Tech, power and rules-based order

Nations at risk of being bifurcated along lines of haves, have-nots in setting cyber norms

By Farlina Said

The concept of power in international relations indicates an actor's ability to shape the actions of another. This can be through enforcement or the threat of it or by limiting strategic options. In cyber, several material definitions could define a state's power and influence.

First, cyberspace is greatly driven by the private sector. A 2019 United Nations Conference on Trade and Development (UNCTAD) report stated that the United States and China account for 90% of the market capitalisation of the world's 70 largest digital platforms. Super platforms, such as Microsoft, Apple, Amazon, Google, Facebook, Tencent and Alibaba, hold two-thirds of market value.

Such platforms are vital engines for digital services, also delivering parts of the government's digital architecture or digital transformation programmes. Meanwhile, social platforms, such as Facebook, Instagram and WhatsApp, under the parent company Meta have more than one billion users on each platform.

WhatsApp's estimated two billion users is a quarter of the world population. Meanwhile, Facebook's penetration rate in some countries ranges from 42.2% in Laos to close to 60% of Malaysia's population.

The private sector's large footprint creates a dependence on such services for simple things like communication and running critical infrastructure. However, there can be times when the dependence can be disproportionate.

Too powerful, too much sway

Meta's ban on news articles on Facebook and Instagram in response to Canada's draft legislation on payment to media outlets for featuring news on these platforms had terrible consequences during a season of wildfires.

The decision impacted on the ability for residents to access accurate information during a crisis. Thus, a state's ability to influence Big Tech rests on domestic legislation, local presence and effective communication channels between the government and private sector. Where necessary, states might have to approach such companies as a grouping to strengthen negotiation capabilities.

Second, data locations are another element of influence. Data is the source of innovation and productivity for future technologies. However, there can be significant North-South disparities to data-processing capabilities and centre locations.

A US International Trade Commission report in 2021 stated that the US, the UK and Germany hold close to a third of global data centre locations, mainly to accommodate domestic demand, servicing financial hubs or tapping into the needs of manufacturing and industry.

If China is added to the fray, close to half the world's data centres resides in these four countries. Meanwhile, the 2019 UNCTAD reported that regions, such as Africa and Latin America, hold only 5% of the world's colocation data centres.

A country's position in the data value chain determines jurisdiction and its ability to harness the digital economy. A country at the lower end of the supply chain, fuelling data harnessed from other parts of the world, would have limited influence on the way data are processed, analysed and used.

This imbalance in power will be distorted further if a government does not have sufficient data-governance frameworks, effective enforcement mechanisms and international coordination channels. Thus, Vietnam's and China's attempts to localise data within jurisdiction might gain traction.

Third, a state's capability for innovation and the development of future technologies would determine dominant roles in a digital-based order. An example is the production of semiconductors where supply chain snarls during the pandemic created vulnerabilities in global production.

Taiwan Semiconductor Manufacturing Co's foundry produced more than 60% of the world's semi-conductor and more than 90% of advanced semiconductors. A natural disaster, such as drought,

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in Taiwan could threaten global chip supplies.

Against this backdrop, small and medium powers are affected by the US-Sino technology rivalry. The US Chips Act's aim to home shore the semiconductor industry and invigorate design capacities would reshape supply chains.

Additionally, the act limits the transfer of chip technology and chip-making machines to China, thereby exacerbating bifurcation, as China continues down its path of high-tech self-sufficiency. The US, Netherlands' and Japan's subsequent introduction of export controls to machines and chemicals further impacted on technology adopters.

As innovation is led by economies with sufficient resources for research and development, developing countries might find themselves subservient to the tide and ebb of geopolitics and rivalry.

Common rules, regulations

Cyber is a developing realm where rules and regulations are at stages of development. To address conflict, the UN has agreed that existing international law applies, though disagreements have surfaced over how to apply it.

In the realm of cybercrime, a treaty is unfolding with the intention to streamline processes and enforcement of law against cybercrimes. This would mean utilising mutual legal assistance mechanisms or increasing cooperation for investigations.

However, much of the applicability of law is still underway. For example, the definitions of cybercrime are not fixed with certain interpretations interested in the dissemination of false information while others wish for a narrow definition of core cyber-enabled crime. Winning the middle ground for interpretation may socialise and normalise ideas that would underpin future regulations.

Thus, while the rules-based order can consist of the rule-makers, rule-takers and rule-breakers, the rule-takers can be kingmakers in arenas where all nations are of equal footing. Yet, equal footing may also mean the 193 UN members, with varying interpretations of issues, would attempt to lower thresholds for the sake of consensus.

Further, the dominance of powers, such as Russia, China and the US, on the UN platform could shift voting patterns. In 2018, for example, the two resolutions that were US-led and Russia-led were

passed for the formation of the OEWG and UNGGE. Among the considerations are language of inclusivity, search for tech-neutral outputs and assessments of national interests.

Language of inclusivity

At the end of the day, multi-polarity of rule-making environments should free spaces for strategic autonomy, especially where states could assess various interpretations of law and apply them as necessary.

A medium to large power, such as EU, successfully introduced industry and market standards shaping cyber governance. Dubbed the "Brussels effect", this is the view that Europe's introduction of law and legal mechanisms would impact on other parts of the world.

The General Data Privacy Regulation (GDPR) illustrates this as its extra-jurisdictional application shapes website practices worldwide. For other countries, GDPR serves as reference for the development of domestic regulations but may differ as governments localise based on enforcement capabilities, digital maturity and local contexts.

In such arenas, the language of inclusivity is necessary as consensus is built on the majority. However, the digital environment can feature asymmetrical challenges with gaps in proficiency over technology threats.

This could mean that while some countries would raise terrorism as one of many threats stemming from cyberspace, others could highlight the protection of the public core as a concern. Meanwhile, technologically sophisticated countries would face threats and harms less experienced by countries in nascent stages of digital maturity.

However, a treaty's long lasting effectiveness is dependent on various factors, such as the rule's normative effects, enforcement capability and a nation's evaluation of the treaty at the onset of its construction. This would mean that while time-consuming, the self-reflection states would have to go through to produce the binding agreements would be useful to ensure their longevity and impact.

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