ACCC Digital Platforms Services Inquiry

September 2022 Report on updating competition and consumer law for digital platform services

Google's Response to the ACCC's Discussion Paper

8 April 2022

Introduction and Summary

We welcome the opportunity to comment on the ACCC's consultation to update Australia's competition and consumer law for digital platforms. The Discussion Paper sets out a vision to ensure that Australian consumers and businesses benefit from high-quality and innovative products and services, and are protected from harmful content and exploitative behaviour online.

We support that vision. Thoughtfully-designed and appropriately enforced competition and consumer laws benefit consumers, businesses, and platforms. Independent regulators can give consumers confidence their interests are being protected as they shop, search, and socialise online. And protection against opaque or unfair practices makes it more likely consumers will use platforms in the long-run. We appreciate the opportunity to contribute ideas and evidence to the discussion of whether existing competition and consumer rules should be adjusted – or new rules introduced – for Australia in the digital age.

We recognise that digital platforms' popularity has given rise to debate about how well competition law works in digital markets. New regulation is being proposed not only in Australia, but in the EU, the UK, the USA and parts of Asia. Introducing new regulation, however, is not costless. Given the high-degree of innovation and dynamism[1] in digital markets, and the benefits that platforms bring Australians in their daily lives,[2] any intervention must be well thought through to prevent unintended harm.[3]

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[1] Benedict Evans reported that Amazon's advertising revenue increased from just over $4bn at the end of 2017 to $14bn by 2019. At the end of 2021, Amazon reported $31bn of advertising revenue. See Benedict Evans 'TV, merchant media and the unbundling of advertising' (18 March 2022). Similarly, the Digital 2022 Global Overview Report reported that TikTok was the most-downloaded mobile app in 2021. Bytedance reported that TikTok's advertising reach increased by 60 million users in the past 90 days, taking worldwide advertising reach to roughly 885 million users by the start of 2022. See We are Social and Hootsuite, 'Digital 2022: Another Year of Bumper Growth' (26 Jan 2022). On 1 April 2022, Nine announced it had launched an exclusive partnership with ad-tech/martech platform AdGreetz to introduce new 'Dynamic Ads' technology. See Nine, 'Nine launches cutting edge advertising platform on 9Now' (Media Release, 1 April 2022).

[2] Google's products create over AU$50 billion of annual economic value in Australia. See AlphaBeta, *Google's Economic Impact in Australia* (December 2020), 5. In the Discussion Paper's words, digital platforms "*provide consumers and businesses with significant benefits*"; they have "*facilitated new and efficient ways for Australian businesses to provide innovative services, promote their products and quickly and easily reach consumers*" (see 4). As Rod Sims has explained, digital platforms have been "*true innovators* [...] *they provide products that consumers and business users value hugely.*" See Rod Sims, 'Protecting and promoting competition in Australia' (Speech, Competition and Consumer Workshop 2021 - Law Council of Australia, 27 August 2021).

[3] A review of academic studies, literature, and OECD papers by the CMA found that: "*Greater regulation is – on average – associated with less competition. For instance, countries with lower levels of product market regulation tend to have more competitive markets and enjoy higher rates of productivity and economic growth*". See Competition & Markets Authority, *Regulation and Competition: A Review of the Evidence* (January 2020), 3-4.

Accordingly, it is vital to ensure that any new regulatory framework will reliably secure additional benefits, while not dampening incentives to innovate and invest. It would be counterproductive if a new regulatory framework impeded innovation, efficiency and competition to the detriment of consumers, businesses, and the economy at large.[4] To that end, our response makes the following key points.

Reform should follow only after analysis demonstrates that the benefit of new rules would outweigh the potential downsides. This has not yet been established. As a first step, the ACCC's report to Government should explain the outcome that a new regulatory framework is seeking to achieve for Australian consumers and businesses.[5] The report should identify the potential downsides of any new regulatory framework (including for innovation, efficiency and competition) and weigh those against its expected benefits. Part of that analysis should consider whether existing competition, consumer, and privacy laws are capable of addressing potential concerns and might be a more proportionate means to achieve these outcomes. The ACCC should also analyse the extent to which competition and product evolutions are already addressing some of its concerns (discussed further in **Schedule A** with respect to Search, Play and Ad Tech). The Government can then evaluate this analysis as part of its response to the ACCC's recommendations.

Any new regulatory framework should only seek to tackle and prevent unambiguous harm arising from a lack of competition. Any new framework should focus on addressing only types of conduct that can be shown to be unambiguously harmful, and which are not capable of being addressed by existing laws. It should not, by contrast, cover conduct that is merely speculated as a theoretical possibility to be harmful. In addition, economy-wide harms that are not specifically related to a loss of competition – such as online scams, fake reviews, and opaque data practices – should be addressed by economy-wide reforms, such as reforms to consumer and privacy law, rather than platform-specific regulation.

The ultimate objective of any new regulatory framework should be to promote competition and innovation to the benefit of consumers, not to shield firms from competition. Any new regulatory framework for digital platforms should adhere to the following six core principles:

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[4] In respect of wide-ranging regulatory reforms proposed in the ACCC's Digital Platforms Inquiry Preliminary Report (many of which remain in the Discussion Paper), the Australian Productivity Commission found that: "*The disruption arising from digital platforms is complex and uncertain, and while there may be some adverse consequences there are also transformational benefits for consumers and firms. There is a risk that the preliminary report is underestimating the costs and consequences of proposed interventions*." See Productivity Commission, *Growing the Digital Economy in Australia and New Zealand: Maximising Opportunities for SMEs* (January 2019), Box 2.6, 47.

[5] For example, the Discussion Paper discusses "*considerations*" for a new regulatory framework as including: encouraging innovation, acting proportionately, ensuring procedural fairness, promoting certainty, and considering incentives for investment (see Discussion Paper, Q4).

- **Principle 1:** Promoting competition and innovation, and enhancing the welfare of consumers, should be the ultimate objectives for this type of regulatory framework. A regulatory framework that shields companies from robust competition would ultimately operate at consumers' expense.
- **Principle 2:** Preventing competitive harm and permitting evidence-based justifications for conduct under scrutiny should be embedded in the overarching framework.
- **Principle 3:** The rules on conduct should be necessary and proportionate to the seriousness of anticipated harm and the likelihood of it occurring.
- **Principle 4:** Suitable procedural protections and review mechanisms should be incorporated to ensure the integrity of a new regulatory framework. Full merits review by a Court should be available for decisions that have legal consequences.
- **Principle 5:** Any changes to the rules should follow evidence and consultation; there should be clear conditions, not unfettered discretion, to change rules or introduce additional rules.
- **Principle 6:** The rules should avoid creating overlapping obligations that are inconsistent with other regulatory frameworks.

Some potential measures outlined in the Discussion Paper illustrate the dangers of a regulatory framework that does not support these principles. For example:

- The Discussion Paper refers to mandatory data sharing and access measures. Such rules could have negative consequences for consumer privacy and businesses' confidential information, as well as enabling the spread of misinformation. Depending on the design, mandatory disclosure of click-and-query data to rival search engines could, for example, disclose Australians' sensitive information to third parties, including those influenced by certain states and autocratic regimes.[6]
- At the same time as suggesting measures to increase data sharing between rivals, the Discussion Paper discusses introducing rules that limit or ban a platform using data across its own services. These are efficiency-harming measures – aiming to 'level down' rather than 'level up' competition. This could deprive Australians of useful services, expose them to harmful practices, and introduce undesirable friction into the consumer experience. For example, we currently use cross-service information to detect fraudulent activity; a limitation or ban on data use could prevent us protecting the consumer in this way.

[6] See Andrew Roth, 'Russian internet giant grants veto powers to Kremlin-linked body', *The Guardian*, 18 November 2019. See Vincent Ni, 'Yahoo withdraws from China as Beijing's grip on tech firms tightens', *The Guardian* (3 November 2021).

- The Discussion Paper proposes a ban on self-preferencing, referring in particular to Search. However, outright bans on self-preferencing – without considering benefits to consumers and whether there is competitive harm – could deprive Australians of useful innovation. Consider our introduction of a thumbnail map in Search: multiple courts and authorities have validated this product improvement.[7] But faced with an outright ban on self-preferencing, we might never have introduced that beneficial design in Australia. More generally, outright bans on self-preferencing, without considering justifications or harm, call into question any vertical integration, which is widely regarded as efficient.[8] To take one example: a modern smartphone comes with multiple downstream services like email, phone, music, video, GPS, calculators and myriad other services. Blanket bans on self-preferencing would restrict a provider from introducing an integrated smartphone.

There is no evidential basis for a digital platform specific merger regime. Many commentators have suggested that Australia's current merger regime is working well, and that there is no basis for a tailored test for acquisitions by large digital platforms.[9] The current

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[7] For example, in *Streetmap*, Mr Justice Roth dismissed complaints raised against Google's display of the map. The judge held that Google's display of a thumbnail map was an "*indisputable*" product improvement and "*procompetitive*". See *Streetmap.EU Limited v Google* [2016] EWHC 253 (Ch), [84]. Likewise, the Taiwan Fair Trade Commission rejected complaints raised against the map, finding that it served "*to improve its users' search experiences*". See Su-Wan Wang & Elizabeth Xiao-Ru Wang, 'Focus on Innovation: A Review of the Taiwan Fair Trade Commission's Investigation on Google Maps' (2016), Summer 2016 1(2), *Competition Policy International Antitrust Chronicle*, 8. The US FTC dismissed complaints against our display of results like the map, finding that they represent a product improvement for users. The FTC stressed that "*Product design is an important dimension of competition and condemning legitimate product improvements risks harming consumers*". See Federal Trade Commission, *Statement of the Federal Trade Commission Regarding Google's Search Practices In the Matter of Google Inc FTC File Number 111-1063* (3 January 2013), 3. The Competition Commission of India decided that "*showing a map in response to queries for addresses and local businesses benefits users*". See Competition Commission of India, *Case No. 07 of 2012 with Case No. 30 of 2012* (8 February 2018), 85.

[8] For an expression of this consensus, see Organisation for Economic Co-operation and Development, Directorate for Financial and Enterprise Affairs Competition Committee, *Vertical Mergers in the Technology, Media and Telecom Sector* (Background note for item 10 of 131's meeting of the Competition Committee on 7 June 2019, 2 May 2019); and Simon Bishop, Andrea Lofaro, Francesco Rosati and Juliet Young, *The Efficiency-Enhancing Effects of Non-Horizontal Mergers* (Report by RBB Economics for DG Enterprise and Industry, 1995). The ACCC's Merger Guidelines (November 2017) recognise that *"It is often the case that vertical mergers will promote efficiency by combining complementary assets/services which may benefit consumers"*, para. 5.4 and 5.19.

[9] Business Council of Australia, Submission to the Federal Treasury on the final report of the Digital Platforms Inquiry, *ACCC Digital Platforms Inquiry* (20 September 2019), 4; Dirk Auer, *The Limits of Australia's Digital Platforms Inquiry* (Paper for Competition Policy International News, 12 November 2019), 2; Stephen Peter King, *The Australian Competition and Consumer Commission's Proposed Merger Reforms* (21 October 2021); George Siolis, 'Tougher tests for mergers may backfire on watchdog', *The Australian* (online, 13 June 2019); Graeme Samuel, 'It's the ACCC that's flawed, not the merger laws', *Australian Financial Review* (online, 1 September 2021).

regime offers flexibility and efficiency, and is sufficient to bring potentially anti-competitive transactions to the ACCC's attention. We are not aware of evidence that the ACCC is missing anti-competitive acquisitions in the digital sector.

By contrast, lowering the threshold for establishing competitive harm in acquisitions by large digital platforms could result in the chilling or prohibition of procompetitive mergers that could otherwise bring significant benefits to Australian consumers. This could in turn dull incentives to innovate by removing exit and growth options for startups and other strategic partnerships. It is not in keeping with the Government's vision for Australia to be a leading digital economy and society by 2030.[10] Consultation on the ACCC's proposals for broader merger law reforms should be completed before considering the need for digital platform-specific rules.

We welcome the opportunity to contribute to this critical debate. We stand ready to discuss these important issues with the ACCC further throughout its inquiry.

Question 1: What competition and consumer harms, as well as key benefits, arise from digital platform services in Australia?

Digital platforms provide Australian consumers and businesses with significant benefits. Businesses (emerging, small and large) can become more widely known and accessible to and for consumers; goods and services can be compared without effort; and the world's information is instantly accessible and findable to the general public.

Platforms create substantial economic value to the Australian economy. Research from the Tech Council found that the tech sector contributed *"$167 billion to the Australian economy in FY2021, equivalent to 8.5% of GDP."*[11] In 2020, the economic value created by Google's apps and platforms was worth $39 billion for Australian businesses and $14 billion for Australian consumers.[12] An estimated $6.1 billion worth of consumer surplus is derived from Google services that increase productivity and convenience.[13] And platforms innovate constantly, as shown in **Annex Q.1.1**.

Google seeks to bring these benefits to consumers and businesses by promoting an open Internet that is accessible to all — this is a long-standing Google commitment.[14] We help businesses reach large numbers of consumers by building high-quality and innovative products that are valued by both groups:

[10] Commonwealth Government, 'Digital Economy Strategy', *Australia's Digital Economy* (Web Page, 2022).
[11] TechCouncil, *The economic contribution of Australia's tech* (August 2021), 5.
[12] AlphaBeta, *Google's Economic Impact in Australia* (December 2020), 5.
[13] AlphaBeta, *Google's Economic Impact in Australia* (December 2020), 6.
[14] Google, 'The meaning of open', *Google Official Blog*, (Blog Post, 21 December 2009).

- Google started as a search engine to help consumers navigate the Internet. Google Search is accessible by anyone in Australia without restrictions as to the platform or hardware they use. Australians overwhelmingly identify Google as their favourite search engine.[15] They switch to it in large numbers when Microsoft sets Bing as default on Windows.[16] The Discussion Paper finds that Google *"continually improve[s] the relevance of its search results."*[17] Our innovation of Search is relentless, as evidenced in **Annex Q.1.2**. To give just one example: in 2018, Google deployed more than 2,400 distinct changes to the Search product, each of which improved it in some way, large or small.

- Google launched Chrome as a cross-platform browser open to all websites. Chrome is consistently identified as the highest quality and fastest browser.[18] It is popular with Australians on all platforms, including where rivals are set as default.[19]

- Google developed Android as a free, open-source, and customisable mobile platform. Android represents an alternative to closed, walled-garden models like Apple and proprietary environments like Windows – the two leading operating systems in Australia.[20] On Android, OEMs can preload third-party app stores and apps, and

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[15] Google, September 2021 Report on market dynamics and consumer choice screens in search services and web browsers: Google's Response to ACCC Issues Paper, *ACCC Digital Platforms Services Inquiry* (7 May 2021), para. 8, 5.
[16] Google, September 2021 Report on market dynamics and consumer choice screens in search services and web browsers: Google's Response to ACCC Issues Paper, *ACCC Digital Platforms Services Inquiry* (7 May 2021), para. 9, 5.
[17] Discussion Paper, 41.
[18] See Ian Paul, 'Best web browser: Chrome, Edge, Firefox and Opera go head-to-head', *PCWorld* (Article, 17 April 2020) ("*A perennial favorite, Google Chrome tops the metrics charts of both StatCounter and NetMarketShare by a huge margin.")*. See also Mark Coppock, 'The best web browsers for 2022', *digitaltrends* (Article, 2 March 2022) ("*... it's easy to see why Chrome is the most popular and the best web browser*"). See also Sean Riley and Paul Wagenseil, 'Best Android browsers in 2022', *tom's guide*, (Article, 10 March 2022) ("*Google Chrome still came out on top as the best all-around choice*"). See also Dion Dassanayake, 'Your Chrome browser is getting a whole lot faster thanks to new Google update', *Express* (Article, 27 August 2020).
[19] Chrome's share of browsers on Windows is around 74% compared with the default Edge, with only 11%. See Google, September 2021 Report on market dynamics and consumer choice screens in search services and web browsers: Google's Response to ACCC Issues Paper, *ACCC Digital Platforms Services Inquiry* (7 May 2021), para. 9, 5.
[20] In respect of mobile operating systems, the ACCC found that *"Apple's iOS accounts for roughly half of mobile operating systems in Australia."* In respect of desktop operating systems, the ACCC found that "*Together, Apple and Microsoft account for the majority of the supply of desktop operating systems in Australia... As at June 2021, Microsoft's Windows made up almost two thirds (63%) of all desktop operating systems in Australia, while Apple's macOS accounts for the remaining third (31%)*." See ACCC, Interim report No.3 - Search defaults and choice screens, *ACCC Digital Platform Services Inquiry* (September 2021), 30, 32.

consumers can download apps in a matter of seconds. Consumer satisfaction with Android is extraordinarily high.[21]

Even though there are clear benefits from digital platforms – and we are proud of the benefits that our products bring consumers and businesses – that doesn't mean regulators shouldn't be on the lookout for abusive or exploitative conduct. In our view, however, any new regulatory framework should focus on addressing unambiguous harm arising from a lack of competition,[22] which is not capable of being addressed by effective enforcement of existing laws or other less intrusive measures. As the Minister for Superannuation, Financial Services and the Digital Economy, Senator the Hon Jane Hume, recognises, "*regulation must be fit for purpose, technology neutral, and it must be based on harms*."[23] By contrast:

- Speculative harm is not suitable for *ex ante* regulation. Regulating platform activity that merely 'could' or 'might' give rise to harm makes the analysis about the costs and benefits of any intervention necessarily speculative, and risks chilling innovation by outlawing conduct that is in fact procompetitive. **Annex Q.1.3** outlines a number of 'harms' identified by the ACCC with respect to Google that we do not think are substantiated.[24] We encourage the ACCC to closely examine these issues before concluding they are all suited for a new regulatory framework and would welcome further discussion on these important points.

- Economy-wide harm is not suited for a regulatory framework focused only on digital platforms. Harms that are unrelated to a lack of competition and affect all firms – such as online scams, fake reviews, and opaque data practices – should be addressed by economy-wide reforms, such as reforms to consumer and privacy law, rather than platform-specific regulation.

Question 2: Do you consider that the CCA and ACL are sufficient to address competition and consumer harms arising from digital platform services in Australia, or do you consider regulatory reform is required?

[21] The CMA found that "*Survey evidence indicates that overall satisfaction with both iOS and Android smartphones is also high with over 9 in 10 satisfied with their device. Samsung owners ([60% to 70%] very satisfied) and iPhone owners ([60% to 70%] very satisfied) report particularly high satisfaction.*" See CMA, *Research and analysis interim report* (26 January 2022).
[22] The Discussion Paper makes clear that *both* anti-competitive conduct and market power is a necessary prerequisite: "*To the extent that dominant digital platforms engage in anti-competitive conduct, this can lead to higher prices, reduced quality, reduced investment and innovation, and reduced choice*", 39.
[23] Senator the Hon Jane Hume, *Opening the virtual frontier* (Speech, Address to Blockchain Week, Sydney, 21 March 2022).
[24] See also **Schedule A**.

Existing competition, consumer protection, and privacy laws should be the starting point to address concerns that have been raised in digital markets.

CCA. One of the defining features of antitrust law is its ability to adapt to new situations, based on the flexible consumer welfare standard. Antitrust law has been used to sanction all manner of different behaviours and business models – spanning the analogue to the digital era – with new theories of harm frequently emerging. For example, the Discussion Paper discusses anti-competitive bundling that lacks justification as a potential prohibition under a new regulatory framework. But that is precisely the type of conduct that s.46 of the CCA is designed to address.[25]

The ACCC advocated for changes to s.46 of the CCA, including to address concerns with digital platforms. In 2018 Rod Sims stated "*[W]e are, of course, aware of arguments in relation to dominant platforms and their entry into various 'vertical' businesses … The ACCC is turning its mind to such issues. The Harper changes now give us the tools to do so, which we did not have before.*" Yet the ACCC has not fully tested its new powers under s.46,[26] having only brought one case since the reforms were introduced. That is insufficient to establish that the law does not have important consequences or does not work. As Rod Sims also explained, "*the change in the law has changed behaviour*."[27] The ACCC has also established a relatively new Digital Platforms Unit with $27 million in funding and extensive investigative powers. The ACCC, through this new Digital Platforms Unit and with strengthened competition laws, should properly utilise these new powers before seeking to introduce a new regulatory framework.

ACL. Australia has one of the strictest consumer protection regimes across jurisdictions.[28] The ACL includes broad prohibitions on misleading or deceptive conduct, false representations and unconscionable conduct – and its unfair contract terms regime will soon be bolstered and expanded.[29] It confers extensive powers on the ACCC, including the ability to seek significant

[25] The ACCC's Guidelines on misuse of market power (August 2018) list "*tying and bundling*" as a type of conduct that has "*great potential to contravene s.46*", para. 3.2. The guidelines also acknowledge that "*Tying and bundling are common commercial arrangements which usually do not harm competition and in many scenarios promote competition by offering consumers more compelling offers…*", para. 3.20, illustrating the dangers of outright prohibitions on such conduct.

[26] Rod Sims, *Address to the Law Council of Australia Annual General Meeting*, (Speech, Law Council of Australia - Annual General Meeting, 3 August 2018).

[27] Commonwealth, *Parliamentary Debates,* House of Representatives - Standing Committee on Economics, 18 September 2019, 20 (Rod Sims). See also Commonwealth, *Parliamentary Debates,* Senate - Economics Legislation Committee, 17 February 2022, 16 (Rod Sims). See also Rod Sims, *An agenda to boost Australia's economic prosperity and fairness*, (Speech, National Press Club, 23 February 2022).

[28] Rod Sims has stated *"the ACL is ahead of what most countries around the world have. I also suspect our ACL penalties are the highest available anywhere in the world."* See Rod Sims, *Continuing the ACL Journey*, (Speech, Ruby Hutchison Memorial Lecture 2022, 15 March 2022).

[29] On 9 February 2022, the Treasury Laws Amendment (Enhancing Tax Integrity and Supporting Business Investment) Bill 2022 was introduced into Parliament proposing changes to Australia's unfair contract terms laws that apply to consumer and small business contracts. Among the proposed changes is the introduction of new prohibitions that will attract significant penalties if violated.

civil pecuniary penalties, and issue infringement notices and public warning notices. These powers have been used extensively. The Federal Court has imposed more than $600 million in civil pecuniary penalties for breaches of the ACL.

If there is a need to reform the ACL further (*e.g.,* by introducing an unfair trading practices prohibition) there is no reason to limit these changes to digital platforms. Concerns about lack of consumer protections apply economy-wide, independent of a company's size or the competitive dynamics in its sector. In our view, Australian consumers should benefit from robust consumer protections not just on a small number of digital platforms, but on all businesses both online and offline.

Privacy law. The *Privacy Act 1988*, enforced by the Office of the Australian Information Commissioner (**OAIC**) regulates how businesses handle personal information. The OAIC can accept court enforceable undertakings, or bring proceedings seeking penalties for breach, as it has done in recent action against Meta alleging that Facebook violated privacy laws. Significant privacy law reform to strengthen the Privacy Act is currently underway. An exposure draft for a new Online Privacy Bill, if passed, would enable the creation of new binding online privacy codes for social media and other online platforms, as well as significantly increase penalties and enforcement measures.[30]

Any new regulatory framework should not seek to regulate these same issues. In fact, in places, the proposals in the Discussion Paper (*e.g.*, around forced data sharing) risk actively working against the Government's privacy reforms. We discuss this in more detail under Q9 below.

Accordingly, it is imperative for the ACCC to consider whether its proposals for new regulation may contradict or overlap with existing legislation or regulation.

Question 3: Should law reform be staged to address specific harms sequentially as they are identified and assessed, or should a broader framework be adopted to address multiple potential harms across different digital platform services?

In our view, whether reform is staged sequentially, or a broader framework is established, is less important than whether any regulatory framework is founded on principles that promote competition and innovation for the benefit of consumers. To identify the types of conduct that might be suitable for platform specific regulation, the following questions should be answered:

[30] The Attorney-General's Department is also conducting an ongoing review into the Privacy Act, which proposes a number of significant amendments, many of which are based on overseas regulations such as the European General Data Protection Regulation and the California Consumer Privacy Act.

- **Is the conduct caught by the existing law, if the law is effectively enforced?** Before additional regulation may be required, it must be established that the current law, effectively enforced, is not capable of preventing the identified harm to competition.
- **Is the conduct known to be unambiguously harmful to competition?** The conduct should be of a type that is known to be unambiguously harmful to competition and consumers, based on evidence. The ACCC's enforcement of the CCA or Court judgments that identify harm could help identify the types of conduct that are harmful and therefore suitable for a new regulatory framework.
- **Is the harm based on mere speculation?** Types of conduct that are merely speculated as a theoretical possibility to give rise to harm are not suitable for platform specific regulation.
- **Is the conduct clearly identifiable?** The conduct must be capable of being identified in a clear manner. This will allow platforms to understand their obligations, consumers and businesses to understand their rights, and assist the ACCC's enforcement.
- **Is the conduct an economy-wide harm or platform-specific harm?** Economy-wide harms, such as online scams, fake reviews, and opaque data practices, should (if current laws are found to be deficient) be addressed by economy-wide reforms, such as reforms to consumer and privacy law, rather than platform-specific regulation.

Question 4: What are the benefits, risks, costs and other considerations (such as proportionality, flexibility, adaptability, certainty, procedural fairness, and potential impact on incentives for investment and innovation) relevant to the application of each of the following regulatory tools to competition and consumer harms from digital platform services in Australia?

a) prohibitions and obligations contained in legislation
b) the development of code(s) of practice
c) the conferral of rule-making powers on a regulatory authority
d) the introduction of pro-competition or pro-consumer measures following a finding of a competitive or consumer harm
e) the introduction of a third-party access regime, and
f) any other approaches not mentioned in chapter 7.

We provide below our high-level observations on the necessary elements for a successful regulatory framework, to ensure that any future regulation is effective and enhances competition, innovation and consumer welfare. We believe it is more important first to establish the overarching principles for any regulatory tools, before discussing the precise mechanisms (*e.g.*, codes of conduct *vs*. legislation).

Introducing regulation is not costless. Improperly designed or implemented regulation can dull innovation, reduce competition, and chill investment. In respect of the wide-ranging regulatory reforms proposed in the ACCC's Digital Platforms Inquiry Preliminary Report (many of which remain in the Discussion Paper), the Australian Productivity Commission found that:

> *"Such regulation imposes costs on firms, consumers and governments, and these costs may outweigh the harms they might reduce... The disruption arising from digital platforms is complex and uncertain, and while there may be some adverse consequences there are also transformational benefits for consumers and firms. There is a risk that the preliminary report is underestimating the costs and consequences of proposed interventions."*[31]

A review of academic studies, literature, and OECD papers by the CMA found that: "*Greater regulation is – on average – associated with less competition. For instance, countries with lower levels of product market regulation tend to have more competitive markets and enjoy higher rates of productivity and economic growth.*"[32] Consistent with this finding, the Government's principles for policy making stipulate that "*regulation should not be the default option for policymakers: the policy option offering the greatest net benefit should always be the recommended option.*" Instead, "*regulation should be imposed only when it can be shown to offer an overall net benefit.*"[33]

With this in mind, we outline six core principles necessary for a regulatory framework to be capable of creating additional benefits for Australian consumers and businesses, and avoiding unintended harmful consequences:

Principle One: Promoting competition and innovation, and enhancing the welfare of consumers, should be the ultimate objectives for any regulatory framework

- Promoting and protecting competition, efficiency and innovation for the benefit of consumers should be the essential elements of the design, objective, and enforcement

[31] Productivity Commission, *Growing the Digital Economy in Australia and New Zealand: Maximising Opportunities for SMEs* (January 2019) Box 2.6, 46-47.
[32] CMA, *Regulation and Competition: A Review of the Evidence* (January 2020), 3-4.
[33] See Australian Government, *The Australian Government Guide to Regulation* (2014), 2. As the UK Penrose Report cautions: "*upfront powers are a headily-addictive drug for regulators to use, but they come with a high cost because they add far more red tape costs and regulatory burdens than traditional competition and consumer powers too. As a result, upfront powers create a high risk of "regulatory creep" which adds red tape costs steadily over time.*" See John Penrose MP, *Power To the People: Stronger Consumer Choice and Competition So Markets Work for People, Not The Other Way Around* (February 2021), 29. Likewise, as FTC Commissioner Christine Wilson has explained, previous attempts to ban vertical integration, impose broad non-discrimination rules, and require *"fair and just"* terms in the US proved complex to administer and disastrous to producers and consumers. See Christine S. Wilson, *Remembering Regulatory Misadventures: Taking a Page from Edmund Burke to Inform Our Approach to Big Tech*, (Speech, Address at the British Institute of International and Comparative Law, London, 28 June 2019), 2-3.

of regulation. Regulation that shelters firms from robust competition risks chilling or deterring innovation and would be counterproductive.

- The benefit of a proposed intervention should be considered against the burden it would impose.[34] If that burden is greater than the benefit, rule-makers should look for alternatives (such as enforcement under existing competition, consumer, or privacy laws) or reconsider the need to intervene at all.

Principle Two: Preventing competitive harm and permitting evidence-based justifications should be embedded in the overarching framework

- Any new regulation should permit companies to justify business practices or product designs based on factors such as: system integrity, security, consumer safety, quality, functionality, performance and utility. Enacting rules without appropriate safeguards risks adversely affecting current forms or outlawing new forms of procompetitive conduct.[35]

- Penalties and remedial action should only be possible if conduct is shown to be likely to harm competition. Otherwise, the new rules may end up outlawing conduct that is, in reality, procompetitive or competitively benign.

Principle Three: The rules on conduct must be necessary and proportionate to the seriousness of anticipated harm and the likelihood of it occurring

- Rules on conduct (and the consequences of non-compliance) should be necessary and proportionate to the seriousness of the anticipated harm and the likelihood of it occurring, assessed based on objective evidence.[36] More intrusive and burdensome regulation is more likely to distort competition, reduce efficiency and deter innovation.

- The first step in determining the necessity and proportionality of new rules is an assessment of the adequacy of the existing law, effectively enforced, or whether the conduct is capable of being addressed via less intrusive means.

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[34] The Australian Government has committed to the use of a cost–benefit analysis to assess regulatory proposals in order to encourage better decision making. See, Department of Prime Minister and Cabinet, *Cost-benefit Analysis Guidance Note*, (March 2020), 1.

[35] For example, the CMA recognises that *"conduct which may in some circumstances be harmful, in others may be permissible or desirable as it produces sufficient countervailing benefits,"* and envisages taking this principle into account when it designs its Code of Conduct. See CMA, *A new pro-competition regime for digital markets. Advice of the Digital Markets Taskforce*, (December 2020), 37.

[36] The Discussion Paper comments "*any new tools should be proportionate and targeted to minimise the risk of undue burden on market participants and any adverse outcomes on efficiency or innovation in relation to digital platform services*", 70.

- Any novel regulation of a type which is unprecedented or very rare in Australia should only be implemented when it is established that it is the only effective way to prevent particularly serious harm.
- To achieve this aim, rules should be crafted after careful testing, and detailed research as to their appropriateness and proportionality.

Principle Four: **Suitable procedural protections and review mechanisms should be incorporated to ensure the integrity of a new regulatory framework**

- The more intrusive and severe the regulation and sanctions associated with it are, the greater the procedural protections and review mechanisms should be.
- Full merits review by a Court should be available for decisions that have legal consequences for affected companies. Full rights of defence should also be available, including the right to review all evidence and comment on that evidence.
- The ACCC should publish reasoned decisions for actions taken under any new regulatory framework – both complaint rejections and infringement decisions. This is an essential procedural right. It is also important to create a body of precedent that helps digital platforms comply with their obligations.

Principle Five: Any changes to the rules should follow evidence and consultation; there should be clear conditions, not unfettered discretion, to change rules or introduce additional rules.

- The introduction of regulation and subsequent changes to regulation should be subject to a thorough and detailed consultation process. Any change to regulation should only be made when it is established on objective evidence that the change is necessary to address non-speculative harm.
- Affected businesses should be given a genuine opportunity to comment on the draft rules before they are implemented.
- Overarching limits on regulator power should be set, ideally in legislation.[37]
- Regulation should be periodically reviewed to test its continuing relevance.

[37] This is consistent with typical practice. For example, in making binding rules of conduct relating to carriers or carriage service providers under Div 4A of Part XIC of the CCA (a power that is available where "*there is an urgent need*" to make rules), the ACCC must take into account the matters in s.152BDAA (such as whether the rules promote the long-term interests of end users) and must not make rules that would have the effects in s.152BDA; the rules must expire within 12 months and do not apply to the extent they are inconsistent with aspects of the telecommunications regulatory framework, for example access agreements.

Principle Six: The rules should avoid creating overlapping obligations that are inconsistent with other regulatory frameworks.

- Inconsistent or duplicative obligations on digital platforms should be avoided. This could lead to unnecessary complexity, confusion, and unintended non-compliance. For example, concerns about privacy are properly addressed by the ongoing privacy reform process rather than a competition-based regulatory framework.[38]

We request the opportunity to discuss the precise scope and format of any regulatory tools the ACCC intends to recommend, as the ACCC's own thinking and proposals develop.

Question 5: To what extent should a new framework in Australia align with those in overseas jurisdictions to promote regulatory alignment for global digital platforms and their users (both business users and consumers)? What are the key elements that should be aligned?

Any new framework should seek to promote Australian consumers' welfare, while promoting and protecting robust competition, economic efficiency and innovation.

We do not see a clear international consensus on the evolution of competition rules. We see some proposals internationally that could foster interoperability and enhance consumer choice, but there are others that will make tech products overly rigid, depriving consumers of useful innovations in order to help a small set of rival firms. Where this is the case, we think any benefit from aligning with international developments is far outweighed by the costs, including to competition, efficiency, innovation and ultimately Australian consumers.

Question 6: Noting that the ACCC has already formed a view on the need for specific rules to prevent anti-competitive conduct in the supply of ad tech services and also general search services, what are the benefits and risks of implementing some form of regulation to prevent anti-competitive conduct in the supply of the following digital platform services examined by this Inquiry, including:

a) social media services
b) online private messaging services (including text messaging, audio messaging, and visual messaging)
c) electronic marketplace services (such as app marketplaces), and
d) other digital platform services?

We disagree that the ACCC has established the case for new rules in search or ad tech. The ACCC has not established, based on evidence, that the benefits of new rules would outweigh

[38] The Australian Government Guide to Regulation states: *"Policy makers must consult with each other to avoid creating cumulative or overlapping regulatory burdens."* See Department of Prime Minister and Cabinet, *The Australian Government Guide to Regulation* (2014), 6.

the costs. The ACCC has not tested the extent to which existing laws, properly enforced, could address these concerns, or the extent to which competition and product evolutions are addressing its concerns (see **Schedule A**). The ACCC's prior reports recognised that new rules in search or ad tech should only be implemented following further consultation.[39] The search and ad tech examples discussed below illustrate precisely why further analysis and consultation is needed.

Search. In Search, the ACCC has identified no evidence of harm to consumers or an innovation slowdown. On the contrary, Australians have more ways to search for information than ever before and the evidence shows that Australians are happy with the search services they have available – surveys show that Google is, by far, Australians' most popular search engine.[40] Bing is not popular in Australia because, as Microsoft has admitted, it has failed to invest here.[41] Google's continuing innovation is inconsistent with any suggestion that Australians suffer from reduced innovation in search (*see* **Annex Q.1.2**).

The ACCC previously speculated that defaults or pre-installation may harm consumers because they prevent consumers from switching due to consumer inertia. But defaults and pre-installation do not restrict users from reaching alternative services, as proved by a simple natural experiment: Microsoft pre-installs its Edge browser that defaults to Bing on Windows. But Google's share of search on Windows is 91%, while Bing's is 7.5%. Australians override Microsoft's defaults and choose their preferred alternative: Google. The ACCC's own consumer survey also confirms that the majority of users know about alternative browsers and search engines, know how to change their defaults, and reported it to be "*easy or very easy to do*"[42] (see **Annex Q.1.3**).[43]

Ad tech. The ACCC has also not established, based on evidence, that the benefits of new rules in ad tech would outweigh the costs, including to innovation, efficiency and ultimately

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[39] ACCC, Interim report No.3 - Search defaults and choice screens, *ACCC Digital Platform Services Inquiry* (September 2021), 18-19, 123. See also ACCC, Final Report, *Digital advertising services inquiry* (28 September 2021), 131-133, 172, 174.

[40] See Google, September 2021 Report on market dynamics and consumer choice screens in search services and web browsers: Google's Response to ACCC Issues Paper, *ACCC Digital Platforms Services Inquiry* (7 May 2021).

[41] In the context of Australia's proposed media bargaining code, Microsoft President Brad Smith agreed that Microsoft would have to improve to be competitive in Australia. He stated in an interview that Microsoft "*would need to invest*" because "*we readily recognise*" that Microsoft is not as high quality as Google in Australia. See Jade Macmillan, 'Microsoft backs media bargaining code, suggests Bing can fill gap if Google and Facebook depart', *ABC News* (Article, 3 February 2021). Mr. Smith also stated that Bing's share in the US, Canada, and UK, where it has made efforts to localise its service, was 20%-30%, and he attributed Bing's lower share in Australia to Microsoft's failure to invest in this country. See Linda Mottram, '"We believe": Microsoft President tells "PM" company backs news payment plan, but can it replace Google for search', *ABC*, (Radio Program Recording, 3 February 2021).

[42] Roy Morgan, *Consumer Views and Use of Web Browsers and Search Engine - Final Report* (September 2021), 9, 15-16.

[43] See also **Schedule A** regarding benefits from defaults and pre-installations.

publishers, advertisers and consumers, whose interests are not always aligned. For instance, the Discussion Paper observes that the level of fees charged for the supply of ad tech services "*likely reflected*" the market power that Google is able to exercise.[44] Yet the ACCC does not substantiate this claim with any evidence. In fact, the ACCC finds that ad tech prices have remained stable, or even fallen, over the past four years[45] (see **Annex Q.1.3**). On the other hand, the ACCC has acknowledged that publishers and advertisers value our ad tech products, and in particular benefit from efficiencies arising from integrations between our products.[46] This is also widely recognised in the industry.[47] A 2021 PwC Report on ad tech in Australia found that 70% of surveyed businesses reported that they choose Google's advertising technology products due to the ease of use, and 45% reported that they chose Google's products due to their greater effectiveness.[48]

The Ad Tech Inquiry Final Report also concluded that ad tech rules should be developed in consultation with "*designated providers, industry and other jurisdictions*". This is, for the ACCC, *"particularly important in ad tech due to the complexity of the services and the rapid changes that occur in these markets*."[49] This consultation needs to consider all relevant interests and issues before specific rules are proposed. For example, measures that increase transparency for one group may conflict with the protection of consumer privacy. Conversely, new restrictions on use of consumer data could impact publishers' ad revenue and reduce innovation.[50]

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[44] See Discussion Paper, 18.
[45] ACCC, Final Report, *Digital advertising services inquiry* (28 September 2021), 50.
[46] ACCC, Final Report, *Digital advertising services inquiry* (28 September 2021), 88-89.
[47] Google, ACCC Digital Advertising Services Inquiry: Google's Response to the Interim Report, *ACCC Digital Advertising Services Inquiry* (12 March 2021), 19-21. See also summary of May submissions in Barney Pierce, 'Answering your top questions about Google's advertising technology', *Google Australia Blog* (Blog Post, 14 January 2022) - *"A&A have said businesses wanted ad tech to be more closely integrated to improve turnaround times, reduce costs and protect publisher inventory, and that Google "took this feedback seriously". Omnicom Media Group shared that campaign implementation is easier for advertisers when using vertically integrated service providers, and that vertically integrated providers are able to provide superior inventory forecasting and delivery of programmatic guaranteed deals to publishers. SBS has said that vertical integration provides more 'streamlined operations' for users, and The Guardian observed that our integration of AdX into Google Ad Manager makes it easier for publishers to set up and run programmatic guaranteed campaigns, which can otherwise be a very manual and time consuming process."*
[48] PwC, Examination of the value created by the advertising technology industry in Australia (September 2021) (commissioned by Google Australia).
[49] ACCC, Final Report, *Digital advertising services inquiry* (28 September 2021), 133.
[50] For example, after the rollout of the GDPR, 'recorded conversions' (e.g. a user read an article; a user watched a video; a user bought an item etc) in European companies fell 12.5%. See Samuel Goldberg, Garrett Johnson and Scott Shriver, 'Regulating Privacy Online: The Early Impact of the GDPR on European Web Traffic & E-Commerce Outcomes', *SSRN Electronic Journal* (January 2019). Compliance costs for app developers also restricted revenue generation and limited innovation resulting in a reduction in apps being available. See Rebecca Jansen, Reinhold Kesler, Michael Kummer and Joel

Social media, messaging, and marketplaces. On social media, messaging and marketplaces (or any other digital platform services), it is difficult to comment in the abstract on the benefits and costs of "*some form of regulation*". Different services raise different issues. For example, messaging, social networks and mobile operating systems (**OSs**) are services where encouraging interoperability can benefit consumers, because of how these services are meant to operate:

- Messaging and social networks are communication services that are designed to be open and allow people to interact with friends and family, no matter what platform they're on. Email provides open standards that allow consumers to exchange messages in a reader-friendly format, no matter what email provider they use. It would be helpful for consumers to extend the benefits of interoperability that exist for email to messaging and social networking.

- Interoperability for messaging and social networks can have wider benefits as well. Lack of interoperability can lock consumers into platforms and prevent switching. The CMA, for example, recently described the harm caused by lack of such interoperability as creating a "*diminished experience*" and posing "*barriers to switching.*"[51] The CMA explained that promoting interoperability between social networks "*has the potential to facilitate consumer choice in platform markets and foster greater innovation.*"[52]

- Mobile OSs, by design, enable interoperability. An OS is 'system software' that controls the basic functions of a computer and enables the user to run applications on it. The value that consumers get from an OS depends on the applications and hardware they can use with it. Independent software vendors and hardware manufacturers build products for the most popular OSs and depend on effective interoperability. Interoperable OSs thus become more attractive, and more valuable for consumers and businesses.

Question 7: Which platforms should such regulation apply to?

If regulation were deemed necessary, we would encourage the ACCC to look beyond the platforms identified in the ACCC's prior market studies, which were conducted under limited

Waldfogel, *GDPR and the Lost Generation of Innovative Apps*, (Conference Paper, National Bureau of Economic Research, 8 February 2021).

[51] CMA, *Mobile ecosystems: Market study interim report* (14 December 2021), 107.

[52] CMA, *Mobile ecosystems: Market study interim report* (14 December 2021), W3.

terms of reference.[53] Relying on these prior studies is not a sufficient basis for a comprehensive analysis of potentially relevant digital platforms and associated *ex ante* rules.

Rather, the ACCC's report to the Government should more systematically examine which markets have the characteristics that merit intervention and what conduct causes unambiguous harm that is not covered by existing rules. In particular, the ACCC should consider the following three points.

First, the ACCC should assess the extent to which concerns cannot be adequately addressed via existing laws, effectively enforced.

Second, any new regulatory framework should not apply to all of a company's products simply because a platform is designated because of its success in one particular area. Any new regulatory framework should apply only to a discrete set of products or services of the company determined by reference to a clearly defined threshold or test.

Third, the Discussion Paper identifies four characteristics of digital markets that may give rise to concerns and might therefore warrant a new regulatory regime: economies of scale; network effects; vertical integration and multi-market activities; and data collection.[54] Many companies across the digital (and broader) economy enjoy economies of scale, exhibit network effects, have multi-market activities, and place importance on data, such as e-commerce platforms (like Amazon, eBay, Gumtree, Kogan), operating systems (Microsoft), mobile operating systems (Apple), cloud computing providers (Amazon, Microsoft, Oracle, Salesforce), delivery platforms (Uber, Menulog), streaming platforms (TikTok, Netflix, Spotify), social media services (Facebook, Twitter, Reddit), news publishers (like NewsCorp), and messaging services (WhatsApp, iMessage, Snapchat).

Microsoft, for example, is the most used operating system in Australia.[55] It has activities across multiple areas (cloud, gaming, OSs, hardware, productivity, search, assistants, jobs),[56] enjoys economies of scale, and has expanded through acquisitions[57] – it is currently planning the largest ever tech acquisition with its $68.7 billion Activision deal. The Discussion Paper does not, however, expressly call out Microsoft as a large digital platform suitable for digital platform regulation in sections 3.1.1-3.1.3. That is the case despite the Discussion Paper later finding that

[53] The ACCC's current Digital Platforms Services Inquiry is limited to the following digital platform services: internet search engine services, social media services, online private messaging services, digital content aggregation platform services, media referral services provided in the course of providing one or more of the previously mentioned services, and electronic marketplace services. See *Competition and Consumer (Price Inquiry - Digital Platforms) Direction 2020*.
[54] See Discussion Paper, 26-36.
[55] The ACCC found that *"As at June 2021, Microsoft's Windows made up almost two thirds (63%) of all desktop operating systems in Australia."* See ACCC, Interim report No.3 - Search defaults and choice screens, *ACCC Digital Platform Services Inquiry* (September 2021), 32.
[56] See Discussion Paper, 31-32.
[57] See Discussion Paper, 21.

Microsoft seeks to *"disabl[e] the choices affirmatively made by consumers"*[58] – an allegation that the Discussion Paper does not advance against Google.

Addressing data advantages

Question 8: A number of potential regulatory measures could increase data access in the supply of digital platform services in Australia and thereby reduce barriers to entry and expansion such as data portability, data interoperability, data sharing, or mandatory data access. In relation to each of these potential options:

a) What are the benefits and risks of each measure?

b) Which data access measure is most appropriate for each of the key digital platform services identified in question 6 (*i.e.* which would be the most effective in increasing competition for each of these services)?

The Discussion Paper outlines three different types of data intervention which give rise to different benefits and risks: (i) data portability, (ii) data interoperability, and (iii) mandatory data sharing or access. We discuss each of these measures below.

Data portability

Data portability measures seek to put consumers in control by allowing them to transfer their data.[59]

In our view, data portability can help drive innovation and competition by enabling consumers to securely switch among services from different providers, empowering them to try new services, and allowing them to choose the offering that best suits their needs. We promote data portability in several ways:

- We've developed tools such as Google Takeout, which allows consumers to easily download their data from a variety of Google services in commonly used, machine-readable formats and export it to rivals.[60] For example, with Google Takeout, consumers can download and export all their Google Fit data to another device.

- We participate in industry efforts such as the Data Transfer Project with other digital platforms including Apple, Meta, Microsoft and Twitter.[61] This extends data portability beyond the download of data from a service provider to the direct transfer of that data

[58] See Discussion Paper, 46.
[59] The Discussion Paper describes them as measures that *"facilitate transfers of data at a consumer's request"*, 88.
[60] See Google, 'Google Takeout', *Google Account* (Web Page, 2022).
[61] See Data Transfer Project, 'About us', *Data Transfer Project* (Web Page, 2022).

to other participating providers (*e.g.*, transferring photos directly from Google Photos to Microsoft OneDrive).[62]

- We provide advertisers with reporting data so that they can evaluate the performance of Google's ads and optimise their bidding strategies.[63]
- We provide website operators with analytical data on consumer interaction with their website via Google Analytics.

Data interoperability

The Discussion Paper describes data interoperability as "*the use of common frameworks and open systems to store and process data in ways that are technically compatible*".[64] The goal is to "*facilitate multi-homing across different digital platform services*".[65]

In our view, measures to promote common frameworks and open systems for consumers to move data between services could have similar benefits as for data portability, provided that the actual data sharing would be at consumers' request. This is what the Data Transfer Project seeks to achieve: it is an open-source, service-to-service data portability platform to enable consumers across the web to move their data between providers, based on a common standard.[66]

By contrast, data interoperability measures should not provide a mechanism for rivals or other third parties to demand access to consumers' data on another platform. That would provide consumers with less, not more, control over their data. For example, the Discussion Paper refers to the measures Google has taken to limit users' IDs being shared across many providers as an example of Google limiting data interoperability.[67] But the ACCC's Ad Tech Inquiry Final Report acknowledged that "*sharing user IDs across many providers can give rise to privacy issues*" and that it "*does not consider that wider sharing of user IDs is a suitable and proportionate solution*."[68]

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[62] Likewise, customers of DV360 and Campaign Manager control all data derived from their use of these services and can export a significant amount of reporting and analysis which they can choose to provide to anyone, without restriction.
[63] Google also makes it easy for advertisers to port their data, through, for example, its Google Ads Application Programming Interface (API) and Ads Editor.
[64] Discussion Paper, 90.
[65] Discussion Paper, 90.
[66] Data Transfer Project, 'About us', *Data Transfer Project*, (Web Page).
[67] Discussion Paper, 90.
[68] ACCC, Final Report, *Digital advertising services inquiry* (28 September 2021), 165.

Forced data sharing and data access

The third data measure the Discussion Paper discusses involves mandatory data sharing or data access.[69] The Discussion Paper does not identify any benefits to such measures.[70] It presents no evidence that rivals need Google's data to be able to compete:

- For example, while search engines rely on data for their ranking, each search engine generates requisite data from the use of its own service. User search data is not a limiting factor for search engines to grow. There are many competitive factors—unrelated to user search data—through which search engines can improve the quality of their service and attract more users that then generate more search data. These factors include, for example, the efficiency and effectiveness of the service's indexing system; the functionality and features offered by the service; the format and design of its results; the creativity of its engineers who develop its algorithms; the relevance and quality of the information it provides (as, *e.g.*, reflected in Google's Rater Guidelines); continued experimentation and innovation; and the efficiency and speed of the server infrastructure that supports the service.[71]

- The same is true of ad tech. The ad tech space is crowded, and characterised by frequent entry and expansion.[72] Ad tech rivals do not need Google's data in order to compete. Nine, for example, recently introduced new digital technology that allows marketers to provide 9Now users with more precisely tailored messaging, stating its new technology is "*underpinned by Australia's largest data footprint*".[73]

While the Discussion Paper presents no evidence or analysis to support that forced data sharing brings benefits, it also ignores that forced data sharing or data access gives rise to serious risks:

First, it would reduce incentives to compete and innovate. Rivals are meant to compete, not to cooperate. Even for dominant companies, keeping an asset and not sharing that asset

[69] Discussion Paper, 90.
[70] The Discussion Paper includes an abstract reference to "*resolve data bottlenecks or to enable firms to develop new or better* products *or services or to train algorithms*" (90), but there is no explanation of what this means, or any substantiation of "*data bottlenecks*".
[71] See also A.V. Lerner, *The role of 'Big Data' in online platform competition*, (26 August 2014).
[72] Paul Wallbank, 'Amazon Advertising announces official Australian launch', *Mumbrella* (Online, 10 April 2019); Greg Sterling, 'Microsoft launches new audience network, 'Audience Ads' at Bing Partner Summit', *Search Engine Land* (Online, 4 May 2018); Adzymic, 'Adzymic expands into Australia, inks partnership with Allegiant Media', *Adzymic* (Web Page, 14 May 2019).
[73] Nine, 'Nine launches cutting edge advertising platform on 9Now' (Media Release, 1 April 2022).

promotes competition and innovation.[74] By contrast, the prospect of having to share assets with rivals discourages innovation – both by the asset owner who knows it has to share the benefits, and by the rivals, who can sit back knowing that if someone else develops a successful asset, they will get access to it, so they don't have to invest in creating their own.

For example, disclosure of click-and-query data, as suggested by the Discussion Paper, would put rivals in a position to copy or imitate Google's search results for every query. Rivals would not have to develop their algorithms at all. Because clicks correlate with rank (higher results get more clicks), the data would tell rivals nearly exactly what results Google shows and in what rank. This would enable rivals to directly copy results for queries that Google discloses and mimic the behaviour of Google's algorithms via machine learning systems for any other queries, without having to invest in the thousands of incremental changes that Google has made to actually advance its understanding of consumers' queries and the web at large. This would not support independent competition or innovation. It would simply create approximate imitations of Google.

Second, there is a risk to consumer privacy. The Discussion Paper describes the harm arising from "*a lack of consumer awareness and control over the collection and use of their personal information*".[75] In mandating that a digital platform should share their data with third parties, however, the ACCC would intervene to give Australian consumers less control over their data, and less knowledgement as to how and by whom it is accessed, used and shared.

Consumers' click and query data can contain highly-sensitive information, such as searches of medical conditions, home addresses, financial details, and political or religious organisations.[76] Depending on the design, mandatory disclosure of click-and-query data to rival search

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[74] In *Pilbara Infrastructure Pty Ltd and Another v Australian Competition Tribunal and Others* (2011) 193 FCR 57, 95-96, the Federal Court cited (at [91]) from the Hilmer Report, in support of the proposition that the circumstances in which Part IIIA of the CCA (Access to services regime) applied should be carefully limited: "*The efficient operation of a market economy relies on the general freedom of an owner of property and/or supplier of services to choose when and with whom to conduct business dealings and on what terms and conditions. This is an important and fundamental principle based on notions of private property and freedom to contract, and one not to be disturbed lightly... The Committee is conscious of the need to carefully limit the circumstances in which one business is required by law to make its facilities available to another. Failure to provide appropriate protection to the owners of such facilities has the potential to undermine incentives for investment*." It also referenced, at [92], a report by the Productivity Commission raising concerns that "*too ready access might chill investment in new facilities*." In *Slovak Telekom*, the EU Court of Justice commented *"it is generally favourable to the development of competition and in the interest of consumers to allow a company to reserve for its own use the facilities that it has developed for the needs of its business*". See *Slovak Telekom v European Commission* (C-165/19) [2021] EU:C:2021:239, 47.

[75] Discussion Paper, 44.

[76] The CMA found "*the disclosure of users' click and query data has the potential to expose users to privacy breaches*"; and there are "*concerns from a privacy perspective arise if the disclosure of search data could lead to the identification of users*". See CMA, *Online platforms and digital advertising: Market study final report, Appendix V*, (1 July 2020), 21.

engines could, for example, disclose Australians' sensitive information to third parties, including those influenced by certain states and autocratic regimes.[77]

Similar considerations apply in the ad tech context: sharing customer information with multiple third parties across a range of different ad tech products has privacy implications. In its Ad Tech Inquiry Final Report, the ACCC recognised that there are tensions between the interests of different stakeholders: while advertisers and publishers may want to receive additional data about consumers, that comes at the expense of consumer privacy.[78]

While the Discussion Paper is keen to ensure that data sharing proposals would be accompanied by "*robust consumer-level controls that limit the privacy risks*", it does not explain what these would be or how privacy would be guaranteed.[79] As found by the CMA in its Final Report into online platforms and digital advertising, "*There are adtech providers that specialise in identity resolution services, attempting to match and connect identifiers into unified customer profiles at scale. They license or provide access to identity graphs to other market participants.*" Microsoft research also illustrates these privacy risks. Microsoft recognises that "*despite [the] extensive literature, 'privacy breaches' are common, both in the literature and in practice, even when security and data integrity are not compromised.*"[80] Microsoft describes the privacy risks inherent to releasing data,[81] the impossibility of absolute disclosure prevention,[82] and new ways that privacy breaches could occur.[83]

Third, forced data sharing risks disclosing businesses' confidential information and potentially facilitating collusion. For example:

- Google receives bids from advertisers to participate in Google Ads. Google does not share advertisers' confidential bidding strategies with other advertisers. A data sharing

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[77] See Andrew Roth, 'Russian internet giant grants veto powers to Kremlin-linked body', *The Guardian*, 18 November 2019. See Vincent Ni, 'Yahoo withdraws from China as Beijing's grip on tech firms tightens', *The Guardian* (3 November 2021).
[78] ACCC, Interim report, *Digital advertising services inquiry* (December 2020), 18.
[79] In 2019, Hendrickx et al identified a method that can correctly re-identify 99.98% of individuals in anonymised data sets with just 15 demographic attributes. See Julien M Hendrickx, Yves-Alexandre de Montjoye and Luc Rocher, 'Estimating the success of re-identifications in incomplete datasets using generative models', (2019) *Nature Communications* 10 (3069).
[80] Cynthia Dwork and Sergey Yekhanin, 'Database Privacy', *Microsoft Research* (Research Article, 24 November 2003).
[81] Cynthia Dwork, *A Firm Foundation for Private Data Analysis* (2010).
[82] Cynthia Dwork and Moni Naor, 'On the Difficulties of Disclosure Prevention in Statistical Databases or The Case for Differential Privacy' (2010) *Journal of Privacy and Confidentiality* 2(1), 93-107.
[83] Cynthia Dwork and Sergey Yekhanin, *New Efficient Attacks on Statistical Disclosure Control Mechanisms* (2008). Researchers have also shown how de-anonymization of large and sparse data sets can be achieved through a practical analysis of the Netflix Prize data set, containing anonymized movie ratings of 500,000 Netflix subscribers. See Arvind Narayanan and Vitaly Shmatikov, *Robust De-anonymization of Large Sparse Datasets* (2008).

obligation should not encourage the sharing of such confidential and competitively sensitive information. Likewise in ad tech, Google has confidentiality obligations relating to the data of the consumers of its platform.

- Disclosing click and query data from Google's ads products risks revealing businesses' confidential and competitively-sensitive information. With click and query data for ads, third parties would receive granular insight into the confidential advertising strategies of the businesses that appear in our ads. Recipients could then use that data to counter the bidding strategies of their rivals.

Fourth, forced data sharing could enable even more severe harms, such as disinformation and manipulation. An obligation to disclose click and query data risks enabling wide-scale manipulation of Google's search results.[84] Such manipulation would harm both users (who would see less relevant results) and legitimate businesses (who would be displaced in Google's ranking by low-quality or manipulative sites). Without appropriate safeguards, mandatory click and query data sharing could allow recipients to work out how Google uses user signals to rank results, and manipulate our results. Even if the data sharing obligation is ostensibly limited to third-party search engines, this would not protect against such risks. Untrustworthy search engine operators might disclose our search data to third parties. Also, nothing would prevent a bad actor from setting up a search engine just so it could receive our search data to enable manipulation. Similarly, state actors could use this information to gain insights into search habits of users and manipulate search results for disinformation and propaganda campaigns.

If the ACCC is seriously considering these types of measures, we request the opportunity to discuss these risks in more detail. It is vital that any measures thought necessary to improve competition in search services don't come at the expense of innovation, quality, competition between merchants or user privacy.

c) What types of data (for example, click-and-query data, pricing data, consumer usage data) should be subject to these measures?

We support data portability and interoperability, at a consumer's request. We note, however, the following qualifications:

- Data portability measures should not apply to data that the consumer does not control. For example: advertisers do not control the data about a consumer's activity on websites where the ads are displayed. Advertiser data portability measures should only

[84] There are millions of low-quality and spammy sites that try to game their way to the top of our ranking through manipulative techniques. These sites provide a poor user experience and can harm users. We write algorithms to identify such sites and lower their ranking in our results.

allow advertisers to transfer data they control from one ad tech product to another at their request.

- Data portability measures should not extend to data that a service provider creates using a consumer's data (i.e. inferred data), such as a consumer profile created by analysis of the data collected. These include data generated to improve system performance or train proprietary algorithms.

We disagree that any of the three listed types of data are suitable for mandatory data sharing:

- Mandatory sharing of click-and-query data would reduce innovation, decrease search result diversity, enable the manipulation of Google's results, and risk serious privacy breaches, for the reasons explained above.[85] Google has invested in mechanisms to share *aggregated* query data (via, for example, Google Trends), as well as click data to affected webmasters.[86] But Google's efforts in this sphere have involved maintaining careful limits on the data released in order to avoid harms to consumer privacy.

- The Discussion Paper does not provide detail on what is meant by 'pricing data'. Sharing pricing data can come with serious risks. For example, disclosing data on the prices that advertisers pay in ad auctions to other advertisers would disclose information that, by its very nature, is competitively sensitive and should not be shared among competitors.

- The Discussion Paper does not provide detail on what is meant by 'consumer usage data'. Sharing such data can also come with serious risks. For example, sharing data on consumer habits with third parties should consider the broader implications to consumers of sharing that data and privacy implications.

In light of the serious concerns we have identified, we would welcome more detailed clarifications and discussions with the ACCC on these issues, if the ACCC is contemplating any such measures.

d) What types of safeguards would be required to ensure that these measures do not compromise consumers' privacy?

[85] See also Google, September 2021 Report on market dynamics and consumer choice screens in search services and web browsers: Google's Response to ACCC Issues Paper, *ACCC Digital Platforms Services Inquiry* (7 May 2021).
[86] Discussed further in **Schedule A.**

Data portability and interoperability

Any system that sought to encourage data portability or interoperability, at a consumer's request, should consider at least the following:[87]

- ***At consumer request.*** A necessary precondition for any data portability regime that seeks to put consumers in control is that it is, in the Discussion Paper's words, "*at consumer's request*".[88] Accordingly, the Discussion Paper is wrong to suggest that a requirement for a search engine to share click and query data with rivals, at rivals' request, is a data portability measure.[89]

- ***Ease of use.*** Data portability tools should be simple and intelligible for consumers to find and operate.

- ***Security.*** Tools should protect privacy and security, and prevent unauthorised access. Consumers should be told about the exact scope of the data being transferred and privacy and security practices of the destination service.

- ***Reciprocity.*** Participating companies should be willing both to receive incoming data and to transmit data to other services at a consumer's direction. In other words, they should build both 'import' and 'export' functionalities.

- ***Privacy.*** Data portability tools should focus only on transmitting data that relate directly to the person requesting the transfer; not data whose transfer would compromise another consumer's privacy. This strikes a balance between portability, privacy, and the benefits of trying a new service.

- ***Use cases.*** Portability should focus on data that the consumer creates, imports, approves for collection, or has control over, which is likely to be meaningful to the consumer. It should not extend to commercially sensitive or proprietary data, including data that companies have to invest in collecting to improve their service.

Mandatory data sharing or data access

We do not believe that the mandatory data sharing regimes contemplated in the Discussion Paper could adequately guard against the risks above – reduction in incentives to invest and innovate, privacy, potential disclosure of confidential information and potential spread of disinformation / misinformation – even with strict safeguards.

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[87] These issues are addressed in greater detail in Data Transfer Project, *Data Transfer Project White Paper* (20 July 2018).
[88] Discussion Paper, 88.
[89] Discussion Paper, 88.

Question 9: Data limitation measures would limit data use in the supply of digital platform services in Australia:

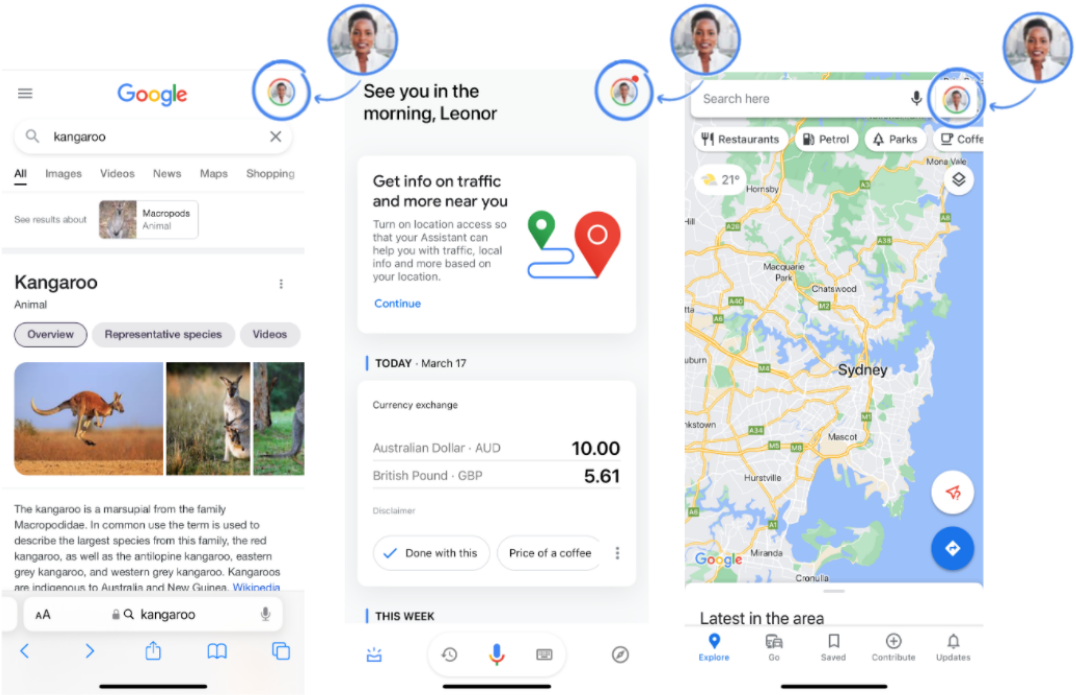
a) What are the benefits and risks of introducing such measures?
b) Which digital platform services, out of those identified in question 6, would benefit (in terms of increased competition or reduced consumer harm) from the introduction of data limitation measures and in what circumstances?
c) Which types of data should be subject to a data limitation measure?

Consumers want, and should be able to, control and manage the processing of their data, including the processing of their data across services. We already provide consumers with granular means to control their data on Google. These controls allow consumers to enable or disable particular personalisation features or the recording of particular data types while retaining the ability to use the service in question. The controls we provide include: (i) privacy settings and controls; (ii) switching between signed-in and signed-out status; (iii) using multiple accounts; (iv) private browsing; (v) data deletion; (vi) Google TakeOut; and (vii) the Data Transfer Project. We summarise these tools in **Annex Q.9**.

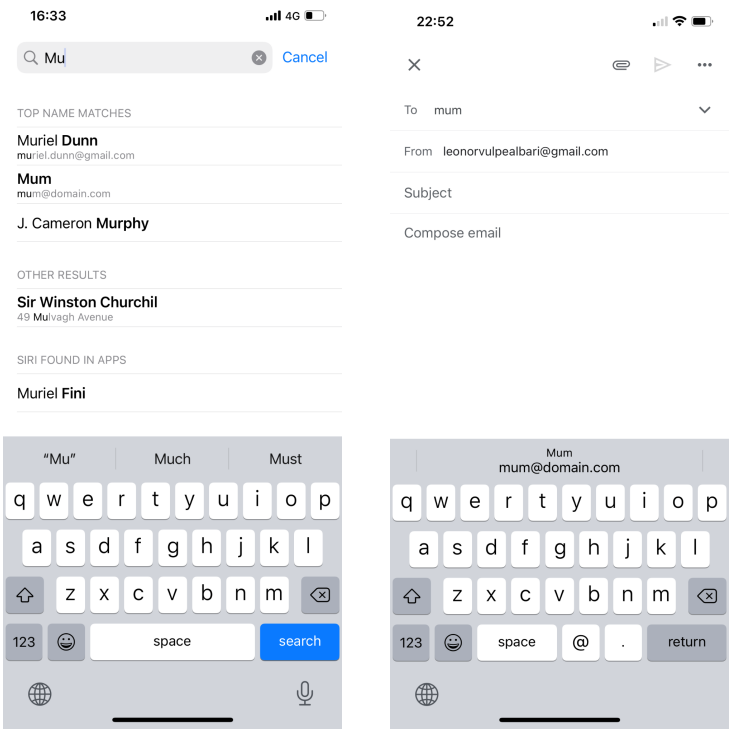
The Discussion Paper in places could be read to contemplate an absolute ban on any data combination across services. Rules that limit or ban the cross-service use of data would degrade the user experience. It would be counterproductive if the ACCC's recommendations sought to limit—rather than preserve—consumers' control over their personal data. Evidence shows that consumers value thoughtful personalisation and product integrations.[90] Consumers should have the choice to access their personal data across services where doing so can, in their own view, benefit them. By way of example:

- Consumers can (but do not have to) use a single Google Account (with name, email, password, and basic information) to sign-in to multiple Google services. This ability provides consumers with an efficient way to manage account credentials and account settings (*e.g.*, language). It also provides consumers with cross-product controls over data collection, use, and retention. For example, instead of having to choose whether or not to save history for a range of separate products, consumers can control this centrally by clicking on their account image regardless of the service they are in.

[90] Third-party research shows that consumers welcome thoughtful personalization. For instance, a 2017 study by Epsilon concluded that 90% of respondents find personalization appealing, see Epsilon, 'New Epsilon research indicates 80% of consumers are more likely to make a purchase when brands offer personalized experiences', *Epsilon* (9 January 2018); a report by consulting firm Accenture found that 91% of consumers say they are more likely to shop with brands that provide offers and recommendations that are relevant to them, while 74% of consumers say 'living profiles' with more detailed personal preferences would be useful if they were used to curate personalised experiences, products and offers, see Accenture Interactive, *Pulse Check 2018 Report* (2018).



- Google enables consumers to access their contact data across Google services, including for auto-complete functionality in Gmail (when composing an email), Maps (when searching for a contact's address in Search or Directions), Docs (for adding collaborators) and Calendar (for adding meetings).



- We use data across services to provide a high level of security across various Google services. To do so, we necessarily use cross-service information. Imagine a signed-in consumer who frequently uses Google Search in Sydney and that runs a search at 10 am. Google then detects at 10:15 am an attempt to log into this consumer's Gmail account from Beijing. Currently, we can treat this login as suspicious and alert the consumer to potential suspicious activity associated with her account. We can only do so by sharing signals across Search and Gmail. Further, our Security Checkup provides security tips adapted to how the consumer uses our products. A limitation or ban on data use would prevent us protecting the consumer in this way.

We also think a ban on cross-service use of data degrades competition and will cause unintended harm to consumers.

- **A ban would harm consumers.** Limitations on cross-service data use would force us to remove beneficial features and services that consumers like and value, including security services, efficient and effective privacy controls, and value-added cross-service experiences.

- **A ban would harm business customers.** Data limitation measures could also prevent our business customers from receiving the benefits of data sharing made possible by vertical integration. In the Ad Tech Inquiry Final Report, the ACCC recognised the benefits of vertical integration;[91] and also the "*potential reduction in efficiency that would likely result from introducing constraints on the internal handling of data within businesses*".[92] The interconnected nature of the ad tech ecosystem means that products need to share information to function properly and efficiently. Certain features require technical integration between different products. Barriers to data sharing will make it more difficult for us to provide high quality products and services to our customers. In ad tech, for example, this is likely to result in less revenue for publishers, lower quality (e.g. less targeted) ads for advertisers, and a reduced consumer experience.

- **A ban would distort competition.** Data limitations for just some digital platforms would prevent those platforms from offering a service that rivals could continue to offer. It would create an artificial quality degradation of certain digital platforms' services, by limiting output and innovation.

Rather than data limitation measures which seek to 'level down' rather than 'level up' competition, we think that the ACCC's objective to enhance "*market contestability*"[93] could be better achieved by measures that encourage data portability or interoperability based on consumer preferences (discussed in Q8 above).

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[91] ACCC, Final Report, *Digital advertising services inquiry* (28 September 2021), 88.
[92] ACCC, Interim report, *Digital advertising services inquiry* (December 2020), 21.
[93] Discussion Paper, 72.

Question 10: In what circumstances might increasing data access be appropriate and in what circumstances might limiting data use be appropriate? What are the relative benefits and risks of these two approaches?

See responses to Qs 8 and 9 above. In summary, we do not believe that the case has been made to establish mandatory data access measures.

- Google already shares considerable data with consumers, websites, and advertisers. Consumers can download all their data via Google Takeout. Websites can understand granular information about how they perform in Search via Google Analytics. And we provide advertisers with considerable data on the performance of their ads. The Discussion Paper does not discuss these tools, let alone establish based on evidence why they are ineffective to achieve the ACCC's objectives.
- As to rivals, forced data sharing with rivals is opposed to the goals of competition and would have negative consequences, as explained in Q8.

We also do not believe the case has been made for data limitation measures. Such measures would not enhance competition, but would rather harm consumers, for the reasons explained in Q9.

Finally, there is an inherent contradiction in the Discussion Paper's discussion of data limitation measures and data access measures. The Discussion Paper identifies a range of consumer harms supposedly arising from consumers lacking meaningful control over their data on digital platforms,[94] including reduced privacy, increased profiling, vulnerable consumers being targeted, reduced transparency, and decreased trust. By nature, measures that force platforms to share data with third parties – such as consumers' click and query data or businesses' confidential data – put consumers and businesses in less control and risk bringing about such harm.

Improved consumer protection

Question 11: What additional measures are necessary or desirable to adequately protect consumers against:

a) the use of dark patterns online
b) scams, harmful content, or malicious and exploitative apps?

We take our responsibility to consumers extremely seriously. We combat scams, harmful content, and malicious and exploitative apps through comprehensive policies and enforcement of those policies. We continue to invest in tools, processes, automated detection technology,

[94] Discussion Paper, 44.

and teams that help us elevate trustworthy information and remove inappropriate content across our services in accordance with our policies. We also provide consumers with online tools for requesting removals and raising complaints, and we have internal complaint handling efforts involving a range of specialist teams.

These processes enable us to respond to issues at scale. For example, in relation to Ads, in 2020 we blocked or removed approximately 3.1 billion ads for violating our policies, including 101 million ads for violating our misrepresentation policies.[95] We also disabled over 1.7 million ad accounts for policy violations, including fraudulent behaviour and scams.[96] Through our machine-learning detection capabilities and app review processes, we prevented over 962,000 policy-violating apps from getting published to Google Play.[97] We also banned 119,000 malicious and spammy developer accounts.[98]

Our efforts in respect of Search and Ads are described further in **Annex Q.11** and in respect of Play are described in **Annex Q.13**. We encourage the ACCC to review and outline in its report to Government all the processes and efforts already available and identify any specific gaps that may exist. The Government can then make an assessment based on a more complete body of evidence in deciding whether to take forward the ACCC's recommendations.

In considering any additional measures for any specifically identified gaps, we make the following comments:

- **Further exploration and understanding of dark patterns is needed:** The concept of 'dark patterns' is new and not yet clearly defined.[99] Further exploration of dark patterns is needed to better understand their prevalence and characteristics, as well as any harm arising from them. The focus should be on manipulative design choices that materially distort the behaviour of an average consumer, rather than banning particular practices which may help consumers make informed decisions and navigate complex online systems.[100] Multiple Australian Government agencies recognise the benefits of behavioural insights, and use such insights to better design, develop and implement

[95] Scott Spencer, 'Our annual Ads Safety Report', *Google Ads & Commerce Blog* (Blog Post, 17 March 2021).
[96] Scott Spencer, 'Our annual Ads Safety Report', *Google Ads & Commerce Blog* (Blog Post, 17 March 2021).
[97] Google, 'How we fought bad apps and developers in 2020', Google Security Blog (Blog Post, 21 April 2021).
[98] Google, 'How we fought bad apps and developers in 2020', Google Security Blog (Blog Post, 21 April 2021).
[99] The ACCC defines dark patterns broadly. Dark patterns are described as "[t]*he design of user interfaces intended to confuse users, make it difficult for users to express their actual preferences, or manipulate users into taking certain actions*" (Discussion Paper, 2).
[100] For example, flight booking tools that make the cheapest flight most prominent or alert consumers when there are limited tickets available.

public policies.[101] For example, the Victorian Government has applied behavioural insights to design reminder messages for patients regarding their hospital appointments to reduce the number of patients who do not attend appointments and to design banner ads on the VicRoads 'renew your licence website' to encourage organ donations.[102]

- **These issues are best addressed as economy-wide issues:** The examples of dark patterns provided in the Discussion Paper are not unique to digital platforms.[103] They apply to all businesses with an online presence, and some - for example "*making the process for cancelling a service much harder than signing up for the service*"[104] can also apply to services offered by offline businesses (e.g. subscription services, including pay television[105] and newspaper subscriptions,[106] health and fitness centre memberships,[107] and holiday packages).[108] Similarly, the incidence of scams and harmful content extends well beyond digital platforms. As the Discussion Paper acknowledges, the majority of reported losses from scams result from phone calls, with scams delivered via social networking and email also prevalent.

- **Any new rules should avoid creating overlapping obligations that are inconsistent with other regulatory frameworks:** Cumulative or overlapping regulatory burdens should be avoided as this could lead to unnecessary complexity, confusion, and unintended non-compliance. We understand that the Government already proposes to consult on the need for an economy-wide prohibition on unfair trading practices,[109] and the ACCC acknowledges that this prohibition may address alleged harms arising from the use of dark patterns and online scams, harmful apps and fake reviews.[110] A best

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[101] See New South Wales Government, 'Behavioural Insights Unit', *NSW Government* (Web Page, 2022); Victorian Government, 'Behavioural Insights', *vic.gov.au* (Web Page, 20 July 2021); New South Wales Government, 'Applying behavioural insights to get trainee teachers to rural and remote NSW', *NSW Government* (11 September 2018); Department of the Prime Minister and Cabinet, 'Projects | Behavioural Economics', *Behavioural Economics Team of the Australian Government* (Web Page, 2022).
[102] Victorian Government, *Applying Behavioural Insights in Victoria: An Update* (July 2019).
[103] Discussion Paper, 45.
[104] Discussion Paper, 97.
[105] Mariam Cheik-Hussein, 'Foxtel puts on more staff to deal with cancellations and suspensions', *AdNews* (Online, 14 April 2020).
[106] Some Australian newspapers employ a 'click to subscribe, call to cancel' practice. In the US, such practices have been recognised as harmful and are considered unlawful in California. See, Sarah Scire, 'The end of "click to subscribe, call to cancel"? One of the news industry's favorite retention tactics is illegal, FTC says', *Nieman Lab* (Online, 15 November 2021).
[107] Tony Ibrahim, 'Gym complaints prompt warning from Fair Trading', *Choice* (Article, 18 May 2021).
[108] Andy Kollmorgen, 'Timeshare survey: 'We want to get out but can't' say 30%', *Choice* (Web Page, 18 May 2021).
[109] For details of ministerial discussions on unfair trading practices, see: Consumer Affairs Forum, 'Meeting 12: Meeting of Ministers for Consumer Affairs' *Australian Consumer Law* (Meeting Minutes, 6 November 2020).
[110] Discussion Paper, 95, 97.

practice approach to regulation would first complete consultation on this economy-wide prohibition, before determining if the facts support the need for additional obligations. We also encourage the ACCC to consider the extent to which recent reforms to online safety and upcoming reforms in relation to online privacy cover these issues.[111]

Question 12: Which digital platforms should any new consumer protection measures apply to?

We support strong consumer protection laws. In our view, Australian consumers should benefit from robust consumer protections consistently, not just with respect to their interactions on a handful of digital platforms, but in all dealings with businesses both online and offline. Many of the issues and behaviours canvassed in the Discussion Paper, such as scams and types of 'dark patterns', are encountered in a wide range of sectors online and offline. The harms arising from them - and solutions to address those harms - ought to be considered on an economy-wide basis.

The ACCC should also consider the risks that applying consumer protection regulations to only certain firms in a given sector could bring:

- **Providing consumers with a false sense of security:** Consumers may be led into a false sense of security about the protections they have when interacting with digital platforms (of all sizes) and other businesses. Consumers may expect the level of protection they get when interacting with firms subject to additional rules, and not appreciate that they do not benefit from that standard when interacting with other firms. They may be unwittingly exposed to harms on other platforms.
- **Distorting competition:** Imposing additional requirements only on certain firms would interfere with the competitive process, by limiting the activities (and raising the costs) of those firms relative to their rivals. This would put firms subject to the additional measures at an undue competitive disadvantage and be contrary to the objectives of promoting competition on the merits and fair trading.
- **Increasing regulatory complexity:** By creating a regulatory framework that is complex to administer.

[111] See *Online Safety Act 2021* (Cth), and Attorney-General's review of the Privacy Act 1988 "*to ensure privacy settings empower consumers, protect their data and best serve the Australian economy*", which is occurring alongside the Privacy Legislation Amendment (Enhancing Online Privacy and Other Measures) Bill 2021 (Online Privacy Bill). See Australian Government Attorney-General's Department, 'Review of the Privacy Act 1988', *Attorney-General's Department* (Government Web Page, 2022).

- **Reducing incentives to grow:** If rules are applied based on a firm's size, this could reduce firms' incentives to grow beyond a certain size.

Question 13: Should digital platforms that operate app marketplaces be subject to additional obligations regarding the monitoring of their app marketplaces for malicious or exploitative apps? If so, what types of additional obligations?

Please refer to our responses to Q11 and Q12.

As noted, we support the objective of protecting Australians from malicious, harmful, and exploitative content. We see no reason why protections should be limited to app marketplaces. Australians should also be protected from harmful and exploitative content and business practices when interacting with all businesses, whether that is online (e.g., e-commerce sites, news publishers, streaming services), or offline businesses.

On Google Play, we have a strong incentive to protect consumers from harmful and exploitative business practices, as well as harmful third-party apps. Our business depends on consumers trusting that they can safely use apps. Accordingly, we have developed and implemented:

- **Robust app review processes to detect harmful apps:** Every app is thoroughly reviewed before it goes live on Play. Our app review process subjects apps to rigorous automated and human reviews in order to identify and remove potentially harmful apps. Our data shows that 99% of apps with abusive or malicious content are rejected before anyone can install them.[112] Please see **Annex Q.13** for more information on Google's policies and practices in relation to Play.

- **Extensive policies directed at preventing harmful apps and content:** The policies against which apps are reviewed include restricted content, consumer privacy, malware, and mobile unwanted software. We are constantly updating our policies to address new and emerging harmful business practices.[113] For example, in December 2021, we updated our subscriptions policy to state that subscriptions must provide sustained or recurring value to users throughout the life of the subscription, and may not be used to offer what are effectively one-time benefits to users. We are also clarifying our subscriptions policy to more explicitly prohibit apps that subject users to deceptive or manipulative purchase experiences (including certain in-app purchases or

[112] Google Play, 'How Google Play Works', *Google Play* (Web Page, 2021).
[113] Google Play gives advance notice of upcoming changes to Play's policies (typically 30 days', or longer if significant technical changes are required to comply), except for changes that are required to take immediate effect (e.g., required by law). For examples of upcoming policy changes, see: Google Play, Updates to Google Play Policies, *Play Console Help,* (Web Page, 2022).

subscriptions).[114]

- **Troubleshooting tools:** Users of Play are able to report or flag harmful apps, such as those that entice consumers into investment or other scams. They can easily do this by completing and submitting a Report Inappropriate Apps Form,[115] which is available on the Google Play Help Centre.[116]

- **Controls to protect consumers on Play:** In addition to our app review process, we have on-device protections in the form of Google Play Protect (**GPP**). GPP runs on Android devices and conducts a safety check on apps when they are installed and periodically scans devices for potentially harmful apps, to protect consumers from malware. In 2020, GPP scanned over 100 billion installed apps every day.[117] GPP warns consumers about any detected potentially harmful apps found, and removes known harmful apps from devices.

  We also offer our Advanced Protection Program, an account-level setting that allows users to operate at a higher level of security. For example, it can be of particular benefit to users who believe that they may be particularly vulnerable to malware and or malicious actors (e.g. journalists operating in hostile environments).[118]

We encourage the ACCC to review and outline in its report to Government all the processes and efforts already available and identify any specific gaps that may exist. The Government can then make an assessment based on a more complete body of evidence in deciding whether to take forward the ACCC's recommendations.

Factors that are relevant to considering what, if any, additional measures could usefully be imposed on app marketplaces, include:

- **The intermediary nature of app stores and the fact that determining whether third-party apps are malicious or exploitative is not always straightforward.** For certain apps, for example scam investment apps, their malicious or exploitative behaviour cannot be detected until a consumer becomes a customer of the service. In addition, some apps (like user-generated content apps) are often benign on their face

[114] Google Play, 'Summaries', *Play Console Help*, (Web Page, 2021).
[115] Google Play, 'Report inappropriate apps', *Play Console Help* (Web Page, 2022).
[116] Google Play, 'How to report an app on the Google Play Store', *Google Play Help* (Web Page, 2022).
[117] Krish Vitaldevara, 'How we fought bad apps and developers in 2020', *Google Security Blog* (Blog Post, 21 April 2021).
[118] The Advanced Protection Program is an optional, opt-in, feature, and users can choose whether or not they want to enrol. There are several methods by which users can enrol in the program. For example, they can register their Android phone's built-in security key (for Android 7.0+ phones), or use a physical key. For guidance as to how users' can enrol into the Advanced Protection Program, see: Google, Advanced Protection Program - Overview.

when first presented to us for review because they don't yet have any user-generated content that would trigger legitimate concerns (e.g. a new social media app that, later on, is found to contain COVID misinformation). Sometimes it is necessary to address issues reactively, and our tools for consumer reporting and consumer reviews perform an important function in this regard.

- **General monitoring obligations, strict requirements to remove apps, and liability provisions could lead to over-removal of legitimate content to the detriment of consumer choice and reputable app developers.** It could also lead to allegations of censorship or discrimination. We see an important distinction between the imposition of any general monitoring or active fact-finding obligations on app stores, and requirements for services to act expeditiously, upon obtaining actual knowledge or awareness of illegal activities, to remove or to disable access to the information concerned.

- **Any additional requirements should accommodate scalable implementation.** Play offers more than two million apps and games to billions of people in 190 countries. Throughout 2020, our machine-learning detection capabilities and app review processes stopped over 962,000 policy-violating apps before they were ever published to the Play store.[119]

- **Asymmetric requirements could have unintended consequences.** The ACCC should also take account of the risk that applying regulations to only certain app stores could unwittingly expose consumers that use other app stores to harm and distort competition, for the reasons outlined in our response to Q12.

Fairer dealings with business users

Question 14: What types of fair-trading obligations might be required for digital platform services in Australia? What are the benefits and risks of such obligations? Which digital platforms should any such fair-trading obligations apply to?

We offer eight products each with at least one billion active users worldwide. Accordingly, like many businesses operating in the Australian economy, we use standard form contracts. Some of our products have a two-sided business model, and our terms and practices must balance the interests of all stakeholders, which are not always aligned.[120] We strive to have fair dealings

[119] Krish Vitaldevara, 'How we fought bad apps and developers in 2020', *Google Security Blog* (21 April 2021).

[120] For example, every aspect of Play, including its business model and policies, is driven by the need to serve and balance the interests of all its stakeholders, including app developers and consumers. See Google, Submission in Response to the ACCC's Issues Paper, *ACCC Digital Platform Services Inquiry - March 2021 Report into App Marketplaces* (19 October 2020), 1.

with both business users and consumers, recognising that the success of our platforms depends on attracting and meeting the needs of customers from both groups.

The current unfair contract terms regime in the ACL recognises that there may be circumstances where businesses need to have the ability to include particular clauses in their contracts or change their terms quickly, for example, in order to respond to emerging malicious behaviour to prevent large-scale consumer harm. This does not and should not make dealings unfair. For example, bad actors may try to target users with scams and frauds with ads. We want to protect users from such harmful content. Accordingly, we make the use of our advertising platform conditional on advertisers' compliance with our ads policies (see **Annex Q.11**). If advertisers do not comply with those policies, their ads or accounts may be suspended. To protect users, it is critical for us to be able to act swiftly, and in some cases, immediately, in order to prevent significant harm.[121] The ACCC has suggested that "*more action should be taken by all platforms to remove scams*", stressing that scammers are *"clever, flexible and innovative"*.[122] The prevalence, flexibility, and innovativeness of scammers — together with our responsibility to fight such scammers and protect consumers — is precisely why we have these policies in place, need the ability to update them unilaterally and require terms and conditions in our advertising contracts that allow us to suspend services quickly.

Factors that are relevant to considering what, if any, additional measures could be imposed, include:

- **The potential for unintended consequences and conflicting measures.** The example provided above illustrates the potential for additional measures for fairer dealings with businesses to lead to consumer harm, and vice versa - that is, the potential for additional measures for enhanced consumer protection to be to the detriment of business users.

- **Any new rules should avoid creating overlapping obligations that are inconsistent with other regulatory frameworks.** We understand that the Government proposes to consult on the need for an economy-wide prohibition on unfair trading practices. A best practice approach to regulation would first complete consultation on the economy-wide prohibition on unfair trading practices, and (if it is determined that such a prohibition ought to be introduced), design and implement it, and then consider if the

[121] For each policy, there is clear wording which explains the action Google will take for its violation. For example, Google's unacceptable business practices policy, which includes *"Enticing users to part with money or information through a fictitious business that lacks the qualifications or capacity to provide the advertised products or services",* is regarded as an egregious violation in response to which Google will suspend Google Ads accounts upon detection and without prior warning (note that advertisers may submit an appeal). For other violations, Google may issue a warning prior to suspending an account. See: Misrepresentation - Advertising Policies Help.
[122] ACCC, Interim report, *Digital advertising services inquiry* (December 2020), 6.

facts support any features, in addition to the economy-wide prohibition, for digital platforms.

Introducing digital platform-specific fair-trading obligations before an economy-wide unfair trading practices prohibition has been explored, and (if deemed appropriate) introduced, may lead to duplication of rules, or rules that are inconsistent or incompatible.

- **The impact of pending regulatory changes should be assessed before introducing further rules.** We note that a proposal for new laws that prohibit unfair contract terms, impose significant penalties for contraventions, and expand the class of businesses that will be subject to those prohibitions, is currently before Parliament.[123] The impact of these changes on commercial dealings should be assessed before considering the need for further rules.

Question 15: Should specific requirements be imposed on digital platforms (or a subset of digital platforms) to improve aspects of their processes for resolving disputes with business users and/or consumers? What sorts of obligations might be required to improve dispute resolution processes for consumers and business users of digital platform services in Australia?

We agree that business users and consumers should have access to effective processes for resolving disputes and we strive to provide effective customer support and dispute resolution mechanisms to businesses and consumers.

Each of our products has tailored policies and enforcement and dispute resolution processes reflecting the nature of the product, its users, and the type of issues and complaints that arise, as explained in relation to Search and Ads in **Annex Q.11** and in relation to Play in **Annex Q.13**. These processes may involve a combination of machine learning, AI, and specialist review teams and address the vast majority of issues before they result in a complaint or a dispute. We provide online tools to seek support (including the ability to request refunds) and raise complaints, and we believe our processes (described in **Annex Q.11**) enable us to resolve issues in a timely manner, bearing in mind the complexities of scale.

In addition to Google's internal processes, Australian consumers and businesses have access to a range of government and industry dispute resolution mechanisms. This includes (depending on the nature of the complaint): the Australian Small Business and Family Enterprise Ombudsman; the State and Territory Small Business Commissions; Ad Standards (for complaints by consumers about 'offensive' advertising); various Civil and Administrative Tribunals, such as ACAT, NCAT, VCAT, and QCAT; the State and Territory Offices of Fair Trading

[123] Treasury Laws Amendment (Enhancing Tax Integrity and Supporting Business Investment) Bill 2022.

and the ACCC; the OAIC; the ACMA; the eSafety Commissioner's Office; the AEC (in relation to election advertising) and the Australian Financial Complaints Authority (in relation to payment services).

We understand that Treasury is already considering whether there is a need for specific requirements for digital platforms' internal dispute resolution processes, or for a specific external dispute resolution scheme to resolve disputes between digital platforms and small businesses and consumers, in response to recommendations 22 and 23 from the ACCC's Digital Platforms Inquiry Final Report. We provided extensive submissions to consultants engaged by Treasury last year and look forward to working further with Treasury on these topics.

In this context, while we recognise and support the objective of improving accountability and consumer trust, we consider that it is premature to consider additional obligations relating to dispute resolution, including potential requirements for:

- "*mechanisms for review of decisions to terminate or suspend accounts*"; and
- "*requirements for digital platforms to employ staff in Australia who can respond promptly to and resolve disputes with Australian consumers or business users*".[124]

The consideration of any additional dispute resolution obligations should take into account the following:

- **Requirements should accommodate scalable implementation.** As noted, Google provides eight products each with at least one billion active users worldwide. Any proposed dispute resolution mechanisms need to be globally scalable and sufficiently flexible to deal with the breadth of issues that may arise. This includes being able to prioritise and respond urgently to issues that may cause broader harms, while allowing sufficient time to properly consider more nuanced issues.

- **Increased transparency in relation to platforms' enforcement decisions (for example, termination or suspension of accounts) can heighten risks that information can be used by bad actors to game systems, that commercially sensitive information is exposed or that consumer privacy is affected.** There is a trade off (and an appropriate balance must be struck) between the desire to provide information to a complainant and the need to safeguard confidential and commercially sensitive information that could be used by bad actors to exploit or game a digital platform's products and systems to the detriment of consumers.

- **There are complexities to the complaints received by digital platforms which may not be experienced by others.** For example, telecommunications companies, banks,

[124] Discussion Paper, 100.

or utilities, typically receive complaints from their customers about the products they provide. By contrast, any user of the web, from anywhere in the world, may make a complaint to Google about products like Search, YouTube, or Maps, or indeed about a Google Ad they see on the web. Many of the issues that consumers and businesses raise in relation to these products relate to third-party content that may be accessed via Google's products, but over which Google has limited or no control. Often Google is an intermediary between a content creator and the subject of the content creator's work, or between a website and the viewer of that website. While a complaint about a traditional business might be indicative of a problem with that business's services or products, a complaint to Google about content generated by a third party is not indicative of a problem inherently with Google.

- **Rigid requirements could have unintended consequences.** For example, rigid timelines for resolving disputes may lead to either over-removal of content or apps to the detriment of legitimate traders, or unwanted delay in suspending accounts meaning that harmful apps or content remain on the platform for longer than would otherwise be the case, to the detriment of consumers; and requirements to provide detailed information about decisions to suspend or terminate accounts may arm bad actors with information they can use to circumvent policies and continue to make harmful content available. It is important that complaint systems are able to remain sufficiently flexible to allow platforms to take a risk-based approach to complaint handling, enabling them to respond more quickly to urgent issues where there is a high risk of broader harm, while allowing sufficient time to properly consider more nuanced issues.

Increased transparency

Question 16: In what circumstances, and for which digital platform services or businesses, is there a case for increased transparency including in respect of price, the operation of key algorithms or policies, and key terms of service?

a) What additional information do consumers need?
b) What additional information do business users need?
c) What information might be required to monitor and enforce compliance with any new regulatory framework?

We support efforts to ensure digital businesses operate as transparently as possible. Our policies work best when consumers and partners are aware of the rules and understand how we enforce them. That is why we work to make this information clear and easily available to all, including via blog posts, dedicated Help Centers, Community Guidelines, and YouTube videos.

Price transparency

The Discussion Paper states that one area of opacity is in relation to the prices paid for the supply of digital advertising and ad tech services. We consider this to be an area where both Google and the broader industry are already taking positive steps (see **Schedule A**). For instance:

- We have published a blog post[125] and data analysis[126] about the average fees and take rates for our products across the supply chain. The Ad Tech Inquiry Final Report says these publications have "*improved transparency of fees*" across the ad tech supply chain.[127]
- The ACCC recommended an industry-led approach in its Ad Tech Inquiry Final Report to improve fee transparency across the ad tech supply chain,[128] which we are actively participating in.

Algorithm transparency

We make available a wealth of information on our policies and the operation of our algorithm rankings.[129] **Annex Q.16.1** provides a snapshot of the information that we make available to webmasters on the operation of our Search ranking. **Annex Q.16.2** provides a snapshot of information that is made available on the operation of our Play policies and ranking.

We agree that it is important for site operators and app developers to understand the high-level principles that algorithms are optimising for, so that they understand what the search engine or app store considers to be a good result and how to aim to become such a result. This concept is captured well in the EU's Platform to Business regulation, which mandates the publication of the 'main parameters' of ranking without requiring granular exposure of the underlying details of how those parameters are implemented.

At the same time, there are dangers with unbounded transparency. We discuss these matters in more detail in **Annex Q.16.3.** There are limits to the information that app stores and search services like Google can disclose about the operation of their ranking. Disclosure of the full details of how Google ranks results would have a number of adverse consequences:

- It would make it easier for websites or app developers to manipulate a service's system to appear more relevant than they actually are with adverse consequences for the

[125] Sissie Hsiao, 'How our display buying platforms share revenue with publishers', *Google Ad Manager*, (Blog Post, 23 June 2020).
[126] RBB Economics, *Google's ad tech take rates - Analysis of Google auction level data sets* (20 October 2020).
[127] ACCC, Final Report, *Digital advertising services inquiry* (28 September 2021), 157.
[128] ACCC, Final Report, *Digital advertising services inquiry* (28 September 2021), Recommendation 4, 19.
[129] Google, 'The basics of how Search works', *Google Search Central* (Web Page, 15 March 2022).

quality and usefulness of the service. For example, the web contains trillions of pages across millions of different machines and is constantly growing and changing. More than 40% of the new web pages that Google indexes across the web are spam. If we turned off our spam systems or if websites knew how these systems worked so that they could avoid them, we estimate that spam websites would receive 50 billion impressions each year in our results.

- The details of how a search service or app store ranks results represents a core value of its business. Disclosing these details would allow competitors to copy innovations and free ride on investments and intellectual property.

Terms of service transparency

We agree that key terms of service should be transparent and easily available to consumers. Google seeks to do that by providing consumers with terms of service that cover:[130]

- what consumers should expect from us in using our services;
- what we expect from consumers when using our services, including rules requiring consumers to comply with applicable laws and respect the rights of others;
- the intellectual property rights of the content found in our services; and
- the rights and mechanisms available to consumers in case of problems or disagreements.

The above information provides consumers and business users with what they need to make informed choices and protect their rights when using Google's services. It would also allow regulators, like the ACCC, to monitor Google's compliance with any new regulatory framework.

We encourage the ACCC to review and outline in its report to the Government all the information already made available to consumers and businesses regarding ranking, prices, policies and terms of service; identify any gaps in that information and whether the benefits of increased transparency are outweighed by potential risks. The Government can make an assessment based on the full body of evidence in deciding whether to take forward ACCC recommendations.

We would be happy to engage further with the ACCC on these important points.

[130] Google, *Terms of Service* (5 January 2022).

Adequate scrutiny of acquisitions

Question 17: Do you consider that reform is required to ensure that Australia's merger laws can prevent anti-competitive acquisitions by digital platforms? Why/why not?

Mergers and acquisitions play an important and positive role in the economy, including as a driver of innovation and investment. The ACCC's Merger Guidelines acknowledge that:

> "*Mergers and acquisitions are important for the efficient functioning of the economy. They allow firms to achieve efficiencies, such as economies of scale or scope, and diversify risk across a range of activities. They also provide a mechanism to replace the managers of underperforming firms.*
>
> *In the vast majority of mergers, sufficient competitive tension remains after the merger to ensure that consumers and suppliers are no worse off. Indeed, in many cases consumers or suppliers benefit from mergers. In some cases, however, mergers have anti-competitive effects…"*[131]

Google agrees that proportionate and effective regulatory review is critical to guard against transactions likely to have a negative impact on competition, and we support debate on whether Australia's merger control regime is fit for purpose.

As a starting point, the ACCC is advocating for economy-wide reform of Australia's merger control regime. Best practice regulation would first design the economy-wide reforms to the merger control regime and then determine if the facts support any features in addition to the economy-wide regime for mergers involving digital platforms.

More substantively, we consider that Australia's merger laws are capable of effectively preventing anti-competitive acquisitions by digital platforms. For the reasons set out below, there is no reason to treat digital mergers as a distinct class, or as being particularly likely to raise concerns. While there are a number of highly concentrated sectors in the Australian economy (for example, energy, telecommunications, supermarkets), there is no suggestion by the ACCC that these industries should be subject to tailored merger regimes. As explained below, the introduction of a bespoke regime could raise significant practical problems, and deter or delay pro-competitive deals.

Acquisitions by large digital platforms are often procompetitive. Contrary to the narrative of anti-competitive digital acquisitions, the Furman Review in the UK recognised that "*the large majority of the acquisitions by large digital companies in recent years have likely been benign*

[131] ACCC Merger Guidelines (November 2017), para. 1.1 and 1.2.

or beneficial for consumers".[132] The European Commission's special advisers' report on 'Competition Policy for the Digital Era' also noted the substantial efficiencies that digital acquisitions can bring about. The Discussion Paper too acknowledges that post-acquisition, access to capital and larger consumer bases may lead to rapid deployment of innovative products by large platforms.[133]

Consistent with this, there are ample success stories of Google acquiring and investing in small businesses and helping them grow. For example:

- When Google acquired Android in 2005, the company had fewer than 10 employees and had not released a single Android smartphone. Now there are approximately 2.5 billion active Android devices worldwide, including models that cost <$100 that have made smartphones available in the poorest countries in the world. Android competes vigorously with iPhones in Australia and across the world.

- When Google acquired YouTube, third party analysts asked "*whether Google's $1.65bn investment is a gargantuan folly*" and how Google could solve the problem that "*much of YouTube's content is not exactly advertiser friendly*." In fact, the deal has led to pro-competitive efficiencies that have contributed to YouTube's success. According to research done by Oxford Economics, in 2020, YouTube's creative ecosystem supported 15,750 Full Time Equivalent (FTE) jobs in Australia alone, and the total contribution of YouTube's creative ecosystem to Australia's GDP was $608 million.[134]

- By the time Google acquired Kaggle, a small company that hosts data science and machine learning competitions, it had been around for approximately seven years. Within approximately two and a half years since it was acquired, Kaggle released Kaggle Learn, which provides micro-courses in data science; integrated Google's BigQuery which allows consumers to analyse data faster; and used Google funding to increase headcount, invest in additional computing resources, and offer a more generous free tier for consumers. Due to these efforts, Kaggle quadrupled its consumer base.

Acquisitions by large digital platforms provide an important exit option for innovators and route to market for their technologies, as acknowledged in the Discussion Paper.[135] The Furman Review noted that "*being acquired is also an important exit strategy for technology start-ups, providing significant incentive for investors to provide funding to risky projects and support market entry.*"[136] The European Commission's special advisers' report found that "*the*

[132] Digital Competition Expert Panel, *Unlocking digital competition*, (March 2019), para. 3.48.
[133] Discussion Paper, 23.
[134] YouTube, 'YouTube in Australia', *YouTube*, (Web Page, 2022).
[135] Discussion Paper, 22-23.
[136] Digital Competition Expert Panel, *Unlocking digital competition*, (March 2019) para. 3.102.

chance for start-ups to be acquired by larger companies is an important element of venture capital markets: it is among the main exit routes for investors and it provides an incentive for the private financing of high-risk innovation."[137] And, as Commissioner Vestager said in March 2019, it would be "*very, very far-reaching*" to tell company owners "*as a rule of thumb that you cannot sell your business.*" The prospects of a buyout by existing technology companies can provide entrepreneurs and start-ups with an exit option, which encourages them and their financial supporters to invest in building new companies in the first place. Buyouts also provide an important alternative to IPOs, which firms may be reluctant to undertake because of regulatory burdens and uncertainty, among other considerations.

Evidence of anti-competitive acquisitions of nascent or potential competitors is weak in the digital sector. So-called 'killer acquisitions' have been defined as "*acquisitions for the purpose of killing or taming a potential future threat to the acquirer's core business.*" This term came from a study of the pharmaceuticals sector, where firms bought emerging therapies and kept them from coming to market. There is little evidence of such acquisitions occurring in the digital sector. A 2020 paper estimates that only a tiny proportion of acquisitions by large tech platforms could (even theoretically) fit a 'killer acquisitions' pattern.[138] Even on what the paper admits is an over-inclusive basis, it finds that just 11 out of 117 deals pass the broad-brush criteria of (i) a deal valuation in excess of $100 million, and (ii) a target that is horizontally or vertically connected with the core businesses of the acquirer. And the paper does not claim that these deals were in fact killer acquisitions. Therefore, a further detailed review of the evidence would be needed. Google is not aware of the ACCC conducting ex post review of digital mergers and finding that acquisitions of nascent competitors (or other acquisitions) ought to have been blocked.[139] A 2019 CMA-commissioned ex-post review of digital mergers did not conclude that the deals under review ought to have been blocked. In the case of Facebook/Instagram, the report found that "*Instagram's growth has significantly benefited from the integration with Facebook*",[140] even if certain aspects of the analysis could have been conducted differently.

It is not clear that a lower standard of proof is workable. The Furman Review rightly rejected the idea of a presumption against acquisitions by large digital platforms, which would be disproportionate and could undermine the benefits of such acquisitions, as described above. A proposal for a standard based on a 'balance of harms' was rightly rejected by the CMA since there are "*practical challenges in applying this kind of test in a transparent and*

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[137] Discussion Paper, 111.

[138] Oliver Latham, Isabel Tecu and Nitika Bagaria, *Beyond Killer Acquisitions: Are There More Common Potential Competition Issues in Tech Deals and How Can These Be Assessed?* (2020).

[139] The ACCC recently completed an ex post review of six past merger decisions, however none of the transactions involved digital platforms. See ACCC, *Ex post review of ACCC merger decisions* (February 2022).

[140] Lear, *Ex-post Assessment of Merger Control Decisions in Digital Markets - Final report prepared for the Competition and Markets Authority* (9 May 2019), para. II.83.

robust way" and it creates a risk of "*unintended consequences.*"[141] The proposal to use a revised probability standard, that would enable the ACCC to intervene when there are "*low probability but high impact competition effects*" appears unwarranted on the same grounds, as well as the broader principles set out above. The threshold is vague, could lead to highly speculative theories of harm with no real prospect of eventuating, and could have the same effect as an outright prohibition on acquisitions. A standard that warrants intervention if a lessening of competition is on balance less rather than more probable is unlikely to support Australia's overall industrial and economic ambitions, and not in keeping with the Government's vision for Australia to be a leading digital economy and society by 2030.[142]

It is not clear that a requirement to notify all acquisitions is needed. There is no evidence that acquisitions that are likely to substantially lessen competition in Australia are taking place without the ACCC having an opportunity to consider them, or, if the ACCC considers that those transactions are anti-competitive, taking steps to challenge them. Unlike some other jurisdictions, Australia does not have strict transaction value or market share thresholds which deprive it of jurisdiction over transactions below those thresholds. We accept that the ACCC should be able to review acquisitions by digital platforms of firms that carry on business in Australia or have a sufficient nexus to Australia, as those acquisitions have the potential to affect competition in Australia. However, Australia is not the appropriate forum for considering acquisitions by global digital platforms of firms that do not have an Australian nexus.

Question 18: Without prejudice to whether reform is required, what are the benefits and risks (including in relation to implementation and potential impacts on incentives for innovation and investment) of the proposals to address anti-competitive acquisitions by digital platforms, identified in this Discussion Paper, including:

a) changing the probability threshold applicable to the assessment of the competitive harm from such acquisitions
b) placing the burden of proof on the merger parties to establish the lack of competitive harm from a proposed acquisition
c) introducing specific merger notification requirements for acquisitions by large digital platforms
d) updating the current merger factors in section 50(3) of the CCA to reflect particular concerns relating to digital platform acquisitions
e) introducing a 'deeming' provision to apply in situations where the digital platform has substantial market power, or meets other pre-identified criteria (whereby an acquisition by such a platform would be deemed to substantially lessen competition if it likely entrenched, materially increased or materially extended that market power)

[141] Andrea Coscelli - CMA, *Digital Competition Expert Panel recommendations* (21 March 2019).
[142] Australian Government, 'Digital Economy Strategy', *Australia's Digital Economy* (Web Page, 2022).

f) any other approaches to address potentially anti-competitive acquisitions by digital platforms?

See our response to Q17.

Question 19: Which digital platforms should be subject to tailored merger control rules, and what criteria or assessment process could be employed to identify these platforms?

See our response to Q17.

If tailored merger control rules for digital platforms were to be pursued, the ACCC should outline an objective, forward-looking test to identify the digital platforms subject to these rules that would be suitable to cover relevant new and emerging digital platforms in the future.

ACCC Digital Platforms Services Inquiry: September 2022 Report on updating competition and consumer law for digital platform services

Annexes and Schedule A to Google's Response

Annex Q.1.1: Innovation in Technology Markets

The Discussion Paper speculates that there is a problem of lack of innovation in technology markets in Australia, but the evidence points to the opposite conclusion.

- *Discussion Paper*, ACCC, February 2022:
    - "*... digital platforms have facilitated new and efficient ways for Australian businesses to provide innovative services, promote their products and quickly and easily reach consumers.*"[1]
- *The economic contribution of Australia's tech sector*, Tech Council of Australia, 2021:
    - The report identifies that the tech sector's contribution to the Australian economy has grown by 79% since 2016: "*[t]he combination of these direct and indirect impacts mean that the tech sector contributed $167 billion to the Australian economy in FY2021, equivalent to 8.5% of GDP. ... If the sector was classified as its own industry, it would be equivalent to the third largest contributor to GDP in Australia ... The sector's economic contribution has increased 79% since 2016 and has outpaced average growth in the economy by more than four times.*"[2]
    - "*The tech ecosystem has been a key driver of growth and innovation in the Australian economy.*"[3]
- *How we're helping build a strong digital future - for all Australians,* Google - Australia blog, November 15, 2021:
    - "*Aussies are trailblazers in the field of technology. ... Today our 20-year commitment to Australia took another big step forward, with the launch of Google's Digital Future Initiative, a $1 billion investment over five years, in Australian infrastructure, research and partnerships.*"[4]

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[1] Discussion Paper, 4.
[2] Tech Council of Australia, *The economic contribution of Australia's tech sector* (2021), 6.
[3] Tech Council of Australia, *The economic contribution of Australia's tech sector* (2021), 17.
[4] Mel Silva, 'How we're helping to build a strong digital future - for all Australians', *Google Australia Blog* (Blog Post, 15 November 2021).

- "*Right now, Google is working with Australian organisations to apply new technology solutions to urgent challenges we face today – from bushfires to mental health and cancer diagnosis.*"[5]

- *Google's Economic Impact in Australia,* AlphaBeta, December 2020:
  - "*... the annual economic value presented by Google's applications and platforms are worth AU$39 billion for Australian businesses, and AU$14 billion for Australian consumers*".[6]
  - "*Google creates significant economic benefits for businesses in Australia. Such benefits come in the form of increased revenue and productivity. The total economic benefits presented by Google Search, Google Ads, AdSense, Google Maps, Google Play, and Ad Grants are estimated at AU$39 billion a year. These comprise AU$32.7 billion in revenue gains and advertising grants, and AU$6.3 billion in time savings (measured in equivalent wage terms).*"[7]

- *Australia tops international tech-readiness ranking*, Statista, June 27, 2018:
  - "*The Economist Intelligence Unit (EIU) has named Australia, Singapore and Sweden as the countries most prepared for technological change, and the most attractive places for tech companies to invest in the next five years [2018-2022]. 82 countries were assessed for the report across three key categories; access to the internet (including internet usage and mobile phone subscriptions), digital economy infrastructure (looking at e-commerce, e-government, and cyber-security) and openness to innovation (international patents, R&D spending, and research infrastructure).*"[8]

- *Protecting and promoting competition in Australia | ACCC* , Rod Sims, August 27, 2021:
  - Digital platforms have been "*true innovators* [...] *they provide products that consumers and business users value hugely*".[9]

- *Australian Digital Innovation on the Rise,* Commonwealth of Australia represented by the Australian Trade and Investment Commission (Austrade) and the Australian Investment Council, October 22, 2020:

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[5] Mel Silva, 'How we're helping to build a strong digital future - for all Australians', *Google Australia Blog* (Blog Post, 15 November 2021).
[6] AlphaBeta, *Google's Economic Impact in Australia* (December 2020), 5.
[7] AlphaBeta, *Google's Economic Impact in Australia* (December 2020), 9.
[8] Simon O'Dea, 'Australia tops international tech-readiness ranking', *Statista* (27 June 2018).
[9] Rod Sims, 'Protecting and promoting competition in Australia' (Speech, Competition and Consumer Workshop 2021 - Law Council of Australia, 27 August 2021).

- "*Australia's technology ecosystem is experiencing rapid growth and is undergoing an exciting period of expansion and innovation.*"[10]

- *Australia's Digital Pulse 2021,* Deloitte Access Economics, 2021:
  - "*Like many industries, the technology sector performed far better than expected at the beginning of the pandemic … Australia's better-than-expected economic performance over the past year was partly due to technology enabling businesses to adapt to a dramatically changing and uncertain environment.*"[11]

- *BEIS Research Paper Number: 2021/040*, David Deller *et al.,* April 2021:
  - "*GAFAM firms have delivered tremendous breakthrough and disruptive innovations delivering substantial benefits to society*".[12]

- *Tech Comes Out on Top. Can It Stay There?* BCG, March 10, 2022:
  - "*Tech giants continue to add value by offering new services and further expanding their business models and partnerships. In one example of the latter, Amazon's AWS subsidiary, Alphabet's Google Cloud Platform business, and Microsoft's Azure service—three hyperscalers that run data centers and cloud services that can rapidly expand to accommodate client demand—have partnered with telecommunications companies to explore opportunities in 5G and edge computing. To fuel innovation and expand beyond their core products, tech companies such as these routinely spend 20% or more of their revenue on R&D, and in some cases as much as 40% to 50%.*"[13]
  - "*A fact of life in the tech industry is the constant threat that young, innovative companies could upend the status quo of the industry's current value-creation leaders. From January 2020 to June 2021, companies in BCG's Growth Tech 100 cohort grew by 93%, more than three times the overall market's growth of 27%.*"[14]

- *Ensuring Innovation Through Participative Antitrust*, Oliver J Bethell, Gavin N Baird, Alexander M Waksman, August 16, 2019:

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[10] Australian Trade and Investment Commission, *Australian Digital Innovation on the Rise* (22 October 2020), 3.
[11] Deloitte Access Economics, *Australia's Digital Pulse 2021* (2021), 3.
[12] David Deller et al, *Competition and Innovation in Digital Markets* (BEIS Research Paper Number: 2021/040, April 2021), 13.
[13] Derek Kennedy et al, 'Tech Comes Out on Top. Can It Stay There?', *BCG* (Web Page, 10 March 2022).
[14] Derek Kennedy et al, 'Tech Comes Out on Top. Can It Stay There?', *BCG* (Web Page, 10 March 2022).

- "*The past decade has witnessed rapid and sometimes unpredictable innovation in the many and varied markets where digital platforms operate. … If a company like Google had limited itself to operating a general search 'platform', many popular products might never have seen the light of day: Chrome, whose open source technology also powers a range of rival browsers; the Play Store, which provides developers of more than two million apps with access to hundreds of millions of smartphone users; and experiments like Project Loon, which is helping restore Internet connectivity to areas struck by natural disasters.*"[15]

- "*The innovation that digital platforms produce and the unpredictable nature of future developments caution against seeking to re-design the market to a particular blueprint.*"[16]

- *Which Companies Spend the Most in Research and Development (R&D)?,* Nasdaq, June 21, 2021:

  - **Google**: "*It continues to allocate a significant part of its revenue towards its R&D initiatives. Alphabet spent $27.57 billion on R&D, which is equivalent to 15.1% of its revenue of $182.57 billion during the fiscal 2020. The company's R&D spending has more than doubled since the fiscal 2016.*"[17]

  - **Amazon:** "*Amazon is among the top R&D spenders even though its financial statements do not mention R&D as a separate line item. Amazon's SEC filing reveals a whopping expenditure of $42.74 billion in the fiscal 2020 (11.1% of net sales) on 'technology and content' as compared to $35.93 billion in the fiscal 2019.*"[18]

  - **Microsoft:** "*Microsoft is committed to R&D across a spectrum of technologies, tools, and platforms with a focus on three interconnected ambitions: Reinvent productivity and business processes; build an intelligent cloud platform; and to create more personal computing. The company has increased spending on R&D, with rising revenues, maintaining the overall allocation at 13% over the years. During the fiscal 2020, the company reported an R&D expenditure of $19.27 billion (Microsoft's fiscal year runs from July 1 to June 30). During the first nine*

[15] Oliver J Bethell, Gavin N Baird and Alexander M Waksman, 'Ensuring innovation through participative antitrust' (2020) 8 *Journal of Antitrust Enforcement* 1, 30.
[16] Oliver J Bethell, Gavin N Baird and Alexander M Waksman, 'Ensuring innovation through participative antitrust' (2020) 8 *Journal of Antitrust Enforcement* 1, 30.
[17] Prableen Bajpai, 'Which Companies Spend the Most in Research and Development (R&D)?', *Nasdaq* (Online, 21 June 2021).
[18] Prableen Bajpai, 'Which Companies Spend the Most in Research and Development (R&D)?', *Nasdaq* (Online, 21 June 2021).

months of the current fiscal (till March 2021), its R&D allocation had reached $15.03 billion."[19]

- **Apple:** "*During fiscal 2020 (Apple's fiscal year runs from October 1 to September 30), Apple spent $18.75 billion on R&D, equivalent to 7% of its net sales."*[20]

- **Facebook**: "*According to Facebook, its "business is characterized by innovation, rapid change, and disruptive technologies." During the fiscal 2020, it allocated $18.45 billion equal to 21% of its revenue towards R&D spending. "*[21]

- *What the Top Innovators Get Right*, PwC, strategy+business, October 30, 2018:

  - "*For the second year in a row, Amazon led the top 20 [R&D spending] list, with spending of $22.6 billion — up a massive 40.6 percent from 2017. It was followed, as was also the case last year, by Alphabet, with R&D expenditures of $16.2 billion … Facebook posted the biggest climb on the top 20 list, up six places from its 2017 position to number 14*."[22]

  - Microsoft was ranked sixth, and Apple seventh in R&D spending.[23]

- *Amazon's Great R&D Gift to the Nation*, Bloomberg, April 5, 2018:

  - "*Amazon passed Volkswagen AG in late 2016 to become the world's biggest corporate R&D spender, and its hold on the No. 1 spot has only grown more secure since."*[24]

  - "*… the online retail, cloud computing and digital entertainment behemoth from Seattle is clearly spending tons of money developing and refining new technologies, and its spending is increasing at a faster pace than that of other corporations."*[25]

- *Overcoming the Innovation Readiness Gap,* BCG, April 2021.

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[19] Prableen Bajpai, 'Which Companies Spend the Most in Research and Development (R&D)?', *Nasdaq* (Online, 21 June 2021).
[20] Prableen Bajpai, 'Which Companies Spend the Most in Research and Development (R&D)?', *Nasdaq* (Online, 21 June 2021).
[21] Prableen Bajpai, 'Which Companies Spend the Most in Research and Development (R&D)?', *Nasdaq* (Online, 21 June 2021).
[22] Barry Jaruzelski, Robert Cwalik and Brad Goehle, 'What the top innovators get right', *PwC strategy + business* (Online, 30 October 2018).
[23] Barry Jaruzelski, Robert Cwalik and Brad Goehle, 'What the top innovators get right', *PwC strategy + business* (Online, 30 October 2018).
[24] Justin Fox, 'Amazon's Great R&D Gift to the Nation', *Bloomberg* (Online, 5 April 2018).
[25] Justin Fox, 'Amazon's Great R&D Gift to the Nation', *Bloomberg* (Online, 5 April 2018).

- BCG ranked the 50 most innovative companies of 2021. Apple, followed by Alphabet, Amazon and Microsoft were ranked as the four most innovative, while Facebook was ranked fourteenth.[26]
- "*The members of our pre-pandemic top 50 from 2020 have outperformed the index by a staggering 17 percentage points in the past year*".[27]

Beyond these sector-wide studies, a deepdive into Google's innovation of Search shows no lack of innovation. To the contrary, Google relentlessly innovates Search, as discussed in more detail in **Annex Q.1.2.**

[26] BCG, *Overcoming the Innovation Readiness Gap* (April 2021), 5.
[27] BCG, *Overcoming the Innovation Readiness Gap* (April 2021), 4.

Annex Q.1.2: Innovation in Google Search

Evidence Attests to Google Search's High Quality

Objective evidence confirms that Google Search is tremendously high-quality. Contrary to the Discussion Paper's speculation, Australian consumers do not suffer from a lack of innovation when they use Google Search:

- **The ACCC confirms Search's quality.** The ACCC has recognised the "*high quality*" of Google Search.[28] The Discussion Paper finds that Google *"continually improve[s] the relevance of its search results."*[29] Other authorities have reached a similar conclusion.[30]

- **Surveys of Australians confirm Search's quality.** A survey of more than 400 Australian users finds that Australians identify Google to be their favourite search service. 89% of respondents say that Google is their favourite.[31]

- **Google's share on Windows confirms Search's quality.** Google's share on Windows provides a natural experiment confirming that Google is preferred by Australian users. Microsoft preinstalls its Edge browser and sets it as default on Windows. Microsoft also sets Bing as the default search service on Edge and Windows. But Google's share of search queries on Windows desktops in Australia is around 91%, while Bing's share is just 7.5%.[32] In turn, Chrome's share of browsers on Windows is around 74% compared with Edge, with only 11%.[33] Australian users override Microsoft's defaults and choose their preferred alternative instead: Google.[34]

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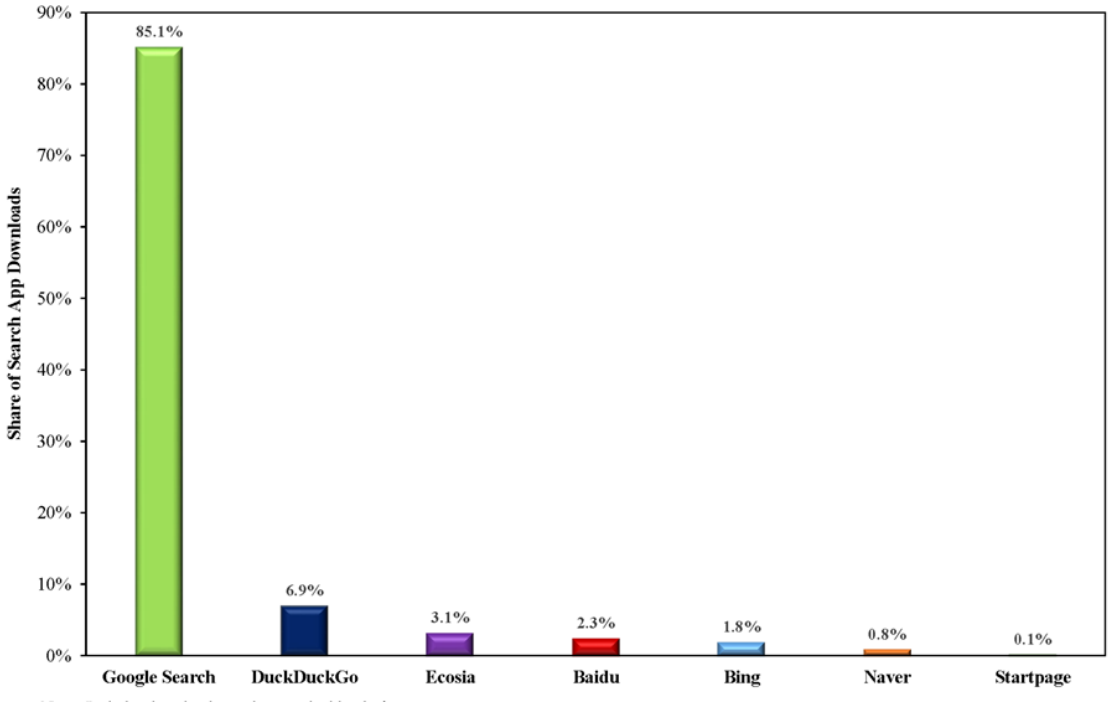
[28] ACCC, Final Report, *Digital Platforms Inquiry* (June 2019), 72.
[29] Discussion Paper, 41.
[30] The *Android* decision (European Commission, Case AT.40099, 18 July 2018) confirmed in multiple places the superiority of Google Search. It noted that Google would win the vast majority of queries in side-by-side competition (paras. 1261(1) and 1234(1)-(2)). It found that users "*may use Google's general search service because of the perceived relevance of the results that service provides*" (paras. 675 and 726). It stressed that users *"trust in the relevance of search results provided by Google*" (paras. 712, 812, and fn.769). It observed that users *"favour Google's UI over [rivals]*" (fn. 770). And it found that Google invests substantially more than rivals in improving its service (para. 692 and Table 8).
[31] Google, September 2021 Report on market dynamics and consumer choice screens in search services and web browsers: Google's Response to ACCC Issues Paper, *ACCC Digital Platforms Services Inquiry* (7 May 2021), Survey One, Question 3.
[32] Netmarketshare, data from January 2020 to October 2020 (Netmarketshare's service was discontinued after that date).
[33] Netmarketshare, data from January 2020 to October 2020 (Netmarketshare's service was discontinued after that date).
[34] Microsoft requires Edge to be preinstalled on its Windows desktops, not Google. See Tom Warren, 'Microsoft is making it harder to switch default browsers in Windows 11', *The Verge* (Web Page, 18 August 2021); see also Mauro Huculak, 'How to set any browser as new default on Windows 10', *Windows Central*, (Web Page, 16 January 2021).

- **Search app downloads on iOS confirm Search's quality**. Google Search is by far the most downloaded search app on Apple iOS devices. In particular, 85% of search app downloads on iOS devices in Australia in 2020 were Google Search. DuckDuckGo was second, with only 7% (based on data from App Annie). The search app download data indicate that Australians prefer Google Search over other search apps.

iOS Search App Download Shares (Australia, 2020)



- **Rater tests confirm Search's quality.** Data from rater tests find that Google outperforms Bing. Google tracks search performance by measuring 'information satisfaction' (**IS**) scores on a 100 point scale. IS is measured blind by Search Quality Raters who do not know whether they are testing Google or Bing. Based on IS score data, Google significantly outperforms Bing.[35] Academic studies reach similar conclusions about the relative quality of Google and Bing.[36]

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[35] The CMA reviewed IS data and also found that Google significantly outperformed Bing in IS scores. See CMA, *CMA Online platforms and digital advertising market study, Appendix I: search quality and economies of scale* (1 July 2020), para. 6.

[36] A study by a professor of Yale Law School demonstrates Google's superiority relative to Bing. See Ian Ayres et al, 'A Randomized Experiment Assessing the Accuracy of Microsoft's "Bing it On" Challenge' (2013) 26 *Loyola Consumer Law Review* 1. Contrary to Microsoft's claim that "*people preferred Bing web search results nearly 2:1 over Google in blind comparison tests.*" See Mike Nicols, 'Take the Bing It On Challenge!', *Microsoft Bing Blogs* (Blog Post, 6 September 2012). The study "*strongly reject[s] the possibility that internet users would prefer Bing search results to Google search results at anywhere near a 2-to-1 ratio.*" It found that "*[s]ubjects who used popular search terms or self-selected search terms had a statistically significant preference for Google over Bing.*"

- **Australian third-party reports confirm Search's quality.** Reports in Australia corroborate the superiority of Google Search to its rivals in Australia. They note rivals' inability to show good results for simple queries like 'best beach Sydney';[37] they emphasise Google's focus on showing authoritative and credible sources, while rivals display low-quality content;[38] and they stress that Bing "*pales in comparison*" to Google.[39]

- **Microsoft's statements confirm Search's quality.** In the context of Australia's proposed media bargaining code, Microsoft President Brad Smith agreed that Microsoft would have to improve to be competitive in Australia.[40] He stated in an interview that Microsoft "*would need to invest*" because "*we readily recognise*" that Microsoft is not as high quality as Google in Australia.[41] Mr. Smith also stated that Bing's share in the US, Canada, and UK, where it has made efforts to localise its service, was 20%-30%, and he attributed Bing's lower share in Australia to Microsoft's failure to invest in this country.[42] Mr. Smith's comments demonstrate that search services' popularity in Australia turns on their relative quality, not defaults or preinstallation.

Google's innovations in Search

A review of evidence on Google's actual innovations confirms that Google relentlessly innovates Search. We list below some of Google's most significant innovations in these areas. These are simply some of the most notable changes to Google Search that can be publicly revealed. Much of Google's search quality also comes from the sum of many hundreds of incremental changes, each of which is rigorously tested. In 2018, Google deployed more than

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[37] Georgina McKay and Angus Whitley, 'Life Without Google: Australia Is Now Facing the Unthinkable', *Bloomberg* (Online, 11 February 2021). ("*Searching for 'best beach Sydney' shows the variance in performance among Google's competitors. DuckDuckGo's first result was an ad for a hotel more than 1,000 kilometers away in Queensland, with Sydney beach reviews listed below a second ad link. Search Encrypt, which touts its data-protection capability, said: 'It looks like there aren't any great matches.' Bing's initial suggestion was Bondi Beach Post Office. Only Google returned a real beach, Bondi, first up*").

[38] See Matthew Elmas, 'Easier to manipulate': Bing searches will drive disinformation, experts warn', *The New Daily* (Online, 5 February 2021) ("*Google's program emphasises credible sources cited by authoritative websites whereas Bing is more likely to deliver results based on quantity of sources, which are often lower quality*").

[39] See Chris Duckett, 'If Bing is the answer then Australia is asking the wrong question', *ZDNet* (Online, 7 February 2021). ("*In my view, Bing lags by quite a distance. For generalist or casual searching, it does the job, but the second you want to dive deep into a subject – or in my case seek out technical information -- it pales in comparison to Google*").

[40] See Jade Macmillan, 'Microsoft backs media bargaining code, suggests Bing can fill gap if Google and Facebook depart', *ABC News* (Online, 3 February 2021).

[41] Linda Mottram, '"We believe": Microsoft President tells "PM" company backs news payment plan, but can it replace Google for search?', *ABC Radio* (Recording of Radio Program, 3 February 2021).

[42] Linda Mottram, '"We believe": Microsoft President tells "PM" company backs news payment plan, but can it replace Google for search?', *ABC Radio* (Recording of Radio Program, 3 February 2021).

2,400 distinct changes to the Search product, each of which improved it in some way, large or small.

Updates and improvements to Google's search algorithms

Google Search uses algorithms to sift through vast amounts of information and find the most relevant, useful results in a fraction of a second. Search algorithms "*look at many factors, including the words of your query, relevance and usability of pages, expertise of sources and your location and settings*" as well as freshness of content.[43] Google continuously improves its search algorithms. To give a few examples:

- **Freshness update (2011):** In 2011, Google improved its ranking algorithm to differentiate between searches and determine the level of freshness needed. For example, while results from a week ago about a TV show may be recent, week-old results for a breaking news story may be too old to be relevant.[44]
- **Panda (2011):** Google developed Panda to identify low-quality sites. This was in response to the widespread perception that its generic results were surfacing too many low-quality sites.[45] The launch of Panda was widely recognised as having markedly improved the quality of Google's search results.[46]
- **Exact Match Domain update (2012):** With this update, Google targeted sites that had exact match domain names but were "*poor quality sites with thin content*".[47]

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[43] Google, 'How Search algorithms work', *Google Search* (Web Page, 2022).
[44] Amit Singhal, 'Giving you fresher, more recent search results', *Google Inside Search* (Blog Post, 3 November 2011).
[45] See Michael Arrington, 'The End of Hand Crafted Content', *TechCrunch* (Blog Post, 14 December 2009); Richard MacManus, 'Content Farms: Why Media, Blogs & Google Should Be Worried', *ReadWrite* (Blog Post, 13 December 2009); Chris Dixon, 'The Anatomy Of A Bad Search Result', *Insider* (Blog Post, 20 December 2009); Greg Niland, 'Why Google Allows Target.com to Spam Results', *Good ROI Marketing* (Blog Post, 10 December 2009); K Dawson, 'Technology: Target.com's Aggressive SEO Tactic Spams Google', *Slashdot* (Online Discussion Forum, 23 December 2009).
[46] Alexis C. Madrigal, 'Testing Google's New Algorithm: It Really Is Better', *The Atlantic* (Online, 25 February 2011): "*And I have to say: Wow, the new algorithm yielded far superior results*". See also Johannes Beus, 'Google Farmer Update: Quest for Quality', *Sistrix* (Blog Post, 26 February 2011): "*A whole lot of low-quality domains lost significant visibility*". See also New Scientist, 'Google and Bing fight off 'content farms' in effort to improve online searches', *The Washington Post* (Online, 19 December 2011): "*Survey finds improved search results after Google muffles content farms*". Virginia Hefferman, 'Google's War on Nonsense', *The New York Times*, (Online, 26 June 2011): "*Panda represents good cyber-governance. It has allowed Google to send untrustworthy, repetitive and unsatisfying content to the back of the class*". Kim Krause Berg, 'Google's Farmer Update Plants User Behavior Seeds', *Search Engine Land* (Online, 4 March 2011): "*The new garden of fresh authentic content that ranks well now will be a welcome improvement*".
[47] Brian Harnish, 'Your Guide to Google's Exact Match Domain Algorithm Update', *Search Engine Journal* (Online, 1 December 2017).

- **Penguin (2012):** Google developed Penguin to identify websites that seek to appear more relevant than they are by relying on artificial links and anchor text (the visible text associated with a link that leads to another webpage).[48]

- **PageRank (1997 and updated regularly since then):** The authoritativeness of result pages is a central part of search quality, and Google relies on authoritativeness signals to combat the rise of misinformation on the web. PageRank uses links on the web to understand authoritativeness.[49] Google's ranking algorithms identify the most authoritative and trustworthy pages and elevate them above information that is less reliable. Such assessments are query-specific and may vary across webpages on the same website.[50] The PageRank algorithm was developed in 1997[51] and updated every 3-4 months until 2013.[52]

- **Payday Loan update (2013):** The Payday Loan algorithm update targeted queries often linked to spam, "*mostly associated with shady industries like super high interest loans and payday loans, porn, and other heavily spammed queries*".[53]

- **Hummingbird (2013):** Google launched the Hummingbird update to improve Google's ability to understand the meaning behind queries, notably 'conversational' queries.[54] The ability to understand a query is an important prerequisite for a search service to deliver relevant and useful search results.

- **Pigeon (2014):** With the Pigeon update, Google was able to provide users with more useful, relevant, and accurate local search results by improving its distance and location ranking parameters.[55]

- **Mobile Friendly update (2015):** The Mobile Friendly Update introduced as a quality signal for searches on mobile devices whether a site has a mobile friendly design and loads quickly. The update did not affect desktop searches. Because mobile devices are comparatively less powerful than desktop computers and mobile data transmission is

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[48] Dan Taylor, 'A Complete Guide to the Google Penguin Algorithm Update', *Search Engine Journal* (Online, 30 November 2017).
[49] Google, *How Google Fights Disinformation* (February 2019), 12.
[50] Google, *How Google Fights Disinformation* (February 2019), 12.
[51] Sergey Brin and Lawrence Page, 'The Anatomy of a Large-Scale Hypertextual Web Search Engine' (1998) 30 *Computer Networks and ISDN Systems* 1-7, 107.
[52] Google Search Central, 'English Google Webmaster Central office-hours hangout', *YouTube*, (Web Page, 6 October 2014), 20:30; Barry Schwartz, 'Google Toolbar PageRank Finally & Officially Dead?', *Search Engine Land* (Online, 7 October 2014).
[53] Brian Harnish, 'What You Need to Know About the Google Payday Loan Algorithm Update', *Search Engine Journal* (Online, 4 December 2017).
[54] Beau Pedraza, 'How the Google Hummingbird Update Changed Search', *Search Engine Journal* (Online, 6 December 2017).
[55] Sam Hollingsworth, 'How the Google Pigeon Update Changed Local Search Results', *Search Engine Journal* (Online, 8 December 2017).

more costly for users, providing a mobile-friendly version of a site that limits data volumes and increases load speed provides a better experience for users on mobile devices.

- **RankBrain (2015):** Rankbrain is a machine learning system that learns to interpret queries and identify relevant results for those queries.[56] The system continuously adjusts by learning from past data in that way that enables Google to deliver more relevant results. RankBrain helps Google better relate pages to concepts and other words, which allows Google to better return relevant pages that do not contain the exact words used in a search query.[57] One reason that RankBrain is more effective for never-before-seen queries is that it can guess what words or phrases might have a similar meaning to a word or phrase it has not seen before.[58]

- **Possum (2016):** Google introduced Possum to improve its local search results. Possum improved local results' ranking by refining Google's use of proximity as a signal, filtering out duplicate entries, and enhancing the user's location as a signal.[59]

- **Mobile Speed (2018):** Mobile Speed introduced page speed as a ranking factor for mobile searches. Mobile Speed only affected "*pages that deliver the slowest experience to users and* [only] *a small percentage of queries. It applies the same standard to all pages, regardless of the technology used to build the page. The intent of the search query is still a very strong signal, so a slow page may still rank highly if it has great, relevant content.*"[60]

- **Bidirectional Encoder Representations from Transformers (BERT) (2018, 2019):** One of the biggest search quality improvements that Google has made over the last five years is the neural matching system, BERT, which was open-sourced in November 2018.[61] By December 2019, BERT was rolled out to 70 different languages worldwide for

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[56] Steven Levy, 'How Google is Remaking Itself as a "Machine Learning First" Company', *Wired* (Online, 22 June 2016).
[57] @searchliaison, "*We've had some questions about how neural matching differs from RankBrain. In short: RankBrain helps us better relate pages to concepts; Neural matching helps us better relate words to searches...*". See Google SearchLiaison, 'Google SearchLiaison thread', *Twitter* (Web Page, 21 March 2019).
[58] Jack Clark, 'Google Turning Its Lucrative Web Search Over to AI Machines', *Bloomberg* (Online, 26 October 2015); Matt McGee, '#SMX Advanced keynote: Google's Gary Illyes talks RankBrain, Penguin update & more', *Search Engine Land* (Online, 22 June 2016).
[59] Joy Hawkins, 'Everything you need to know about Google's 'Possum' algorithm update', *Search Engine Land* (Online, 21 September 2016).
[60] Doantam Phan and Zhiheng Wang, 'Using Page Speed In Mobile Search Ranking', *Google Search Central Blog* (Blog Post, 17 January 2018).
[61] Ming-Wei Chang and Jacob Devlin, 'Open Sourcing BERT: State-of-the-Art Pre-training for Natural Language Processing', *Google AI Blog* (Blog Post, 2 November 2018).

Search.[62] Google's neural matching works like a 'super-synonym system' which primarily helps Google better understand how words in search queries might be related to concepts.[63] For example, the query 'why does my tv look strange' will return pages about 'the soap opera effect', which involves the use of motion smoothing technology on modern TVs.[64] In November 2019, Google started to use neural matching to generate local search results.[65]

- **Recent spam filter updates (2021):** In November 2021, Google confirmed that a further update to its spam filters was being implemented globally.[66] This was the fourth update Google made to its spam filters in 2021.[67] Google fights spam both with algorithms that automatically detect and remove spam, and with human analysts who provide manual penalties to pages exhibiting spammy behaviours.

- **Multitask Unified Model (MUM) (2021):** Google announced that it will be using artificial intelligence (**AI**) to improve Google Search through MUM technology. MUM uses *"the T5 text-to-text framework and is 1,000 times more powerful than BERT"*[68]

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[62] @searchliaison, "*BERT, our new way for Google Search to better understand language, is now rolling out to over 70 languages worldwide. It initially launched in Oct. for US English. You can read more about BERT below & a full list of languages is in this thread....*". See Google SearchLiaison, 'Google SearchLiaison thread', *Twitter* (Web Page, 9 December 2019).

[63] @searchliaison, "*We've had some questions about how neural matching differs from RankBrain. In short: RankBrain helps us better relate pages to concepts; Neural matching helps us better relate words to searches...*". See Google SearchLiaison, 'Google SearchLiaison thread', *Twitter* (Web Page, 21 March 2019). A 2018 paper published by Google researchers explores several extensions of deep learning models used for document relevance ranking (*i.e.* "*the task of ranking documents from a large collection using the query and the text of each document only*"). Ion Androutsopoulos, George Brokos and Ryan McDonald, *Deep Relevance Ranking Using Enhanced Document-Query Interactions*, (Proceedings of the 2018 Conference on Empirical Methods in Natural Language Processing, 2018), 1849. The models explored in this paper are interaction based models, which allow for "*direct modeling of exact- or near-matching terms (e.g., synonyms), which is crucial for relevance ranking*", 1850.

[64] @dannysullivan, "*Last few months, Google has been using neural matching, --AI method to better connect words to concepts. Super synonyms, in a way, and impacting 30% of queries. Don't know what "soap opera effect" is to search for it? We can better figure it out*." See Danny Sullivan, 'Danny Sullivan thread', *Twitter* (Web Page, 25 September 2018).

[65] @searchliaison, "*In early November, we began making use of neural matching as part of the process of generating local search results. Neural matching allows us to better understand how words are related to concepts, as explained more here*". See Google SearchLiaison, 'Google SearchLiaison thread', *Twitter*, (Web Page, 2 December 2019).

[66] @searchliaison, "*As part of our regular work to improve results, we've released a spam update to our systems. This November 2021 spam update should be fully rolled out within a week*." See Google SearchLiaison, 'Google SearchLiaison thread', *Twitter*, (Web Page, 3 November 2021). See also Duy Nguyen, 'A reminder on qualifying links and our link spam update', *Google Search Central* (Blog Post, 26 July 2021).

[67] Jan Grundmann, 'Google Spam Update November 2021: How to Avoid a Drop in Rankings', *searchmetrics* (Blog Post, 24 November 2021).

[68] Pandu Nayak, 'MUM: A new AI milestone for understanding information', *Google: The Keyword* (Blog Post, 18 May 2021).

(described above). Not only does it understand language, it can also generate it. A feature of MUM is 'Things to know' which uses its understanding of how people explore certain topics to provide more relevant search results.[69] For example, if a person searches for "acrylic paint", MUM might suggest 'Things to know' like how to paint with acrylic paint, or clean it off surfaces and brushes.[70]

- **"About this result" update (2021):** Google now provides 'About this result' information for search results, which includes information about when the web page was first indexed, whether the user's connection to the site is secure, and the language of the web page.[71] This update is meant to help users determine what search results are most relevant to their query.

- **Local Search Update (2021):** In November 2021, Google rolled out updates to its local search algorithm.[72] The factors Google uses to rank local search results are relevance, distance and prominence.[73] The update involved a 'rebalancing' of these factors.[74]

- **Page Experience update (2021, 2022):** Google's Page Experience algorithm update is expected to be fully rolled out to desktop search results by the end of March 2022.[75] This update is an extension of mobile search update which took place in the summer of 2021.[76] These updates aim to highlight webpages that provide users with a great experience.[77]

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[69] Joseph Chukwube, *'The 8 Biggest Google Algorithm Updates of 2021 (+Optimization Tips)'*, *WordStream* (Blog Post, 6 February 2022); Sarah Perez, 'Google is redesigning Search using AI technologies and new features', *TechCrunch* (Blog Post, 29 September 2021).
[70] Sarah Perez, 'Google is redesigning Search using AI technologies and new features', *TechCrunch* (Blog Post, 29 September 2021).
[71] Joseph Chukwube, *'The 8 Biggest Google Algorithm Updates of 2021 (+Optimization Tips)'*, *WordStream* (Blog Post, 6 February 2022).
[72] @googlesearchc *"Our November 2021 local search update has concluded"*. See Google Search Central, 'Google Search Central thread', Twitter (Web Page, 16 December 2021). Matt G. Southern, 'Google Confirms Update To Local Search Results', *Search Engine Journal* (Blog Post, 16 December 2021).
[73] Google, 'How to improve your local ranking on Google', *Google Business Profile Help* (Web Page, 2022).
[74] @googlesearchc *"Our November 2021 local search update has concluded"*. See Google Search Central, 'Google Search Central thread', Twitter (Web Page, 16 December 2021).
[75] Matt G. Southern, 'Google Page Experience Update Starts Rolling Out On Desktop', *Search Engine Journal* (Blog Post, 22 February 2022).
[76] Matt G. Southern, 'Google Page Experience Update Starts Rolling Out On Desktop', *Search Engine Journal* (Blog Post, 22 February 2022).
[77] Jeffrey Jose, 'More time, tools, and details on the page experience update', *Google Search Central Blog* (Blog Post, 19 April 2021).

Updates and improvements to Google's web crawling technology

By 2008, there were already one trillion unique URLs on the web. There is no central registry for all of these webpages, and so Google constantly searches for new pages and updates to existing webpages in order to keep an up-to-date list of known pages. This process is known as 'crawling'. Google is continuously looking for ways to improve its crawling technology.

- **Sitemaps (2005):** Sitemaps are files provided by website owners which contain information that Google and other search engines can use to more intelligently crawl a site.[78] Specifically, sitemaps provide information about which pages are important, when a page was last updated, how often a page is changed, and alternate language versions of a page. Google introduced sitemaps in June 2005 to improve the coverage and freshness of its index.[79] By November 2006, sitemaps had become an open initiative with the additional support of Yahoo! and Microsoft.

- **Smartphone GoogleBot (2011):** Google introduced a version of Googlebot that identified itself as a smartphone to webpages, allowing it to "*discover content specifically optimized to be browsed on smartphones.*"[80]

- **Local-Aware Crawl configurations (2015):** Google introduced new configurations of its crawler, Googlebot, which allowed it to more completely index webpages that were locale-adaptive (*i.e.*, pages that change their content to reflect a user's language or location).[81]

- **Google Webmaster Tools and Search Console updates (2006-2018):** In August 2006, Google introduced Google Webmaster Tools, a set of tools that allowed owners of websites deeper insight into and control of how Google crawled and indexed their sites.[82] In May 2015, Google Webmaster Tools was rebranded as Google Search Console.[83] Over the years, Google has made many updates to the Webmaster Tools and Search Console, including a version that was "*rebuilt from the ground up*" in 2018.[84] The Search Console currently contains a couple dozen reports and tools.[85]

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[78] Google Search Central, 'Learn about sitemaps', *Google Search Central* (Web Page, 28 February 2022).
[79] Shiva Shivakumar, 'Webmaster-friendly', *Google Official Blog* (Blog Post, 2 June 2005).
[80] Yoshikiyo Kato, 'Introducing smartphone Googlebot-Mobile', *Google Search Central Blog* (Blog Post, 15 December 2011).
[81] Pierre Far and Qin Yin, 'Crawling and indexing of locale-adaptive pages', Qin Yin and Pierre Far, *Google Search Central Blog* (Blog Post, 28 January 2015).
[82] Vanessa Fox and Adam Lasnik, 'We love you, webmasters', *Google Official Blog* (Blog Post, 24 August 2006).
[83] Michael Fink, 'Announcing Google Search Console - the new Webmaster Tools', *Google Search Central Blog* (Blog Post, 20 May 2015).
[84] Hillel Maoz, John Mueller and Ofir Roval, 'Introducing the new Search Console', *Google Search Central Blog* (Blog Post, 8 January 2018).
[85] Google, 'Reports at a glance', *Search Console Help* (Web Page, 2022).

- **Nofollow update (2005, 2020) - affects crawling and indexing:** Google introduced the nofollow attribute in 2005 as a way to filter spam. It is also used as a way for webmasters to flag links to advertising or sponsored content. In 2020, Google introduced "*two new link attributes that provide webmasters with additional ways to identify to Google Search the nature of particular links*".[86] Further, until 2020, Google excluded links marked as nofollow from being used as a signal in its search algorithms. With the update, nofollow and the new two link attributes are instead treated as hints. Google will use these hints "*as a way to better understand how to appropriately analyze and use links within our systems*".[87]

Updates and improvements to Google's indexing technology

In order for Google to return a webpage in its Search results, it must first have that webpage in its index. Google builds its index by using web crawling software to discover public webpages. Google's index covers hundreds of billions of webpages, is over 100,000,000 million gigabytes in size[88] and is continuously being updated.

- **Caffeine Index System (2010):** After at least a year of testing,[89] Google completed a new web indexing system called Caffeine.[90] The new Caffeine system allowed Google to serve fresher search results. Prior to Caffeine, there was a significant delay (2-3 days in the "base" index)[91] between when Google found a webpage with its web crawlers, and when that page was added to the index and made available in search results.[92] After Caffeine was put into production, content became searchable seconds after it had been crawled.[93] Caffeine allowed Google to provide 50% "fresher" results for web searches than before[94] (*i.e.*, the average age of a document returned in Search results dropped by 50%).[95] Caffeine also allowed Google to increase the size of its index, and

[86] Gary Illyes and Danny Sullivan, 'Evolving "nofollow" – new ways to identify the nature of links', *Google Search Central Blog* (Blog Post, 10 September 2019).
[87] Gary Illyes and Danny Sullivan, 'Evolving "nofollow" – new ways to identify the nature of links', *Google Search Central Blog* (Blog Post, 10 September 2019).
[88] Google, 'How Search organizes information', *Google Search* (Web Page, 2022).
[89] Matt Cutts and Sitaram Iyer, 'Help test some next-generation infrastructure', *Google Search Central Blog* (Blog Post, 10 August 2009).
[90] Carrie Grimes, 'Our new search index: Caffeine', *Google Search Central Blog*, (Blog Post, 8 June 2010).
[91] Frank Dabek and Daniel Peng, *Large-scale Incremental Processing Using Distributed Transactions and Notifications* (Proceedings of the 9th USENIX Symposium on Operating Systems Design and Implementation, USENIX, 2010), 2.
[92] Carrie Grimes, 'Our new search index: Caffeine', *Google Search Central Blog*, (Blog Post, 8 June 2010).
[93] Vanessa Fox, 'Google's New Indexing Infrastructure 'Caffeine' Now Live', *Search Engine Land* (Online, 8 June 2010).
[94] Carrie Grimes, 'Our new search index: Caffeine', *Google Search Central Blog*, (Blog Post, 8 June 2010).
[95] Frank Dabek and Daniel Peng, *Large-scale Incremental Processing Using Distributed Transactions and Notifications* (Proceedings of the 9th USENIX Symposium on Operating Systems Design and Implementation, USENIX, 2010), 2.

was more flexible than the system it replaced.[96] Caffeine made it relatively easier for new types of information about webpages and other documents to be added to Google's index and included in search results.[97]

- **Android App Indexing (2014):** Google announced a new capability for Search called app indexing.[98] App indexing allows content in an Android app to be indexed by Google, and for links to content within an app to be returned in search results if users have that app installed. This functionality was launched fully in June 2014.

- **Indexing JavaScript Content (2014):** JavaScript is a popular programming language used to make websites interactive.[99] In May 2014 Google announced that it had increased the number of webpages for which its indexing system rendered JavaScript content.[100] At Google's 2018 I/O conference, Tom Greenaway from Google explained that pages with JavaScript go through two phases of indexing.[101] Indexing pages with JavaScript content that is rendered on the client-side, rather than the server-side, is a relatively more computationally intensive process than indexing pages without JavaScript.[102] Therefore, Google will perform an initial index of pages with JavaScript, and when more resources are available, Google will render the JavaScript portion of the page and update the index with the full version of this page.[103]

- **Indexing API (2018):** There are certain types of short-lived content for which it is important that the information kept in Google's index is fresh. In June 2018, Google introduced the Indexing API that allowed site owners to directly notify Google when a job posting was added or removed. In December 2018, this API was extended to video livestreams. When Google is directly notified when short-lived content such as a video livestream or job posting has changed, it can do a better job keeping its search results fresh.

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[96] Frank Dabek and Daniel Peng, *Large-scale Incremental Processing Using Distributed Transactions and Notifications* (Proceedings of the 9th USENIX Symposium on Operating Systems Design and Implementation, USENIX, 2010), 9.
[97] Mitch Wagner, 'Caffeine gives Google search a jolt', *Computerworld* (Online, 10 June 2010); and Vanessa Fox, 'Google's New Indexing Infrastructure 'Caffeine' Now Live', *Search Engine Land* (Online, 8 June 2010).
[98] Lawrence Chang, 'Indexing apps just like websites', *Google Search Central Blog* (Blog Post, 31 October 2013).
[99] Tomek Rudzki, 'The Ultimate Guide to JavaScript SEO (2020 Edition)', *Onely* (Blog Post, 11 March 2020).
[100] Erik Hendriks, Kazushi Nagayama and Michael Xu, 'Understanding web pages better', *Google Search Central Blog* (Blog Post, 23 May 2014).
[101] Jennifer Slegg, 'Google Indexes and Ranks JavaScript Pages in Two Waves Days Apart', *The SEM Post* (Online, 11 May 2018).
[102] Jennifer Slegg, 'Google Indexes and Ranks JavaScript Pages in Two Waves Days Apart', *The SEM Post* (Online, 11 May 2018).
[103] Jennifer Slegg, 'Google Indexes and Ranks JavaScript Pages in Two Waves Days Apart', *The SEM Post* (Online, 11 May 2018).

- **Passage ranking update (2021):** This update allows Google to use AI to index passages of text from webpages. Snippets with text can then be displayed in Search, allowing users to find answers to their queries in less time than if they had to sift through the webpage themselves.[104]

- **Mobile-First Indexing (2018, 2022):** By November 2016, most people searching on Google were using a mobile device.[105] But prior to 2018, Google's crawling, indexing and rankings systems typically used the version of a webpage that would be served to a desktop user.[106] Beginning in March 2018, Google started to shift to using the mobile version of webpages for indexing and ranking.[107] Google planned to switch to "mobile-first" indexing for all websites by March 2021, but the rollout has been delayed.[108]

Google's controlled experiments

Google is typically running a large number of experiments simultaneously. Google disclosed in 2008 that at any given time, it was running anywhere from 50 to 200 experiments on Google sites around the world to test potential changes to search.[109] For years now, it has been possible for Google to layer experiments without losing effectiveness.[110]

In 2019, Google ran 17,523 live traffic experiments, where it enabled the feature in question for a small number of users, usually starting at 0.1% for each experiment.[111] The search traffic used by all of Google's 'merge server' experiments (this is Google's main type of search rank experiment) that are running simultaneously at any one time is allocated across 0.6% of Google's search traffic. Data collected from the experiments is compared against a control group that did not have the feature enabled, by looking at various metrics such as click-through rates and the time taken to click on a webpage.[112] These results help determine whether the feature can meaningfully improve Google's search results.

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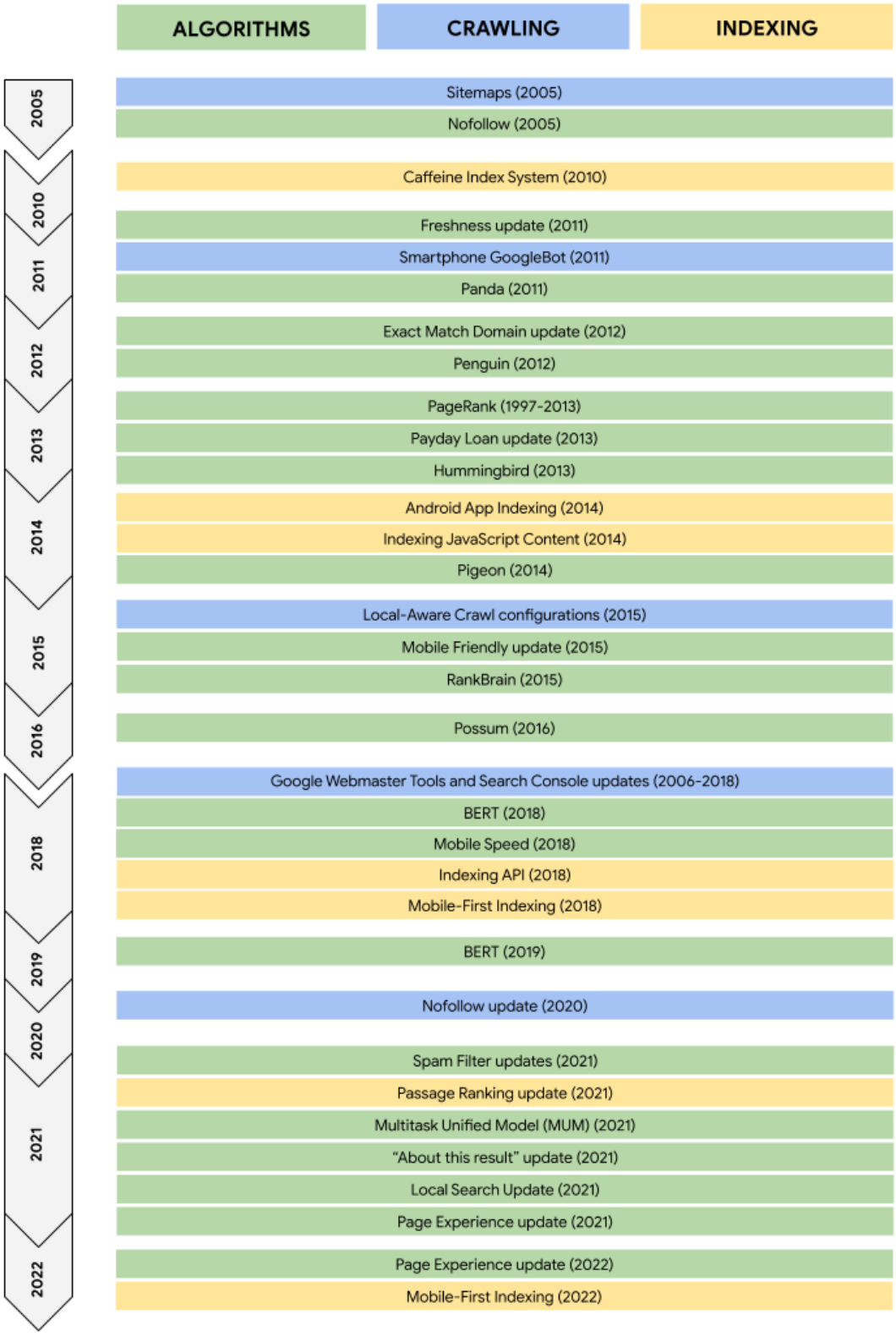
[104] Joseph Chukwube, 'The 8 Biggest Google Algorithm Updates of 2021 (+Optimization Tips)', *WordStream* (Blog Post, 6 February 2022).
[105] Doantam Phan, 'Mobile-first Indexing', *Google Search Central Blog* (Blog Post, 4 November 2016).
[106] Fan Zhang, 'Rolling out mobile-first indexing', *Google Search Central Blog* (Blog Post, 26 March 2018).
[107] Fan Zhang, 'Rolling out mobile-first indexing', *Google Search Central Blog* (Blog Post, 26 March 2018).
[108] Yingxi Wu, 'Prepare for mobile-first indexing (with a little extra time)', *Google Search Central Blog* (Blog Post, 21 July 2020); Mindy Weinstein, 'Google's Mobile-First Indexing: Everything We Know (So Far)', *Search Engine Journal* (Online, 2 August 2021).
[109] Ben Gomes, 'Search experiments, large and small', *Google Official Blog* (Blog Post, 26 August 2008).
[110] Google, *How Google Fights Disinformation* (February 2019), 12.
[111] Google, 'Rigorous testing – Live traffic experiments', *Google Search* (Web Page, 2022).
[112] Google, 'Rigorous testing – Live traffic experiments', *Google Search* (Web Page, 2022).

A Snapshot of Some Significant Innovations in Google Search



Annex Q.1.3: The Discussion Paper's Discussion of Harms Relating to Google Products Needs Correcting

The Discussion Paper discusses a few of our products, including Search, some of our ads products and Play. In places, however, the Discussion Paper mischaracterises how these products work and includes inaccuracies. We welcome the opportunity to address these inaccuracies and look forward to engaging with the ACCC further on these points.

1. Google Search

The Discussion Paper repeats concerns that default and preinstallation arrangements for search services and browsers allegedly determine market shares in general search and prevent users from reaching rivals.[113] The Discussion Paper claims that as a result of these arrangements, Google is able to foreclose rivals' access to users and generate beneficial economies of scale and network effects, resulting in decreased innovation.

These concerns overlook that there is a consistent body of evidence demonstrating that Google's popularity reflects its quality (due to Search's constant innovation), not default and preinstallation arrangements.[114]

Google's popularity reflects its quality

Evidence consistently confirms that Google is higher quality than its rivals:

- In a user survey, **89% of Australians identify Google as their favourite search service**.
- Data from rater tests, natural experiments and academic studies all corroborate Google's quality (**Annex Q1.2**).
- The ACCC itself has recognised the ***"high quality"* of Google Search**.[115]
- The Discussion Paper stresses that Google ***"continually improve[s] the relevance of its search results."***[116]

In short, Google is the highest-quality search service in Australia. It is therefore unsurprising that Google is the preferred search service for Australians. That does not reflect or result from a market failure, but rather lawful competition on the merits, that is unrelated to any default settings or preinstallation.

[113] Discussion Paper, Section 5.2.2.
[114] See Google's Response to the ACCC Issues Paper of March 2021.
[115] ACCC, Digital Platforms Inquiry Final Report, *Digital Platforms Inquiry* (June 2019), 72.
[116] Discussion Paper, 41.

Defaults and preinstallation do not restrict users from reaching alternative services

There is a consistent body of evidence demonstrating the ease of changing defaults and that users can and do override defaults and preinstallations:

- Google's share on Microsoft Windows desktops in Australia: Microsoft preinstalls its Edge browser that defaults to Bing on Windows. But Google's share of search on Windows is 91%, while Bing's is 7.5%.[117] **Australians override Microsoft's defaults and choose their preferred alternative: Google**.

- The ACCC's recently commissioned survey confirms that **the majority of users know about alternative browsers and search engines, know how to change their default browser and search engine, and reported it to be *"easy or very easy to do"***:

    - ***"Most consumers were confident that there was a wide choice of other browsers (80%) and search engines (77%)*** *than the browser and search engine provided on their devices if they were ever unhappy with the way they search the internet."*[118]

    - ***"Three in four consumers (78%) stated that they knew that it was possible to change the default search engine*** *set by their browser."*[119]

    - *"Among those who had changed the default browser or search engine on their device in the last 2 years, more than* ***four in five found this process to be easy or very easy****."*[120]

- Professor Pinar Akman from the University of Leeds released an independent study on user behaviour on online platforms such as search engines. Professor Akman conducted a large-scale study with over 11,000 consumers across ten countries, including Australia. She found that:

    - **72% of Australians had changed the initial search engine on at least one of their devices**.[121]

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[117] Netmarketshare, data from January 2020 to October 2020 (Netmarketshare's service was discontinued after that date).
[118] Roy Morgan, *Consumer Views and Use of Web Browsers and Search Engine - Final Report* (September 2021), 9.
[119] Roy Morgan, *Consumer Views and Use of Web Browsers and Search Engine - Final Report* (September 2021) 15.
[120] Roy Morgan, *Consumer Views and Use of Web Browsers and Search Engine - Final Report* (September 2021) 16.
[121] Pinar Akman, 'A Web of Paradoxes: Empirical Evidence on Online Platform Users and Implications for Competition and Regulation in Digital Markets' (2022) 16 *Virginia Law and Business Review* 2 2017, figure 7, 17.

- **73% of Australians changed the initial default internet browser on at least one of their devices.**[122]

- Google's survey of more than 350 Australian Android users found that **77% would switch to a different search engine if their device came with a default search engine they didn't like and 89% would use alternative browsers or search engines** if their preloaded internet browser came with a default search service they didn't like.[123]

- Data from an EU Commission survey also found that "***nearly eight in ten internet users would probably change search engine*** *if the search results provided were not useful.*"[124]

- Mozilla entered into a deal in 2014 to set Yahoo! as the default on its browser. But **such a large share of users switched back to Google that Mozilla terminated the deal** in 2017, two years early.[125]

- Decisions from the Canadian Competition Bureau and Competition Commission of India found that users "***can and do change the default search engine on their desktop and mobile devices if they prefer a different one*** *to the pre-loaded default.*"[126]

2. Ad Tech

The Discussion Paper describes Google as the largest supplier of ad tech services across the entire ad tech supply chain in Australia.[127] The Discussion Paper alleges that the fees charged for its ad tech services reflect Google's market power, which allegedly stems from among others, its 'data advantage' and integration across its services.

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[122] Pinar Akman, 'A Web of Paradoxes: Empirical Evidence on Online Platform Users and Implications for Competition and Regulation in Digital Markets' (2022) 16 *Virginia Law and Business Review* 2 2017, figure 7, 17. Professor Akman finds the existence of a digital literacy deficiency (noting some consumers cannot tell a search engine apart from an internet browser) and recommends the remedy of this deficiency first, via dedication of governmental resources to digital education, before considering the need for additional interventions such as choice screens. See 51-53.

[123] Google, September 2021 Report on market dynamics and consumer choice screens in search services and web browsers: Google's Response to ACCC Issues Paper, *ACCC Digital Platforms Services Inquiry* (7 May 2021), para. 21(iii).

[124] European Commission, *Special Eurobarometer 447* (June 2016), 16.

[125] Google, September 2021 Report on market dynamics and consumer choice screens in search services and web browsers: Google's Response to ACCC Issues Paper, *ACCC Digital Platforms Services Inquiry* (7 May 2021), para. 21(iii).

[126] Government of Canada, *Competition Bureau statement regarding its investigation into alleged anti-competitive conduct by Google* (19 April 2016); and Competition Commission of India, *Case No. 07 of 2012 with Case No. 30 of 2012* (8 February 2018).

[127] Discussion Paper, Section 3.1.1.

The ACCC's characterisation of Google's services and its assessment of the ad tech industry overlooks the following key points.

The digital advertising industry is dynamic and crowded - Google is not the only player in ad tech

The Discussion Paper relies on the ACCC's findings in the Ad Tech Inquiry Final Report, stating that Google is the largest supplier of ad tech services across the entire ad tech supply chain in Australia, with no other provider having the same scale and reach.

However, this assessment fails to properly highlight or account for critical aspects of the ad tech industry. When market dynamics are properly understood, it is clear that Google's ad tech products face competitive constraints at every level. In particular, the ACCC's assessment of Google's position in ad tech:

- **Focusses on ad inventory sold on 'open display' channels**. Yet according to the ACCC's own estimates, **open display represents only 17%** of total digital advertising in Australia.[128]
- **Does not properly recognise important competitive constraints on Google's ad tech products including dynamic trends.** For instance, it does not properly account for:
    - The significance of **direct deals**. Within the **open display** channel, **~40% of advertiser expenditure is through deals directly negotiated** between the advertiser and publisher.[129] The ACCC recognises that **ad tech services do not play a large role** in facilitating these **direct deals**. [130]
    - The growing importance of **mobile apps** to advertisers compared to website advertising. Mobile app advertising **represented 44% of advertiser expenditure** for ads sold programmatically in 2020, where Google faces strong competitors, particularly Meta.[131]
    - The growing importance of **Connected TV**, where The Trade Desk is a strong competitor. For a sample of larger publishers, IAB estimates that Connected TV **increased from 23% to 50% in just two years** (Q4 2018 and Q4 2020).[132]

[128] ACCC, Final Report, *Digital advertising services inquiry* (28 September 2021), 3 and 5.
[129] ACCC, Final Report, *Digital advertising services inquiry* (28 September 2021), 3.
[130] ACCC, Final Report, *Digital advertising services inquiry* (28 September 2021), 27.
[131] ACCC, Final Report, *Digital advertising services inquiry* (28 September 2021), 43.
[132] ACCC, Final Report, *Digital advertising services inquiry* (28 September 2021), 46. According to a report by PwC Australia (commissioned by Google Australia), expenditure on connected TV digital advertising rose to a high of $1.1 billion in FY21. See PwC Australia, *Examination of the value created by the advertising technology industry in Australia* (September 2021).

- Increasing spend on **video display advertising**, which **grew by six times** from $276 million in 2014 to $1.9 billion in 2020. This spend includes on emerging channels such as broadcast video on demand.[133]

- **Does not include 'closed channels' for buying display advertising in its share estimates.** This is despite platforms such as Meta acting as a significant competitive constraint on Google's ad tech products. According to the ACCC's own findings:
  - Spend on **closed channels represented ~57%** of display advertising.
  - **Meta is by far the largest provider of display ads in Australia**, accounting for **62% of revenue in 2019**.[134]
  - **Meta is a closer competitor with Google Ads** (one of Google's core ad buying platforms) than other Demand Side Platforms.[135]

- **Does not properly acknowledge the many vertically integrated and specialist participants** that have entered, expanded and thrived in ad tech in Australia.[136]

Ad tech fees are not excessive and evidence indicates they have remained stable or decreased over recent years

The Discussion Paper repeats the ACCC's observation from the Ad Tech Inquiry Final Report that *"the level of fees charged for the supply of ad tech services likely reflected the market power that Google is able to exercise in its dealings with advertisers and publishers."*

However, the ACCC does not substantiate this claim with any evidence - indeed CMA and ACCC findings indicate that Google's fees are not excessive compared to other providers:

- According to the ACCC **ad tech prices have remained stable, or even fallen**, over the past four years. The Ad Tech Inquiry Final Report found that:

[133] ACCC, Final Report, *Digital advertising services inquiry* (28 September 2021), 46.
[134] ACCC, Interim report, *Digital advertising services inquiry* (December 2020), B11.
[135] ACCC, Final Report, *Digital advertising services inquiry* (28 September 2021), 65.
[136] For example, participants that are vertically integrated along multiple parts of the ad tech stack include Adobe, Amazon, AT&T/Xandr, and Verizon Media. Specialist players include, Adroll, Amobee, Big Mobile, Bonzai, Criteo, Flashtalking, Index Exchange, Innovid, ironSource, MediaMath, Playground XYZ, PubMatic, Publift, Taboola, Magnite, The Trade Desk, Triplelift, Triton, and specialist data management platform and analytics providers including Chartbeat, Oracle, SAS, Snowflake/Snowplow and Webtrends. The Trade Desk is a notably strong competitor. It is the "fastest growing demand-side platform in the industry," with revenue of US$661m for the year ended 31 December 2019. The Trade Desk continues its growth in Australia, focusing on connected TV ("CTV"), and strengthening partnerships with mobile video platform TikTok and analytics provider SambaTV. Playground XYZ is a locally based ad tech player with its own programmatic mobile marketplace, The Playground Private Exchange. It was named eighth in Deloitte's 2019 Technology Fast 50 winners report, which noted its rapid growth of 678%. Playground XYZ counts Woolworths, Telstra, and the Commonwealth Bank amongst its Australian advertiser client base.

- Average fees for DSP services, and advertiser and publisher ad server services, changed little.
- Average fees for SSP services decreased by approximately 20%.[137]

- **Other reports also show that ad tech fees have declined** while **programmatic ad spend continues to see growth** as a result of competition.
  - According to eMarketer, US programmatic ad spending has been growing year-over-year by large double digit figures.[138] At the same time, fees as a proportion of the total non-social programmatic display spending decreased between 2019 and 2020 and are projected to continue to decrease over the next couple of years.[139]
  - In Australia, the proportion of display advertising purchased through ad tech services (open auction, private marketplace or programmatically) as compared to direct-sold ads increased from 34% to 44% between Q4 2018 and Q3 2020.[140] Ultimately, ad tech services would not be widely and increasingly used if fees were excessive.

- **Analysis has shown that Google's take rates across the ad tech stack are competitive.**
  - In 2020, the CMA found that Google's take rates are 'broadly in line with (or slightly lower than)' the market-wide average take rates in the UK.[141]
  - In Australia, RBB Economics submitted a similar analysis to the Ad Tech Inquiry which showed that Google's take rates are in line with those published by the CMA.[142] It also showed that the take rate for Google's DSP is in line with the industry average estimated by the ACCC.[143]
  - The ACCC also found that the take rate retained by Google Ads does not differ materially from the industry average.[144]

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[137] ACCC, Final Report, *Digital advertising services inquiry* (28 September 2021), 50.
[138] Daniel S. Bitton and Stephen Lewis, *Clearing-up Misconceptions About Google's Ad Tech* (5 May 2020), 36, citing Lauren Fisher, 'US Programmatic Ad Spending Forecast 2019', *eMarketer* (Online, 25 April 2019).
[139] eMarketer, 'US Programmatic Digital Display Ad Fees, 2019-2022', *eMarketer* (1 October 2020).
[140] ACCC, Interim report, *Digital advertising services inquiry* (December 2020), 41.
[141] CMA, Appendix R to Final Report, *Online platforms and digital advertising market study* (1 July 2020), para. 11.
[142] RBB Economics, *Google's ad tech takes rates: Analysis of Google auction level data sets* (20 October 2020), 2.
[143] RBB Economics, *Google's ad tech takes rates: Analysis of Google auction level data sets* (20 October 2020), 2; see also ACCC, Final Report, *Digital advertising services inquiry* (28 September 2021), 9.
[144] ACCC, Interim report, *Digital advertising services inquiry* (December 2020), 159.

Ultimately, ad tech providers compete on more than just price. Google also competes by offering high quality products and services.

Vertical integration has benefits and is common in ad tech

The Discussion Paper states that Google's alleged 'dominance' in ad tech is partly underpinned by the vertical integration of its services across the supply chain. It also states that 'conflicts of interest' may arise where a vertically integrated ad tech provider supplies services to both advertisers and publishers.

These statements are not supported by evidence and mischaracterise the role of vertical integration in ad tech.

- There are **multiple other vertically integrated participants across the ad tech stack**, such as: AppNexus/Xandr, Verizon Media, Amazon, Adform, Innovid and MediaMath.[145] This suggests vertical integration in ad tech can deliver benefits that are not linked to market share / power.
- **Conflicts of interest do not arise by virtue of Google's vertical integration**. Google's advertiser and publisher-facing products act in the best interests of their respective customers, while Google is appropriately incentivised to advance the longer term interests of the ecosystem.
- **Google's vertical integration in ad tech delivers significant benefits** to customers. Some of these are recognised in the Ad Tech Inquiry Final Report:[146]
    - Lower likelihood that bids from its DSP to its SSP will fail;
    - Interconnecting between ad tech services is easier;
    - The ability to provide more consistent measurements and metrics; and
    - The use of consistent user IDs means greater targeting capabilities.

Data advantage concerns are overstated

The Discussion Paper cites the Ad Tech Inquiry Final Report finding that Google's access to a large volume and range of first-party and third-party data appears to provide it with a competitive advantage in ad tech. This supposed 'data advantage' is said to also underpin Google's alleged 'dominance' in ad tech.

However, claims about this advantage are overstated.

[145] ACCC, Final Report, *Digital advertising services inquiry* (28 September 2021), 53.
[146] ACCC, Final Report, *Digital advertising services inquiry* (28 September 2021), 88-89.

- **Third-party data is non-rivalrous** and is collected by many ad tech participants.
    - Criteo says it has built *"the world's largest open shopper data set" covering "72% of online shoppers globally."*[147]
    - CEO of Xandr (then AppNexus) stated: *"We have more unique supply than AdX does in most markets. We have major publishers like LinkedIn and Microsoft and Axel Spring and Schibsted."*[148]
- The Ad Tech Inquiry Final Report recognises that **Google makes extremely limited use of first-party data in its ad tech products** for targeting on third party properties.[149]
- Google has made **further commitments to limit its use of first-party data and third-party trackers**. In relation to the Privacy Sandbox initiative[150] and the upcoming deprecation of third-party cookies on Chrome:
    - Google has made legally binding commitments to the CMA (with global application) that it will not track users to target or measure digital advertising on inventory on third-party websites using either (i) personal data collected from Google's user-facing services; or (ii) personal data regarding users' activities on websites other than those of the relevant advertiser and publisher.[151]
    - Google will not build or user user-level identifiers to track users as they browse across the web.[152]

3. <u>Play</u>

The Discussion Paper alleges that concerns have arisen regarding the operation of Google's app marketplace, Play, due to Google's presupposed 'gatekeeper' positions. These include

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[147] Criteo, 'Explained: Data in the Criteo Engine: Introduction', *Criteo* (Video, 2022) cited in Andres V. Lerner, The Economics of Network Effects and User Data in the Provision of Search, Search Advertising, and Display Ad Intermediation, *ACCC Digital Platform Inquiry* (15 May 2019).
[148] Sarah Sluis, 'AppNexus CEO Brian O'Kelley On Waging A Price War', *adexchanger* (Blog Post, 9 November 2017).
[149] ACCC, Final Report, *Digital advertising services inquiry* (28 September 2021), 82.
[150] The Privacy Sandbox initiative aims to create technologies that both protect people's privacy online and give companies and developers tools to build thriving digital businesses. The Privacy Sandbox reduces cross-site and cross-app tracking while helping to keep online content and services free for all. See Google, 'Protecting your privacy online', *The Privacy Sandbox* (Web Page, 2022).
[151] See CMA, *Decision to accept commitments offered by Google in relation to its Privacy Sandbox Proposals, Appendix 1A*, (Case number 50972, February 2022).
[152] See David Temkin, 'Charting a course towards a more privacy-first web', *Google Ads & Commerce Blog* (Blog Post, 3 March 2021).

alleged concerns about Google's ability to set and enforce terms and conditions for access, and the service fee Google charges.[153]

We disagree with these concerns, for the following key reasons.

Google's ecosystem is defined by choice and openness and does not "lock-in" users

The Discussion Paper refers jointly to Apple and Google when raising concerns regarding the restrictive operation of their app marketplaces, as part of their mobile ecosystems.

However, by referring to Apple and Google together, the Discussion Paper often fails to recognise important differences between Apple's closed model and the open Android ecosystem. Google's ecosystem has been deliberately designed to be different to enable greater choice and flexibility for device manufacturers, app developers and users.

- **Device manufacturers can obtain Android free of charge**, under an open-source licence.
    - Anyone can download and use (as well as modify) the Android source code, to create unique, differentiated products, without the need for any authorisation or consent from Google. Android device manufacturers include the likes of Amazon and Samsung.
- **Device manufacturers can choose which and how many apps and app stores** (whether Play and/or other app stores) **they want to preinstall on their devices**.
    - Many OEMs choose to preinstall their own app stores and most Android devices ship with two or more app stores preloaded.
    - Android is available without any proprietary apps, including from Google. Google's own apps are licensed separately from Android and share 'shelf space' on devices with non-Google apps.
- **App developers have access to Android functionality and need to write their apps only once for Android**. They can then be distributed and will work across the entire compatible Android ecosystem.
    - Google makes a substantial number of APIs available to all developers to enable them to build and improve their apps.[154] For Android 12, Google has developed a range of new features and APIs that are available to all developers.[155] For example:

[153] Discussion Paper, Section 5.2.2.
[154] See Android for Developers, Android API Reference (webpage, 2022).
[155] See developers, 'Android 12 features and changes list', *developers* (Web Page, 2021).

        - Android already allows developer access to its NFC chip. On Android 12, apps can now enable NFC payments without the device screen turned on.
        - New platform APIs that provide support for ultra high-resolution camera sensors.
    - The ACCC's App Store Report acknowledged that they had not received complaints from developers about how Google provides access to Android and proprietary APIs.[156]

- **App developers can freely choose how they distribute their apps on Android.** Beyond Play, app developers can choose to distribute their apps through:
    - **Numerous other Android app stores and app subscription services** (such as the Samsung Galaxy Store and Amazon Appstore).
    - **Via direct downloads from their own (and third-party) websites**. For example, WhatsApp is available via WhatsApp's direct download page, or can be downloaded from Play. App repositories such as APK Mirror host thousands of apps to download.
    - **Via negotiated preinstallation deals with device manufacturers** to preinstall their apps on devices so that users will have access to them out-of-the-box.
    - **Via web apps or app streaming services** (such as Nvidia).
- **App developers have flexibility to determine the in-app content of their apps on Play**:
    - Developers can make their apps on Play consumption-only (i.e. not offer in-app purchases of any sort, even if it is a paid service out of the app.)
    - Developers are also free to offer different SKUs within and outside of their apps. For a multiplatform service provider that sells content outside of the app, there is no requirement for content parity on Play.
- **Game streaming apps are welcome on Play.** Like music and video streaming apps, developers can distribute game streaming apps via Play as long as they adhere to Play's policies. Google does not require each game in the streaming service to be separately available on Play.

[156] ACCC, Interim report No. 2 - App marketplaces, *Digital platform services inquiry* (28 April 2021), 61.

- **App developers own their relationship with their users.** Play not only allows but expects developers to support their users - for example, by providing refunds and other customer support.
- **App developers can talk to their users.** Developers, in any app, can refer users (i.e. via a linkout) to administrative information, such as an account management page, privacy policy or a help centre, provided the webpage does not eventually lead to an alternate payment method prohibited by the Payments policy.
- **Users are able to freely customise their devices.**
    - Users are able to **change default apps** for non-core phone features.
    - Users can **delete or deactivate** pre-installed apps.

Google's first party apps are subject to the same policies and principles as third party apps

The Discussion Paper raises concerns that Google may be using its position as an app marketplace operator to preference or advantage its own first-party apps.

Play strives to treat all app developers fairly and equitably, whether big, small, third-party or first-party apps. It also seeks to be transparent about when certain features or functionality may not be available to all developers.[157]

- **All apps are subject to the same set of rules and policies**. Play's developer policies – including the requirement that apps use Play's billing system for in-app purchases of digital goods – apply to all apps on Play, including Google's own apps.
- **All apps are promoted in Play according to the same principles.**
    - **Google discloses the main factors used for app discovery and ranking on Play**, without allowing developers to 'game' Play's algorithms.[158]
- **All apps in Play can be rated and reviewed by users**. This includes Google's first party apps.
- **Google has formal policies prohibiting the company-wide sharing of identifiable data about third-party apps gathered by Play.** This third-party data is not shared with Google's first party app developers to unfairly advantage them, or for purposes other than benefit across the Play and Android ecosystems.[159]

[157] Google, 'Availability of Features and Services', *Play Console Help* (Web Page, 2022).
[158] Google, 'App Discovery and Ranking', *Play Console Help* (Web Page, 2022).
[159] Kareem Ghanem, 'How to sustain a safe, thriving app and game ecosystem', *Google The Keyword* (Blog Post, 10 December 2021).

The service fee for paid apps and in-app payments reflects the value provided by Android and Play and supports Google ongoing investments

The Discussion Paper claims that the service fee paid by developers on in-app payments on Play is "highly likely" to be inflated by Google's market power.

However, the ACCC does not substantiate this claim with any evidence. And this claim mischaracterises the nature of the service fee and fails to recognise the value it affords developers or the consistent price decreases over time.

- **The service fee funds major investments into the Android and Play ecosystem**. This includes investment in:[160]
    - **Android & the Play Store**: The free Android operating system enables hardware manufacturers to build a wide range of devices at different price points that gives users unprecedented choice. And the Play Store delivers the world's largest selection of apps and games, available in over 190 countries with personalised recommendations and easy discovery of high-quality apps.
    - **New Android platforms**: We build platforms for new form factors such as Auto and TV to help developers increase their reach in new ways.
    - **Security**: Consumers trust Android and Play because of its security, the reviews of apps to ensure they comply with policies around safety and privacy, and with automated security of Google Play Protect that scans over 100 billion apps per day.
    - **App distribution**: Developers can instantly reach over three billion Android users with the ability to optimise delivery by device and functionality and provide ongoing updates.
    - **Developer tools**: Developers can run experiments, beta test, optimise store listings, analyse performance, and more.
    - **Billing system**: Users enjoy safe and trusted payments, while developers can easily transact with 700 million users using Play gift cards and locally relevant forms of payment.
- **The vast majority of developers do not pay a service fee.** The service fee is only charged when a developer chooses to charge users for their app or offer digital content for purchases within their app.
    - This means that **only 3% of developers are subject to the service fee**.

[160] Google, 'Understanding Google Play's Service Fee', *Play Console Help* (Web Page, 2022).

- The **other 97%** can distribute their app on Play and utilise all the developer tools and services at no cost.

- **The service fee has never been raised - instead it has been subject to multiple reductions.** This has been as a result of competitive pressure (in particular from Apple).[161] Today, of the 3% of developers who are required to pay the service fee, **99% qualify for a fee of 15% or less**.

  Most recently it was announced that:

  - From 1 July 2021, the service fee was reduced from 30% to 15% for the first US$1 million of revenue every developer earns each year.[162]

  - From 1 January 2022, the service fee for all digital subscription payments on Play was reduced to 15%, starting from day one. Previously, the fee dropped from 30% to 15% after 12 months of a recurring subscription. It was also announced that ebooks and on-demand music streaming services are eligible for a service fee as low as 10%.[163]

- **Charging a service fee is common practice and the level of the service fee has been found to be competitive with similar providers.**

  - The most prominent app stores and software distribution platforms, such as the Apple App Store, Samsung Galaxy Store, Amazon App Store and Microsoft Store, all have policies that require developers to pay fees, and use the platform's in-app payment system to purchase in-app digital products, with certain carve outs.[164]

  - Play's service fee has been found to be competitive with other stores.[165] In the CMA's Interim Report into Mobile Ecosystems, it found that Google's rates were similar to those set by other app stores.[166]

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[161] For instance in November 2020, Apple announced its own App Store Small Business Program, under which it reduced its service fee to 15% for developers who earned up to US$1 million in the previous calendar year. See Apple, 'Announcing the App Store Small Business Program', *Developer News and Updates* (Web Page, 18 November 2020).
[162] Sameer Samat, 'Boosting developer success on Google Play', *developers Android Developers Blog* (Blog Post, 16 March 2021).
[163] Sameer Samat, 'Evolving our business model to address developer needs', *Android Developers Blog* (Blog Post, 21 October 2021).
[164] Jonathan Borck, Juliette Caminade and Markus von Wartburg, Apple's App Store and Other Digital Marketplaces (Analysis Group Report, July 2020), 12.
[165] Julia Alexander and Ian Carlos Campbell, 'A guide to platform fees: Apple App Store, YouTube, Twitch, and more - The Verge',*Vox Media* (Online, 24 August 2021).
[166] This was also acknowledged by the CMA. See CMA, Mobile ecosystems - Market study interim report (14 December 2021), para. 4.226, 4.229, 4.232.

Annex Q.9: Overview of the controls Google makes available to users

As discussed in Question 9, consumers want, and should be able to, control and manage the processing of their data, including the processing of their data across services. Proposals should seek to preserve, rather than limit consumers' control over their personal data.

Users have a number of ways to control and manage Google's processing of their data, including processing of data across services. These options include: (i) privacy settings and controls; (ii) switching between signed-in and signed-out status; (iv) using multiple accounts; (v) private browsing; (v) data deletion, (vi) Google Takeout, and (vii) the Data Transfer Project.

Privacy settings and controls. Google provides a range of granular privacy settings and controls through which users can manage Google's processing of their data. These controls include options that provide users with the choice of enabling or disabling particular personalisation features or the recording of particular data types while retaining the ability to use the service in question.

To facilitate access to, and use of these tools, Google has centralised them in an easily accessible privacy hub. Centralisation of these controls enables users to set preferences across Google services from a single space. This increases engagement with the options available and the sense of control the options provide.

In general terms, Google provides a number of privacy options to all users, regardless of whether they are signed-in and a number of additional privacy controls for logged-in users to control what data gets associated with their account.

- Privacy controls that are available to all users include the ability to control search customisation, YouTube watch history and related personalisation, and ads personalisation. Android users can control access rights of individual apps, including whether an app can read location data, such as GPS and other sensor data, from their device.

- For signed-in users, Google additionally provides controls via the Google Account dashboard (accessible from the header of all core Google products) including Web & App Activity, YouTube watch history and related personalisation, Location History (which is off by default), and ads personalisation.

Through these settings, both signed-in and signed-out users have considerable control over the manner in which Google processes their data.

A user can revisit their privacy choices at any time. Google provides a range of powerful tools to modify the privacy settings of an existing account. For example:

    - The **Web & App Activity** controls whether Google saves a user's activity on Google sites and apps in order to provide users better recommendations and more personalised experiences in Maps, Search, and other Google services. Users can turn this setting off entirely or they can maintain Web & App Activity on Google sites while excluding data being saved from Chrome history and third party sites or from audio recordings. These controls are made easily accessible through a single panel in the My Activity account space.

- Google provides a detailed account page that provides additional explanations around the more granular options for users:
    - With the **YouTube History** control, users can prevent Google from saving in their account the history of what they search for on YouTube or what they watch.
    - Google also provides a range of **Ads personalisation** features, including granular controls over what information is used to show users ads. Google provides access to these controls in the same central location as the controls described above.
    - Certain products may also offer users additional controls that are tailored to the specific nature of the product in question. For instance, Chrome has an option that enables users to prevent Chrome 'syncing' data to their Google Accounts, enabling them to use Chrome separately from the rest of their Google experience.

Switching between signed-in and signed out status. A user can use the same Google service or different Google services with varying log-in status. Users can use this flexibility to control data use, including cross-service data use. A user can, for example, be signed-in to YouTube but use Search without signing-in, which prevents the user's search history from being used for recommended video personalisation in YouTube.

Multiple accounts. Users can also maintain multiple accounts for use of different Google services. Users can block cross-service use of data while maintaining full signed-in status by using different accounts for different services.

Private browsing. Another option for users to control the recording and use of their data is to use private browsing settings on their browser. Chrome browser offers an 'incognito mode' which prevents saving of browsing history, cookies, or information in forms. In addition, the iOS and Android apps for Google Maps, YouTube, and Google Search similarly offer an 'incognito mode' that provides the same functionality within the apps.

Deleting data. Users who are signed-in can view their past activity in their account, delete all or specific items, or set up an auto delete to delete the activity on a rolling basis. Non-signed-in users can clear their browser cookies, which will 'reset' their data.

Google Takeout. Google has developed Google Takeout specifically to allow users to easily download their data in commonly used, machine readable formats (allowing for the easy upload of such data to third-party service providers). Google Takeout can be used to transfer photos directly from Google Photos to Flickr and Microsoft OneDrive. Google Takeout is available for multiple Google services including services which are available in connection with Google Assistant.

For example, where a user creates lists (including shopping lists) or notes using Google Assistant, the user can subsequently download such lists in CSV format via Google Takeout. Additionally, users can download records of their activity data (such as their search history, YouTube history, web and app activity, and location history) including where such activities have been collected via Google Assistant. Activity data can be downloaded in multiple formats: activity records can be downloaded in HTML and JSON, while images related to activity records are available in JPEG and audio attachments are available in MPEG formats.

Once the user has selected the data they wish to download and the format, the user can then choose whether to download the data as a .zip or .tgz file (both of which can be opened on almost any computer). The user may also be able to select from the following data-file-delivery methods: (i) download link sent via email, (ii) data added to the user's Google Drive, (iii) data uploaded to the user's Dropbox account, (iv) data uploaded to the user's Microsoft OneDrive account, or (v) data uploaded to the user's Box account.[167]

Data Transfer Project. The Data Transfer Project[168] (DTP) was launched in 2018 to create an open-source, service-to-service data portability platform to enable users across the web to easily move their data between online service providers whenever they want.

The DTP extends data portability beyond a user's ability to download a copy of their data from their service provider, to providing the user the ability to initiate a direct transfer of their data into and out of any participating provider (*e.g.*, transferring photos directly from Google Photos to Microsoft OneDrive).[169]

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[167] Google, 'How to download your Google data', *Google Account Help* (Web Page, 2022).
[168] Data Transfer Project, 'About us', *Data Transfer Project* (Web Page, 2022).
[169] Likewise, customers of DV360 and Campaign Manager control all data derived from their use of these services and can export a significant amount of reporting and analysis which they can choose to provide to anyone, without restriction.

Annex Q.11: Google's approach to tackling harmful content

Core to Google's mission is a focus on the relevance and quality of the information we present to users. In different ways across our different platforms, we strive to connect people with 'high-quality information'; the most useful, trustworthy, and helpful content at the moment a person needs it. At the same time, we work to prevent user and societal harm and limit the reach of 'low-quality information'; content that strays furthest from those qualities.

Sorting 'high-quality' from 'low-quality' information is a large, dynamic challenge without a perfect answer. The breadth of information available online makes it impossible to give each piece of content an equal amount of attention, human review, and deliberation. Even if that were possible, reasonable people could disagree on appropriate outcomes. Similarly, no ranking system can be perfect, nor will everyone agree on the values for which they should optimise.

Each of the products and services we offer has a different purpose, and people have different expectations of what kind of content they will interact with on each. So, we tailor our approach to the content that should be available on each product and service carefully.

Our products and services fall on a spectrum, from most open to more protected.[170] Google Search serves as an index of pages available on the open web, where users expect to find every legal webpage pertaining to their query. Therefore, it is on the most open end of that spectrum. On the other end, our advertising products include more protections, as we do not want to profit from those who create harmful content or experiences. Other products fall elsewhere on the spectrum.

We rely on four complementary levers (remove, raise, reduce, reward) to support information quality and moderate content across many Google products and services:

- **Remove**: We set responsible rules for each of our products and services and take action against content and behaviours that infringe on them. We also comply with legal obligations requiring the removal of content.
- **Raise**: We elevate high-quality content and authoritative sources where it matters most.
- **Reduce**: We reduce the spread of potentially harmful information where we feature or recommend content.
- **Reward**: We set a high standard of quality and reliability for publishers and content creators who would like to monetise or advertise their content.[171]

[170] Google, *Information quality and content moderation*.
[171] Google, *Information quality and content moderation*.

These levers allow us to be consistent in our methodology, but tailor their implementation to suit the specific needs and uses of each product or service.

We employ a combination of manual and automatic tools to prevent issues before they are experienced by users, or result in complaints or disputes, as described below for Search and our ads products.

Tackling malicious actors and harmful content on Search

Google faces significant challenges in tackling malicious actors and harmful content on Search. Malicious actors continue to attempt to harm or deceive Search users through a wide range of actions, including tricking our systems in order to promote their own content (via a set of practices we refer to as 'webspam'), propagating malware, and engaging in illegal acts online. The creators and purveyors of disinformation employ many of the same tactics.

Google is not in a position to assess objectively, and at scale, the veracity of every piece of content on the web or the intent of its creators.[172] In 2020:

- There were trillions of webpages on the web, which are constantly being updated, all while new pages are being created.
- There were hundreds of billions of webpages in Google's index.
- There were billions of Search queries around the world every day, and 15% of the searches we see each day are searches we've never seen before.
- More than 19 million Australians actively used Google Search each month.[173]

Further, a considerable percentage of content contains information that cannot be objectively verified as fact. This is because it either lacks necessary context, because it is delivered through an ideological lens others may disagree with, or because it is constructed from contested datapoints.

To tackle harmful content and protect Search users from disinformation, Google Search takes a pragmatic approach:

- **Make Quality Count.** We use ranking algorithms to elevate authoritative, high-quality information in our products. For most searches that could potentially surface misleading information, there is high-quality information that our ranking algorithms can detect and elevate. When we succeed in surfacing high-quality results, lower quality or outright malicious results (such as disinformation or otherwise deceptive

[172] Google, *How Google Fights Disinformation* (February 2019), 10.
[173] Nielsen Digital Panel, All demographics, PC, Smartphone and Tablet, Unique Audience, February 2019, cited in ACCC, Digital Platforms Inquiry Final Report, *Digital Platforms Inquiry* (June 2019), 43.

pages) are relegated to less visible positions in Search, letting users begin their journey by browsing more reliable sources. As noted above, our ranking system does not identify the intent or factual accuracy of any given piece of content. However, it is specifically designed to identify sites with high indicia of expertise, authority, and trustworthiness, like Wikipedia.

- **Counteract Malicious Actors.** We look for and take action against attempts to deceive our ranking systems or circumvent our policies. Our algorithms can detect the majority of spam and demote or remove it automatically. **In 2020, Google's systems identified 40 billion spam pages everyday**.[174] The remaining spam is tackled manually by our spam removal team, which reviews pages (often based on user feedback) and flags them if they violate the Webmaster Guidelines. In 2017, **we took action on 90,000 user reports of search spam and algorithmically detected many more times that number.**

- **Give Users More Context.** We provide users with tools to access the context and diversity of perspectives they need to form their own views.

- **Troubleshooting tools.** We provide users and webmasters with online tools for troubleshooting, requesting removals and raising complaints regarding content on Search. Please see the section on complaint handling at the end of this Annex for more details.

- **Content removal (in limited circumstances).** Google Search aims to make information from the web available to all our users - that is, to be a reflection of the web. That's why we do not remove content from results in Google Search, except in very limited circumstances. These include legal removals, manual actions against webspam under our Webmaster Guidelines,[175] or a request from the webmaster responsible for the page.

Tackling malicious and harmful ads

Our ads and monetisation products enable businesses of all sizes from around the world to promote a wide variety of products, services, applications, and websites on Google and across our partner sites and apps, making it possible for Internet users to discover more content they care about.

[174] Cody Kwok, 'How we fought Search spam on Google in 2020', *Google Search Central*, (Blog Post, 29 April 2021); Google, 'How Google keeps you safe on Search', *YouTube* (Video, 27 January 2021).
[175] Google, 'Webmaster guidelines', *Google Search Central* (Web Page, 28 February 2022).

We understand that the content of both ads and publisher sites needs to be safe and provide a positive experience for users. To keep people safe and preserve trust in the ads ecosystems, we:

- **Develop policies and guidelines designed to catch bad behaviours.** We develop policies that govern the types of ads allowed on Google[176] and what content can and cannot be monetised, in order to protect people from inappropriate or harmful ads or content. Relevantly:

    - **Misrepresentation.** Our misrepresentation policy includes but is not limited to:
        - *unacceptable business practices* (such as impersonating brands or businesses by referencing or modifying the brand content in the ads, URL, destinations or misrepresenting yourself as the brand or business in user interactions; Enticing users to part with money or information through a fictitious business that lacks the qualifications or capacity to provide the advertised products or services);
        - *misleading representations* (such as implying affiliation with or endorsement by, another individual, organisation, product, or service without their knowledge or consent);
        - *dishonest pricing practices* (such as failure to clearly and conspicuously disclose the payment model or full expense that a user will bear);
        - *clickbait ads*; and
        - *promoting unreliable claims* (such as making inaccurate claims or claims that entice the user with an improbable result (even if this result is possible) as the likely outcome a user can expect) or unavailable offers.[177]

      In 2020, we blocked or removed 101 million ads for violating our misrepresentation policies.[178]

      Our publisher policies[179] similarly prohibit misrepresentative content, including:

        - content that makes claims that are demonstrably false and could significantly undermine participation or trust in an electoral or democratic process; and

[176] Google, 'Google Ads policies', *Advertising Policies Help*, (Web Page, 2022).
[177] Google, 'Misrepresentation', *Advertising Policies Help* (Web Page, 2022).
[178] Scott Spencer, 'Our annual Ads Safety Report', *Google Ads & Commerce Blog* (Blog Post, 17 March 2021).
[179] Google, 'Google Publisher Policies', *Google AdSense Help* (Web Page, 2022).

- content that deceives users through manipulated media related to politics, social issues, or matters of public concern.[180]

- **Inappropriate content.** We value diversity and respect for others, and we strive to avoid offending users, so we don't allow ads or destinations that display shocking content or promote hatred, intolerance, discrimination, or violence.[181] We also have long-standing policies to disallow monetisation of inappropriate content on our advertising platforms, the details of which are publicly available online.[182] This includes but is not limited to:

  - *dangerous or derogatory content* (including content that harasses, intimidates or bullies and individual, and content seeks to exploit others, for example, extortion or blackmail);
  - *shocking content* (such as promotions containing violent language, gruesome or disgusting imagery graphic images or accounts of physical trauma, or promotions that suggest you may be in danger, be infected with a disease or be the victim of a conspiracy); and
  - *sensitive events* (including sds that potentially profit from or exploit a sensitive event with significant social, cultural, or political impact, such as civil emergencies, natural disasters, public health emergencies, terrorism and related activities, conflict, or mass acts of violence).

- **Abusing the ad network.**[183] We want ads across the Google Network to be useful, varied, relevant, and safe for users. We don't allow advertisers to run ads, content, or destinations that attempt to trick or circumvent our ad review processes. For example, this policy prohibits (among other things):

  - *cloaking* (showing different content to certain users, including Google, than to other users) that aims at or results in interference with Google's review systems, or hides or attempts to hide non-compliance with Google Ads policies;
  - *repeated policy violations* across any of the advertiser's accounts, including creating new domains or accounts to post ads that are similar to ads that have been disapproved (for this or any other Google Ads policy);

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[180] Scott Spencer, 'An update on our political ads policy', *Google The Keyword* (Blog Post, 20 November 2019).
[181] Google, 'Inappropriate content', *Advertising Policies Help* (Web Page, 2022).
[182] Google, 'Inappropriate content', *Advertising Policies Help* (Web Page, 2022); Google, 'Google Publisher Policies', *Google AdSense Help* (Web Page, 2022), 'Dangerous or derogatory content'; and Google, 'Google Publisher Policies', *Google AdSense Help* (Web Page, 2022), 'Shocking content'.
[183] Google, 'Abusing the ad network', *Advertising Policies Help* (Web Page, 2022).

- *bypassing enforcement mechanisms and detection* by creating variations of ads, domains or content that have been disapproved (for this or any Google Ads policy);
- *manipulation of ad components* (text, image, videos, domain, or subdomains) in an attempt to bypass detection and / or enforcement action; and
- *submitting false information* as part of our verification programs.[184]

- **Review content on our advertising platforms and enforce our policies.** Our enforcement teams use a variety of robust methods to ensure content on our advertising platforms adheres to our policies, including machine learning, human review, and other technological methods.

  We have always relied on a combination of humans and technology to enforce our policies and will continue to do so. When we find policy violations we take action to enforce our policies. Depending on the policy violation, this can include blocking a particular ad from appearing and removing ads from a publisher page or site. In cases of repeated or egregious violations, we may disable an account altogether.[185]

  Our annual 'Ads Safety Report' outlines the scale of our work to enforce our advertising policies, including the number of ads that were removed, the number of pages that we stopped showing ads on, the number of advertiser and publisher accounts that were terminated throughout the year, and the number of updates we made to our policies over the course of the year.[186] Notably, in 2020:[187]

  - **We blocked or removed approximately 3.1 billion ads for violating our policies, and restricted an additional 6.4 billion ads.**
  - **We removed ads from 1.3 billion publisher pages in 2020, up from 21 million in 2019.**
  - **We also stopped ads from serving on over 1.6 million publisher sites with pervasive or egregious violations.** In the case of egregious or persistent violations, we terminated publishers' accounts.

[184] Google, 'Abusing the ad network', *Advertising Policies Help* (Web Page, 2022).
[185] For more information regarding Google Ads enforcement, see: Google, 'What happens if you violate our policies', *Advertising Policies Help* (Web Page, 2022); and Google, 'Fix policy issues that affect ad serving', *Google AdSense Help* (Web Page, 2022).
[186] Scott Spencer, 'Our annual Ads Safety Report', *Google Ads & Commerce Blog* (Blog Post, 17 March 2021).
[187] Scott Spencer, 'Our annual Ads Safety Report', *Google Ads & Commerce Blog* (Blog Post, 17 March 2021).

- **We disabled over 1.7 million ad accounts for policy violations, including fraudulent behaviour and scams.**
- **We also blocked or removed over 867 million ads for attempting to evade our detection systems, including cloaking.**

Our 'Ads Safety Report' also outlines the particular challenges we have faced to address threats emerging from the pandemic, which saw an uptick in opportunistic advertising and fraudulent behaviour from actors looking to mislead users.

- **Detect and combat ad fraud.** Google has strong incentives to combat ad fraud. Ensuring a safe user experience, and maintaining advertisers' and publishers' trust in the online advertising ecosystem, and Google's offerings in particular, is critical to the continued success of Google products, and far outweighs whatever marginal, short-term benefits we could derive from tolerating fraud.

  We use a combination of automated detection technology and human review processes to tackle ad fraud and scams. Google's global fraud prevention team includes data scientists, engineers and researchers that have developed over 200 sophisticated filters (algorithms) to date and work with thousands of human reviewers.[188] If Google detects fraudulent activity, we will rectify the situation as soon as possible including via suspending suspected fraudulent accounts and refunding advertisers.[189]

- **Apply our Advertiser verification program.** The Advertiser verification program is Google's unified verification program that consolidates identity and business operations verification in a single flow. The program comprises a series of steps that advertisers will be required to follow and complete. Under this program, advertisers are asked to provide basic information about their business and identity. [190] Advertisers may be selected to complete Google's Advertiser verification program based on the following example criteria:
  - Advertisers may be selected to complete verification if, for example, the advertising behaviour or their ad content is deemed as potentially misleading. We want to ensure that users understand who is providing the advertised products or services on Google ads.
  - As a part of a phased rollout of Google's transparency efforts, under which all advertisers will eventually be required to complete Google's Advertiser

[188] Deepti Bhatnagar, 'Connect with high-quality publishers and broadcasters in Display & Video 360's Inventory module', *Google Marketing Platform* (Blog Post, 13 November 2018); Google, 'How does Google prevent invalid activity?', *Google Ads Traffic Quality* (Web Page, 2022).
[189] Google, 'How does Google prevent invalid activity?', *Google Ads Traffic Quality* (Web Page, 2022).
[190] Google, 'About verification', *Advertising Policies Help* (Web Page, 2022).

verification program that encompasses completion of the steps above. We are currently rolling out this program globally, and it will ultimately be available in Australia.
    - As an additional layer of protection for our users, Google may request that advertisers complete the Advertiser verification program if, for example, they are advertising on brand-related queries or user queries in business verticals or industries susceptible to abuse, fraud, and scams (such as travel, customer or technical support services and financial services). Where an advertiser is asked to complete additional verification, advertisers' campaign performance may be impacted when advertising on certain Google restricted queries.[191]

- **Increase transparency, choice and control for users**. We give users tools to find out more information about a particular ad, make a complaint about ads,[192] see how Google tailors ads for them, stop seeing ads from a specific company or opt out of personalised ads.

- **Supporting industry efforts.** In addition to the above, we support industry efforts like the Coalition for Better Ads to protect people from bad experiences across the web.[193]

Complaints handling systems

Google's measures described above address the vast majority of potential issues before they result in a complaint or a dispute.

Where a complaint or dispute is raised, we use a combination of innovative tools to provide users with an effective and robust dispute resolution process. Each of Google's products has a specific complaints handling process which reflects the nature of the products, their users and the type of complaints that arise. Implementing product-specific complaint processes enables Google to provide effective and efficient dispute resolution for business users and consumers.

Our systems have the following common elements:

- **Online tools:** Google provides users and customers with user facing online tools to seek support and raise complaints about its products. These tools allow users to provide supporting material in substantiation of their complaints.

[191] Google, 'About verification', *Advertising Policies Help* (Web Page, 2022).
[192] Google, 'Report an ad/listing', *Ads Help* (Web Page, 2022).
[193] Coalition for Better Ads, 'Coalition to Adopt Better Ads Standards Worldwide', *Coalition for Better Ads* (Web Page, 2018).

- **Global resources:** We operate globally and have significant product and technical expertise sitting outside Australia. We rely on internal resources (located across multiple regions) and third party vendors for user / customer support and complaints handling. This helps our response times and enables us to provide 24-hour coverage.

- **Timely resolution:** We endeavour to resolve complaints in a timely manner. We do not, however, have rigid timeframes for resolving complaints - again, reflecting the wide range of complaints that may arise. Some complaints are more critical than others (for example, a video of a terrorist attack, which contains abhorrent violent material), some complaints can be easily addressed, while others take longer to investigate.

- **Flexibility to triage and prioritise based on risk level and urgency:** Our systems are sufficiently flexible to allow us to take a risk-based approach to complaints handling, enabling us to respond more quickly to urgent issues where there is a high risk of broader harm, while allowing sufficient time to properly consider more nuanced issues.

- **Appropriate transparency:** Google also endeavours to provide complainants information about its decision. However, in doing so, we balance the desire to provide information to the complainant with the need to safeguard confidential and commercially sensitive information that could be used by bad actors to exploit or game our products and systems. We also strive to ensure that no user, website or customer receives access to information that may bias or influence the independence of Google's products. This means that in some cases, complainants are referred back to publicly available information.

- **Appeal processes:** In the case of account suspensions or terminations, internal appeal processes are available (except for enforcement actions like those taken recently in connection with the war in Ukraine). For example, if Google terminates a publisher's AdSense account, Google will email the publisher informing the publisher of the action taken, with a link to the appeal form.

- **Prompt review of appeals:** We endeavour to review appeals promptly, and inform the account holder of our decision. In reviewing appeals, it may be necessary for primary review teams to seek input from other teams and specialists.

Annex Q.13: Google's processes to protect against harmful apps

Google's interests in the app review process and in enforcing its policies are closely aligned with those of developers and users

Google is incentivised to ensure that consumers have access to as many high-quality apps as possible - so that they try, or keep using, Play. All of Google's policies are designed with users' and developers' interests in mind - they promote a safe and secure environment for all stakeholders.

Before apps are made available on Play, they are subject to our rigorous app review process to identify potentially harmful apps[194] that contain malware, as well as apps that otherwise violate Google's Play Developer Distribution Agreement (**DDA**)[195] and Developer Program Policies (**DPP**).[196]

The review criteria we use, as set out in the DPP, include:

- **Restricted content**: Google does not permit apps that contain certain restricted content, including child endangerment, deceptive or harmful financial products and services, and certain other inappropriate content such as hate speech, sexual content, and profanity.
- **Impersonation and Intellectual Property:** Google does not permit apps that:
    - use another app's or entity's brand, title, logo, or name in a manner that may mislead users;
    - infringe upon intellectual property rights (including trademark, copyright, patent, trade secret, and other proprietary rights); or
    - encourage or induce the infringement of intellectual property rights.
- **Privacy, deception and device abuse:** Google does not permit apps that are deceptive, malicious or intended to abuse or misuse any network, device or personal data. If an app collects user data, the developer must clearly disclose what data it collects and why, and include the developer's privacy policy in the store listing and the app.

[194] Google, 'Potentially Harmful Applications (PHAs)', *Google Play Protect* (Web Page, 12 November 2019).
[195] Google Play, *Google Play Developer Distribution Agreement* (17 November 2020).
[196] See Google Play, 'Developer Policy Center', *Google Play* (Web Page, 2022). Our policies are generally updated quarterly and all developers are notified via email of any changes. Developers have at least 30 days to make any necessary updates to their apps, and longer if the updates are likely to be significant.

- **Store Listing and Promotion:** App developers must describe their app appropriately and accurately. Any misleading metadata or promotions that are harmful to users are not permitted.
- **Spam and Minimum Functionality:** At a minimum, apps should provide users with a basic degree of functionality and a respectful user experience. Therefore, Google does not allow apps that exhibit behaviour that is not consistent with a functional user experience, or that serve only to spam users or Play.

To ensure that apps are quickly and efficiently available for distribution through Play, the app review process involves automation as well as input from human reviewers. On average, new apps are uploaded within a few hours of their submission for review. In 2020, our automated detection capabilities and app review processes prevented over 962,000 policy-violating apps from getting published to Play. We also banned 119,000 malicious and spammy developer accounts.

Play provides a flexible and proportionate intervention and appeal process for non-compliant apps

Where Google finds an app is in breach of the DDA and/or DPP, Google acts in accordance with the enforcement process as outlined on the DPP Centre Page.[197] The level of enforcement is proportional to the seriousness of the violation and accounts for whether a developer's violations are habitual.

Developers can appeal all enforcement actions using an online form, which takes just a few minutes to fill out. Instructions for filing an appeal are included in each email informing a developer of enforcement action taken against their apps or account. Google typically responds to appeals within two to three days. If a developer's appeal of an app removal or app rejection is denied and the developer's Play Console account is still in good standing, the developer may upload a new, policy compliant version of its app.

Repeated or serious violations of our policies (such as malware, fraud, and apps that may cause user or device harm) or of the DDA may result in the termination of the developer's accounts.

User security is key to the Android ecosystem, including for Play

Android provides multiple layers of app protection for its users,[198] including:

[197] Google Play, 'Developer Policy Center', *Google Play* (Web Page, 2022); Google, 'Enforcement process', *Play Console Help* (Web Page, 2022).
[198] Android, *Android Enterprise Security Paper* (April 2021).

- a range of security features (*e.g.*, Safe Browsing, Security Checkup, and 2-Step Verification) to protect users' accounts;
- Google Play Protect, a powerful threat detection service that, when enabled, monitors a device to protect it, its data, and apps from malware;[199]
- extensive policies, as described above, and enforcement of those policies, to protect users from malicious actors trying to distribute harmful apps; and
- Google's Advanced Protection Program, an account-level setting that allows users to operate at a higher level of security. For example, it can be of particular benefit to users who believe that they may be particularly vulnerable to malware and or malicious actors (*e.g.* journalists operating in hostile environments).[200]

User reporting

If a harmful app evades the policies and security measures described above, users of Play can easily flag it by completing and submitting a Report Inappropriate Apps Form,[201] which is available on the Google Play Help Centre.[202] Every submission of a form triggers a review of the app by Google, which involves an assessment of the app against the DPP. The category of inappropriate content reported as well as any explanation provided by the user may be used to help inform the review.

[199] If Google Play Protect identifies an app containing malware, it notifies the user. In 2019, Google Play Protect helped to prevent 1.9 billion malware installs. See Harshvardan Sharma, 'Announcing our first GCP VRP Prize winner and updates to 2020 program', *Google Security Blog* (Blog Post, 11 March 2020).
[200] The Advanced Protection Program is an entirely optional, opt-in, feature, and users can choose whether or not they want to enrol. There are several methods by which users can enrol in the program. For example, they can register their Android phone's built-in security key (for Android 7.0+ phones), or use a physical key. For guidance as to how users' can enrol into the Advanced Protection Program, see: Google, 'Advanced Protection Program - Overview', *Advanced Protection Program* (Web Page, 2022).
[201] Google, 'Report inappropriate apps', *Play Console Help* (Web Page, 2022).
[202] Google, 'How to report an app on the Google Play Store', *Google Play Help* (Web Page, 2022).

Annex Q.16.1: Google discloses extensive information on how its search algorithms operate and provides advanced notice of significant algorithmic changes

Google will generally announce important changes that affect ranking of websites on its *Google Webmaster Blog*.[203] The Webmaster Blog contains thousands of posts on the operation of Google's algorithms, including information on upcoming algorithm changes.

In addition, Google provides webmasters with a wealth of information and guidance on the operation of its ranking. This includes the following:

Search Quality Rater Guidelines:[204] Google describes the relevance principles it uses to rank results in the guidelines it provides to external raters evaluating Google's search results (the Rating Guidelines). The Rater Guidelines define the relevance standard against which raters test changes in Google's results, and in turn which Google seeks to optimise its search results to deliver. The Rater Guidelines establish users as the central reference point for search result evaluation. They explain the concepts of topicality and quality. Google designs its algorithms to return results that are topical and high quality in the way described in the Rater Guidelines.

The Rater Guidelines are a comprehensive guide which sets out the criteria that Google uses to evaluate the quality of webpages. These are the actual instructions provided to Google's search quality raters, not merely a summary or description of the guidelines. The Rater Guidelines contain more than 160 pages of detailed and granular information that websites can use to design their sites in a way that is likely to rank well in Google's results. The Rater Guidelines explain that the three most important concepts for quality are: (a) Expertise (is the author an expert on the topic?); (b) Authoritativeness (is the webpage authoritative about the topic?); and (c) Trustworthiness (can you trust it?).

Google's Webmaster Guidelines:[205] The Guidelines set out general principles for how websites can (a) help Google find their pages, (b) help Google understand their pages, and (c) help visitors use their pages.

The Guidelines describe common types of manipulative behaviour that could lead to a website not ranking well in Google's results. An example includes displaying automatically generated content or participating in link schemes (where a site may pay another site to link to it as a way to manipulate PageRank artificially). The Guidelines include videos and links to other materials (such as the Search Console, described below) to help webmasters find out even more information about the operation of Google's ranking.

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[203] Google, 'Google Search Central (formerly Webmasters)', *Google Search Central* (Web Page, 2022).
[204] Google, *General Guidelines* (December 5, 2019).
[205] Google, 'Overview of guidelines', *Google Search Central* (Web Page, 28 February 2022).

Google's Help Centre for Webmasters:[206] Google Help Centre for Webmasters provides news, resources, information and guidance to help publishers design their pages so that they can rank well on Google.

Webmasters Help Community:[207] The Webmasters Help Community is a dedicated community forum where publishers can describe issues they face with their ranking and see posts and explanations providing answers. Publishers can search over tens of thousands of pre-existing posts and answers to find input on their questions. In addition, publishers can post new questions that will be answered by contributors to the community, including Google employees and other expert contributors. The respondents are graded with colored badges (for example, if they are Google employees or Google community specialists) to help website owners find information they seek more easily.

Troubleshooting results site:[208] Google provides news media companies with a specific website to help them troubleshoot common problems. The troubleshooting results website helps answer questions such as:

- *Why did my site traffic drop?* The troubleshooting site provides the top reasons for traffic drops and helps websites diagnose the problem and find a fix.[209]
- *Why is my page missing from Google Search?* The troubleshooting site helps webmasters troubleshoot and fix the most common problems when their page is missing from Google Search results.[210]
- *Why is my site blocked from Google Search?* The troubleshooting site helps webmasters to understand why their site may have been blocked from Google Search (for example, because it shows dangerous or spammy material) and to fix that problem.[211]
- *Why does my search result look wrong?* Google allows websites to show special features like snippets or sitelinks in search results. The troubleshooting site helps webmasters if the appearance or text of their Google search results look different than they expect.[212]

Web Fundamentals site:[213] Google provides a dedicated site called Web Fundamentals, which sets out detailed advice on how to build a site valued by users that is likely to rank well. The Web Fundamentals site provides detailed information, resources, videos, code labs, and

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[206] Google, 'You want to be found on the web. We want to help', *Google Webmasters* (Web Page, 2022).
[207] Google, 'Welcome to the Google Search Central Help Community', *Search Console Help* (Web Page, 2022).
[208] Google, 'Troubleshooting results', *Search Console Help* (Web Page, 2022).
[209] Google, 'Why did my site traffic drop?', *Search Console Help* (Web Page, 2022).
[210] Google, 'Why is my page missing from Google Search?', *Search Console Help* (Web Page, 2022).
[211] Google, 'Why is my site blocked from Google Search?', *Search Console Help* (Web Page, 2022).
[212]Google, 'Why does my search result look wrong?', *Search Console Help* (Web Page, 2022).
[213] Google, 'Web Fundamentals', *Web* (Web Page, 31 March 2022).

samples to help websites create a web experience that is (a) fast, (b) integrated, (c) reliable, and (d) engaging. These factors allow a website to rank well in Google's results.

SEO Starter Guide:[214] Google publishes a detailed Search Engine Optimisation (**SEO**) Starter Guide. The SEO Starter Guide sets out the best practices to follow to rank well on Google.

Search blog:[215] Google provides a separate blog, called the Search Blog, where news media companies can find the latest news on Google's search ranking, screenshots of Google's newest features, and other multimedia resources. The Search Blog includes hundreds of blog posts relating to algorithms, ranking, and search quality. It provides public summaries and reports regarding many hundreds of algorithmic changes, updates, and improvements.

Google Webmasters & Search Liaison Twitter accounts:[216] Through an account with over 409,000 followers, the Google Webmasters Twitter account provides free information about new launches and features, including algorithm updates. @searchliaison is the primary account Google uses for core updates to Google Search and other algorithm announcements.

Google Webmasters YouTube accounts:[217] The dedicated Google Webmasters YouTube channel regularly broadcasts information covering, among other things, Google's algorithm updates, to over 360,000 subscribers.

Google Search Console:[218] The Google Search Console provides webmasters with free tools and reports to help manage their performance in Google's results, as well as with step-by-step tips and short instructional videos. The Google Search Console allows news media companies to keep track of their websites' search traffic and performance. It also enables them to check indexing status and optimise the visibility of their websites.

How Search Works website:[219] Google provides detailed information on the functioning of Google Search through a dedicated and free How Search Works site. This site contains information on browsing and indexing, Google's algorithms, Google's efforts to provide users with useful answers, and Google's approach to Search.[220]

How News Works website: Google provides detailed information on our approach to news, including how we organise, rank, present and build news experiences.[221]

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[214] Google, 'Do you need an SEO?', *Google Search Central* (Web Page, 15 March 2022).
[215] Google, 'Official Blog: Search', *Google The Keyword* (Web Page, 2022).
[216] Twitter account 'Google Webmasters'; Twitter account 'Google Search Liaison'.
[217] Youtube, 'Google Search News (March '22) - Search Console URL Inspection API, ranking changes and more!', *Google Search Central channel* (Video, 1 April 2022).
[218] Google, 'How can we help you?', *Search Console Help* (Web Page, 2022).
[219] Google, 'How Search works', *Google Search* (Web Page, 2022).
[220] Google provides clear information on the functioning of its Search algorithms, including on results raking. See Google, 'How Search algorithms work', *Google Search* (Web Page, 2022). See also Google, 'Maximize access to information', *Google Search* (Web Page, 2022).
[221] Google, 'How news works on Google', *Google* (Web Page, 2022).

Office Hours: The Google Webmasters team and community experts are available for free to answer and discuss webmaster topics during online webmasters office hours hangouts. These hangouts generally cover anything related to publishing content online and making it findable in web-search. Some topic examples include crawling, indexing, sitemaps, Search Console, duplicate content, and multi-lingual/multi-regional sites.[222] The Google Webmasters office hours are public and recorded on the Google Webmasters YouTube. Google Webmasters also reminds potential viewers of upcoming office hours and provides easily accessible information on how to join.

Testing features: Google allows news media companies to perform tests for how well their website is designed on criteria that are important for Google's ranking through the Search Console. Such criteria includes mobile-friendliness, page speed, and structured data. News media companies can receive recommendations on how to improve their websites based on the test results. This may improve their ranking in Google's results. For example, the *Mobile-Friendly Test Tool* provides news media companies with a screenshot of how their webpage looks to Google on a mobile device, as well as a list of any mobile usability problems that it finds.[223]

Research papers: Google publishes hundreds of research papers each year and makes them available on an easily-accessible searchable database.[224] Google has published over 750 research papers on the subject of algorithms.

Publisher Centre Help: Outlines how Publishers can appear in Google News, relevant content policies and how content is ranked.[225]

[222] Google, 'What's new on Google Search Central', *Google Search Central* (Web Page, 2022).
[223] Google, 'Mobile-Friendly Test Tool', *Search Console Help* (Web Page, 2022).
[224] Google, 'Publication database', *Google Research* (Web Page, 2022).
[225] Google, 'How can we help you?', *Publisher Center Help* (Web Page, 2022).

Annex Q16.2: Google's Explanation of its Play Policies

Organising and ranking apps

Information on the main factors influencing app discovery and ranking is made publicly available.[226]

When a developer submits an app to Play, the developer provides information about the app and its characteristics (for example app title, description, category and graphic assets) and information about the app's content and functionality. In addition, Google identifies additional characteristics from the app (for example, that the app is a 'multiplayer' game) and analyses user feedback (for example, through ratings, reviews and engagement).

This information informs Google's approach to ranking and helps Google organise apps and present them to users whether they are browsing for something new or searching for a specific title.

Our goal in organising apps in Play is to determine which apps to display, how many to display, and how to display those apps in a user-friendly way. Many factors are involved when organising apps, including:

- **User relevance**: The most relevant apps to a user depends on where they are browsing or the query they use in a search.
- **Quality of the app experience**: Apps that have strong technical performance and a good user experience are generally favoured over lower quality apps.
- **Editorial value**: Play provides curated recommendations to help users find content that is noteworthy and interesting.
- **Ads**: Some developers choose to advertise on Play similar to other Google properties. These ads are well marked and shown alongside other content.
- **User experience**: Play endeavours to ensure users have a positive experience in navigating the wide range of available apps.

These main factors impacting ranking are weighted differently based on where on Play a user is looking, the device they are on, and their personal preferences. For example, apps shown on Top Charts are heavily influenced by popularity, whereas apps shown in search results are heavily influenced by relevance to the user's query. Additionally, some apps are optimised for different devices and could be ranked higher when searched on a TV than on mobile for example, or may only be available on certain devices (for example, a car).

[226] See Google, 'App Discovery and Ranking', Play Console Help (Web Page, 2022).

Play policies

To distribute apps on Play, developers must comply with a set of developer policies. Google provides dedicated pages on its Developer Policy Center that explains these policies.[227] Google Play gives advance notice of upcoming changes to Play's policies (typically 30 days', or longer if significant technical changes are required to comply), except for changes that are required to take immediate effect (*e.g.*, required by law).[228]

At core, the policies are designed to permit developers to deliver their apps, while keeping users safe from harmful practices. Please see **Annex Q.13** for more information on Google's policies and practices to protect against harmful apps.

Google's Play website sets out the complete content specification for apps that developers are able to distribute through Play.[229] In addition, developers have to comply with the Developer Distribution Agreement.[230]

Play policies guidance

Google provides substantial supplemental guidance to developers on how they can design apps to be compatible with Play's policies. In documentation for and functionality within the Google Play Console, through which developers submit their apps for publication, Google explains how to:[231]

- Build a high quality app or game[232]
- Release with confidence[233]
- Grow your audience[234]
- Monetise with ease[235]
- Engage and retain users[236]

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[227] Google, 'Developer Policy Center', *Google Play* (Web Page, 2022).
[228] For examples of upcoming policy changes, see: Google Play, Updates to Google Play Policies, *Play Console Help,* (Web Page, 2022).
[229] Google, 'Developer Policy Center', *Google Play* (Web Page, 2022).
[230] Google, 'Google Play Developer Distribution Agreement', *Google Play* (Web Page, 17 November 2020).
[231] Google, 'Google Play Console', *Google Play Console* (Web Page, 2022).
[232] Google, 'Build a high-quality app or game', *Google Play Console* (Web Page, 2022).
[233] Google, 'Release with confidence', *Google Play Console* (Web Page, 2022).
[234] Google, 'Grow your audience', *Google Play Console* (Web Page, 2022).
[235] Google, 'Monetize with ease', *Google Play Console* (Web Page, 2022).
[236] Google, 'Engage and retain your users', *Google Play Console* (Web Page, 2022).

In addition, Google offers specific programs for developers on:

- Families[237]
- Go Global[238]
- Google Play Pass[239]
- Start on Android[240]
- Teacher approved[241]

Google also offers free courses via the Google Play Academy on best practices for building a successful app or game business.[242]

Google has an official YouTube channel for Android Developers that offers the latest Android news, best practices, live videos, demonstrations, and tutorials.[243] It also offers guidance on its Twitter account Android Developers to ensure anyone who is willing to can contribute to Google's app repertoire.[244]

Google also provides Android developers with best practice recommendations on how to build apps at technical and conceptual levels on the Android Developers website[245] and blog,[246] and offers developers an app quality checklist.[247]

[237] Google, 'Creating apps and games for children and families', *Google Play Console* (Web Page, 2022).
[238] Google, 'Go Global', *Google Play Console* (Web Page, 2022).
[239] Google, 'Grow with Google Play Pass', *Google Play Console* (Web Page, 2022).
[240] Google, 'Google Play Console', *Google Play Console* (Web Page, 2022).
[241] Google, 'Build Teacher Approved apps', *Google Play Console* (Web Page, 2022).
[242] Google, 'Google Play Academy', *Google Play Academy* (Web Page, 2022).
[243] Google, 'Android Developers channel', *YouTube* (Web Page, April 2022).
[244] Google, '@googleplaydev Twitter account', *Twitter* (Web Page, 2022).
[245] Google, 'Android for Developers', *developers* (Web Page, 2022).
[246] Krish Vitaldevara, 'Expanding Play's Target Level API Requirements to Strengthen User Security', *Android Developers Blog* (Blog Post, 6 April 2022).
[247] Google, 'Deliver high quality apps', *developers* (Web Page, 2022).

Annex Q.16.3: Dangers of Disclosing Details of Ranking Algorithms

Search services rely on a variety of proxy signals to measure the design characteristics of a website that matter to them and their users. When considering transparency efforts it is critical to distinguish between:

- The primary website characteristics that search services seek to evaluate; and
- The indirect, proxy signals that they use for this evaluation.

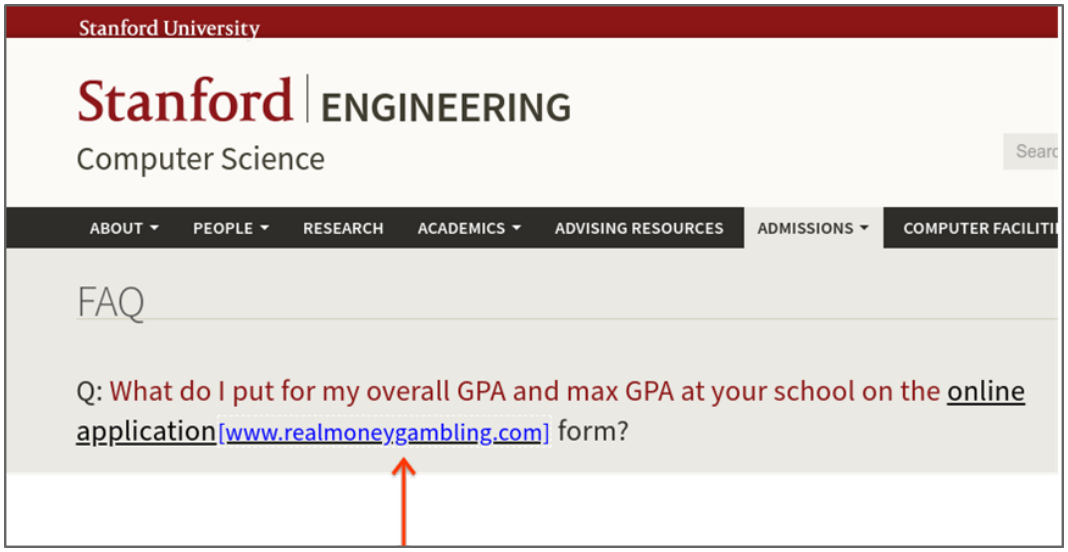
Primary website characteristics may include, for example, whether the content of a website matches a user's query, the quality of the content, how authoritative a website is for a particular topic, the richness of its functionality, load speed, or whether it is optimised for mobile devices. These are characteristics that matter for users that visit the websites, and therefore may be considered as important by search services. Google discloses extensive information about the primary website characteristics that it seeks to evaluate, as discussed in **Annex Q.16.1**.

Proxy signals, by contrast, serve as an indirect means to evaluate these primary characteristics. These indirect, proxy signals are typically not criteria that users directly notice. They do, however, provide indicators for the user's experience. Google's PageRank signal is a good example. The PageRank signal is a proxy signal that examines the number and quality of links that a website receives from other websites. A user does not as such notice the number of links that a website receives. But if a website receives a lot of links from other websites, that indicates that the website likely provides useful content for users.

Any efforts to increase transparency should refer only to the primary website characteristics that a search service considers to be important, and elements such as remuneration. It should not be understood as requiring disclosure of the proxy signals that a search service uses to measure these primary characteristics.

Disclosure of proxy signals would have serious adverse consequences for the quality of a search service because it would allow websites to manipulate ranking. The PageRank signal is again a good example. Because website operators know that Google considers the number of incoming links as a signal, some websites engage in practices to manipulate that signal, rather than genuinely improving their website. For example, they buy incoming links or engage in link exchange schemes so that they appear to Google's algorithms to be of greater quality than they really are.

The screenshot below gives an example of a bad actor trying to use the Stanford Engineering website to link to the website realmoneygambling.com, as a way to try to improve the latter's rank in Google's results. Millions of websites engage in link spam such as this every year.



Sites that engage in such tactics provide a poor user experience and may harm or mislead users. Google therefore maintains and develops algorithms that take into account signals that seek to detect particular manipulation practices and lower the rank of sites that engage in such tactics. But Google cannot disclose publicly the precise signals and algorithms that it uses to detect whether websites engage in such practices. Doing so would defeat the whole purpose of the signals and algorithms.

Taking the example above, if Google were forced to disclose the signals that it uses to detect when a site is engaging in link spam, the bad actor could simply buy, sell, or hack the links in a way to evade Google's quality signals. The site like realmoneygambling.com could therefore game its way to the top of Google's rankings, even though it offers a seriously poor – or even harmful – experience to users.

Likewise, Google needs constantly to update and improve its algorithms to catch the evolving tactics used by certain websites. Otherwise, Google's results would quickly be overrun by websites engaging in manipulation tactics, rather than high-quality and relevant sites. Google cannot announce in advance each algorithm change because to do so may render the point of the algorithm change redundant. Giving advance notice of such algorithmic changes or disclosing more information about them would allow websites to reverse engineer how these algorithms work and circumvent them. This would have serious adverse consequences for the quality and usefulness of Google's search service and the trust that users place in it.

It bears emphasis that some of the sites that Google takes action against contain seriously harmful content. For example, Google has seen an uptick in spam sites seeking to sell harmful Opioids. Google's algorithms seek to protect users from such sites by removing them from the results. In 2020, for the query, 'oxycontin for sale', Google removed over 1.6 million webpages; and for the query 'Xanax for sale', Google removed 23 million webpages. If Google

were forced to disclose the signals that it uses to detect such pages, these websites would be able to sidestep those signals, and Google's results would be overrun with harmful material.

In short, to help websites understand how a search engine ranks, it is not necessary to know the proxy signals that search services use to assess websites. What matters is that websites understand what primary design characteristics a search service expects from a website. For example, it is sufficient for a website to understand that a search service considers mobile-friendliness to be a relevant parameter for ranking. It is not necessary for websites to know the specific proxy signals that the search service uses to assess whether the website is mobile friendly. Disclosure of the proxy signals would have the counterproductive effect of website optimising for those proxy signals, rather than genuinely improving their mobile-friendliness.

Schedule A: Google's position, existing practices and changes addressing the ACCC's Concerns

Ad Tech

ACCC's concerns[248]	Actions Google is already taking which address this concern
Data use	
Concerns about Google's use of data in ad tech, including: • Leveraging Google's 'extensive first-party data advantage'. • The extent of Google trackers on third party websites and apps. • The breadth of Google's terms and conditions relating to use of data, which allow it to use consumer's data for a wide range of purposes.	**Google has made public commitments to limit its use of first-party data and third-party trackers.** In relation to the Privacy Sandbox initiative and the deprecation of third-party cookies on Chrome: • Google has made legally binding commitments to the CMA (which Google will apply globally) that, after Chrome ends support for third party cookies it will not track users to target or measure digital advertising on inventory on third-party websites using either (i) personal data from Google's user-facing services; or (ii) personal data regarding users' activities on websites other than those of the relevant advertiser and publisher.[249] • Google has publicly announced that it will not build or use user-level identifiers to track users as they browse across the web.[250] Per Recommendation 1 of the Ad Tech Inquiry Final Report, **Google is also reviewing its public-facing materials and considering updates about how Google uses first-party data in its ad tech products.** **Google is constantly improving and developing tools for users to control**

[248] We have sought to address what we have identified as the ACCC's core concerns. Failure to address a particular issue should not be taken as a concession or general agreement.
[249] See CMA, *Decision to accept commitments offered by Google in relation to its Privacy Sandbox Proposals*, *Appendix 1A* (February 2022).
[250] David Temkin, 'Charting a course towards a more privacy-first web', *Google Ads & Commerce Blog* (Blog Post, 3 March 2021).

	how their data is used, including for advertising. These form part of Google's industry leading privacy settings and controls. We summarise these settings and controls in **Annex Q.9**.
Transparency	
Concerns about transparency over ad tech service, including in relation to ad tech auctions, verification and attribution.	**Google provides publishers with a range of information about auctions on its ad server, Google Ad Manager** • Publishers can generate detailed and highly customisable reports on Ad Manager, enabling them to discover insights that are designed to help publishers capture advertising revenue more efficiently across their inventory. Publishers can select an extensive array of dimensions to include in their reports.[251] • Publishers can receive Data Transfer Files, which contain non-aggregated, event-level data from their ad campaigns. Data Transfer files contain event data that is accurate to the second, and publishers can choose to include other information in the files to see device, geography, and other information related to the event. • Google also provides publishers using Ad Manager with additional auction transparency via the Bid Data Transfer File, which enables publishers to create a full bid landscape including won and lost bids. **Google is actively involved in ongoing industry initiatives to improve transparency and counter ad fraud.** • Google worked with the Coalition for Better Ads to develop its Better Ads Standards for browsers to identify ad formats that significantly diminish

[251] See Google, 'Report on performance: Create a new report', *Google Ad Manager Help* (Web Page, 2022); and Google, 'Ad Manager report dimensions', *Google Ad Manager Help* (Web Page, 2022).

	user experience.[252] • Google also co-authored and led industry adoption of the Interactive Advertising Bureau's ads.txt and app-ads.txt specifications, which work together with industry initiatives sellers.json and SupplyChain object (discussed below). These initiatives were aimed at increasing trust and transparency in programmatic advertising by allowing publishers to designate authorised sellers of their inventory.[253] • Google supports seller.json across its sell-side products. Sellers.json is a standard for advertising platforms that enables programmatic buyers to identify entities behind inventory sellers. The standard arose following the launch of ads.txt standard to further increase security of the ad tech ecosystem and address ad fraud.[254] • Google also supports bid transparency with SupplyChain Object, which enables advertisers and intermediaries to see all parties who are selling or reselling inventory. It consists of 'nodes'. Each node represents a specific entity participating in the bid request, which includes all entities involved in the direct flow of payment for inventory.[255] • Per Recommendation 4 of the Ad Tech Inquiry Final Report, Google is working with industry to implement a standard to enable independent verification of demand side platform services. **Features of Google's products for advertisers provide significant transparency into the supply chain path.** Advertisers have access to: • *Google Ads Data Hub (ADH) reports*. ADH now includes supply chain data

[252] Google Australia Pty Ltd, Submission in Response to the ACCC's Issues Paper, *ACCC Digital Advertising Services Inquiry* (1 May 2020).
[253] Google Australia Pty Ltd, Submission in Response to the ACCC's Issues Paper, *ACCC Digital Advertising Services Inquiry* (1 May 2020), 7; IAB Tech Lab sources (1), (2) and (3).
[254] Google, 'Inventory management: Provide your seller information with sellers.json', *Google AdSense Help* (Web Page, 2022).
[255] Google, 'Bid transparency with the SupplyChain object', *Google AdManager Help* (Web Page, 2022).

	from Sellers.json[256] and the SupplyChain Object to offer advertisers even more granular transparency into the supply ecosystem. ADH reports offer increased transparency into buying behaviours and allow advertisers to act on them for supply path optimisation processes. Insights available through ADH include average bid price by exchange, average path length by exchange, and delivery volume by exchange, domain, site ID. • *DV360 reports*, which include a wide range of metrics about an advertiser's campaign, including: *"Invalid Traffic"* which is the estimated percentage of impressions filtered out pre-bid as invalid traffic, *"Available Requests"* which is the number of bid requests received before targeting was taken into consideration and *"Bid Responses"* which is the number of bid responses made to eligible bid requests. • *Control over the supply chain using Bid Multipliers and Custom Supply Path (Alpha)*. Bid Multipliers can be used to adjust the bid price per supply path. In this way, advertisers can include, exclude or adjust the bid price for certain supply paths based on performance and viewability concern. Custom Supply Path (currently in alpha mode) can also be used to bulk include or exclude a particular supply path. • *Frequency capping controls* (including on Google Ads, Display and Video 360) which allow advertisers to limit the number of times ads appear to the same person.[257] **Google also continues to build and refine its products to enhance transparency for publishers.** Publishers have access to: • *Ad Manager Data Transfer files, including granular impression data*. These files provide non-aggregated, event-level data from ads served on a

[256] Sellers.json is a standard for advertising platforms that enables programmatic buyers to identify entities behind inventory sellers. See Google, 'Inventory management: Provide your seller information with sellers.json', *Google AdSense Help* (Web Page, 2022).
[257] Google, Google's Response to the Interim Report, *ACCC Digital Advertising Services Inquiry* (12 March 2021), 9.

	publisher's site. Data Transfer reports include access to bidding information on a publisher's inventory, which gives publishers a way to identify buyers who may potentially qualify for premium inventory sold through Preferred Deals and Private Auctions.[258] • *Ad Manager Home Dashboards,* which provide daily snapshots of a publisher's Ad Manager and Ad Exchange revenue performance over time. Information about impressions, revenue, and eCPM can be filtered by inventory types and channels. Publishers can also use the 'Top pricing rules' card to understand which bid amounts are winning auctions and how those winning values affect their earned revenue.[259] • *'Bid range' dimension (beta) and 'bid rejection reason' dimension in Ad Manager Reports.* The former shows the range within which the bid for the publisher's inventory falls (divided into $0.10 buckets). The latter is the reason the bid for the publisher's inventory lost or did not participate in the auc*tion.* [260] • *Frequency capping controls* including on Ad Manager and AdMob. **Google has developed its own effective measurement metrics for its advertisers that are independently verified.** • For instance, Google has obtained Media Ratings Council (MRC) accreditation for over 30 distinct measurement solutions, covering all of its billable metrics (such as clicks, impressions, and viewability) across search, video, and display for products including Google Ads, Google

[258] Google, 'Ad Manager Data Transfer reports: Access event-level data related to your Ad Manager network', *Google Ad Manager Help* (Web Page, 2022).
[259] Google, 'Ad Manager Home dashboards', *Google Ad Manager Help* (Web Page, 2022); see also Google, 'Using your Overview Home dashboard', *Google Ad Manager Help* (Web Page, 2022).
[260] Google, 'Ad Manager report dimensions', *Google Ad Manager Help* (Web Page, 2022).

	Marketing Platform, and Google Ad Manager.[261] **Third-party verification providers are able to independently test Google's verification data.** ● Approved third party verification providers are given both the data and data-use permissions necessary to provide this independent verification in a privacy centric way. ● Third party verification providers offer solutions that work across Google advertising products, including Google Marketing Platform, Google Ads, and YouTube. ● Google allows these third parties to access ad log data, which can be exported through Ads Data Hub in aggregated form for privacy reasons.
Concerns about price transparency across the ad tech supply chain, including the ability for providers to retain hidden fees.	**Google is working with industry to implement an industry standard to help address this concern in 2022 (as recommended by the ACCC)** ● Per Recommendation 4 of the Ad Tech Inquiry Final Report, Google is working with industry to implement a standard for ad tech providers to publish average fees and take rates for ad tech services, and to give comfort to advertisers and publishers that there are no 'hidden fees' in the chain. **Google has taken measures to increase transparency over its fees across the supply chain.** ● Google's public submission, prepared by RBB Economics, in which it presents take rates for some of its main products based on a sample of

[261] See Media Rating Council Current Membership at Media Rating Council, 'Current Membership', *Media Rating Council* (Web Page). See also Google, 'Building trust and increasing transparency with MRC - accredited measurement', *Google Partners Blog* (Blog Post, 21 February 2017). For a full list of Google's MRC accreditations, see Media Rating Council, *Digital Metrics, Companies Accredited by MRC* (3 April 2022).

	one week's transactions in Australia.[262] ● A 2019 blog post, where Google stated that when ads were traded using Google's ad tech products, publishers kept 69% of the total amount paid to advertisers.[263] ● These analyses helped inform the ACCC's finding that there is no evidence that Google is charging hidden fees or retaining an undisclosed portion of advertising expenditure.[264] Similarly, the ACCC cites the UK CMA's finding that the take rate charged by Google Ads is similar to other DSPs.[265]
Self-preferencing and conflicts of interest	
Concerns about potential conflicts of interest and self-preferencing in ad tech.	**Google has appropriate controls in place to manage the potential for conflicts of interest** ● The sharing of information between Google's ad tech products is limited by internal policies and controls, and contractual restrictions. **Google facilitates interoperability across products** ● Google enables interoperability with a large number of competing platforms throughout the Google ad tech stack. For example: ○ On the buy-side, Google Campaign Manager is interoperable with any DSP, and Google DV360 supports over 80 ad exchanges.

[262] RBB Economics, Google's ad tech take rates - Analysis of Google auction level data sets, submitted in the *Digital advertising services inquiry* (20 October 2020).
[263] Sissie Hsiao, 'How our display buying platforms share revenue with publishers', *Google Ad Manager* (Blog Post, 23 June 2020).
[264] ACCC, Interim report, *Digital advertising services inquiry* (December 2020), 155.
[265] ACCC, Final Report, *Digital advertising services inquiry* (28 September 2021), 155.

	○ On the sell-side, Google Ad Manager works with any ad exchange, not just Google's own exchange and supports 100s of ad networks and exchanges. Google Ad Manager also includes an ad exchange AdX that is interoperable with any ad server on both the demand and supply side. **Google has publicly committed to making it easier for publishers to receive equal access to data and use our tools with other ad technologies.**[266] ● Google is working to create a solution that ensures all buyers that a publisher works with can receive equal access to data related to outcomes from the Ad Manager auction, including Minimum Bid to Win information from previous auctions. ● Google is also working on changes that improve interoperability between Ad Manager and third-party servers. ● Google is reaffirming its promise not to use data from other SSPs to optimise bids in our exchange in a way that other SSPs can't reproduce.

[266] Maria Gomri, 'Some changes to our ad technology', *Google The Keyword* (Blog Post, 7 June 2021).

Play

ACCC's concerns[267]	Actions Google is already taking which address this concern
Exclusionary conduct, including anti-competitive self-preferencing and leveraging	
Concerns about app store operators controlling access to their app store, including: • Preventing developers from communicating with consumers, in particular with respect to alternate payment options. • Acting as 'unavoidable business partners' and requiring developers to accept their terms to reach consumers.	**Developers distributing their apps on Play have numerous ways to reach out to users**. These are explained on Play's support page. • Developers can freely communicate with users outside their app, including about alternative purchase options.[268] They can use email marketing and other channels outside of the app to provide subscription offers and even special pricing. • Within the app, developers have flexibility to communicate with their users. This includes communications about administrative information like an account management page, privacy policy, or to a help centre. Developers may provide a link to a webpage within their app, as long as the link does not lead to alternative payment options. • For apps that are consumption only (i.e. apps that do not enable users to purchase access to digital goods or services from within the app), developers may also communicate with users about purchasing options without direct links. **Developers also have multiple channels on Android through which they can**

[267] We have sought to address what we have identified as the ACCC's core concerns. Failure to address a particular issue should not be taken as a concession or general agreement.
[268] Google, 'Understanding Google Play's Payments policy', *Play Console Help* (Web Page, 2022).

	distribute their apps, in addition to or instead of Play (i.e. Google is not an 'unavoidable business partner'). Developers can choose to distribute their apps through: • **Numerous other Android app stores and app subscription services** (such as the Samsung Galaxy Store and Amazon Appstore). • **Via direct downloads from their own (and third-party) websites**. For example, WhatsApp is available via WhatsApp's direct download page, or can be downloaded from Play. App repositories such as APK Mirror host thousands of apps to download.[269] • **Via negotiated preinstallation deals with device manufacturers** to preinstall their apps on devices so that users will have access to them out-of-the-box. • **Via web apps or app streaming services** (such as Nvidia and Amazon's Luna). • Developers only need to write their app once for it to be distributed across Android.
Concerns about app store operators monitoring downstream competitors and making use of developer data/information to develop or improve their own apps.	**Google has formal policies prohibiting the company-wide sharing of identifiable data about third-party apps gathered by Play.** This third-party data is not shared with Google's first party app developers to unfairly advantage them, or for purposes other than benefit across the Play and Android ecosystems. [270]

[269] See APK Mirror.
[270] Kareem Ghanem, 'How to sustain a safe, thriving app and game ecosystem', *Google The Keyword* (Blog Post, 10 December 2021).

Concerns about app store operators providing greater discoverability and ranking to their own first party apps and associated opacity around the operation of ranking algorithms.	**All apps are promoted in Play according to the same principles.** ● Google discloses the main factors used for app discovery and ranking on Play, without allowing developers to 'game' Play's algorithms. (these disclosures comply with corresponding EU and Japanese P2B regulation).[271]
Concerns about withholding or limiting access of third party apps to device functionality.	**App developers have access to Android functionality** ● Google makes a substantial number of APIs available to all developers to enable them to build and improve their apps.[272] For Android 12, Google has developed a range of new features and APIs that are available to all developers.[273] For example: ○ Android already allows developer access to its NFC chip. On Android 12, apps can now enable NFC payments without the device screen turned on. ○ New platform APIs that provide support for ultra high-resolution camera sensors. ● The ACCC's App Store Report (at p 61) acknowledged that they had not received complaints from developers about how Google provides access to Android and proprietary APIs.[274]

[271] Google, 'App Discovery and Ranking', *Play Console Help* (Web Page, 2022).
[272] See Android for Developers, Android API Reference (webpage, 2022).
[273] See developers, 'Android 12 features and changes list', *developers* (Web Page, 2021).
[274] See ACCC, Interim report No. 2 - App marketplaces, *Digital platform services inquiry* (March 2021), 61.

	• Google also explains when certain features or functionality may not be available to all developers.[275]
Concerns about mobile operating system operators implementing and enforcing favourable pre-installation and default settings for their first party apps control over mobile operating systems implementing and enforcing favourable re-installation and default settings.	**Device manufacturers can choose which and how many apps and app stores (whether Play or other app stores) they want to preinstall on their devices.** • Many OEMs choose to preinstall their own app stores and most Android devices ship with two or more app stores preloaded. • Developers can negotiate with OEMs to have their apps preinstalled on Android devices. • Android is available without any proprietary apps, including from Google. Google's own apps are licensed separately from Android and share 'shelf space' on devices with non-Google apps. **Users are able to freely customise their devices.** • Users are able to change all default apps on Android devices. • Users can delete or deactivate pre-installed apps.
Concerns about app store operators mandating use of their billing systems, including the level of the service fee associated with use of those billing systems.	**Google has announced a pilot program to explore the implementation of user-choice billing.**[276] • Spotify is the first partner that will participate in the program, whereby they will be introducing Play's billing system alongside their current billing system.

[275] See Google, 'Availability of Features and Services', *Play Console Help* (Web Page, 2022).
[276] See Sameer Samat, 'Exploring User Choice Billing With First Innovation Partner Spotify', *Android Developers Blog* (Blog Post, 23 March 2022).

	The service fee has never been raised - instead it has been subject to multiple reductions. These reductions have been made in consultation with developers and as a result of competitive pressure (in particular from Apple).[277] ● Today of the 3% of developers who are required to pay the service fee, 99% qualify for a fee of 15% or less. ● Most recently it was announced that: ○ From 1 July 2021, the service fee was reduced from 30% to 15% for the first US$1 million of revenue every developer earns each year.[278] ○ From 1 January 2022, the service fee for all digital subscription payments on Play was reduced to 15%, starting from day one. Previously, the fee dropped from 30% to 15% after 12 months of a recurring subscription.[279] ○ As part of the Play Media Experience program, it was also announced that ebooks and on-demand music streaming services are eligible for a service fee as low as 10%.[280]
Unfair terms of use and access	
Concerns about app store operators terms	**Every app is thoroughly reviewed before it goes live on Play.** Our app review

[277] For instance in November 2020, Apple announced its own App Store Small Business Program, under which it reduced its service fee to 15% for developers who earned up to US$1 million in the previous calendar year. See Developer, 'Announcing the App Store Small Business Program', *News and Updates* (Web Page, 18 November 2020).
[278] See Sameer Samat, 'Boosting developer success on Google Play', *Android Developers Blog* (Blog Post, 16 March 2021).
[279] See Sameer Samat, 'Evolving our business model to address developer needs', *Android Developers Blog* (Blog Post, 21 October 2021).
[280] See Google, 'Play Media Experience Program', *Google Play Console* (Web Page, 2022).

and conditions being unclear and/or enforced unilaterally, including opacity surrounding the app review process.	process subjects apps to rigorous automated and human reviews in order to identify and remove potentially harmful apps. The policies against which apps are reviewed include restricted content, consumer privacy, malware, and mobile unwanted software. Please see **Annexes Q.13** and **Q.16.2** for more information on Google's policies and practices in relation to Play.
Consumer welfare	
Concerns about consumer privacy and app users being exposed to invasive data practices.	**Android provides multiple layers of app protection for its users, including Google Play Protect (GPP),[281] which is provided on all devices with Play installed** (see **Annex Q.13** for more information on Google's processes to protect against harmful apps)**.** **In 2021, Google made changes to improve data privacy and security in relation to advertising on Android devices.[282]** ● When users opt out of interest-based advertising or ads personalisation, their advertising ID is removed and replaced with a string of zeros. ● Linking persistent device identifiers to personal and sensitive user data or resettable device identifiers was also prohibited. This policy adds an additional layer of privacy protection when users reset their device identifiers or uninstall apps. **In 2022, Google announced Privacy Sandbox for Android,[283] with the goal of introducing new, more private advertising solutions.**

[281] See Google, 'Google Play Protect', *Google Play Protect* (Web Page, 2022).
[282] See Krish Vitaldevara, 'Announcing Policy Updates To Bolster Privacy and Security', *Android Developers Blog* (Blog Post, 28 July 2021).
[283] See Anthony Chavez, 'Introducing the Privacy Sandbox on Android', *Google The Keyword* (Blog Post, 16 February 2022).

	• These solutions will limit sharing of user data with third parties and operate without cross-app identifiers, including advertising ID. • Google is also exploring technologies that reduce the potential for covert data collection, including safer ways for apps to integrate with advertising SDKs.
Concerns about app store operators taking further measures to prevent and remove harmful apps.	**Further to Google Play Protect (see above), Play enforces policies to protect users from malicious actors trying to distribute harmful apps** (see **Annexes Q.13** and **Q.16.2** for more information on Google's policies and practices)**.**

Search

ACCC's concerns[284]	**Google's position and existing practices**
Exclusionary conduct, including anti-competitive self-preferencing, bundling/tying and leveraging	
Concerns about Google foreclosing rivals' access to users and generating beneficial economies of scale and network effects (such as access to more click-and-query data than its rivals, which allows Google to continually improve the relevance of its search results,	The Discussion Paper's statement that Google is able to generate beneficial economies of scale and continually improve the relevance of its results does not identify a competitive harm. To the contrary, it identifies the opposite: benefits to users from Google's innovation and improvement of Search. The Discussion Paper's comments about preinstallation and defaults overlook that there is a consistent body of evidence demonstrating that Google's

[284] We have sought to address what we have identified as the ACCC's core concerns. Failure to address a particular issue should not be taken as a concession or general agreement.

attracting more users, and entrenching Google's dominance) as a result of: ● its pre-installation and default arrangements; and ● the power of defaults and consumer inertia.	popularity reflects its quality (due to Search's constant innovation), not default and preinstallation arrangements (discussed further in **Annex Q.1.3**). In addition: ● **Defaults and preinstallation benefit users by creating a seamless experience.** Defaults and preinstallation mean that users can access a given service seamlessly upon initial activation of a device or first use of a platform. OEMs and developers set defaults and preinstall services to create a positive experience for users on their platforms, based on their view of what service will make their platforms more competitive. Accordingly, defaults and preinstallation benefit users by making it easier for them to use services quickly and easily. ● **Defaults and preinstallation benefit OEMs and developers by allowing them to monetise distribution opportunities on devices.** Defaults and preinstallation also benefit OEMs and developers by providing an important source of revenue. Services compete for default and preinstallation opportunities based on their quality and by offering to remunerate OEMs and developers. OEMs and developers, in turn, use these revenues to reduce the cost of supplying devices and browsers, thereby benefiting consumers in the form of lower prices and higher-quality products
Entrenched market power leading to reduced incentives for investment and innovation	
Concerns that Google's entrenched market power has likely led to reduced incentives for investment and innovation, with likely	Google is continuously innovating and investing in research and development, and in particular in Google Search (see **Annex Q.1.2**). It is the most popular and highest quality search engine in Australia.

implications for the quality and range of search engines available to consumers.	
Significant competitive data advantage	
Concerns that the click-and-query data Google collects from its search engine allows it to improve its search algorithm, making Google Search more attractive to search users.	Google has invested extensively in mechanisms to share aggregated query data, including via: • Google Trends;[285] • Google Search Console;[286] and • various reports available to webmasters (for example, the Links Report,[287] the Performance report[288] and the Core Web Vitals report).[289] In addition, we promote data portability in several ways, including through tools such as Google Takeout[290] and industry efforts such as the Data Transfer Project[291] (both discussed in **Annex Q.9**). By contrast, **access to Google's click and query data is unnecessary for rivals to compete**, as explained further in our response to **Q.9**.
Harms to consumers from scams	

[285] Google, 'Explore what the world is searching', Google Trends (Web Page, 2022). See also Google, 'FAQ about Google Trends data', Trends Help (Web Page, 2022).
[286] Google, 'Improve your performance on Google Search', Google Search Console (Web Page, 2022).
[287] Google, 'Links report', Search Console Help (Web Page, 2022).
[288] Google, 'Performance report (Search)', Search Console Help (Web Page, 2022).
[289] Google, 'Core Web Vitals report', Search Console Help (Web Page, 2022).
[290] Google, 'Google Takeout', *Google Account* (Web Page, 2022).
[291] Data Transfer Project, 'About us', *Data Transfer Project* (Web Page, 2022).

Concerns that digital platforms don't do enough to remove scams either proactively or in response to complaints, and do not provide appropriate and effective redress for their users.	Google faces significant challenges in tackling malicious actors and harmful content on Search. Google is not in a position to assess objectively, and at scale, the veracity of every piece of content on the web or the intent of its creators.[292] Further, a considerable percentage of content contains information that cannot be objectively verified as fact. This is because it either lacks necessary context, because it is delivered through an ideological lens others may disagree with, or because it is constructed from contested datapoints. Google's measures to address scams and other harmful content on Search (and ads) are outlined in **Annex Q.11**.
Unfair trading practices for business users	
Concerns regarding non-price opacity: Insufficient transparency regarding the key decision-making algorithms digital platforms use to display content and advertising, rank search results.	This abstract statement is not based on any analysis of the information that Google actually makes available. **Annex Q.16.1** provides a snapshot of the information that we make available to webmasters on the operation of our Search ranking. **Disclosure of the full details of how Google ranks results would have adverse consequences**, as described in our response to **Q16**.

[292] Google, *How Google Fights Disinformation* (February 2019), 10.