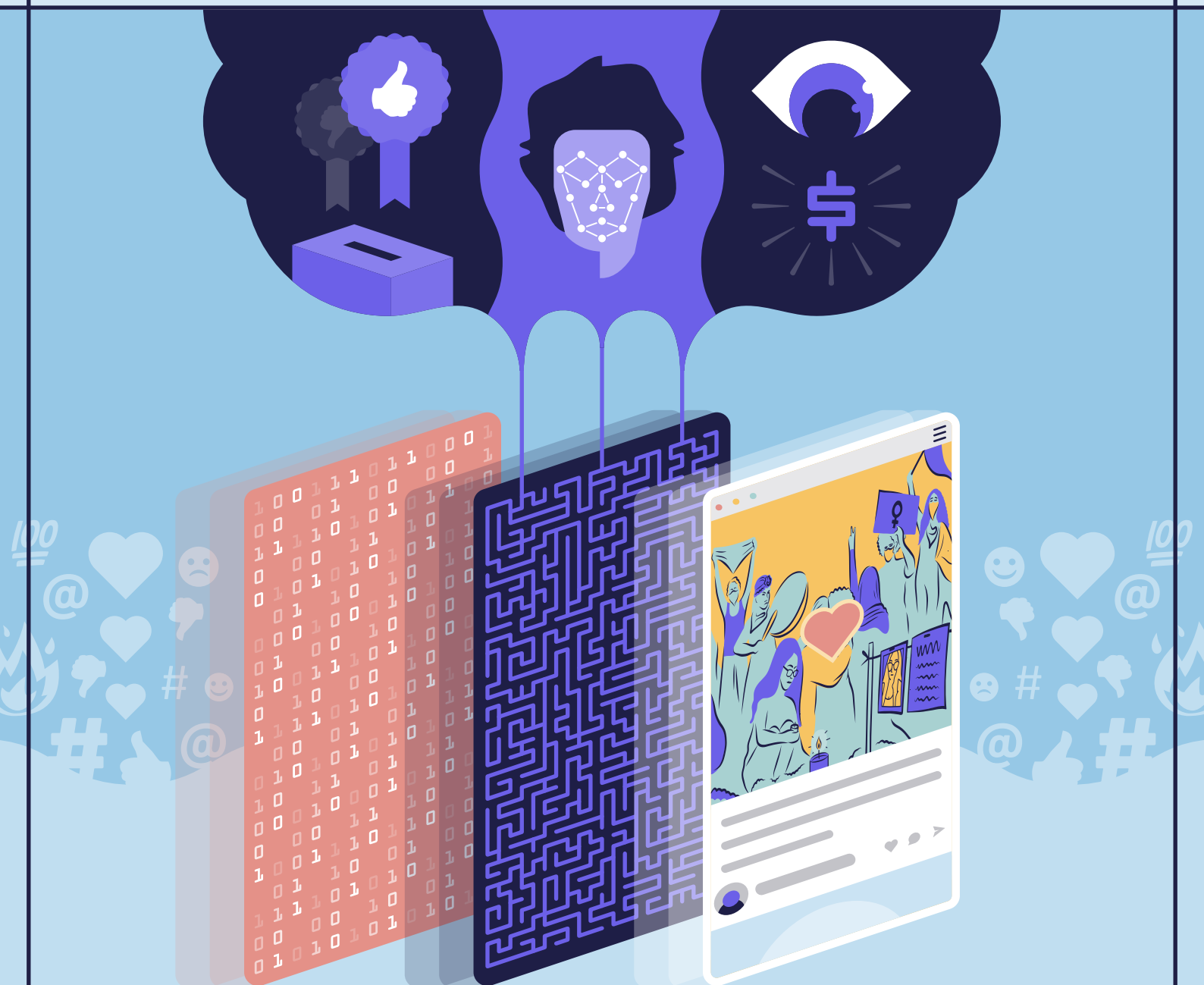


EXECUTIVE SUMMARY**HIDDEN IN PLAIN SIGHT****HOW THE INFRASTRUCTURE OF SOCIAL MEDIA
SHAPES GENDER NORMS**

Publication information

Published by: Advancing Learning and Innovation on Gender Norms (ALIGN) and ODI, July 2022.

This work is licensed under CC BY-NC-SA 4.0.

This document is an output of ALIGN. The views expressed and information contained within are not necessarily those of or endorsed by the Government of Canada which accepts no responsibility for such views or information or for any reliance placed on them.

Suggested citation and permalink

Diepeveen, S. (2022) *Hidden in plain sight: how the infrastructure of social media shapes gender norms*. ALIGN Report. London: ODI (<https://www.alignplatform.org/resources/report-hidden-in-plain-sight>).

Acknowledgements

Author: Stephanie Diepeveen

Editors: Terese Jonsson

Design: squarebeasts.net

This report benefitted from the contributions and insights of many people throughout.

A particular thank you to Emilie Tant for working on the structure and for communications support, and to Rachel Marcus, Caroline Harper and Rachel George for helpful advice and reviews during the drafting process. I am also grateful to the invaluable comments provided by peer reviewers Eleanor Drage and Louise Shaxson.

Finally, thank you to Sonia Hoque who provided administrative and budgetary management, Terese Jonsson for copy-editing, Emily Subden for publications delivery, Emma Carter for proofreading, and also to Steven Dickie for typeset and design. All remaining errors are the author's own.

This study was undertaken with financial support from the Government of Canada. The views expressed are those of the authors and do not necessarily reflect the official views or policies of GAC.

About the authors

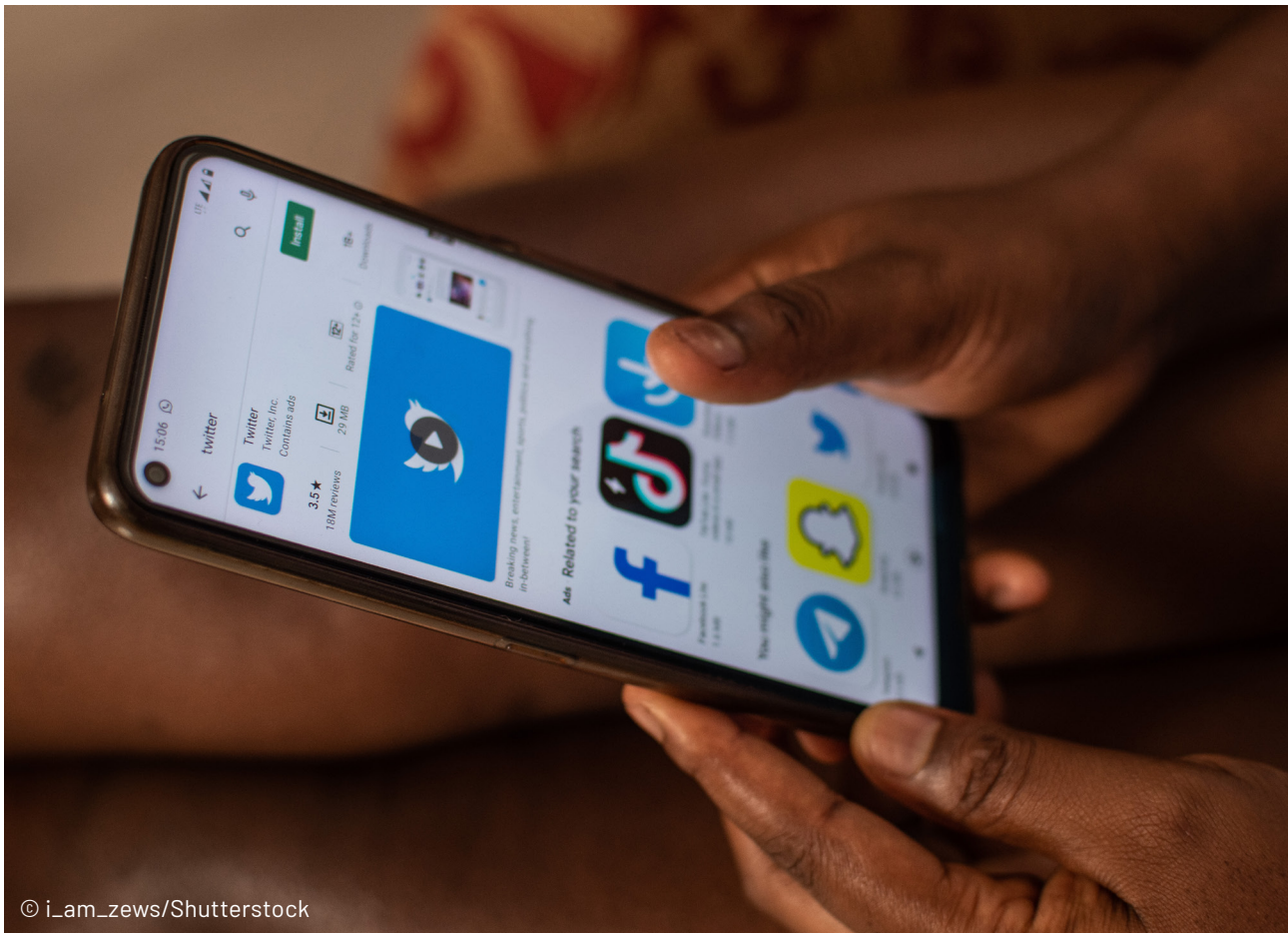
Stephanie Diepeveen is a Research Fellow in ODI's Politics and Governance programme and plays a lead role in the institute's Digital Societies initiative. Stephanie is also a Research Associate in the Department of Politics and International Studies at the University of Cambridge.

Introduction

Social media has become one of the 21st century's most powerful and era-defining innovations. Online platforms have infiltrated the very functioning of our personal and intimate relationships, the marketplace and the political sphere, blurring the boundaries between local and global communities and driving cultural trends. As such, they are important sites for exploring gendered dynamics, as they constitute a new public forum in which prevailing gender relations are both perpetuated and contested. The prevalence of hateful content toward women and non-conforming genders online raises concerns about whether and how social media is designed to promote gender equality and inclusion (Di Meco and Wilfore, 2021; Khan, 2021).

The *Hidden in plain sight* report explores how online social networks are shaped by, and shape, gender norms (the informal social rules that prescribe how people are expected to behave according to their perceived gender). Bridging technical and social approaches to social media, it focuses on the building blocks of social media that users do not see: the back-end infrastructures of the platforms. To understand how social media platforms shape gender norms, it is necessary to understand how the different layers of these infrastructures work and how they interact with each other.

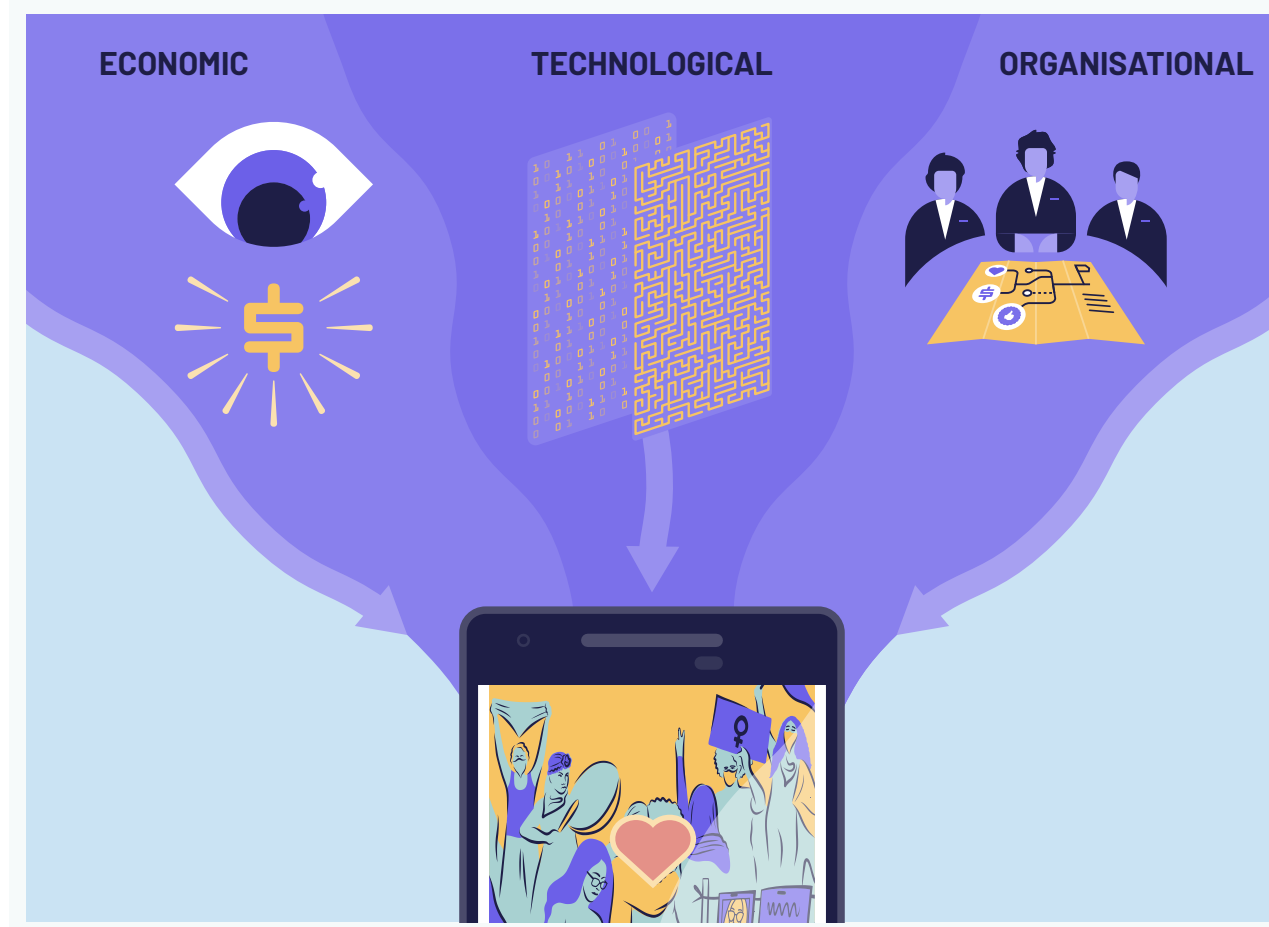
Based on a review of academic and grey literature on gender identity, sexuality and the infrastructure of social media, the report focuses on some of the more popular social media platforms, including, among others, Facebook, Instagram and Twitter.



© i_am_zews/Shutterstock

Different layers of social media infrastructure

Figure 1: Hidden layers of social media infrastructure



Economic infrastructure

Social media platforms are commercial companies with business models, aiming to make a profit. Since the early 2000s, several platforms have generated high levels of profit, most notably Facebook, which had a net worth of over \$1 trillion 2021 (Murphy, 2021). In the same year, Twitter's net worth was estimated at \$4.4 billion (*ibid.*). Other platforms, such as Tumblr, have not been as profitable (Siegel, 2019).

Most platforms generate profit through user data, and some scholars argue that social media companies are data companies, primarily serving advertisers (Alaimo and Kallinikos, 2017; Zuboff, 2019). As people interact through the front end of the platforms, they create data trails: information generated and recorded from their digital activity. This includes data on identity categories such as sex and gender. Companies process this data and use it to target products and marketing campaigns and advertisers pay to access advertising space aimed at target audiences. In 2020, Facebook and Twitter generated \$84.2 billion and \$3.2 billion in advertising revenue respectively, which represented 97.9% and 86.3% of their total revenue (Van der Vlist et al., 2021).

Many social media companies also generate further profit by forming partnerships with each other and with other third-party applications and websites in order to share data.

Technological infrastructure

From a technological perspective, social media platforms consist of software programmes and applications. These technologies are developed based on decisions made by software engineers, designed to engage with people's data in particular ways. For instance, certain gender categories may be embedded in the digital identifiers that users must select to interact on social media platforms. Different platforms require different amounts of personal information from users: platforms like Tumblr or Twitter require very little personal information while Facebook requires users to provide their real name and other identifiers, including gender.

Platforms rely heavily on algorithms, which are sets of rules and instructions on how to deal with information. Algorithms play a critical role in automating decisions about what content to show which user, and in what format. Platforms rely on algorithms to continually curate an individually tailored online environment that presents, amplifies and monitors content while connecting users.

While humans build algorithms, they can be designed to operate independently of human supervision to different degrees. For instance, algorithms can be used to infer users' identity categories, such as gender, based on their web use (Cheney-Lippold, 2011). Algorithms are often owned by the company, meaning that they can be kept secret. As a result, it is often not possible for users to know how they function.

Social media platforms also use application programming interfaces (APIs), which enable different platforms and third-party applications to 'speak' to one another and share data. Larger platforms tend to have more power in these partnerships, and can therefore influence how other platforms operate – for instance, in how they approach data relating to sex and gender.

Organisational infrastructure

Social media platforms are organisations with policies, workforces, hierarchies and cultures. Like most large companies in the tech sector, social media companies have faced challenges in fostering diverse and equitable workforces, particularly in leadership and engineering roles. As in many other sectors, there are also gendered disparities in pay.

Men have the most influence over platform design, while women and other intersecting marginalised groups are more often assumed to be end users: targeted by advertising, or creators of user-generated content (Gregg and Andrijasevic, 2019). Recent efforts by companies indicate some effort to at least alter the gender balance within leadership roles. However, there is a need for more research into how decision-making structures shape company priorities and platform design.

Table 1: Proportion of women in the work force: social media platforms

	Overall	Technical roles	Leadership roles
Twitter (June 2021)	43.7% female/women	29.2% female/women	37.7% female/women
Facebook (2021)	36.7% female/women	24.8% female/women	35.5% female/women
LinkedIn (2020)	44.7% female/women	24.0% female/women	41.9% female/women

Sources: Twitter (n.d.); LinkedIn, 2020; Williams, 2021

Contract and crowd workers, who obtain work on a per-task basis, play a key role behind the scenes of social media companies. Outsourced work is critical to the functioning of the machine learning systems that underpin social media platforms. At the most basic level, this involves a person describing a piece of information (labelling data), and then this being done repeatedly for many different labels and huge amounts of content. When labelling data, crowd workers have to make judgements about the world, and people's appearances, identities, emotions and attitudes (Crawford and Paglen, 2019). Little is known about the make-up of this often poorly paid and widely distributed workforce, nor is much known about what attention is given to equality, diversity and inclusion within this work.

Box 1: Bumble: does this female-led dating app challenge gender norms?

There are exceptions. The dating app, Bumble, was founded by a woman and markets itself as a company that is kind to its workforce. It has an 85% female workforce, and a fund that invests mainly in start-ups led by women and underrepresented groups. Bumble provides an opportunity to explore the relationship between a female-led workforce and user experiences on the platform. For example, while Bumble claims to give women agency on its app, paralleling its gender-friendly ethos, the effects of this are mixed and have generated some criticism. The app requires women to message men first, and some suggest that this compounds inequality in labour, and that it does not necessarily challenge dominant gender dynamics and ideas of attractiveness.

Sources: Bumble (n.d.) and Strimpel (2021).

Gender norms, power and social media infrastructure

The economic, technological and organisational infrastructure of social media platforms interact in different ways to impact on user experiences, including shaping gender norms, with implications for gender equality and activism.

Algorithms and gender bias

Studies of social media algorithms show that they are biased along gender lines, with users disproportionately being exposed to content that reflects prevailing patriarchal and racialised gender norms. Evidence suggests that profit incentives drive algorithmic outcomes, with algorithms amplifying content that promotes 'traditional' or patriarchal views of the female body, as these are seen as more profitable (Roberts, 2018). The impact on users is a cause for concern. Facebook's own studies have found that 13.5% of UK teenage girls felt that Instagram worsened their suicidal thoughts and 17.0% of teenage girls' said their eating disorders got worse after using the platform (Romo, 2021).

Algorithmic outputs on social media platforms have also shown discrepancies in what content is targeted to whom. This includes a gendered splitting of content, whereby what is most visible to users of different (perceived) genders is determined by dominant views of femininity and masculinity (Bishop, 2018).

Additionally, algorithmic outputs can negatively impact users by making different content visible depending on their sex and gender identification. Facebook's 'default publicity', in particular, has been of concern for some LGBTQI+ users, with research highlighting instances when information on users' sexual identities has been broadcast to relations who were not aware (Cho, 2018).

'Disciplining' identities

No matter how complex the algorithms or granular the data, digital data is always constrained by the need to represent information as a sequence of discrete values. This means that gender is represented and labelled into discrete categories, detached from societal contexts and fluid self-definitions. In this way, social media platforms' back-end processes can act as a form of 'disciplining power', conditioning how people identify (Cheney-Lippold, 2011).

Algorithms have misgendered users, incorrectly assessing a person's gender and then structuring their online environment on this basis. This has been found to be more common for gay men and straight women relative to straight men (Fosch-Villaronga et al., 2021). Attempts to improve algorithms to minimise misgendering are likely to be inadequate, as the reduction of complex experiences into a limited set of discrete categories will continue to marginalise people whose sex/gender identities do not align with dominant cultural norms.

There are also concerns about data harvesting, and about who is given access to increasingly precise data on individuals. Data on race and ethnicity, in particular, has been found to be used for targeted surveillance of people of colour (D'Ignazio and Klein, 2020: 32). When considering unequal power relations – whether around race, gender or other characteristics – technical solutions are insufficient as they do not address wider inequalities and biases that underpin technical inaccuracies.

Algorithmic processes are also used to intentionally discipline people's behaviour through the practice of 'shadowbanning', whereby 'content moderators block or partially block content in a way that is not apparent to the user or their followers' (Bridges, 2021). These decisions are often hidden from users. This indicates that social media companies use a degree of obscured censorship to decide how people should appear in public. These practices have in some cases targeted feminist activists.

Users' agency and online community-building

Algorithmic outputs are not the end of the story for the construction of gender norms on social media. Social media users can, and do, circumvent social media platforms' intended designs, and contribute to algorithmic processes. The ways that users choose to engage on social media platforms can lead to experiences that differ from some of the more dominant patterns in outputs that have been identified. For instance, some users have subverted Facebook's 'default publicness' by creating multiple profiles to communicate with different groups of people, also using fake names and pseudonyms (Costa, 2018).

Users with marginalised gender and sexual identities often use social media platforms to connect with like-minded users in semi-public forums. For example, LGBTQI+ Ugandans have used social media sites to navigate dating and work, and even to arrange 'lavender marriages' between gay men and lesbian women as a

tactical survival mechanism (Bryan, 2019). In South Africa, LGBTQI+ vloggers and viewers have used YouTube videos to express themselves in more authentic and safer ways than would be possible offline (Andrews, 2021). These forms of agency and community-building show that it is possible for users to share different perspectives and experiences of gender and sexuality on social media, diversifying gender norms.

The influencer industry

Some popular social media users take part in the targeted advertising business as influencers. Brand or marketing firms pay these influencers to promote products to their networks. By 2019, influencer marketing was estimated to be a \$9 billion industry (Bertaglia et al., 2020). Influencer work is most often associated with women and industries traditionally seen as female (e.g. beauty, fashion, crafts, parenting and homemaking).

Influencers, especially in Anglo-American contexts, have tended to reinforce stereotypical images of women's work and femininity (Van Driel and Dumitrica, 2021). However, representations of gender and sexuality within influencer content do vary. Some LGBTQI+ influencers on YouTube, for instance, promote public acceptance of their sexual identities (Lovelock, 2017; Andrews, 2021). Some gay male influencers have also gained popularity as beauty influencers, an area of marketing predominantly occupied by women (Chen and Kanai, 2021).

Discrepancies in pay have been identified as another gendered aspect of the influencer industry. While there are more women influencers than men, one study showed that women, on average, charged less than men (\$351 versus \$459 per post) (Young, 2019).

Box 2: Tumblr: an alternative (and unprofitable?) platform model

In contrast to more dominant and profitable social media companies, Tumblr allows users to remain anonymous and it does not emphasise connections between online identities and wider offline connections. Users can choose to integrate different media into their pages to express themselves. These features have enabled more flexible and open use by LGBTQI+ communities. For some trans* individuals, anonymity and separation from offline networks can make Tumblr a safer space for personal expression than offline spaces and other social media platforms.

However, Tumblr has also faced allegations that its content moderation and removal procedures unfairly discriminate against queer users. Tumblr's permissiveness also allows for racist and homophobic content, and homophobic Tumblr communities exist alongside LGBTQI+ ones.

Tumblr fell in value from \$1.1 billion to \$3 million from 2013 to 2019 (Siegel, 2019).

Sources: Cho, 2018; Cavalcante, 2019; Siegel, 2019; Pilipets and Paasonen, 2020; Haimson et al., 2021.

Content: what's allowed and who decides?

Most platforms have standards relating to what content is permissible, predominantly focused on areas where it could be deemed to be illegal, including support for terrorism, crime and hate groups, and sexual content involving minors (Gerrard and Thornham, 2020). Greater dynamism remains around other issues, where existing laws do not necessarily clearly apply.

Content moderation and removal involves both computational tools and human monitoring (Gillespie, 2018). Internally, companies often have moderation teams that work with frontline reviewers and independent contractors. Externally, content removal can involve crowd workers reviewing content on a per-task basis, volunteer moderators, as well as users voluntarily 'flagging' (reporting) content as inappropriate.

While flagging content can be used by feminists to report sexist positions, it has also been used against them. For instance, in 2021, Hannah Paranta, a Somali women's rights activist, was restricted by Facebook from posting content when anti-gender activists conducted a targeted campaign that repeatedly flagged her content as inappropriate. Decisions made on the back of users' flags are not visible to users.

Marginalised user groups have been disproportionately affected by content removal. In 2019, LGBTQI+ YouTube creators filed a class action lawsuit against the company for discrimination, alleging that the platform's moderation of content, by both algorithms and people, discriminated against LGBTQI+ content (Southerton et al., 2021). As part of the case, some users explained that they had begun to self-censor content that could be labelled as queer by the platform's algorithm to avoid its removal (Kleeman, 2019).

Sometimes content is removed due to algorithms' struggle to take context into account. For instance, Facebook's algorithm for removing content based on female nudity did not distinguish photos of breastfeeding and female indigenous elders with uncovered breasts from other types of nudity (Dragiewicz et al., 2018).

The channels available to users to contest content removal processes are limited (Nurik, 2019). Often, users are not given a specific reason why their content has been removed and there is little recourse to appeal restrictions placed on their accounts or content (Salty, 2019). Users' most visible efforts to contest content removal have involved collective action. Humorous and original viral campaigns (such as the '#FreeTheNipple' hashtag) have taken place against Facebook's nudity policy, for instance. However, these have not resulted in a clear change in Facebook's policies.



While flagging content can be used by feminists to report sexist positions, it has also been used against them.

External regulation

Despite platforms' content moderation processes, most women have experienced or witnessed abuse online (The Economist Intelligence Unit, 2021). Without external regulation, social media platforms appear to be easily taken over by content marked by prejudice, hate speech and abuse.

The subject of external regulation introduces additional questions about the legitimacy and inclusion of marginalised groups, both in how regulation is designed and how it intersects with platform operations and use. These insights point to the need for greater attention to gender perspectives in research on the regulation of social media platforms.

While evidence is thin, there are indications that regulation can have unequal impacts on historically marginalised groups, including women, LGBTQI+ and gender non-conforming people. The regulation of sexually explicit content is an area of concern, and LGBTQI+ people might be particularly affected in some jurisdictions.

Existing legal frameworks

Most large social media companies are corporate and legal entities in the US (Gillespie, 2018). Section 230 of the 1996 Communication Decency Act (CDA) protects these companies from being responsible for content created by their users (with some exceptions related to child pornography and intellectual property), as it designates social media platforms as *hosts* rather than as *publishers* or *creators* of content. As platforms have grown, critics in both political and academic circles have questioned this legal designation (Wakabayashi, 2020). However, large technology firms lobby the US government extensively; in 2020, the top seven firms spent \$64.9 million on lobbying (\$20 million of this came from Facebook) (Romm, 2021).

Other countries have taken different approaches to regulating platform content. Some governments, including Germany, France and Austria, have conducted audits on specific areas of harmful content, such as hate speech. In 2018, Germany instituted the Network Enforcement Act, which requires social media companies to respond to illegal content flagged by users within a specific timeframe. The UK government's 'Online harms' white paper proposed a 'duty of care' approach, which demands greater transparency from platforms (Department for Digital, Culture, Media & Sport and Home Office, 2019). The EU Digital Services Act places due diligence obligations on large platforms and requires them to conduct regular risk assessments.

Algorithmic impact assessments

Some governments have started to explore the potential of algorithmic impact assessments, which aim to identify potential bias and harm in algorithmic systems. Algorithmic impact assessments take different forms, including those that focus on eliminating gender-based prejudice and gendered harm. Draft regulations or legislation are underway in Canada, New Zealand, the EU and the US (Moss et al., 2021). The Canadian Algorithmic Impact Assessment Tool is already a mandatory risk assessment tool for government agencies and for vendors serving government agencies (Government of Canada, n.d.).

There is little clarity about when and to what extent algorithmic impact assessments could identify gender-related impacts in practice and how their findings might be meaningfully enforced to reduce harms. Additionally, algorithmic impact assessments do not necessarily question whether gender can and should be translated into data or algorithms. Their efficacy in challenging dominant gender norms may therefore be limited.

Human rights: an alternative model for regulation?

Advocates for gender equality have also used a human rights perspective to challenge uneven power dynamics on social media platforms (Khan, 2021). Some challenge the notion that platforms are proprietary spaces, and argue that they need to be understood as public spaces with public obligations (Gillespie, 2018; Colliver et al., 2021). Human rights advocates also stress the need for company content moderation and regulation to be transparent and governed by human rights (Kaye, 2019). These approaches suggest that gendered harms on social media platforms should be addressed as part of a wider effort towards greater transparency in general, redistributing power in platform moderation.

Others aim to improve user agency through the training and education of users. This includes initiatives empowering women to navigate online communications safely and effectively, teaching media professionals how to counter disinformation and online threats, and sensitising journalists to unintentional sexist and racist bias (Mediapooli, n.d.; Di Meco and Wilfore, 2021).

A human rights-based approach expands the entry points for intervention; it can shift who is involved in the process of developing regulation and envisioning online environments that promote gender rights. A more systematic and critical review is needed to explore the potential of different human rights approaches and how to integrate them into platform operations and regulations.

Encrypted platforms and concerns over privacy

While transparency is key to incorporating human rights into platform regulation, it can also be disempowering for users from marginalised groups and activists in authoritarian contexts, who rely on end-to-end encrypted communication channels – such as WhatsApp (owned by Facebook), Signal and Telegram – to evade content monitoring and surveillance.

Platforms and governments have sometimes collided over whether encrypted channels should be subject to external surveillance. In 2021, for instance, WhatsApp sued the Indian government over internet laws that gave it scope to monitor content on encrypted channels. The debates over WhatsApp in India indicate the potential for regulations to cause harm by putting marginalised groups' safety at risk. This is a complex debate, especially as platforms operate in a variety of democratic and authoritarian contexts.

Recommendations for further research

ALIGN's review of the existing evidence on how platform infrastructure shapes gender norms reveals a number of important areas for further research. A successful research agenda will build on the base of three pillars (See full report for details; Diepeveen, 2022):

- 1) **Transdisciplinary approaches.**
- 2) **Forward-looking analyses of regulation.**
- 3) **Global evidence using an intersectional lens.**

References

- Alaimo, C. and Kallinikos, J. (2017) 'Computing the everyday: social media as data platforms' *The Information Society* 33(4): 175–191 (<https://doi.org/10.1080/01972243.2017.1318327>).
- Andrews, G. (2021) 'YouTube queer communities as heterotopias: space, identity and "realness" in queer South African vlogs' *Journal of African Cultural Studies* 33(1): 84–100 (<https://doi.org/10.1080/13696815.2020.1792275>).
- Bertaglia, T., Goanta, C. and Spanakis, G. (2020) 'Business model prevalence in influencer marketing on Instagram'. Presentation at the Workshop on Technology and Consumer Protection, 21 May, virtual conference (www.ieee-security.org/TC/SPW2020/ConPro/papers/bertaglia-conpro20-talk.pdf).
- Bishop, S. (2018) 'Anxiety, panic and self-optimization: inequalities and the YouTube algorithm' *Convergence* 24(1): 69–84 (<https://doi.org/10.1177/1354856517736978>).
- Bridges, L.E. (2021) 'Digital failure: unbecoming the "good" data subject through entropic, fugitive, and queer data' *Big Data & Society* 8(1) (<https://doi.org/10.1177%2F2053951720977882>).
- Bryan, A. (2019) 'Kuchu activism, queer sex-work and "lavender marriages," in Uganda's virtual LGBT safe(r) spaces' *Journal of Eastern African Studies* 13(1): 90–105 (<https://doi.org/10.1080/17531055.2018.1547258>).
- Bumble (n.d.) 'We're launching Bumble Fund to invest in women founders'. Webpage. Bumble (<https://bumble.com/en/the-buzz/bumble-fund>).
- Cavalcante, A. (2019) 'Tumbling into queer utopias and vortexes: experiences of LGBTQ social media users on Tumblr' *Journal of Homosexuality* 66(12): 1715–1735 (<https://doi.org/10.1080/00918369.2018.1511131>).
- Chen, S.X. and Kanai, A. (2021) 'Authenticity, uniqueness and talent: Gay male beauty influencers in post-queer, postfeminist Instagram beauty culture' *European Journal of Cultural Studies*, online version (<https://doi.org/10.1177/1367549421988966>).
- Cheney-Lippold, J. (2011) 'A new algorithmic identity: soft biopolitics and the modulation of control' *Theory, Culture & Society* 28(6): 164–181 (<https://doi.org/10.1177%2F0263276411424420>).
- Cho, A. (2018) 'Default publicness: queer youth of color, social media, and being outed by the machine' *New Media & Society* 20(9): 3183–3200 (<https://doi.org/10.1177%2F1461444817744784>).
- Colliver, C., Comerford, M., King, J. et al. (2021) *Digital Policy Lab '20 companion papers*. Working Group Report. London: Institute for Strategic Dialogue (www.isdglobal.org/isd-publications/digital-policy-lab-20-companion-papers/).
- Costa, E. (2018) 'Affordances-in-practice: an ethnographic critique of social media logic and context collapse' *New Media & Society* 20(10): 3641–3656 (<https://doi.org/10.1177/1461444818756290>).
- Crawford, K. and Paglen, T. (2019) 'Excavating AI: the politics of training sets for machine learning' *Stages* 9 (www.biennial.com/journal/issue-9/excavating-ai-the-politics-of-images-in-machine-learning-training-sets).
- Department for Digital, Culture, Media & Sport and Home Office (2019) *Online harms*. White paper. London: HM Government (www.gov.uk/government/consultations/online-harms-white-paper).
- Diepeveen, S. (2022) *Hidden in plain sight: how the infrastructure of social media shapes gender norms*. ALIGN Report. London: ODI (<https://www.alignplatform.org/resources/report-hidden-in-plain-sight>).
- Di Meco, L. and Wilfore, K. (2021) 'Canadian women leaders' digital defence initiative'. White Paper. Montreal: Montreal Institute for Genocide and Human Rights Studies, 3 June (https://issuu.com/migsinstitute/docs/whitepaper_final_version.docx).
- D'Ignazio, C. and Klein, L.F. (2020) *Data feminism*. Cambridge, MA: MIT Press.
- Dragiewicz, M., Burgess, J., Matamoros-Fernández, A. et al. (2018) 'Technology facilitated coercive control: domestic violence and the competing roles of digital media platforms' *Feminist Media Studies* 18(4): 609–625 (<https://doi.org/10.1080/14680777.2018.1447341>).
- Fosch-Villaronga, E., Poulsen, A., Søraa, R.A. et al. (2021) 'A little bird told me your gender: gender inferences in social media' *Information Processing & Management* 58(3): 102541 (<https://doi.org/10.1016/j.ipm.2021.102541>).
- Gerrard, Y. and Thornham, H. (2020) 'Content moderation: social media's sexist assemblages' *New Media & Society* 22(7): 1266–1286 (<https://doi.org/10.1177%2F1461444820912540>).

Gillespie, T. (2018) *Custodians of the internet: platforms, content moderation, and the hidden decisions that shape social media*. New Haven, CT: Yale University Press.

Government of Canada (n.d.) 'Algorithmic impact assessment tool'. Webpage. Government of Canada (www.canada.ca/en/government/system/digital-government/digital-government-innovations/responsible-use-ai/algorithmic-impact-assessment.html).

Gregg, M. and Andrijašević, R. (2019) 'Virtually absent: The gendered histories and economies of digital labour' *Feminist Review* 123(1): 1–7 (<https://doi.org/10.1177/0141778919878929>).

Haimson, O.L., Dame-Griff, A., Capello, E. et al. (2021) 'Tumblr was a trans technology: the meaning, importance, history, and future of trans technologies' *Feminist Media Studies* 21(3): 345–361 (<https://doi.org/10.1080/14680777.2019.1678505>).

Kaye, D. (2019) *Speech police: the global struggle to govern the internet*. New York: Columbia Global Reports.

Khan, I. (2021) *Report of the Special Rapporteur on the promotion and protection of the right to freedom of opinion and expression*. United Nations Report A/76/258 (<https://undocs.org/A/76/258>).

Kleeman, J. (2019) 'SNL producer and film-maker are latest to accuse YouTube of anti-LGBT bias'. The Guardian, 22 November (www.theguardian.com/technology/2019/nov/22/youtube-lgbt-content-lawsuit-discrimination-algorithm).

LinkedIn (2020) 'Our 2020 workforce diversity report'. Press release. LinkedIn, 21 October (<https://news.linkedin.com/2020/october/2020-workforce-diversity-report>).

Lovelock, M. (2017) 'Is every YouTuber going to make a coming out video eventually?': YouTube celebrity video bloggers and lesbian and gay identity' *Celebrity Studies* 8(1): 87–103 (<https://doi.org/10.1080/19392397.2016.1214608>).

Mediapooli (n.d.) 'Mediapooli'. Website (www.mediapooli.fi/en/).

Moss, E., Singh, R., Watkins, E.A. et al. (2021) 'Assembling accountability, from the ground up'. Data & Society: Points, 29 June (<https://points.datasociety.net/assembling-accountability-from-the-ground-up-4655c492d0d0>).

Murphy, H. (2021) 'Facebook warns of "significant" slowdown in revenue growth'. Financial Times, 28 July (www.ft.com/content/30f14409-438d-4066-a443-c09b3bceb5e6).

Nurik, C. (2019) 'Men are scum': self-regulation, hate speech, and gender-based censorship on Facebook' *International Journal of Communication* 13: 2878–2898 (<https://ijoc.org/index.php/ijoc/article/view/9608/2697>).

Pilipets, E. and Paasonen, S. (2020) 'Nipples, memes and algorithmic failure: NSFW critique of Tumblr censorship' *New Media & Society* (<https://doi.org/10.1177/1461444820979280>).

Roberts, S.T. (2018) 'Digital detritus: "error" and the logic of opacity in social media content moderation' *First Monday* 23(3) (<https://doi.org/10.5210/fm.v23i3.8283>).

Romm, T. (2021) 'Amazon, Facebook, other tech giants spent roughly \$65 million to lobby Washington last year'. Washington Post, 22 January (www.washingtonpost.com/technology/2021/01/22/amazon-facebook-google-lobbying-2020/).

Romo, V. (2021) 'Whistleblower's testimony has resurfaced Facebook's Instagram problem'. NPR, 5 October (www.npr.org/2021/10/05/1043194385/whistleblowers-testimony-facebook-instagram?t=1633982889234).

Salty (2019) 'Exclusive: an investigation into algorithmic bias in content policing on Instagram'. Salty, October (<https://saltyworld.net/algorithmicbiasreport-2/>).

Siegel, R. (2019) 'Tumblr once sold for \$1.1 billion. The owner of WordPress just bought the site for a fraction of that'. Washington Post, 13 August (www.washingtonpost.com/technology/2019/08/13/tumblr-once-sold-billion-owner-wordpress-just-bought-site-fraction-that/).

Southerton, C., Marshall, D., Aggleton, P. et al. (2021) 'Restricted modes: social media, content classification and LGBTQ sexual citizenship' *New Media & Society* 23(5): 920–938 (<https://doi.org/10.1177/1461444820904362>).

Strimpel, Z. (2021) 'Bumble's "feminism" is half-baked'. Spectator, 17 February (www.spectator.co.uk/article/bumble-s-feminism-is-half-baked).

The Economist Intelligence Unit (2021) 'Measuring the prevalence of online violence against women' Infographic. The Economist, 1 March (<https://onlineviolencewomen.eiu.com/>).

Twitter (n.d.) 'Inclusion, diversity, equity, and accessibility'. Webpage. Twitter (<https://careers.twitter.com/en/diversity.html#Leadership>).

- van der Vlist, F.N. and Helmond, A. (2021) 'How partners mediate platform power: mapping business and data partnerships in the social media ecosystem' *Big Data & Society* 8(1) (<https://doi.org/10.1177%2F20539517211025061>).
- Van Driel, L. and Dumitrica, D. (2021) 'Selling brands while staying "authentic": the professionalization of Instagram influencers' *Convergence* 27(1): 66-84 (<https://doi.org/10.1177%2F1354856520902136>).
- Wakabayashi, D. (2020) 'Legal shield for social media is targeted by lawmakers'. New York Times, 28 May (www.nytimes.com/2020/05/28/business/section-230-internet-speech.html).
- Williams, M. (2021) 'Facebook diversity update: increasing representation in our workforce and supporting minority-owned businesses'. Meta, 15 July (<https://about.fb.com/news/2021/07/facebook-diversity-report-2021/>).
- Young, L. (2019) 'How much do influencers charge?' Klear, 16 May (<https://klear.com/blog/influencer-pricing-2019/>).
- Zuboff, S. (2019) *The age of surveillance capitalism: The fight for a human future at the new frontier of power*. London: Profile books.

ALIGN

About ALIGN

ALIGN is a digital platform and programme of work that is creating a global community of researchers and thought leaders, all committed to gender justice and equality. It provides new research, insights from practice, and grants for initiatives that increase our understanding of – and work to change – discriminatory gender norms. Through its vibrant and growing digital platform, and its events and activities, ALIGN aims to ensure that the best of available knowledge and resources have a growing impact on harmful gender norms.

ALIGN Programme Office

ODI
203 Blackfriars Road
London SE1 8NJ
United Kingdom
Email: align@odi.org.uk
Web: www.alignplatform.org

Disclaimer

This document is an output of Advancing Learning and Innovation on Gender Norms (ALIGN). The views expressed and information contained within are not necessarily those of or endorsed by ODI, Global Affairs Canada or the Ford Foundation, and accepts no responsibility for such views or information or for any reliance placed on them.

Copyright

© ALIGN 2022. This work is licensed under a Creative Commons Attribution – NonCommercial-ShareAlike 4.0 International Licence (CC BY-NC-SA 4.0).

alignplatform.org

ALIGN is a research platform currently supported by the Government of Canada (through Global Affairs Canada) and is led by ODI.

