

Disinformation Risk Assessment: The Online News Market in Australia



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The Global Disinformation Index is a not-for-profit that operates on the three principles of neutrality, independence and transparency. Our vision is a world free from disinformation and its harms. Our mission is to catalyse industry and government to defund disinformation. We provide disinformation risk ratings of the world's news media sites. For more information, visit www.disinformationindex.org

The Digital Media Research Centre (DMRC) at Queensland University of Technology conducts world-leading communication, media and law research for a flourishing digital society. It is one of Australia's top organisations for media and communication research, areas in which QUT has achieved the highest possible rankings in ERA, the national research quality assessment exercise. The DMRC's research programs investigate the digital transformation of media industries, the challenges of digital inclusion and governance, the growing role of Al and automation in the information environment and the role of social media in public communication. For more information, visit www.research.gut.edu.au/dmrc







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Executive summary

Since the news industry 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. A recent example is the disinformation surrounding the COVID-19 pandemic. 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 the disinformation risk of news domains. 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. A site's overall disinformation 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 Australian 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 Australia, based on a study of 34 news domains. These findings are the result of research led by the GDI with the researchers from the Digital Media Research Centre, at the Queensland University of Technology, Brisbane Australia, in the period from April to September 2021. Sites rated as minimum-risk are named and profiled in the report. 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 Australia 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: Australia

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

Nearly 75 percent of the sites in our sample have a low to minimum risk of disinforming their online users.

- Twenty-six percent (nine sites) were identified as presenting a minimum risk of disinformation for their online users and have been disclosed in this report.
- A further 47 percent of media outlets (sixteen sites) were classified as being at low risk of disinforming users.

Only a limited number of Australia's sites present high or maximum levels of disinformation risk.

- Only one site was rated as having a maximum level of disinformation risk.
- Two sites were rated with a high level of disinformation risk. These sites performed poorly on both the Content and Operations pillars.

The low- and minimum-risk media sites assessed in Australia tend to perform well, on average, but there is room for improvement in the Operations pillar.

- Both the minimum and low-risk media outlets scored better in their Content pillar than their Operations pillar.
- The findings suggest that many low-risk sites may be able to be reclassified as minimum-risk if they improve their **Operations pillar** scores.

The Australian media market: Key features and scope

In the six months prior to September 2020, the Australian Communications and Media Authority reports that 99 percent of Australians accessed the internet.³

Eighty-six percent of Australians utilised the internet to access news in 2020, a rising trend from the previous year.⁴ Further, the 2021 Reuters Digital News Report noted a reduction in popularity in television, radio, and print news in recent years.⁵ The Report demonstrates that, as the main source of news, social media have been gaining more popularity over the past three years, while online news has remained stable during the same period.

During the last year, trust in news has increased by 5 percentage points to 43 percent, and trust in COVID-19 news specifically reached 53 percent in April 2020. The use of online news access supposedly increased as a result of a desire to keep abreast of developments in the COVID-19 pandemic. The peculiarities in the Australian media market also contribute to user behaviour in news consumption.

Historically, Australia has had a unique media market among established democracies. In 2011, media concentration in Australia was among the highest in the world, behind only China and Egypt, both of which had statecontrolled media. 6 Changes to a series of media rules, most notably the '75 percent reach' and the 'two out of three' rules,7 led to a media market that was increasingly dominated by a small number of organisations, namely News Corp, Nine Entertainment, Fairfax, and Seven West. Until 2017, the '75 percent reach' rule prohibited any entity from controlling commercial television licences covering more than three-quarters of the Australian population. The 'two out of three' rule mandated that each person or media company could control a maximum of two of the three forms of media platforms (radio, television, and newspapers). However, as this rule was removed in 2017, larger companies like News Corp and Nine Entertainment were able to effectively buy out, merge with (as happened with the Fairfax and Nine Entertainment merger), or simply eliminate other companies, leading to a higher concentration of media in Australia. Today, the Australian media is predominantly controlled by News Corp and Nine.

Recent studies show that the majority of regional Australian news consumers access local and regional news regularly.8 However, the readership of local and regional newspapers in Australia has shrunk by half in the last five years, while the website use of such media has remained low but stable at 11 percent. The COVID-19 pandemic has further intensified financial struggles for Australian regional and local media; revenues from advertising have declined significantly, leading to further staff redundancies and closures of outlets in this sector. The latest examples of this trend are the affiliation deals between WIN News and Nine Network, and between regional broadcaster Southern Cross Austereo (SCA) and Channel 10, which led to the closure of local bulletins in regional Victoria and Queensland as well as staff redundancies. 9 Citizens with limited local news access began to turn increasingly to social media as a source of information, creating a fertile environment for the spread of mis- and disinformation.

While digital advertising revenue for newspapers has fallen by five percent to A\$463 million following the impacts of the COVID pandemic, digital subscriptions saw growth of 23.5 percent to A\$375 million in 2020.10 With the ubiquity of digital news shared via platforms and its impact on the advertising revenue of Australian media outlets, and subsequent pressure exerted by these outlets, the Australian Government passed a 'News Media Bargaining Code'11 that was designed to pressure major technology platforms and search engines like Facebook and Google to pay Australian media for presenting their content (such as on Facebook's Newsfeed and in Google search results). The bill was designed to protect the advertising revenue of Australian media and was supported by some of the major media companies, such as News Corp and the Guardian. The process led to Facebook removing all Australian news from its platform for a few days in February 2021, which significantly dropped their share

of traffic. Finally, negotiations between the Australian Government, Facebook and Google led to a reformed bill, and Australian news returned to Facebook pages.

The number and scope of online disinformation campaigns have remained a concerning trend over the last few years in Australia and the world, accelerated and amplified by the impact of the coronavirus pandemic. Examples of such campaigns in Australia include the online communication of independent Federal MP Craig Kelly, who had widely shared information on unproven treatments for COVID-19 to his thousands of Facebook followers. The platform has suspended the account of the Australian politician for breaching misinformation policies. Another prominent incident in the media sector took place on 1 August 2021, when Sky News Australia posted several dubious videos about the COVID-19 pandemic. YouTube banned the outlet from uploading new videos for a week.

There were a few collaborative attempts by the platforms and government bodies to combat mis- and disinformation online. In February 2021, a new voluntary industry code was developed by DIGI, a not-for-profit organisation, stemming from the Digital Platforms Inquiry conducted by the Australian Communications and Consumer Commission, designed to reduce the risk of online misinformation in the country. 12 Such platforms as Twitter, Google, Facebook, Microsoft, Redbubble, TikTok, Adobe and Apple have adopted the new Code since and started publishing annual transparency reports on their efforts under the code. It is still too early to conclude whether such attempts help to combat the real volume of problematic information circulating in the country. Meanwhile, new comprehensive instruments for evaluating such content and identifying major disinformation agents in the country and its media sector are required.

Disinformation risk ratings

This study looks specifically at a sample of 34 Australian media outlets in English.

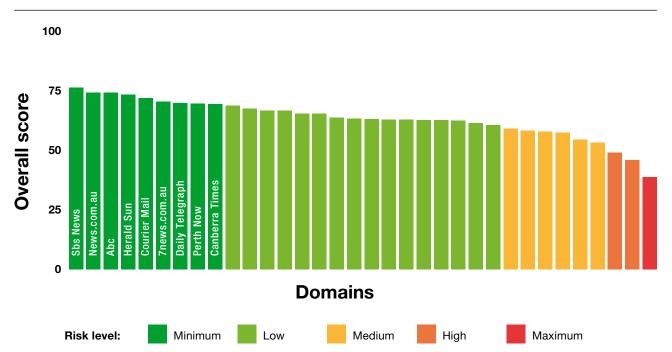
Market overview

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. The team also considered the concentration of media in Australia, and included other outlets not owned by the dominant media owners—News Corp or Nine Entertainment—even though the outlets were not necessarily among the ones with highest reach or rating. These outlets were selected in consultation with leading media scholars in Australia. We also endeavoured to include sites that could represent the range of political and contextual considerations related to the Australian news landscape.

Table 1. Media sites assessed in Australia (in alphabetical order)

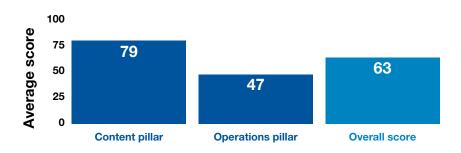
News outlet	Domain	News outlet	Domain
7news.com.au	www.7news.com.au	Pedestrian TV	www.pedestrian.tv
Abc	www.abc.net.au	Perth Now	www.perthnow.com.au
Brisbane Times	www.brisbanetimes.com.au	Red Flag	www.redflag.org.au
Business Insider Australia	www.businessinsider.com.au	Sbs News	www.sbs.com.au/news
Courier Mail	www.couriermail.com.au	Sky News Australia	www.skynews.com.au
Crikey	www.crikey.com.au	The Age	www.theage.com.au
Epoch Times Australia	www.theepochtimes.com	The Australian	www.theaustralian.com.au
Financial Review	www.afr.com	The Canberra Times	www.canberratimes.com.au
Herald Sun	www.heraldsun.com.au	The Chronicle	www.thechronicle.com.au
InDaily	www.indaily.com.au	The Daily Telegraph	www.dailytelegraph.com.au
Independent Australia	www.independentaustralia.net	The Green Left	www.greenleft.org.au
IndigenousX	www.indigenousx.com.au	The Mercury	www.themercury.com.au
Junkee	www.junkee.com	The New Daily	www.thenewdaily.com.au
National Indigenous Times	www.nit.com.au	The Saturday Paper	www.thesaturdaypaper.com.au
New Matilda	www.newmatilda.com	The Sydney Morning Herald	www.smh.com.au
News.com.au	www.news.com.au	The Unshackled	www.theunshackled.net
Nine.com.au	www.nine.com.au	The West Australian	www.thewest.com.au

Figure 1. Disinformation risk ratings by site



The findings for Australia's media sites show overall good results when it comes to disinformation risks. Around three quarters of the sites present minimum to low levels of disinformation risk. Only three out of 34 sites obtained a high or maximum risk level. The low- and medium-risk groups of sites generally scored relatively poorly on their **Operations pillar**, which represents a straightforward opportunity for improving their risk rating. Overall, many of the risk factors in Australia come from a lack of transparency on journalistic and editorial checks and balances in their newsrooms (see Figure 3).

Figure 2. Overall market scores, by pillar



In Australia, nine sites received a **minimum-risk** rating, a high score for a media market with a significant concentration of ownership. These sites perform almost perfectly on all of the Content pillar indicators: most of their articles assessed are neutral and unbiased, carry bylines and headlines which match the story's contents, and do not negatively target groups or individuals. Most of these sites also have key operational policies in place that are transparently accessible, including information about their funding and ownership, a statement of editorial independence, and in many cases a clear process for correcting errors. The prevalence of these good scores for those indicators could at least partly be explained by the fact that many of these sites are owned by the same parent companies, which apply similar policies and guidelines to their various media outlets. However, the average score for all indicators in the **Operations pillar** was 47 points out of a possible 100, with only two websites scoring above 70 points.

Sixteen sites in Australia were rated as low-risk sites. These sites tended to perform relatively well on the Content pillar indicators, scoring especially well for the indicators of Article bias, Sensational language, Visual presentation and Negative targeting of specific individuals or groups. However, they lack some of the operational transparency and editorial safeguards,

Figure 3. Average pillar scores by risk rating level

including information on their sources of funding and clear editorial independence statements. It is also worth noting that our evaluations in the Content pillar were based solely on text and images, and not on other media forms such as videos. Including these media formats might have led to higher risk ratings for some of the sites.

Six sites were assessed with a **medium-risk** rating. Interestingly, five of these are not owned by any of the major media owners in the Australian market. The majority of these sites explicitly support certain political views or community interests, but their risk rating could also be partly due to their lack of resources, which may impact their editorial capacity. In general, editorial decisions related to attribution of content, disclosure of funding sources, or recency of covered stories could be improved in this group.

Only three sites received a high- (2) or maximumrisk (1) rating. They almost exclusively share hyperpartisan political content, with highly sensationalised, cherry-picked, and/or explicitly biased articles. Many of the articles posted in these outlets negatively target individuals, groups, and/or religious or racial minorities. These outlets perform relatively well in terms of bylines, but very poorly on all the other indicators.

Minimum risk Low risk Medium risk High risk (9 domains) (16 domains) (6 domains) (2 domains) 100

Maximum risk (1 domain) 75 50 25 0 Content Operations Content Operations Content Operations Content Operations Content Operations

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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 and a sample of content pertaining to topics which present a disinformation risk, such as politics and health. All article scores are based on a scale of zero (worst) to 100 (best), as assessed by the country reviewers.

Overall, the Australian media market showed low disinformation risks in relation to content, attesting to the quality of coverage in the sample of sites. The articles reviewed suggest relatively unbiased, neutral, non-sensational, and accurate reporting. The market average was 79 out of 100 points. The high average score on the **Content pillar** can partly be attributed to the presence of **Byline information**, non-sensational **Visual presentation** in selected articles, as well as the overall neutrality of the content accompanied by the limited use of **Sensational language** and the **Negative targeting** of groups and individuals. The average **Article bias** score for the entire sample was 86 out of 100.

Within the **Content pillar**, Australian news sites received lower scores (below average) on the presence of **Ledes** (leading paragraphs that advance and summarise the content of the story), **Common** and **Recent coverage**. It was seen that fewer articles contained clear ledes, or stated dates of described events; in general, the events presented were less likely to be covered by other reliable outlets.

Further, the six sites receiving the lowest **Content pillar** scores were all independently-owned and/or small outlets explicitly serving specific community interests or political affiliations. Expectedly, these outlets did not benefit from the range of resources and funding available to much larger organisations, so the low scores could be at least partly due to having less editorial capacity to provide oversight on content. However, it is also worth noting that, due to their explicit political leanings, these outlets have a higher likelihood of presenting and/or framing issues from a biased perspective, which could impact their scores in the **Content pillar**.

Figure 4. Average Content pillar scores by indicator

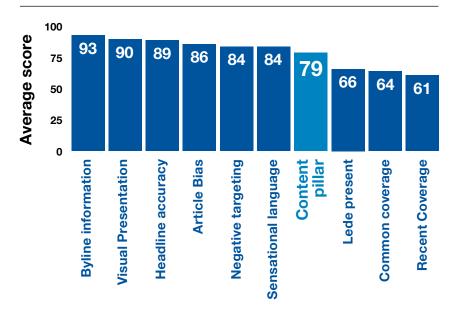


Figure 5. Content pillar scores by site



Operations pillar

This pillar assesses the operational and editorial integrity of a news site. All scores are based on a scale of 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.¹³

All 34 sites in the sample have the potential to score perfectly on all the indicators of the **Operations pillar** if they adopt and disclose such operational policies and information. 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). ¹⁴ 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.

Most domains in our sample received relatively low scores on the range of indicators that measure their operational transparency and accountability. The average score on the **Operations pillar** was 47 out of 100 possible points. Half of the websites scored below the average level. The two best-performing sites, SBS and ABC, scored 74.09 and 71.85, respectively, due to the extensive information they have made publicly available regarding their operational and editorial policies and practices.

A majority of the outlets performed poorly on indicators measuring **Attribution**. The **Attribution** score is the rating for the number of policies and practices identified on the site which ensure that facts and content are accurately and transparently sourced and attributed. Five media outlets obtained a score of 0. This indicates that these sites either did not abide by any of the policies in GDI's framework that ensure accurate facts, authentic media, and accountability for stories, or did not publish these policies.

Overall, many media outlets in the sample did not receive a high score for their transparency regarding funding. This issue was found across all types of media outlets, from large conglomerates to small, independent outlets. It was difficult to find financial statements online for many domains. The lack of funding information may mask conflicts of interest and compromise a reader's trust in the media outlet, and greater transparency may be necessary to alleviate reader concerns regarding potential conflicts of interest from ownership and funding

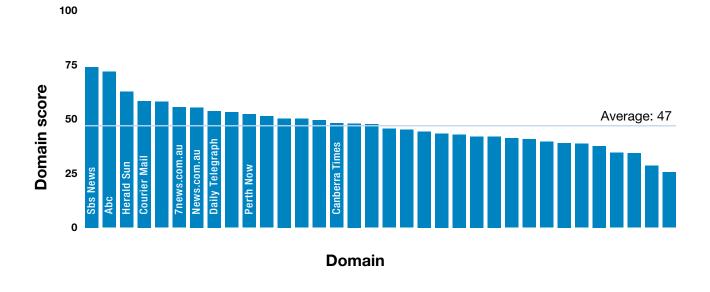
The average score for the **Ensuring accuracy indicator** across the entire sample was just 26 out of 100. The purpose of this indicator is to assess policies which ensure that only accurate information is reported, and that—if needed—corrections will be made promptly and communicated to readers. A low score on this indicator is of concern as it indicates the market as a whole has poor pre-publication fact-checking and post-publication correction policies. This could potentially indicate a lack of accountability for the accuracy of content, hence leading to an increased likelihood for false information to remain and circulate online. It also increases the risk of disinformation if an article is not confirmed to be factual prior to publication, and may result in the sharing and spread of information across social networks and via word of mouth.

Media outlets generally performed better on the **Comment policies indicator**, which assesses the number of policies related to mitigating disinformation and harmful content in user-generated comments, in addition to a rating for how well the media outlet enforces those comment policies. Sixteen of the thirty-four media outlets received a perfect score on the **Comment policies indicator**, with a further four domains scoring 92.86. Note that sites that do not have a comments section are awarded a score of 100 on this indicator, on the basis of the absence of this source of risk on the site. Despite the fact that media outlets may publish guidelines regarding comments and user-generated content, many are not transparent about how these policies are enacted and the regulation process.

100 **75 72** Average score 75 47 47 44 50 26 19 25 Editorial principles & practices **Comment policies** Ownership **Operations Ensuring accuracy Attribution** Funding

Figure 6. Average Operations pillar scores by indicator





Conclusion

Our assessment of the disinformation risk of news sites in Australia finds a fairly low average risk overall. Out of the 34 sites reviewed, only three received high or maximum ratings, and 6 received a medium rating.

The remaining 25 sites were in the low-risk (16 sites) or minimum-risk (nine sites) category.

Australian media sites typically demonstrate low levels of risk in our framework when it comes to indicators that assess the disinformation risk of the **Content pillar**. As for the **Operations pillar**, the rating of many outlets could be improved through greater levels of accuracy assurance and added transparency regarding funding sources, true beneficial owners of the site, and other operational and editorial policies such as the attribution of sources.

News sites could address these shortcomings by taking actions that:

- Increase transparency about fact-checking processes.
 Although our review of the sites indicates some level of fact-checking occurring before the publication of articles, few outlets explicitly outlined their fact-checking process, and/or included this information in their editorial policies.
- Ensure explicit and easy-to-access publication of editorial and journalistic practices through a specific, clearly labelled page on the site.
- Encourage sites to provide clear and accurate sources for all external media presented on the website, and avoid vague or absent references, such as 'supplied', or 'Facebook'.
- Improve the score on the Common coverage and Recent coverage indicators, by ensuring that the day of the week or the date of the event is easily identifiable. This will help readers situate the event in time so that they can seek other relevant articles that may provide different perspectives on the same event.
- Increase the number of articles containing a fact-based lede, so that readers can gather the basic facts of a story before being influenced by the journalist's opinion or analysis.

- Enforce overriding principles that make the presentation and categorisation of opinion pieces clear to the reader. Stylistic and editorial choices are acceptable and allow for heterogeneity in the Australian media landscape. However, we recommend the explicit categorisation of opinion pieces and, if possible, a separate section on the website rather than masking these types of articles by using vague descriptors that may differ between outlets. This will reduce the ambiguity about what is fact and what is an opinion.
- Improve and make more visible a site's correction practices for errors. It is important that such site corrections are clearly seen and understood.
- Focus on adopting and making transparent journalistic and operational standards like those set by the Journalism Trust Initiative, publishing their sources of funding and publishing a statement of editorial independence and guidelines for issuing corrections.

The need for a trustworthy, independent, and systematic rating of disinformation risk is pressing, particularly in countries with high media concentration. This risk-rating framework will provide significant information to policymakers, media outlets, and the advertising industry, enabling them further to stem the tide of money that incentivises and sustains the publication and dissemination of disinformation.

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. ¹⁵ 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.

Global Disinformation Index Technical Advisory Group

GDI's risk assessment framework is developed with the advice and support of a technical advisory group (TAG), including:

- Ben Nimmo (Facebook)
- Camille François (Graphika)
- Miguel Martinez (co-founder & chief data scientist, Signal Al)
- Nic Newman (Reuters Institute of Journalism)
- Olaf Steenfadt (Reporters without Borders)
- Cristina Tardáguila (Lupa)
- Amy Mitchell (Pew Research)
- Scott Hale (Meedan and Credibility Coalition)
- Finn Heinrich (OSF), and
- Laura Zommer (Chequeado)

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 **Article bias**, **Sensational language** 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
	Headline accuracy			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			Indicative of clickbait Indicative of stories creates accountability eracity Indicative of fact-based reporting and high journalistic standards Indicative of a true and significant event let Indicative of a newsworthy event, rather which has been taken out of context which has been taken out of neutral, fact-based reporting rounded analysis Indicative of	Indicative of a true and significant event
Content	Recent coverage	None Art	Article	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
	Attribution	None		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		Rating for the number of policies identified on the site	Assesses policies to reduce disinformation in usergenerated content
	policies	Moderation		Rating for the mechanisms to enforce comment policies identified on the site	addine Indicative of clickbait ided in the Attribution of stories creates accountability for their veracity the a fact- Indicative of fact-based reporting and high journalistic standards peen pal media Indicative of a true and significant event Indicative of a newsworthy event, rather than one which has been taken out of context targets a Indicative of hate speech, bias or an adversarial narrative Indicative of neutral, fact-based reporting or well-rounded analysis Indicative of neutral, fact-based reporting or well-rounded analysis Indicative of neutral, fact-based reporting or well-rounded analysis 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 actices Assesses policies to reduce disinformation in user-generated content Assesses the mechanism to enforce policies to reduce disinformation in user-generated content Assesses the degree of editorial independence and the policies in place to mitigate conflicts of interest is likely to do nits actices Assesses the policies in place to ensure that factual information is reported without bias actices Assesses the policies in place to ensure that factual information is reported without bias actices Assesses policies to ensure that only accurate and istinguish between news and opinion content actices Assesses policies to ensure that needed corrections are adequately and transparently disseminated actices Assesses policies to ensure that needed corrections are adequately and transparently disseminated Indicative of possible conflicts of interest stemming from over-reliance on one or few sources of revenue and are active of the incentives and conflicts of interest that can arise from opaque revenue sources Indicative of a separation between financial and editorial decision making, to avoid conflicts of interest that can arise from opaque revenue sources Indicative of the transparency that is require
		Editorial independence		Rating for the number of policies identified on the site	
	Editorial narrative principles and practices Content guidelines		Rating for the degree to which the site is likely to adhere to an ideological affiliation, based on its published editorial positions	•	
				Rating for the number of policies identified on the site	Assesses the policies in place to ensure that factual information is reported without bias
		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
Operations	Ensuring	Pre-publication fact-checking	Domain	Rating for the number of policies and practices identified on the site	
	accuracy Post-pul	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
Funding Accountability to readership Transparent funding Owner-operator division Ownership Transparent Ownership Rating based on whether reader subscriptions or donations are identified as a revenue source inform Rating based on the degree of transparency the site provide regarding its sources of funding Rating based on the number of distinct executive or board level financial and editorial decision-makers listed on the site Transparent Ownership Rating based on the number of distinct executive or board level financial and editorial decision-makers listed on the site Rating based on the degree of transparency the site interest of the provides regarding its ownership structure.	Funding	incentive		· ·	Indicative of possible conflicts of interest stemming from over-reliance on one or few sources of revenue
	monitor the incentives and conflicts of interest that				
	Ownership			board level financial and editorial decision-makers	editorial decision making, to avoid conflicts of
	Ownership				monitor the incentives and conflicts of interest that

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	Standard deviation
Minimum risk	69.12	100	> 1.5
Low risk	59.81	69.11	> 0.5 and ≤ 1.5
Medium risk	50.5	59.8	> -0.5 and ≤ 0.5
High risk	41.2	50.49	≥ -1.5 and ≤ -0.5
Maximum risk	0	41.19	< -1.5

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, Brazil, Canada, India, Italy, Kenya, Malaysia, Mexico, Nigeria and Spain.
- 3 See https://www.acma.gov.au/sites/default/files/2020-09/Trends-in-online-behaviour0-and-technology-usage-ACMA-consumer-survey-2020.pdf.
- 4 See https://www.acma.gov.au/sites/default/files/2020-09/Trends-in-online-behaviour0-and-technology-usage-ACMA-consumer-survey-2020.pdf.
- 5 See https://www.canberra.edu.au/research/faculty-research-centres/nmrc/digital-news-report-australia-2021.
- **6** Noam, Eli M., ed. Who Owns the World's Media? Media Concentration and Ownership around the World. Oxford; New York: Oxford University Press, 2016.
- 7 Parliament; address=Parliament House, Canberra corporateName=Commonwealth. 'Media and Broadcasting in the Digital Age'. Text. Australia. Accessed 19 August 2021. https://www.aph.gov.au/About-Parliamentary-Departments/Parliamentary-Departmentary-Departments/Parliamentary-Departmentary-Departmentary-Departmentary-Departmentary-Departmentary-Departmentary-Departmentary-Departmentary-D
- **8** See https://www.canberra.edu.au/research/faculty-research-centres/nmrc/digital-news-report-australia-2021.

- **9** See https://www.abc.net.au/news/2021-07-01/regional-tv-changes-win-nine-southern-cross-austereo-vic-gld/100258412.
- 10 See https://www.pwc.com.au/industry/entertainment-and-media-trends-analysis/outlook/newspapers.
 https://www.pwc.com.au/industry/entertainment-and-media-trends-analysis/outlook/newspapers.
 https://www.pwc.com.au/industry/entertainment-and-media-trends-analysis/outlook/newspapers.
- 11 Authority, Australian Communications and Media. 'News Media Bargaining Code | ACMA'. Australian Communications and Media Authority, 1628227341. https://www.acma.gov.au/news-media-bargaining-code.
- 12 See https://digi.org.au/disinformation-code/.
- 13 The Operations pillar looks at whether relevant policies are in place and made transparent to the public. 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.
- 14 For more information on the JTI, which has adopted an ISO standard for the industry, please see: https://jti-rsf.org/en/.
- 15 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.

