Democracy and digital disinformation

How Europe can protect its people without endangering free speech





• • . • • • • • • • • • • • • . • • • • • . . • • • • • • • . . • • • • • • • . • • • • • • . . . • • • • • • • • • • . • • . . • • • • • • • • • • • • • . . . • • • • • • • • • • • • • . . • • • • • • • • • • • • • • • • · · · · · · · · · · · · • • • • . • . . . • . . • • • . • • • • • • . . . • • • • • • . • • . • • • • • • . . . • • • • • • • . . . • • • • . .

. .

.

Preface

It was in 2016, in the wake of the US presidential election and Britain's Brexit referendum, that things came to a head and the public mood reached a tipping point: Large digital platforms – hitherto a panacea to cure the ills of open societies – were suddenly and increasingly seen as dangerous tools of electoral meddling. The resultant "techlash" birthed a revolt against the enormous market power of Facebook, Google and Twitter, the big Internet players that have taken on the role of a new form of global mass communication. Legislators on both sides of the Atlantic have definitely recognized the problem. To date, however, they are still wringing their hands in search of potential ways to curb the spread of disinformation.

In Europe, the debate is all too often reduced to what is seen as a conflict between irresponsible tech disruptors and technophobic politicians. Or worse, a battle between innovative entrepreneurs and "old media" with "obsolete business models". Such oversimplification will never resolve the issue of political disinformation.

One thing is for sure: Even in the digital age, every individual should still be able to assess the truthfulness of news items and form their own opinion about the world around them. If this foundation crumbles, our liberal democracy too will ultimately be eroded. For precisely this reason, the digital platforms must be made to shoulder greater responsibility regarding the dissemination of fake news. Yet entrepreneurship and free speech are part of the bedrock of any democratic social order. And it is this dilemma that makes any form of intervention a tricky balancing act. Yes, we need stricter rules. But not at the expense of innovation, openness and individual freedoms.

Together with Roland Berger, we have taken a close look at this important topic. Since its inception, the IE.F has been consistently committed to a flourishing digital economy. Innovative companies need fair condition under which to operate if they are to reach their potential in a digital world. Back in 2016, our study "Fair play in the digital arena" presented proposals on how lawmakers should respond to the negative consequences of increasingly monopolistic tendencies. The information loop on the Internet is now similarly affected, dominated as it is by a few large platforms.

We hope that this study will provide urgently needed context, and that our recommendations will be taken up by governments, civil society and the digital platforms themselves.



Prof. Dr. Friedbert Pflüger Chairman, Internet Economy Foundation



Clark Parsons Managing Director, Internet Economy Foundation

Recommendations

1

Create consistent criteria on how to deal with fake news

2

Raise awareness of online manipulation

3

Uniformly regulate political advertising

4

Give users (greater) control over the choice of content

5

Protect users' right to anonymity

Contents

1 A TRICKY BALANCING ACT	6
Why we need the right level of regulation to combat fake news	
2	
TRUTH AND POETIC LICENSE	11
Free speech and media diversity as the bedrock of democracy	
3	
RADICAL TRANSFORMATION	18
How digital platforms are revolutionizing the media landscape	
4	
A THREAT TO DEMOCRACY?	36
The influence of digital platforms on politics	
5	
REGULATION DONE RIGHT	48

Five proposals on how to combat political disinformation

A TRICKY BALANCING ACT WHY WE NEED THE RIGHT LEVEL OF REGULATION TO COMBAT FAKE NEWS

Never in the history of humankind has it been easier to spread news on a large scale. Gone is the need for printing presses or other privileged distribution channels: All it usually takes these days is a basic user account with Facebook. This has brought the world closer together – but has not necessarily made it a better place.

Major platforms such as Facebook and Twitter are revolutionary tools. They have driven the marginal cost of disseminating information down to virtually nil. They also enable every user – at least in theory – to proclaim their opinion to an audience of millions. This groundbreaking innovation can be used for all kinds of different purposes. It makes it easier for idealists and defenders of democracy to connect to each other. Yet by the same token, despots and demagogues too have learned to abuse digital platforms for their own ends. Negative aspects dominate the current debate: a "serious threat to democracy" (Sarovic, 2019) is perceived on all sides, not just by the revolutionary freedom fighters of yesteryear.

Following the present discussion, one increasingly gets the impression that a new wave of regulation has become inevitable. In the US, even former Facebook co-founder Chris Hughes has advocated the break-up of the company. Suggestions from big-name politicians and forward thinkers tend in the same direction (Hughes, 2019; McGill & Overly, 2019). The question is no longer whether stricter laws will be imposed on the big platforms, but when.

The stakes are high. Facebook and co. have become so powerful that the label "private enterprise" no longer

'We must learn to deal with fake news as an aspect of hybrid warfare."

Angela Merkel German Chancellor

fully does them justice. If you are banished from their presence, you lose a powerful forum via which to reach people. For politicians and companies alike, a "no show" on the major platforms can very quickly become an existential threat.

The principle of free speech does not equate to a (legal) right to voice one's opinions anywhere and at any time. It is intended to protect individuals from state oppression, but only indirectly protects people from the actions of private firms. Strictly speaking, the likes of Facebook are therefore free to delete content of any kind from their pages as they see fit. That does become a problem, however, in light of the dominant market position that makes Facebook, Twitter and Google so tremendously important to the public debate. Which is precisely what makes regulation so tricky: Regulation needs to remedy existing problems without creating new ones.

One thing is clear, however: The platforms themselves are largely to blame for the current storm of indignation, having ignored the negative externalities of their business model for far too long. Three buzzwords – filter bubbles, fake news and electoral manipulation – suffice to illustrate the point. The platforms did not invent these concepts but have given them new and fertile soil in which to grow and flourish.

The data scandal surrounding the dubious activity of the firm Cambridge Analytica in particular rekindled popular fears of disinformation. This episode showed how well behaviors and reactions in the real world can be selectively influenced based on psychological data profiles culled from the Internet. We define disinformation, or fake news, as the intentional dissemination of incorrect information. Merely speaking untruths does not fit the definition: The originator must also be aware that this is the case.

Caution is in order, however: Especially the phrase "fake news" is increasingly being used specifically to discredit unwelcome reporting by serious media. For this reason, the British government wants to dispense with the term altogether (Murphy, 2018). While that is understandable, such a response overlooks the fact that the concept cannot simply be banned from the debate: It is already far too powerful for that to happen, which is why we continue to use the term in this study.

The extent to which fake news shapes the debate is evidenced by press database searches. The term put in only 1,800 appearances in English-language print and online media in 2015, but that changed very quickly in the years that followed. In 2018, the same search scored 100,000 hits, and the trend is still pointing upward. It is no coincidence that, two years earlier, the Oxford Dictionaries chose "post-truth" as the international word of the year.

There are good reasons for the ubiquity of fake news. Almost every week we read new reports of extensive attempts to manipulate opinions or voting behavior, for example, via social media. The European elections in spring 2019 are only one of the more recent examples. At the time, the media were full of bot networks from Spain, fake profiles from Poland and questionable Facebook sites from Italy (Institute for Strategic Dialogue, 2019). All these phenomena have now become the permanent soundtrack to the world's electoral campaigns. And German Chancellor Angela Merkel has evidently seen the writing on the (virtual) wall: "We must learn to deal with fake news as an aspect of hybrid warfare." (Zeit Online, 2019)

Yet one important distinction is increasingly being fudged in public debate: Most cases of fake news or disinformation concern tendentious utterings that are often difficult to put up with but are nearly always covered by the right to free speech. Witness the Russian

"Modern liberal democracies have always struggled to balance the right to free speech and the need to censor. This challenge has been exacerbated by the advent of social media."

Jo Fox

University of London's Institute of Historical Research

influence on the US presidential election – one of the best researched disinformation campaigns in the modern Internet era. The same pattern was followed consistently: a grain of truth overblown here, statements taken out of context there, and so on. However, the fake news was almost never a matter for criminal lawyers. It is therefore all the more important not to equate fake news with "hate speech". The latter refers to inflammatory, defamatory and/or offensive statements that, depending on national legislation, may also be punishable by law outside the confines of social media. That is not the case with most of the lies that circulate on the big platforms. And that is what makes it so difficult to get a handle on fake news. It is also the reason why laws fashioned in the pre-digital world cannot simply be applied as-is to social media.

Ultimately, the fight against fake news hinges materially on the role we ascribe to the platforms. In their capacity as a new type of media, must they shoulder editorial liability for all the content they publish? Or are they rather a public space whose primary concern is to make sure no one is excluded from the discussion? The ongoing debate about the right way to deal with false news lays bare precisely these tensions: Stricter rules protect users from political disinformation but could also restrict free speech. And vice versa.

Step by step, this study explores how we arrive at this zero-sum game. We describe the dilemma facing platforms and society and, at the end, submit recommendations to help restore a greater balance. To this end, chapter two briefly outlines the information loop in a traditional media democracy. Chapter three then explains the extent to which digital platforms have revolutionized human communication, albeit without suspecting that this revolution may not necessarily lead to a better world. The negative impacts of the new information loop are thus discussed in chapter four: While the major platforms should not be held responsible for everything that goes wrong on the Net, social media certainly can be an excellent weapon to fight against democracy. It is therefore all the more important to find new strategies and new solutions. The final chapter presents five recommendations that can mitigate many of the problems addressed.

TRUTH AND POETIC LICENSE FREE SPEECH AND MEDIA DIVERSITY AS THE BEDROCK OF DEMOCRACY

"We the people" are the first words of the Constitution of the United States of America. Article 20 of Germany's Basic Law determines that all state authority is derived from the people. These two documents exemplify the idea that, in a democracy, citizens are the sovereigns who wield the authority of government. This authority is exercised through elections and voting. However, if people are to form their own opinions, understand their sovereign role and play a part in the political process, they depend on reliable information and news.

Until recently, most of the research, editing, communication and comments relating to this information and news came from media such as newspapers, radio and television. Their coverage empowers citizens to find out about topics that go beyond their everyday experiences and thus form an opinion. That is why the unhindered dissemination of information is quite simply of constitutive importance to the working of a democracy (Darnstädt, 2010). For this reason, liberal democracies guarantee not only freedom of speech and opinion, but also freedom of the press and the media in general. Freedom of the press and the media refers not only to content, but also to the nature of the coverage provided. Sensationalism and gossip are just as legitimate as reports on cultural events and political commentaries.

That, however, is not to say that there should be no limits on free speech and/or a free press (see box feature on the rules that govern free speech in different countries and regions). These freedoms reach their limits when they violate the personal rights of others. Media can be held liable for such misconduct, and the parties affected can defend themselves by publishing an opposing viewpoint – in instances where an article is based on incorrect facts, for example.

That is why one key task of editors in the press in liberal societies is choosing and weighting what appears in the news. Whether and in what form a given news item is published in a medium ultimately depends on a judgment on whether the event is newsworthy and the level of public interest in the event. Media that focus on the political and economic realms generally attach greater importance to the scale and consequences of an event. On the other hand, the tabloids and yellow press more strongly target news of considerable public interest (Lischka & Stöcker, 2017).

"Sensational news" in particular is a good way to appeal to a broad readership, and that is not a new phenomenon: Over the past 300 years, newspapers have regularly published reports, the sole purpose of which seems to be to satisfy their readers' cravings for sensation. The topics addressed - accidents, crime, fraud and adultery - have remained comparatively constant over time. To be fair, news about such matters actually meets people's evolutionary need to know about the reputation of other members of their social group: These reports keep them abreast of what behavior is socially acceptable and what is not (Davis & McLeod, 2003). Seen from this angle, one might say that an interest in sensational news is an integral part of human nature. Incidentally, that also applies to strong demand for negative news: Although consumers often express the desire for more "positive" coverage, they themselves more frequently opt for reports with negative content (Trussler & Soroka, 2014). 2 Truth and poetic license

Other than publishing eye-catching reports, media can also tap into a regular readership by cultivating a clear political orientation. Until the early 20th century, the mass media were actually devoted primarily to opinion journalism. It was not until the 1920s that objectivity increasingly became the journalistic ideal of choice in the English-speaking world (Pressman, 2018). Yet despite this legacy, most media can today still be placed – explicitly or implicitly – in a particular band of the political spectrum (Groseclose & Milyo, 2005).

That said, neither demand-driven sensationalism nor the existence of political inclinations prevent people from sourcing their information independently. In liberal countries, media diversity ensures that the political orientations of different media balance each other out. Thanks to the range of outlets on offer, this constellation also ensures coverage of topics that are still perfectly newsworthy even though they may be of little interest to the public. Where actual or perceived gaps in media coverage of the political spectrum exist, new media step into the breach. At a time when it was felt that the German press landscape was too conservative, for example, the daily newspaper TAZ was founded in 1978 as a deliberately left-leaning paper. Conversely, American broadcaster Fox News Channel has, since its inception in 1996, seen itself as a counterweight to the perception of a liberal-leftist media environment.

But even in such a balance-focused system of media, there is still no way to completely rule out even blatantly false reports. Several cases have caused quite a stir: Some have involved journalists inventing stories, such as Jane Cooke and her "Jimmy's World" report in the Washington Post about an eight-year-old who was allegedly a drug addict. Another was Claas Relotius' story in Spiegel about fictitious American vigilantes roaming the Mexican border region. Fabricated stories such as these are usually born of avarice or a desire for recognition. Media publish them due to ignorance of the errors and inaccuracies they contain.

A clear distinction must be drawn between misinformation and fabrications in the media on the one hand and deliberate manipulation based on fake news on the other. Fake news does not necessarily have to be completely fictitious, though. Misleading reports often appear more credible if they are rooted in a kernel of truth. The secret formula reportedly used in East Germany was: "One quarter truth and three quarters embellishment" (Grassegger & Krause, 2019). Disinformation and propaganda vastly predate modern mass media: At the end of the last millennium before Christ, the rivalry between the Romans Octavian and Marcus Antonius was thus decided in favor of the former. Why? Because Octavian incited the Senate and the people against his adversary on the basis of what was probably a falsified document (Soll, 2016). During Europe's Thirty Years' War, propaganda was for the first time disseminated using mass media in the form of flyers and newspapers (Graham, 2011). The origins of modern-day propaganda are attributed to the mobilization of the peoples of Europe in the First World War by means of newspapers, posters, advertisements and speeches (Purseigle, 2013). $\rightarrow B$

Figure B maps the kinds of information described above in a matrix that distinguishes between the intent behind information and the veracity of its content. In a free and

THE RULES THAT GOVERN FREE SPEECH IN DIFFERENT COUNTRIES AND REGIONS

No country grants unlimited freedom of speech. Exactly where the line is drawn between the socially acceptable expression of opinions and utterances that qualify for negative sanctions varies from culture to culture. Figure A illustrates the point: In an international survey, the PEW Research Center quizzed people in different countries about their views on free speech. Specifically, respondents were asked questions such as whether the government should permit public statements that are insulting to minorities or to their own religion/beliefs. The most conspicuous finding is that the proportion of respondents who think such statements should be allowed is similarly high for both questions. $\rightarrow A$

By contrast, very significant differences arise across the regions surveyed. In the US, more than two thirds of respondents argue that public affronts to minorities or one's own religion should be allowed. Roughly every second respondent in Latin America and Europe shares the same view. In Africa and Asia, however, only about a third of respondents accept that it should be possible to insult minorities or one's own religion. In Lebanon, only 1% of respondents hold this opinion.

Anchored in different cultures, these varying attitudes are also reflected in the laws that prevail in the same regions. A very broad interpretation of free speech in the US also covers hate speech against minorities, for example. In the area of morality and decency, however, a somewhat narrower view is taken of what is socially acceptable. The Federal Communications Commission regulates areas such as TV and radio broadcasts and is tasked with enforcing compliance with decency standards. Obscene, indecent and/or vulgar content (such as nudity) can incur fines.

Europe draws narrower lines around permitted expressions of opinion than the US. For understandable historical reasons, denying that the Holocaust took place is thus prohibited in Germany. The same goes for France. Germany and the UK also ban hate speech against minorities where such speech is deemed a threat to the public order.

Free speech is subject to even tighter restrictions in Asia and the Middle East. Promoting atheism is a punishable offense in Indonesia, for example. In Jordan, it is forbidden to publicly turn against religious leaders, nor may religious feelings be affronted by publications.



diverse media landscape, objective reporting will coexist with politically colored media and articles. Erroneous reports will also occur from time to time due to inadequate internal controls and/or mistakes. All three of these types of information are part and parcel of a liberal society.

A democracy also has to put up with political disinformation: Even lies are, in principle, covered by the right to free speech. However, a democracy can only survive in the long term if its people – the sovereign bearers of government authority, remember – can rely on a shared base of information. If a point is reached where it is no longer possible to distinguish between truth and lies in public discourse, that effectively pulls the rug out from under the democratic decision process.

For this reason, democratic societies apply common media standards that make deliberate manipulation more difficult, give citizens transparency about the origins of information and, in so doing, make democratic processes such as elections possible in the first place. Topping the list of common standards is a voluntary commitment to truth, accurate reporting and the public correction of errors.

Guidelines staked out by the media themselves also govern the separation of advertising and editorial content, the presumption of innocence, ways to deal with conflicts of interest and the protection of sources. Examples of such manuals include the Reuters Handbook of Journalism, the German Pressekodex ("Press Code"), the Statement of News Values and Principles circulated by the American Associated Press and the Charte AFP des bonnes pratiques éditoriales et déontologiques ("AFP Charter of Good Editorial and Ethical Practices") used by France's Agence France-Presse.

On top of these rules governing issues of content and process in the media, there are also laws to prevent monopolies and safeguard media diversity. This task is usually entrusted to government actors such as France's Conseil supérieur de l'audiovisuel, Britain's Office of Communications (Ofcom) and Germany's Kommission zur Ermittlung der Konzentration im Medienbereich (KEK).

These conventions, written and unwritten rules and supervisory authorities protect the diversity of media landscapes, creating a kind of safety net for democratic societies. The power of the media as a "news gatekeeper" is offset by a diverse array of providers, allowing citizens to form an independent picture of the world in line with their own interests. And it is this carefully balanced system that is now coming under critical pressure.

At the very least, the rise of the major platforms presents a huge challenge to the existing equilibrium: What use are the high standards of the "old media" if information is processed ever more rarely via newspapers, TV and radio channels and ever more frequently via YouTube, Facebook, Twitter and Instagram? The next chapter therefore traces the radical transformation of the media landscape and explains how digital platforms have led to the emergence of a new information loop. The outcome is a new universe that, compared to the tightly regulated corset within which the old media democracies operated, is still effectively "lawless terrain". The originators of fake news are among those taking advantage of this situation.





.....

Source: Butcher 2019, Roland Berger

3 RADICAL TRANSFORMATION **HOW DIGITAL PLATFORMS ARE** REVOLUTIONIZING THE MEDIA LANDSCAPE

Underestimating the influence of the mass media is one thing sociologist Niklas Luhmann didn't do. In a nowfamous essay penned in 1996, he wrote: "Whatever we know about society, or indeed about the world in which we live, we know through the mass media" (Luhmann, 1996, p. 9). By no means intended as flattery or praise, his analysis nevertheless perfectly encapsulated the media democracy of the 20th century: powerful, leading media determining the topics, with a largely passive public consuming the content.

The world Luhmann described was a world without Google and Facebook. So, whether his analysis remains valid in a radically changing media landscape depends materially on the role in which one sees the big American platforms: Are they "neutral" purveyors of information, effectively on a par with telecommunications companies? Or must we assign them to the ranks of the traditional mass media?

A heated dispute has flared up in the public domain about how to classify these giants. One camp, represented by the likes of British daily The Guardian and influential tech journalist David Kirkpatrick, sees Facebook and the others as nothing more than gigantic media companies (Kirkpatrick, 2019; The Guardian, 2018) – if only because the platforms themselves offer content and handle its weighting, thereby assuming a gatekeeper function just as established media do. Another argument is that, over the years, Facebook has – like traditional publishers – regularly commissioned and paid for journalistic content from external providers. In the future, there are even plans to ramp up such cooperative ventures in order to supply users with high-quality information offerings (Liao, 2018; Bell, 2019; Ingram, 2019).

Additionally, Facebook has recently employed thousands of moderators who check and, where necessary, remove articles from the platform – another activity comparable to that of traditional copy editors. If the big platforms nevertheless persist in seeing themselves as neutral entities, that - in the words of Internet critic Evgeny Morozov (Morozov, 2013) - is nothing more than "technocratic posing" in order to shirk responsibility. Some countries share the same basic idea. In France, the Conseil supérieur de l'audiovisuel – a supervisory authority originally set up to oversee only television and radio broadcasting - now plays a pre-eminent role in monitoring opinions expressed on the Internet (Wiegel, 2019). In the USA, voices on both sides of the political spectrum are ever more stridently demanding that Section 230 of the Communication Decency Act be deleted. Dating back to 1996, the section in question means that platforms such as Facebook can be held responsible for their users' content only in very extreme cases. $\rightarrow C$

Opponents of this view – especially the big US platforms themselves – want at all costs to avoid being classified as media companies. Why? Because that would make the likes of Facebook responsible for all content published on their sites. However, New York professor of journalism Jeff Jarvis warns that any such step would drastically impair the free conversation that is ongoing on the Internet (Jarvis, 2019). In cases of doubt, platforms would simply suppress critical content rather than leaving themselves exposed to avoidable risks. That is also why Facebook founder Mark Zuckerberg has changed his tune

"Facebook is not a social network, an advertising platform or a community. Facebook is something completely new that has never existed before."

Sascha Lobo Journalist and author

and no longer speaks of the "perfect personalized newspaper" (Kim, 2014) he originally wanted his company to create for billions of people. Instead, he now prefers to define platforms as a "social service" (Kuchler, 2019), a "community" (Hoffman, 2017) or simply a "social network" (Swisher, 2018). In the German commercial register, Facebook is accordingly listed as an "online network platform" (Registeranzeiger GmbH, 2018).

That, however, does not mean that the platforms would be unwilling to switch sides at any time if the situation made it expedient to do so – and especially to escape from excessive regulation. \rightarrow C When such threats arise, they behave like the famous cat in the thought experiment conducted by physicist Erwin Schrödinger, simultaneously assuming two different states. The only difference is that, unlike the animal, the platforms are not both dead and alive, but strive at once to be both media companies and neutral telecoms providers. "I agree that we're responsible for the content [on our site]," Mark Zuckerberg said in April 2019 in response to a question by Texas Senator John Cornyn (Kirkpatrick, 2018). This statement radically distances Facebook from its original position but may also avert more incisive intervention by the government – intervention that could even lead to the threat of break-up. →D

C Freedom without responsibility: Newspaper publishers and media companies are bound by far stricter legal provisions than digital platforms

Rules about	NEWSPAPER PUBLISHERS/ MEDIA COMPANIES	DIGITAL PLATFORMS
Market access/ market power	Licenses needed (for broadcasting), stricter merger controls for broadcasters/the press in some cases	No licenses needed, no dedicated merger regulations
Liability for content	Editorial liability for all content	Extensive exclusion of liability
Commitment to truth	Voluntary commitment within the framework of press codes; statutory due diligence obligations in some cases	None
•••••		

Source: Roland Berger

This ambivalent stance is often overlooked in public debate – for example by the German newspaper publishers' association BDZV, which sides with the classic view taken by the platforms. The association's president, Axel Springer CEO Mathias Döpfner, insists that Facebook and the others should on no account be recognized as "digital super-publishers". His reasoning: Doing so would unduly "upgrade" the American Internet groups, because their algorithm-based filter process is unable to assess content on the basis of journalistic criteria. This view positions Facebook, Twitter and Instagram as nothing more than technology-driven communication platforms. All that is then expected of them is that they remove obvious legal violations from news streams and shoulder responsibility as a distributor. "Facebook doesn't do final editing," Döpfner stresses (Bundesverband Deutscher Zeitungsverleger e.V., 2016).

Expert debate in Germany illustrates just how difficult it is to arrive at an accepted definition. Here, the technical term "information intermediary" is becoming increasingly established. This is essentially a way of saying that platforms such as Twitter and Facebook are hybrid forms that must be placed somewhere between media companies and telecoms providers as the two extremes, with a slight tendency toward the latter. If you position





Source: Roland Berger

social platforms as "information intermediaries" for legal purposes, you are stressing their role as a broker: between users on the one hand and content offerings on the other. To date, there is no sign of an end to the debate. By now, however, it is apparent that the US platforms are hard to nail down using the terminology commonly at our disposal. Author Sascha Lobo put the point in a nutshell: "Facebook is not a social network, an advertising platform or a community. Facebook is something completely new that has never existed before" (Lobo,

2018). There is no question that the emergence of the large US platforms has changed society and, with it, the nature of the public sphere. Today, information is absorbed, processed and passed on in different ways. News, be it true or false, can fan out across platforms at lightning speed, but can also very accurately target even the tiniest niche audiences. This far-reaching transition is what we explore in the section below, beginning with consumers and originators and then moving on to the new distributors of information.

3.1 The triumphal march of new news offerings

Even the most revolutionary technology does not become established overnight. This can be seen in the influence that analogue television still has on the way opinions are formed. In Germany and other European countries, TV is still the first and most important source of news. However, even this persistent and substantial popularity should not obscure one vital fact: Traditional news formats have seen their influence gradually eroded in recent years. The fact that they have not literally disappeared from our screens is primarily due to the 50+ generation: Nowhere else is loyalty to linear television programs stronger.

Younger age cohorts paint a completely different picture: The Internet is already out in front of TV as a source of orientation in the 30-to-49 year age bracket. The rule of thumb is that the younger the audience, the more important is online content. Nearly three quarters of 19-to-29 year-olds today source their news primarily on the Internet – a number that is expected to rise higher in the future. The point is underscored by a glance at the US, where the technological transformation has already had a profound effect on news consumption. $\rightarrow E$

Although pronounced discrepancies exist between national media landscapes, the transformation is progressing along similar fault lines in many countries. One of the most important trends is that traditional media companies have lost too many consumers to the direct distribution channels. Roughly every second Internet user today looks for brokered news services rather than individual news websites. They do so via search engines, but also via social networks and news aggregators such as Apple News. The latter produce no content of their own but merely provide links to content (Nielsen, Newman, & Kalogeropoulos, 2019).

For 60% of Western Europeans, Facebook remains the most important Internet platform for information (Mitchell et al., 2018). Even the data scandal surrounding political consultancy Cambridge Analytica has done little to change that. Nor have recent data leaks had much of an impact – such as when, in September 2018, multiple security loopholes enabled unknown parties to steal millions of items of sensitive user data (Facebook, 2018). Only younger users are increasingly turning their back on Facebook. In most cases, however, they stay loyal to the parent company and merely "move across the hall" to Facebook subsidiary Instagram, which is growing at a phenomenal rate. In Germany, the latter platform is now used as a source of news content by almost one in four adults between the ages of 18 and 24. The same trend is observable throughout Europe (Hölig, Hasebring, & Behre, 2019).

A growing mistrust of the established media is not enough to explain users' new behavioral patterns. Yes, the gatekeepers of the past have seen confidence in them decline, even in politically stable countries such as Finland and Germany. Yet at the same time, a new kind of online journalism has taken shape in recent years that, despite scarcer resources, has instilled high quality standards and is valued by users around the globe. The

E Online first: Younger Europeans prefer online news

Percentage of respondents who consume news from the given source at least once per day



vast reach of the New York Times and Britain's Guardian is a striking example. In terms of reputation, however, traditional media companies are still relatively well placed compared to social media. In 2019, the Edelman Trust Barometer found that 60% of the population of Europe trust them, against just over a third for the Facebooks of this world (Edelman, 2019). \rightarrow F

A renaissance of old-style news consumption is nevertheless unlikely. Many traditional media companies have modified their business model on the Internet and introduced a paywall, but user acceptance has been modest. Customers' willingness to pay for online news content is stagnating at a constant, low level, except in the Scandinavian countries. The standout exception is and remains Norway, where digital subscribers have once again increased year on year as a percentage of the total population, rising from 30 to 34%. The comparable figure is only 8% in Germany and 9% in the UK (Hölig, Hasebring, & Behre, 2019).

The dearth of demand is reinforced by a phenomenon known as "subscription fatigue". This simply means that the vast majority of people are unwilling to increase their media budget, placing an implicit limit on the number of new subscribers. Interestingly, studies show that news channels fare worse than entertainment offerings in direct comparison. If it comes down to a choice, Spotify and Netflix have the edge over Le Monde and Spiegel.

Meanwhile, "super-apps" that combine a wide range of services are growing ever more popular. Users no longer need to switch between platforms but can do

F A question of trust: As a source of news, traditional media command far greater trust than social media

Percentage of respondents who trust each source of news



Source: Edelman Trust Barometer 2019, Roland Berger

everything in one (virtual) place: shopping, chatting, sourcing political news, whatever. The best-known example of a super-app is WeChat in China, while Facebook's ever deeper integration across services puts it well on the same path. This model scratches where many users itch: They no longer want to actively go looking for information about what is going on in the world. Instead, they trust the network effect of the major platforms. Evidence of this trend is reflected in a single sentence that crops up again and again in surveys: "If the news is that important, it will find me" (Benton, 2019).

Not just the sources of news, but also the ways in which news is consumed have changed. Scientists point out that it is not unusual for users to scroll through platforms such as Facebook and Twitter in a state of distraction, which increases their vulnerability to cognitive distortions such as confirmation bias (Panger, 2018). When that happens, "the truth" is not what matches the facts but what fits one's own worldview.

The younger generation has clearly adapted far better to the new media landscape. Users in this cohort find it easier to distinguish between facts and mere opinions on the Internet. Older users have a much harder time doing so. They are not only more receptive to lies on social networks, but also pass them on more frequently than the younger generation (Gottfried & Grieco, 2018). However, it is also true that the traditional distinction between pure consumers on the one hand and professional news sources on the other is an anachronism. As we will see in the next chapter, the lines are becoming increasingly blurred.

3.2 Yesterday's audience is today's broadcaster

The fact that the rules of the old media democracy no longer apply is shown by an example from the small town of Ferguson in the US state of Missouri. In August 2014, a stand-alone live streamer by the name of Mustafa Hussein went on the air there and, in a very short time, reached the kind of audience that only TV news channel CNN normally attracts. Hussein was reporting live and direct about mass protects against police violence, not bothering to take a detour via the mass media (Tufekci, 2018).

In the age of Facebook and co., yesterday's audience has become today's broadcaster. Anyone who wants to can beam messages out into the world at any time and with little friction. Two developments have made this possible: ever cheaper and more powerful hardware, centered around the smartphone; and the potent network effects of the major US platforms, which potentially give every user access to a mass audience. The extent to which this new understanding of roles has gained traction is illustrated by user statistics on social networks. Every hour, 510,000 new comments are posted on Facebook, and 600,000 hours of new video material are added to YouTube in the same period. On Instagram, 100 million people produce personal "video stories" every day (Marr, 2018).

What has emerged is a new "fractal public" that twists and fragments into countless sub-audiences. What







Source: Roland Berger

H New world: Digital platforms serve as media via which information can be disseminated in an unfiltered form



goes on in these niches is often difficult for the outside world to keep track of. Unlike in the past, old-style gatekeepers – newspapers, radio broadcasters and TV companies – can be bypassed with ease. And with them has gone a shared basis for discussions to which all participants in a debate can refer. In their place, platforms like Google and Facebook now distribute content regardless of the source. Preselection and filtering still takes place, but this is now done with the aid of algorithms and based on different criteria. The crucial element is whether an item of news can generate enough attention. $\rightarrow G \rightarrow H$

New technical possibilities have already brought lasting change in the battle to shape political opinion. That is true of electoral campaigns, insurgencies and civic/ social engagement alike. This development first came to light during the Arab Spring in 2011. The ensuing uprisings were thus often referred to as a "social media revolution", because the protesters harnessed the new platforms to circumvent the monopolistic systems of those in power. This strategy made it vastly simpler to coordinate and mobilize demonstrators. And even though people's real presence on streets and public squares was ultimately more decisive, events in Egypt and Tunisia did, for the first time, show what powerful tools Facebook and Twitter can be in the hands of protesters (El Difraoui, 2011; Shearlaw, 2016).

We have since witnessed the emergence of a new breed of politicians who leverage social media to launch new movements in a very short time. US President Donald Trump and Democratic presidential candidate Bernie Sanders are just two of many examples. Similarly, civil society movements such as Fridays for Future would today be inconceivable without the amplification facilitated by social networks. The mechanism is always the same: A topic rises exponentially to prominence as soon as others join in; they, in turn, bring others with them. This popularization of news production is made possible by a completely new business model that we examine in the section below.

3.3 The business model behind the media revolution

Jill Abramson, former Editor-in-Chief of the New York Times, has vivid memories of 2007. That is when the first iPhone came on the market, a year after Facebook had launched its news feed. Since then, any and every user has been able to view a mix of opinions, entertainment, news and status reports – fully automated and in real time. "2007 was the year when everything started to fall apart," Abramson writes (Abramson, 2019), referring to the business model of the New York Times and the Washington Post.

Ad-financed journalism has been mired in a profound crisis for some years. More and more advertising revenue is being siphoned off by the big Internet platforms. Google and Facebook today share a de facto duopoly of the world's online advertising market. Last year, their share of the digital advertising market was 60%. British market researchers WARC expect that figure to climb higher still in 2019 (WARC, 2019). →I

Changing of the guard: Global advertising expenditure is migrating from traditional media to the online universe – 60% of online advertising revenues go to Facebook and Google

Where advertising customers spend their money

Facebook and Google's online advertising revenues (absolute figures [USD bn] and as share of global online advertising market [%])





Source: Meeker 2019, eMarketer 2019, Roland Berger

The dominance of the major US platforms is rooted in a radically new business model. They too want to supply users with the "most relevant" content, of course. But they no longer do so in accordance with generally valid journalistic criteria. Instead, they select content with which users exhibit especially strong interaction. The strategic consideration behind this approach is simple: The longer a user stays on the site, the more advertising can be sold.

The level of user "engagement" is constantly measured by signals. The most important of these include likes, shares and the comments made about a given article, but also the time spent reading an article or watching a video. In this way, the algorithm learns about the user's individual preferences – and continually adapts accordingly. Only content that promises to attract maximum attention is displayed. Just how successful Facebook and the other platforms have been with this model is evidenced by the average time spent on social media platforms. In Germany, the record is currently held by YouTube, where the 16-to-19 year-old age group spend an average of 150 minutes a day (Wulff, Rumpff, Arnoldy, & Bender, 2018).

The key to the success of this new model of information distribution lies in how it links user data to advertising business. Advertising customers can tailor advertising to even the tiniest target niche group. Dubbed "microtargeting", this practice is legal and beneficial to users if it shows them advertising that is of relevance to their preferences. Half of all advertising revenue on the Internet is already generated with the aid of microtargeting. The principal beneficiaries are the platforms that dominate the digital advertising market, J Record-breaking margins: Digital platforms operate exceptionally profitable business models – and are leaving media companies in their wake

Net margins of digital platforms, incumbent media companies and the members of selected stock indices¹ [2018]



K Valuable users: Facebook's market capitalization is closely linked to growth in the number of users

.....

Facebook's stock price [in USD] and the active number of users per day [in millions]



Source: Bloomberg, Roland Berger

as can be seen from their net margins: Whereas average companies listed on leading stock indices such as the S&P 500, the Euro Stoxx 50 and the DAX 30 do not manage net margins of more than low double digits at best, Facebook and Twitter have been able to turn 40% of their revenue into profit. At Alphabet (Google), the net margin of 22% is still twice as high as that of the average S&P 500 company. →J

The big American platforms reap the rewards of a tremendous network effect: The greater their reach, the more ads can be sold. This effect is reflected in the trend in Facebook's share price, which, since 2010, has increased at more or less the same rate as the number of monthly active users. $\rightarrow K$

That also explains why the platform has in recent years sought to acquire new users at almost any cost. Mark Zuckerberg himself hinted at this in an interview, referring to the "growth team" set up in 2007 as Facebook's "most important product feature" (Altman, 2016). The consequences are obvious: If ever more users disseminate ever more news at an ever faster pace, the information loop as a whole accelerates as a result. What that means in practice is the subject of the next section.

3.4 A news cycle flying at supersonic speed

In summer 2016, the website EndingTheFed.com made it onto Facebook's list of trending topics thanks to a

dubious report. The report claimed that Fox News moderator Megyn Kelly had been fired, allegedly for supporting Hillary Clinton. There was no substance to this "news", as in the case of most other reports on EndingTheFed.com. The site nevertheless enjoyed considerable success in the months leading up to the US presidential election. Its four top articles solicited nearly three million Facebook engagements – substantially more than the four top articles by the Washington Post (Silverman, 2016).

The stellar rise of questionable websites illustrates one of the fundamental dilemmas of the new information age: Little distinction is now made between different articles on Facebook and Twitter. Every article, every photo, every video competes for attention with every other article, photo or video – irrespective of whether the content comes from a serious source or a site such as EndingTheFed.com. Traditional media are thus increasingly falling behind and must either lower their standards or see their reach and influence continue to wane. The New York Times was quick to see where things were heading. Back in its 2014 Innovation Report, it acknowledged that it had fallen behind in "bringing the art and science of journalism to the reader" (The New York Times, 2014).

The extent to which the emotionalization of content matters in this environment is, for example, demonstrated by a Facebook experiment focused on influencing feelings. The core message was that people who see less emotional articles in their news feed are less active on the network afterward – which is in the interests neither of the originator, nor of the platform



L Perpetuum mobile: The toxic cycle of fake news

Source: Roland Berger

operator (Kramer, Guillory, & Hancock, 2014). Importantly, though, not all emotions are equal. Negative articles provoke significantly more reactions than positive ones, and hence also generate much more attention (Stieglitz & Dang-Xuan, 2012).

Fake news flourishes and grows especially well in this communication climate. It spreads faster than reports with verifiably true content, as researchers at Science magazine recently found. That is due not so much to bots as to real people who respond more frequently – and preferentially – to false news. There is a simple explanation for this behavior: The study authors found that fake news is perceived to be "newer" and thus "of greater relevance" to decisions. Bots do nothing to change this circumstance. They merely ensure that all news, be it true or false, is spread more quickly (Vosoughi, Roy, & Sinan, 2019). →L

Former Guardian Editor-in-Chief Alan Rusbridger said something that summed up the essence of the new information landscape: "Nothing stays exclusive for more than two minutes" (Rusbridger, 2018). Rusbridger sees this as a problem especially for media companies, because it is hardly worth their while to conduct expensive research if their findings are copied immediately and then spread far and wide in real time. At the same time, the flood of information is also becoming a growing problem for Internet users: Permanent updates, status reports and live coverage make it increasingly difficult to stay on top of the news situation – all the more so because many of the protagonists on social media no longer feel bound by traditional media's commitment to truth. The outcome is a growing sense of exhaustion among recipients, coupled with a desire for far less news (Nielsen, Newman, & Kalogeropoulos, 2019).

Strictly speaking, this new clutter and confusion is a logical consequence of weakening gatekeepers. For decades, the latter determined the limits of what could be said in public, or staked out what political scientist Joseph P. Overton termed the "Overton window": the corridor of opinion that demarcates publicly acceptable positions and viewpoints. And precisely these fixed boundaries have now disappeared. In the words of Internet sociologist Zeynep Tufekci, "The Overton window is broken" (Tufekci, 2016) – with all the positive and negative consequences that this entails.

Never has it been so easy to represent the legitimate interests of minorities; and never has it been so easy to spread conspiracy theories and fake news. Precisely this development puts the political opinion-building process to a stiff test. As we will see in the next chapter, this situation creates a whole series of new problems that could threaten the very foundations of democracy.

A THREAT TO DEMOCRACY? THE INFLUENCE OF DIGITAL PLATFORMS ON POLITICS
The big communication platforms are not yet twenty years old, yet the initial euphoria has long since evaporated. No longer are YouTube and Facebook perceived as standard-bearers of freedom and innovation, but increasingly as a danger to open societies. Fake news, electoral manipulation, filter bubbles, you name it: The platforms are accused, if not of inventing these ills, then at least of raising them to undreamed-of prominence with their digital offerings. In fall 2017, the lead article in Britain's Economist asked the question "Do social media threaten democracy?" This question alone still aptly sums up the prevalent mood.

This chapter takes a detailed look at three of the main criticisms leveled at digital platforms: a lack of transparency, reliability and responsibility. All three aspects touch on the minefield that exists between free speech and appropriate safeguards for constructive dialogue. They also provide orientation for the regulatory proposals we will discuss later.

One does not need to fully subscribe to the perception of Facebook and co. as "threats to democracy" to recognize negative externalities that are partially attributable to the rapid rise of the major platforms. They range from the scandal surrounding the shady political consultancy Cambridge Analytica through the most recent US elections and the UK's Brexit vote to the violence unleashed on the Rohingya minority in Myanmar. They also dramatically show how easily the current platform architecture can be abused.

Strictly speaking, Facebook and the other platforms act like a coal-fired power plant that pays only the cost of

"Liberal democracy is broken. And you broke it."

Carole Cadwalladr Journalist addressing Mark Zuckerberg (among others) in a TED talk

running its operations, not that of poisoning the environment – or, in the case of Facebook, of poisoning the political climate. If the platforms had to foot more of the bill for the negative fallout from their business models, that would put pressure on their generous margins. This point is made clearly by the impact Facebook's acceptance of self-imposed obligations in the wake of the recent scandals has had on its income statement. The company's investment – in an array of measures from stricter monitoring of the site to the set-up of an advertising library – is already sizable (Vogelstein, 2018), but is not enough to offset the existing negative externalities.

One problem is still the lack of transparency about how Facebook and the other platforms select information,

and the apparent randomness with which some platforms apply the rules. Another is the absence of a sense of responsibility. The dominant services today represent an ever larger share of the public. So far, however, they have not done enough to meet the concomitant responsibilities.

4.1. Esoteric algorithms

Every time Facebook's programmers tweak the company's news feed, the same ritual is repeated: First, a brief memo is published to roughly sketch the new guidelines. Then the world attempts to understand what the changes actually mean. April 2019 was no different: Facebook announced changes to the criteria based on which its algorithm would structure and select information on the platform. "Not again," came the audible sigh from technology journal Wired (Dreyfuss & Lapowsky, 2019).

Facebook is not an exceptional case. Platforms such as Twitter, YouTube and LinkedIn are likewise constantly adapting their algorithms to new realities. $\rightarrow M$

So, what is the problem, one might ask? The problem is that the algorithms of the major American platforms remain a black box to this day. At best, outsiders can only guess at why some articles appear in their news feed and others do not.

"Over 200 signals" determining the sequence of hits for a search argument have been mentioned in the case of Google (Lischka & Stöcker, 2017). Facebook and Twitter are likely to be on a similar level. But the platform operators' lips remain tightly sealed on how hits are weighted and what criteria ultimately clinch this or that decision. Adam Mosseri, Facebook's former news feed boss, says this is done to avoid making it easier for people to manipulate the algorithm (Glaser & Will, 2018). At the same time, the issue of the filter mechanisms also touches on business secrets and is therefore of relevance to the platforms' livelihood. From the operators' perspective, then, there is a reason for all the secrecy.

Not so for users, for whom the lack of transparency can quickly become a problem. Unlike in the past, it becomes much more difficult to position information in an appropriate context. Viewers of a conservative TV channel such as Fox News, or a liberal one such as MSNBC, always knew exactly what positions to expect. On Facebook and Twitter, that is no longer the case.

There are many indications that the big US platforms themselves do not fully grasp how their own algorithms work. That may indeed be only natural: Algorithms adjust themselves permanently through interaction with users, discovering new preferences and adapting accordingly. Under certain circumstances, that could trigger dangerous and self-reinforcing trends. In June 2019, evidence emerged that the YouTube software had inadvertently lifted videos of kids out of their original context – and then recommended them in endless video playlists to people with pedophile tendencies. A regrettable "tweak" in the algorithm, as YouTube explained to the New York Times (Fisher & Taub, 2019). Because the methods used to select information are so

"The exceptional profitability of these companies is largely a function of their avoiding responsibility for – and avoiding paying for – the content on their platforms."

Sheryl Sandberg

COO Facebook, speaking about digital platforms

esoteric, it takes time before even obvious distortions come to public attention. Witness the case researched by Zeynep Tufekci: During the US presidential election campaign in 2016, she noticed that the YouTube algorithm was recommending ever more radical material after she had played videos of Trump rallies. She finally ended up with articles by racists and Holocaust deniers (Tufekci, 2018).

Other scientists have observed similar effects: Anyone looking to find information about the riots in the eastern German city of Chemnitz in late summer 2018 was almost inevitably steered in the direction of extreme right-wing sites (Fisher & Bennhold, 2018). And anyone looking for information about flu vaccines quickly splashed down in a sea of vaccination conspiracy theories (Nicas, 2018).

There is a simple explanation why radicalization tendencies are built into the algorithms: Platforms are fighting for the attention of their users, and it is easier to grab that attention with radical content than with well-balanced articles. Yet even scientists emphasize that caution is in order when drawing generalized conclusions. No outsider has a handle on what billions of personalized news feeds and timelines are washing to the surface day in, day out.



Number of changes to terms of use and news feed algorithms



Source: Tow Center for Digital Journalism, Roland Berger

Whether algorithms genuinely create "filter bubbles" on a large scale is a controversial subject among scientists. That said, there are many indications that they can at least reinforce existing prejudices – often without the wider public even noticing the new "echo chambers". The Brexit vote in the UK was a case in point: Journalist Carole Cadwalladr was initially astonished at why 62% of the population of the small Welsh town of Ebbw Vale had voted to leave the EU. This traditional Labour (i.e. left-wing) stronghold had in the past benefited handsomely from subsidies from Brussels.

Cadwalladr believes aggressive anti-EU advertisements on Facebook were partially responsible for the mood swing in Ebbw Vale, as in other British towns and cities. Such ads nurtured fears of an impending Turkish accession to the EU, for example, although the wider public had heard nothing of this. "The entire referendum took place in darkness because it took place on Facebook," the journalist said. "And what happens on Facebook, stays on Facebook, because only you see your news feed and then it vanishes, so it's impossible to research anything. So we have no idea who saw what ads, or what impact they had, or what data was used to target these people, or even who placed the ads, or how much money was spent, or even what nationality they were" (Cadwalladr, 2019).

Shady political advertising also played a role in the US presidential election campaign. The Trump campaign placed what are known as "dark posts" on Facebook, the aim being to keep regular Democratic voters from going to the polls. African-American voters, for example, were specifically targeted with an animation whose text read

"Hillary thinks African-Americans are super predators" (Green & Issenberg, 2016). As is customary with dark posts, however, the animation was a paid ad that was not visible to everyone in the main flow of visitors to a page: It was only shown in the individual news feeds of a certain target group. Opposition groups cannot respond to this kind of article. They do not even know that these ads exist in the first place. That was the case in the abovementioned article about Hillary Clinton's alleged attitude to African-American voters, for example, which Donald Trump's campaign team rolled out based on a Facebook quote taken out of context.

Irrespective of the success or otherwise of individual attempts at manipulation, it is worrying when there is no longer any clarity about how information is distributed in a democracy. In the long run, this completely undermines the political debate. Transparent filter rules alone are not enough to get the new information loop back on an even keel. The same rules must be valid for everyone and must be applied reliably, as we will see in the section below.

4.2 The difficult search for uniform criteria

Sometimes, criteria can change in the space of a day. When Vox journalist Carlos Maza recently complained about homophobic and racist remarks made by YouTuber Stephen Crowder, the company's answer sounded unambiguous: While the said statements were "clearly

"Facebook is now reeling from one scandal to the other, and Sandberg will go down in history as someone who damaged democracy."

Scott Galloway

Honorary Professor of Marketing and author of several books

offensive", they were covered by the right to free speech. What followed was a wave of public indignation in which Google employees too had their say. The very next day, YouTube then backtracked, noted "patterns of outrageous behavior" by Crowder and cut him off from advertising revenues (Romano, 2019).

Virtually every social media platform has since experienced its own "Crowder case". And the pattern remains the same every time: Users first complain about controversial content, then the platform makes a tricky decision – sometimes favoring free speech, sometimes reinforcing the safety of its users. A storm of protest then breaks out, whereupon the platform revises its decision. "We are constantly changing our rules, (...) we are never really finished," says David Gasca, Twitter's product health chief (Conger, 2019).

The problem is that the big platforms are not only uncertain about how to apply the rules they have imposed on themselves. They have also failed to agree to a common standard of assessment. This point was made with abundant clarity in the recent case of a manipulated video that showed Democratic party

politician and Speaker of the US House of Representatives Nancy Pelosi during one of her numerous public appearances. The subtle difference was that, this time, the playing speed was slowed down and the pitch was adjusted.

This distortion made Pelosi's voice sound strange, as though she were drunk when the video was made. Yet although it was a blatant case of video manipulation, the reactions of the major platforms could not have differed more widely. YouTube removed the video, Twitter allowed it to continue circulating unhindered and Facebook effectively sat on the fence: The video could still be shared, but only with a warning and heavily penalized by the algorithm (Harwell, 2019).

A Facebook spokesman later said he believed the company's response had succeeded in striking the right balance between free speech and the promotion of a safe and authentic community (Feiner, 2019). Indirectly, this statement could also be interpreted as an attack on the other platforms: In the eyes of Facebook, the others had failed to strike the targeted balance.

If there is one thing the manipulated Pelosi video shows, it is that there are no reliable criteria setting the boundaries of what is permissible. As things stand, the standards of each community are formulated so vaguely that they could be used to justify practically any decision – from the censoring of content to unrestricted laissezfaire. And that despite the situation in the Pelosi case being fairly straightforward: This was an American debate, so it should have been sufficient to apply American laws. As soon as the cross-border nature of multinational platforms comes into play, however, things become inordinately more complex. As we saw in chapter two, free speech itself is interpreted more or less widely or narrowly around the globe. What might violate someone's personal rights in many European countries may be perfectly legitimate in the US. The same goes for denying the Holocaust, which is punishable by law in Israel, Germany, France and 14 other European countries, but not in the US or in most other countries of the world. Which laws should platforms observe, then? The most restrictive ones in each case? The most liberal ones? Up to now, Facebook, Twitter and the others have mostly regulated their content along the lines of North American law. In the past, though, that has led to a raft of problematic decisions that quickly needed to be reversed. For example, Facebook in 2016 banned one of the most important war photographs in the world: the iconic photo of "napalm girl" Kim Phúc running away. The official reasoning at the time was given as illegal public nudity (Levin, Wong, & Harding, 2016).

If the focus gravitates away from freedom of speech as the greater good and toward the more forceful regulation of content, the incidence of such controversial decisions is likely to increase in the future. "Protecting the user is our top priority," Twitter boss Jack Dorsey explained recently (Conger, 2019). He did not specify what that might mean in practice – perhaps because there can be no simple solutions. Even critical experts are coming to realize that the platforms face a seemingly unsolvable dilemma: How should they accommodate countryspecific cultures without limiting the freedom of information worldwide? Nor is the absence of clear criteria the only issue. In the vast majority of cases, what criteria do exist are no longer applied by platform moderators, but by notoriously unreliable algorithms. True, Facebook software now identifies almost all pornographic content (99%) before it can spread across the site. In other categories, however, the success rate is far less impressive. In the case of hate speech, Mark Zuckerberg puts the figure at just 52% (Zuckerberg, 2018). And one is loath to imagine how political disinformation might be "proactively identified". This conundrum will definitely have consequences for society. In the section that follows, we therefore look at how platform design can influence the political opinion-building process – intentionally or otherwise.

4.3 Monopolists with no sense of responsibility?

For a long time, Mark Zuckerberg would not even countenance the possibility that Facebook might have influenced the outcome of the American presidential election. Shortly after Donald Trump's victory, the Facebook CEO still categorically denied any such allegations. "The idea that fake news on Facebook [...] influenced the election [...] is a pretty crazy idea," he said at the time (Schulz, 2018). Yet only a year later, in fall 2017, the company was forced to concede that Russian propaganda had been shown to 150 million Americans on the platform. Zuckerberg had to distance himself from his original claim. Other platform operators too came under fire: YouTube confirmed 1,108 "problematic" videos with links to Russia, while Twitter identified 36,746 relevant user accounts (Economist, 2017).

There is now plenty of evidence for such platform-based attempts at meddling. What is unclear is the extent of their actual influence on political opinion building. Scientific studies of this topic must surmount a number of challenging obstacles: How is it at all possible to measure the scope of political disinformation on digital platforms? How do we assess the reception given to such articles? And what influence does manipulative news ultimately have on an individual's voting choices at the ballot box?

One 2018 study, for example, estimates that political advertising on Facebook increased the probability that individual voters would actually vote by as much as 10% during the US presidential election in 2016. Among "swing" voters who were still undecided, the scientists reckoned that placing political advertising on Facebook was able to increase the probability of votes being cast for Donald Trump by 5% (Liberini, Redoano, Russo, Cuevas, & Cuevas, 2018). Another study shows that, during the same US presidential election campaign, 6% of all news disseminated via Twitter was fake. However, the study authors claim that 80% of this fake news was shared by only 0.1% of users (Grinberg, Joseph, Friedland, Swire-Thompson, & Lazer, 2019). During the US presidential elections in 2012 and 2016, communication researcher Kelly Garrett further investigated whether a positive correlation existed between susceptibility to fake news and the use of social networks. In the end, he came to the opposite conclusion,

"We don't optimize for absolute free speech, we optimize for overall free speech and having people feel safe to say what they do."

Jack Dorsey Co-founder and CEO Twitter

stating "The effects are often small" (Garrett, 2019). Alcott and Gentzkow (2017) likewise believe that the influence of fake news on the outcome of the US presidential election in 2016 was far smaller than the lead enjoyed by Mr. Trump in the deciding states.

The same applies to the popular theories of filter bubbles and echo chambers. These theories imply that algorithmic filtering creates a world without contradiction, a world in which one's own views are confirmed incessantly. In practice, however, evidence to back up this assertion is lacking. True, the existence of "opinion bubbles" on Twitter has been validated (Vanderbiest, 2019), and Twitter boss Jack Dorsey has admitted that the service he runs does "contribute to filter bubbles" (Thompson, 2018). That said, little research has been conducted into the extent to which such bubbles genuinely influence users. "The influence of echo chambers is overstated," explains Elizabeth Dubois of the University of Ottawa (Robson, 2018).

Nor is it possible to make sweeping statements about whether more time spent on social networks automatically leads to less plurality of opinion. A whole series of studies indeed points in the opposite direction (Flaxman, Goel, & Rao, 2016; Bruns, 2016; Bakshy,

"In a lot of ways, Facebook is more like a government than a traditional company."

Mark Zuckerberg Co-founder and CEO Facebook

Messing, & Adamic, 2015; Stark, Magin, & Jürgens, 2017): In these studies, scientists find that the users of Facebook and other platforms gravitate more commonly than is usual toward controversial news content. However, this content contradicts their own convictions with astonishing frequency.

This does not mean that the resultant polarization must be ineffective. People confronted with completely contrary values often take all the more trouble to rationalize their own worldview. Psychologists call this effect "motivated perception", which causes people to cling more closely to their own beliefs.

No final verdict can be made on whether platforms such as Facebook pose an intrinsic "threat to democracy" or whether they merely exacerbate the problems that already exist in a society. By contrast, there is no question that their size alone places a special responsibility on major platforms. Owing to its financial muscle and its more than two billion users, Facebook in particular is often effectively equated with a nation state in public debate (Rosenbach, 2018). This impression has grown stronger still since the company set to work on its own digital currency with global ambitions. And the impression is not entirely wrong: The rules prescribed or not prescribed on Facebook have repercussions for all other market players and participants.

The United Nations contends that hatred and propaganda on Facebook played a significant part in outbreaks of violence against the Rohingya minority in Myanmar, for

example. Similar reports have come in from other countries (Human Rights Council, 2018). In India and Sri Lanka, a series of lynchings can be attributed to deliberate fake news that was previously circulated on WhatsApp or Facebook (Taub & Fisher, 2018; Mclaughlin, 2019). A similar (albeit less dramatic) spiral of escalation can be observed in Germany. Over a period of two years, scientists from the University of Warwick closely examined all attacks on refugees in this country and noted that significantly more assaults took place in cities with a high incidence of Facebook usage (Müller & Schwarz, 2018).

Moreover, a thought-provoking experiment from 2010 illustrates – at least in theory – the extent to which communication platforms can participate in the formation of political opinion. In the run-up to Congressional elections in that year, 61 million Facebook users were encouraged by the platform to find out about and take part in the election. The automated prompts paid off: Scientists concluded that, as a result, an additional 340,000 people – 0.14% of the eligible American electorate – were motivated to cast their votes (Bond et al., 2012). In democracies, that is certainly a desirable effect. Such appeals become problematic, however, if only the potential voters of a single party get to see them. If that happens, equal opportunities are eliminated in one fell swoop.

Nor is the number of false news items in circulation an independent variable. Platforms can apply rules to control what happens on them, as shown by a study conducted by Stanford University and New York University. The scientists who took part tracked interactions with fake news in the period from December 2016 through summer 2018. These fell by 65% on Facebook due to more restrictive regulations but increased on Twitter in the same period (Allcott & Gentzkow, 2017).

Evidently, reliable rules are needed to keep the new information loop in good order. Large platforms such as Facebook have understood this and have publicly called on legislators to prepare uniform regulations (Zuckerberg, 2019). There is no longer any question that they today embody an important segment of the public. Anyone who is excluded from Facebook, Twitter and/or YouTube loses a significant mouthpiece to inform the public debate. That in turn makes it all the more important to carefully consider the consequences of any approach to regulation. Based precisely upon this guiding principle, the closing chapter thus outlines our recommendations.

5 REGULATION DONE RIGHT FIVE PROPOSALS ON HOW TO COMBAT POLITICAL DISINFORMATION

5 Regulation done right

One of the undisputed skills of Facebook founder Mark Zuckerberg is his ability to spot inevitable developments before others do. This was apparent first when he purchased Instagram and, later, when he acquired WhatsApp. Right now, we see the same principle at work again: Zuckerberg is one of the most strident advocates of platform regulation. His view seems to be that, if there is no alternative to state intervention, it might as well happen on Facebook's terms.

It is an open secret that governments will tighten the rules for platforms. The problems outlined in chapter four are too obvious for the legislator to be able to stand by and do nothing. The crucial question is therefore not whether deeper intervention in the free flow of information is needed, but what it might look like – and whether such action will genuinely solve the problems it addresses or only make them worse.

Especially chapter four of our study clearly shows that regulation won't come free of charge. If opinions that are not punishable by law are banned from platforms, that could tangibly restrict the diversity of opinions. Conversely, the climate of debate could turn toxic if the likes of Facebook remain bound only by minimum standards. This is the dilemma that makes any form of intervention so tricky.

Wherever policymakers ultimately choose to draw the line, the important thing is that the decision must be preceded by a broad-based debate. Each society must decide for itself what level of fake news it is willing to tolerate – and when it deems that a red line has been crossed. This principle underpins the five recommendations we make below. The issue at stake is how to reinforce users' sovereignty, as they are the ones who must live with the consequences. For this reason, it is they who should ultimately be able to choose what matters more: free speech or protection from false information.

#1 Create consistent criteria on how to deal with fake news

Just about everyone wants to see clear rules for the platforms. The question is: Who should set those rules – particularly when it comes to drawing a line between legitimate expressions of opinion and the undesirable, deliberate dissemination of fake news? Should we leave the decision to private enterprises such as Facebook? Or to governments, as is already the case in China and Russia? Neither option seems ideal: the former because it is hard to reconcile with the nature of a democracy; and the latter because controversial intervention can quickly expose governments to accusations of censorship.

In response to a proposal by the European Commission, individual digital platforms and representatives of the advertising industry formulated a voluntary code of conduct to combat disinformation in Fall 2018. That is a step in the right direction but does not go far enough. All platforms need to have uniform and transparent rules to deal with fake news, and the rules need to be placed within a clear-cut legal framework. Experience gained from implementation of the code of conduct up to now should be taken into account to successfully tread the fine line between excessive interference with freedom of speech and the dangers of a laissez-faire attitude. One aspect that must be consistently regulated within the legal framework for digital platforms is this: What kinds of fake news come under the umbrella of free speech? How can disputes about content deleted by non-government instances be arbitrated? What penalties should be incurred for failure to comply? At what point should there be a right to corrective statements?

Obviously, the regulatory process can never be completed once and for all: Those who spread fake news are constantly refining their methods, so the same should hold true for the catalogue of criteria. But it is equally obvious that the European Commission cannot simply trust the goodwill of the platforms themselves. And if the intended statutory regulation fails to produce the desired effects in curbing disinformation, further steps must be taken. One example could be to hold digital platforms liable for false information that is actively disseminated. If fines imposed on the companies prove ineffective, one could also explore the option of holding the chief executives of platforms personally responsible for the active dissemination of disinformation on their sites.

#2 Raise awareness of online manipulation

New rules are important. But the debate must not be restricted to legalities alone. One reason why fake news spreads like wildfire is that people all too easily fall for it – not because bots are especially effective. Any smart strategy should therefore begin by tackling the issues where the most can be done and where collateral damage is at its lowest: with the users.

Best practice examples from Scandinavia in general and Finland in particular show how this can be done. In Finland, a far-reaching educational offensive has pushed back the influence of fake news. The country's credo is that "nursery teachers are the first line of defense", not the last one. The public awareness campaign targets every person in the country. Courses familiarize people with the main manipulation methods used on the Internet, showing how fake profiles work, how human emotions are exploited and how click-baiting articles are structured.

Other countries in Europe must follow this example. Calls for a new subject in schools are all well and good but are much too short-sighted. What is needed is a holistic approach that encourages a critical mindset across every discipline and every age group, and that pools existing programs. That said, it will be some time before this kind of approach begins to take effect. In Finland, these programs have been running since 2014.

5 Regulation done right

#3 Uniformly regulate political advertising

Be it out of heartfelt conviction or in response to public outrage, Google, Twitter and Facebook have not been sitting on their hands in the wake of numerous scandals surrounding paid-for political advertising. They have introduced rules of their own with which they want to fight abuses more effectively in the future. The outcome, however, is a patchwork of varied approaches, some of which contradict each other - and none of which are legally binding. A permanent solution, however, would have to look very different: It should follow the example set by existing legal stipulations regarding political canvassing in the analogue world. In Germany, for example, political advertising on broadcasting media is prohibited outside of electoral campaigns. Posters displayed in public spaces must be approved by the local authority, which also means that equal opportunities - in terms of the volume of poster space - must be guaranteed for the various parties. The UK puts a cap on party spending for election advertising, while France's TV channels must give the same amount of time to all presidential candidates in the last two weeks before a presidential election.

It makes no sense to map these rules as-is onto the digital world, because the latter is subject to different dynamics and therefore requires different rules and regulations. That is why a state-backed framework is needed as quickly as possible – a framework that defines consistent standards for digital political advertising – in addition to the rules for dealing with fake news

specified in our first recommendation. To begin with, every kind of advertising on platforms should bear a clearly visible "financed by" disclaimer. The most important background information to a given ad must also be immediately and easily accessible and presented in a user-friendly manner. This information includes who is responsible for the advertisement, how many people it is being shown to, the target group to which the ad is tailored and where exactly it is being rolled out. Depending on common national practice and the prevailing political culture, it would also be conceivable to limit political advertising to electoral campaigns. Additionally, it might be worth looking at statutory provisions to combat the unequal treatment of individual political parties on digital platforms.

This approach would naturally create new problems in practice. First and foremost, what exactly constitutes "political advertising"? Where does it begin and where does it end? This question is of particular relevance to what are known as "issue ads": advertisements that do not explicitly back this or that political actor, but that take a stance on a political issue such as migration or climate change. It follows that any legal framework must define criteria based on which political advertising can be reliably identified as such. Similarly, it must be ensured that statutory provisions do indeed have the desired impact and potency in practice. Responsibility for compliance with the rules must lie with the digital platforms and should be documented in a published yearly report. Fines should be imposed if this is not done - in part because the major platforms have long since become a decisive factor in electoral campaigns: Estimates indicate that 80% of all digital political advertising is placed on Facebook (Scott, 2019).

#4 Give users (greater) control over the choice of content

News feeds, or filter algorithms, are the beating heart of social media platforms. They determine what people see and what they don't. Online portals make editorial choices about content and are therefore covered by press law. But in contrast, the automated and individualized selection of articles on social media platforms is guided by esoteric rules designed to maximize user activity. On YouTube, 70% of user traffic is today generated by automated recommendations (Fisher & Taub, 2019). Such numbers make it all the more incomprehensible that platform customers have no say whatsoever in the criteria on which these recommendations are based.

In the future, every user must have the right to edit the filter criteria for the articles displayed to them on social media platforms – and to do that on a permanent basis. An EU regulation applicable directly in all member states could create the conditions needed for this to happen. Any such regulation should oblige platforms to offer a variety of default settings from which users can choose. Nor should these settings – starting with chronological news feeds and including other sorts of criteria – be automatically reset. The most important setting is the chronological news feed, which guards against an unnatural bias in favor of emotional content and keeps users from involuntarily slipping into a filter bubble.

Control by the wider society cannot be avoided entirely, however. Platforms such as Facebook have now become

so powerful that they can shape perceptions of political events. Logically, therefore, governments must demand greater transparency with regard to filters. That is not to say that platforms must disclose their algorithms: Business secrets must continue to enjoy protection under all circumstances. What is needed, however, is an anonymized overview of those topics that are actively pushed into the news feeds of certain user groups or are recommended to certain user groups. This should be done in the form of statistical distribution curves that allow conclusions to be drawn about which topics are shown or recommended how frequently to what specific user groups or what sub-audiences. That in turn will make it easier to track down potential filter bubbles and echo chambers.

#5 Protect users' right to anonymity

The debate about more transparency has triggered dangerous overreactions on a broad front. More and more voices are arguing that, while the platforms should disclose their filter criteria, users too should make themselves clearly identifiable. The former point definitely makes good sense. The latter obligation for users to use their real names, however, goes in the wrong direction and is of practically no value in the fight against fake news. Bearing in mind that spreading disinformation is almost never illegal, there is still nothing that can (legally) be done even if the genuine originators are known.

5 Regulation done right

Even in the case of hate speech crimes, the obligation to use real names has so far not acted as a deterrent. Studies conducted in Switzerland and South Korea show that the number of insulting offenses did not decline as a result: The only difference was that offensive speech was more cleverly formulated. Why should fake news, which is not punishable by law, fare any differently?

Conversely, such a rule could do serious damage. Deprived of the right to anonymity, there can no longer be any guarantee that people with different opinions can continue to express them unhindered. Especially in autocratic regimes, dissidents could quickly find their very livelihood at risk. Yet even in democracies, there are good reasons why people feel safer if they log into a platform under a pseudonym. One need only think of members of the LGBTQ community. In a democracy, they, like other minority groups, merit protection. The alternative is the loss of the Internet's hard-won diversity of opinions.

"I deeply believe regulation is needed. That is the condition for the success of a free, open and safe Internet – the vision of its founding fathers."

Emmanuel Macron French President

- Abramson, J. (2019). Merchants of Truth: The Business of News and the Fight for Fact. *New York: Simon & Schuster*.
- Alexander, J. (2019, February 19). YouTube still can't stop child predators in its comments. *TheVerge.com*.
- Alexandre, B., & Makse, H. A. (2019). Influence of fake news in Twitter during the 2016 US presidential election. *Nature Communications 10(7)*.
- Allcott, H., & Gentzkow, M. (2017). Social Media and Fake News in the 2016 Election. *Journal of Economic Perspectives*, 31(2), 211-236.
- Allcott, H., Gentzkow, M., & Yu, C. (2018). Trends in the diffusion of misinformation on social media. *California: Stanford Institute for Economic Policy Research.*
- Altman, S. (2016, August 16). How to Build the Future: Mark Zuckerberg. *Genius.com*.
- Bakshy, E., Messing, S., & Adamic, L. A. (2015). Exposure to ideologically diverse news and opinion on Facebook. *Science* 348(6239).
- **Bell, E. (2019, August 9).** Facebook's proposal to license news signifies a change. *Columbia Journalism Review*.
- **Benton, J. (2019, June 17).** Why do some people avoid news? Because they don't trust us — or because they don't think we add value to their lives? *Niemanlab.org*.
- **Bogost, I. (2019, May 28).** Facebook's Dystopian Definition of 'Fake'. *The Atlantic.*
- Bond, R., Fariss, C., Jones, J., Kramer, A., Marlow, C., Settle,
- J., & Fowler, J. (2012). A 61-million-person experiment in social influence and political mobilization. *Nature*, 489(7415).
- Bradshaw, S., & Howard, P. N. (2018). Challenging Truth and Trust: A Global Inventory of Organized Social Media Manipulation. University of Oxford. Oxford, UK: Oxford Internet Institute.
- Bruns, A. (2016, November 23). Echo Chamber? What Echo Chamber? *The Conversation*.

Bundesverband Deutscher Zeitungsverleger e.V. (2016). Speech by BDZV president Dr. Mathias Döpfner at the Zeitungskongress in Berlin on September 26, 2016. Berlin: Bundesverband Deutscher Zeitungsverleger e.V.

- **Butcher, P. (2019, January 30).** Disinformation and democracy: The home front in the information war. European Policy Center. *Retrieved from European Policy Centre*.
- Cadwalladr, C. (2017, May 7). The great British Brexit robbery: how our democracy was hijacked. *The Guardian*.
- Cadwalladr, C. (2019, April 16). Facebook's role in Brexit and the threat to democracy. *TED Talk*.
- **Conger, K. (2019, July 9).** Twitter Backs Off Broad Limits on "Dehumanizing" Speech. *The New York Times*.
- Darnstädt, T. (2010). Verrat als Bürgerpflicht? Der Spiegel (50).
- Davis, H., & McLeod, S. (2003). Why Humans Value Sensational News. An Evolutionary Perspective. *Evolution and Human Behavior*, 24(3), 208-2016.
- Dreyfuss, E., & Lapowsky, I. (2019, April 10). Facebook Is Changing News Feed (Again) to Stop Fake News. *Wired.com*.
- **Economist (2017, November 4).** Do social media threaten democracy?

Edelman (2019). 2019 Edelman Trust Barometer.

- **El Difraoui, A. (2011, November 3).** Die Rolle der neuen Medien im Arabischen Frühling. *Bundeszentrale für Politische Bildung.*
- eMarketer (2019, February 19). US Digital Ad Spending Will Surpass Traditional in 2019.
- **European Commission (2018).** A multi-dimensional approach to disinformation. *Directorate-General for Communication Networks, Content and Technology. Brussels: European Commission.*
- Facebook (2018, October 12). An Update on the Security Issue. https://newsroom.fb.com/news/2018/10/update-onsecurity-issue/.

- Feiner, L. (2019, May 24). Facebook says the doctored Nancy Pelosi video used to question her mental state and viewed millions of times will stay up. *CNBC.com*.
- Fisher, M., & Bennhold, K. (2018, September 7). As Germans seek news, YouTube delivers far-right tirades. *The New York Times*.
- Fisher, M., & Taub, A. (2019, June 3). On YouTube's Digital Playground, an Open Gate for Pedophiles. *The New York Times*.
- Flaxman, S., Goel, S., & Rao, J. M. (2016, March 22). Filter Bubbles, Echo Chambers, and Online News Consumption. *Public Opinion Quarterly 80(S1), 298-320.*
- Garrett, K. R. (2019, March 27). Social media's contribution to political misperceptions in U.S. Presidential elections. *PLoS ONE 14(3): e0213500.*
- Geschke, D., Lorenz, J., & Holtz, P. (2019). The triple-filter bubble: Using agent-based modelling to test a meta-theoretical framework for the emergence of filter bubbles and echo chambers. *British Journal of Social Psychology* 58(1), 129-149.
- Glaser, A., & Will, O. (2018, March 15). Facebook's Alleged Role in Myanmar's Violence Is "Deeply Concerning," Says Facebook's News Feed Chief. Slate.com.
- Gottfried, J., & Grieco, E. (2018, October 23). Younger Americans are better than older Americans at telling factual news statements from opinions. *Pew Research Center*.
- Grassegger, H., & Krause, T. (2019, May 2). Täuschungsmanöver. SZ Magazin.
- Green, J., & Issenberg, S. (2016, October 27). Inside the Trump Bunker, With Days to Go. *Bloomberg.com*.
- Grinberg, N., Joseph, K., Friedland, L., Swire-Thompson, B.,
- **& Lazer, D. (2019).** Fake news on Twitter during the 2016 U.S. presidential election. *Science* 363(6425), 374-378.
- Groseclose, T., & Milyo, J. (2005). A Measure of Media Bias.

The Quarterly Journal of Economics, 1191-1237.

- Harwell, D. (2019, May 24). Facebook acknowledges Pelosi video is faked but declines to delete it. *The Washington Post*.
- Hoffman, R. (2017, October 6). Masters of Scale, Episode 4. Transcript: Mark Zuckerberg. https://www.youtube.com/ watch?v=ZSgQW2BuhHM.
- Hölig, S., Hasebring, U., & Behre, J. (2019, June). Reuters Insitute Digital News Report 2019 - Ergebnisse für Deutschland. Arbeitspapiere des HBI Nr. 47.
- Hughes, C. (2019, May 9). It's Time to Break Up Facebook. The New York Times.
- Human Rights Council (2018). Report of the independent international fact-finding mission on Myanmar. *Human Rights Council.*

Ingram, M. (2019, July 18). Facebook is both killing and funding local journalism. Columbia Journalism Review.

- Jarvis, J. (2019, April 1). Proposals for Reasonable Technology Regulation and an Internet Court. *Medium.com*.
- Kim, E. (2014, November 6). Mark Zuckerberg Wants To Build The 'Perfect Personalized Newspaper' For Every Person In The World. BusinessInsider.com.
- Kirkpatrick, D. (2018, April 12). The Facebook Defect. *Time.com.*
- **Kirkpatrick, D. (2019, June 25).** Facebook's Moral Crisis. Podcast by Andrew Keen: *http://www.ajkeen.com/podcast/episode23*.
- Kramer, A. D., Guillory, J. E., & Hancock, J. T. (2014, June 17). Experimental evidence of massive-scale emotional contagion through social networks. Proceedings of the National Academy of Sciences – PNAS 111(24), 8788-8790.
- Kuchler, H. (2019, March 28). How Facebook grew too big to handle. *Financial Times*.

Lazer, D. M., Baum, M. A., Benkler, Y., Berinsky, A. J., Greenhill, K. M., Menczer, F., . . . Thorson, E. A. (2018). The science of fake news. *Science* 359(6380), 1094-1096.

- Levin, S., Wong, J. C., & Harding, L. (2016, September 9). Facebook backs down from 'napalm girl' censorship and reinstates photo. *The Guardian*.
- Liao, S. (2018, December 13). Facebook is expanding its video platform while reportedly slashing news show funding. *TheVerge.com*.

Liberini, F., Redoano, M., Russo, A., Cuevas, A., & Cuevas, R.

- (2018). Politics in the Facebook Era. Evidence from the 2016 US Presidential Elections. CAGE Online Working Paper Series 389.
- Lischka, K., & Stöcker, C. (2017). Digitale Öffentlichkeit Wie algorithmische Prozesse den gesellschaftlichen Diskurs beeinflussen. *Gütersloh: Bertelsmann Stiftung*.
- Lobo, S. (2018, April 11). Facebook, die erste vernetzte Gefühlsmaschine. Spiegel Online.
- Luhmann, N. (1996). Die Realität der Massenmedien (2nd ed.). Westdeutscher Verlag.
- Marr, B. (2018, May 21). How Much Data Do We Create Every Day? The Mind-Blowing Stats Everyone Should Read. *Forbes.com.*
- McGill, M. H., & Overly, S. (2019, May 27). Why breaking up Facebook won't be easy. *Politico.com*.
- McLaughlin, T. (2019, December 12). How WhatsApp fuels fake news and violence in India. *Wired.com*.

Meeker, M. (2019, June 11). Internet Trends 2019.

- Mitchell, A., Matsa, K. E., Shearer, E., Johnson, C., Walker,
- M., Simmons, K., . . . Tayler, K. (2018, May 14). In Western Europe, Public Attitudes Toward News Media More Divided by Populist Views Than Left-Right Ideology. *Journalism.org*.
- **Morozov, E. (2013).** To Save Everything, Click Here: The Folly of Technological Solutionism. *New York City: PublicAffairs*.

Müller, K., & Schwarz, C. (2018). Fanning the Flames of Hate: Social Media and Hate Crime. *Warwick Business School*. Nicas, J. (2018, February 7). How YouTube Drives People to the Internet's Darkest Corners. *The Wall Street Journal*.

Nielsen, R. K., Newman, N. F., & Kalogeropoulos, A. (2019). Reuters Institute Digital News Report 2019. Oxford: The Reuters Institute for the Study of Journalism.

Panger, G. (2018). People Tend to Wind Down, Not Up, When They Browse Social Media. Proceedings of the ACM on Human-Computer Interaction 2 (CSCW).

- **Pariser, E. (2011).** The Filter Bubble What the Internet is Hiding from You. *New York: The Penguin Press.*
- Pennycook, G., & Rand, D. (2019). Lazy, not biased: Susceptibility to partisan fake news is better explained by lack of reasoning than by motivated reasoning. *Cognition* 188, 39-50.
- Pörksen, B. (2018). Die große Gereiztheit: Wege aus der kollektiven Erregung. *Hanser*.
- **Pressman, M. (2018, November 5).** Journalistic Objectivity Evolved the Way It Did for a Reason. *Time.com*.

Registeranzeiger GmbH (2018). Facebook Germany GmbH.

- Reporter ohne Grenzen Deutschland (2018). Regulierung 2.0,
 Warum soziale Netzwerke, Suchmaschinen & Co. ein
 Teil der informationellen Grundversorgung geworden sind
 und wie sie reguliert werden sollten, um die Meinungsund Pressefreiheit zu schützen. Berlin: Reporter ohne
 Grenzen e.V.
- Robson, D. (2018, April 17). The myth of the online echo chamber. *BBC.com*.

Romano, A. (2019, June 5). YouTube may allow hate speech if it's part of a larger argument. Yikes. *VOX.com*.

Rosenbach, M. (2018, December 4). Wie aus dem Digitalmessias ein Demokratiegefährder wurde. Spiegel Online.

Rusbridger, A. (2018). Breaking News: The Remaking of Journalism and Why it Matters Now. *Canongate Books Ltd.*Sarovic, A. (2019, May 23). Eine echte Bedrohung für die Demokratie. Spiegel Online.

Schulz, T. (2018). Außer Kontrolle. Der Spiegel (13).

- Scott, M. (2019, July 25). Facebook transparency effort fails to stop shady political ads. *Politico.eu*.
- Secretary of State for Digital, Culture, Media & Sport;
- Secretary of State for the Home Department (2019).

Online Harms White Paper. London: HM Government.

- **Shearlaw, M. (2016, January 25).** Egypt five years on: was it ever a 'social media revolution'? *The Guardian*.
- Silverman, C. (2016, November 16). This Analysis Shows How Viral Fake Election News Stories Outperformed Real News On Facebook. *BuzzFeedNews*.

Starbird, K. (2019, July 24). Disinformation's spread: bots, trolls and all of us. *Nature* 571(449).

- Stark, B., Magin, M., & Jürgens, P. (2017). Ganz meine Meinung? Informationsintermediäre und Meinungsbildung. Düsseldorf: Landesanstalt für Medien Nordrhein-Westfalen (LfM).
- Stieglitz, S., & Dang-Xuan, L. (2012, May 15). Impact and diffusion of sentiment in public communication on Facebook. Universität Münster. European Conference on Information Systems.

Swisher, K. (2018, October 8).

Zuckerberg: The Recode Interview. VOX.com.

- Taub, A., & Fisher, M. (2018, April 21). Where countries are tinderboxes and Facebook is a match. *The New York Times*.
- The Guardian (2018, November 28). The Guardian view on Zuckerberg's Facebook: regulate it as a media firm.

The New York Times (2014, March 24). Innovation Report 2014. The Wharton School, University of Pennsylvania (2016,

November 21). Fake News, Hate Speech and Social Media Abuse: What's the Solution? *Knowledge@Wharton*.

The Wharton School, University of Pennsylvania (2018, October 3).

Why Fake News Campaigns Are So Effective. Knowledge@Wharton.

- Thompson, N. (2018, October 16). Jack Dorsey on Twitter's Role in Free Speech and Filter Bubbles. *Wired.com*.
- Trussler, M., & Soroka, S. (2014). Consumer Demand for Cynical and Negative News Frames. *The International Journal of Press/Politics*, 360-379.
- Tufekci, Z. (2016, March 31). Adventures in the Trump Twittersphere. *The New York Times*.
- Tufekci, Z. (2018, January 16). It's the (Democracy-Poisoning) Golden Age of Free Speech. *Wired.com*.
- **Tufekci, Z. (2018, March 10).** YouTube, the great radicalizer. *The New York Times.*
- Vanderbiest, N. (2019). A Russian influence on the French elections? *Retrieved August 5, 2019, from https://spark.adobe. com/page/fJxCYVGj8d5Fk/*
- Vogelstein, F. (2018, July 25). Facebook Just Learned the True Cost of Fixing Its Problems. *Wired.com*.
- Vosoughi, S., Roy, D., & Sinan, A. (2019, March 9). The spread of true and false news online. *Science* 359(6380), 1146-1151.

WARC (2019). Global Ad Trends February 2019. London: WARC.

- **Wiegel, M. (2019, July 9).** Bis der Hass im Netz gelöscht ist. *Frankfurter Allgemeine Zeitung.*
- Woolley, S. C., & Howard, P. N. (2019). Computational Propaganda: Political parties, politicans, and political manipulation on social media. Oxford University. New York: Oxford University Press.
- Wulff, C., Rumpff, S., Arnoldy, S., & Bender, S. (2018).Zwischen Entertainer und Werber Wie Influencer unserKaufverhalten beeinflussen. PWC Influencer Marketing.
- Zuckerberg, M. (2018, November 15). A Blueprint for Content Governance and Enforcement. *Facebook.com*.
- Zuckerberg, M. (2019, March 30). Mark Zuckerberg: The Internet needs new rules. Let's start in these four areas. *The Washington Post.*

Imprint

Publishers

Internet Economy Foundation (IE.F) Uhlandstraße 175 10719 Berlin www.ie.foundation Prof. Dr. Friedbert Pflüger Chairman

Roland Berger GmbH Sederanger 1 80538 Munich www.rolandberger.com Stefan Schaible Global Managing Director

Authors

IF F **Clark Parsons** c.parsons@ie.foundation Amelie Drünkler a.druenkler@ie.foundation

Roland Berger Dr. David Born david.born@rolandberger.com **Klaus Fuest** klaus.fuest@rolandberger.com Christian Gschwendtner christian.gschwendtner@rolandberger.com **Dr. Christian Krys** christian.krys@rolandberger.com

Contact

IF F **Clark Parsons** Managing Director Internet Economy Foundation (IE.F) c.parsons@ie.foundation +49 30 8877 429-400

Roland Berger Claudia Russo Press Officer Roland Berger GmbH claudia.russo@rolandberger.com +49 89 9230-8190

Publication date

November 2019

Picture credits

Page 3: IE.F

Quote sources

P.7: Press article Zeit Online, 2019, February 8; https://www.zeit.de/politik/deutschland/2019-02/bnd-nachrichtendienst-zentraleumzug-praesident-bruno-kahl; P.9: Körber History Forum, interview with Jo Fox (2019); https://www.koerber-stiftung.de/en/koerberhistory-forum/2019/interview-fox; P.16: Press article Europost, 2018, December 14; http://europost.eu/en/a/view/mariya-gabriel-thereis-serious-fake-news-risk-for-the-ep-election-24295; P.20: Press article Spiegel Online, 2018, April 11; https://www.spiegel.de/netzwelt/web/ sascha-lobo-kolumne-was-facebook-wirklich-ist-a-1202360.html; P.37: TED2019 Talk, 2019, April 16 (minute 12:21); https://www. ted.com/talks/carole cadwalladr facebook s role in brexit and the threat to democracy/transcript?utm campaign=social&utm medium=referral&utm_source=t.co&utm_content=talk&utm_term=technology; P.39: Press article Quartz, 2018, August 30; https://qz.com/1480543/the-george-soros-speech-at-the-center-of-the-sheryl-sandberg-facebook-controversy/; P.42: Press article Handelsblatt, 2019, January 22; https://www.handelsblatt.com/unternehmen/it-medien/digitalkonferenz-dld-scott-galloway-facebook-hat-eine-korrupte-kultur/23893690.html?ticket=ST-37761878-fSuboVbrQNgtM1TgoUTi-ap1; P.45: WIRED Interview, 2018, October 16 (minute 04:42); https://www.wired.com/video/watch/wired25-twitter-ceo-jack-dorsey; P.47: Press article TIME, 2018, April 12; https://time.com/5237458/the-facebook-defect/; P.53: The Republic at the Internet Governance Forum speech held by M. Emmanuel Macron, 2018, November 12; https://www.elysee.fr/emmanuel-macron/2018/11/12/speech-by-m-emmanuel-macron-presidentof-the-republic-at-the-internet-governance-forum.en

Disclaimer

This study is intended to provide general guidance only. Readers should not act exclusively according to any content of this study, particularly without obtaining prior professional advice tailored to their individual circumstances. Neither IE.F nor Roland Berger accept any liability for losses arising from actions taken on the basis of this study.

.....

