

The GDI logo is rendered in a large, bold, white sans-serif font. The background of the entire cover is a complex digital graphic featuring a world map composed of blue dots, overlaid with a network of glowing orange and red lines and various colored circles (red, orange, yellow, purple, white) that suggest data points or nodes in a network.

GDI

Global
Disinformation
Index

Media Market Risk Ratings: Malaysia

www.disinformationindex.org

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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

The Centre for Independent Journalism, Malaysia (CIJ) is a non-profit organisation that aspires for a society that is democratic, just and free where all peoples will enjoy free media and the freedom to express, seek, and impart information. For more information, visit <https://cijmalaysia.net>



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Preface

Since the invention of the web, how we live our lives online—and off—has changed in countless ways. This includes how news is funded, produced, consumed and shared.

With these shifts in the news industry have come risks. Disinformation is one of them. Disinformation has been used as a tool to weaponise mass influence and disseminate propaganda. During the COVID-19 pandemic, disinformation has created an infodemic undermining public health, safety and government responses. No country or media market is immune from these threats.

To combat disinformation, we need to find ways to disrupt the system and its funding. This is where the Global Disinformation Index (GDI) has set its focus.

At the GDI, we believe that an independent, trusted and neutral risk rating of news sites’ disinformation risks is needed. These risk ratings can be used by advertisers and ad tech companies to ensure that where they direct their online ad spends is aligned with their own brand safety and risk mitigation strategies for disinformation.

The GDI’s research offers a trusted and neutral assessment about a news domain’s risk of disinforming. By looking at content, operational and context indicators, the GDI provides a domain-level rating about a news site’s risk of disinforming an online user.

The following report presents the results of applying the GDI risk rating methodology to some of the most frequently visited media sites in Malaysia. In total we assessed 31 sites. These sites were selected to ensure a media sample that reflected the linguistic diversity of the country and the information sources that different key groups use for news. The media sample includes English, Malay and Mandarin language sites.

The assessment and report were done in partnership with the Centre for independent Journalism (CIJ) in Malaysia.

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

News outlet	Domain
Berita Harian	www.bharian.com.my
Borneo Post	www.theborneopost.com
China Press	www.chinapress.com.my
Daily Express Sabah	www.dailyexpress.com.my
Free Malaysia Today	www.freemalaysiatoday.com
Guang Ming Daily	www.guangming.com.my
Harakah	www.harakahdaily.net
Harian Metro	www.hmetro.com.my
Kosmo!	www.kosmo.com.my
Kwong Wah Yit Poh	www.kwongwah.com.my
Malay Mail Online	www.themalaymailonline.com
Malaysiakini	www.malaysiakini.com
Malaysian Chronicle	www.malaysia-chronicle.com
Malaysian Gazette	www.malaysiagazette.com
Malaysian Reserve	www.themalaysianreserve.com
mStar	www.mstar.com.my
Nanyang Siang Pau	www.enanyang.my
New Sarawak Tribune	www.newsarawaktribune.com.my
New Straits Times	www.nst.com.my
Overseas Chinese Daily News	www.ocdn.com.my
SAYS	www.says.com/my
See Hua Daily News	www.news.seehua.com
Sin Chew	www.sinchew.com.my
Sinar Harian	www.sinarharian.com.my
The Edge	www.theedgemarkets.com
The Malaysian Insight	www.themalaysianinsight.com
The Rakyat Post	www.therakyatpost.com
The Star	www.thestar.com.my
The Sun	www.thesundaily.my
Utusan	www.utusan.com.my
Utusan Borneo	www.utusanborneo.com.my

Introduction

The harms of disinformation¹ are proliferating around the globe—threatening our elections, our health, and our shared sense of facts.

The infodemic laid bare by COVID-19 conspiracy theories clearly shows that disinformation costs peoples’ lives. Websites masquerading as news outlets are driving and profiting financially from the situation.

The goal of the Global Disinformation Index (GDI) is to cut off the revenue streams that incentivise and sustain the spread of disinformation. Using both artificial and human intelligence, the GDI has created an assessment framework to rate the disinformation risk of news domains.²

The GDI risk rating provides advertisers, ad tech companies and platforms with greater information about a range of disinformation flags related to a site’s **content** (i.e. reliability of content), **operations** (i.e. operational and editorial integrity) and **context** (i.e. perceptions of brand trust; see Figure 1). The findings in this report are based on the three pillars that were manually reviewed: **Content**, **Operations**, and **Context**.³

A site’s disinformation risk level is based on that site’s aggregated score across all of the reviewed pillars and indicators.⁴ A site’s overall score ranges from zero (maximum risk level) to 100 (minimum risk level). Each indicator that is included in the framework is scored from zero to 100. The output of the index is therefore the site’s overall disinformation risk level, rather than the truthfulness or journalistic quality of the site.

Figure 1. Overview of the GDI disinformation risk assessment



The following report presents findings pertaining to disinformation risks for the media market in Malaysia based on a study of 31 news domains.⁵ Sites in the sample include English, Malay and Mandarin language media. The data provide an initial snapshot of the overall strengths and challenges that these sites face to mitigate disinformation risks.⁶

These findings come from the research led by GDI with the Centre for Independent Journalism (CIJ), from February through May 2021. The market analysis is based on nearly 20 disinformation flags that were assessed for Malaysia based on data collected by the CIJ and by an independent perceptions survey.⁷

This report presents the average scores for the market sample. It is GDI policy that sites which are rated as minimum-risk sites are named and profiled in the report. However, since no sites met this criteria in the Malaysian market, no specific domain scores are provided.⁸

The GDI risk rating methodology is not an attempt to identify truth and falsehoods. It does not label any site as a disinformation site—or, inversely, as a trusted news site. Rather, our approach is based on the idea that a range of signals, taken together, can indicate a site’s risk of carrying disinformation.

The scores should be seen as offering initial insights into the Malaysian media market and its overall levels of disinformation risk. The results are open to debate and refinement with stakeholders from news sites, advertisers and the ad tech industry. (The appendix of this report outlines the assessment framework).⁹ We look forward to this engagement.

Key findings: Malaysia

In reviewing the media landscape for Malaysia, our assessment found that:

Many Malaysian sites lacked operational checks and balances.

- This finding was particularly true for policies regarding financial transparency, editorial independence, and journalistic accountability, which are considered critical for mitigating disinformation risk.

Only two sites presented a high level of disinformation risk.

- Both sites obtained low scores under the Operations pillar, indicating a severe lack of transparency in their ownership and funding, as well as the potential for conflicts of interest. The lack of checks and balances creates an opportunity for their audience to be manipulated.
- However, it is notable that one site obtained a significantly higher score than the other on the content indicators, which demonstrate a difference in the reliability of content for online users of both sites.

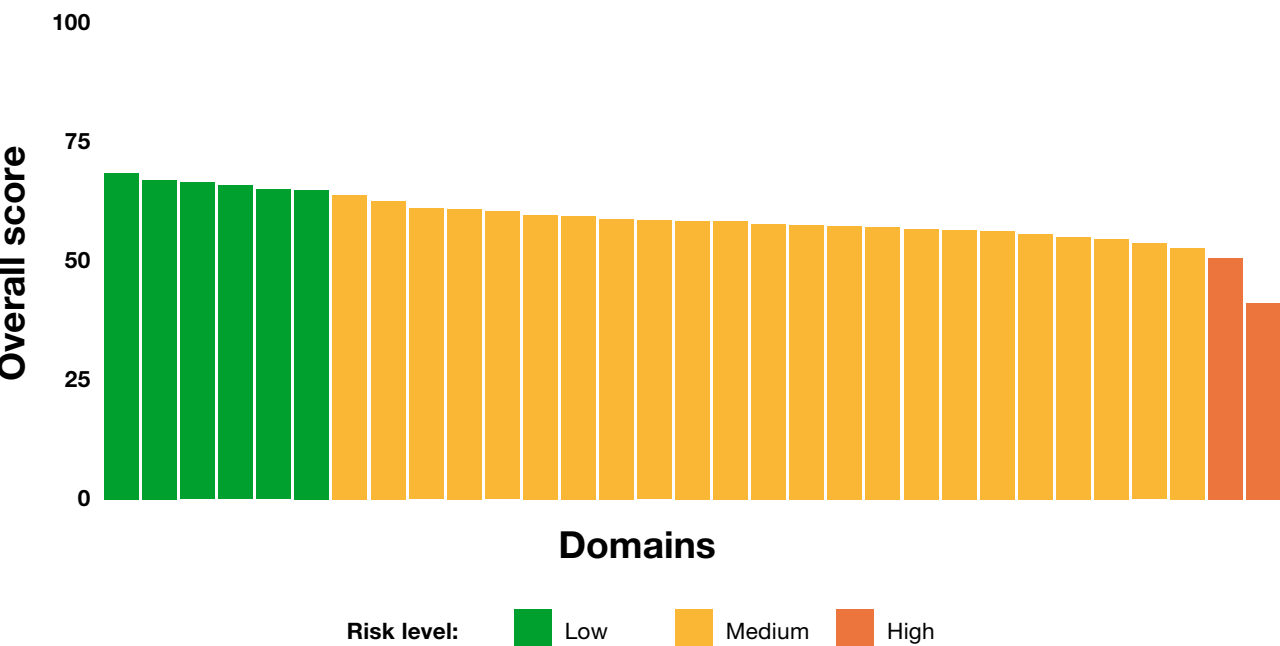
Six sites were rated as low risk, although none presented minimum levels of disinformation risk.

- No site was rated as having a ‘minimum’ disinformation risk, but six sites were rated with a ‘low’ level of disinformation risk, representing a broad political spectrum of viewpoints and range of formats from traditional papers to online news portals.
- These sites tended to score better on the operational indicators than most of the other sites, which indicates their broad transparency in terms of editorial independence, funding, and the people behind their ownership.
- However, their results were more uneven across the content indicators. Some sites stood out for showing higher levels of neutral, reliable content.

Most media sites in Malaysia fell within the medium risk category.

- Twenty-three out of 31 sites (nearly 75 percent) were rated as presenting a ‘medium’ risk of disinforming their online users.
- Most sites could improve their mid-range performance by addressing shortfalls, such as their operational policies and byline policy, to move up to the low-risk category.

Figure 2. Disinformation risk ratings by site



The Malaysian media market: Key features and scope

Malaysia has a highly internet-savvy population. According to a 2020 report¹⁰ by the Malaysian Communications and Multimedia Commission (MCMC), over 88 percent of Malaysia's population are internet users.

This savviness is also reflected in the population's media consumption; a 2019 report¹¹ by Nielsen revealed that 81 percent of Malaysians consume a combination of both traditional and digital media.

This high level of consumption seems to be a result of Malaysians' general trust in the media. A 2019 survey¹² by Ipsos, which compared Malaysia's trust in media against global benchmarks, found that a majority of Malaysians believe media practitioners work with good intentions. Of the survey respondents, 79 percent said that they trust the intentions of newspapers and magazines (vs 50 percent globally) and nearly the same number (77 percent) said that they trust the intentions of TV and radio (vs 52 percent globally). For online news sources, the figure was 70 percent (as compared to 49 percent globally). The survey also showed that while overall trust in the media has declined globally, it has risen for Malaysians.

The rise in online consumption of media has been accompanied by a corresponding increase in online advertising revenue. From 2013 to 2018,¹³ the online advertising market experienced a compounded annual growth rate (CAGR) of close to 20 percent. According to data from Nielsen Malaysia,¹⁴ spending on digital ads from January to May 2020 exceeded MYR430 million (US\$105 million), representing more than a fifth (22 percent) of total media ad spending. The shift to online advertising has resulted in the decline of some traditional media outlets and the rise of more tech-savvy, click-focused news sites; it has also increased incentives for 'viral' marketing and 'clickbait' to garner more site views.

While online ads and the use of online media in Malaysia are burgeoning, it is important to note that the Malaysian media landscape operates within a rigid legislative framework. Temporary bans or content censorship have been imposed on media outlets that opposed the government of the day. Criminal laws include the Sedition Act, the Penal Code and the Communications and Multimedia Act, as well as the Printing Presses And Publications Act. These measures stipulate fines and jail terms, and have given the executive broad powers to investigate and prosecute media practitioners over the years. Under these laws, journalists can be sentenced up to 20 years in prison.¹⁵

While Malaysia witnessed progress in press freedom following the 14th General Election in 2018, this was overturned after the Perikatan Nasional government came into power in March 2020, causing Malaysia to drop 18 places in the 2021 World Press Freedom Index.¹⁶ Since then, media houses have seen more prosecutions and police searches, and this restriction on free speech is most notably seen in the case of Malaysiakini in February 2021.¹⁷ The Federal Court held that the online news portal was guilty of contempt of court over its readers’ comments, and was fined RM500,000 (US\$120,000) for the offence.¹⁸

The rigid legislative framework means that online media in Malaysia are likely to opt to remove any articles and/or comments under scrutiny to mitigate risks and preserve funds. Groups such as the International Federation of Journalists (IFJ) have stressed that such draconian regulations undermine the critical role of media in facilitating space for public participation and freedom of speech—which allows the exchange of ideas and expression of opinions on matters of public interest as a fundamental and constitutional right.¹⁹

Disinformation risk ratings

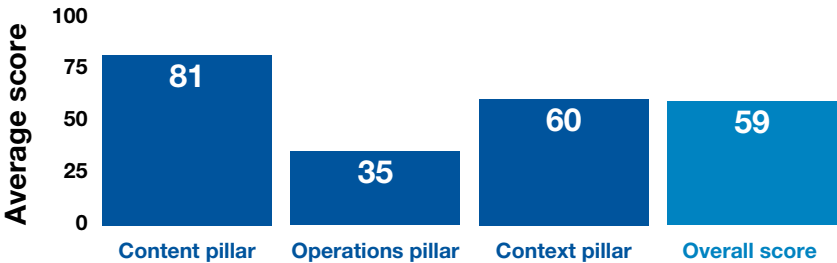
This study looks specifically at a sample of 31 Malaysian news websites in English, Malay and Mandarin, all of which have programmatic advertising.

Market overview

The sample was defined based on the sites’ reach,²⁰ relevance, and the ability to gather complete data for the site.

The findings for Malaysian media sites in our sample show that most sites are medium risk, with few sites falling in the low- or high-risk categories when it comes to disinformation. Nearly 75 percent of sites in the study fell into the medium-risk category. It is this group of sites which has the greatest likelihood of reducing their risks going forward. At the same time, however, no site was rated in the minimum-risk category. Overall, many of the risk factors in Malaysia come from a lack of transparency in operations, particularly in regard to editorial policies, sources of funding, and ownership (see Figure 3).

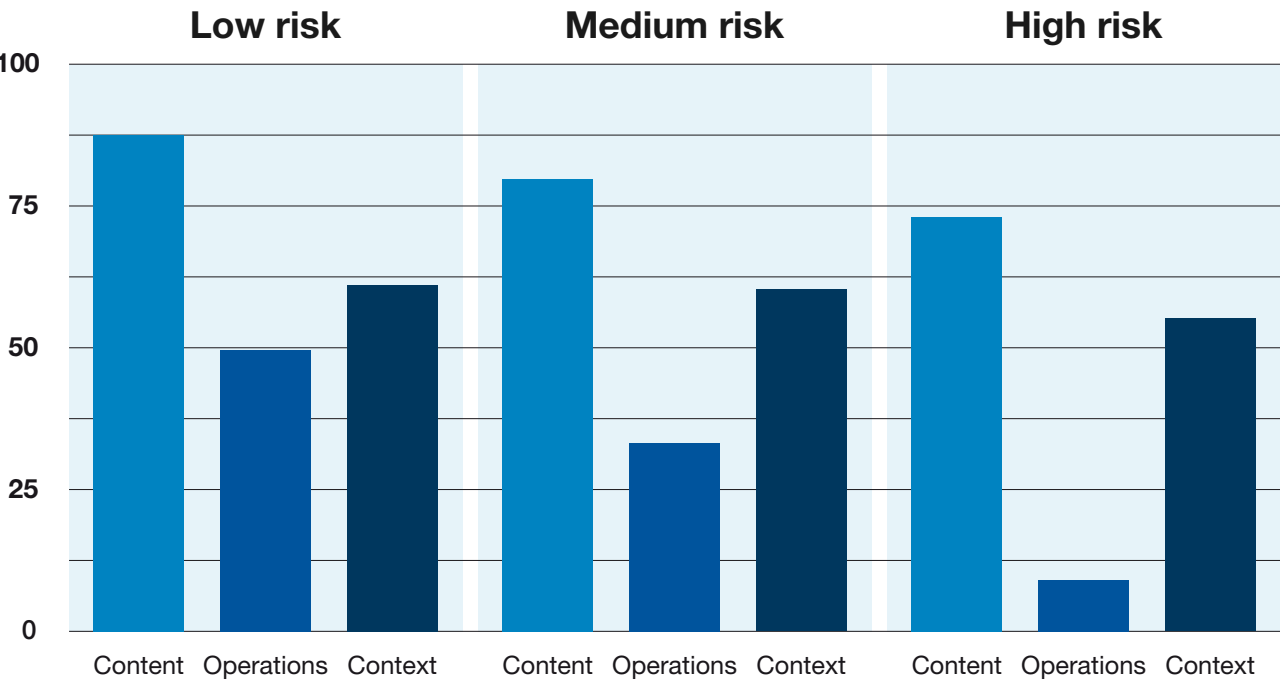
Figure 3. Overall market scores, by pillar



There are six sites in Malaysia that were rated as **low-risk** sites. These sites tend to perform relatively well on the Content pillar indicators, especially for having neutral and non-sensational content that does not negatively target any specific individual or groups. However, they lack operational transparency and editorial safeguards, including disclosing information on their sources of funding.

Three out of four sites in the sample (23 sites) were assessed with a **medium-risk** rating. While these sites generally perform fairly well on providing reliable and unbiased content, they face a similar issue with those in the low-risk category—transparency of their operational policies. Such policies are associated with strong universal journalistic standards, which have been set by the Journalism Trust initiative (JTI).²¹ Most of the sites that currently fall in the middle range for risks could move into a lower-risk group with improvements to their site’s operational policies. Furthermore, in terms of content, Malaysian sites scored an average of 75 out of 100 points. This result can be seen as a middling performance that can be improved with stricter adherence to using fact-based leads, clearer signposting with headlines, and providing reporter bylines for the articles. This last point about bylines is especially critical for Mandarin-language news sites in Malaysia. There may be cross-newsroom cultural differences that explain whether individual reporters or teams are credited for daily reporting. Nevertheless, in this disinformation era, it has become increasingly relevant for audiences to be able to identify who exactly is behind the news they read as a method of fact-checking or verifying the validity of sources.

Figure 4. Average pillar scores by risk rating level



The two remaining sites received a **high-risk rating**. These sites scored very poorly on their operational transparency, but the difference between these two sites on the Content pillar is notable. For one of the sites, this rating indicates a failure to meet universal standards for operational policies, despite their production of rather credible content. As for the other, the site’s failure to declare their operations, coupled with the use of sensationalised headlines and aggregated content, put it in the high-risk category.

Pillar overview

Content pillar

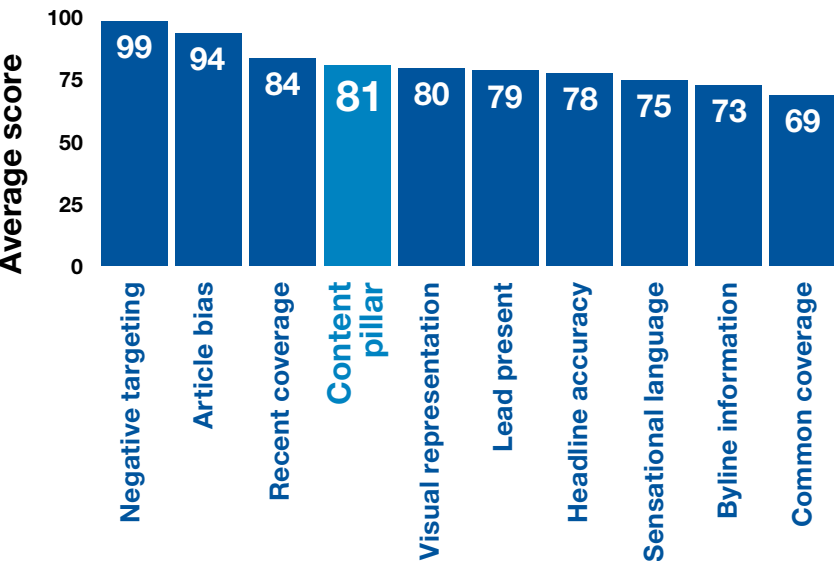
This pillar focuses on the reliability of the content provided on the site. Our analysis for the Content pillar is based on an assessment of ten anonymised articles for each domain. These articles are drawn from the most frequently shared pieces of content during the data collection period and from a group of topic-based articles.²² All article scores are based on a scale of zero (worst) to 100 (best), as assessed by the country reviewers.

Over half of the 31 sites reviewed had above-average scores on the Content pillar. These sites did fairly well in utilising neutral language for their content, writing non-sensational headlines, and starting their pieces with fact-based leads, among other factors. Starting with a fact-based lead means that readers can immediately verify the facts of a case and establish the ground rules for the arguments that follow. It also indicates that the publication anchors its reporting to facts and events, rather than couching events in biased or inflammatory narratives. Meanwhile, for the remaining sites, authors occasionally resorted to clickbait headlines, sensationalised language, and bias in reporting on current events.

Sites in the ‘low-risk’ category varied, with some significantly outperforming others in terms of content that was more neutrally presented, covered recent and verifiable news events, and did not negatively target groups or individuals.

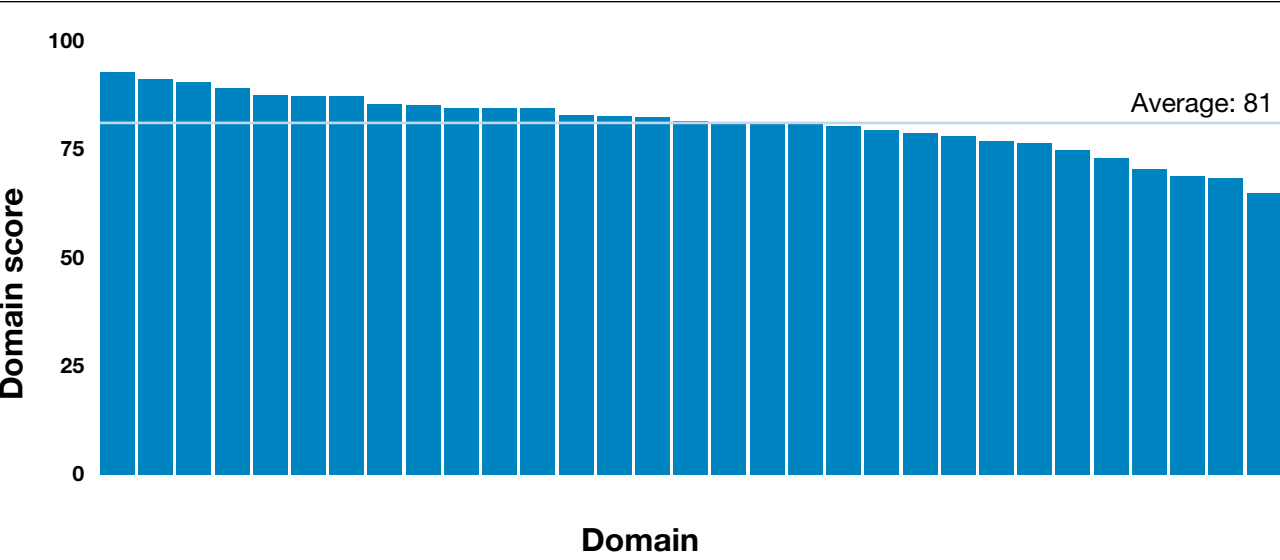
One of the two sites that fell into the ‘high-risk’ category was a particular offender, whose modus operandi included consistently republishing articles from other sites with new headlines that were sensationalised, and often inflammatory. It is also notable that all of the pieces published on its site have opinionated headlines that are entirely capitalised, which is indicative of a reliance on clickbait.

Figure 5. Average Content pillar scores by indicator



A deeper look into the pillar showed the indicators that the Malaysian sites can improve on, especially by providing more transparent byline information as well as increasing common coverage of stories. Some sites in particular seemed to have internal policies preventing any transparency of byline information, often publishing stories under the ‘Editorial Team’ byline or providing none at all. This might be a sign of cultural differences between newsrooms.

Figure 6. 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), based on data collected by the country reviewers using information available on the site. The operations indicators are the quickest wins to reduce disinformation risk ratings, as they represent policies that news outlets can immediately establish and make public.²³

Many sites in the sample scored poorly on this pillar, with a great number lacking even basic published editorial guidelines, citations or corrections policies, or policies to mitigate conflicts of interest. In some cases, sites lacked even author/reporter bylines, which is considered a further risk of disinformation due to the lack of individual accountability.

A closer look into the indicators under the Operations pillar showed that most sites in Malaysia scored poorly on transparent information about their due diligence to attribute sources and check the accuracy of articles. Although attributing sources and fact-checking processes are signs of a site’s credibility, most sites in Malaysia do not make these practices transparent. In fact, no Malaysian site explicitly stated whether it had any staff members dedicated to fact-checking, nor did any detail any specific fact-checking processes aside from vague commitments to general accuracy. It is notable that these indicators do not mean that there is a lack of attribution of sources or accuracy of information; they merely highlight the lack of a public promise to do so. This seems to be the case for most Malaysian media houses. Practices and guidelines are mostly kept internal and away from the public eye, which limits the opportunity to establish public accountability and trust.

Nonetheless, most sites in our sample have the potential to score perfectly on all the indicators of the Operations pillar if they were to 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).²⁴ As the JTI points out,²⁵ 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 7. Average Operations pillar scores by indicator

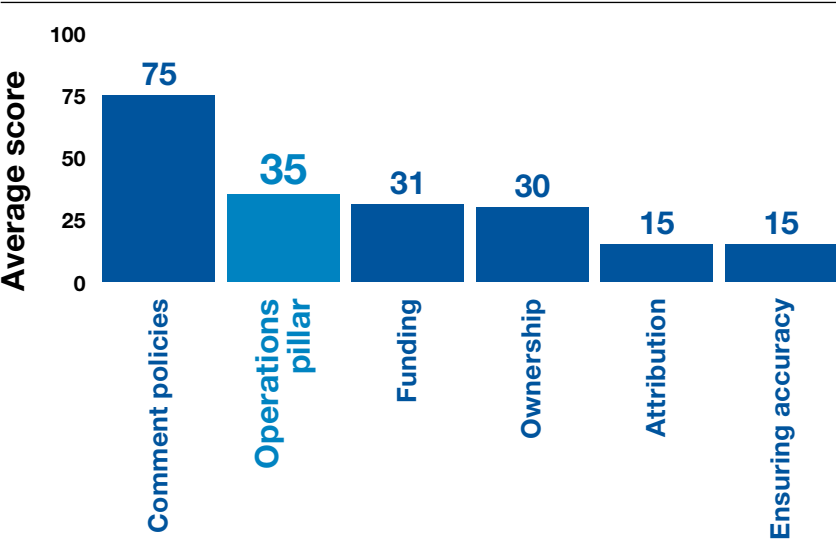
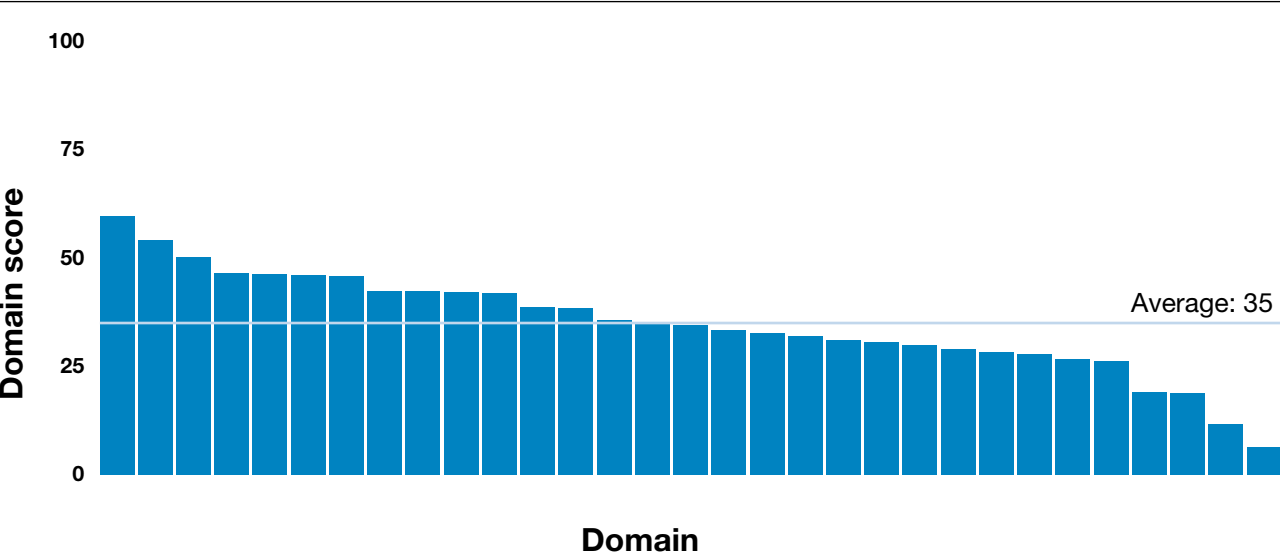


Figure 8. Operations pillar scores by site



Context pillar

A site's performance on this pillar is a good measure of perceptions of brand trust in a given media site. All scores are based on a scale of zero (worst) to 100 (best), as rated by online users. The Context pillar findings are based on an independent survey conducted to measure online users' perceptions of brand trust in the media sites included in our sample for Malaysia.

The Context pillar scores show that most Malaysia domains are perceived to report the news accurately, and to adequately differentiate between news and opinion content. This reflects the trend of increasing trust in online news highlighted earlier. However, the market has significant room for improvement in terms of the use of clickbait and issuing transparent corrections. It must be noted that improvements in these areas of public perceptions are only likely to materialise over time, due to the fact that perceptions can be 'sticky' and take time to realign with a site's current realities. That said, our statistical analysis indicates that respondents' perceptions do reflect several of the Content and Operations pillar indicators, so adopting the content and operations standards measured in those pillars may have the additional effect of improving perceptions in the eyes of the country's readers (see Figure 11 in the Appendix).

Figure 9. Average Context pillar scores by indicator

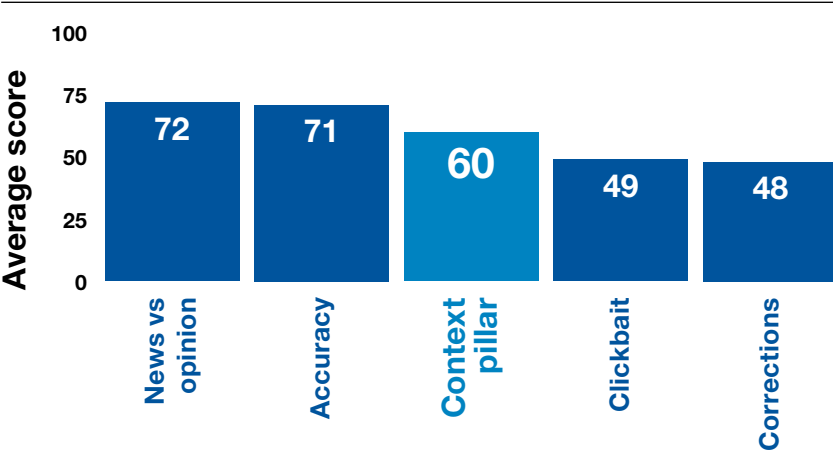
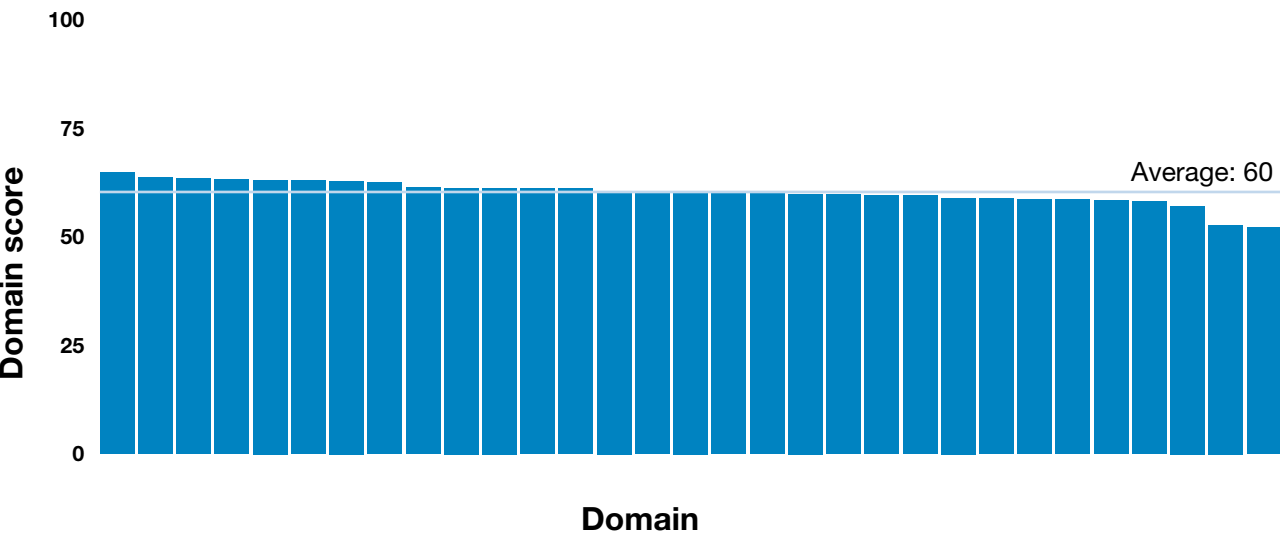


Figure 10. Context pillar scores by site



Conclusion

Our assessment of news sites in Malaysia finds that the entire market sample displayed some level of disinformation risk, with nearly 75 percent of the sites showing medium risk levels, while only two sites fall in the high risk category.

Six sites in our sample perform relatively well, receiving low risk ratings. However, while no site received a rating of ‘maximum risk’, no site achieved the category of ‘minimum risk’ either.

Malaysian media sites typically demonstrate medium to low risk in our framework when it comes to indicators that assess the reliability of content, and this is backed up by strong performance on the Context pillar indicators that measure quality reporting. Still, the domains’ overall ratings are brought down significantly by operational shortcomings, especially regarding transparent information about a site’s beneficial owners and its sources of funding, as well as operational and editorial policies.

News sites could address these shortcomings by taking actions that:

- Focus on adopting journalistic and operational standards, such as those set by the Journalism Trust Initiative, and make those policies transparent on the site;
- Clearly publish their sources of funding on their page rather than a parent company site. This information helps to build trust in the site and dispel doubts about how it is funded or about any potential sources of influence or conflicts of interest;
- Publish a statement of editorial independence, guidelines for ensuring accuracy and attribution in reporting, and policies for user-generated comments;
- Improve and make more visible correction practices for submitting and publishing errors;
- Use bylines wherever appropriate. Publishing the identity of the author is an easy way to ensure transparency and accountability. What is more, it gives the audience the opportunity to check whether the author is an actual person or a false identity being used to publish disinformation.

The Malaysian government also plays a crucial role in setting the tone and legislation for a media ecosystem with more transparency and less risk for disinformation. Some steps that could be taken to enhance trustworthiness in the media space would include:

- Strengthening existing state-level Right to Information (RTI) laws as well as adopting federal-level legislation to promote freedom of information. With better access to information, journalists will be able to report with confidence and utilise reliable sources more often.

- Forming a self-regulatory media council by empowering media industry members to self-govern, enhance journalistic integrity, and uphold common standards for responsible reporting.
- Abolishing restrictive media laws such as the Printing Presses and Publications Act and amending laws such as the Communications and Multimedia Act to grant the press the freedom to report without fear of government crackdowns.²⁶
- Ensuring the right to report for legitimate publications to encourage transparency and assuage journalists’ concerns over being personally identified in their stories.

The need for a trustworthy, independent rating of disinformation risk is pressing. The launch of this risk-rating framework for Malaysia 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.

Appendix: Methodology

Pillar scoring

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 three pillars: Content, Operations, and Context. The three 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. The Context pillar relies on indicators that measure the perceived credibility and reliability of news-related information published by each domain.

Each of the 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.²⁷ 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 indicators for the Content pillar are based on the review of a sample of ten articles published by each domain. Five of these articles are randomly selected from a domain’s most frequently shared articles on Facebook within a two-week period. The remaining five articles are randomly selected from 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 rules and policies for the comments section. The analysts gather evidence to support their assessments as they perform each Operations pillar's review.

The Context pillar is based on a public perception survey conducted by an international internet-based market research and data analytics organisation. This external organisation creates and disseminates a survey among informed readers in the media market in the relevant study languages. The survey seeks to capture the perceived quality and reliability of the content published by each domain, along with a set of country-specific control variables.

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: article bias, byline information, common coverage, headline accuracy, lead present, negative targeting, recent coverage, 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's 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.

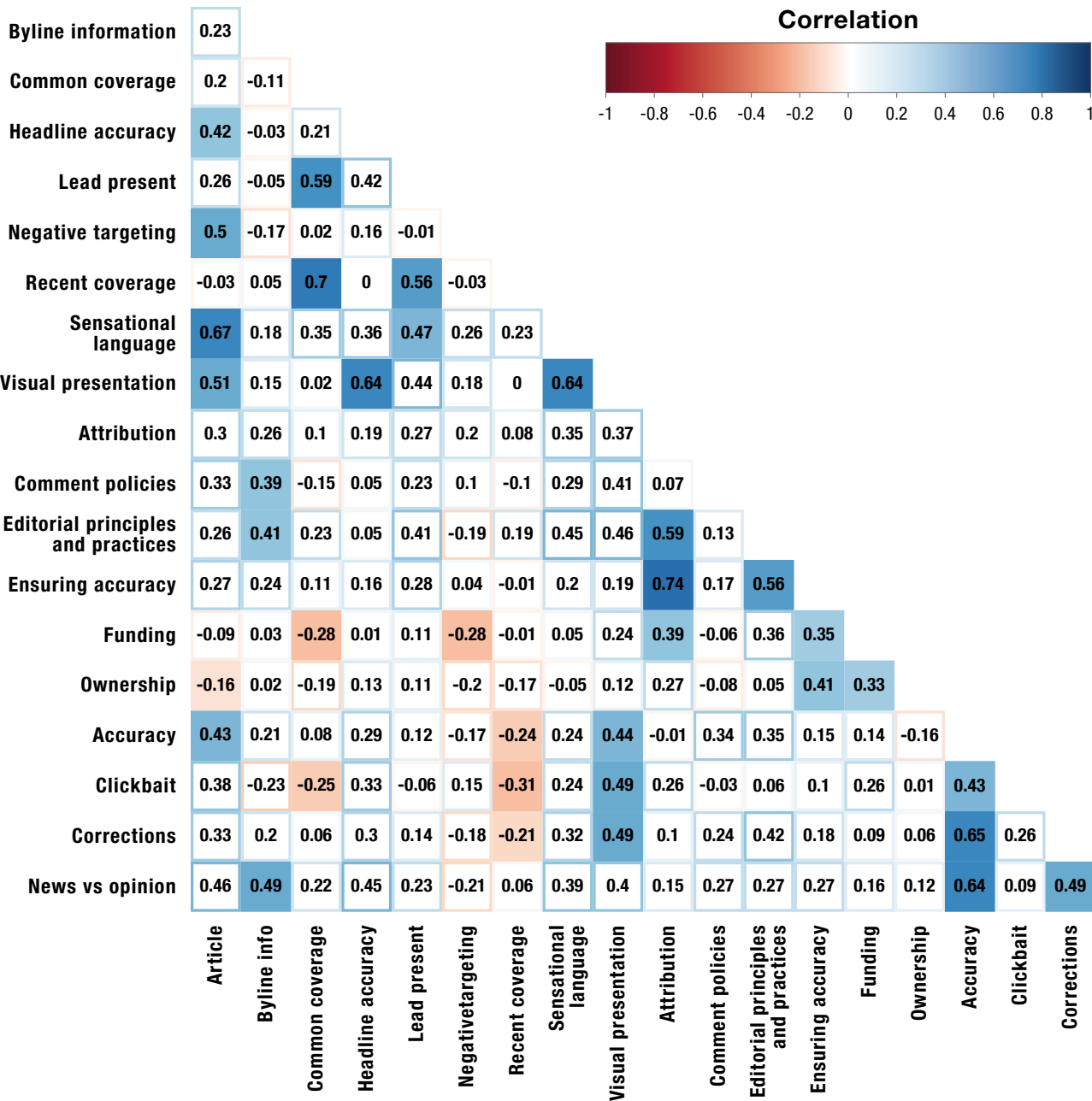
The answers of the perception survey are transmitted to GDI as a dataset, which is used to compute the indicators for the indicators for the Context pillar. The Context pillar captures four indicators: accuracy, clear differentiation of news and opinion articles, use of clickbait titles, and error reporting. The total score for each domain in this pillar can range from zero to 100 based on an 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
	Lead present			Rating for whether the article begins with a fact-based lead	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 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 disseminated adequately and transparently
	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
Context	Accuracy	None	Domain	Respondent rating for perceived level of accuracy in covering news events	Assesses accuracy of the site's content without the need to directly fact-check
	Clickbait			Respondent rating for perceived use of clickbait headlines	Assesses the site's use of clickbait
	News vs. opinion			Respondent rating for ability to differentiate between opinion and news articles	Assesses how well the site communicates the difference between fact and opinion to its readers
	Corrections			Respondent rating for perceived frequency of issuing corrections in response to errors	Assesses the site's credibility in terms of issuing corrections

Figure 11 visualises the relationships between each of the GDI indicators in the Malaysian media market.

Figure 11. Correlations matrix



*Note: Statistically significant correlations are highlighted.

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	76.17	100	> 1.5 SD from mean
Low risk	63.89	76.16	> 0.5 and ≤ 1.5 SD from mean
Medium risk	51.60	63.88	> -0.5 and ≤ 0.5 SD from mean
High risk	39.32	51.59	≥ -1.5 and ≤ -0.5 SD from mean
Maximum risk	0	39.31	< -1.5 SD from mean

Endnotes

1 We define disinformation in terms of the verb ‘to disinform’: ‘to deliberately mislead; opposite of inform.’

2 The human review elements of the framework were developed in collaboration with Alexandra Mousavizadeh (head of insights for Tortoise Media and co-founder of the GDI). The framework was advised by, vetted by, and finalised with the support of a technical advisory group (TAG), including Ben Nimmo (Facebook), Camille François (Graphika), Miguel Martinez (co-founder and chief data scientist, Signal AI), 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).

3 For more on our methodology, see the Appendix.

4 For more information on the assessment framework, please see the Appendix of this report.

5 In 2021, media market assessments will be produced for the following countries: Argentina, Australia, Brazil, Canada, India, Italy, Mexico, Nigeria and Spain. Additional countries may also be added.

6 All sites included in the report were informed of their individual scores and risk ratings, as well as the overall market averages.

7 The research partner, the Centre for Independent Journalism (<https://cijmalaysia.net/>) provided two researchers to assess each site and indicator. The survey of informed online users was conducted by YouGov between 8 and 25 March 2021. All respondents answered a standard set of questions used by the Global Disinformation Index (GDI) in all countries where it conducts risk ratings. Each respondent provided their

perceptions of brand trust and credibility for up to ten sites that they said they were ‘familiar’ with. In total there were 502 respondents.

8 Minimal risk is the best risk rating, followed by a low-risk rating. Both ratings suggest a news site that has scored well across all of the indicators. For all countries, individual site scores were shared confidentially with the site operators to allow for engagement, feedback and any necessary changes. All sites were contacted in advance to provide them with information on the methodology and rating process. In all countries covered by the risk ratings, the composite scores are shared only for the sites assessed to have a low or minimal disinformation risk. As a result, the number of sites disclosed in the report will vary by country.

9 The GDI looks forward to working with the entire industry in this effort. There is strong demand for such a risk assessment of sites, and a notable concern that less trusted, less independent actors may seek to fill this gap.

10 See: <https://www.mcmc.gov.my/skmmgovmy/media/General/pdf/IUS-2020-Report.pdf>.

11 See: <https://www.nielsen.com/wp-content/uploads/sites/3/2020/03/Media-Landscape-Sell-Sheet-web.pdf>.

12 See: https://www.ipsos.com/sites/default/files/ct/news/documents/2019-08/trust_in_media_-_a_malaysian_perspective_eng_pr_-_final_-_100919.pdf.

13 See: <https://menafn.com/1098774230/Malaysia-Online-Advertising-Market-has-been-Growing-Steadily-Driven-by-Rising-Number-of-Online-Advertising-Agencies-and-Sustaining-Digital-Infrastucture-Ken-Research-Analysis>.

14 See: <https://www.theedgemarkets.com/article/adspend-picking-digital-ads-accounting-25-total-spend>.

15 Communications and Multimedia Act 1998 (Act 558).

16 See: <https://rsf.org/en/ranking/2021>.

17 See: https://ejudgment.kehakiman.gov.my/ks_builtin/file_dispatcher_pub.php?id=12466&key=3e8660979d7b5123399300cc2971236a.

18 See: <https://www.theedgemarkets.com/article/federal-court-says-malaysiakini-readers-comments-were-scurrilous-and-irreprehensible#:~:text=In%20a%20six%2Dto%2Done,the%20news%20portal%20RM500%-2C000>.

19 Article 10, Federal Constitution of Malaysia.

20 The reach metric is based on a site’s Alexa ranking and Facebook and Twitter followers.

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

22 This sampling process aims at selecting articles that concern topics which are frequently associated with polarising discussions and/or disinformation campaigns. The general topics are selected on the basis of GDI internal research and monitoring work. The keyword list includes more than 170 keywords belonging to more than 20 topics. The topic list is discussed further in the Appendix of this report.

23 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 of how often sites correct errors or are viewed as presenting accurate content.

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

25 See: <https://www.cen.eu/news/workshops/Pages/WS-2019-013.aspx>.

26 Under existing law, anonymous, shadowy sites often have much more strident (though often not accurate or responsible) reporting.

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.



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