

Digital platforms and competition in Australia

Background paper

JULY 2025

Contents

Executive summary

1. Digital platforms are driving productivity and innovation across the Australian economy

2. Some countries have adopted ex ante regimes for digital platforms, while others are adopting a 'wait and see' approach

3. Regulators should carefully measure the potential consequences of ex ante regimes and other regulatory reform options

Q

3

4

9

21

MANDALA

This document is intended for general informational purposes only. The analysis in this report was commissioned by Apple and prepared by Mandala.

Mandala is an economics research and advisory firm. Mandala specialises in combining cutting-edge data and advanced analytical techniques to generate new insights and fresh perspectives on the challenges facing businesses and governments.

Views and opinions expressed in this document are prepared in good faith and based on Mandala's knowledge and understanding of its area of business, markets and technology. Opinions expressed herein are subject to change without notice. No part of this document may be reproduced in any manner without the written permission of Mandala.

© July 2025

Note: All dollar figures are Australian dollars unless indicated otherwise.

Executive summary





Digital platforms are driving productivity and innovation across the Australian economy

Some countries have adopted ex ante regimes for digital platforms, while others are adopting a 'wait and see' approach

Regulators should carefully measure the potential
 consequences of ex ante regimes and other regulatory
 reform options

Productivity is critical to Australia's prosperity, contributing 80 per cent of the growth in real GDP per person over 40 years

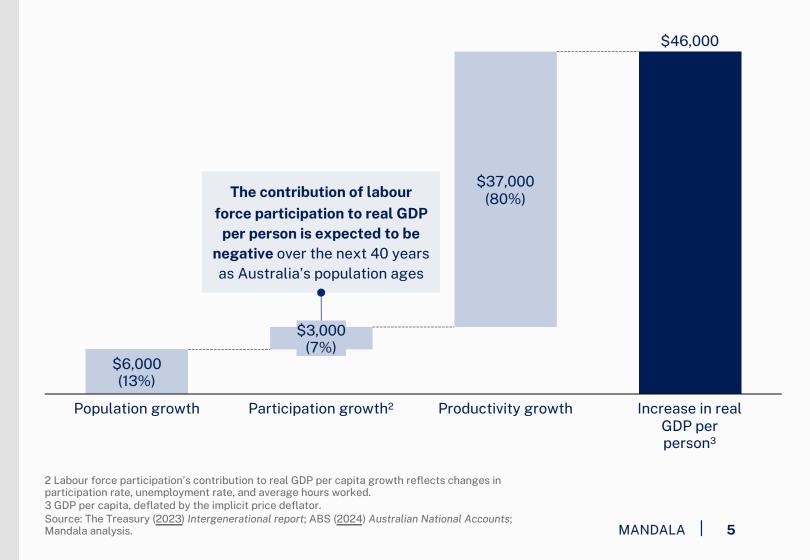
Productivity is the largest contributor to rising living standards. Higher productivity means higher wages, lower inflation, and a lower cost of living.

\$37,000 or 80 per cent of the total increase in real GDP per person over the past 40 years has come from productivity. Other factors played more modest roles, with increases in the working-age population contributing \$6,000 and increases in labour force participation contributing \$3,000.

Nearly all future growth is expected to come from productivity gains¹. With an ageing population, Australia's participation rate is expected to decline and contribute negatively to real economic growth over the next few decades. Productivity increases will become even more crucial to future economic growth and prosperity.

Exhibit 1: Factors contributing to growth in Australian real GDP per person since 1984

\$ (2023 prices), 1984-2024



Australia's productivity growth is declining, risking lower wage growth and growth in living standards

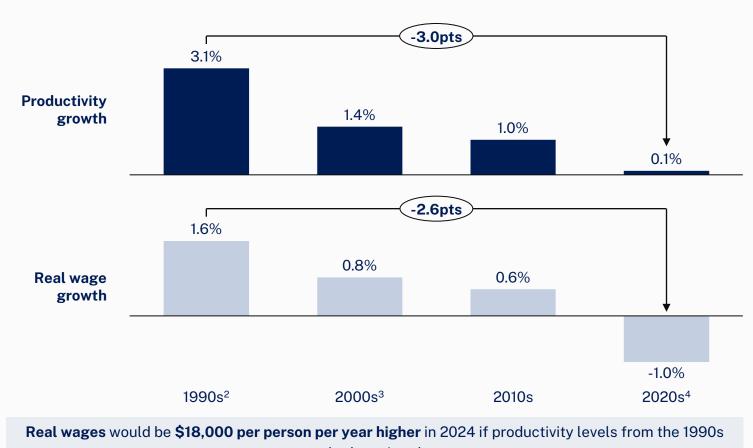
A decline in productivity growth has contributed to a decline in wage growth over the last four decades.

Annual productivity growth has declined from 3.1 per cent in the 1990s to just 0.1 per cent in the 2020s. This has led to a decline in annual real wage growth over the same period, from 1.6 per cent growth in the 1990s to a 1 per cent decline in the 2020s.

Real wages today would be approximately \$18,000 higher per person per year if Australia had maintained 1990s productivity levels. Research shows productivity is a key driver of rising incomes and living standards.¹

Exhibit 2: Annual productivity and real wage growth

Average annual percentage increase, 1998-2024



had persisted

2 Due to data unavailability for real wages, 1990s includes only 1998–1999 for both average real wage and productivity growth.

3 Calculations exclude Q3 2000 – Q2 2001 to control for the GST introduction shock.

4 Includes only the period from 2020 to 2024.

Source: ABS (2024) Australian National Accounts; ABS (2024) Average Weekly Earnings; ABS (2024) Wage Price Index; Mandala analysis.

Tech is a bright spot in Australia's productivity story, with tech sector productivity outpacing other sectors

While Australia's productivity growth has slowed, the tech sector stands out as an exception. Tech sector productivity has grown by 38 per cent since 2007, compared to the economy-wide average of 14 per cent.

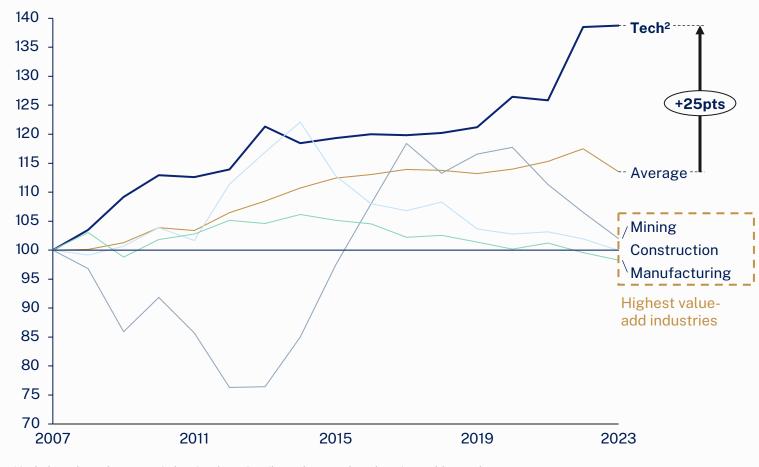
In contrast, other high value-add market sectors have shown much more modest growth, with marginal gains observed in the mining and construction sectors and declines in productivity relative to 2007 in the manufacturing sector.

More importantly, the tech sector has facilitated the increased adoption of new technologies by small, medium and large businesses. Businesses using digital platforms are indirectly adopting the latest technologies, including AI, which lifts their productivity.

Regulatory settings that continue to foster strong productivity growth from the tech sector present an opportunity for Australia to improve national productivity.

Exhibit 3: Labour productivity growth in the highest value-add market-sector industries and tech¹

Index of labour productivity by industry (2007 = 100), 2007-2023



1 Includes only market-sector industries that primarily produce goods and services sold at market prices and excludes Healthcare and Social Assistance.

2 Defined to include technological services and intelligence, technology-enabling infrastructure, and e-commerce and media platforms.

Source: ABS (2024) Estimates of Industry Multifactor Productivity; Tech Council of Australia (2021) The economic contribution of Australia's tech sector; Mandala analysis.

MANDALA **7**

Digital platforms have transformed sectors like music by facilitating waves of innovation

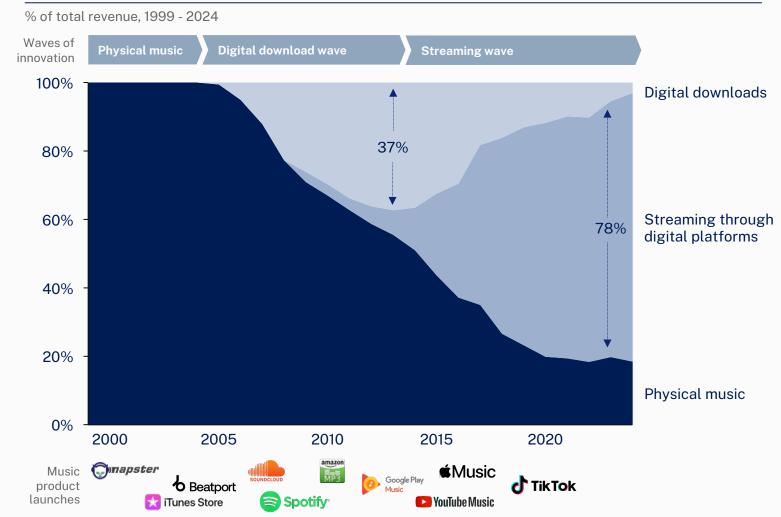
Digital platforms have facilitated constant innovation and disruption in many sectors, ensuring these sectors remain dynamic and competitive.

For example, the music sector has experienced ongoing waves of disruption due to digital platforms. In the 1990s, physical retailers like Sanity and HMV accounted for all music sales. By the late 1990s, digital disruptors had entered the market. For example, in 2003 iTunes developed an innovative platform for online music sales and distribution. Digital downloads peaked at 37 per cent of revenue by 2013.¹

Streaming services via digital platforms have disrupted the sector over the last decade. Streaming now accounts for 78 per cent of global music sales, has brought 118 times more music options to consumers compared to physical CD stores,² and has cut distribution times by 89 per cent compared to vinyl.

1 Excludes synchronisation and performance rights revenue. 2 Based on the average number of songs available across Spotify, YouTube Music, and iTunes compared to the music CDs available at JB Hi-Fi. Source: TuneCore (2024) Preparing my music for release.

Exhibit 4: Global revenue from digital and physical music sales



Source: IFPI (<u>2025</u>) *Global music report*; Atomic Disc (<u>2024</u>) *Why does it take so long to make vinyl records?*; Mandala analysis.





Digital platforms are driving productivity and innovation across the Australian economy

Some countries have adopted ex ante regimes for digital platforms, while others are adopting a 'wait and see' approach

Regulators should carefully measure the potential consequences of ex ante regimes and other regulatory reform options

Treasury proposed a digital competition regime in 2024 that will reshape market dynamics and incentives

The Australian Treasury proposed a new digital competition regime to address concerns of possible anti-competitive behaviour by digital platforms.

Following the ACCC's Digital Platform Services Inquiry, Treasury's 2022 consultation paper sought stakeholder feedback on the ACCC's regulatory reform recommendations. Treasury then introduced its proposal detailing a framework to regulate digital platforms in 2024.

The proposal outlines a regulatory framework for

digital platforms. The proposed framework would apply to digital platform services which are designated based on criteria that indicates a significant market position and potential to impact competition in the Australian economy, but not actual evidence of harm. Once designated, platforms would need to comply with broad and service-specific obligations.

WHO IT APPLIES TO	OBLIGATIONS		
	The proposal outlines two tiers of obligations:		
 Designated digital platforms with a critical position in the Australian economy The proposal mentions that the priority services to be investigated first include: App marketplaces Ad tech Social media 	 (i) Broad obligations apply across all designated digital platform services The proposal states that the broad obligations would target: Anti-competitive self-preferencing Anti-competitive tying Impediments to consumer switching Restrictions on interoperability that limit effective competition Unfair treatment of business users Lack of transparency 	 (ii) Service-specific obligations apply to entities designated for a specified service While these obligations typically focus on conduct within the specified service, they may extend to related services where the designated platform may have market power or control 	

Exhibit 5: Treasury's proposal for a new digital competition regime

In the past three years, the global regulatory environment has shifted its approach to digital platform markets

The global context for digital platform regulation has changed since Treasury's initial consultation in 2022.

- The White House recently issued a memorandum opposing foreign regulations that could limit US companies' growth.
- AI has since disrupted digital sectors including general search and online marketplace services. These sectors look vastly different and are more dynamic than they were just a few years ago, upending old assumptions about market dominance and competition.
- New leadership at key regulators like the CMA, European Commission, and FTC over the last year have brought new perspectives on competition.

The changing global dynamics create more uncertainty for an already-uncertain approach to regulating digital platforms.

Exhibit 6: Key global shifts since Treasury's initial consultation on digital regulatory reform

KEY SHIFT	DESCRIPTION
US Presidential Action on defending American companies and innovators	The US government has indicated it would impose tariffs and take necessary actions against regulations by 'foreign governments that could inhibit the growth or intended operation' of US companies, specifically calling out the ex ante EU rules for scrutiny.
Rise of foundational artificial intelligence models disrupting digital markets	Foundational artificial intelligence (AI) models have disrupted digital platform markets . For example, AI has spurred the emergence of new search and answer engines, including ChatGPT and Perplexity.
Changing leadership of prominent competition regulators	In the last year, Doug Gurr became the new CMA chair, Teresa Ribera became the new European Commissioner for Competition, and Andrew Ferguson became the new FTC Chair. This signals a potential change in global regulatory approaches.

Source: White House (2025) Defending American Companies and Innovators From Overseas Extortion and Unfair Fines and Penalties; White House (2025) Presidential actions; Competition and Markets Authority (2023) AI Foundational Models: Initial Report.



The proposed regime would implement 'ex ante' or upfront rules on the market without requiring evidence of harm, unlike traditional ex post enforcement

Exhibit 7: Comparison of ex post and ex ante regulation of conduct

The Government's proposed new digital competition regime represents an **ex ante regulatory approach**, introducing pre-emptive rules for 'designated' digital platforms by amending the CCA to establish broad and service-specific obligations to be enforced by the ACCC

	EX POST REGULATORY REGIME	EX ANTE REGULATORY REGIME	
Description	Identifies and remedies conduct that has been assessed as having anti-competitive effects on the market	Rules place obligations on conduct without an assessment of whether the conduct is harmful	
Applications	Default approach for most sectors of the economy, where regulatory intervention aims to remedy identified harms	Applies to specific sectors or companies, typically those deemed to be natural monopolies (e.g., energy and water sectors) ¹	
When this works best	With robust detection and enforcement capabilities	With clear evidence of harm arising from a pattern of conduct in a stable sector	
Example of regulation	Section 46 of the <i>Competition and Consumer Act 2010</i> (CCA) prohibits corporations with a substantial degree of market power from engaging in conduct that has the purpose, or is likely to have the effect, of substantially lessening competition. ²	The ACCC regulates some nationally significant infrastructure services. Its functions include deciding on access prices, terms and conditions, such as for the wholesale National Broadband Network (NBN) service. ²	

1 For example, the telecommunications, energy, and water sectors. 2 ACCC (2025) National Broadband Network (NBN) access regulation 2 Types of conduct that may contravene section 46 of the CCA include predatory pricing and refusal to deal, among others. Source: Australian Government (2025) Competition and Consumer Act 2010; Australian Government (2024) A new digital competition regime – Proposal paper; Mandala analysis.

The proposed regime departs from Australia's traditional competition policy, which has evolved to prioritise evidence-based assessments of market harms

Exhibit 8: Evolution of Australia's competition framework for assessing general conduct

		PRE-TPA ERA ¹	PROSCRIBED PURPOSE ERA	EFFECTS ERA	PROPOSED DIGITAL PLATFORMS REGIME
		Pre-1970s	1974-2017	2017 onwards	Present day
	Key points	Economic evidence increasing over time			
	Australian firms and markets have long been regulated under		Develo	pments	Ĩ
	 been regulated under an ex post framework This has evolved over time toward outcomes-based assessments of harm, prioritising economic evidence over rules and presumptions Ex ante digital 	 Precursor to modern competition legislation Focused on prohibiting monopolisation The legislation did not invite analysis of the effects of conduct on the market, with limited recognition of modern economic concepts of competition 	 Shift towards incorporating economic concepts into law New provisions prohibited a firm from taking advantage of market power by engaging in conduct for a proscribed purpose (Section 46) This provision did not invite analysis of the actual effects of the conduct on the market 	 The effects test is introduced, focusing on the effect or purpose of conduct on competition² Improved the ACCC's ability to target conduct harming the Australian economy Prioritised evidence-based economic analysis in competition regulation 	 Growing concerns around the expansion of digital platforms and potential risks to competition and consumers Government directed the ACCC to launch Digital Platforms Inquiry, which recommended an ex ante framework for digital platforms
	platform regulation represents a significant change to		Legislation and regulation		
t	this landscape	Australian Industries Preservation Act 1906 (based on principles in US Sherman Act)	Trade Practices Act 1974 (later, the Competition and Consumer Act 2010)	2015 Harper Competition Policy Review led to two major legislative amendments which commenced in 2017	Government proposes a new ex ante digital competition regime in 2024

1 TPA refers to the *Trade Practices Act* 1974. 2 The 'effects test' relates to conduct that a firm engages in that "has the purpose, effect, or likely effect of substantially lessening competition". Note: This timeline depicts the evolution of the framework for assessing general anticompetitive conduct, as opposed to that which governs conduct such as cartel conduct, mergers, and authorisations. Source: Australian Competition Law (2022) *Chronology of Australian Competition Law*; ACCC (2017) *ACCC welcomes new era in competition law*; ACCC (2025) *Digital platform services inquiry* 2020-25; Mandala analysis.

International markets are taking different approaches to competition regulation, with no global consensus on ex ante regulation

Exhibit 9: Ex ante regulation and implementation status in international markets

There is **no global consensus** on ex ante digital platform regulation, and attitudes towards ex ante appear to be changing. This is unsurprising given the **lack of consensus among competition lawyers and economists** on this topic



CONCERNS

EXAMPLES

The US has been more apprehensive of ex ante approaches, citing risks to innovation, regulatory inflexibility, and a lack of evidence of harm



Exhibit 10: Rationale behind market-based regulators' resistance to ex ante regulations



STIFLING INNOVATION AND BUSINESS PRACTICES

- Ex ante regulation could restrict legitimate business practices, stifling innovation and creativity¹
- Ex ante regulation could prevent benign or procompetitive conduct, creating inefficiencies and inadvertently harming consumer welfare

Jim Jordan, Chairman of US House Judiciary

Committee, warned that EU ex ante regulations

would 'hurt consumers and stifle innovation'.2

REGULATORY RIGIDITY IN DYNAMIC MARKETS

- Ex ante rules may fail to account for nuanced, interconnected, and rapidly evolving dynamics among distinct digital markets³
- These prescriptive restrictions could quickly become outdated and difficult to implement in rapidly evolving tech markets

Taiwan's Fair Trade Commission emphasised that 'issue-driven' enforcement is the most effective enforcement principle given the **digital economy's rapid innovation, short life cycles, and dynamic competition.**⁴



EXISTING ENFORCEMENT MECHANISMS UNDER EX POST

- Under the existing ex post enforcement framework, the US Department of Justice (DOJ) and Federal Trade Commission (FTC) has brought several antitrust cases against platforms
- The ex post framework requires the DOJ and FTC to support claims with evidence of demonstrated harms, rather than presumed risks

In recent years, Department of Justice has pursued **enforcement actions against digital platforms over competition concerns**, with several cases now entering remedy phase.⁵

1 Aghion et al. (2023), The Impact of Regulation on Innovation, '[r]egulation reduces aggregate innovation by 5.7 percent'; 2 Jordan (2025) Letter to Teresa Ribera, Executive Vice-President for a Clean, Just and Competitive Transition; 3 Ginsburg et al. (2025) Comment of the Global Antitrust Institute on the Australian Digital Platform Services Inquiry; 4 Reinsch & Suominen (2023) Are US Digital Platforms Facing a Growing Wave of Ex Ante Competition Regulation?; 5 Roller (2025) Six major tech lawsuits to keep tabs on in 2025.

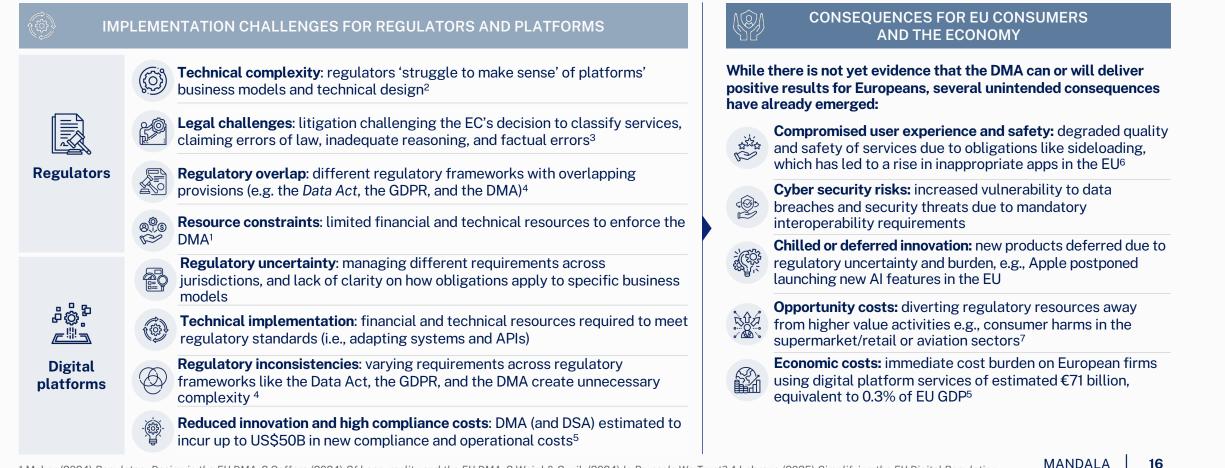


In the EU, regulators and digital platforms have experienced implementation challenges, with consequences for users and the economy



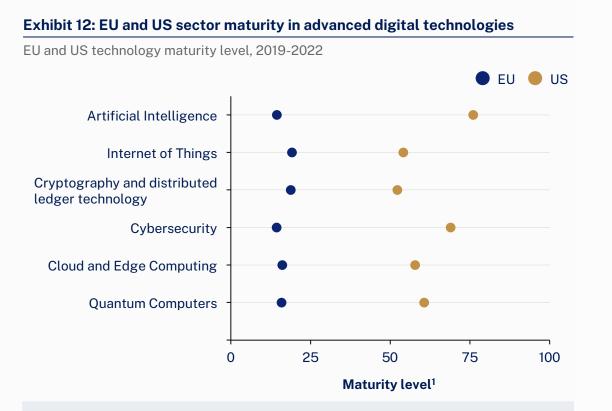
The EU DMA has created challenges for both regulators and digital platforms, as well as flow on effects to consumers and the economy more broadly, with limited evidence of success

Exhibit 11: Challenges and consequences of the implementation of the DMA



1 Maher (2024) Regulatory Design in the EU DMA; 2 Caffara (2024) Of hope, reality and the EU DMA; 3 Weigl & Guzik (2024) In Brussels We Trust? 4 Lobrano (2025) Simplifying the EU Digital Regulation; 5 Suominen (2022) Implications of the European Union's Digital Regulations; 6 Vakulov (2025) Apple's First Notarised Porn App Stirs Privacy Woes, Third-Party Risks; 7 KWM (2025) Concentrating on concentration; Mandala analysis.

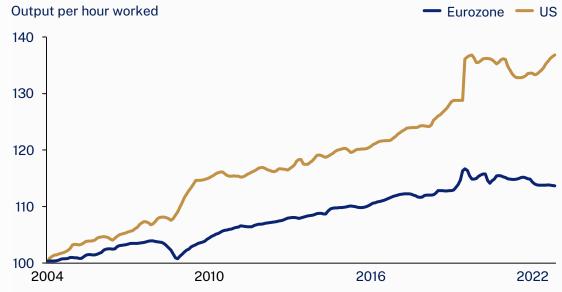
Growing evidence suggests the US's thriving tech sector and productivity growth are being driven by its market-driven approach to digital platform regulation



The **US has outpaced the EU on technological maturity** across many advanced technologies, including artificial intelligence, at a time when digital technologies have become critical productivity drivers.

Exhibit 13: Real output per hour worked of the EU and US across time

Index of real US non-farm output per hour and EU output per hour worked (2004=100), 2004-2022



Productivity in the US has increased by over 35% since 2004, compared to less than 15% in the EU over the same period. Studies suggest this is due to the impact of stringent regulations in the EU on business dynamism and productivity.²

1 X-axis (referred to as the Relatedness Density Index in the Draghi report) indicates how easily a country can build comparative advantage in a particular technology, based on how closely related it is to other technologies the country is already strong in; 2 Anderton et al (2020) Impact of product market regulation on productivity through firm churning: Evidence from European countries; Cette et al. (2016) The pre-Great Recession slowdown in productivity; Crafts, N (2006) Regulation and Productivity Performance Source: Adapted from Draghi (2024) The Draghi report: A competitiveness strategy for Europe (Part A); The Economist (2023) Productivity has grown faster in western Europe than in America.

Some jurisdictions that showed an early interest in ex ante regulation have modified their positions, as global developments continue to play out



Exhibit 14: Examples of international markets that have modified their policy positions on ex ante regulation

THEN		NOW
 UK Parliament passed the Digital Markets, Competition and Consumers Act in May 2024, granting the Competition & Markets Authority (CMA) powers to administer a new ex ante regulatory regime for the largest tech companies 	United Kingdom	 UK Government has directed regulators to prioritise decisions 'for growth and not just for risk'² CMA CEO, Sarah Cardell, noted that the CMA should 'both drive growth and investment, and uphold consumer interests'³
 Korea Fair Trade Commission (KFTC) proposed ex ante platform regulation in 2020 (Online Platform Fairness Act) Developed proposed Platform Competition Promotion Act, following EU DMA framework 	South Korea	 KFTC explicitly abandoned EU-style comprehensive platform regulation approach in 2024, instead amending existing competition law to address platform-related issues in traditional framework
 India's Competition Commission proposed ex ante measures for digital platform regulation via the Draft Digital Competition Bill (March 2024) Designed framework to complement existing ex post measures 	India	 Minister of State for Corporate Affairs announced India is in 'no hurry' to introduce and enact the Digital Competition Bill. Emphasised the need for thorough analysis to adapt global best practices to Indian markets¹
 The Philippine Competition Commission (PCC) announced its plan to develop specialised digital frameworks in 2021 	Philippines	 PCC ruled out DMA-style bill in 2024, focusing instead on addressing challenges through its existing framework No update on implementation timeline for previously announced digital-specific regulations since

1 Srivats (2025) 'Not in a hurry to enact Digital Competition Bill' says MoS Corporate Affairs Malhotra; 2 Gov.UK (2025) Former Amazon boss names interim chair of CMA; 3 Cardell (2025) New CMA proposals to drive growth, investment and business confidence.

Source: UK Parliament (2024) Digital Markets, Competition and Consumers Act 2024; Lee (2025) Lessons from Korea's Roller-Coaster Ride Toward Platform (Non)Regulation; McConnell (2024) Exclusive: Philippine competition watchdog rules out DMA-style bill, for now.

Meanwhile, the regulatory landscape across the EU is evolving, with prominent figures highlighting the need for policies that foster innovation and growth

Exhibit 15: Positions of prominent economists and officials regarding regulation and innovation in the EU

- In his report, The Future of European Competitiveness, Mario Draghi emphasises the need for Europe to accelerate its capacity for innovation and calls for regulatory frameworks that foster investment and innovation.
- These views are gaining traction across Europe, where prominent figures are highlighting the need to focus on Europe's productivity and growth rather than further antitrust regulation.



"For the most part, we have done all we can to limit innovation"

"Regulatory barriers to scaling up are particularly onerous in the tech sector, especially for young companies"

Mario Draghi, former European Central Bank President, 9 September 2024



"We need to change the status quo. **We need to propose to Europe a big campaign of deregulation**. And the stakes are very high. Our competitiveness is at stake."

Donald Tusk, Prime Minister of Poland, 22 January 2025



"Europeans need to worry about [the] **tech sector lagging behind**... Europeans should not just be the referee. They need to get on the field, they need to play the game..."

Anu Bradford, Leading scholar on the European Union, global economy, and digital regulation, 6 February 2025



"[The Commissioner Designate] should give adequate weight to the European economy's more **acute needs in respect of resilience**, **efficiency and innovation**."

Ursula von der Leyen, President of the European Commission, 17 September 2024



"The EU needs entrepreneurial freedom, not antitrust reforms"

Andreas Mundt, President of the Bundeskartellamt, 30 January 2025



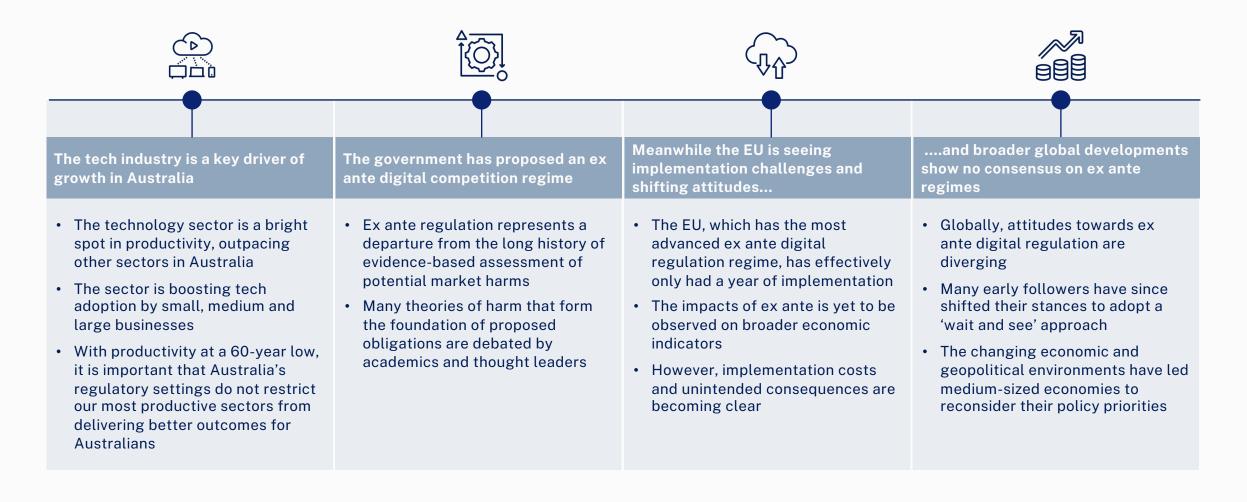
"It is **highly dubious** that [the DMA] will truly improve the position of European businesses, boost European productivity or help unleash European innovation"

Cristina Caffarra, Competition economist, 26 August 2024

Source: Draghi (2024) The Draghi report: A Competitiveness strategy for Europe (Part A); Caffara (2024) Europe Needs to Do More than Scratch at the Ramparts of Big Tech's Castle; John (2025) EU needs "entrepreneurial freedom" not antitrust reforms, FCO head says; Jackson & Hendrix (2025) Assessing Europe's Digital Markets Act One Year In; von de Leyen (2024) Mission Letter to Teresa Ribera Rodriguez; Polish Presidency (2025) The speech of Polish Prime Minister at the European Parliament; Mandala analysis.

MANDALA 20

In summary, ex ante regimes overseas are new and remain under scrutiny, the government should carefully monitor impacts before progressing domestically





Digital platforms are driving productivity and innovation across the Australian economy

Some countries have adopted ex ante regimes for digital platforms, while others are adopting a 'wait and see' approach

Regulators should carefully measure the potential consequences of ex ante regimes and other regulatory reform options

Digital regulation should balance benefits delivered by platforms with the need for flexible regulatory frameworks that can adapt to emerging technologies





ITAL REGULATION



REGULATING EMERGING TECHNOLOGIES

(**c**)

such as Al

(A) BENEFITS OF DIGITAL PLATFORMS	(B) RISKS OF EX ANTE DIGITAL REGULATION
Digital platforms make up a complex ecosystem that provides a range of benefits to users and businesses	Ex ante obligations such as mandated interoperability carry risks for users and may stifle innovation
 Digital platforms provide multiple interrelated services that enable our modern digital lives These services provide Australian consumers and businesses with a range of benefits, 	 The proposed ex ante digital regime would impose obligations targeting conduct perceived as anti-competitive, for example by mandating interoperability
 including time savings, fraud protection, and expanded revenue streams Digital platforms enable widespread economic 	 Government must carefully weigh up impacts on user safety, privacy, user experience, innovation, and competition

- Digital platforms enable widespread economic activity, spurring the creation of new businesses and stimulating growth across various sectors
- Digital platforms are rapidly evolving, and new services and features continue to emerge

- al regime would ng conduct perceived mple by mandating
- weigh up impacts on perience, innovation,
- Australia can learn from the EU experience, where these risks are playing out
- Australian markets have distinct differences from EU markets. Relying on international regulations overlooks Australia's unique market features

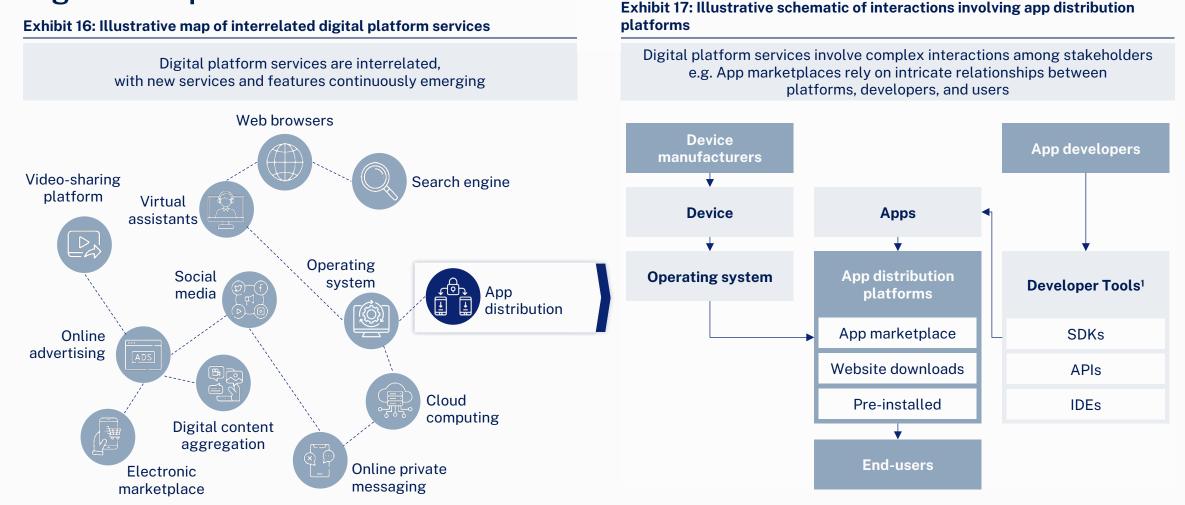
Digital regulation should anticipate and accommodate rapidly evolving technologies,

Regulatory frameworks need to be able to adapt to

technological innovation and change

- Al is driving innovation and renewed competition across multiple markets, while regulators grapple with how to regulate it
- The EU experience shows how regulatory intervention in digital markets can hamper the benefits of this latest wave of innovation
- Australians could lose early access to cutting edge technology

Digital platforms provide a range of complex, dynamic and interrelated services that make up modern digital platform ecosystems which makes service-specific regulations problematic



1 SDKs (Software Development Kits), APIs (Application Programming Interfaces), and IDEs (Integrated Development Environments) are tools used in software development Source: Mandala analysis.

Digital services provide significant value to both the consumers and businesses that use them

Digital platforms have delivered substantial value to

Australian consumers, businesses, and the broader economy. In 2022, the Apple App Store facilitated US\$14 billion in billings and sales across Australia and New Zealand. In 2023, app marketplaces supported 182,000 jobs in Australia.

Digital platform services like cloud computing have fuelled the growth of Australian businesses. They have provided the infrastructure for homegrown tech unicorns like Canva to flourish. As digital platforms improve their technology, the small, medium and large businesses indirectly adopt those new technologies, too.

Consumers save significant time through digital platforms, with search engines allowing the average Australian to save approximately 115 hours (4.8 days) annually by providing instant access to information.

Small and medium-sized businesses experience increased revenue by selling through online marketplaces. Businesses that sell through online marketplaces generate 2.2 times the revenue of those that do not.

Source: PPI (2023) The app economy in Australia; Tech Council (2023) Submission in response to ACCC Digital Platforms consultation.

Exhibit 18: Examples of benefits digital platforms brought to Australian consumers, businesses, and the economy



30% time savings

Average efficiency improvement by firms adopting **AI-enabled solutions**



2.2x revenue

Higher revenue of small to medium sized business using **online marketplaces**



US\$ 4 billion Fraudulent transactions prevented globally by app marketplaces

1 Estimated billing and sales facilitated by the Apple App Store across Australia and New Zealand. Source: Analysis group (2023) The continued growth and resilience of Apple's app store ecosystem; AIIA (2024) Securing Australia's Cloud potential; Access Partnership (2022) Google's economic impact in Australia; CSIRO (2023) Australia's AI ecosystem momentum; Sprout Social (2025) Social media statistics shaping Australia's digital landscape in 2025; Apple (2023) Newsroom; Android (2023) Blog; Mandala analysis.

Effective regulation should balance consumer benefits, innovation, and fairness while adapting to a dynamic market

Effective regulation of digital platform markets should achieve four key objectives:

- Deliver positive consumer outcomes through improved competition, including competitive pricing, higher quality and more secure digital services.
- Facilitate continued investment and innovation by preserving and strengthening incentives for platforms to develop new technologies while avoiding burdensome regulations that would stifle innovation.
- Foster fair markets for all, to maximise competition on the merits.
- Ensure adaptability to highly dynamic markets, to allow regulatory frameworks to remain relevant and not constrain innovation in the digital sector.

Exhibit 19: Goals of an effective regulatory regime for digital markets



1. Positive consumer outcomes

Delivers competitive pricing, choice, and high-quality digital services for consumers.



2. Continued investment and innovation

Preserves incentives for digital platforms to develop new technologies and services by avoiding regulatory burdens that would slow digital innovation and growth.



3. Fair markets for all

Prevents anti-competitive behavior, allowing digital businesses of all sizes to compete on merit by offering better value products and services to consumers.



4. Adaptability to highly dynamic markets

Responds effectively to both current and future challenges in rapidly evolving digital markets. Ensures regulation evolves alongside digital technology rather than constraining it.

Discussion question: Are these the right goals for effective regulatory regime for digital markets?

Ex ante regulatory regimes impose obligations on designated services including mandated interoperability

Ex ante regulatory regimes target specific conduct, but do not assess the effect of this conduct on the market.

Treasury's proposal identifies six examples of areas that obligations could target. Many of these areas are common to international ex ante regimes, including the *Digital Markets Act* (DMA) in the EU.

While Treasury's proposal paper does not outline all potential obligations that might attach to target areas, The DMA provides a guide for how obligations might be designed in Australia. For example, to target interoperability, the DMA requires designated platforms to give third parties access to the same features in the same way as the platform itself, generally without compensation and with limited regard for privacy protections implemented by the platform.

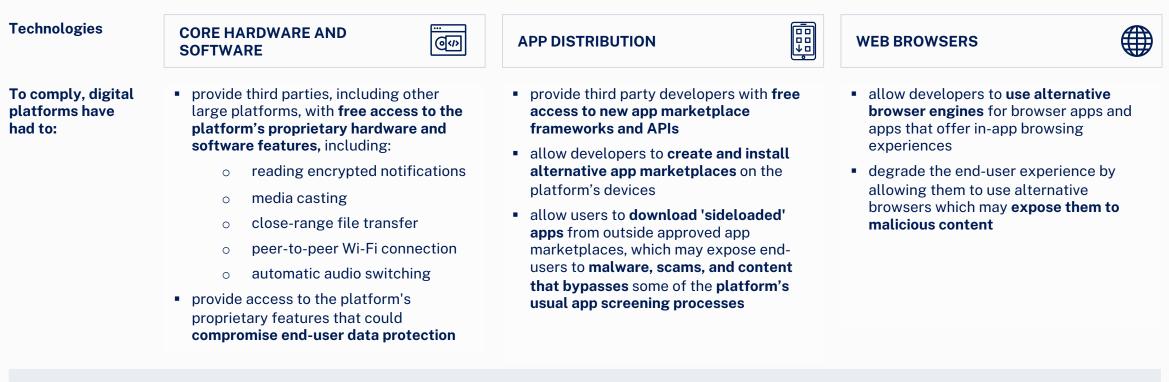
Exhibit 20: Example areas that obligations could target in an ex ante regime

EXAMPLE AREAS THAT OBLIGATIONS COULD TARGET	EXAMPLES OF POTENTIAL OBLIGATIONS FOR DESIGNATED SERVICES, BASED ON THE DIGITAL MARKETS ACT ¹	
Restrictions on interoperability that limit effective competition	Must enable the distribution of apps through alternative mechanisms, including through direct downloads and third-party app stores	Explored in more detail in this paper
Anti-competitive tying	Must not require end-users to use any other services provided by the platform as a condition for using a designated service	
Impediments to consumer switching	Must not restrict the ability of end users to switch between different software applications and services	
Anti-competitive self- preferencing	Must not treat its own services and products more favorably than similar services offered by a third party, and must apply transparent, fair and non-discriminatory conditions to any ranking	
Unfair treatment of business users	Must apply fair, reasonable and non-discriminatory conditions of access for business users to its services, and must not have conditions for terminating the service that are disproportionate	
Lack of transparency	Must provide sufficient transparency over policies and processes governing app review and approval ²	

1 While the Treasury proposal paper does not set out obligations, this table includes obligations from the DMA as an indication of the types of obligations that could be included under a potential Australian regime. 2 There is no clear analogue for a 'transparency' obligation in the DMA. This table adopts language used to describe relevant conduct from the Treasury proposal. Source: EU (2022) *Digital Markets Act*; Treasury (2024) *A new digital competition regime*; Mandala analysis.

Interoperability and related obligations have required platforms to provide third parties with free access to proprietary technologies

Exhibit 21: Digital platform actions to comply with interoperability and related obligations of the Digital Markets Act



Interoperability: The ability to exchange information and mutually use the information which has been exchanged through interfaces or other solutions, so that all elements of hardware or software work with other hardware and software and with users in all the ways in which they are intended to function

Interoperability and related obligations risk user safety, privacy, and may hamper future innovation and competition in digital markets

Exhibit 22: Examples of risks arising from interoperability obligations for digital platforms in the EU

While interoperability and related obligations have introduced clear consumer harms, they have not produced clear consumer benefits.



Discussion question: What alternative approaches could better promote consumer outcomes and market competition while preserving innovation, user safety and privacy?

Source: Apple (2024) Consultation on regulatory reform; Forbes (2025) Apple's first notarized porn app stirs privacy woes, third-party risks; Apple (2024) It's getting personal; European Commission (2024) Case AT.40684 – Facebook Marketplace; ITIF (2025) Comments to the European Commission; Digital Markets Act (2024) Case summary; Mandala analysis.

Competition frameworks need to support tech innovations as they emerge over time

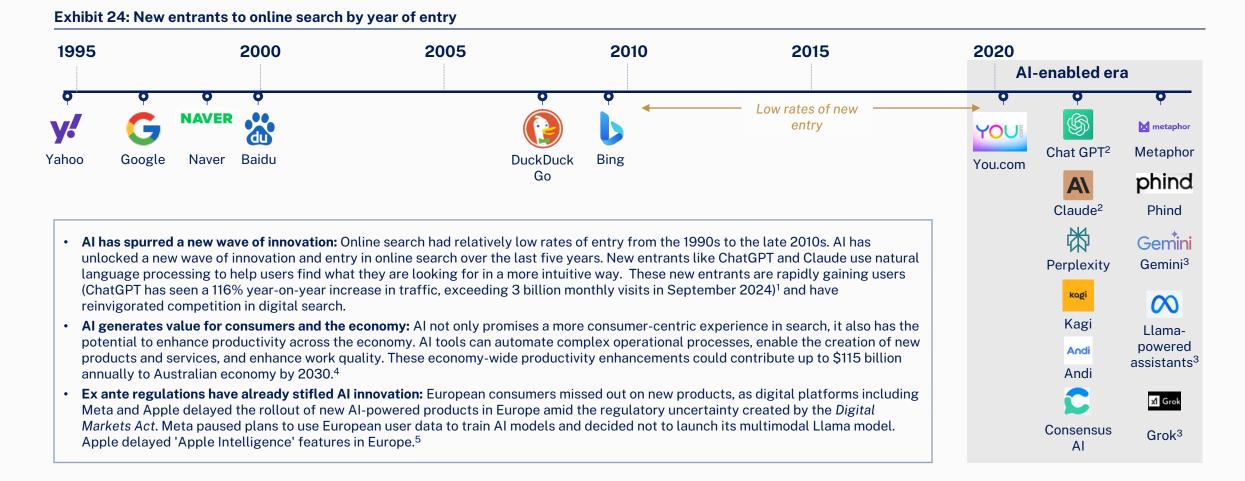
NOVEL REGULATORY ASPECTS DESCRIPTION Whether AI could inadvertently lead firms to become Computer systems designed to perform tasks that Explored in Artificial usually require human intelligence, including learning, party to anti-competitive practices, such as the use of more detail in reasoning, speech recognition, image analysis, and algorithmic pricing tools that leads to unlawful collusion Intelligence this paper language understanding Ensuring regulation does not stifle innovation Digital currencies and other distributed ledger How blockchain based networks of value transfer fit technology (blockchain) applications that record within existing financial frameworks Blockchain transactions without requiring centralised authority Each International coordination for borderless technologies technology Consumer protection and financial safety vs. benefits adds to the Network of physical objects embedded with Device security standards stack of technologies like sensors and software to connect and Privacy from ambient data collection existing **Internet of Things** exchange data with other devices and systems over the Cross-sector regulatory coordination regulatory internet challenges Extremely large datasets that can be analysed Data as a competitive asset in market assessments computationally to reveal patterns, trends, and Privacy protection vs. innovation benefits **Big data** associations, especially relating to human behaviour and Market definition in zero-price services interactions Data sovereignty and cross-border jurisdiction The delivery of computing services, including servers, storage, databases, networking, software, and analytics, Service interoperability and data portability **Cloud computing** over the internet Security and privacy standards

Exhibit 23: Emerging tech innovations since the 2010s adding layers of complexity to the regulatory landscape

- Regulatory frameworks must be future-proof, meaning they can adapt to emerging technologies
- Policymakers should take a holistic approach to regulation, looking at how digital developments such as AI relate to existing provisions
- This is critical to creating a consistent regulatory and legal framework and avoid a mosaic of different and potentially conflicting provisions

Source: de Moncuit et al. (2024) Al challenges in competition law; Kalenzi (2022) Artificial Intelligence and Blockchain: How Should Emerging Technologies Be Governed? Hendry (2023) Cloud giants, locals divided over Australia's regulatory settings; Mandala analysis.

As the latest wave of tech innovation, AI has fueled new entry and competition in online search but ex ante regulations risk stifling this



1 Carr (2024) ChatGPT topped 3 billion visits in September; 2 ChatGPT and Claude are General AI Chatbots with Search features. Both eventually added web search capabilities in 2023 3 General AI chatbots with Search features; 4 Microsoft & Tech Council of Australia (2023) Australia's Generative AI opportunity; 5 Reuters (2024) Apple to delay launch of AI-powered features in Europe, blames EU tech rules; The Guardian (2024) Meta pulls plug on release of advanced AI model in EU; Mandala analysis.

MANDALA 31

Australia should consider a regulatory framework for digital platforms that achieves its goals while minimising potential costs

GOALS OF AN EFFECTIVE DIGITAL REGIME	Exhibit 25: Potential regulatory options for digital competition in Australia (non-exhaustive)			
Positive consumer	REGULATORY OPTIONS	Ex ante competition enforcement	Ex post competition enforcement	Any other options?
outcomes	POTENTIAL	 May prevent harm before it occurs by restricting conduct¹ 	• Enables analysis of actual competitive effects of conduct, to avoid preventing innovative, pro-competitive conduct ²	What is the most suitable
Continued investment and innovation	BENEFITS		 More flexible and adaptable to developments in digital sectors³ 	framework for regulating competition in digital markets? Are there other regulatory tools that could assess and address competition issues in emerging technology while preserving its pro-competitive potential? Some potential paths forward: • Variations on existing ex post or
Fair markets for all	POTENTIAL	Have so far been difficult to implement and interpret , creating uncertainty and thwarting innovation ⁴	• While enforcement can be robust, cases that continue to litigation can take some time to resolve ⁷	
Adaptability to highly dynamic market	COSTS	 Specific conduct rules may be inflexible in rapidly evolving markets and may harm consumers⁵ Risks preventing potentially pro- competitive or benign conduct⁶ 		ex ante approaches (e.g., a modified Section 46) • Quasi-regulatory tools such as industry codes

1 Treasury (2024) A New Digital Competition Regime; 2, 5 Bougette, Budzinski & Marty (2024) Ex-ante versus Ex-post in Competition Law Enforcement: Blurred Boundaries and Economic Rationale; 3 Eroglu & Koksal (2024) Ex-Post Application of Structural Remedies to Large Online Platforms at a National Level, Ginsburg et al. (2025) Comment of the Global Antitrust Institute on the Australian Digital Platform Services Inquiry; 4 Caffara (2024) Of hope, reality and the EU Digital Markets Act; 6 Feyler & Postal (2023) Can Self-Preferencing Algorithms be Procompetitive?; 7 ACCC (2022) Digital Platform Services Inquiry: Interim Report No. 5 – Regulatory Reform.



MANDALA