

# China's New Rules for Algorithms

## Lessons for India

JAI VIPRA

A set of draft rules released by the Cyberspace Administration of China, to regulate algorithm-empowered recommendation activities on the internet, are congruent with the demands made by civil societies worldwide and more substantive than the actions proposed or taken by the governments in western liberal democracies.

On 27 August 2021, the Cyberspace Administration of China (CAC) released a set of draft rules to regulate the “algorithm-empowered recommendation activities on the internet.”

“Algorithm-empowered recommendation activities” refer to many automated phenomena we experience in using the internet today. When we search for an item on Amazon, an algorithm decides which brands show up first in the search results. When we open Twitter, an algorithm decides which tweets we see. An algorithm shows us advertisements on various websites according to our browsing patterns. These rules govern the deployment of all such algorithms used for search rankings, filtering, personalised recommendations, decision-making, etc.

The draft rules provide general standards that all algorithm recommendation service providers should follow. They also contain provisions on competition, consumer protection, worker protection, and social issues. These are categorised and contextualised in this article.

### Standards and Processes

The draft rules fill a major regulatory gap for algorithm recommendation services in regard to standards, such as those of transparency about the use of algorithms (Article 14), regular examination of algorithms (Article 8), and the following of security standards and data protection requirements (Article 7). A decentralised mechanism for algorithm security assessment is also created under the draft rules (Article 24). In simpler terms, these rules require that the working of recommendation algorithms be made understandable to the public, and that the algorithms follow a set standard of data security to avoid data leaks.

Apart from the field of data protection, global regulation still lags the mushrooming of algorithm recommendation services. Transparency and audit requirements for

algorithms are still scarce, save in fields such as finance. For example, the Securities and Exchange Commission of the United States (us) has detailed guidelines on algorithmic accountability for automated financial advisors. Such guidelines or accountability measures are lacking in most other sectors.

Data scientists and civil society actors have been making a strong case for the regulation and auditing of algorithms (Brown et al 2021). Algorithm audits are compared to audited financial statements, wherein algorithms are subjected to interdisciplinary scrutiny to see whether the algorithm exacerbates social biases, whether its working is sufficiently transparent to the public, whether it is being used for a deceptive purpose, and so on (Guszcza et al 2018). The CAC's draft rules on algorithms should be seen in this vein and will go a long way in keeping regulation in tandem with technological development in China.

### User and Consumer Rights

The draft rules empower users by increasing the gamut of their choices. Algorithm recommendation service providers have to indicate if any information is generated algorithmically (Article 9), and create mechanisms to redress grievances about algorithms by the public (Article 26).

Importantly, service providers have to give users the choice to sidestep algorithmic recommendations entirely, or to not receive targeted recommendations (Article 15). For example, Google Search provides personalised search results by default but provides an option to remove personalisation. It is not legally required to do this and can stop any time—these draft rules, if implemented, would compel search engines and other algorithm service providers to maintain this option. In addition, the draft rules prohibit differential pricing of products or services based on behavioural tracking (Article 18). In China, it is reportedly a common practice to charge prices according to analytics about a particular user's ability to pay.

Fake accounts, fake “likes,” and manipulation of search result rankings are also outlawed (Article 13). This measure

Jai Vipra ([jaivipra@gmail.com](mailto:jaivipra@gmail.com)) is a public policy researcher focusing on the economics of digital technology in the Global South.

is likely to go some way towards controlling the proliferation of fake news and political manipulation. The importance of acting against fake accounts and likes in India was clarified when an ex-employee of Facebook revealed that the company knew about fake accounts boosting a Bharatiya Janata Party member of Parliament's profile, but chose to not act on this information (Rakheja 2021). Fake accounts and actions, such as "likes" can manipulate the visibility and perceived legitimacy of online content. This can directly interfere with the democratic process, especially when not everyone has equal access to using fake accounts.

### Workers' Rights

The draft rules take a significant step for workers by requiring work-related algorithms to take into account workers' rights and interests (Article 17). However, more clarity on this requirement—particularly on algorithmic transparency—would have been useful.

China has already put in place certain measures to safeguard the rights of its 200 million or so gig workers. Companies engaging gig workers and workers in other flexible employment are now required to pay workers on time, consult with workers' representatives before changing work-related algorithms, and avoid incentives that endanger workers' health or safety (Wang 2021). There are also efforts underway to unionise gig workers in China. The All-China Federation of Trade Unions, which is legally recognised, has called for the protection of gig workers' rights and unions in the sector (Borak 2021).

Gig workers in India working for companies, such as Zomato, Swiggy, Uber, and Ola have complained about the lack of transparency about pay, tips, work allocation, etc. Many decisions about their work life are made algorithmically, but they are not privy to the parameters used in these algorithms. For example, the number of rides a driver is assigned is determined algorithmically to optimise for certain variables, which only the platform knows. This makes it difficult for the driver to plan their day or to act in accordance with their own objectives. Transparency on even the broad workings

of such algorithms can help workers understand their own incentives better.

### Competition

The draft rules also take some pro-competition measures in a fast-monopolising digital industry. "Improper competition" with the use of algorithms is prohibited (Article 13). Recently, small traders in India have complained that e-commerce platforms, such as Amazon and Flipkart give preferential treatment to some sellers by manipulating search results (Mathi 2021). For example, the platform could display its products by its own brands on the top of search results, disadvantaging other sellers. Due to a lack of competitiveness in the e-commerce platform market, this could be construed as unfair to the sellers, who would need a neutral platform in order to be able to compete. Similarly, hotels in India have complained about online travel platforms manipulating search ratings to promote certain hotels (Gurumurthy and Bharthur 2020).

While the draft rules by China's CAC do not go into details about "improper

competition," China's e-Commerce Law of 2018 already prohibits e-commerce platform operators from taking advantage of technology to impose unreasonable restrictions on sellers, product prices, etc. It also requires platform operators to clearly indicate products owned by self-operated businesses and to not mislead consumers about these products. The draft rules add to this regulation of the relationship between platforms and businesses operating on platforms.

### Social Issues

An area where the draft rules are disconcerting is that of social issues. Algorithm recommendation service providers are required to "observe social morality and ethics, science and reasoning" and are called upon to "vigorously disseminate positive energy." While the spirit of some of these regulations is no doubt lost in translation, they are open-ended and open to abuse. In contrast, there are reasonable broad provisions such as those for the protection of minors (Article 16) and those delineating

## Economic & Political WEEKLY

### National Family Health Survey-4

February 8, 2020

Twenty-five Years of the NFHS: Lessons for the Future	—S Irudaya Rajan
Quality of Data in NFHS-4 Compared to Earlier Rounds: An Assessment	—K Srinivasan, Rakesh Mishra
Demographic and Health Diversity in the Era of SDGs	—K S James, S Irudaya Rajan, Srinivas Goli
Trends, Differentials and Determinants of Child Marriage in India: Evidences from Large-scale Surveys	—Sanjay Kumar
Frequently Asked Questions on Child Anthropometric Failures in India	—Sunil Rajpal, Rockli Kim, Rajan Sankar, Alok Kumar, William Joe, S V Subramanian
Stagnancy in the Unmet Need for Family Planning in India	—Purushottam M Kulkarni
Intimate Partner Violence: Effects on Maternity Care and Pregnancy Outcomes in India	—Srinivas Goli, Md Juel Rana, Jitendra Gouda
Household Assets and Wealth Quintiles, India 2006–16: Insights on Economic Inequalities	—Udaya Shankar Mishra, William Joe

For copies write to: Circulation Manager,

**Economic & Political Weekly,**

320–322, A to Z Industrial Estate, Ganpatrao Kadam Marg, Lower Parel, Mumbai 400 013.

email: circulation@epw.in

responsibility for algorithms promoting addiction (Article 8). For example, YouTube has been the subject of criticism multiple times for algorithmically leading people down the path of hateful content and disinformation. Its algorithms are designed to increase the time people spend on the website, and thus its recommended videos sometimes lead to disinformation spirals (Lomas 2021).

**Other Recent Reforms**

These draft regulations have been released against the backdrop of several recent reforms that China has undertaken in the technology sector. These include the new data security law that came into effect this September. This law governs the conditions under which data can be transferred abroad and the security requirements for storing certain important data. Another significant recent law is the Personal Information Protection Law, passed in August. The scope of this law is comprehensive, as it restrains the collection and use of personal information across sectors. Importantly, it states

that only the minimum amount of data necessary for a stated purpose should be collected, stalling the unfettered collection of data in the digital economy.

These and other measures are also being taken, given that the us and China are in a technological cold war. In August 2020, the us took punitive steps against TikTok’s parent company (Allyn 2020), and the us and European countries have been hostile to Huawei (Cerulus 2020). Their opposition was ostensibly due to vulnerabilities in Huawei’s networks and its answerability to the Chinese government. However, the competitive threat that Huawei poses to American and European firms is clear, as none of them have the 5G capabilities that Huawei does. Additionally, vulnerabilities and backdoors for government access created for the us government in products by American companies like Cisco were revealed by the Snowden leaks several years ago (Menn 2017). These are not subject to the same scrutiny or distrust. In response, China has made it more difficult for its technology

companies to be listed on us stock exchanges (Tan and Cheng 2021). It is also making efforts to become largely self-reliant in the design and manufacturing of semiconductors, an important long-term goal in an unstable international environment (Hille and Liu 2020). Semiconductors form the hardware basis for the digital economy, and their design and manufacturing is concentrated in a few hands at many points in the supply chain.

**Worldwide Implications**

Commentary on China tends to veer between alarmist to dishonest. The vague descriptor of authoritarianism pervades nearly every analysis of Chinese government actions. In this case, however, several of the measures that China is taking now are measures demanded by the civil society worldwide. These are also actions that other governments have expressed interest in carrying out. The us government has made its antitrust intentions against large technology companies clear, but its efforts are being stalled by lobbying (Edgerton and Allison 2021).

**New in EPWRF India Time Series Module on Health Statistics**



**Features**

Data is from 1954 onwards based on availability.

Structured in six major sections :

- Demography
- Health Status
- Infrastructure
- Health Manpower
- Education Facilities
- Health Finance

The EPWRF ITS has 23 modules covering a range of macro-economic, financial and social sector indicators on the Indian economy.

**For more details, visit : [www.epwfits.in](http://www.epwfits.in)**

European countries have announced a slew of measures to protect digital users and increase competition, such as through the proposed Digital Services Act and Digital Markets Act. Australia has acted in an almost draconian way against Facebook to force it to share revenue with media companies whose business is affected by Facebook advertising (Meade 2021).

In India, the Personal Data Protection Bill is still languishing under a review by a joint parliamentary committee (Bhargava and Nair 2021). The development and deployment of algorithmic decision-making systems in India is being carried out in a regulatory vacuum. There is no comprehensive or sectoral law to govern algorithmic decision-making. China's draft rules provide some good ideas for regulation in India, even if these cannot be imported wholesale.

Commentators differ on the question of the class character of the Chinese state and whether the era of capitalist development reflects populism or the lack of it. Regardless of one's opinions on these questions, it ought to be clear that the Chinese society has been facing the same problems with digitalisation that other societies are facing. Large technology companies are on a spree of accumulation, monopolising markets, and transforming society. Their growth has been upending democratic processes worldwide, sometimes creating avenues for democratic engagement but far more often enabling reactionary forces. Most governments have recognised the need to implement rules relating to privacy, accountability, and competition in the digital world. At the same time, most governments have failed to form a coherent vision of a digital society, let alone act decisively in this sphere. This is why antitrust experts in the US are now changing their view of China from being an exporter of surveillance to a state able to act against the powerful interests of capital (Stoller 2021).

Perhaps some of China's steps will turn out to be mistaken. Its aims to control speech, and social interaction are certainly not to be emulated and can be furthered with these draft regulations. More clarity is required on the implementation

of many of these draft regulations. But it is clear that the Chinese government has decided that the era of unrestrained operation of technology companies must come to an end before social dynamics are completely subordinated to private technological dynamics. Besides, tackling the accumulation in the technology industry and the inequality it has wrought is crucial if China has to make strides towards its stated goal of "common prosperity" (Fan 2006). The challenge for people in India and in other countries is to ensure that their governments act in the interests of the people, and do not stand by as democratic processes and economic futures get determined in a few boardrooms.

#### REFERENCES

- Allyn, Bobby (2020): "Trump Signs Executive Order That Will Effectively Ban Use of TikTok in the US," *NPR*, <https://www.npr.org/2020/08/06/900019185/trump-signs-executive-order-that-will-effectively-ban-use-of-tiktok-in-the-us>.
- Bhargava, Yuthika and Sobhana K Nair (2021): "More Delays on Data Protection Bill as Panel Reopens Debate," *Hindu*, <https://www.thehindu.com/news/national/more-delays-on-data-protection-bill-as-panel-reopens-debate/article36344706.ece>
- Borak, Masha (2021): "'Gig Workers of All Trades, Unite!' China's State Trade Union Calls for Branches for Gig Economy Workers," *South China Morning Post*, <https://www.scmp.com/tech/big-tech/article/3141846/gig-workers-all-trades-unite-chinas-state-trade-union-calls-branches>.
- Brown, Shea, Jovana Davidovic and Ali Hasan (2021): "The Algorithm Audit: Scoring the Algorithms That Score Us," *Big Data & Society*, <https://doi.org/10.1177/2053951720983865>.
- Cerulus, Laurens (2020): "Europe's 5G Plans in Limbo after Latest Salvo against Huawei," *Politico*, <https://www.politico.eu/article/europe-5g-plans-in-limbo-after-latest-salvo-against-huawei/>.
- Creemers, Rogier, Helen Toner and Graham Webster (2021): "Translation: Internet Information Service Algorithmic Recommendation Management Provisions (Opinion-Seeking Draft)," *Stanford DigiChina Cyber Policy Center*, <https://digichina.stanford.edu/news/translation-internet-information-service-algorithmic-recommendation-management-provisions>.
- Creemers, Rogier and Graham Webster (2021): "Translation: Personal Information Protection Law of the People's Republic of China (Effective 1 November 2021)," *Stanford DigiChina Cyber Policy Center*, <https://digichina.stanford.edu/news/translation-personal-information-protection-law-peoples-republic-china-effective-nov-1-2021>.
- DigiChina (2021): "Translation: Data Security Law of the People's Republic of China," *Stanford DigiChina Cyber Policy Center*, <https://digichina.stanford.edu/news/translation-data-security-law-peoples-republic-china>.

- Egerton, Anna and Bill Allison (2021): "Big Tech Spent Millions on Lobbying Amid Antitrust Scrutiny," *Bloomberg*, <https://www.bloomberg.com/news/articles/2021-07-21/big-tech-spent-millions-on-lobbying-amid-antitrust-scrutiny>.
- European Commission (2021): "The Digital Services Act Package," <https://digital-strategy.ec.europa.eu/en/policies/digital-services-act-package>.
- Fan, C Cindy (2006): "China's Eleventh Five-year Plan (2006–10): From 'Getting Rich First' to 'Common Prosperity'," *Eurasian Geography and Economics*, Vol 47, No 6, pp 708–23, <https://www.tandfonline.com/doi/abs/10.2747/1538-7216.47.6.708>.
- Gurumurthy, Anita and Deepti Bharthur (2020): "Techno-disruptions and Travel: Examining the Impact of Platformisation in the Indian Tourism Sector," *IT for Change*, <https://itforchange.net/sites/default/files/add/Report%3A%20Techno-disruptions%20and%20travel.pdf>.
- Guszcza, James, Iyad Rahwan, Will Bible, Manuel Cebrian and Vic Kataly (2018): "Why We Need to Audit Algorithms," *Harvard Business Review*, <https://hbr.org/2018/11/why-we-need-to-audit-algorithms>.
- Hille, Kathrin and Qianer Liu (2020): "US Chokehold Pushes China Chip Self-sufficiency up the Agenda," *Financial Times*, <https://www.ft.com/content/6bdc2df6-04c0-4f10-b5b4-9169e3d1a536>.
- Keju, Wang (2021): "China to Better Protect Workers' Rights in New Labor Forms to Boost Flexible Employment," The State Council, The People's Republic of China, [http://english.www.gov.cn/premier/news/202107/07/content\\_WS60e5ad55c6d0df57f98dc8e2.html](http://english.www.gov.cn/premier/news/202107/07/content_WS60e5ad55c6d0df57f98dc8e2.html).
- Lomas, Natasha (2021): "YouTube's Recommender AI Still a Horror Show, Finds Major Crowdsourced Study," *TechCrunch*, <https://techcrunch.com/2021/07/07/youtubes-recommender-ai-still-a-horrorshow-finds-major-crowdsourced-study/>.
- Mathi, Sarvesh (2021): "CAIT's Feedback on Proposed E-Commerce Rules Calls for Transparency to All Stakeholders," *Medianama*, <https://www.medianama.com/2021/07/223-cait-feedback-amendments-ecommerce-rules>.
- Meade, Amanda (2021): "Google and Facebook: The Landmark Australian Law That Will Make Them Pay for News Content," *Guardian*, <https://www.theguardian.com/technology/2021/feb/16/google-and-facebook-the-landmark-australian-law-that-will-make-them-pay-for-news-content>.
- Menn, Joseph (2017): "A Scramble at Cisco Exposes Uncomfortable Truths about US Cyber Defense," *Reuters*, <https://www.reuters.com/article/us-usa-cyber-defense-idUSKBN17013U>.
- Rakheja, Harshit (2021): "Facebook Let Fake Accounts Inflate BJP MP's Popularity in India, Says Former Employee," *Inc42*, <https://inc42.com/buzz/facebook-let-fake-accounts-inflate-bjp-mps-popularity-in-india/>.
- Stoller, Matt (2021): "Lina Khan Leads the Government's New Attempt to Break Up Facebook," *BIG by Matt Stoller*, <https://mattstoller.substack.com/p/lina-khan-leads-the-governments-new>.
- Tan, Emily and Evelyn Cheng (2021): "China Will Still Allow IPOs in the United States, Securities Regulator Tells Brokerages," *CNBC*, <https://www.cnbc.com/2021/07/29/china-to-still-allow-ipo-in-the-us-securities-regulator-csrc-says.html>.