of discussion regarding the treatment that platforms should provide to metadata. This is an issue that permeates the debate about effective data protection on the internet. The lack of metadata protection makes the user more vulnerable to the violation of their privacy, as the crossing of this information reveals behavioral patterns that enable accurate profiling, which escapes the consent and knowledge of the citizen, and which shapes the content and ads they will receive when using the platform (Menezes Neto; Moral; Bezerra, 2017).

The debate about a model of regulation of digital platforms that is adequate to the complexities of the network society "involves the challenge of conceiving new forms of accountability of platforms, taking care not to generate excessive filtering that affects freedom of expression"[6] (Lima; Valente, 2020, p. 6). The regulatory model proposed in the Brazilian Bill received the nomenclature of "regulated self-regulation", including this term being the title of

[5] It should be said that, regardless of the lack of provision for particularities regarding reparatory measures by the Bill, reparation is due, and it is even established in the Civil Rights Framework for the Internet that one of the principles that govern the use of the Internet in Brazil is the accountability of agents according to their activities, under the terms of the law (Brasil, 2014). Thus, having the platform acted inappropriately in content moderation, it is subject, based on current legislation, to be held liable for any damage, as it is a service provider in the information supply chain.

[6] In general, in self-regulation (private regulation), the platform defines its guidelines based on its social responsibility. In a comparison with regard to the self-regulation of social communication, this takes place through a voluntary process where those involved control their activities in order to ensure that they are in accordance with ethical values. In heteroregulation (public regulation), there is a set of agreed duties and obligations through which the State determines, controls or influences the behavior of those regulated (Cabral, 2011, p. 39-40). With regard to the forms of liability, in the strict sense, the intermediaries of the communication relationship (which, in this case, would be the platforms) are responsible for the content of third parties, and must always monitor users to avoid sanctions. In conditional freedom, there is a responsibility, but it is partial. It can be seen that the Brazilian Bill tried to carry out a combination of these two models in order to achieve what it called "regulated self-regulation".

Chapter V of the initial legislative proposition (Brasil, 2020). However, this term was deleted from the final version attached to the opinion of rapporteur Orlando Silva after a parliamentary debate that discussed the effectiveness of a regulated self-regulation model in the face of the indifference of digital platforms.

Although the expression has been removed in literal form, its contours continue to be part of the essence of the bill. This is because the debate that permeated the creation of the legal provisions was based on this model of regulated self-regulation, which was initially proposed by Germany by NetzDG (Brasil, 2023a). At various times, the German law influences the Bill, for example, in the provision that the new legislation does not affect journalistic companies and that it applies only to platforms with more than 2 million users in the country. The current version of the Bill also follows the example of the NetzDG in providing for the possibility of fines for companies in case of non-compliance with the legislation and also by obliging them to produce quarterly transparency reports (Schreiber, 2020).

However, it is possible to see that with regard to sanctions imposed on platforms, there is a mitigation by the PL compared to NetzDG. The text approved in the Senate does not oblige companies to delete posts for their content, it only determines that they must deactivate inauthentic accounts. Unlike German law, PL 2630/2020 does not establish a deadline for the deletion of inauthentic and automated accounts. According to the Bill, these issues may be established in infra-legal norms that will establish the rules and guidelines for the application of the law (Schreiber, 2020)[7]8.

Still on the management power of platforms, when analyzing the proposed law, it is observed that, despite being limited, private entities have the possibility of editing their own rules. In short, they are little different from the terms of use already used by digital platforms to guide (and shield) their behavior in the face of harmful content hosted and propagated by them.

According to the proposal of the Bill, there would be a shared responsibility between the public and private entities. It turns out that this action strategy would only be effective if the public entity could guarantee compliance with this "gentlemen's agreement". When studying the articles of the Bill that provide for responsibilities and sanctions to digital platforms and, in theory, support the actions of the public authorities, they are insufficient to enable forceful state action when this relationship between public and private conflicts.

For the viability of state action, there must be an inspection of the effectiveness of the regulations, which must occur through an independent regulatory body. Regarding this point, it can be seen that in the original text there was a provision for the creation of a "Council

[7] It is understood as a weakness of the project the omission regarding the exclusion period, which should be better debated, as the rapid dissemination of content may cause a significant number of users to be reached. Even if the platform removes the content later, by doing so, the publication with misinformation will have already achieved its objective, so the lack of temporal precision leaves a very wide margin of action for the platforms.

for Transparency and Accountability on the Internet", with elected members, endowed with autonomy and with multisectoral representation, which, after parliamentary debate, was suppressed from the final text (Brasil, 2020). Such suppression proves to be a loss for society and institutions, as it prevents the establishment of democratic governance of the sector, keeping power in the hands of the internet giants.

Although there is no longer such a provision, the Internet Steering Committee was given several attributions to carry out studies, opinions, presentation of guidelines, and analysis of providers' systemic risk assessment reports (Brasil, 2023a). It is noted that it is foreseen that the Committee will act as a control and monitoring assistant, but without the prerogatives of the council described above and, as it turns out, emptying the possibility of more effective regulation and application of sanctions. This need for an independent regulatory body was even discussed and proposed by the CGI.br itself in the third action defined by the Committee in its report (CGI, 2022), but it is clear that, when the issue reaches Parliament, the pressure and lobbying of the platforms speak louder.

Regarding the effectiveness of a legal regulatory framework, it is necessary to understand that "regulation cannot be seen as an end in itself, but as an instrument to favor and provide security to interactions in cyberspace" (Silva, 2012, p. 300). The provision of a Council that would monitor the transience of virtual demands could be an effective instrument in order to mitigate the difficulties that the legal system has in ensuring the effectiveness of online rights. In this sense, "thinking about a Law for the Internet requires, preliminarily, escaping the trap of transposing traditional legal models to the scope of the informational society" (Silva, 2012, p. 297). According to Ana Frazão (2018, p. 658), when looking into the controversy of the legal regulation of digital platforms,

It is necessary to understand that they should not be subject to the traditional rules, but, on the other hand, they cannot be immune to the legislation either. For this reason, "it is necessary to find a regulatory alternative that makes it possible to stimulate innovation, while preserving the consistency of sectoral regulation and the important interests protected by the areas of hard regulation" (Frazão, 2018, p. 654). Therefore, the need for a specific control of internet application providers is understood, which must be compatible with the needs that emerge from the virtual environment.

4 Conclusion

From the above, it was possible to understand the proposals of Bill No. 2,630 of 2020, which establishes the Law on Freedom, Responsibility and Transparency on the Internet, and which suggests a model of regulated self-regulation for the accountability of digital platforms regarding the creation, propagation and hosting of harmful content. To achieve an

understanding of this theme, two specific objectives were established. The first is to identify the role of digital platforms in the social, economic and political relations that permeate their use and elaboration. It was noticed that an environment devoid of accountability for third-party content allowed the rapid development of network interaction and the business model of platforms at the beginning of the century, and that it was on this global regulatory absence that a select group of companies in the digital sector became gigantic. These use the personal data and metadata produced by user content to target ads and publications, which aims to generate profit for the company from the monetization of content - including those that are harmful. As for the legal provisions in Brazil, the Civil Rights Framework for the Internet (MCI) provides that, as a rule, the platform will be held liable for the damage caused by third-party content only if it fails to comply with a judicial notice of content removal.

After concentrating the knowledge about digital platforms and harmful content, this research used the comparative method, which met the second specific objective: to verify whether the guidelines on the responsibility of digital platforms proposed by the Internet Steering Committee (CGI) are contemplated by the Bill on Freedom, Responsibility and Transparency on the Internet. It was observed that the lack of understanding of information and communication technologies (ICTs) generates negative consequences for the laws that exist, also reflecting negatively on the proposals in progress. It was noted that the Bill does not address important issues for the preservation of rights on the internet, such as the regulation of the use of metadata by digital platforms. In other aspects, it added little to what was already provided for by law, limiting itself to repeating aspects already provided for in the MCI. The Legislative Branch should act forcefully in safeguarding the rights of users and democratic institutions (both at risk in disinformation processes), which both involves vigilant action regarding the effectiveness of existing laws, and requires greater diligence in the forwarding of new bills.

It was also found that there are discrepancies regarding the understanding of the CGI and the final text of the Bill placed for approval in the opinion of the rapporteur Orlando Silva. Important guidelines and actions established by the Committee had been met by the original text of the Bill, however, they were suppressed from the final text after parliamentary debate.

From the falsification of the hypotheses initially elaborated, it is possible to answer the research problem by finding that the regulated self-regulation model, proposed by PL 2630/2020, is partially sufficient to respond to the spread of harmful content. This is because, despite dealing with certain important issues for the fight against harmful content, it fails to address sensitive issues that need legislative force for their improvement, such as the creation of a regulatory body, or the more defined demarcation regarding the responsibility of digital platforms.

In line with the examples listed by the revision of the doctrine on the subject, it is

clear that a singular look and cooperation between the powers are needed to regulate the behavior of digital platforms. The demands and complex problems arising from the digital environment need to be faced with new responses, in addition to those traditionally offered and that honor the broad freedom of action and reinforce the irresponsibility of the platforms. The risks that the spread of disinformation generates for individual and collective rights and democracy itself must be taken into account, which points to the need to create a multisectoral governance model, which allows the representation of the various interests in tension, otherwise the new legislation under preparation will reproduce the vices of the MCI, giving a merely symbolic response that will not contain the power of the platforms.

Last but not least, it is not enough to legislate on the subject, but mechanisms must be established for the analysis and monitoring of the performance of platforms by an independent body to be created, measures without which any attempt to hold platforms accountable will remain innocuous.

References

ALMEIDA, Clara Leitão de. **Regulation of transparency on digital platforms and legitimacy in content moderation.** 2022. 134 f. Dissertation (Master's Degree in Law) - Rio de Janeiro Law School, Fundação Getúlio Vargas, Rio de Janeiro, 2022. Available at: https://hdl.handle.net/10438/32486. Accessed on: 19 Aug. 2023.

BASSANI, Patrícia B. Scherer; MAGNUS, Emanuele Biolo. Curating practices as learning activities in digital culture. *In:* SANTOS, Edméa O.; SAMPAIO, Fábio F.; PIMENTEL, Mariano (ed.). **Informatics in Education:** fundamentals and practices. Porto Alegre: Brazilian Computer Society, 2021. (Informatics in Education Series, v.1) Available at: https://ieducacao.ceie-br.org/curadoria. Accessed on: 15 Aug. 2023.

BARBOSA, Bruno Rafael Gueiros. **Social bots:** an analysis of the genesis and development of bots in social media. Recife: Bruno Gueiros, 2018. *Electronic book.*

BRAZIL. **Law No. 12,965, of April 23, 2014.** It establishes principles, guarantees, rights and duties for the use of the Internet in Brazil. Brasília: Diário Oficial da União, 2014. Available at: https://www.planalto.gov.br/ ccivil_03/_ato2011-2014/2014/lei/l12965.htm. Accessed on: June 26, 2023.

BRAZIL. **Bill No. 2630, of July 03, 2020.** Establishes the Brazilian Law on Freedom, Responsibility and Transparency on the Internet. Brasília: Chamber of Deputies, 2020. Available at: https://www.camara.leg.br/proposicoesWeb/prop_mostrarintegra?codteor=1909983. Accessed on: June 28, 2023.

BRAZIL. **Bill No. 2630, of 2020, and its appendices.** Establishes the Brazilian Law on Freedom, Responsibility and Transparency on the Internet. Preliminary Opinion of the Plenary of March 25. of 2023. Rapporteur: Deputy Orlando Silva. Brasília: Portal da Câmara dos Deputados Available at: https://www.camara.leg.br/proposicoesWeb/prop_mostrarintegra?codteor=2265334&filename=PRLP+1+%3D%3E+PL+2630/2020. Accessed on: June 28, 2023.

BRAZIL. Chamber of Deputies. *Homepage* of Bill PL 2630/2020 and its appendices. **Portal of the Chamber of Deputies,** Brasília, 2023b. Available at: https://www.camara.leg.br/propostas- legislative/2256735. Accessed on June 29, 2023.

BRAZILIAN INTERNET STEERING COMMITTEE - CGI. **Actions and Guidelines for the Regulation of Digital Platforms in Brazil**: report of the workshop held by the Platform Regulation WG. São Paulo: Internet Steering Committee in Brazil, 2022. Available at: https://www.cgi.br/media/docs/publicacoes/4/20230208141956/ Acoes_Diretrizes_Regulacao_Plataformas_Digitais_Brasil.pdf. Accessed on: June 29, 2023.

CABRAL, Hendery Manuel Mendes. **The regulation of the media: self-regulation or hetero-regulation?** 2011. 60 f. (Master's Degree in Law) - Faculty of Law, University of Porto, Porto, 2011. Available at: https:// repositorio-aberto.up.pt/bitstream/10216/84933/2/24840.pdf. Accessed on 19 Aug. 2023.

CAMPOS, Ricardo; SANTOS, Carolina Xavier. OLIVEIRA, Samuel Rodrigues de. Systemic risks in the Digital Services Act and its lessons for Brazil. **ConJur,** 7 mar. 2023. Available at: https://www.conjur.com.br/2023- mar-07/direito-digital-riscos-sistemicos-dsa-licoes-brasil. Accessed on: 15 Aug. 2023.

EMPOLI, Giuliano Da. **The engineers of chaos:** how *fake news*, conspiracy theories and algorithms They are being used to spread hatred, fear and influence elections. São Paulo: Vestigio, 2019.

FRAZÃO, Ana. Digital Platforms and the Challenges for Legal Regulation. *In:* PARENTONI, Leonardo. (coord.). **Law, Technology and Innovation.** Belo Horizonte: Editora D'Plácido, 2018. p. 635-665.

LIABILITY of application provider for offensive content does not depend on judicial notification. **Superior Court of Justice,** 4 Dec. 2020. Available at: https://www.stj.jus.br/sites/portalp/Paginas/ Comunicação/Notícias/04122020-Responsabilidade-de-provedor-de-aplicacao-por-conteúdo-offensive-independe-de-notificacao-judicial.aspx . Accessed on: June 29, 2023.

LIMA, Marcos Francisco Urupá Moraes de; VALENTE, Jonas Chagas Lucio. Regulation of digital platforms: mapping the international debate. **Liinc em Revista**, Rio de Janeiro, v. 16, n. 1, p. e5100, 2020. Available at: https://revista.ibict.br/liinc/article/view/5100/4650. Accessed on: June 29, 2023.

MENEZES NETO, Elias Jacob de; MORAIS, José Luis Bolzan de; BEZERRA, Tiago José de Souza Lima. The bill for the protection of personal data (PL 5276/2016) in the world of big data: the phenomenon of dataveillance in relation to the use of metadata and its impact on human rights. **Brazilian Journal of Public Policies,** Brasília, v. 7, n. 3, Dec/2017, ISSN 2236-1677. Available at: https://www.rel.uniceub.br/ RBPP/article/viewFile/4840/3636. Accessed on: June 29, 2023.

PASQUALE, Frank. The automated public sphere. **Electronic journal of the Master's Program in Communication at Faculdade Cásper Líbero,** São Paulo, year XX, n. 39, p. 17-35, 2017. ISSN 1517-3283. Translated by Marcelo Santos and Victor Varcelly. Available at: https://edisciplinas.usp.br/pluginfile.php/6295917/ mod_resource/content/1/866-1906-1-PB.pdf. Accessed on: June 24, 2023.

PASQUALE, Frank. Platform Neutrality: Enhancing Freedom of Expression in Spheres of Private Power. **Theoretical Inquiries in Law:** University of Maryland Legal Studies Research Paper, Maryland, v. 487, n. 2016- 24, 12 May 2016. Available at:

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2779270. Accessed on: 24 Jun. 2023.

PASQUALE, Frank. **The Black Box Society:** the secret algorithms that control money and information. Cambridge: Harvard University Press, 2015.

SCHREIBER, Mariana. The controversial German law that inspires the Fake News bill. **BBC News Brasil,** 26 Aug. 2020. Available at: https://www.bbc.com/portuguese/brasil-53914408. Accessed on: 18 Aug. 2023.

SILVA, Rosane Leal da. Cyberlibertarian culture x internet regulation: co-regulation as a model capable of harmonizing this conflict. **Revista Brasileira de Estudos Constitucionales - RBEC,** Belo Horizonte, year 6, n. 21, p.279-312, jan./mar. 2012.

TEFFÉ, Chiara Antonia Spadaccini de. The civil liability of the internet application provider for damages arising from content generated by third parties, according to the Civil Rights Framework for the Internet. **Revista Fórum de Direito Civil - RFDC,** Belo Horizonte, year 4, n. 10, set./dez. 2015. Available at: https://www.editoraforum.com.br/wp-content/ uploads/2015/12/A-responsabilidade-civil-do-provedor-de-aplicacoes-de-internet.pdf. Accessed on: June 26, 2023.

VAN DIJCK, José. **The culture of connectivity:** a critical history of social media. New York: Oxford University Press, 2013.

VAN DIJCK, José; POELL, Thomas; DE WAAL, Martijn. **The platform society:** public values in a connective world. New York: Oxford University Press, 2018.

How to cite:
SILVA, Rosane Leal da; VON ENDE, Luiza Berger; ROSA, Isabela Quartieri da. The accountability of digital platforms and the propagation of harmful content: regulated self-regulation and the Bill of Law on Freedom, Responsibility and Transparency on the Internet. **Pensar – Journal of Legal Sciences**, Fortaleza, v. 29, n. 1, p. 1-13, jan./mar. 2024. DOI: https://doi.org/10.5020/2317-2150.2024.16838

Mailing address:
Rosane Leal da Silva - E-mail: rosane-leal.da-silva@ufsm.br

Luiza Berger von Ende - E-mail: luiza.bergerv@gmail.com

Isabela Quartieri da Rosa - Email: isabela.quartieri@gmail.com

Received: *10/31/2023*

Accepted on: *12/28/2023*