

Media Market Risk Ratings: Germany



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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 structural, 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 frequently visited media sites in Germany. In total we assessed 30 sites. The country has been chosen because of its historically respected media market, its vibrant and robust online advertising market; its high share of readers consuming their news online, and its past experiences with countering disinformation campaigns targeting online readers and fostering public debate.

Figure 1. Media sites assessed in Germany (in alphabetical order)

1. www.achgut.com	11. www.handelsblatt.com	21. www.stern.de
2. www.ard.de	12. www.indymedia.org	22. www.sueddeutsche.de
3. www.bild.de	13. www.jungefreiheit.de	23. www.t-online.de
4. www.br.de	14. www.mdr.de	24. www.tagesschau.de
5. www.compact-online.de	15. www.n-tv.de	25. www.tagesspiegel.de
6. www.dw.com	16. www.ndr.de	26. www.web.de
7. www.faz.net	17. www.pi-news.net	27. www.welt.de
8. www.focus.de	18. www.prosieben.de	28. www.zdf.de
9. www.freitag.de	19. www.rtl.de	29. www.zeit.de
10. www.gmx.net	20. www.spiegel.de	30. www1.wdr.de

Introduction

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

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

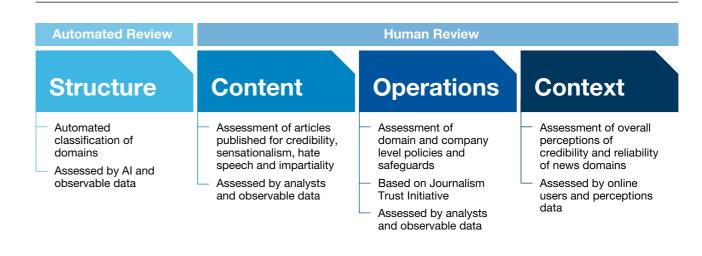
The goal of the Global Disinformation Index (GDI) is to cut off the revenue streams that incentivise and sustain the spread of disinformation. Using both artificial and human intelligence, the GDI has created an assessment framework to rate the disinformation risk of news domains.²

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 Structure (i.e. metadata and lexical features),³ Content (i.e. reliability of content), Operations (i.e. operational and editorial integrity) and Context (i.e. perceptions of brand trust; see Figure 2). The findings in this report are based on the three pillars that were manually reviewed: Content, Operations and Context.⁴

A site's disinformation risk level is based on that site's aggregated score across all of the reviewed pillars and indicators (see figure 2).⁵ 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.

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Figure 2. Overview of the GDI disinformation risk assessment



The following report presents findings pertaining to disinformation risks for the media market in Germany, based on a study of 30 news domains. The data provide an initial snapshot of the overall strengths and challenges that these sites face to mitigate disinformation risks.

All of these findings come from research conducted between February and June 2020. The market analysis is based on 15 disinformation flags from the human review of German websites performed by two researchers.⁸ This report presents the average scores for the market sample. Sites that are rated as a minimum-risk site and/or score above a 95 on any of the three pillars are named and profiled in the report.⁹

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 German 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. We look forward to this engagement. (The annex of this report outlines the assessment framework).¹⁰

Key Findings: Germany

In looking at the media landscape for Germany, GDI's assessment found that:

Thirty percent of our sample—including some of Germany's most followed news sites—are also those with the lowest levels of disinformation risk (see Figure 3).

 Three sites in our sample are seen as having a 'minimum' level of risk: <u>www.ard.</u> <u>de, www.br.de</u>, and <u>www.tagesschau.de</u>.
 Six sites fell into the low-risk category.

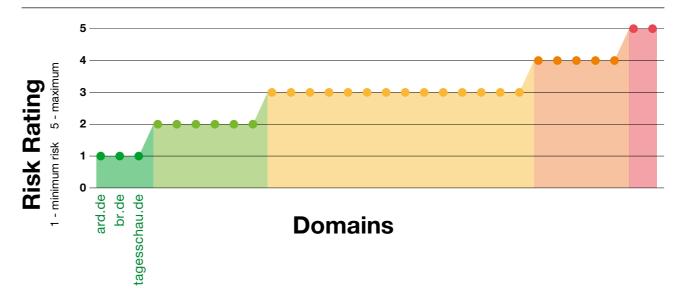
Nearly half of the sample sites have some level of 'medium' risk, while seven sites have a 'high' or 'maximum' risk level.

 These results are largely due to their lack of key operational policies and to low levels of brand trust.

Many German news outlets lack transparency into some key operational policies. Publishing such policies could help mitigate the risk of disinformation and increase brand trust.

- For example, the majority of domains do not state that their newsrooms are independent from their publishers. Unfortunately, the German Press Code does not require its members to follow such a policy.
- In contrast to publicly-funded media sites in Germany, privately-owned media outlets in our sample do not always publish information on who owns or funds them.
- Findings for Germany show that publishing such information—particularly ownership information is an important factor for increasing perceptions that a site provides accurate and trusted content.¹¹

Figure 3. Disinformation risk ratings by site



Generally low perceptions of brand trust reflect the skepticism many German news consumers have towards online news media.

- The German online readers surveyed for this study believe that roughly half of the sampled domains often use clickbait headlines and infrequently publish corrections of their errors.¹²
- Respondents think that roughly one-third of all domains do not publish accurate content nor clearly label and separate out news stories from opinion pieces.
- Our findings show that surveyed readers' perceptions reflect similar research findings that point to a general lack of trust in German news media.

While these disinformation flags are worrying, German news media present lower content risks. Over all, sites tend to publish neutral, unbiased and non-targeted content.

- Based on our sample of domains and articles, German news sites publish articles on recent topics, written in a factual and descriptive tone which does not negatively target particular groups.
- At the same time, there is a small group of sites
 which show a tendency to publish articles with
 misleading or inaccurate titles. These media
 outlets frequently publish articles in a biased tone
 and negatively target specific groups like the
 'established news media', government or migrants.

The German media market: Key features and scope

The German media system has some unique features when compared to other leading global media markets. The country has a strong public broadcasting system financed through mandatory user-paid licence fees ('Rundfunkgebühren'). 13 Public broadcasting is provided by ARD¹⁴, ZDF, and the radio station 'Deutschlandradio'. In 1984, a dual broadcasting system with commercial broadcasters was established, with Mediengruppe RTL and ProSiebenSat.1 Media SE being the largest broadcasters. 15 The print market includes several national daily and weekly newspapers as well as regional and local media outlets. 16 As the media market has become more digital, some of these publishers have struggled with declining circulation (including Bild Zeitung, Frankfurter Allgemeine Zeitung, Die Zeit, and Süddeutsche Zeitung). 17

In 2019, online news consumption was up (68 percent) to nearly the same level as those people who consume their news primarily through television (72 percent). ¹⁸ In Germany, it is estimated that 70 percent of readers get their news online, mostly via their mobile phones (58 percent). ¹⁹ The German online news market is shared by several news sites. Some of these sites are online news portals that have a high share of overall online traffic in Germany: GMX, WEB.DE, and T-Online. Other key news sites include Bild.de, Der Spiegel, Focus, and public broadcaster ARD. ²⁰

Recent research suggests that only 47 percent of people in Germany trust online news media, and that only 16 percent trust the news they see on social media.²¹ Disinformation has a role to play here. Findings show that 40 percent of those surveyed in Germany feel overwhelmed with the task of distinguishing

between real and 'fake' news online.²² Public debate about declining trust in the media intensified after a high profile case of a 'Der Spiegel' news reporter falsifying news sources and quotes.²³ While public broadcasters ARD and ZDF remain the most trusted news sources, there have been attacks against them, labeling them the 'lying' press.²⁴

The media are regulated largely through industry standards. The German Press Council is the body responsible for the voluntary self-regulation of the press in Germany. Its 'German Press Code' provides recommendations on truthful and ethical news reporting, conflicts of interest, user-generated content, privacy, and how to portray people appropriately, among other areas. If these recommendations seem to have been breached, third parties may lodge a complaint with the Press Council.²⁵

Germany also has tried to enact legislation to build trust in the media and address disinformation. In 2018, the country adopted the Network Enforcement Act, also known as NetzDG.²⁶ The law is aimed at combatting 'fake news', hate speech and the distribution of illegal content. The law requires social platforms like Facebook and YouTube to remove hate speech and illegal content within 24 hours of notice or face fines. The governing CDU party largely considers it a success,²⁷ but others in Germany, the EU and globally have criticised the law.²⁸ Their argument is that NetzDG is the equivalent of outsourcing the responsibility of content moderation to private corporations.²⁹

There are several less formally organised 'soft' approaches to dealing with disinformation in Germany,

including fact-checking. Some fact-checking websites use blogs to crowdsource and comment on news reporting,30 while others are formally affiliated with platforms and newsrooms.31 News agency DPA (Deutsche Presse-Agentur) and investigative newsroom Correctiv have partnered with Facebook as part of its International Fact-Checking Network (IFCN).³² This collaboration recently triggered a court case between the online magazine 'Trichys Einblick' and Correctiv. This court case ruled over what kinds of news content may be qualified as 'false' and how such qualifications should be presented in order not to be misleading.³³ While the court case did not rule about the legality of Facebook's fact-checking initiative, it provoked a discussion about who should have the right to judge what constitutes fake content in Germany.34

Against this backdrop of rising digital news consumption and oversight, Germany's online advertising market has been growing. According to a recent survey, Germany's digital advertising market is the second largest in Europe, at 7 billion euros annually.³⁵ Revenues for digital display advertising rose in 2019 to 3.6 billion euros.³⁶ That is an increase of about 10 percent compared to 2018. In line with shifting digital media usage, ad spending on online banners has declined, while spending on mobile and video advertisements has risen.³⁷

As advertisers and German readers have moved their focus online, the German news media landscape has consolidated and become concentrated among an ever smaller number of publishing houses. This is because increased online news consumption has not substituted for declining print sales revenue, as only a

small number (8 percent) of Germans are paying to read their news online.³⁸

Partly due to declining ad and subscription revenues, some newspapers have merged (e.g. Verlagsgruppe Rhein-Main).³⁹ Others have announced job cuts and considered pulling out of print (e.g. Funke Mediengruppe)⁴⁰ or have sold parts of their print portfolio (e.g. DuMont).⁴¹

Many new media outlets in Germany are restructuring their business. Sometimes the intent is to focus on and grow specific digital news segments; in other instances, such changes are being made because their digital news operations are not profitable. For example, HuffPost Germany, once considered a flagship of the Burda media group, closed down at the end of March 2018.⁴² One of the largest publishing houses, Axel Springer SE, is considered to have successfully transitioned to a digital advertising business model.⁴³

For this study, we defined the German media market based on an initial list of nearly 60 news sites, which included well-known national outlets, tabloids and regional newspapers. We then worked with local media experts to refine the list based on each site's reach and relevance. We defined reach and relevance based on a site's Alexa rankings and its Facebook and Twitter followers. We also consulted with local experts to identify domains with lower reach but high relevance among decision-makers or which have been deemed relevant outlets targeting specific groups in Germany.

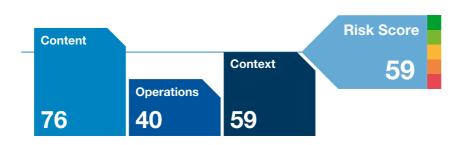
Disinformation risk ratings

Thirty percent of our sample have been assessed to pose 'minimum' or 'low' levels of disinformation risk. This includes some of Germany's most followed news sites.

Market overview

Based on the sample, there is a notable group of sites that have a very limited number of disinformation flags across the three pillars. While these strengths are notable, a majority of German media sites generally lack many of the recommended operational checks and balances, and are shown to have mixed levels of brand trust by their online users (see Figure 4).

Figure 4. Overall market scores, by pillar

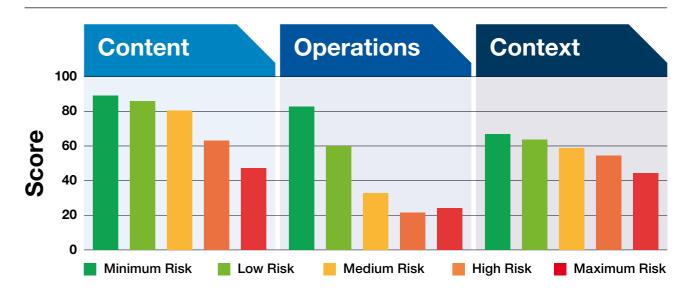


In Germany, the minimum-risk sites are a group of public broadcaster media sites that have strong performance on all three pillars, particularly in the areas of neutral and non-sensational content, robust operational policies and brand trust. Three sites in our sample receive this low-risk rating: www.br.de, and www.br.de, and www.br.de, and www.tagesschau.de.

Six sites—which include a mix of public broadcasters and private companies—receive a low-risk rating. The sites share similar characteristics with minimum-risk sites, but have a more checkered performance on some key operational policies, such as statements of editorial independence and corrections policies.

The medium-risk sites are composed of a broad group of sites—nearly half the sample fall into the medium-risk category. The driver of increased disinformation risks for this group is largely their use of unclear or misleading headlines that do not match the article content and their general failure to publish key editorial and operational policies, including for their funding and ownership. Such policies are recommended in terms of journalism standards that have been set by the Journalism Trust Initiative.⁴⁴

Figure 5. Average pillar score by risk rating level



The high-risk domains within the sample were found to publish sensational content and also to lack editorial and operational policies as compared with the overall sample. There are some very-high traffic sites which are in this group due to absent and/or inconsistent bylines; reliance on more sensational, misleading, or mischaracterising content, and missing checks and balances that determine how they make corrections and state their editorial independence (see Figure 5).

There are only two maximum-risk sites in our German sample. These generally demonstrate multiple risk flags for all of the three pillars. They tend to use their stories to negatively target specific groups and/or individuals, and have very low levels of brand trust by online users.

Pillar Overview

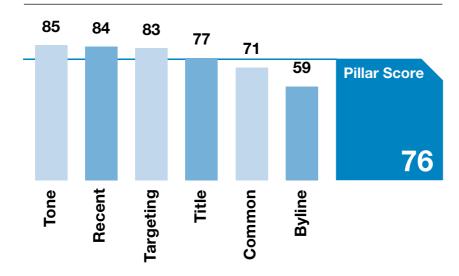
CONTENT PILLAR

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 (see Figure 6). All article scores are based on a scale of zero (worst) to 100 (best), as assessed by the country reviewers.

For the German media market, we found mixed indications of disinformation risk. Only one site performed consistently well on all of the indicators: www.br.de. Most domains publish recent and up-to-date news without adopting a biased tone or negatively targeting specific individuals and groups. The clearest indication for disinformation risk is the irregular publication of bylines for almost all the domains.

Some domains do not identify content produced by editorial teams or provide bylines for specific authors, while other domains identify cross-syndicated content. Providing byline policies and adding author information more consistently can help address related disinformation risks.

Figure 6. Average Content pillar scores by indicator



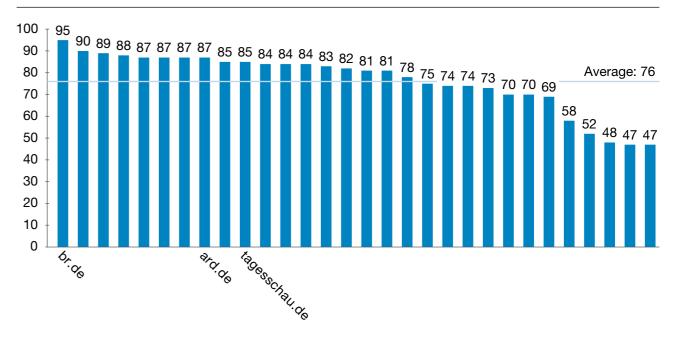
Fifty percent of all domains score 80 or higher, showing that they tend to publish accurate to extremely accurate titles which correctly reflect the article's content. However, one in five domains scores lower than 70 in this category, indicating that a segment of our sample has a risk of publishing articles with unclear or even misleading titles.

Across the sample, 85 percent of all domains score above 70 for the neutral tone of their articles. They tend to publish descriptive and factual information without relying on sensationalism, misusing quotes, or mischaracterising people. Four domains stand out for publishing clearly biased content that targets specific groups or individuals such as mainstream media, government actors, or migrants. By contrast, seven out of ten domains score 90 or higher

for providing content that does not negatively target individuals or groups.

Two-thirds of all domains score 80 or higher for publishing recent and up-to-date content. One in two domains tends to cover common stories that are reported by at least one other major news domain. Roughly one in eight domains tends to publish articles that haven't been published elsewhere and which are not based on recent events (scoring 50 or lower on both categories). These domains sometimes publish exclusive content such as features or documentary productions, but can also include articles on protest events, or topics like migration which could not be corroborated by other news stories. Therefore, in some cases a lower score in both categories can identify domains that pose a disinformation risk for publishing content that may not be corroborated by other domains and, possibly in an attempt to stir up issues or level accusations.

Figure 7. Content pillar scores by site



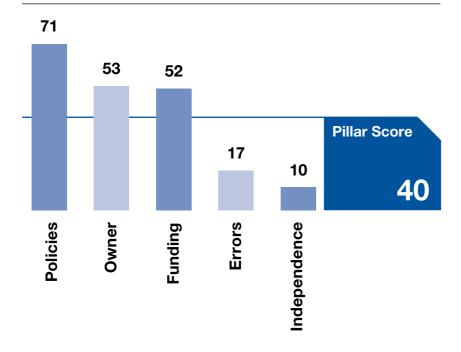
OPERATIONS PILLAR

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, as they represent policies that domains can immediately establish and make public. 45 However, many sites in our sample lack such policies.

Most domains do not state the independence of their editorial positions from the potential influence of their management and publishers. Only one in ten sites in our sample publishes such a statement. A similar issue is seen for information about a site's correction policies. Only five public broadcasters publish policies on how to communicate and implement error corrections, despite recommendations from the German Press Council for all media companies to have such policies.⁴⁶

There is also a disconcerting lack of transparency regarding information on ownership and funding sources. The sites in our sample inconsistently publish such information. Only one in four sites presents complete information and full transparency on its ownership and funding (scoring 100 in both categories). This includes all of the public broadcasters in our sample. Over half of the news domains publish information about either their funding and/or ownership on parent company websites. This is often found in their annual reports, 'about us' pages or investor relations pages. These domains include many private broadcasters and online newspapers.

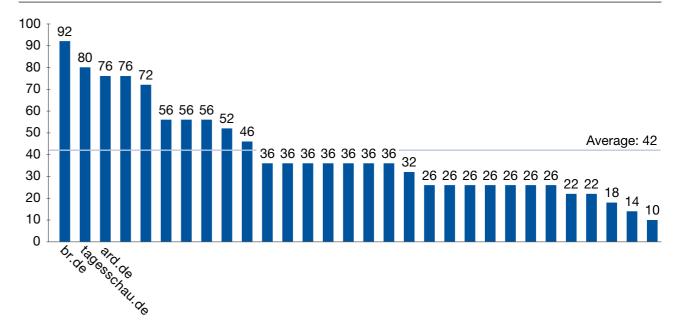
Figure 8. Average Operations pillar scores by indicator



Policies for user-generated content are commonly published as so-called 'netiquette' policies. Seventy percent of all domains forbid hate speech, defamation, violation of privacy, and harassment. The remaining nine domains score an average of 46, indicating that they cover only some of these aspects. Policies on synthetic (Al-generated) content are very uncommon, with only one domain publishing them: www.tagesschau.de. As more news content is automated, such policies will be a critical feature for assessing a news site's operational integrity.

All 30 sites in our 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).⁴⁷ As the JTI points out,⁴⁸ 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. The German Press Council may play a supportive role by developing recommendations for voluntary self-regulation in accordance with JTI's key policies.⁴⁹ This may include recommendations to guarantee editorial independence from a site's publishers and/or owners.

Figure 9. Operations pillar scores by site

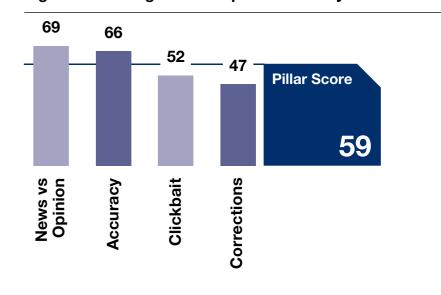


CONTEXT PILLAR

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.

Context pillar scores have significant room for improvement for many domains, although shifting online user perceptions can only occur over the medium to long term. ⁵⁰ This is partly 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 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.

Figure 10. Average Context pillar scores by indicator

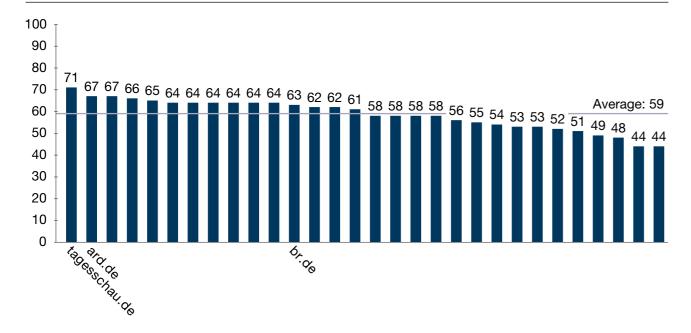


The context pillar findings are based on an independent survey⁵¹ conducted of online user perceptions of brand trust in the German media sites included in our sample. The survey responses of online users emphasise two disinformation risks, namely the perceived lack of error corrections by sites and the perceived use of clickbait titles (see Figure 10). The findings in our Content pillar support the perceived lack of error corrections, but contrast with the perceived use of clickbait titles, since our researchers found that many German media outlets are currently publishing titles which, over all, align very well with the content of the story.

For the 30 domains in our sample, many are considered to do relatively better at providing accurate information and at labelling news and opinion pieces. However, only half of the sites get a passing grade (70 points or above out of a possible 100) for both of these indicators from survey respondents.

Two specific disinformation flags that online users signaled are the perceived use of clickbait titles by sites and their perceived general failure to not visibly issue corrections. No site receives a score of 70 or above (which is considered to be a 'passing' grade). The respondents' perception that sites do not correct errors is supported by our finding that most domains do not have a public corrections policy and/or clear way for the public to submit correction requests.

Figure 11. Context pillar scores by site



Domains could improve their brand reputation in the eyes of online users by investing in quality content and publishing policies regarding company transparency and editorial conduct. For instance, statistical tests show a positive correlation between an article's tone (the Content pillar) and perceptions of accuracy, clickbait, and error corrections issued. Likewise, publishing error correction policies (the Operations pillar) correlates with better perceptions regarding accuracy and clickbait.

Conclusion

Our assessment finds that Germany's media market shows a diverse range of risk levels.
One-third of the sites have minimum and/or low risk levels. Yet at the same time, on the other extreme, nearly one in four sites in Germany presents a high to maximum risk level.

Still there are some generally shared traits among the sites. The majority of German news sites tend to publish reliable content. Only a small number of domains clearly fall short in this category. Operationally, policies that support editorial independence often are not published. Only a few sites lead in this category. In addition, at least half of the domains in the sample enjoy a sizeable degree of brand trust among users, particularly in terms of perceptions of sites providing accurate news coverage.

News sites could address these shortcomings in the short-term by taking actions that:

- Improve the implementation of country-specific journalistic and operational standards recommended by the German Press Code, and expand upon these recommendations by adopting and aligning with the standards set by the Journalism Trust Initiative.
- Ensure that sites consistently publish statements of editorial independence, ownership and funding sources which are easily findable for online users (for instance by adding such information to the 'Impressum' page).
- Emphasise the need to publish policies on algorithmically and synthetically generated content as it becomes more widely adopted in German newsrooms.
- Highlight article authorship clearly and consistently by adding bylines and providing background information on authors on individual profile pages.
- Improve and make more visible a site's correction practices by publishing policies on error corrections and submitting correction requests, in accordance with recommendations by the German Press Council.

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

Annex: Methodology

Pillar scoring

The Structure, Content and Operations pillars of the GDI risk ratings are all designed to capture discrete, observable features of a domain by analysing a snapshot of a particular moment in time. This approach is effective at mitigating bias and standardising our analysis across domains and countries, but it is limited in scope. Historical information about a domain's content and practices is not captured by these pillars—nor are less observable disinformation flags (such as regularly disinforming readers by saying nothing about a story or topic). Both of these limitations are addressed by the fourth pillar, Context, which assesses long-term trends and indicators that are harder to measure. In this report, two-thirds of a domain's score is based on a snapshot of observable features (through the Content and Operations pillars), while the final third comes via a public perceptions survey that contextualizes our findings.

The Content pillar produces a score based on six indicators reviewed by two dedicated country analysts across ten articles published by a domain. These ten articles were randomly selected from among that domain's most frequently shared articles within a two-week period and then stripped of any information that could identify the publisher. The indicators included in the final risk rating are: title representativeness, author attribution, article tone, topicality and common coverage of the story by other domains.

The Operations pillar is scored at the domain level by the same country analysts. We selected five indicators from the Journalism Trust Initiative's list of trustworthiness signals in order to capture the risk associated with a domain's potential financial conflicts of interest, vulnerability to disinformation in its comments sections, and editorial standards. This is not meant to capture the

actual quality of journalism, as this pillar rates a domain based on its public disclosure of operations, which may differ from actual operations. The indicators included are: disclosure of true beneficial owners, transparency in funding sources, published policies for comments sections and the flagging of algorithmically-generated content, a clear process for error reporting, and a public statement affirming editorial independence.

The Context pillar score is based on results from a survey of online users' perceptions of a domain's content and operations. Incorporating survey data in calculating the risk rating is essential because it captures a wider range of opinions, and because online users' perceptions are based on a site's long-term behaviour and performance. This pillar offers a good complement to our Content pillar, which goes into greater depth but analyses only ten articles. The survey captures four indicators: accuracy, clear differentiation between news and opinion articles, use of clickbait titles and error reporting.

Domains are placed into one of five risk categories based on their final risk score. The cut-offs for the categories are determined by combining the risk ratings for domains in all countries in the current version of the index, and calculating this global sample's mean and standard deviation. Domains are placed into a category based on the number of standard deviations that separate their rating from the global mean score. The next table shows each category and its cut-offs.

Table 1: Overview of risk bands

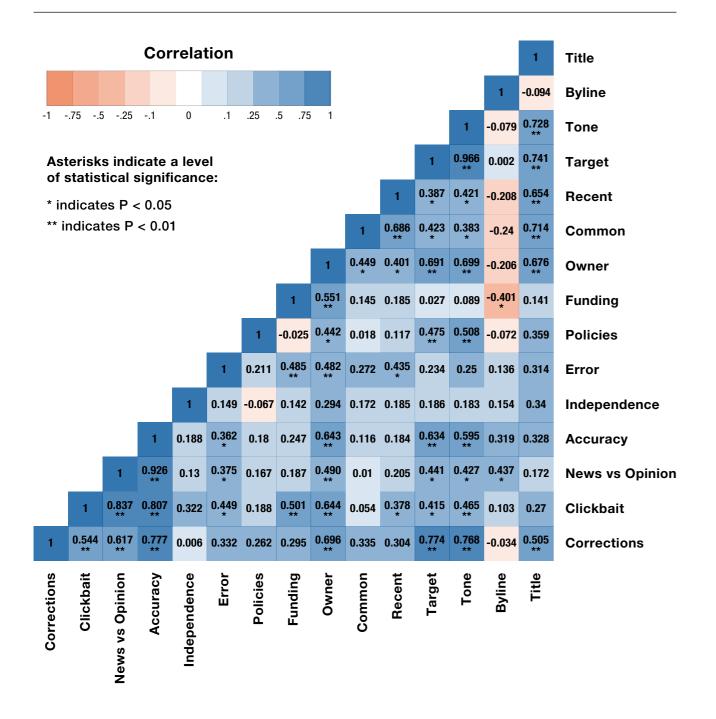
TOTAL DOMAIN SCORE	DISINFORMATION RISK LEVEL	DISINFORMATION RISK CATEGORY
< -1.5 SD from mean	5	Maximum risk
\geq -1.5 and \leq -0.5 SD from mean	4	High risk
$>$ -0.5 and \leq 0.5 SD from mean	3	Medium risk
> 0.5 and \leq 1.5 SD from mean	2	Low risk
> 1.5 SD from mean	1	Minimum risk

Data collection

Each of the German domains was assessed by two analysts who were trained on the GDI framework by our staff according to a codebook that provides detailed instructions for assessing each indicator.

The survey was conducted by YouGov and includes 500 respondents drawn from sophisticated online users. Each respondent was asked a series of questions about domains that they indicated they were familiar with. Each respondent assessed up to ten sites from the sample, based on their familiarity with the site. The maximum of respondents for a site was 125 and the minimum 46. These numbers suggest a robust survey size that allows for a robust analysis.

Table 2. Correlations matrix



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 (Graphika), Camille François (Graphika), Miguel Martinez (co-founder & chief data scientist, Signal AI), Nic Newman (Reuters Institute of Journalism), Olaf Steenfadt, (Reporters without Borders), Cristina Tardáguila (the Poynter Institute's International Fact-Checking Network), Amy Mitchell (Pew Research), Scott Hale (Meedan and Credibility Coalition), Finn Heinrich (OSF) and Laura Zommer (Chequeado).
- 3 The Structure pillar is assessed by a machine-learning algorithm prototype that is trained on metadata from thousands of websites known for regularly disinforming readers. It identifies these domains according to technical features. For example, use of ads.txt, security protocols, and site-specific email aliases. For more on our methodology, see the appendix.
- 4 For more on our methodology, see the appendix and methodology at: https://disinformationindex.org/research/.
- 5 The Structure pillar is assessed by a machine-learning algorithm prototype that is trained on metadata from thousands of websites known for regularly disinforming readers. It identifies these domains according to technical features of the website itself, and currently produces a binary assessment: it either is or is not a high-risk disinformation site. For this study, the structural indicators were used only as a filter to cross-check the domains which were selected for the human review. Their scores on this pillar were not used to calculate the final risk rating. As the sample is composed of some of the most popular sites in the German media market, they would not be expected to share structural features with high-risk sites.
- 6 In this round of reports for 2020, media market assessments will be produced for the following countries: Argentina, Estonia, France, Georgia, Germany, Latvia, India, South Africa, UK and the US. Additional countries may also be added.
- 7 All sites included in the report were informed of their individual scores and risk ratings, as well as the overall market averages.
- 8 Two researchers assessed each site and indicator. The survey was commissioned and conducted by YouGov (www.yougov.com). YouGov is an international research

- data and analytics group headquartered in London. The company has a proprietary panel of over 9 million people globally and is one of the world's largest research networks.
- 9 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.
- 10 The GDI looks forward to working with the entire industry this effort. There is a 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.
- 11 See statistical correlations in the Annex.
- 12 A perceptions survey of over 500 online readers in Germany was conducted by YouGov between 6 and 25 May 2020. The sample is based on a YouGov panel of what is called a 'catalyst audience'. This is a group that YouGov defines as the top 10 % of its survey panel for a country. It is composed of 'change-makers drawn from civil society, business, politics, media, the third sector and beyond. They are defined by their recent activities which include entrepreneurialism, leadership and activism. Typical roles in this group include business & social entrepreneurs, organisational leaders, and political activists.'
- 13 See https://www.rundfunkbeitrag.de/welcome/ englisch/index ger.html.
- 14 ARD (abbreviation for 'Arbeitsgemeinschaft der öffentlich-rechtlichen Rundfunkanstalten der Bundesrepublik Deutschland') is an association of regional broadcasting stations, the 'Landesrundfunkanstalten', and Deutsche Welle, see https://www.dw.com/en/a-dualbroadcasting-system/a-435426.
- 15 See https://www.dw.com/en/a-dual-broadcastingsystem/a-435426.
- 16 In Germany, we refer to 'local' news outlets as those that are a city or 'Kreis' edition ('Landkreise' are an administrative sub-unit of a Bundesland. Regional media outlets refer to those that encompass territories which are the size of a Bundesland.

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- 17 See https://meedia.de/2019/10/21/zeitungs-ivw-bild-bams-welt-und-fas-dick-im-minus-handelsblatt-zeit-und-freitag-legen-zu/.
- 18 See http://www.digitalnewsreport.org/survey/2019/ germany-2019/.
- 19 See http://www.digitalnewsreport.org/survey/2020/ germany-2020/.
- **20** Based on the Alexa rankings for the top sites in Germany and http://www.digitalnewsreport.org/survey/2019/germany-2019/.
- 21 See http://www.digitalnewsreport.org/survey/2019/ germany-2019/.
- 22 See https://www.medienanstalt-nrw.de/presse/ pressemitteilungen/pressemitteilungen-2019/2019/juni/ neue-forsa-zahlen-zur-wahrnehmung-von-hassrede-undfake-news-im-internet.html.
- 23 See https://www.deutschlandfunk.de/vertrauen-im-journalismus-im-post-relotius-zeitalter.2907.
 de.html?dram:article_id=446344_as_well_as_https://kress.de/news/detail/beitrag/141953-haben-journalisten-endqueltig-das-vertrauen-verspielt.html.
- 24 See http://www.digitalnewsreport.org/survey/2019/ germany-2019/.
- 25 See https://www.presserat.de/en.html.
- **26** See https://www.bmjv.de/DE/Themen/FokusThemen/NetzDG/NetzDG_EN_node.html;jsessionid=196F320798D53257B43060B1C21D3CDD.2_cid297.
- 27 See https://www.cducsu.de/presse/pressemitteilungen/netzdg-ist-richtig.
- 28 For example, see https://www.forbes.com/sites/federicoguerrini/2020/03/03/the-problems-with-germanys-new-social-media-hate-speech-bill/#68c40b40592a and https://techcrunch.com/2020/06/19/germany-tightens-online-hate-speech-rules-to-make-platforms-send-reports-straight-to-the-feds/.
- **29** See https://www.hrw.org/news/2018/02/14/germany-flawed-social-media-law.
- **30** See, for instance, Bildblog: https://bildblog.de/haeufiggestellte-fragen/.
- **31** See, for instance, ARD's "Faktenfinder": https://www.tagesschau.de/faktenfinder/.
- **32** See https://correctiv.org/faktencheck/ueber-uns/2018/12/17/ueber-die-kooperation-zwischencorrectiv-faktencheck-und-facebook.
- 33 See https://www.welt.de/wirtschaft/article208479891/ Tichy-vs-Correctiv-Faktencheck-bei-Facebook-muss-geloescht-werden.html.

- **34** See https://www.faz.net/aktuell/feuilleton/medien/tichysiegt-gegen-correctiv-vor-gericht-16789353.html.
- 35 See https://de.statista.com/statistik/daten/studie/166546/umfrage/ausgaben-fuer-online-werbung-in-europa/ as well as https://www.emarketer.com/content/germany-digital-ad-spending-2019.
- **36** The figures are provided by 'Online-Vermarkterkreis (OVK)', a member organisation of the industry association 'Bundesverband Digitale Wirtschaft (BVDW) e.V.: https://www.horizont.at/digital/news/deutschland-digitale-werbung-ist-2019-um-zehn-prozent-gewachsen-80256.
- 37 See https://www.netzwerkreklame.de/ werbespendings/.
- **38** See figures from the Reuters Institute for the Study of Journalism, available at https://de.statista.com/infografik/2362/umfrage-zur-zahlungsbereitschaft-fuer-online-news/.
- 39 See https://www.vrm.de/unternehmen/.
- **40** See https://www.schiebener.net/wordpress/funke-streicht-westfalenpost-redaktion-warstein-der-ausstieg-aus-dem-print-journalismus-wird-beschleunigt/.
- **41** See https://kress.de/news/detail/beitrag/144560-exklusiv-warum-madsack-die-dumont-zeitungen-nicht-wollte.html.
- **42** See https://meedia.de/2019/01/11/zum-aus-der-huffpost-in-deutschland-wie-das-ambitionierte-projekt-aufs-ende-zusteuerte/.
- 43 See https://www.axelspringer.com/en/press-releases/axel-springer-simultaneously-invests-and-saves-costs-in-order-to-strengthen-digital-journalism-and-streamline-structures-at-bild-and-welt as well as https://www.horizont.net/medien/nachrichten/bilanz-axel-springer-macht-weniger-umsatz-und-gewinn-181147.
- 44 See https://jti-rsf.org/en/.
- 45 The Operations pillar looks at whether relevant policies are in place. It does not assess the level of robustness of the policy based on good practice, and does not look at how the policies are being implemented. However, other indicators in the framework do capture some of the relevant practices, such as by measuring perceptions on how often sites correct errors or are viewed as presenting accurate content.
- **46** See Article 3 in the German Press Code, available at https://www.presserat.de/pressekodex.html.
- **47** For more information on the JTI, which has adopted an ISO standard for the industry, please see https://jti-rsf.org/en/.
- **48** See https://www.cen.eu/news/workshops/Pages/WS-2019-013.aspx.

- 49 The German Press Council explains that '[t]he press code sets guidelines for journalistic work. From respect for human dignity to the presumption of innocence, from victim protection to the separation of advertising and editorial work: the 16 digits of the press code are the basis for assessing the complaints submitted to us. Most German publishers are committed to respecting the press code.' See https://www.presserat.de/pressekodex.html.
- 50 The survey responses are based on a panel of 500 respondents. Respondents scored sites that they were "familiar" with and also identified how many times a month they read the specific site. Each respondent answered questions on up to ten sites. The survey was conducted online by YouGov between 6 and 25 May 2020.
- 51 The sample is based on a YouGov panel of what is called a 'catalyst audience'. This is a group that YouGov defines as the top 10 % of its survey panel for a country. It is composed of 'change-makers drawn from civil society, business, politics, media, the third sector and beyond. They are defined by their recent activities which include entrepreneurialism, leadership and activism. Typical roles in this group include business & social entrepreneurs, organisational leaders, and political activists.'

