




# GDI

Global  
Disinformation  
Index

---

## Disinformation Risk Assessment: The Online News Market in Brazil

---



**Authors:** Debora Albu, Thayane Guimarães, Andréa Doyle, Carla Rodrigues, Redson Fernando and Ana Carolina Benelli.

**Design:** [www.designbythink.co.za](http://www.designbythink.co.za)

**The Global Disinformation Index** is a UK-based not-for-profit that operates on the three principles of neutrality, independence and transparency. Our vision is a world in which we can trust what we see in the media. Our mission is to restore trust in the media by providing real-time automated risk ratings of the world's media sites through a Global Disinformation Index (GDI). The GDI is non-political. Our Advisory Panel consists of international experts in disinformation, indices and technology. For more information, visit [www.disinformationindex.org](http://www.disinformationindex.org)

The mission of the **Institute for Technology & Society** (ITS) is to ensure that Brazil and the Global South respond creatively and appropriately to the opportunities provided by technology in the digital age, and that the potential benefits are broadly shared across society. Through its own research and in partnership with other institutions, ITS Rio analyses the legal, social, economic and cultural dimensions of technology and advocates for public policies and private practices that protect privacy, freedom of expression and access to knowledge. The Institute also offers innovative methods of education, training and opportunities for individuals and institutions, enabling them to understand the promises and challenges of new technologies. Finally, ITS Rio aims at strengthening Brazil, Latin America and Global South voices in international debates on technology, the Internet and their regulation.

**GDI** Global  
Disinformation  
Index



Instituto  
de Tecnologia  
& Sociedade  
do Rio



September 2021. Published under a Creative Commons License (CC BY-NC-SA 4.0)

# Table of contents

---

<b>Executive summary</b>	<b>4</b>
<b>The Brazil media market:</b> Key features and scope	<b>6</b>
<b>Disinformation risk ratings</b>	<b>8</b>
<b>Conclusion</b>	<b>16</b>
<b>Appendix: Methodology</b>	<b>17</b>
<b>Endnotes</b>	<b>21</b>

---

# Executive summary

---

**Since the news business has expanded to the online world, transformations in news production and distribution have exposed the industry to new disinformation risks.**

News websites have financial incentives to spread disinformation, in order to increase their online traffic and, ultimately, their advertising revenue. Meanwhile, the dissemination of disinformation has disruptive and impactful consequences. The COVID-19 pandemic offers a recent example. By disrupting society's shared sense of accepted facts, these narratives undermine public health, safety and government responses.

To combat ad-funded disinformation, the Global Disinformation Index (GDI) deploys its assessment framework to rate news domains' risk of disinforming their readers. These independent, trusted and neutral ratings are used by advertisers, ad tech companies, and platforms to redirect their online ad spending, in line with their brand safety and disinformation risk mitigation strategies.

GDI defines disinformation as 'adversarial narratives that create real world harm,' and the GDI risk rating provides information about a range of indicators related to the risk that a given news website will disinform its readers by spreading these adversarial narratives. These indicators are grouped under the index's Content and Operations pillars, which respectively measure the quality and reliability of a site's content and its operational and editorial integrity.<sup>1</sup> A site's overall risk rating is based on that site's aggregated score across all the indicators, and ranges from zero (maximum risk level) to 100 (minimum risk level).

The GDI risk rating methodology is not an attempt to identify and label disinformation sites or trustworthy news sites. Rather, GDI's approach is based on the idea that a combined set of indicators can reflect a site's overall risk of carrying disinformation. The ratings should be seen as offering initial insights into the Brazilian media market and its overall levels of disinformation risk, along with the strengths and challenges the sites face in mitigating disinformation risks.

The following report presents the findings pertaining to disinformation risks for the media market in Brazil,<sup>2</sup> based on a study of 35 news domains. These findings are the result of the research led by the GDI with the Institute for Technology and Society (ITS Rio), in April through August of 2021. No sites are named and profiled in this report, even those that are rated as a minimum-risk sites and/or score above a 95 on one of the two pillars. All sites included in the report were informed of their individual scores and risk ratings, to allow for engagement and feedback.

The need for a trustworthy, independent rating of disinformation risk is pressing. This risk-rating framework for Brazil will provide crucial information to policy-makers, news websites, and the ad tech industry, enabling key decision-makers to stem the tide of money that incentivises and sustains disinformation.

## Key findings: Brazil

In reviewing the media landscape for Brazil, GDI's assessment found that:

***Half of the sites in our sample have a high to maximum risk of disinforming their online users.***

- Ten sites present a high disinformation risk rating, while seven sites (20 percent of the sample) had a maximum risk rating.
- Many of these sites publish biased content, using negative targeting, sensational tone and visual elements, thus creating an opportunity to manipulate their audience.
- In terms of operational checks and balances, this group of websites lacks policies to regulate their comments section, to ensure accuracy, and attribution policies.
- Five of the maximum-risk sites are known spreaders of disinformation.

***Only a limited number of Brazil's sites present low or minimum levels of disinformation risk.***

- Only three sites were rated as having a 'minimum' disinformation risk. The sites perform satisfactorily on the content flags: overall, articles assessed are unbiased, but do present some degree of sensational language.
- Three sites were rated with a 'low' level of disinformation risk. These sites tend to perform relatively well on the content indicators rather than the operations indicators, as for instance, they present low scores for the disclosure of their funding structure.

***Most of the media sites assessed in Brazil present pitfalls across the indicators belonging to the Operations pillar.***

- Only two sites from the 35 in the sample scored on average above 70 on the Operations pillar.
- The media sites assessed in Brazil could significantly improve their scores by focusing on their operations and editorial policies.
- Many of the sites in the sample could publish their policies regarding attribution, regulation of the comments section, and measures to ensure accuracy.



# The Brazilian media market: Key features and scope

---

**News consumption in Brazil has undergone profound changes in the last decade. Part of this transformation is due to the democratisation of internet access and mobile telephony technology.**

In 2019, the number of Brazilian households with internet access reached 50.7 million (71 percent of total households), an increase of 5.2 million households compared to 2018.<sup>3</sup> This growth was driven mainly by the dissemination of access among the most economically vulnerable groups: for the first time, more than half of households in the lower-income classes<sup>4</sup> were connected to the internet.<sup>5</sup> In addition, for the 134 million Brazilian internet users, the mobile phone was by far the main device used to go online (99 percent), especially among lower-income social groups.<sup>6</sup>

The expansion of access to the network and the massive use of platforms such as Facebook, Instagram and Twitter has boosted the presence of traditional media platforms in the virtual space. Moreover, it is important to observe the emergence and growth of new actors in the digital information ecosystem, such as blogs and alternative media platforms. According to the Reuters Institute report released in 2021, 83 percent of the Brazilian population reported consuming news online, including social media, while the consumption of information through printed newspapers and magazines dropped from 50 percent to 12 percent over the last nine years.<sup>7</sup> Facebook, as in previous years, remains the main social media channel for news consumption in Brazil (47 percent of the population), followed by WhatsApp (43 percent) and Instagram (39 percent).<sup>8</sup> It is noteworthy that in 2017, Brazil represented 10 percent of all WhatsApp users in the world; in 2019, the instant messaging application reached 99 percent of smartphones in the country.

With regard to the financial sustainability of media platforms, Brazil is the leading ad market in Latin America, and one of the largest ad markets in the world. Broadcast TV still attracts most of its advertising revenue, but there is constant growth in internet advertising. According to the report Advertising industry in Brazil - Statistics & Facts<sup>9</sup> published by Statista, digital advertising in Brazil saw a boom in 2012, when spending on digital advertising grew 40.2 percent in comparison to the previous year. After that, the medium continued to grow in the country, albeit at more moderate rates. The share of mobile internet in digital advertising spending in Brazil is forecast to grow from an estimate of 55.5 percent in 2018 to almost 78 percent in 2022. By that year,

mobile internet ad spending in the country is projected to reach five billion US dollars, a significant rise, considering that spending amounted to only 200.7 million US dollars in 2014. What is more, according to the Digital News Report 2021, the COVID-19 pandemic has also strongly impacted this market and appears to have accelerated the migration to digital platforms. Overall circulation of the top ten newspapers dropped 9.2 percent, but the digital proportion of their readers increased to 64 percent in the first half of 2020.<sup>10</sup> Virtually all major newspapers have restricted access to news (in whole or in part), but many of them offer digital subscriptions at low prices.

In this sense, the Brazilian media ecosystem, historically hegemonised by five groups or individual owners who control more than half of the highly relevant communication outlets in the country,<sup>11</sup> underwent a profound change: the upsurge of new information-producing actors, the creation of digital-content-only media, and the enhancement of partisanship by media channels, whose political-ideological positions shifted. Despite the reduced concentration of the media, this transformation entailed an even more deeply polarised information ecosystem. A 2018 study analysed the main sources of information consumed by social media users interested in political issues during that year's election. It identified that voters of different candidates do not consume the same sources of information; what is more, the more radical (isolated) their contact networks were, the more they found their views reinforced.<sup>12</sup>

Besides the polarisation of these networks, the 2018 elections placed Brazil in the international spotlight due to the massive dissemination of disinformative content and the impact of this phenomenon on the electoral result. The survey "Thousands of Small, Constant Rallies: A Large-Scale Analysis of Partisan WhatsApp Groups", by Northwestern University, showed that websites known for spreading disinformation were among those that circulated the most in WhatsApp groups in the country during the election period.<sup>13</sup> That same year, Agência Lupa, the first organisation specialised in fact-checking in Brazil, analysed the degree of veracity of the top 50 images that circulated on WhatsApp during the first round of elections. Of that set, only four were

proven to be true.<sup>14</sup> The phenomenon proved even more complex when studies showed that a large part of the political debate in the country and the spread of disinformation was being influenced by bots. In 2018, up to 20 percent of the electoral debate in Brazil was carried out by bots.<sup>15</sup>

In 2019, as a consequence of the national and international repercussions of the strategic use of disinformation as a political weapon, a Joint Parliamentary Inquiry Commission (CPMI) was set up to investigate the financing and creation of false profiles and cyber attacks on digital platforms, and their potential influence on the electoral process and the public debate.<sup>16</sup> Additionally, in 2020, the Fake News Inquiry was also launched, with the objective of investigating the dissemination of fraudulent news, slanderous denunciations and threats against the Supreme Court, its ministers and their family members.<sup>17</sup> In both investigations, media outlets became targets of lawsuits accusing them of being part of digital militias set up to support candidates and political representatives, disseminate disinformation and attack adversaries.

In 2020, the Brazilian political debate on regulating disinformation intensified, as the state sought to curb the financing, production and sharing of such campaigns. This spurred the drafting of the Brazilian Law on Freedom, Responsibility and Transparency on the Internet, better known as the 'Fake News Law'.<sup>18</sup> The controversial legislation states, for example, that those responsible for promoting, building or financing automated and broadcasting services with the aim of disseminating false news face a penalty of up to five years in prison.

This scenario had an impact on the population's confidence in news broadcast on official websites and platforms of the traditional press (which has been harshly attacked by the current president and his political supporters<sup>19</sup>) as well as in information that goes viral through social media and applications such as WhatsApp. Since 2020, however, the uncertainty brought about by the health crisis has apparently strengthened people's will to search for reliable information. Overall confidence in news from traditional outlets is relatively high by international standards, and much lower in news posted on social media.<sup>20</sup>

# Disinformation risk ratings

This study looks specifically at a sample of 35 news websites in Portuguese.

## Market overview

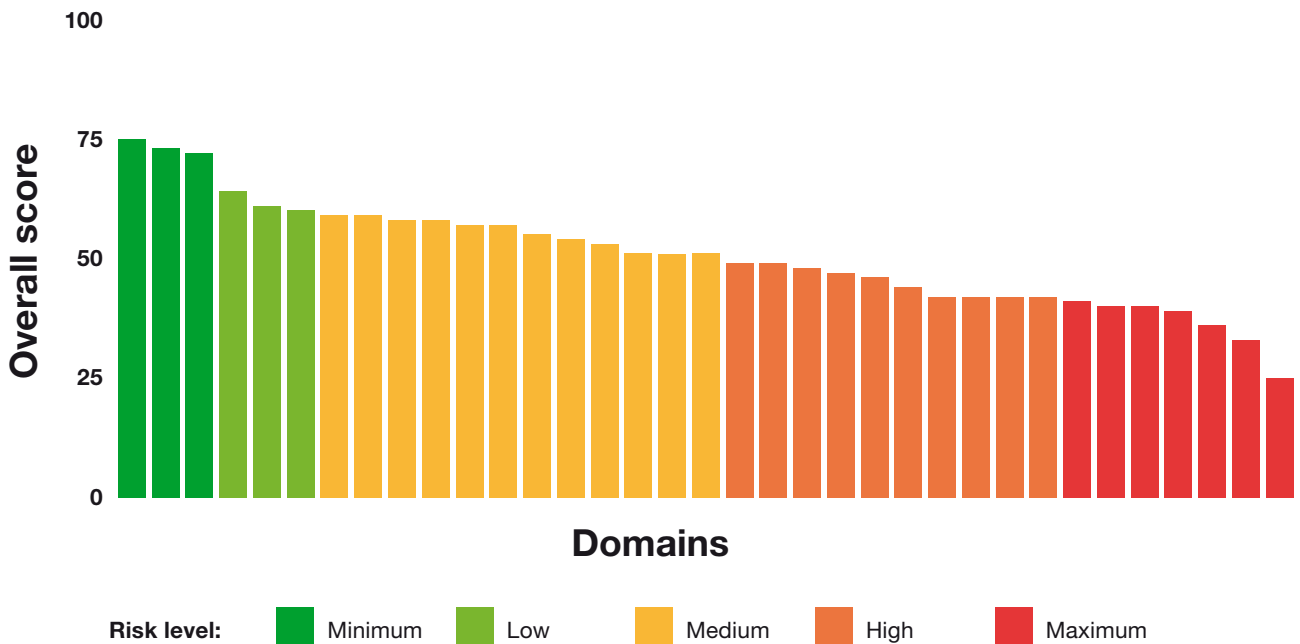
The sample was defined based on the sites' reach, (using each site's Alexa rankings, Facebook followers and Twitter followers), relevance, and the ability to gather complete data for the site. This report focuses on overall market risk factors, in order to highlight the steps that media outlets across Brazil can take to mitigate disinformation risk.

**Table 1.** Media sites assessed in Brazil (in alphabetical order)

News outlet	Domain	News outlet	Domain
A Tarde	atarde.uol.com.br	Jornal Da Cidade Online	www.jornaldacidadeonline.com.br
Brasil 247	www.brasil247.com	Metrópoles	www.metropoles.com
Brasil De Fato	www.brasildefato.com.br	O Antagonista	www.oantagonista.com
Brasil Sem Medo	brasilsemmedo.com	O Globo	oglobo.globo.com
Carta Capital	www.cartacapital.com.br	O Povo	www.opovo.com.br
Conexão Política	conexaopolitica.com.br	Plantão Brasil	www.plantaobrasil.net
Correio Braziliense	www.correio braziliense.com.br	R7.Com	www.r7.com
Diário Do Centro Do Mundo	www.diariodocentrodomundo.com.br	Rede Brasil Atual	www.redebrasilatual.com.br
Estadão	www.estadao.com.br	Renova Mídia	renovamidia.com.br
Estado De Minas	www.em.com.br	República De Curitiba	republicadecuritiba.net
Exame	exame.com	Revista Fórum	revistaforum.com.br
Folha De São Paulo	www.folha.uol.com.br	Revista Oeste	revistaouest.com
Folha Política	www.folhapolitica.org	Terça Livre	tercalivre.com.br
Gaucha Zero Hora	gauchazh.clicrbs.com.br	Terra	www.terra.com.br
Gazeta Brasil	gazetabrasil.com.br	Uol	www.uol.com.br
Gazeta Do Povo	www.gazetadopovo.com.br	Valor Econômico	valor.globo.com
Gazeta Online	www.agazeta.com.br	Veja	veja.abril.com.br
Istoé	istoe.com.br		

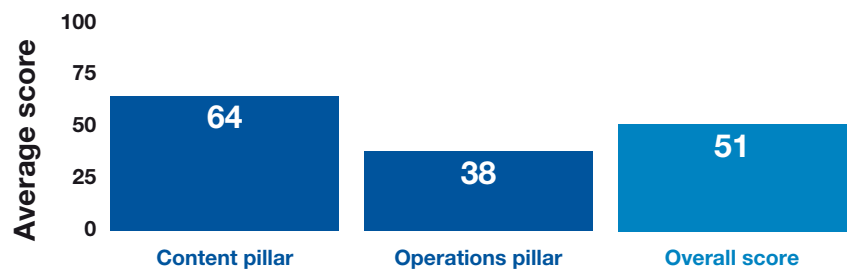


**Figure 1.** Disinformation risk ratings by site



The findings for Brazil’s media sites show a skewed distribution when it comes to disinformation risks. Of the 35 sites reviewed, only six fell in the lower-risk categories, three being classified as low-risk and the other three as minimum-risk (see Figure 1). This means that 29 sites present a considerable disinformation risk – as they belong to the medium-, high- and maximum-risk categories. A considerable fraction of the sample, 20 percent of the domains, presents a maximum disinformation risk. The high- and medium-risk categories comprise ten and twelve sites, respectively. Overall, most of the risk factors in the Brazil media market seem to stem from lacking operational transparency and weak editorial standards and policies.

**Figure 2.** Overall market scores, by pillar



In Brazil, only three sites received a **minimum-risk** rating and none of them achieved an overall score higher than 75 points. The sites perform satisfactorily on the Content pillar: the articles assessed are fairly unbiased and tend to avoid negative targeting against groups or individuals. Their headlines are mostly accurate and their articles mostly start with a fact-based lede, but present a certain level of sensational language. These sites have many of the key operational policies in place, and especially strong editorial principles and practices. Areas of improvement for these websites concern the publication of policies regulating their comment sections and ensuring accurate attribution of stories, facts and media. The level of transparency regarding their ownership and funding structure might also be increased.

Three sites in Brazil were rated as **low-risk** sites. These sites tend to score above the average of the Content pillar, but they present problems in some indicators, such as common and recent coverage, and visual presentation. They lack some of the operational transparency and editorial safeguards, including full disclosure of their sources of funding and ownership structures. The policies to ensure accuracy and correct attribution also seem weak for these sites. One of the sites has no policies to regulate its comment section.

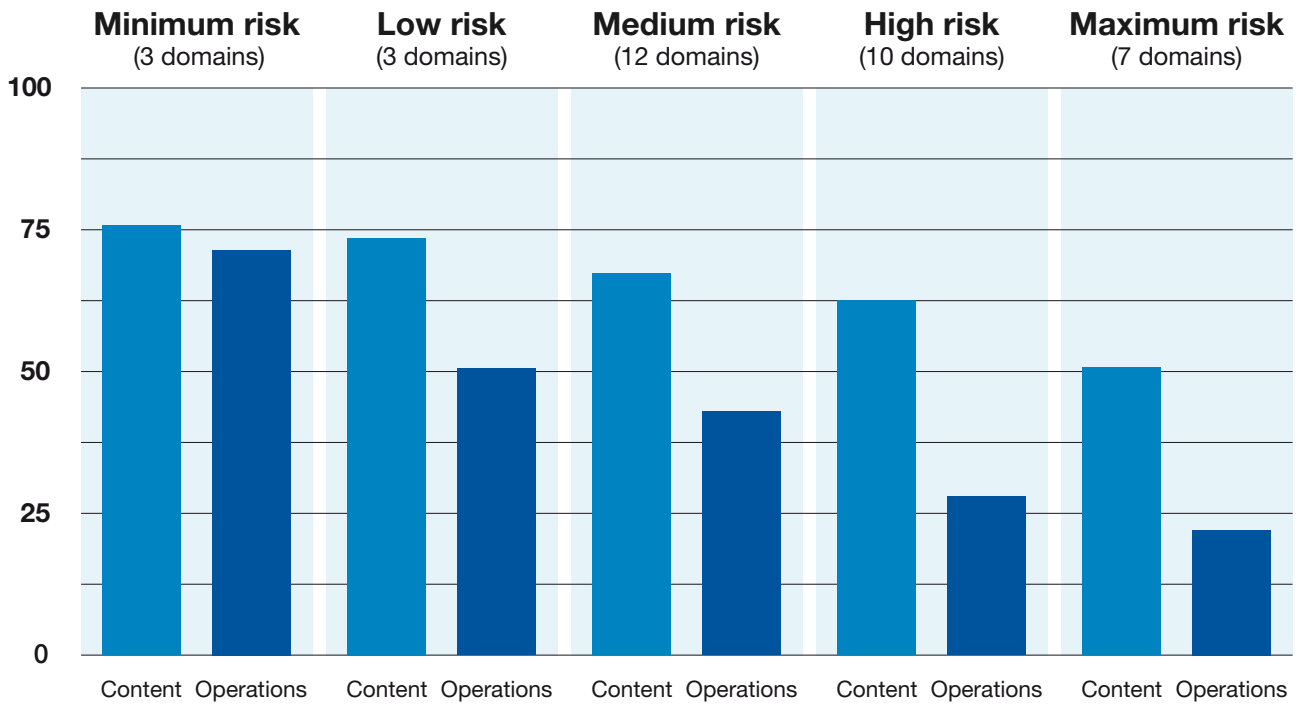
The majority of the sites were assessed with a **medium-risk** rating (12 out of 35 websites). While these sites generally perform above the Content pillar average and provide reliable and unbiased content, they lack key operational policies, including information on their funding sources. These sites consistently received a low score on the attribution indicator, which is indicative

of policies that ensure accurate facts, authentic media and accountability for stories. The accuracy indicator was also generally low for the medium-risk sites. These policies are associated with strong universal journalistic standards. Most of the sites that currently fall in the middle range for disinformation risks could move into a lower-risk group with improvements to their site's operational and editorial policies.

Almost half of the sample (17 out of 35 sites) scored as sites with high or maximum disinformation risk. Out of these 17 sites, 10 received a **high-risk** rating. The content from these sites demonstrates a fair level of bias, sensational language and sensationalised visual elements. More than half of the high-risk sites scored below the pillar average for the negative targeting indicator. Many of these sites are actively partisan pertaining to all sides of the ideological spectrum. All of them ranked very low on operational and editorial quality: the attribution and accuracy indicators are the lowest. One of these sites, however, is an otherwise long-established and well-received news outlet, but fails to publish complete editorial and operational policies.

Finally, seven sites received a **maximum-risk** rating, representing one fifth of the reviewed sample. These domains consist largely of sites that score poorly on the credibility of their content. They often publish articles that are sensational and/or biased, and which may negatively target groups and individuals. They also entirely fail to meet universal standards for editorial and operational policies. At least five of those sites are known to be disinformation creators and spreaders, which has been documented by many researchers, journalists and fact-checkers.

**Figure 3.** Average pillar scores by risk rating level



## Pillar overview

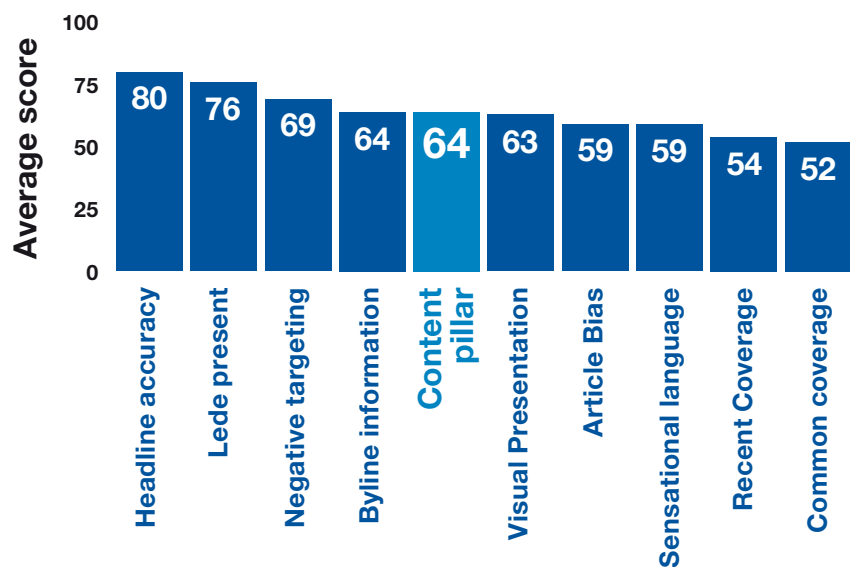
### Content pillar

This pillar focuses on the reliability of the content provided on the site. Our analysis for the Content pillar is based on an assessment of ten anonymised articles for each domain. These articles are drawn from among the most frequently shared pieces of content during the data collection period. All article scores are based on a scale from zero (worst) to 100 (best), as assessed by the country reviewers.

Figure 4 shows that Brazilian online news articles tend to feature basic journalistic elements, such as a headline that accurately represents the content and a lead paragraph summarising the piece. Negative targeting seems to be a fairly contained phenomenon for the Brazilian news environment. With a few exceptions, people and social groups are criticised and held responsible for their actions and stances, but mainly in a fair way. Only eight sites in the sample scored below 60 on this indicator, and all of them are classified as high or maximum risk based on their overall score.

On the other hand, considerably biased pieces using sensationalist language appeared frequently in the sample. Although they rarely resorted to extreme language, many articles strayed from objective description of content. Furthermore, the common and recent coverage indicators were the worst performers within the content pillar. These indicators check for the credibility of content: whether a story is based on events from the 30 days prior to publication (rather than reheated or out-of-context coverage), and whether the same event can be verified by coverage elsewhere. The results show that at least a third of the sampled content from 29 sites covered events that fell outside the 30-day window, while 30 sites had similarly poor performance in terms of reporting that could be verified elsewhere.<sup>21</sup>

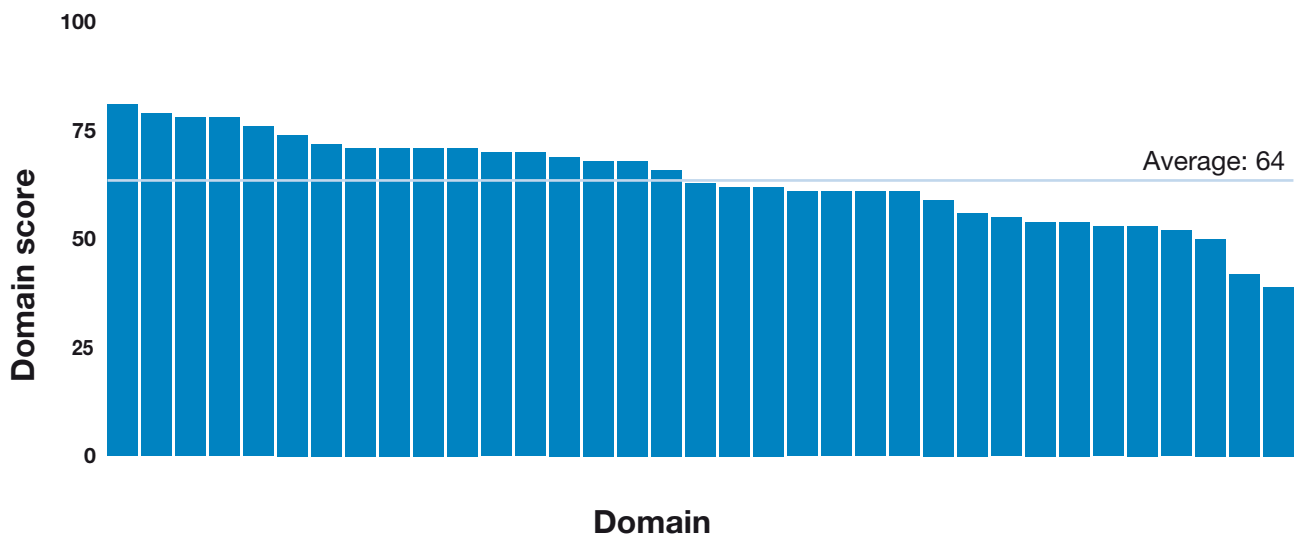
**Figure 4.** Average Content pillar scores by indicator



Almost half of the domains scored above the Content pillar average, i.e. 64 out of 100. The worst-performing sites on the Content pillar score between 40 and 50 out of 100, indicating an effort to communicate following a seemingly sound journalistic style, while resorting to sensational language or bias, and covering outdated and uncommon stories. This calls for extra attention when reading seemingly well-constructed news pieces.

**Figure 5.** Content pillar scores by site

---





## Operations pillar

This pillar assesses the operational and editorial integrity of a news site. All scores are based on a scale from zero (worst) to 100 (best), as scored by the country reviewers according to the information available on the site. The operations indicators are the quickest wins to reduce disinformation risk ratings, as they represent policies that domains can immediately establish and make public.<sup>22</sup>

The Brazilian news media outlets have an average score of 38 out of 100 points on the Operations pillar, which is relatively low. As stated in the “Key findings”, only two sites score above 70. Eighteen of them score below the average.

All in all, most of the sites in our sample publish significant information concerning their ownership structure. However, there seems to be less transparency when it comes to the funding sources, as the Funding indicator is slightly below the Operations pillar average. Less than half of the domains scored above 50 for the Editorial principles and practices indicator. This seems to suggest that few sites publish policies to guarantee editorial independence, mitigate conflicts of interest, ensure that factual information is reported without bias, and ensure that readers can distinguish between news and opinion content.

The indicators for the Operations pillar are taken from the standards which have been set by journalists as part of the Journalism Trust Initiative (JTI).<sup>23</sup> As the JTI points out, adopting these standards raises credibility in the eyes of the public, compels traditional media to reassess their practices in the digital age, and encourages new media outlets to be more transparent about their business models.<sup>24</sup>

Most of the sites in the sample could improve their fact-checking and corrections policies, along with policies regarding the attribution of content, information and journalistic sources, as the Attribution and Ensuring accuracy indicators scored an average of 20 out of 100 points. This effort might have a significant impact on how a reader receives the news. A considerable proportion of the 35 sites in our sample has the potential to score better on all indicators in the operations pillar, especially the ones classified as medium-risk for disinformation. One fifth of the sites in our sample fail to meet journalism standards, practices, editorial principles, and other operational aspects.

**Figure 6.** Average Operations pillar scores by indicator

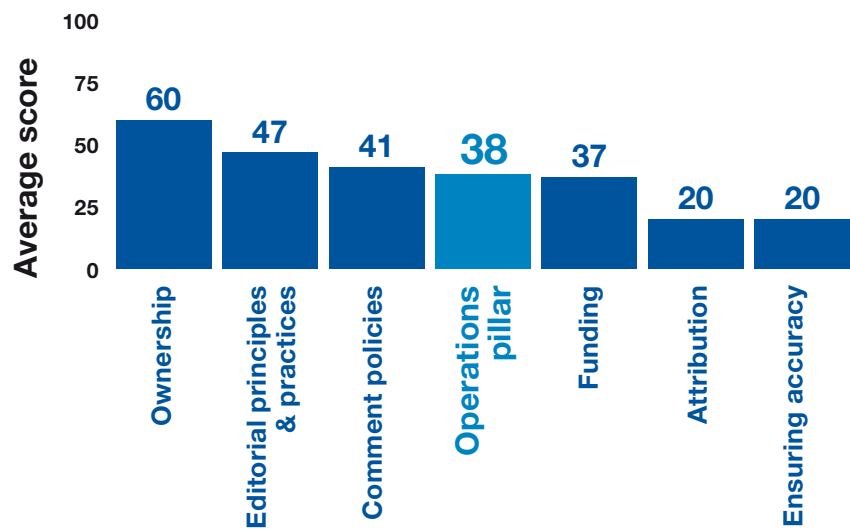
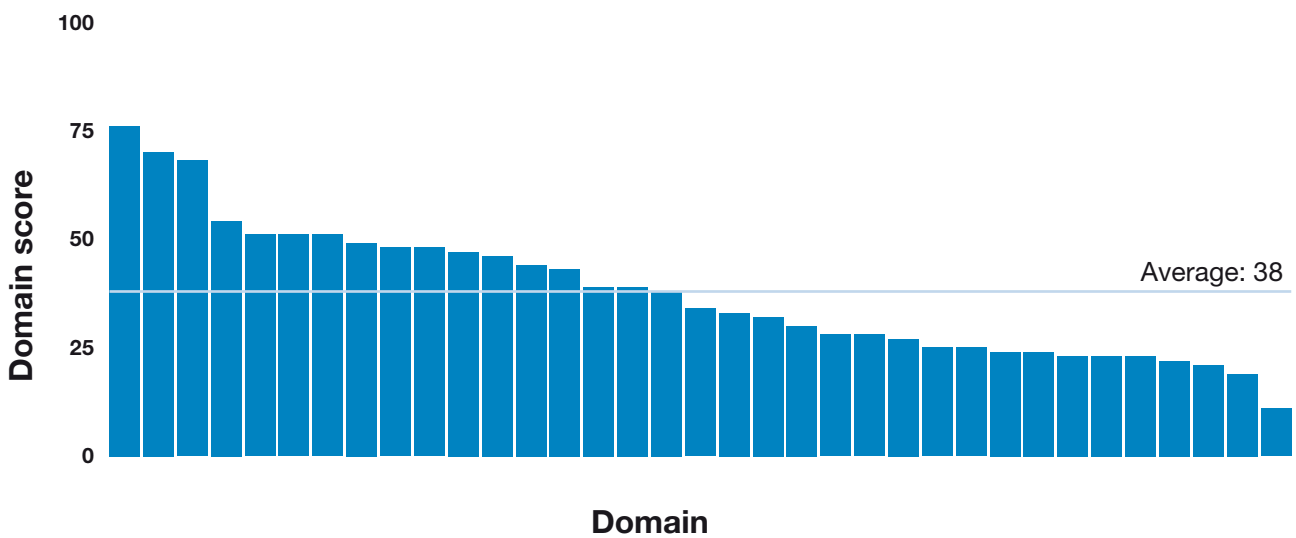


Figure 7 shows the aggregated score on all Operations pillar indicators for every media domain. The indicators on which most sites perform best pertain to Ownership and Comment policies. Regarding the latter, despite the importance of user-generated content moderation for mitigating the risk of disinformation, the sites present no explicit guarantee that posted comments can be deleted or banned. The lowest scores are attributed to indicators of transparent funding, attribution, pre-publication fact-checking and post-publication corrections.

**Figure 7.** Operations pillar scores by site



# Conclusion

---

**Our assessment of the disinformation risk in the Brazilian media market showed a high-risk environment for disinformation. Of the 35 sites reviewed in this research, only six of them figured in the minimum- and low-risk tiers.**

Moreover, half of the sites fall into the high- and maximum-risk categories, while some of them have already been cited many times by Brazilian fact-checking agencies as vehicles of disinformation for the population about political issues.<sup>25 26</sup>

Brazil's media sites typically demonstrate medium levels of risk in our framework when it comes to indicators in the Content pillar. These domains' overall scores are lower for the Operations pillar indicators, especially for information about funding sources, ensuring accuracy and attribution.

News sites could address these shortcomings by taking actions that:

- Focus on adopting journalistic and operational standards like those set by the Journalism Trust Initiative that make transparent information about overall policies of the site.
- Encourage sites to clearly publish their sources of funding on their page. This information helps to build trust in the site and dispel doubts about how it is funded.
- Ensure that sites publish a statement of editorial independence, guidelines for issuing corrections, and policies for user-generated content.
- Include fact-checking practices and ensure that they are implemented before and after publication of content: creating partnerships with well-established agencies might be an efficient way forward.
- Ensure that sites in Brazil publish bylines. Publishing the identity of the author is an easy way to ensure transparency and accountability. Moreover, it gives the audience the opportunity to check who the author is and how they position themselves, lending accountability to the process.
- Although the Content pillar shows better results than the Operations one, there is still room for improvement, especially concerning bias and sensationalist language. Using multiple sources, adopting diverse points of view and toning down emotional language in favour of more factual information are a few steps towards a healthier news environment.

The assessment developed in this report exposes a grim scenario: there is a high overall risk of disinformation amongst news sites in Brazil. In the midst of a pandemic that has been causing a public health crisis, it is crucial that these shortcomings are addressed and taken into consideration immediately by the media market. The results presented in this research are an important starting point to build a more trustworthy and reliable news ecosystem in Brazil.

# Appendix: Methodology

---

The Global Disinformation Index evaluates the level of disinformation risk of a country's online media market. The country's online media market is represented by a sample of 30 to 35 news domains that are selected on the basis of their Alexa rankings, their number of social media followers, and the expertise of local researchers. The resulting sample features major national news sites with high levels of online engagement, news sites that reflect the regional, linguistic and cultural composition of the country, and news sites that influence ideas among local decision-makers, groups or actors.

The index is composed of the Content and Operations pillars. The pillars are, in turn, composed of several indicators. The Content pillar includes indicators that assess elements and characteristics of each domain's content to capture its level of credibility, sensationalism and impartiality. The Operations pillar's indicators evaluate the policies and rules that a specific domain establishes to ensure the reliability and quality of the news being published. These policies concern, for instance, conflicts of interest, accurate reporting and accountability.

Each of GDI's media market risk assessments are conducted in collaboration with a local team of media and disinformation experts who develop the media list for the market sample, contribute to the sampling frame for the content included in the Content pillar review, conduct the data collection for the Content and Operations pillars, vet and interpret the index results, and draft the market report.

## Site selection

The market sample for the study is developed based on a mix of quantitative and qualitative criteria. GDI begins by creating a list of the 50 news websites with the greatest traffic in the media market. This list is provided to the country research team, along with data on the number of Facebook and Twitter followers for each site, to gauge relevance and reach. The local research team then reduces the list to 35 sites, ensuring that the sample provides adequate geographic, linguistic and political coverage to capture the major media discourses in the market. International news outlets are generally excluded, because their risk ratings are assessed in the market from which they originate.<sup>27</sup> News aggregators are also excluded, so that all included sites are assessed on their original content. The final media market sample reflects the complete set of between 30 to 35 sites for which complete data could be collected throughout the review process.

## Data collection

The Content indicators are based on the review of a sample of ten articles published by each domain. Five of these articles are randomly selected among a domain's most frequently shared articles on Facebook within a two-week period. The remaining five articles are randomly selected among a group of a domain's articles covering topics that are likely to carry disinformation narratives. The topics, and the associated set of keywords used to identify them, are jointly developed by GDI and the in-country research team. Each country team contributes narrative topics and the keywords used to identify them in the local media discourse to GDI's global topic classifier list, developed by GDI's data science and intelligence teams. Country teams also manually verify the machine translation of the entire topic list in the relevant study languages.

The sampled articles are anonymised by stripping them of any information that allows the analysts to identify the publisher or the author of the articles. The anonymised content is reviewed by two country analysts who are trained on the GDI codebook. For each anonymised article, the country analysts answer a set of 13 questions aimed at evaluating the elements and characteristics of the article and its headline, in terms of bias, sensationalism and negative targeting. The analysts subsequently review how the article is presented on the domain and the extent to which the domain provides information on the author's byline and timeline. While performing the Content pillar's reviews, the analysts are required to provide a thorough explanation and gather evidence to support their decisions.

The Operations pillar is based on the information gathered during the manual assessment of each domain performed by the country analysts. The country analysts answer a set of 98 questions aimed at evaluating each domain's ownership, management and funding structure, editorial independence, principles and guidelines, attribution policies, error-correction and fact-checking policies, and comments section rules and policies. The analysts gather evidence to support their assessments as they perform each Operations pillar's review.

## Data analysis and indicator construction

The data gathered by the country analysts for the Content pillar are used to compute nine indicators. The Content pillar's indicators included in the final risk rating are: Headline accuracy, Byline information, Lede present, Common coverage, Recent coverage, Negative targeting, Article bias, Sensational language and Visual presentation. For each indicator, values are normalised to a scale of 0 to 100. The domain-level score for each indicator in this pillar is the average score obtained across the ten articles. The pillar score for each domain is the average of all the scores for all of the pillar's indicators, and ranges from 0 to 100.

For the Operations pillar, the answers of the country analysts are translated into a set of sub-indicators. The six indicators are calculated as the averages of these sub-indicator scores. The resulting Operations pillar's indicators are: Attribution, Comment policies, Editorial principles & practices, Ensuring accuracy, Funding and Ownership. For each indicator, values are normalised to a scale of 0 to 100. The domain score for the Operations pillar is the average score across indicators.



**Table 2.** Global Disinformation Index pillars and indicators

Pillar	Indicator	Sub-indicators	Unit of analysis	Definition	Rationale
Content	Headline accuracy	None	Article	Rating for how accurately the story's headline describes the content of the story	Indicative of clickbait
	Byline information			Rating for how much information is provided in the article's byline	Attribution of stories creates accountability for their veracity
	Lede present			Rating for whether the article begins with a fact-based lede	Indicative of fact-based reporting and high journalistic standards
	Common coverage			Rating for whether the same event has been covered by at least one other reliable local media outlet	Indicative of a true and significant event
	Recent coverage			Rating for whether the story covers a news event or development that occurred within 30 days prior to the article's publication date	Indicative of a newsworthy event, rather than one which has been taken out of context
	Negative targeting			Rating for whether the story negatively targets a specific individual or group	Indicative of hate speech, bias or an adversarial narrative
	Article bias			Rating for the degree of bias in the article	Indicative of neutral, fact-based reporting or well-rounded analysis
	Sensational language			Rating for the degree of sensationalism in the article	Indicative of neutral, fact-based reporting or well-rounded analysis
	Visual presentation			Rating for the degree of sensationalism in the visual presentation of the article	Indicative of neutral, fact-based reporting or well-rounded analysis
Operations	Attribution	None	Domain	Rating for the number of policies and practices identified on the site	Assesses policies regarding the attribution of stories, facts and media (either publicly or anonymously); indicative of policies that ensure accurate facts, authentic media and accountability for stories
	Comment policies	Policies		Rating for the number of policies identified on the site	Assesses policies to reduce disinformation in user-generated content
		Moderation		Rating for the mechanisms to enforce comment policies identified on the site	Assesses the mechanism to enforce policies to reduce disinformation in user-generated content
	Editorial principles and practices	Editorial independence		Rating for the number of policies identified on the site	Assesses the degree of editorial independence and the policies in place to mitigate conflicts of interest
		Adherence to narrative		Rating for the degree to which the site is likely to adhere to an ideological affiliation, based on its published editorial positions	Indicative of politicised or ideological editorial decision making
		Content guidelines		Rating for the number of policies identified on the site	Assesses the policies in place to ensure that factual information is reported without bias
	Ensuring accuracy	News vs. analysis		Rating for the number of policies and practices identified on the site	Assesses the policies in place to ensure that readers can distinguish between news and opinion content
		Pre-publication fact-checking		Rating for the number of policies and practices identified on the site	Assesses policies to ensure that only accurate information is reported
	Funding	Post-publication corrections		Rating for the number of policies and practices identified on the site	Assesses policies to ensure that needed corrections are adequately and transparently disseminated
		Diversified incentive structure		Rating for the number of revenue sources identified on the site	Indicative of possible conflicts of interest stemming from over-reliance on one or few sources of revenue
		Accountability to readership		Rating based on whether reader subscriptions or donations are identified as a revenue source	Indicative of accountability for high-quality information over content that drives ad revenue
	Ownership	Transparent funding		Rating based on the degree of transparency the site provide regarding its sources of funding	Indicative of the transparency that is required to monitor the incentives and conflicts of interest that can arise from opaque revenue sources
		Owner-operator division		Rating based on the number of distinct executive or board level financial and editorial decision-makers listed on the site	Indicative of a separation between financial and editorial decision making, to avoid conflicts of interest
	Transparent ownership	Rating based on the degree of transparency the site provides regarding its ownership structure	Indicative of the transparency that is required to monitor the incentives and conflicts of interest that can arise from opaque ownership structures		

## Risk ratings

The overall index score for each domain is the average of the pillar scores. The domains are then classified on the basis of a five-category risk scale based on the overall index score. The risk categories were defined based on the distribution of risk ratings from 180 sites across six media markets in September 2020.

This cross-country dataset was standardised to fit a normal distribution with a mean of 0 and a standard deviation of 1. The standardised scores and their distance from the mean were used to determine the bands for each risk level, given in table 3. These bands are then used to categorise the risk levels for sites in each subsequent media market analysis.

**Table 3.** Disinformation risk levels

Risk level	Lower limit	Upper limit	Distribution
Minimum risk	69.12	100	> 1.5 SD from mean
Low risk	59.81	69.11	> 0.5 and ≤ 1.5 SD from mean
Medium risk	50.5	59.8	> -0.5 and ≤ 0.5 SD from mean
High risk	41.2	50.49	≥ -1.5 and ≤ -0.5 SD from mean
Maximum risk	0	41.19	< -1.5 SD from mean

# Endnotes

---

- 1 The GDI assessment framework is outlined in the annex of this report.
- 2 In 2021, news market assessments will be produced for the following countries: Argentina, Australia, Brazil, Canada, India, Italy, Kenya, Malaysia, Mexico, Nigeria and Spain.
- 3 See: [https://cetic.br/media/docs/publicacoes/2/20201123121817/tic\\_dom\\_2019\\_livro\\_eletronico.pdf](https://cetic.br/media/docs/publicacoes/2/20201123121817/tic_dom_2019_livro_eletronico.pdf).
- 4 According to Brazil's Statistics Institute (IBGE), these classes are named D, in which households earn up to four minimum living wages, and E, in which they earn up to two minimum living wages.
- 5 See: [https://cetic.br/media/docs/publicacoes/2/20201123121817/tic\\_dom\\_2019\\_livro\\_eletronico.pdf](https://cetic.br/media/docs/publicacoes/2/20201123121817/tic_dom_2019_livro_eletronico.pdf).
- 6 See: [https://cetic.br/media/docs/publicacoes/2/20201123121817/tic\\_dom\\_2019\\_livro\\_eletronico.pdf](https://cetic.br/media/docs/publicacoes/2/20201123121817/tic_dom_2019_livro_eletronico.pdf).
- 7 See: [https://reutersinstitute.politics.ox.ac.uk/sites/default/files/2021-06/Digital\\_News\\_Report\\_2021\\_FINAL.pdf](https://reutersinstitute.politics.ox.ac.uk/sites/default/files/2021-06/Digital_News_Report_2021_FINAL.pdf).
- 8 See: [https://reutersinstitute.politics.ox.ac.uk/sites/default/files/2021-06/Digital\\_News\\_Report\\_2021\\_FINAL.pdf](https://reutersinstitute.politics.ox.ac.uk/sites/default/files/2021-06/Digital_News_Report_2021_FINAL.pdf).
- 9 See: <https://www.statista.com/topics/2151/advertising-industry-in-brazil/>.
- 10 See: [https://reutersinstitute.politics.ox.ac.uk/sites/default/files/2021-06/Digital\\_News\\_Report\\_2021\\_FINAL.pdf](https://reutersinstitute.politics.ox.ac.uk/sites/default/files/2021-06/Digital_News_Report_2021_FINAL.pdf).
- 11 See: <http://brazil.mom-rsf.org/es/propietarios/>.
- 12 See: <https://itsrio.org/wp-content/uploads/2019/02/politica-de-oposicao.pdf>.
- 13 See: [https://www.researchgate.net/publication/334669877\\_Thousands\\_of\\_Small\\_Constant\\_Rallies\\_A\\_Large-Scale\\_Analysis\\_of\\_Partisan\\_WhatsApp\\_Groups](https://www.researchgate.net/publication/334669877_Thousands_of_Small_Constant_Rallies_A_Large-Scale_Analysis_of_Partisan_WhatsApp_Groups).
- 14 See: <https://piaui.folha.uol.com.br/lupa/2018/10/17/whatsapp-lupa-usp-ufmg-imagens/>.
- 15 See: <http://dapp.fgv.br/robos-redes-sociais-e-politica-estudo-da-fgvdapp-aponta-interferencias-ilegitimas-no-debate-publico-na-web/>.
- 16 See: <https://www12.senado.leg.br/noticias/materias/2019/09/04/cpmi-das-fake-news-e-instalada-no-congresso>.
- 17 See: <http://portal.stf.jus.br/noticias/verNoticiaDetalhe.asp?idConteudo=445860&ori=1>.

18 See: <https://www25.senado.leg.br/web/atividade/materias/-/materia/141944>.

19 See: <https://rsf.org/pt/noticia/velhos-tiranos-duas-mulheres-e-um-europeu-rsf-revela-sua-edicao-2021-dos-predadores-da-liberdade-de>.

20 See: [https://reutersinstitute.politics.ox.ac.uk/sites/default/files/2021-06/Digital\\_News\\_Report\\_2021\\_FINAL.pdf](https://reutersinstitute.politics.ox.ac.uk/sites/default/files/2021-06/Digital_News_Report_2021_FINAL.pdf).

21 Investigative pieces or original features are exempted from these indicators, so as not to penalise original stories or coverage that takes more than 30 days to develop.

22 The Operations pillar looks at whether relevant policies are in place. It does not assess the level of robustness of the policy based on good practice, and does not look at how the policies are being implemented. However, other indicators in the framework do capture some of the relevant practices, such as by measuring perceptions on how often sites correct errors or are viewed as presenting accurate content.

23 For more information on the JTI, which has adopted an ISO standard for the industry, please see: <https://jti-rsf.org/en/>.

24 For more information about JTI, which has adopted the media standards for credibility, transparency and sustainability, please see: <https://rsf.org/en/news/launched-may-18-jti-online-platform-represents-new-dawn-media-integrity-transparency-and>

25 See: <https://www.aosfatos.org/noticias/sites-de-fake-news-foram-os-mais-populares-em-grupos-de-whatsapp-nas-eleicoes/>.

26 See: <https://www.aosfatos.org/noticias/como-sete-sites-lucraram-com-anuncios-no-google-ao-publicar-desinformacao-sobre-pandemia/>.

27 In select cases, international news outlets may be included in a study if the domestic market is small, the sites are considered highly relevant, the content on the site is specific to the market assessed, and GDI has not developed a risk rating for that site elsewhere.







---

[www.disinformationindex.org](http://www.disinformationindex.org)