

An aerial night view of a city, likely Tokyo, showing a dense urban landscape with numerous skyscrapers and buildings illuminated with lights. A prominent feature is a multi-level highway interchange with bright orange and yellow light trails from traffic, curving through the city. The overall color palette is dominated by blues and oranges.

# GDI

Global  
Disinformation  
Index

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# Disinformation Risk Assessment: The Online News Market in Japan

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





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**The Global Disinformation Index** is a not-for-profit organisation 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](http://www.disinformationindex.org).

**The Institute for the Next Generation of Journalism and Media (INGJM)** is one of the Project Research Institutes of the Comprehensive Research Organization of Waseda University. INGJM is engaged in research on the construction of a model for next-generation journalism that is trusted by citizens in the digital society. We examine the requirements for journalism to be trusted, including that it be “evidence based”, “open”, and “interactive”. Trusted journalism approaches such as fact-checking, data journalism, open journalism, engaged journalism, constructive journalism and solutions journalism are being practised around the world today.

INGJM is currently working on a fact-checking system, which is one of the main pillars in the fight against disinformation and misinformation. In addition, INGJM invites practitioners and researchers working on next-generation journalism, particularly engaged journalism, as lecturers to talk about their awareness of the issues and actual practices, as we collect and systematise case studies.

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Comprehensive Research Organization



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# Table of contents

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<b>Executive summary</b>	<b>4</b>
Key findings: Japan	<b>5</b>
<b>The Japanese media market:</b> Key features and scope	<b>6</b>
<b>Disinformation risk ratings</b>	<b>8</b>
Market overview	<b>8</b>
Pillar overview	<b>11</b>
Content pillar	
Operations pillar	
<b>Conclusion</b>	<b>15</b>
<b>Appendix: Methodology</b>	<b>16</b>
Site selection	<b>16</b>
Data collection	<b>17</b>
Data analysis and indicator construction	<b>17</b>
Risk ratings	<b>19</b>
<b>Endnotes</b>	<b>20</b>



# Executive summary

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**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 disinformative narratives surrounding the COVID-19 pandemic are a recent – and deadly – 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 Japan 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 Japan, based on a study of 33 news domains. These findings are the result of the research led by the GDI with the researchers from the Institute for the Next Generation of Journalism and Media at Waseda University, from June through September of 2022. Sites that are 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 Japan will provide crucial information to policymakers, news websites and civil society, enabling key decision-makers to stem the tide of money that incentivises and sustains disinformation. Moreover, the results of the current study will contribute to GDI’s mission to disrupt the business model of disinformation, as it is earmarked for sharing with ad tech industry stakeholders and other parties acting to defund disinformation.

## Key findings: Japan

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

**About 40 percent of the sites in our sample present minimum to low levels of disinformation risk.**

- Five sites were rated as having a minimum disinformation risk. The minimum-risk sites distinguish themselves through a high level of transparency on their operational policies. The five minimum-risk sites are named in this report.
- Eight sites were rated as presenting a low risk of disinformation. These sites also score well overall for publishing neutral and non-sensational content, but were much less likely to disclose information on some of the operational policies that are deemed critical for managing disinformation risk in the newsroom.

**Only a limited number of Japanese sites present high or maximum levels of disinformation risk.**

- Two sites presented a high disinformation risk rating, while only one site had a maximum-risk rating. The remaining seventeen sites received a medium-risk rating.
- The maximum-risk rating site published biased content with negative targeting, thus creating an opportunity to build adversarial narratives and manipulate their audience.

**Most media sites assessed in Japan lack transparency on operational policies, which can help mitigate disinformation risks.**

- All sites including minimum-risk media sites showed poorer performance on the **Operations pillar** than the **Content pillar**. About 75% of the sites (25 sites) scored below 50 on the **Operations pillar**.
- Most sites provided little or no information about their attribution policies and how they ensure the accuracy of the stories they publish.
- A majority of sites also did not disclose information about their editorial guidelines, funding structure, or how they regulate their user-generated comment sections.

# The Japanese media market: Key features and scope

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**Japan used to be known as a country of newspapers with large circulation, such as Yomiuri, which once had a circulation of over 10 million copies. Even in 2021, Yomiuri and Asahi had among the highest circulations in the world, with 7 million and 4.6 million copies respectively.<sup>2</sup>**

However, newspaper circulation in Japan is rapidly declining, in line with the global trend.<sup>3</sup> Though lagging behind the efforts of other countries, traditional media in Japan are becoming increasingly aware of the digital shift and are putting more effort into turning their newspapers into news websites.

According to a 2021 survey conducted by the Ministry of Internal Affairs and Communications (MIC), the main sources for current news in Japan are: television (79%), newspapers (33%), online news sites (61%), and social media (29%).<sup>4</sup> Traditional media (TV and newspapers) usage decreased by 24 points, while online media (news sites and social media) usage increased by 31 points from 2015.<sup>5</sup> Among online media, Yahoo! News, a news aggregator that publishes a diverse range of online news, mainly from traditional media, is the most popular news website in Japan. News consumption in Japan is at a transitional stage, moving from traditional media to online media.

However, traditional media remain more trusted than online media, and especially social media. According to a Ministry of Internal Affairs and Communications

(MIC) survey<sup>6</sup> conducted during the COVID-19 pandemic, 61% of respondents trust newspapers, the highest level among all generations aged 20+ and across gender. Among the respondents, 54% trust TV and 42% news websites (including social media news distribution), while only 15% trust social media. According to the Reuters Institute, which conducts an annual survey measuring “trust in news,” the trust figure for Japan is 44% in 2022.<sup>7</sup> It has been gradually decreasing from 46% in 2015, except in the past two years when it rose by 7 points. This seems to be a result of the pandemic, which has restored the importance of the media. This trend will be interesting to observe in the long term, because the level of trust in the media may return to its previous state as the pandemic calms down.

Interestingly, internet advertising expenditure in Japan exceeded traditional media advertising expenditure (newspapers, magazines, radio and TV) for the first time in 2021. According to Dentsu, internet advertising expenditure was 2,705.2 billion yen in 2021, up 21.4% from 2020. While the advertising market in 2020 was affected by the pandemic, the market was positively impacted by the Tokyo Olympic and Paralympic Games in the following year. Internet advertising expenditure continued to grow over the long term from 377.7 billion yen in 2005 to 2,705.2 billion yen in 2021, exceeding total advertising expenditures for traditional media (2,453.8 billion yen). Internet advertising expenditure in 2021 accounted for about 40% of total advertising expenditures (6,799.8 billion yen) in Japan.<sup>8</sup>

Although freedom of the press is guaranteed by the Constitution of Japan, there are some concerns that it might be limited. The 2022 press freedom index published by Reporters Without Borders ranked Japan 71st out of 180 countries, a significant drop from its best rank (11th) in 2010.<sup>9</sup> Factors cited as restricting freedom of the press include the Specified Secrets Protection Law enacted in 2014, which prohibits the publication of information obtained without respecting governmental rules; Article 4 of the Broadcasting Act, which stipulates that broadcasting must maintain political neutrality; and government pressure on the media.<sup>10</sup> As for political neutrality, Japan's Minister of Internal Affairs and Communications once mentioned that the government could shut down a broadcaster's airwaves if it repeated non-neutral political reporting.<sup>11</sup> As a result, this legal and political framework may encourage self-censorship by journalists

Additionally, the traditional "kisha kurabu" (press club) system discourages the analysis or fact-checking of government statements, while favouring the publication of these statements verbatim.<sup>12</sup> Traditionally, many kisha kurabu consist of journalists from major Japanese newspapers, television stations and news agencies, who have exclusive and easy access to the Prime Minister's Office and other government offices. Reporters in charge of covering the Prime Minister's Office are said to be self-regulating and tend to avoid writing articles critical of the administration.<sup>13</sup>

Disinformation in Japan is often a problem during natural disasters such as the Great East Japan Earthquake. Among other examples, immediately after the Kumamoto earthquake in 2016, disinformation was spread on Twitter that "a lion had been released from a zoo due to an earthquake," and the sender was arrested by police.<sup>14</sup> More recently, in September 2022, when Shizuoka Prefecture was hit by torrential rains as a result of Typhoon No. 15, a shocking image of houses flooded in large areas was shared on Twitter as "a picture of flood damage in Shizuoka Prefecture captured by a drone." It turned out to be a fake image which was fabricated with image-generating AI technology.<sup>15</sup>

While disinformation during elections is rarely a serious issue, the 2018 Okinawa gubernatorial election saw widespread disinformation and fake websites attacking one of the candidates.<sup>16</sup> In the medical health field, in 2016 WELQ, a popular medical information website run by the big IT company DeNA, was shut down after it was found to be posting inaccurate information based on little evidence.<sup>17</sup>

In Japan, adversarial elements, such as hate speech, slander, and discriminatory remarks against women, minorities, and people of certain nationalities on social media, is also recognised as a major problem.

Fact-checking efforts against disinformation have been gradually increasing since the late 2010s, but are still considered insufficient compared to neighbouring countries, Europe, and the United States. The government (MIC<sup>18</sup>)-sponsored study group stated that "it is appropriate to promote measures against disinformation, first of all, based on voluntary efforts by the private sector, including platformers."<sup>19</sup> Currently, in Japan there is no effort to regulate disinformation by law.

However, traditional media and other organisations undertook efforts to combat disinformation. Mainichi, Nippon TV, and Asahi are three traditional media outlets in Tokyo that engage in fact-checking at present. Online media outlets such as BuzzFeed Japan and Infact also conduct fact-checking. In 2022, Litmus and the Japan Fact-check Center (JFC) were established as organisations specialising in fact-checking. The Safer Internet Association (SIA), whose regular members include Z holdings (Yahoo! Japan and LINE under its umbrella), set up JFC as part of its efforts to combat disinformation. JFC is funded by Google.org and Yahoo! Japan.

FactCheck Initiative Japan (FIJ), a non-profit organisation, was established in 2017. FIJ itself does not conduct fact-checking, but assists fact-checkers and fact-checking organisations. FIJ detects questionable narratives (mainly on Twitter) with its Claim Monitor system, which combines machine-learning and human analysts, and provides them to fact-checking organisations.

# Disinformation risk ratings

This study looks specifically at a sample of 33 news websites in Japanese.

## 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.

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

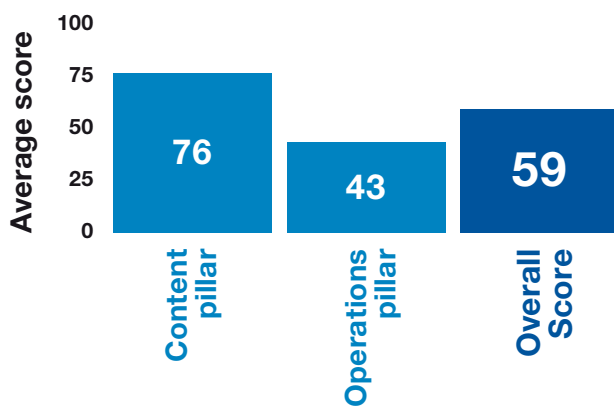
News outlet	Domain	News outlet	Domain
<b>ABEMA TIMES</b>	times.abema.tv	<b>Nikkan Gendai Digital</b>	www.nikkan-gendai.com
<b>AERA dot.</b>	dot.asahi.com	<b>Nikkan SPA!</b>	nikkan-spa.jp
<b>Asahi Shimbun</b>	www.asahi.com	<b>Nikkei</b>	www.nikkei.com
<b>Bunshun Online</b>	bunshun.jp	<b>Nikkei Business Digital</b>	business.nikkei.com
<b>Chunichi Shimbun</b>	www.chunichi.co.jp	<b>Nippon TV</b>	news.ntv.co.jp
<b>Daily Shincho</b>	www.dailyshincho.jp	<b>Nishinippon Shimbun</b>	www.nishinippon.co.jp
<b>Diamond Online</b>	diamond.jp	<b>PRESIDENT Online</b>	president.jp
<b>FNN Prime Online</b>	www.fnn.jp	<b>Sankei Shimbun</b>	www.sankei.com
<b>Gendai Business</b>	gendai.ismedia.jp	<b>Seikyo Shimbun</b>	www.seikyoonline.com
<b>Hokkaido Shimbun</b>	www.hokkaido-np.co.jp	<b>Shimbun Akahata</b>	www.jcp.or.jp/akahata
<b>HuffPost Japan</b>	www.huffingtonpost.jp	<b>Smart FLASH</b>	smart-flash.jp
<b>J-CAST News</b>	www.j-cast.com	<b>TBS NEWS DIG</b>	newsdig.tbs.co.jp
<b>Jiji.com</b>	www.jiji.com	<b>Toyo Keizai Online</b>	toyokeizai.net
<b>Litera</b>	lite-ra.com	<b>Wedge Online</b>	wedge.ismedia.jp
<b>Mainichi Shimbun</b>	mainichi.jp	<b>Yomiuri Shimbun</b>	www.yomiuri.co.jp
<b>News Post Seven</b>	www.news-postseven.com	<b>zakzak</b>	www.zakzak.co.jp
<b>NHK</b>	www3.nhk.or.jp/news		

Source: Global Disinformation Index





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



Source: Global Disinformation Index

In Japan, five sites received a minimum-risk rating. These sites performed well on almost all of the **Content** indicators. The average score for the **Content pillar** was 86 points out of a possible 100. Almost all of the articles assessed were neutral and unbiased, carried clear bylines, and included headlines that match the story’s contents. They also did not negatively target groups or individuals. These sites had many of the key operational policies in place and published information about them on their websites, including their funding and ownership structure, and a statement of editorial independence. However, some of these sites lacked details about their attribution policies and a clear process for correcting errors.

Eight sites in Japan were rated as low-risk sites. These sites tended to perform relatively well on the **Content pillar** indicators, especially for having neutral and

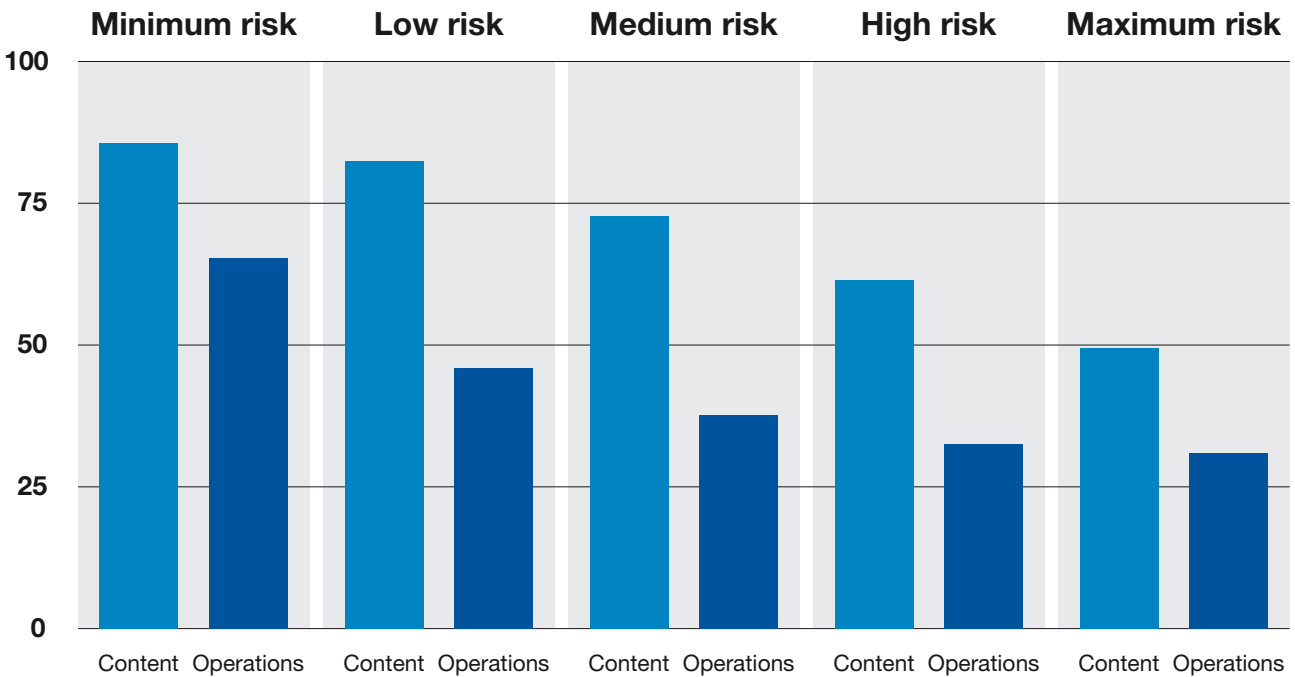
non-sensational content and avoiding negative targeting against any specific individual or group. Additionally, one of these eight sites had the top score (91 points) on the **Content pillar**. However, low-risk sites received a relatively low score on the **Operations pillar**. These sites tended to lack transparency about attribution and accuracy policies, editorial guidelines, and operational transparency, including information on their sources of funding.

Seventeen sites were assessed with a medium-risk rating. Although the average score for the **Content pillar** was 73 points, the average score on the **Operations pillar** was 38 points. These sites generally performed well on providing reliable and unbiased content, but they did not perform exceedingly well on the *Lede present*, *Common coverage*, and *Recent coverage* indicators, according to the GDI methodology. Some of these news sites are operated by local newspapers or magazine publishers, and tended to feature content that is unique or not necessarily recent. Regarding the **Operations pillar**, they lacked key operational policies which are associated with strong universal journalistic standards. In general, transparency about attribution policies, editorial guidelines, and policies to ensure accuracy could be improved in this group.

Three sites received a high- or maximum-risk rating. One of these sites exclusively published partisan political content, with highly sensationalised and extremely biased articles. Many of the articles posted by this website negatively targeted individuals and groups. The news sites in these categories tended to perform poorly on the **Content pillar** as they rarely used clear bylines and ledes to introduce their stories. They also scored very poorly on all the **Operations pillar** indicators, except for *Comment policies*.



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



Source: Global Disinformation Index

## Pillar overview

### Content pillar

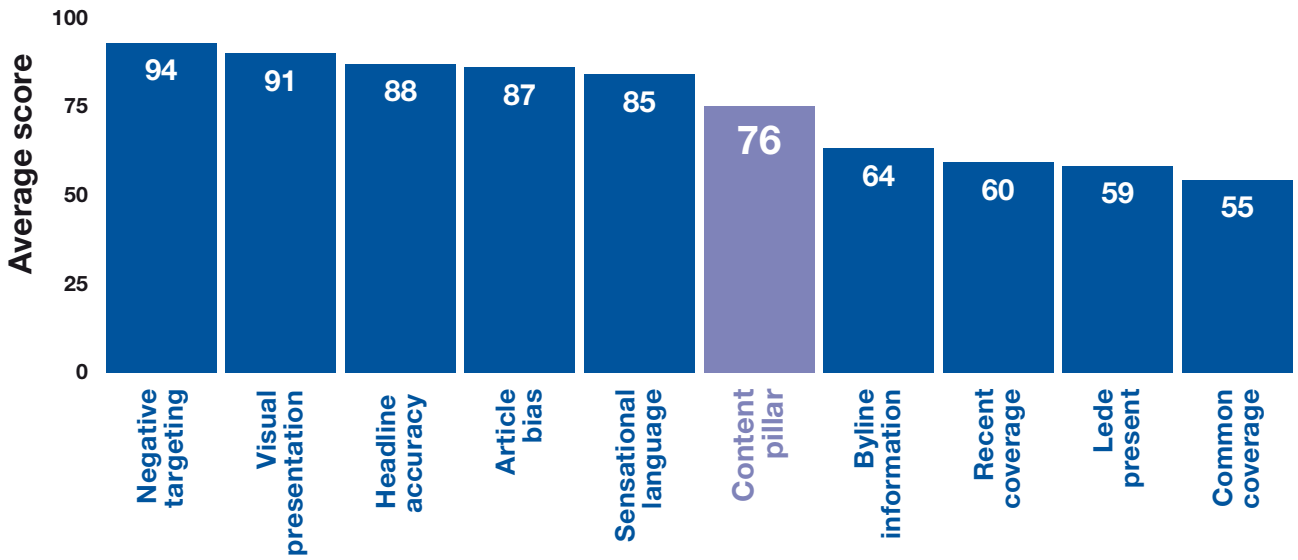
The **Content pillar** focuses on the reliability of the content provided on the site. Analysis for this pillar is based on the assessment of twenty anonymised articles for each domain. These articles are drawn from the most frequently shared pieces of content during the data collection period and a 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).

Overall, the Japanese media market showed low disinformation risks in relation to content, attesting to the quality of the coverage of the sampled sites. The articles reviewed featured relatively unbiased, neutral, and non-adversarial reporting. The market average was 76 out of 100 points in this pillar.

The high average score on the **Content pillar** can partly be attributed to the absence of *Negative targeting* (94 out of 100), the neutral *Visual presentation* of the articles (91 out of 100), and the *Headline accuracy* (88 out of 100) in most of the articles. Additionally, the overall neutrality of the content was accompanied by the limited use of *Sensational language* (85 out of 100). The average *Article bias* score for the entire sample was 87 out of 100.

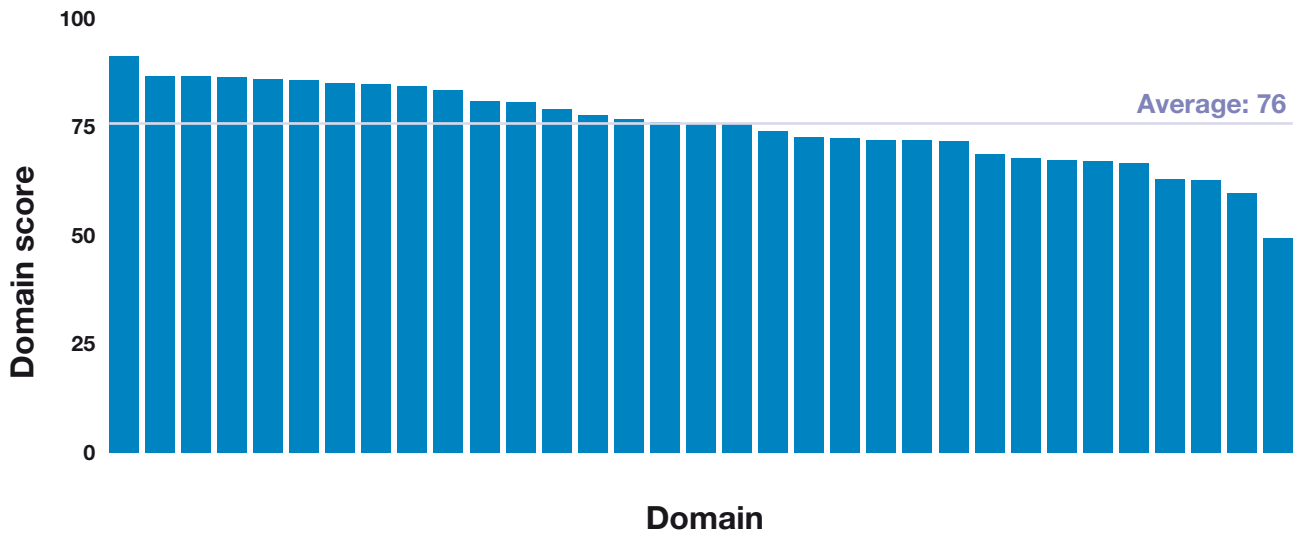
Within the **Content pillar**, Japanese news sites received scores below the pillar average on the *Lede present* indicator (59 out of 100). This means that Japanese sites did not consistently use introductory statements that summarise the facts of the story. In the sample the use of a clear byline was also inconsistent, as reflected by the low score for the *Byline information* indicator (64 out of 100). The scores for *Common* and *Recent coverage* (55 and 60, respectively) suggest that some articles covered events that were not necessarily recent and that the news events were less likely to be covered by other reliable outlets.

Figure 4. Average Content pillar scores by indicator



Source: Global Disinformation Index

Figure 5. Content pillar scores by site



Source: Global Disinformation Index



## Operations pillar

The **Operations 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 or elsewhere online. The **Operations** indicators are the quickest wins to reduce disinformation risk ratings, as they represent policies that domains can immediately establish and make public.

Most domains in the sample received relatively low scores on the indicators that measured their operational transparency and accountability. The average score on the **Operations pillar** was 43 out of 100 possible points. In fact, 25 out of the 33 sample sites scored below 50. The two best-performing sites, Asahi Shimbun and NHK, scored 89 and 69, respectively, due to the extensive information they made publicly available concerning their operational structure and editorial policies and practices.

A majority of the outlets performed poorly on indicators measuring the transparency of policies on *Attribution*, i.e. practices that ensure that facts and content are accurately and transparently sourced and attributed. Most of the sites (28 out of 33) scored below 20 on this indicator. This indicates that most of the Japanese sites could improve their scores by publishing on their sites the policies they may already have in place to ensure correct and transparent attribution.

The average score for the *Ensuring accuracy* indicator across the entire sample was 14 out of 100. This indicator is based on the policies published by the sites to ensure that only accurate information is reported, and that — if needed — corrections are promptly made and communicated to the readers. A low score on this indicator is of concern, as it indicates that the market as a whole features very

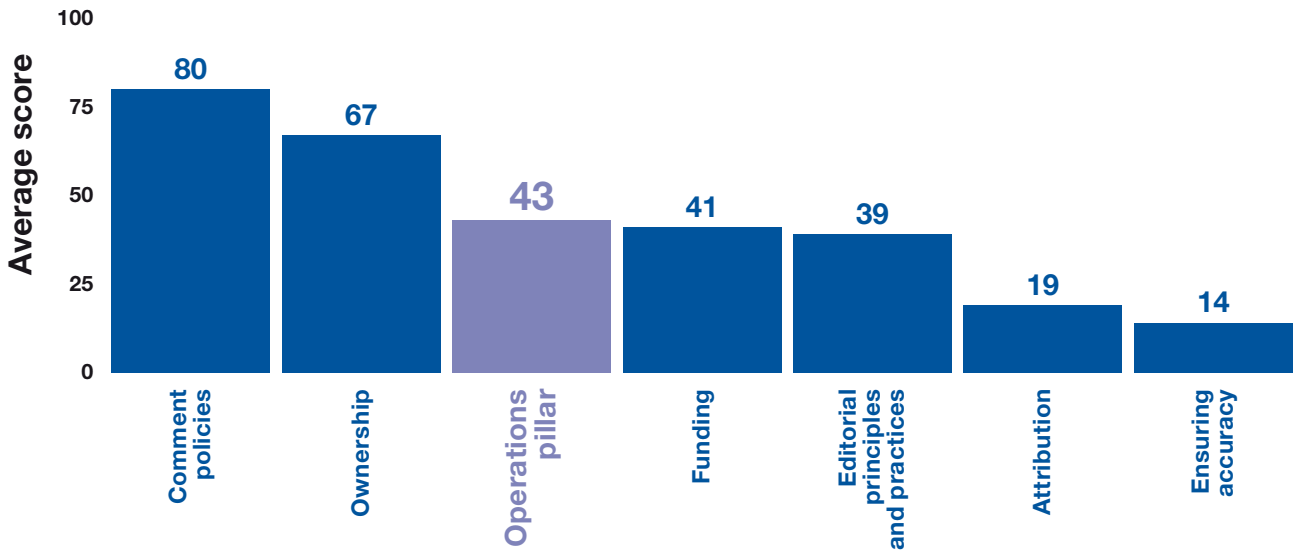
low transparency about pre-publication fact-checking and post-publication correction policies. This could potentially indicate a lack of accountability for the accuracy of content, increasing the likelihood of inaccurate or baseless information being published and circulated online.

The Japanese sites scored relatively low on the *Editorial principles and practices* (39 out of 100) and *Funding* indicators (41 out of 100). This suggests that Japanese sites could do a better job of publishing guidelines to preserve editorial independence and integrity, as well as of improving transparency about their sources of funding.

Media outlets generally performed better on the *Ownership* (67 out of 100) and the *Comment policies* indicators (80 out of 100). Sites were fairly transparent about their ownership structure and the policies they have in place to mitigate disinformation and harmful content in user-generated comments. Very few sites in Japan have user-generated comment sections; those that do need to make a greater effort to mitigate this specific source of disinformation risk, as many sites do not specify how these policies are implemented. On the other hand, 25 of the 33 media outlets received a perfect score on the *Comment policies* indicator. 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.

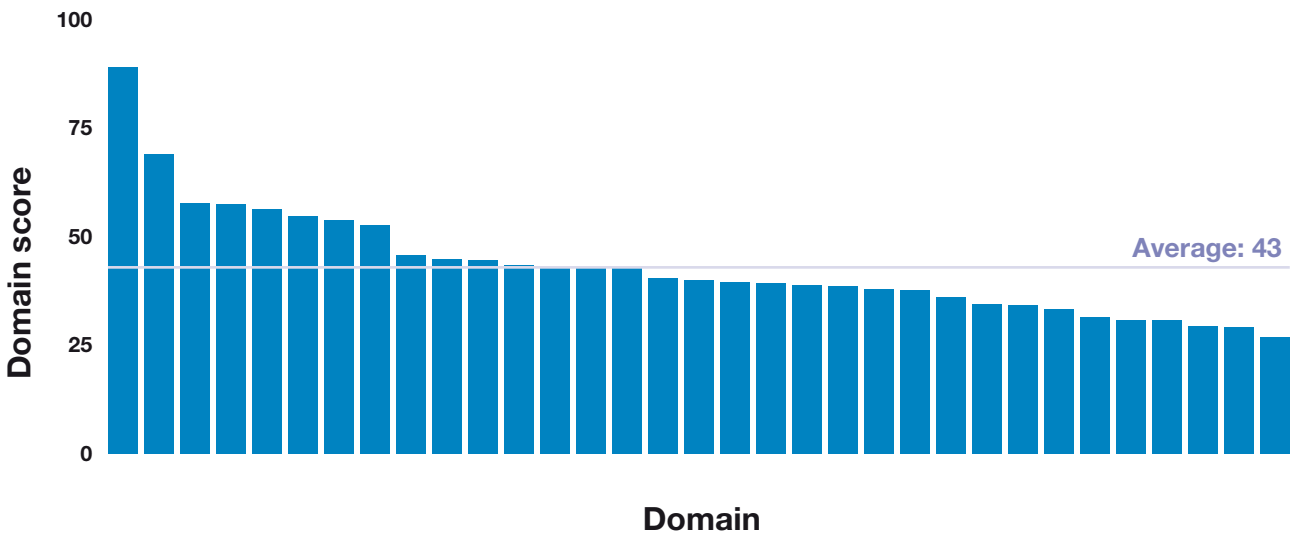
The indicators for the **Operations pillar** are based on the standards which have been set by journalists as part of the Journalism Trust Initiative (JTI).<sup>20</sup> As the JTI points out, adopting these standards raises credibility in the eyes of the public, compels traditional media to reassess their practices in the digital age, and encourages new media outlets to be more transparent about their business models.

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



Source: Global Disinformation Index

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



Source: Global Disinformation Index



# Conclusion

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**Japanese news sites have an overall low risk of disinformation, according to our review of the Content pillar and the Operations pillar on the basis of the GDI methodology.**

In particular, the **Content pillar** scores are fairly high, but the **Operations pillar** indicators scored poorly in comparison. Improving each of the **Operations pillar** indicators will help reduce disinformation risk and increase credibility.

The following measures are recommended for news sites:

- State clear and specific operational and editorial policies, including a statement of editorial independence and guidelines to avoid conflicts of interest. Publish editorial policies and journalistic practices on pages within the site that are easily accessible to the audience.
- Increase transparency regarding fact-checking process. Include information on the fact-checking process deployed before the publication of an article and clearly explain the process on the website.
- Improve the way errors in the articles can be communicated to the website and publish details on how the errors are corrected. It is important that corrections on news sites are clearly visible and understandable.
- Publish on their sites the policies in place to ensure correct and transparent attribution.
- Increase the presence of fact-based ledes at the beginning of articles. Ensure that readers can gather the basic facts of a story before the reporter's interpretation or analysis.
- Clearly publish the rules for posting comments and how the user-generated comment sections are regulated to reduce the risk of disinformation as much as possible.

# Appendix: Methodology

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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** 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>21</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 twenty articles published by each domain. Ten of these articles are randomly selected among a domain's most frequently shared articles on Facebook within a two-week period. The remaining ten 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** 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** 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** 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 zero 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 zero 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** indicators are: *Attribution*, *Comment policies*, *Editorial principles and practices*, *Ensuring accuracy*, *Funding*, and *Ownership*. For each indicator, values are normalised to a scale of zero 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
		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
	Ensuring accuracy	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
		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	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
		Transparent funding		Rating based on the degree of transparency the site provides 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
	Ownership	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		

Source: Global Disinformation Index



## 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 bound	Upper bound	Standard deviation
Minimum risk	69.12	100	> 1.5
Low risk	59.81	69.11	> 0.5 and ≤ 1.5
Medium risk	50.50	59.80	> -0.5 and ≤ 0.5
High risk	41.20	50.49	> -1.5 and ≤ -0.5
Maximum risk	0	41.19	≤ -1.5

*Source: Global Disinformation Index*

# Endnotes

- 1 The GDI assessment framework is outlined in the annex of this report.
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- 14 Ministry of Internal Affairs and Communications. (2020). *Final Report of the Study Group on Platform Services* (in Japanese). [https://www.soumu.go.jp/main\\_content/000668595.pdf](https://www.soumu.go.jp/main_content/000668595.pdf).
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- 16 Ibid., 14.
- 17 Otake, T. (March 13 2017) "Huge number of articles on DeNA info websites found to have plagiarism, copyright issues", *Japan Times*. <https://www.japantimes.co.jp/news/2017/03/13/national/huge-number-articles-dena-info-websites-found-plagiarism-copyright-issues/>.
- 18 Ministry of Internal Affairs and Communications.
- 19 Ibid., 14.
- 20 For more information on the JTI, please see: <https://www.journalismtrustinitiative.org/>.
- 21 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.



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