

Fiona Sing and Antonia Lyons

Regulating the Digital Environment

to Protect Users from Harmful Commodity Marketing

Abstract

Although the creators of the world wide web never intended it to be regulated by state intervention, the rapid evolution of the online environment has necessitated regulation of certain aspects of the digital ecosystem. Harmful commodity marketing (e.g., alcohol, vaping and unhealthy food and beverage product marketing) on social media and in digital spaces has been linked to adverse health outcomes and there have been calls for its regulation. In this commentary we explain why this is important and consider how such regulation could be achieved.

Keywords digital regulation, harmful commodities, digital marketing, alcohol, vaping, unhealthy food

Digital regulation

As the digital ecosystem has grown since its inception in the early 1990s, different New Zealand governments have introduced laws to regulate the digital sphere to protect the safety and rights of the New Zealand public. Each legal response

touches on different aspects of the way the public engage with the online space, such as online safety, data protection, consumer protection law, intellectual property law and telecommunications law. Successive governments have regulated, for example, the way personal data is collected and used

by online actors, the sending of harmful digital communications and unsolicited emails, and the conduct of internet service providers in relation to consumers. This reactive protective legislative framework is largely fragmented and requires comprehensive reform and realignment to adequately address the realities of the ever-developing digital ecosystem.

Regulation is playing catch-up

The world wide web was designed to allow the free flow of information as quickly as possible with freedom from indiscriminate censorship and surveillance (Kiss, 2013; World Wide Web Foundation, n.d.). However, Tim Berners Lee, credited with inventing the world wide web, has publicly argued that we now need state intervention and regulation of large technology firms to prevent it becoming 'weaponised' by a small number of dominant, and increasingly powerful, platforms (Solon, 2018). The online environment is central to so many people's lives. For many (particularly younger people), social life plays out

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within the online realm (Auxier and Anderson, 2021; Shields Dobson, Robards and Carah, 2018). There is a reliance on the digital space for many aspects of our lives, including social engagement, connection with networks, engagement with public discourse, and consumer experience. Increased engagement with an unwieldy digital ecosystem that crosses international borders raises risks and potential breaches of fundamental rights. Governments have a role to play in protecting their citizens in this space. Yet regulatory controls by the state are at odds with the underlying philosophy of much of the digital system, which is often border-less and involves big tech actors who do not neatly fall under the jurisdiction of any individual government. Importantly, this system is currently driven by profit making and does not need to have regard for the public good, or the rule of law, until certain aspects of the ecosystem are held accountable through various governance systems, including state regulation.

However, the government regulation of the online environment continues to lag well behind the fast-paced growth of the digital ecosystem. The legislative process is slow, and the political economy of lawmaking is such that the social licence and political appetite for robust, comprehensive protective laws must gather serious momentum to get an issue on the political agenda. A policy window needs to open to create an opportunity for action. Previously, policy windows for online regulation have opened following large-scale events that have threatened the safety of the public, such as the Christchurch mosque attack of March 2019, high-profile revenge porn cases, the Cambridge Analytica scandal, or large-scale data leaks from cybersecurity breaches of major public institutions, such as hospitals.

Some things are universally accepted as so abhorrent that cross-party support for a legislative response is guaranteed (e.g., child pornography). Further, risks to security are prioritised by Western democratic governments and state intervention is considered justified in the face of online risks that threaten national security. However, issues that may be considered as moving into the realm of the 'nanny state' or impinging on individual

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freedoms are more contentious and debated, both in political spheres and in public discourse. There is always a fine balance between protection and censorship that governments must negotiate, and navigating this fine balance requires political capital and political will, which are often lacking. Added to this reluctance to act is the perceived complexity of the digital ecosystem and the mega technology industries which wield significant power on the global stage.

As an example, the Labour-led New Zealand government of 2017–23 explored at least three areas of digital regulation in its last term: a content regulatory review (online safety) (Department of Internal Affairs, 2023); a consumer data right (Ministry of Business, Innovation and Employment, 2023); and regulating the news media practices of large platforms like Meta and Google (New Zealand Parliament, 2023). Each area grapples with contentious issues and raises numerous

questions, including whether the government has a mandate to regulate online content, which would impinge on freedom of expression; whether a new legal right should be established for consumers further protecting their personal data; and whether the New Zealand government can effectively regulate immensely powerful and highly resourced digital platforms such as Google and Meta.

The Labour-led government also considered the best way to protect the public from disinformation and misinformation, although no legislation was tabled, and the work may continue under the new, National-led coalition government (Department of the Prime Minister and Cabinet, 2023). The current regulatory review of online safety is important; it encompasses many different areas of regulation in one regulatory response. The recent Department of Internal Affairs online safety discussion document articulated clearly that the current system for content regulation in New Zealand is fragmented and out of date, and that a comprehensive reform and realignment is necessary to adequately address the realities of the ever-developing digital ecosystem (Department of Internal Affairs, 2023).

The harm caused by the commercialisation and commodifying approach of the e-commerce landscape cannot be left out of this policy debate. As public health researchers, we are concerned with harmful commodity industries, which we define as industries that produce and market commodities or services that cause people harm. In this article we focus on commodities such as tobacco, alcohol and unhealthy foods and beverages, rather than services, such as those provided by the gambling industry (which are widely available online). Use of harmful commodities is a major driver of the burden of preventable non-communicable diseases (McKevitt et al., 2023). Alcohol consumption accounts for 3 million deaths globally each year and contributes to the poor health of millions of people with chronic disease and non-fatal injuries; 5% of the global burden of disease can be attributed to the harmful use of alcohol (World Health Organization, 2018). Evidence shows that alcohol is New Zealand's most harmful drug (Crossin et al.,

2023). The link between tobacco and multiple chronic diseases is well-established, and evidence is emerging that demonstrates the links between vaping and poor health outcomes (Sun et al., 2023). Unhealthy food and beverage consumption is linked with an increased risk of being overweight and obesity, and diet-related non-communicable diseases such as cancer, stroke, heart disease and diabetes (Afshin et al., 2017). The digital marketing of such commodities by all actors in the programmatic digital marketing supply chain – from the advertisers through to the social media platforms – is conducted in an increasingly pervasive and insidious manner and has led to increased exposure of the public to such products (Buchanan et al., 2018).

Digital marketing of harmful commodities: insidious, opaque and effective

There is robust evidence that traditional forms of marketing increase consumption of harmful products (Babor, 2010; Babor et al., 2022; Garde et al., 2018; Sing et al., 2022). But because of the nature of digital and social media marketing, this effect is exacerbated (Buchanan et al., 2018; Montgomery and Chester, 2009; Tatlow-Golden and Garde, 2020; VicHealth, 2020; World Health Organization, 2022, 2023; World Health Organization Regional Office for Europe, 2016, 2021). Digital marketing is defined as ‘promotional activity, delivered through a digital medium, that seeks to maximise impact through creative and/or analytical methods’. Digital marketing is distributed to the public through digital channels, such as display on websites, apps, social media platforms, games and films, and accessible through digital devices such as desktops, laptops and mobile phones (World Health Organization, 2023). Digital marketing is pervasive due to its programmatic nature: it uses machine learning to direct the targeting of the marketing into flows of online content at particular times where it will be most effective; there is an exponential potential for reach of marketing; and there is a lack of accountability and transparency in the ‘ad tech’ system (Goodwin, 2022).

Social media uses subtle but persuasive forms of marketing of harmful commodities that are linked to habitual

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consumption. Evidence shows that young people and underage users’ consumption patterns are influenced by social media marketing (Anderson et al., 2009; Carah and Angus, 2018; Carter, 2016; Cavazos-Rehg et al., 2014; Cheney-Lippold, 2011; Courtwright, 2019; Dyer, 2019; Esser and Jernigan, 2018; Jackler et al., 2019; Jernigan et al., 2017; Laestadius, Wahl and Cho, 2016; Lyons et al., 2019; McCreanor et al., 2013; Reith, 2018). In the wider online environment, research shows that exposure to harmful commodity marketing influences purchase and consumption behaviours (Backholer et al., 2021; Buchanan et al., 2018; Lobstein et al., 2017). The vast amount of digital marketing of a harmful product normalises it and makes it more acceptable, while also boosting awareness of the product as a part of everyday life (Carah and Brodmerkel, 2021). Engaging people who are online with the marketing (through likes, shares,

competitions, activations, and so on) encourages consumer-driven socialising and tying products into people’s identities. These processes are intensified with smartphones, where the marketing is not confined to time or place and appears on a device that is used frequently throughout the day (Lyons et al., 2023).

Alcohol

Exposure to alcohol marketing online increases its normalisation and the acceptability of consuming alcohol (World Health Organization, 2022). The digital marketing of alcohol products is linked to starting to drink at younger ages, as well as risky patterns of drinking; for example, marketing exposure at a younger age is linked to a higher risk of experiencing alcohol-related harm (World Health Organization, 2022, 2018; World Health Organization Regional Office for Europe, 2021). A recent World Health Organization report stated: ‘The digital ecosystem exposes individuals to alcohol advertising, identifies and pursues individuals who are most likely to purchase and consume alcohol, often those most at risk of developing alcohol use disorders, and transforms users into vulnerable targets’ (World Health Organization, 2022, p.3). Digital alcohol marketing is intended to engage users in ways that make brands and products essential elements of their online activities and identities (Babor et al., 2022). Digital marketing of alcohol frequently allows a seamless flow from exposure and engagement with digital marketing to online purchasing, and delivery to homes, a process that was intensified by the Covid-19 pandemic (World Health Organization, 2022).

Unhealthy food

Digital marketing of unhealthy foods exacerbates the effects of ‘traditional’ marketing techniques, enhancing advertisement attention and recall, attitudes, brand awareness, and therefore purchase intent and product sales (Boylard et al., 2022; Murphy et al., 2020). The digital marketing of unhealthy foods targets children, who are less able to recognise its persuasive objective (Freeman et al., 2016; Garton, Mackay et al., 2022; Smith et al., 2019). The interactive nature of digital

marketing creates repeated and extended exposure to brands and food products, building brand loyalty and influencing children's purchases and purchase requests (Buchanan et al., 2018; Freeman et al., 2016; Garton, Mackay et al., 2022; Kelly et al., 2015; Smith et al., 2019; World Health Organization Regional Office for Europe, 2016).

According to a 2022 study, 85% of posts and videos on company Facebook pages and YouTube channels for the most popular packaged food, fast food and non-alcoholic beverage brands/companies in New Zealand featured unhealthy food or drinks (Garton, Gerritsen et al., 2022). The AdHealth study (Kidd et al., 2021) assessed the exposure of New Zealand Facebook users aged 16–18 to 'paid' food advertisements. It found that of advertisements containing food, 98% contained unhealthy food and drinks. On average, users were exposed to 4.8 unhealthy food or drink adverts per hour spent on Facebook.

Vaping and tobacco

Vaping and tobacco companies use social media marketing to appeal to young people and encourage vaping. This marketing includes engaging people through comments, likes, questions, competitions and sponsorships (Cochran, Robertson and Hoek, 2023; Hardie, McCool and Freeman, 2023; Lyons et al., 2024). Instagram has been used by vape product retailers to engage with and appeal to young New Zealanders, using strategies such as employing popular influencers, linking vapes to appealing lifestyles and sponsoring festivals (Hardie, McCool and Freeman, 2023). International research shows that social media has been central in publicising, normalising and marketing vape products among young people (O'Brien et al., 2020).

Harm experienced by Māori

There are at least two areas of harm caused by harmful commodity marketing practices that have a significant impact on Māori. First, e-commerce practices use consumer data to target groups and populations with digital marketing of harmful commodities. Māori scholars, especially those leading Te Mana Raraunga

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(the Māori Data Sovereignty Network), have highlighted the necessity for Māori data sovereignty and demonstrated that there is harm caused by collecting and using Māori data. Tahu Kukutai and colleagues articulate that Māori data is considered a taonga embodied by whakapapa that carries responsibilities of kaitiakitanga and collective concepts of privacy. Therefore, to commercialise and profit from this protected data goes against tikanga principles (Kukutai et al., 2023; Te Mana Raraunga, 2016; Kukutai and Cormack, 2021).

The Waitangi Tribunal in its March 2023 report on the CPTPP (the Comprehensive and Progressive Agreement for Trans-Pacific Partnership) defines Māori data sovereignty as 'the inherent rights and interests that Māori have in relation to the collection, ownership, and application of Māori data' and Māori data governance as 'the principles, structures, accountability mechanisms, legal instruments, and policies through which

Māori exercise control over Māori data' (Waitangi Tribunal, 2023, p.xix). The United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) supports the protection of indigenous data sovereignty and governance (Kelsey, 2022; Riley, 2023; Kukutai et al., 2023). Therefore, Crown engagement and consultation with Māori from the inception of the policy development is necessary to ensure that any regulatory response to increase protections online upholds the values outlined in te Tiriti and UNDRIP (Kukutai and Cormack, 2021; Kukutai et al., 2023; Te Mana Raraunga, 2016).

Further, excessive exposure to harmful commodity marketing and the tactics used by alcohol, tobacco, vaping and food brands to target consumers has an additional layer of harm for Māori. For example, Māori experience much greater harm from alcohol consumption compared to their non-Māori counterparts (Connor et al., 2017), and policy that successfully reduces consumption by the population overall will thus have a greater impact for Māori. Therefore, in order to uphold the rights and obligations in te Tiriti, regulating the e-commerce landscape, particularly the harmful commodity marketing system, must be prioritised by the government.

Regulatory responses

Some areas of harmful commodity marketing are regulated by the government, but the majority of the marketing practices are subject only to industry self-regulation. This self-regulatory approach has numerous flaws and is an ineffective way to address the issue of harmful commodity marketing online (Jackson, Cowie and Robinson, 2021; Sing et al., 2020).

Self-regulatory approach for alcohol and food

New Zealand has a voluntary self-regulatory system run by the Advertising Standards Authority (ASA) to receive complaints about alcohol and food advertisements. The Advertising Standards Authority is made up of advertisers, advertising agencies and the media. Standards for alcohol advertising are set out in the Advertising and Promotion of Alcohol Code developed by the authority. Standards for food marketing are set

out in the Children and Young People's Advertising Code. There are also relevant provisions for both areas of marketing in the Advertising Standards Code 2018.

The Advertising and Promotion of Alcohol Code states that advertisers must avoid advocacy of excessive alcohol consumption and portraying alcohol as positive or desirable; that alcohol sponsorship must be confined to the brand, name or logo, and exclude sales messages; and that alcohol-sponsored programmes must primarily promote the programme, with the sponsorship subordinate. But alcohol advertising is not required to be excluded from broadcast coverage of an event or situation where such promotion is a normal feature of that event or situation, so long as the code is adequately considered.

Jackson, Cowie and Robinson (2021) analysed 73 complaints to the ASA under the Advertising and Promotion of Alcohol Code between 2017 and 2020. Fifty-five complaints made it through to consideration by the authority's Complaints Board, and over half of the complaints related to online social and digital media. Jackson noted that this was not indicative of the level of advertising in breach of the Advertising and Promotion of Alcohol Code as the regulatory system relies on a public complaints system. This system is ineffective as it relies on the public being aware of the code, identifying breaches and submitting them to the ASA. In reality, harm reduction agencies, such as Alcohol Health Watch, often carry out this function on behalf of the public. In the case of digital marketing, this becomes particularly ineffective as digital marketing is ephemeral in nature and it is highly targeted. It is therefore harder to identify content, and also to identify who has been exposed. Jackson et al. also noted that while in the majority of cases the advertisement was removed, this was not until the ASA had processed the complaint, which could take over 60 days. By this time the marketing campaign had likely ended, having reached its targets, and the offending marketing had already disappeared as it is only shown for particular time periods (for example, 24 hours on Instagram 'reels').

Additionally, digital marketing campaigns to promote alcohol products

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claim that they are not influencing minors as companies use age verification and age-gating mechanisms to ensure that minors are not exposed to such marketing. However, age-gating and verification systems have been found to be ineffective, as they are easily circumvented (Babor et al., 2022; World Health Organization, 2022). Digital marketing of alcohol also appears in minors' social media feeds when it occurs in the posts of influencers they follow or is shared by friends or others in their networks.

A study evaluating the ASA codes that restrict advertising of unhealthy food and beverages to children, and their interpretation by the ASA Complaints Board in decisions between 2017 and 2019, found that of the 16 complaints assessed, 12 were not upheld, and only one was upheld under the Children and Young

People's Advertising Code (Sing et al., 2020). Three complaints were upheld under the Advertising Standards Code but not the Children and Young People's Advertising Code. The study compared the ASA system with a public health law framework that identified best practice design for marketing restrictions, and found that many facets of the framework were not met, including protecting children up to 18 years of age; the use of a comprehensive nutrient-profiling system to scientifically categorise which foods are prohibited from being marketed; transparency and accountability mechanisms; an independent body to monitor and enforce; an independent complaint-handling scheme; and incentives to encourage compliance. The study concluded that a self-regulatory system does not adequately protect children from the exposure to, and power of, unhealthy food and beverage marketing, and that government-led, comprehensive and enforceable marketing restrictions are required (Sing et al., 2020).

Legislative approach for tobacco and vaping

Under New Zealand's smokefree legislation it is illegal to market a tobacco or vaping product to anyone, including online. This includes the sponsorship of 'organised activities' by tobacco and vaping companies, including the company's trademark, or words, logos, colours, shapes, sounds or smells associated with a trademark, and all or any part of a company name included in a regulated product trademark.

While there are still loopholes in the enforcement of this law and an independent monitoring system has been called for (Cochran, Robinson and Hoek, 2023), comparatively this full ban on marketing is a far stronger regulatory approach than that for alcohol and unhealthy food. This is in part because New Zealand is a party to the World Health Organization's Framework Convention on Tobacco Control (FCTC). However, while the issue of tobacco control may have been in the public discourse for decades and the public and political acceptance of the need to reduce the harm caused by tobacco products is high, this does not discount the need for other harmful commodities to be

regulated in a similar way to tobacco. Legislation introduced in New Zealand to implement the FCTC demonstrates that it is within the government's jurisdiction to legislate to control the online environment, and this provides a precedent for other harmful commodities.

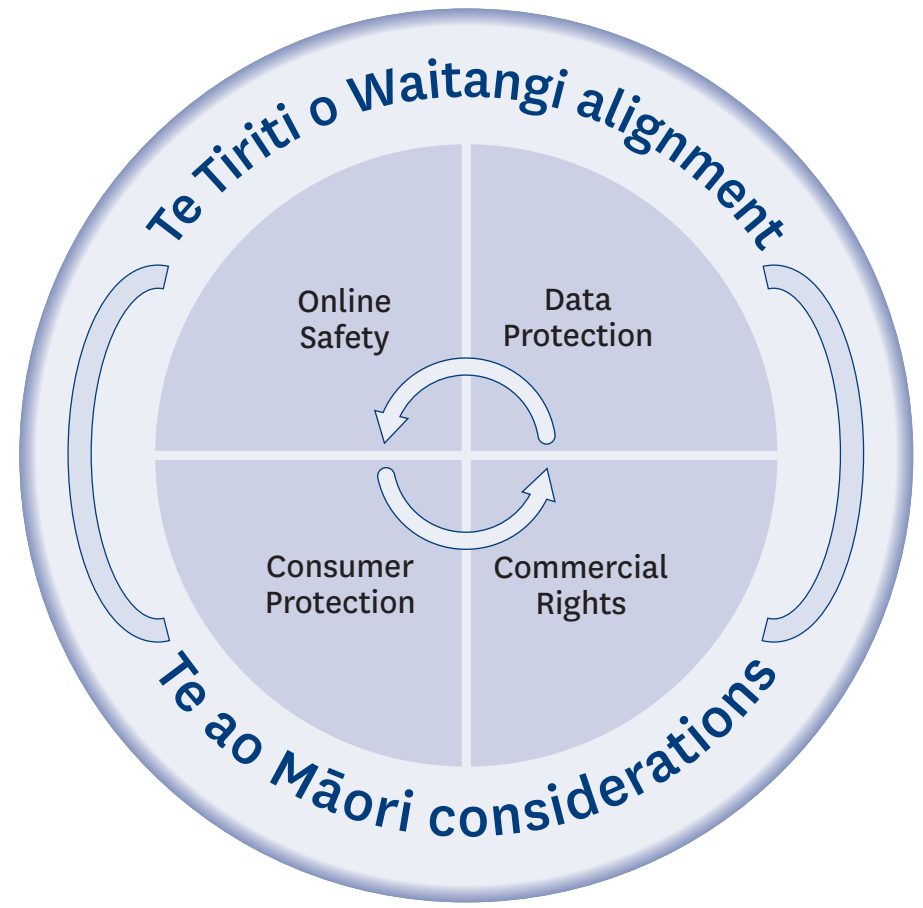
Bring harmful commodity marketing under the online protection rubric

Given the level of harm posed by harmful commodity marketing, it is important that it is considered under the current protective rubric applied to other areas of online safety/protection or online harm. The government regulates copyright, censorship, harmful communications and broadcasting standards and protects intellectual property, copyright, data, privacy and consumer rights. The current regulatory system is fragmented and outdated. Harmful commodity marketing needs to be included in considerations regarding online protection and future regulatory responses.

Figure 1, developed by the authors, provides a visual representation of the four overarching areas of online protection or rights that are currently regulated in New Zealand. The prolific marketing of harmful commodities online should be included in this framework. Figure 1 also highlights how any approach to protecting the New Zealand public or giving rights to the public must be consistent with te Tiriti o Waitangi and must respect and honour te ao Māori perspectives. This is not only to honour te Tiriti, but also to reduce unacceptable inequities experienced by Māori.

Digital marketing of unhealthy commodities could potentially be regulated under a mix of consumer protection, data protection or online safety law. This is due to the programmatic nature of digital marketing, its heavy reliance on collecting wide-ranging information and data from users and using this information to target potential consumers. Further legal analysis is required to determine whether the best legislative approach is to amend other areas of law (e.g., consumer protection law, privacy law, data protection or the proposed online safety law) or develop separate, fit-for-purpose legislation. Either way, a variety of definitional, ethical and technical

Figure 1: New Zealand's online protection framework



issues will need addressing. This includes considerations around the right to freedom of expression and free speech, and how this should be weighed against protecting the public from harm. Another issue is finding technical and practical ways to ensure that marketing that originates from outside New Zealand is adequately captured under the regulation. This is an issue that is being grappled with by many governments around the world: how can they control marketing that is developed in other jurisdictions, but that appears within the feeds of their own citizens on global social media and other platforms?

There have been recent changes to legislation in other parts of the world to ensure greater protection of online users. For example, the European Union has introduced significant data protection and privacy laws, including the Digital Services Act and the General Data Protection Regulations.¹ While these regulations are leading the way, they do not yet protect users from the full extent of harmful commodity marketing. Countries such as Australia, the United Kingdom, Ireland and

Canada have passed, or are attempting to pass, online harm bills that moderate illegal or harmful content such as child pornography and hate speech, and some governments are moving to regulate the dissemination of misinformation and disinformation. The United Kingdom is also proposing a legislative response to online advertising that would ban currently illegal and legal advertising, such as gambling or alcohol advertising to minors, for example (UK Government, 2023).

Although this article has focused on legal protections for the whole population, we note that there is an extensive literature base justifying the need for a legislative response to protect children from harmful marketing, particularly under the United Nations Convention on the Rights of the Child and subsequent documents (e.g., Optional Protocol 25). Any legislative response would need to aim to reduce all online marketing of harmful commodities, and not just marketing directed at children, to effectively protect children who operate in general online environments developed for adults. The challenges and issues raised

in this article about regulating harmful commodity marketing are likely to be relevant to regulating other forms of harmful industry marketing, such as of gambling, or other online harm issues such as misinformation or disinformation.

Conclusion

The harm caused by the marketing tactics of harmful commodity industries

necessitates a legislative response by the government. It is time to bring such marketing under the rubric of online protection applied to other areas where the public interact with the digital ecosystem. Any regulatory response needs to embed te Tiriti principles from the outset and consider te ao Māori to ensure that the unacceptable inequities that exist are not perpetuated or exacerbated.

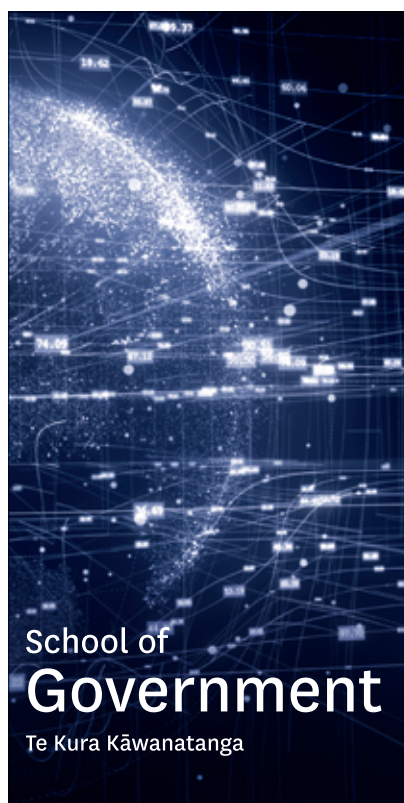
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