

Market Review on the Digital Economy Ecosystem Under the Competition Act 2010

Malaysia Competition Commission (MyCC)
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Abbreviations

ACCC Australian Competition & Consumer Commission

ADEX Advertising Expenditure

ADIF Alliance of Digital India Foundation
AEM Aggregated Event Measurement
AES Advanced Encryption Standard

AGCM Autorità Garante della Concorrenza e del Mercato

Al Artificial Intelligence

APEC Asia-Pacific Economic Cooperation
API Application Programming Interface

APX Adzymic Premium Exchange

AR Augmented Reality

ASA Advertising Standards Authority

ASEAN Association of Southeast Asian Nations

ASP Application Service Provider
ATT App Tracking Transparency

BEPS Base Erosion and Profit Shifting

BEUC European Consumer Organisation

BNM Bank Negara Malaysia
BRI Belt and Road Initiative

CAD Canadian Dollar

CAGR Compound annual growth rate

CAP The Consumers' Association of Penang

CCB Canadian Competition Bureau

CCCS Competition and Consumer Commission of Singapore

CCI Competition Commission of India

CDEI Centre for Data Ethics and Innovation

CDN Content-Delivery Network
CDP Customer Data Platform

CII Critical Information Infrastructure

Competition and Markets Authority/Communications and

Multimedia Act

CMCF Communications and Multimedia Content Forum of Malaysia

COVID Coronavirus Disease

CPA Cost per Acquisition/Action

CPC Cost per Click
CPM Cost per Mille
CPV Cost per View

CRM Customer Relationship Management

DDI Domestic Direct Investment

DMA Digital Markets Act

DMCC Digital Markets, Competition and Consumers

DMP Data Management Platform

DNB Digital Nasional Bhd
DOJ Department of Justice
DOOH Digital-Out-Of-Home

DOSM Department of Statistics Malaysia

DPO Data Protection Office
DSA Digital Services Act

DSP Demand-side platforms
EC European Commission
EEA European Economic Area

EPU Economic Planning Unit

ESG Environmental, Social, and Governance

EU European Union

EUR Euro

FBA Fulfillment by Amazon

FCA French Competition Authority

FCO Federal Cartel Office

FGD Focus Group Discussion

FOMCA The Federation of Malaysian Consumers Associations

FRP Foreign Registered Person
FSP Foreign Service Provider

FTC Federal Trade Commission

FWIG Foreign Workers Insurance Guarantee

GAM Google Ad Manager

GDI Global Digitalisation Index
GDN Google Display Network
GDP Gross domestic product

GDPR General Data Protection Regulation
GERD Gross Domestic Expenditure on R&D

GMT Global Minimum Tax

GMV Gross Merchandise Value
GPS Global Positioning System
HHI Herfindahl-Hirschman index

IAP In-app Purchases
IC Integrated Circuit

ICA Italian Competition Authority

ICO Information Commissioner's Office

ICT Information and Communication Technology

ID Identification

IDC International Data Corporation

IDI In-depth interview

IMD Institute for Management Development
IP Internet Protocol/Intellectual Property

IT Information Technology

ITU International Telecommunication Union

JARING Joint Advanced Research Integrated Networking

JENDELA National Digital Infrastructure Plan

JFTC Japan Fair Trade Commission

JPDP Jabatan Perlindungan Data Peribadi

KEGA Key Economic Growth Area

KOL Key Opinion Leader

KPDN Ministry of Domestic Trade and Cost of Living

KPI Key Performance Indicator

LHDN Inland Revenue Board of Malaysia

LVG Low-Value Goods

MAA Malaysian Advertisers Association
MAB Medicine Advertisements Board

MADA Mobile Application Distribution Agreements

keMampanan (Sustainability), kesejAhteraan (Prosperity),

MADANI Daya cipta (Innovation), hormAt (Respect), keyakiNan

(Trust) and Ihsan (Compassion)

MAVCOM Malaysian Aviation Commission

MCAP Malaysian Code of Advertising Practice

MCMC Malaysian Communications and Multimedia Commission

MCPA MyChannel Partner Agreement
MCSS Malaysia Cyber Security Strategy

MDA Medical Device Authority

MDC Multimedia Development Corporation
MDEB Malaysia Digital Economy Blueprint
MDEC Malaysia Digital Economy Corporation

MFN Most Favoured Nation

ML Machine Learning

MITI Ministry of International Trade and Industry

ML Machine Learning
MOF Ministry of Finance
MOH Ministry of Health

MOSTI Ministry of Science, Technology and Innovation MOSTI Ministry of Science, Technology and Innovation

MOTAC Ministry of Tourism, Arts and Culture
MPC Malaysia Productivity Corporation

MPPM Malaysian Premium Publishing Marketplace

MRANTI Malaysian Research Accelerator and Technology Innovation

MRC Media Rating Council

MSA Media Specialists Association
MSC Multimedia Super Corridor

MSIC Malaysia Standard Industrial Classification

MSME Micro, Small and Medium Enterprises

MYR Malaysia Ringgit

N-IICS Number-Independent Interpersonal Communication Service

NACSA National Cyber Security Agency

NADI National Information Dissemination Centres

NAIO National Artificial Intelligence Office

NCS National Security Council

NESR National E Commerce Strategic Roadmap

NIIF New Investment Incentive Framework

NIMP National Industrial Master Plan

NPRA National Pharmaceutical Regulatory Agency

NST New Straits Times

NSW National Single Window

NTIS National Technology and Innovation Sandbox

OECD Organisation for Economic Co-operation and Development

OS Operating System
OTA Online Travel Agency

OTT Over-the-top

PADU Pangkalan Data Utama
PD Programmatic Direct
PDG Princeton Digital Group

JPDP Jabatan Perlindungan Data Peribadi

PDPA Personal Data Protection Act

PDRM Royal Malaysia Police

PE Permanent Establishment

PENJANA Pelan Jana Semula Ekonomi Negara

PIAM General Insurance Association of Malaysia

PLKS Pas Lawatan Kerja Sementara

PMP Private Marketplace

POV Point of View

PSA Postal Services Act

AI-RMAP Artificial Intelligence Roadmap

RMCD Royal Malaysian Customs Department

RMN Retail Media Networks
ROI Return on Investment

RTB Real-time bidding

SC Securities Commission Malaysia

SCENIC Sabah Creative Economy and Innovation Centre

SDEC Sarawak Digital Corporation

SEA Southeast Asia

SEO Search Engine Optimisation

SIRIM Institut Piawaian dan Penyelidikan Perindustrian Malaysia

SME Small and Medium Enterprise

SPV Shared Prosperity Vision

SSM Suruhanjaya Syarikat Malaysia

SSP Supply-side Platforms
SST Sales and Service Tax

SUPER Malaysia Startup Ecosystem Roadmap

SWN Single Wholesale Network
TLS Transport Layer Security
TPM Technology Park Malaysia

TTPM Tribunal of User Claims Malaysia

TV Televisions

UAE United Arab Emirates

UGC User-Generated Content

UK United Kingdom
UN United Nations
U.S. United States

USD United States Dollar

VC Venture Capital

WCC World Competitiveness Center

WHT Withholding Tax
YTL Yeoh Tiong Lay

ZTE Zhongxing Telecommunication Equipment

1. Executive summary

1.1 Global digital economy

- The digital economy encompasses a wide range of activities primarily driven by digitised technologies. The sector is dynamic and rapidly evolving, continuously adapting to technological advancements and changing societal needs.
- As of 2022, the sector was valued at USD 11.1 trillion globally, with an expected annual growth rate of 10.4% by 2028.
- Key trends shaping the sector's development include its growing role in geopolitics, data emerging as a critical factor, and increasing digitalisation of governments, businesses, and consumers.
- The sector has given rise to companies that dominate global industries e.g., Google, Apple, Meta. Many of the largest global companies are also operating across multiple industries.
- Key players' involvement in anti-competitive practices are becoming more prominent, largely due to their strong dominance and traditional regulatory frameworks struggling to keep up with rapid sector changes.
- As Malaysia continues to develop its digital economy, understanding the sector and the potential anti-competition challenges posed by key players will be crucial.

1.2 Digital economy in Malaysia

 In Malaysia, its digital economy sector is crucial to the country's growth. In 2023, it contributed approximately 23.5% to the national gross domestic product (GDP) and employed around 1.2 million people (7.8% of total employment). E-commerce holds the largest share, at about 41%.

- The sector is vulnerable to anti-competitive practices and data privacy violations. Several companies, such as Dagang Net, MyEG, Grab, Shopee, Carousell, and iPay88, have faced both allegations and formal investigations in recent years. As the digital economy grows, anti-competitive cases are expected to rise.
- Malaysia has developed several policies and regulations to support the digital economy. However, there are gaps which hinder effective oversight and enforcement, such as the lack of an overarching digital economy framework, unclear jurisdictional boundaries between regulatory bodies, and overlapping competition regulations.
- As anti-competitive practices increase, it is essential for Malaysia to understand the technologies and complexities within the sector, especially in the four sub-sectors.

1.3 Digital advertising

- The digital advertising sub-sector in this study focuses on brand promotion through online channels, including search engines, social media platforms, video platforms, and websites.
- Malaysia's advertising market grew from MYR 5.2 billion in 2019 to MYR 7.2 billion in 2023, reflecting a compound annual growth rate (CAGR) of 8.6%.
- Digital advertising is the primary driver of this growth, contributing MYR 5.1 billion (71%) in 2023, and is projected to reach MYR 5.5 billion (74%) in 2024.
- Growth has been driven largely by increased digital media consumption, which has led advertisers to shift focus toward platforms where consumers spend the most time.
- The digital advertising ecosystem consists of four main categories of players:

- Advertisers/agencies: Brands and advertising firms responsible for designing and executing advertising campaigns.
- Ad intermediaries: Entities such as Demand-Side Platforms (DSPs), ad networks, ad exchanges, and Supply-Side Platforms (SSPs) that facilitate the buying and selling of ad inventory.
- Ad publishers: This includes websites, content creators, search platforms, and video platforms that host and deliver ads to users.
- Data Service Providers / Data Management Platforms (DMPs):
 Platforms that aggregate and analyse data to create detailed audience segments for targeted advertising.
- Google and Meta dominate the digital advertising value chain due to their vertically integrated models, owning both the advertising platforms (e.g., YouTube, Facebook) and the underlying ad delivery infrastructure.
- As of August 2024, Google commands 95.3% of the search engine market in Malaysia.
- On the other hand, Meta platforms are widely relied on by SMEs for reach, audience targeting, and business tools.
- There are also several local players in the market, primarily focused on display advertising. These include Star Media, Media Prima, and Astro Malaysia.
- Lack of binding regulation remains the primary regulatory concern in Malaysia's digital advertising sub-sector. The industry is largely governed by self-regulatory codes and voluntary standards, with limited formal legal oversight.
- In addition, several key competition-related issues have been observed, many of which reflect broader global trends:

- Vertical integration: Dominant platforms control multiple layers of the digital advertising supply chain, creating high barriers to entry for new or smaller competitors.
- Lack of transparency: The opaque nature of ad pricing and delivery mechanisms makes it difficult for advertisers and publishers to understand how ad placements are determined or priced.
- Cookie deprecation: The ongoing phase-out of third-party cookies, driven by browser providers like Google Chrome and policy changes by Apple (ATT), is reshaping traditional tracking and targeting practices across the ecosystem.
- Three targeted recommendations are also proposed to address concerns specific to the digital advertising sub-sector:
 - Develop digital advertising sub-sector guideline: Establish a clear and specific set of guideline for digital advertising players operating in Malaysia.
 - Provide support programmes to local players in the cookieless transition: Using targeted grants, tax incentives and capacitybuilding initiatives to help local advertisers adopt cookieless technologies. Also to encourage platforms to continuously provide advertisers with greater access to relevant data.
 - Establish industry standards for ad performance metrics and market pricing transparency: Supplement platform-specific metrics with industry-standard definitions for common performance metrics like CPM, CPA, and CPV to ensure consistency and transparency.
- Six general recommendations also being proposed, with the most critical being the establishment of a central digital economy taskforce. This taskforce would lead key high-level initiatives, including the development of a digital platform ombudsman, clear guidelines on platform conduct, and a unified legislative framework

to clarify regulatory roles, address existing gaps, and ensure a level playing field across the digital ecosystem.

 Another key general recommendation is the consolidation of competition oversight under a single authority. Aligned with the 13th Malaysia Plan, this aims to clarify and delineate the regulatory boundaries between MyCC and other sectoral regulators with competition mandates.

2. Introduction

2.1 Market review on the digital economy ecosystem

The Malaysia Competition Commission (MyCC) is an independent body established under the Competition Commission Act 2010 [Act 713], tasked with enforcing the Competition Act 2010. Through its efforts, MyCC aims to foster a robust, efficient, and sustainable economy for Malaysia and its people.

Under section 11(1) of the Competition Act 2010 [Act 712], MyCC has the authority to conduct market reviews to assess if there are any activities in a market that may prevent, restrict or distort competition. These reviews help MyCC understand market conditions and identify any competition issues that need to be addressed.

Given the rapid growth of the digital economy, MyCC has decided to conduct a market review focusing on selected digital economy subsectors. The market review will be the eighth review, following previous studies on the professional body fees, domestic broiler market, pharmaceutical, building materials in construction, food, wholesale retail trade and transportation sectors since 2013.

2.2 Market review objectives

The Market Review on the Digital Economy Ecosystem under the Competition Act 2010 aims to achieve the following objectives:

- To study the market structure, supply chain and profile of industry players that are involved throughout the upstream and downstream of the digital economy and sub-sectors studied;
- To study any market interactions and competition concerns in the digital economy and sub-sectors studied;
- To study the extent of potential market distortion by authority's regulations and policies and whether government intervention is

necessary in curbing competition concerns in the digital economy and sub-sectors studied; and

• To provide recommendations to the government agencies and regulators in the digital economy to minimise the actual or potential restrictive effect of regulations on competition.

2.3 Expected outcomes

Four outcomes expected from the market review of the digital economy sector:

- Identify potential anti-competitive behaviour in the sub-sectors, and validate the effectiveness of MyCC's enforcement tools;
- Provision of an all-encompassing study of the digital economy to the government (which provides details on the supply chain and its current state and prospect);
- Provision of better understanding of the sector to the government in the areas of market practices and competition issues; and
- Serve as a detailed guidance for the government and industry stakeholders to bolster Malaysia's digital economy in line with international standards, thereby further boosting its contribution to the national GDP.

2.4 Research methodology

This study employs a two-pronged approach, incorporating both primary and secondary research methods:

Table 1: Research methodologies

Activity	Details
(FGD)	Qualitative data collection method through the gathering of a small group
	Focus group discussion (FGD)

Methodology	Activity	Details
		of relevant supply chain stakeholders for each sub-sector. Purpose of the FGDs is to validate existing understanding of the market structure, as well as current practices by stakeholders. Sessions with sub-sector
	Written input from sub- sector players	Formal submissions provided by sub-sector players either following an IDI session or on their own initiative after receiving a list of interview questions from MyCC.
	Sub-sector surveys	Four online surveys targeting customers

Methodology	Activity	Details
		(differ according to subsectors) of the four subsectors. Questions focused on three main areas: (1) respondent profile, (2) the nature of the operational relationship with the key player, and (3) key challenges encountered.
	End-user/ public survey	One survey targeting endusers across the four subsectors (app users, ecommerce buyers, individuals who have interacted with digital advertisements and OTA users). Survey focused on understanding consumer behaviour throughout the customer journey, from initial awareness to postpurchase engagement.
	Public consultation sessions	Online-based public consultations to both share findings and gather additional insights from stakeholders, with the aim of refining the market study.
Secondary research	Literature review	Review of existing literature, including industry reports, market

Methodology	Activity	Details
		studies, and government publications.
	Public data/ information review	Utilise secondary data from reputable sources.
	Industry research report review	Assess industry-specific reports to gather complete picture of each sub-sector's market structure.
	Player analysis	Examine various secondary information/data related to the players, focusing on areas that may be indicative of anticompetition practices.
	Benchmarking analysis	Review of anti- competitive practices in similar sub-sectors across other countries, as well as initiatives taken to curb it.

Source: MyCC

2.5 Focus of the market review

The review focuses on three sections:

2.5.1 Overview of the digital economy sector

Historical performance and expected performance of the sector as a whole, including key policies and regulations related to the digital economy.

2.5.2 Sub-sector deep dive

Four digital economy sub-sectors are selected for review in this study, with focus on its:

- 1. **Study scope:** Scope/ market boundaries of the review. The boundaries are outlined solely to define the study area and do not reflect MyCC's final view on the sub-sector.
- 2. **Market structure and supply chain:** Organisation of the sub-sector, specifically how services flow within the supply chain.
- 3. **Market practices:** Common business practices employed by players in the sub-sector.
- 4. **Data privacy and protection:** Data collection and management practices by key players within the sub-sector.
- 5. **Sub-sector regulations:** Regulations, guidelines and codes specific to the sub-sector, as well as relevant issues.
- 6. **Consumer behaviour and innovation trends:** Consumer behaviour in interacting with the sub-sector, along with the latest innovation trends that may impact competition.
- 7. **Key players:** Key players along the sub-sector's supply chain.

- 8. **Key market-related issues:** Key structural or functional problems found in the sub-sector.
- 9. **Competition assessment:** Degree of competition within the subsector based on the following three areas market concentration, degree of horizontal and vertical integration and level of entry barriers. These assessments are based on insights and data gathered from FGDs, IDIs, and secondary research sources.
 - Market concentration: Extent to which a small number of firms dominate the sub-sector (defined based on the study scope), reflecting the level of competition within the market. Two key quantitative measures used to assess this: the Herfindahl-Hirschman Index (HHI) and the Concentration Ratio of the top 4 firms (CR4):

Table 2: Overview of HHI and CR4

Factors	ННІ	CR4
Definition	Commonly used measure of market concentration and competition among companies in a sector.	Another common measure of market concentration that focuses on the largest companies in a sector.
	 Assesses how much market share is controlled by the key companies. 	 It shows how much of the market is controlled by the top four companies.
Formula	• HHI = S1^2 + S2^2 + S3^2+	• CR4 = S1 + S2 + S3+ S4
	• S1, S2, etc.: Refers to the market share (in %) that	 S1, S2, S3, S4.: Refers to the market share (in %) of four largest

Factors	HHI	CR4
	key players hold in the sub-sector	players in the sub- sector
Indication of competition	 < 100 = no concentration 100-1,500 = low concentration 1,500-2,500 = medium concentration > 2,500 = high concentration 	 0% = no concentration 1-49% = low concentration 50% = oligopoly 51-99% = high concentration 100% = monopoly

Source: Corporate Finance Institute

- Degree of horizontal and vertical integration: Extent to which subsector players expand their control either by merging or acquiring competitors at the same stage of production (horizontal) or by controlling multiple stages of the supply chain (vertical).
- Level of entry barriers: Assessment of how easy or difficult it is for new companies to enter the sub-sector.
- 10. **Key competition-related issues:** Behaviours and activities observed that harm fair competition in the sub-sector.

The focus sub-sectors in this review are:

(a) Mobile Operating & Payment System

Software platforms designed for mobile devices and serve as intermediaries between device hardware and applications. This study will focus exclusively on the mobile operating system (OS), app store, app distribution and its integrated payment system.

(b) E-commerce (retail marketplace)

Business-to-consumer (B2C) marketplace platforms that allow users and merchants to buy and sell goods over the internet. These platforms act as intermediaries between sellers and buyers. This excludes service-related (e.g., transportation, food delivery) platforms.

(c) Digital Advertising Services

Online marketplaces and platforms that enable supply and demand partners to buy or sell digital ad inventory, with ads displayed on search engine results, social media, and other digital properties.

(d) Online Travel Agencies (OTAs)

Web and mobile-based platforms that allow consumers to book travel services, with the focus being only on accommodation booking platforms.

The selected sub-sectors are based on two considerations: (a) alignment with other digital economy studies and (b) alignment with key digital economy anti-competition cases. Detailed rationale is highlighted in section 2.6.

In addition to the four sub-sectors, one enabling area will be studied across them:

(e) Data Privacy & Protection:

Data plays a central role in the business models of all the aforementioned sub-sectors. For example, app stores use data to customise app offerings and improve user experience; e-commerce marketplaces rely on customer data to personalise product recommendations; digital advertisers leverage data to tailor content and target audiences effectively; and OTAs rely on data to offer personalised travel recommendations and dynamic pricing.

Given the critical role of data in the digital economy, access to relevant data can thus be a key factor in determining the competitive position of companies in their respective sub-sector ¹. influencing both market dominance and the ability to expand its market presence.

This study examines two key data-related areas:

- **Data privacy**: which relates to the rights of internet users to control which data is shared with whom, and how their personal information is used in the digital marketplace.
- **Data protection**: which focuses on the mechanisms and management practices employed by companies (data controller) to prevent the misuse or unauthorised access of personal and sensitive information that they collect, store, and process.

In understanding data privacy & protection across the four sub-sectors, key areas of data collection, usage, control and compliance will be studied.

2.5.3 Strategic recommendations

Key recommendations for each sub-sector are provided to address the identified competition— and regulatory-related issues. These recommendations may be implemented by the relevant ministries and government agencies to promote greater competition and ensure an inclusive digital economy, without undermining foreign investment or stifling innovation.

2.6 Benchmarking studies

The selected sub-sectors (mobile operating and payment system, e-commerce (retail marketplace), digital advertising services and online travel agencies) are based on two considerations, aimed at identifying areas with the highest likelihood for anti-competitive practices:

¹ CMA (2021). Competition and data protection in digital markets: a joint statement between the CMA and the ICO, page 13. https://ico.org.uk/media/about-the-ico/documents/2619797/cma-ico-public-statement-20210518.pdf

2.6.1 Alignment with other digital economy studies

Table 3: Key published studies on the digital economy by competition commissions of selected economies:

Study	Focus areas	Relevant sub- sector
Final Report Regarding Digital Advertising (2021) by Japan Fair Trade Commission ²	 Examination of the digital advertising market practices, focusing on how digital platforms interact with advertisers, publishers, and consumers 	Digital advertising
	 Identification of potential abuses of dominant positions under the Antimonopoly Act. 	
Market Study Report on Mobile OS and Mobile App Distribution (2023) by Japan Fair Trade Commission ³	 Analysis on the dominance of Apple and Google, highlighting concerns over high fees, self-preferencing, and limited competition. 	Mobile OS
Market study on e- commerce in India (2020) by Competition Commission of India ⁴	 Analysis of the e-commerce sector, with focus on identifying competition impediments such as lack of platform neutrality, unfair 	E-commerce

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² JFTC (2025).Press releases. https://www.jftc.go.jp/en/

³ JFTC (2025).Press releases. https://www.jftc.go.jp/en/

⁴ CCI (2025). Market studies and research. https://www.cci.gov.in/economics-research/market-studies/details/18/6

Study	Focus areas	Relevant sub- sector
	contracts, exclusive arrangements, and deep discounting.	
Mobile ecosystems market study final report (2022) by United Kingdom's (UK) Competition and Markets Authority ⁵	 Examination of how Apple's and Google's dominance over mobile OS, app stores, and web browsers affects competition and consumer outcomes. 	Mobile OS
Online Travel Booking Sector (2019) by Singapore's Competition & Consumer Commission	Examination of competition and consumer protection issues in the online travel booking industry, identifying practices such as drip pricing, preticked boxes, and misleading claim.	ОТА
E-commerce Platforms (2020) by Singapore's Competition & Consumer Commission ⁷	Examination of competition and consumer protection issues in Singapore's multi-sided e-commerce platforms.	E-commerce

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^{(2025).} GOV.UK Competition markets authority. and https://www.gov.uk/government/organisations/competition-and-markets-authority CCCS (2025).Market studies. https://www.cccs.gov.sg/resources/publications/market-studies/ CCCS (2025). studies. Market https://www.cccs.gov.sg/resources/publications/market-studies/

Study	Focus areas	Relevant sub- sector
Digital Platforms Services Inquiry 2020-25 (2025) by Australian Competition & Consumer Commission ⁸	Examination of the competitive and consumer impacts of digital platform services including internet search engines, social media online messaging, approximarketplaces, digital advertising, and data practices. Examination of the competitive and consumer impacts and consumer impacts and data practices.	F , , , , , , , , , , , , , , , , , , ,
Market study on the distribution of hotel accommodation in the EU (2020) by the European Commission ⁹	Examination distribution practices among hotels, OTAs, and price comparison sites.	

Source: JFTC, CCI, Gov.UK, CCCS, ACCC and European Union

Table 4: Other relevant published studies on the digital economy by competition commissions of selected economies:

Country	Year	Study	Focus area
Japan ¹⁰	2019	Report regarding trade practices	E-commerce,
		on digital platforms (Business-to-	Mobile OS
		<u>Business transactions on online</u>	
		retail platform and app store)	
	2021	The Study Group on Competition	General digital
		Policy in Digital Markets Released	economy
		the Report on Algorithms/Al and	
		Competition Policy	

⁸ ACCC (2025). Publications. https://www.accc.gov.au

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⁹ EU (2025). Competition Policy. https://competition-policy.ec.europa.eu/index_en

¹⁰ JFTC (2025). Press releases. https://www.jftc.go.jp/en/

Country	Year	Study	Focus area
		Report of the Study Group on	Data
		Competition Policy for Data	
		<u>Markets</u>	
	2022	Report Regarding Cloud Services	Cloud services
	2023	Report on the Follow-up Survey on	Fintech
		<u>Fintech-based Services</u>	
United	2019	Assessment of merger control	General digital
Kingdom ¹¹		decisions in digital markets	economy
	2020	Centre for Data Ethics and	
		Innovation (CDEI) Review of online	
		targeting	
	2021	2021 Compendium of approaches	
		to improving competition in digital	
		<u>markets</u>	
	2022	CMA consumer research into	Mobile OS
		purchasing behaviour in the UK	
		smartphone market	
		Online Choice Architecture: How	General digital
		digital design can harm competition	economy
		and consumers	
		2022 Compendium of approaches	
		to improving competition in digital	
		<u>markets</u>	
		Music and streaming market study	Music &
			streaming
	2023	2023 Compendium of approaches	General digital
		to improving competition in digital	economy
		<u>markets</u>	
		Frontier AI: capabilities and risks	
		Trends in Digital Markets: a CMA	
		horizon scanning report	
	2024	International Scientific Report on	
		the Safety of Advanced Al	
		-	

GOV.UK (2025). Competition and markets authority. https://www.gov.uk/government/organisations/competition-and-markets-authority

Country	Year	Study	Focus area
Germany	2019	Algorithms and Competition	
12	2021	<u>Digital Markets Act: Perspectives in</u>	
		(inter)national competition law	
	2022	Merger control in the digital age	
United	2020	A Brief Primer on the Economics of	Digital
States ¹³		Targeted Advertising	advertising
		Social Media Bots and Advertising:	
		FTC Report to Congress	
	2022	Combatting Online Harms Through	General digital
		<u>Innovation</u>	economy
	2023	<u>Protecting Kids from Stealth</u>	Digital
		Advertising in Digital Media: A FTC	advertising
		<u>Staff Perspective</u>	
		Generative Artificial Intelligence	General digital
		and the Creative Economy Staff	economy
		Report: Perspectives and	
		<u>Takeaways</u>	
	2024	A Look Behind the Screens:	Data
		Examining the Data Practices of	
		Social Media and Video Streaming	
		<u>Services</u>	
		Tech Summit on Artificial	General digital
		Intelligence: Consumer Facing	economy
		<u>Applications</u>	
Australia ¹⁴	2021	Digital Advertising Services Inquiry	Digital
			advertising
European	2019	Competition issues in the area of	Financial
Union ¹⁵		Financial Technology (FinTech)	technology
		Competition policy for the digital	Digital
		era	economy
			regulation

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Bundeskartellamt (2025). Publication. & Markets Authority. https://www.bundeskartellamt.de/EN/Home/home_node.html

¹³ FTC (2025). Reports. https://www.ftc.gov/

¹⁴ ACCC (2025). Publications. https://www.accc.gov.au

¹⁵ EU (2025). Competition Policy. https://competition-policy.ec.europa.eu/index_en

Country	Year	Study	Focus area
	2020	Opportunities of artificial	Artificial
		intelligence	intelligence
	2021	Digital Markets Act in the making	Digital
		The Digital Services Act and the	economy
		Digital Markets Act	regulation
		The EU digital markets act	
	2022	Merger review in digital and	General digital
		technology markets	economy
		Digital Services Act & Digital	Digital
		Markets Act	economy
		Merger enforcement in digital and	regulation
		tech markets	

Source: European Union, JFTC, Gov.UK, Bundeskartellamt, FTC, ACCC, EU

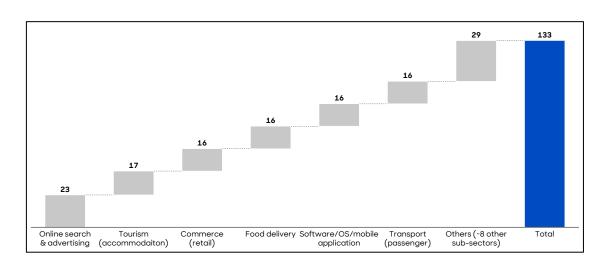
Studies published by various competition authorities in key economies since 2019 - including the Japan Fair Trade Commission (JFTC), Competition Commission of India (CCI), Competition and Markets Authority (CMA - UK), Federal Cartel Office (FCO - Germany), and Federal Trade Commission (FTC - U.S.), Competition and Consumer Commission of Singapore (CCCS), Australian Competition & Consumer Commission (ACCC) and European Commission (EC) - indicated the four sub-sectors of this study as focus. Below are the emphasis of the studies:

- Comprehensive analysis of the sub-sectors (e.g., Mobile OS, Ecommerce, Digital advertising, OTA, Data Privacy and Protection);
- Examination of consumer behaviour, market practices, and supply chain developments;
- Discussion of global issues related to competition, market dynamics, and regulatory frameworks;
- Analysis of data utilisation by market players and interventions by competition authorities, and

 Consideration of any other pertinent matters that could further enhance this market review.

2.6.2 Alignment with key digital economy anti-competition cases

Figure 1: Anti-competitive cases by sub-sectors in the digital economy sector worldwide, 2006–2022 [# of cases] 16



Source: World Bank

The selected sub-sectors are also based on the volume of anti-competitive cases observed globally. According to the World Bank Group's Global Markets Competition and Technology Digital Antitrust Database, from 2006 to 2022, the top sub-sectors with the most anti-competition cases were primarily related to online search and advertising, tourism (accommodation), e-commerce, food delivery, software/OS/mobile applications and transport.

Recent notable cases include the abuse of dominance ruling against Yandex in Russia for self-preferencing its own products in online search results ¹⁷, Japan's antitrust case against Booking.com over price parity

¹⁶ World Bank Group (2025). The Global Markets Competition and Technology Digital Antitrust Database. https://dataviz.worldbank.org/views/Global-Digital-Antitrust-Database/Overview?%3Aembed=y&%3AisGuestRedirectFromVizportal=y

¹⁷ Global Competition Review (2021). Russia probes Yandex over self-preferencing concerns. https://globalcompetitionreview.com/article/russia-probes-yandex-over-self-preferencing-concerns

clauses in hotel contracts¹⁸, South Korea's investigation of Naver for self-preferencing its own online shopping site¹⁹, and China's case against Alibaba for exclusive dealing practices²⁰.

Food delivery and transport sub-sectors are excluded from this market review as MyCC has previously undertaken initiatives on food delivery and conducted a market review on transportation in 2021. Further details on these prior undertakings and reviews conducted can be found on MyCC's website.

2.7 Limitation of the study

- The conclusions, analysis, and recommendations in this report are derived from both primary and secondary sources. While effort has been made to ensure the completeness and accuracy of the information, it is important to note that the information may be influenced by the respondents' knowledge or willingness to disclose details, as well as potential unintentional errors or gaps from the publishers.
- This market review will consist of confidential and non-confidential versions. The non-confidential report will only utilise publicly available information, and any data involving numbers will be aggregated. Any confidential information shared by both private and publicly listed companies²¹ is considered sensitive and competitive in nature. Such information will be exclusively retained for MyCC's internal use to protect the data provided by key stakeholders while allowing the MyCC to conduct a comprehensive and thorough analysis.

¹⁸ Lexology (2023). Spotlight: restrictive agreements and dominance in Japan. https://www.lexology.com/library/detail.aspx?g=ed6bc6bc-a67c-4287-97f0-187c3215394d

¹⁹ KFTC (2020). KFTC imposes corrective measures on Naver for favoring its own realestate search, shopping, and video services over competitors. https://www.ftc.go.kr/eng/downloadBbsFile.do?atchmnflNo=17327

²⁰ SAMR (2021). The State Administration for Market Regulation issued the administrative penalty decision and administrative guidance letter in the monopoly case of Alibaba Group Holding Limited in the online retail platform services market within China. https://www.samr.gov.cn/cms_files/filemanager/samr/www/samrnew/fldes/tzgg/xzcf /202204/t20220424_341930.html

²¹ Unless the information is disclosed in the companies' public documents (e.g., annual reports).

- Additionally, given that data availability for certain sub-sectors varies
 depending on the level of confidentiality of the data retrieved from
 market participants, the coverage in the sections of market
 structure and supply chain, and key players and level of competition
 may vary across sub-sectors.
- This study is aimed at understanding the current state of the market, including prevalent practices, issues, and potential concerns related to competition, market structure, and regulation. Given the continuously changing nature of these sub-sectors, it is challenging to comprehensively identify every issue along the supply chain.
- The report's highlighted issues are based on observations and inputs gathered through primary and secondary research. Since much of the information required to substantiate these findings is sensitive often requiring access and disclosure of internal company documents and transparency from the companies involved - a more thorough examination (if required) is thus necessary in order to validate any claims of anti-competitive behaviour.

Despite these limitations and the acknowledgment of the dynamic nature of the market, the MyCC remains resolutely committed to further developing the study through continuous, rigorous, and thorough analysis. This aligns with the initial objective of conducting a comprehensive study and assures stakeholders of the MyCC's unwavering competence in market oversight.

3. Overview of digital economy

3.1 Digital economy in a global context

Digital economy refers to a broad spectrum of activities that are primarily driven by the use of digitised technologies. A crucial sector within an economy, the digital economy plays a key role in transforming industries, enhancing productivity, and driving economic growth. By adopting digital technologies such as artificial intelligence (AI), cloud computing, and big data analytics, businesses can streamline operations, lower costs, and develop new products and services. The digital economy also facilitates global trade and expands access to services, especially in emerging markets. Additionally, it supports job creation, skill development, and enhances global competitiveness.

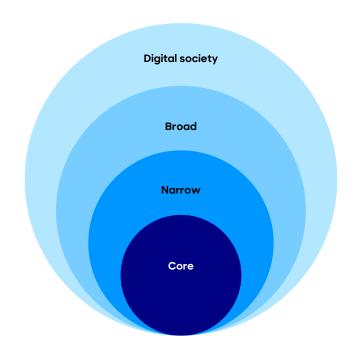


Figure 2: Layers of the digital economy

Source: OECD

According to the Supporting the Digital Transformation of Higher Education in Hungary, published by the Organisation for Economic Co-

operation and Development (OECD), the digital economy is divided into four key layers²²:

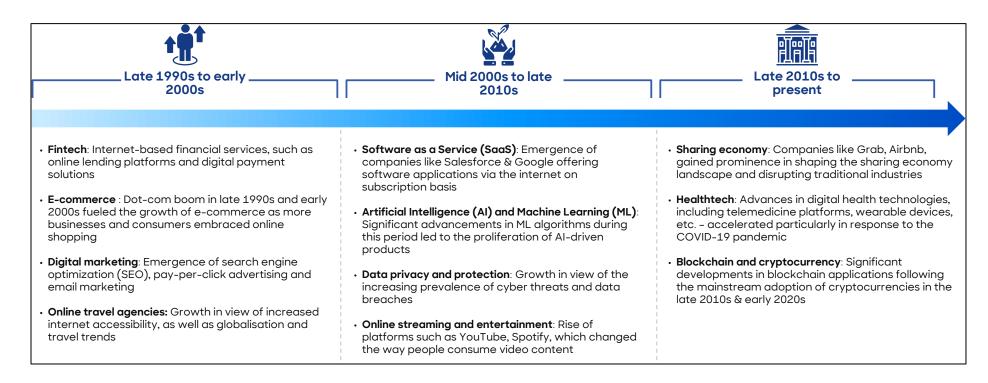
- (a) Core measurement: Includes all economic activities linked to the production of Information and Communication Technology (ICT) goods and digital services.
- (b) Narrow measurement: Expands on the core measurement by encompassing businesses that rely entirely on digital technologies and data to operate. These organisations do not directly produce ICT goods or services, but their operations are heavily dependent on them.
- **(c) Broad measurement**: Further extends to include all sectors where digital technologies and data significantly enhance the production processes, even if they do not rely on them exclusively.
- (d) Digital Society: Refers to the non-commercial use of digital activities by individuals in a society, involving activities like social media interaction, personal data use, and digital communication that are not conducted for profit but influence social dynamics and everyday life.

 $higher-education-in-hungary_d30ab43f-en.html$

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²² OECD (2021). Supporting the digital transformation of higher education in Hungary. https://www.oecd.org/en/publications/supporting-the-digital-transformation-of-

Figure 3: Key digital economy industries from 1990s to present



Source: Secondary research and MyCC analysis

The digital economy is an ever-evolving sector, constantly adapting and expanding in response to technological advances and shifting societal needs. The rise of the digital economy began in the early 1980s with the creation of the internet, which initially offered basic online services like email and internet access. Early platforms such as Compuserve ²³ and Prodigy ²⁴ provided basic digital communication but were not widely accessible. A significant turning point came in the early 1990s with the advent of the World Wide Web²⁵, which made it easier for individuals to share content online, sparking a surge in website creation and digital resources.

As internet usage increased, the "dot-com boom" ushered in a new era for key industries. This period saw the rise of e-commerce, with major players like Amazon and Alibaba emerging, alongside the growth of financial technology (fintech) as online payment solutions (e.g., Paypal in 1998) became essential. Digital marketing (e.g., Yahoo! in 1994, Google in 1998) also gained traction as businesses sought to reach consumers online. Furthermore, online travel agencies (e.g., Priceline in 1997, Expedia in 1996) transformed the travel industry by making bookings more accessible²⁶.

This period culminated in the dot-com (stock market) bubble in the year 2000, which resulted in the failure of many companies, including but not limited to Pets.com (pet supply), Webvan.com (grocery delivery) and eToys (toys)²⁷. Despite this, the boom laid the groundwork for future advancements in the digital economy and at the same time, also led to the increase in regulation and scrutiny of the industry.

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²³ Wired (2009). Sept. 24, 1979: First online service for consumers debuts. https://www.wired.com/2009/09/0924compuserve-launches/

²⁴ The Atlantic (2014). Where online services go when they die. https://www.theatlantic.com/technology/archive/2014/07/where-online-services-go-when-they-die/374099/

²⁵ CERN (2025). A short history of the web. https://home.cern/science/computing/birth-web/short-history-web

²⁶ Medium (2023). A journey through time: looking back at the dot com bubble and early internet companies. https://medium.com/@sikanderfraz72/a-journey-through-time-looking-back-at-the-dot-com-bubble-and-early-internet-companies-c937d5d1cba2; Skift (2025). The definitive oral history of online travel. https://skift.com/history-of-online-travel/

²⁷ CNN Money (2010). 10 big dot.com flops. https://money.cnn.com/galleries/2010/technology/1003/gallery.dot_com_busts/2.html

The mid-2000s to late 2010s marked another transformative phase in the digital economy. Software as a Service (SaaS) became increasingly popular, enabling businesses to access applications via cloud. This era also witnessed the rise of artificial intelligence (AI) and machine learning (ML), which allowed companies to harness big data for personalised customer experiences. With this, the importance of data privacy and protection grew, leading to regulatory developments. Additionally, online streaming and entertainment services gained prominence, changing how consumers accessed media.

From the late 2010s to the present, the sharing economy has taken centre stage, driven by the proliferation of smartphones and mobile applications. Platforms like Airbnb and Grab connected users directly, enabling individuals to monetise underutilised assets such as spare rooms and vehicles. Healthcare technology also emerged as a key industry, focusing on telehealth and digital health solutions. Meanwhile, blockchain technology and cryptocurrencies gained traction, introducing new paradigms in finance and data security.

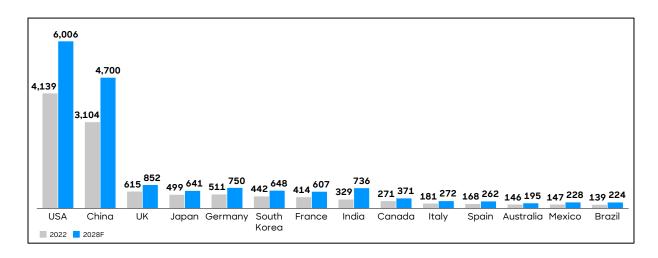
Today, the digital economy is characterised by ongoing digital transformation across various sectors, enhancing efficiency and customer engagement. The Coronavirus Disease (COVID)-19 pandemic further accelerated the adoption of remote work and digital collaboration tools, reshaping workplace dynamics. However, as the digital economy continues to grow, concerns around two aspects, data privacy and data protection, are also becoming more prominent. This is especially the case, considering growing cybersecurity, data breach, and monopolistic practice issues in the digital economy, all of which leads to increased regulatory scrutiny, signalling a new chapter in the evolution of the digital landscape.

3.2 Size of the global digital economy

As of 2022, the global digital economy was valued at USD 11.1 trillion, with an anticipated annual growth rate of 10.4%. By 2028, this figure is projected to reach approximately USD 16.5 trillion²⁸.

Technology spending plays a central role in the digital economies of many countries. South Korea, for example, stands out for its significant spending on research and development (R&D), with a strong focus on areas such as AI, semiconductors, Fifth Generation (5G) and Sixth Generation (6G) networks, quantum computing, the metaverse, and cybersecurity.

Figure 4: Selected key economies projected digital economy growth, 2022 & 2028F [USD billion]



Source: Forrester Research

In contrast, countries such as India and Mexico's digital economies are primarily driven by exports of ICT products and services. India, for example, contributed USD 257 billion to the global digital economy in 2023 29 , representing 4.4% of the world's total exports of digitally delivered services. Meanwhile, Mexico, is the largest exporter of technology-related products

²⁸ Forrester (2024). The global digital economy will reach \$16.5 trillion and capture 17% of global GDP by 2028. https://www.forrester.com/blogs/the-global-digital-economy-will-reach-16-5-trillion-and-capture-17-of-global-gdp-by-2028/

²⁹ International Trade Administration (2023). Mexico - country commercial guide. https://www.trade.gov/country-commercial-guides/mexico-advanced-manufacturing

and services in Latin America, with key exports including satellites, computers, and automation-focused robotics³⁰.

3.3 Leaders in the digital economy

The United States (U.S.) and China lead the expansion of the global digital economy, together accounting for roughly two-thirds of the sector.

The U.S. digital economy's strength lies primarily in digitally delivered services, which comprised about a quarter of its total exports in 2022. Telecommunications, computer services and software licensing are key contributors. These services not only boost the country's economic output but also solidify its position as a technological innovator.

Overall tech dominance also resides in the U.S., where it is home to the world's largest tech companies by market capitalisation, such as Microsoft, Apple, NVIDIA, Alphabet, etc.

China, as the second-largest digital economy, has made significant strides, especially in 5G infrastructure. Between 2022 to September 2024, it built a network of four million 5G base stations, up from one million in 2022³¹. This rapid expansion has led to a substantial increase in 5G mobile subscribers, reaching 966 million by September 2024. Additionally, China dominates digital payments, with apps like WeChat Pay and Alipay integrated into daily life and business.

Furthermore, the country's intelligent manufacturing equipment industry is valued at over USD 450 billion and continues to innovate to maintain its position as the world's top manufacturer³². It has more than 420 national-

WTO (2024). Global trade outlook and statistics. https://www.wto.org/english/res_e/publications_e/trade_outlook24_e.htm

³¹ State Council of the People's Republic of China (2024). China home to 4 million 5G base stations.

https://english.www.gov.cn/archive/statistics/202409/25/content_WS66f40117c6d0868f4e8eb416.html

World Bank Group (2025). Manufacturing, value added (current US\$). https://data.worldbank.org/indicator/NV.IND.MANF.CD

level demonstration factories, with AI and digital twins being applied in more than 90% of the factories³³.

According to the China Academy of Information and Communications Technology, to-date, the digital economy in the country is estimated to represent 41.5% of the country's GDP³⁴.

3.4 Trends impacting the development of digital economy

3.4.1 Digital economy as a flashpoint for geopolitics

Beyond its obvious economic impact, the digital economy is emerging as a key geopolitical tool, with many countries leveraging it to gain strategic advantages. For example, in March 2025 in India, the government decided to scrap its 6% tax on online services, including digital advertising, in an effort to ease trade tensions with the United States. Introduced in 2016, the tax targeted cross-border digital advertising transactions by non-resident platforms that earned revenue from Indian advertisers, even without a physical presence in the country³⁵.

Meanwhile, the EU in April 2025 fined Apple and Meta for a combined value of EUR 700 m for violations of digital market rules. This is despite warnings from the U.S. government about potential retaliation against any fines imposed on American firms³⁶.

However, the most significant flashpoint in this evolving digital landscape is the competition between the U.S. and China. As the two largest digital

https://english.www.gov.cn/news/202312/09/content_WS6573d73dc6d0868f4e8e204 a.html

³³ The State Council of the People's Republic of China (2024). Digital economy expands in scale, demonstrating enormous potential. https://english.www.gov.cn/archive/statistics/202405/26/content_WS6653223bc6d08 68f4e8e77a9.html

³⁴ The State Council of The People's Republic of China (2023). Digital sector roadmap to aid

Reuters (2025). India to scrap digital ad tax, easing US concerns. https://www.reuters.com/world/india/india-proposes-remove-equalisation-levy-digital-services-government-source-says-2025-03-25/

³⁶ Fox Business (2025). EU hands Apple, Meta massive fines despite warnings from Trump. https://www.foxbusiness.com/media/eu-hands-apple-meta-massive-fines-despite-warnings-from-trump

economies, their rivalry has significant implications for global power dynamics and international relations.

At the heart of the competition between the two countries lies the bifurcation of the global digital ecosystem and the push for technology dominance. Each nation has developed its own technological infrastructure and set of dominant players. On the U.S. side, companies such as Google, Meta, and Apple lead the way in software, services, and platforms. Similarly, China's ecosystem is dominated by tech giants like Alibaba, Tencent, Baidu, and Huawei. This division has led to a growing fragmentation of global technology markets, with competing standards in areas such as 5G networks, cloud computing, and digital applications.

For example, in the telecommunications sector, 5G infrastructure in the U.S. is largely built by companies like Verizon and AT&T and partners such as Nokia and Ericsson, while Huawei and Zhongxing Telecommunication Equipment (ZTE) control the Chinese market. Similarly, popular global platforms such as TikTok, which originated in China, face potential bans or heavy scrutiny in multiple countries due to national security concerns. This rivalry has contributed to the emergence of two distinct digital spheres, with varying levels of access to platforms, apps, and services depending on geographical region.

Data security and privacy concerns have further exacerbated these tensions. The U.S. government has cited potential threats posed by Chinese tech firms (e.g., TikTok, China Mobile) to national security^{37,38}. This has led to increased scrutiny and restrictions on Chinese applications and platforms.

Such rivalry has significant implications for Malaysia, as both countries are major investors in the nation. This is particularly the case in ICT manufacturing, where Malaysia has emerged as one of the key destinations for many global companies' (e.g., Micron, Intel) China Plus One

³⁸ Reuters (2024). Exclusive: US probing China telecom, China mobile over internet, cloud risks. https://www.reuters.com/business/media-telecom/us-probing-china-telecom-china-mobile-over-internet-cloud-risks-2024-06-25/

³⁷ CNN Business (2023). Lawmakers say Tiktok is a national threat, but evidence remains unclear. https://www.cnn.com/2023/03/21/tech/tiktok-national-security-concerns/index.html

(C+1) strategy, where they seek to diversify its supply chains in one or more additional countries. Additionally, many international tech companies have or planned to set up data centres in the country, including but not limited to NVIDIA, AirTrunk, GDS Holdings, Princeton Digital Group (PDG)³⁹ and ByteDance⁴⁰.

However, Malaysia's position in the digital economy is dominated by global technological superpowers (the U.S. and China), which requires a careful balancing act. Its close economic ties with China, especially under initiatives like the Belt and Road Initiative (BRI), have opened the door for collaboration on various digital-related projects, including the "Digital Twin Cities⁴¹" (2024: collaboration between China's Lingang New Area and Malaysia's Cyberjaya in areas such as data economy, cross-border data flows), Digital Free Trade Zone⁴² (2017: establishment of a logistics centre for global marketplaces) and City Brain initiative⁴³ (2018: Kuala Lumpur became the first city outside of China to adopt AliCloud's system, allowing real-time data collection and integration of traffic and emergency data from traffic cameras and other sources).

Separately, Malaysia's dependence on the U.S. for technological imports and investment in sectors like cloud computing (commitment by Amazon to invest MYR 29.2 billion to establish Amazon WebServices Asia Pacific⁴⁴),

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³⁹ Channel News Asia (2024). Johor's data centres getting a boost from the Singapore factor; water, power remain bottlenecks. https://www.channelnewsasia.com/asia/malaysia-johor-data-centres-nvidia-ytl-kulai-sedenak-sez-us-china-trade-war-4310496

⁴⁰ Data Centre Dynamics (2024). TikTok owner ByteDance to expand Malaysia data center footprint in \$2.1bn AI deal. https://www.datacenterdynamics.com/en/news/tiktok-owner-bytedance-to-expand-malaysia-data-center-footprint-in-21bn-ai-deal/

⁴¹ China (Shanghai) Pilot Free Trade Zone, Lin-Gang Special Area (2024). Lin-gang special area, Malaysia sign Mou to build 'digital twin cities'. https://www.lingang.gov.cn/html/website/lg/English/News1630758253379031042/Upd ates/c1810961039432421377.html

⁴² The Straits Times (2017). Malaysia and Alibaba launch regional logistics hub. https://www.straitstimes.com/asia/se-asia/alibaba-launches-electronic-trading-hub-in-malaysia

⁴³ Alibaba Cloud (2018). Alibaba Cloud launches Malaysia City Brain to enhance city management. https://www.alibabacloud.com/en/press-room/alibaba-cloud-launches-malaysia-city-brain-to-enhance-city-management?_p_lc=1

⁴⁴ Amazon (2024). AWS launches Malaysia's first cloud infrastructure region. https://www.aboutamazon.sg/news/aws-launches-malaysias-first-cloud-infrastructure-region

software and enterprise and cybersecurity solutions, underscores the country's delicate positioning in the wider tech geopolitical competition.

3.4.2 Emphasis on data

Data is increasingly recognised as a critical driver of economic growth and innovation, particularly within the digital economy. The ability to collect, analyse, and leverage vast amounts of data enables organisations to make more informed decisions, improve efficiency, and develop new products and services that meet the evolving needs of consumers. In advanced areas like AI and ML, data is being harnessed across to learn, adapt, and make predictive analyses.

In view of this, many countries are implementing policies to leverage data for economic development and influence in the global digital economy. A prime example is China, where in 2020, it formally recognised data as the fifth factor of production, alongside land, labour, capital, and technology⁴⁵. This showcases a shift in how China views data not just as a resource, but as an essential component of its economic future. Separately, United Arab Emirates (UAE) "Dubai Data" is an example of an initiative by the local government aimed at creating a seamless sharing of data citywide to enable the powering of smart cities, resolving business problems and improving residents' quality of life⁴⁶.

With data becoming a critical economic resource, many countries are focusing on data sovereignty which is the concept of regulating data within national borders. Governments are increasingly concerned with controlling their citizens' data and preventing foreign entities from accessing it. For instance, the European Union (EU) has established a comprehensive data protection framework through the General Data Protection Regulation (GDPR), enacted in 2018. It sets strict guidelines on how personal data, especially from EU citizens, can be collected, processed, and stored. It requires companies to obtain consent before collecting data, mandates transparency in data usage, and gives

⁴⁵ Stanford University, DigiChina (2022). China wants to put data to work as an economic resource - but how? https://digichina.stanford.edu/work/china-wants-to-put-data-to-work-as-an-economic-resource-but-how/

⁴⁶ Digital Dubai (2025). Initiatives. https://www.digitaldubai.ae

individuals the right to access or delete their data. While focused on privacy, the GDPR reflects the EU's approach to controlling data generated within its borders⁴⁷. In China, the Cybersecurity Law (2017) requires that data generated in China be stored domestically and restricts the transfer of sensitive data abroad⁴⁸. This regulation ensures that China can manage the data produced within its borders and prevent foreign access to certain types of data.

3.4.3 Digitalisation in government, business and consumers

The growing digitalisation of governments, businesses, and consumers is a key driver of the global digital economy, contributing to increased efficiency, new economic opportunities, and broader market access.

Many governments worldwide are increasingly adopting digital technologies to improve public services, enhance administrative efficiency, and drive economic development. In 2023, Gartner, a technology research company, estimated worldwide government Information Technology (IT) spending would reach USD 589.8 billion, with a growth of 7.6% from 2022. Majority of the spending lies in Information Technology (IT) services (35.5%) and software (31.2%)⁴⁹, with the aim to ensure more effective public services can be delivered.

Digitalisation has become a standard practice for many businesses. According to the International Data Corporation (IDC), global spending on digital transformation across business processes, products, and organisations is projected to reach USD 2.8 trillion by 2025, more than double the amount spent in 2020. In addition to investments in operational digital transformation, customer experience in consumer-oriented sectors

⁴⁷ EU (2016). Regulation (EU) 2016/679 of the European parliament and of the council. https://eur-lex.europa.eu/eli/reg/2016/679/oj

⁴⁸ In Country (2024). China's digital data sovereignty laws and regulations. https://incountry.com/blog/chinas-digital-data-sovereignty-laws-and-regulations/

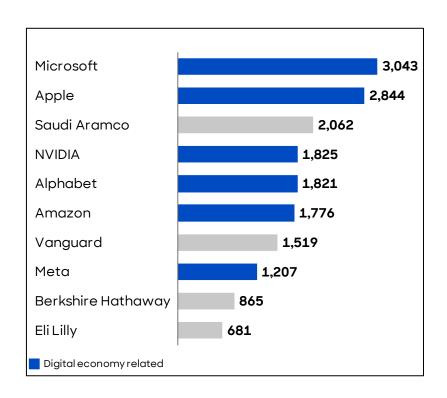
⁴⁹ Gartner (2023). Gartner forecasts worldwide government IT spending to grow 8% in 2023. https://www.gartner.com/en/newsroom/press-releases/2023-05-24-gartner-forecasts-worldwide-government-it-spending-to-grow-8-percent-in-2023

such as securities and investment services, banking, and retail are attracting significant investments⁵⁰.

Consumers are also driving the growth of the digital economy. Greater access to the internet and mobile devices has fuelled a rise in online shopping, digital banking, and on-demand services. According to the World Bank, 67.4% of the global population were internet users in 2023, nearly double the 35.4% recorded in 2013 51. This widespread internet adoption has created a more connected consumer base, increasing demand for digital services across various industries.

3.5 Digital economy and competition

Figure 5: Companies with the largest market capitalisation in the world, as of February 2024 [USD billion]



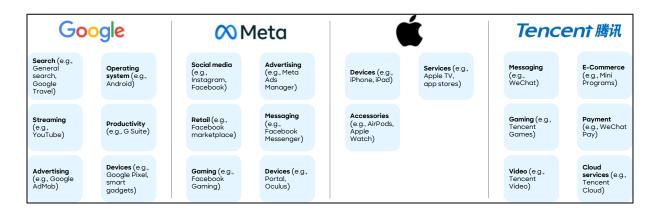
Source: Capital IQ and MyCC analysis

⁵⁰ Business Wire (2021). New IDC spending guide shows continued growth for digital transformation in 2020 as organizations focus on strategic priorities. https://www.businesswire.com/news/home/20211109006138/en/New-IDC-Spending-Guide-Shows-Continued-Growth-for-Digital-Transformation-in-2020-as-Organizations-Focus-on-Strategic-Priorities

World Bank Group (2025). World development indicators. https://datatopics.worldbank.org/world-development-indicators/

The digital economy has given rise to numerous companies that now dominate selected industries across the world. Companies like Amazon, Apple, Microsoft, Alphabet (Google), Meta and Alibaba, to name a few, have emerged as leaders in the sector, with their influence extending beyond traditional market boundaries. As of early 2024, many players in digital economy-related industries dominate as the world's largest companies⁵².

Figure 6: Selected digital economy players' involvement in different digital economy sub-sectors



Source: Secondary research and MyCC analysis

Many of the major players in the digital economy have expanded their operations across multiple sub-sectors by leveraging their core technological strengths and vast data capabilities. For instance, Alphabet Inc. (Google), originally a search engine company, has leveraged its ability to process and analyse mass amounts of data to diversify into areas such as Google Ads, allowing them to deliver targeted ads based on user interests and search history. Additionally, its core strength helps build a foundation for branching into online travel. Through Google Hotel Ads, it utilised its search capabilities to aggregate data from travel providers and display it in a user-friendly format. This effectively turned Google into a metasearch engine for the travel industry, allowing users to compare prices, explore options, and make bookings⁵³.

⁵³ Google (2025). From the garage to the Googleplex. https://about.google/our-story/

⁵² Data extracted from Capital IQ as of February 2024.

For Meta, it began as a social media platform with Facebook in 2004, with a core strength in connecting people and sharing content. The platform's rise was driven by its ability to capture vast amounts of data on user behaviour, interests, and interactions. Utilising these data provided Meta with the insights to offer targeted advertising, turning Facebook into a digital advertising player. Its acquisition of Instagram in 2012 and WhatsApp in 2014 further expanded its reach and user base, allowing Meta to strengthen its social media and messaging capabilities⁵⁴.

Apple's emphasis on seamless integration of hardware and software as its core has been central to its expansion into new areas. For instance, iOS, the mobile OS, powers Apple's iPhones and iPads. It also capitalised on its OS integration by creating the App Store in 2008 by providing a controlled marketplace for apps, allowing app developers to reach its users while also generating revenue from app sales and IAP⁵⁵.

Tencent started in 1998 as a simple messaging platform called QQ in China. However, it quickly evolved into a vast digital ecosystem spanning multiple sectors, including social media, gaming, fintech, cloud computing, and Al. In particular, drawing on its messaging expertise, Tencent developed WeChat, an all-in-one app that enabled it to expand into diverse areas such as fintech (WeChat Wallet and WeChat Pay), e-commerce (Mini Programs), and entertainment (Tencent Games), among others⁵⁶.

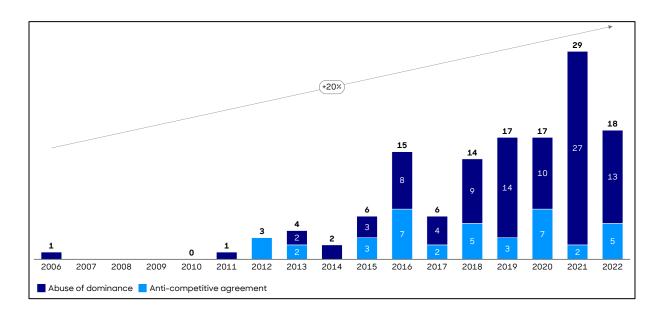
As the digital economy continues to expand, concerns regarding anticompetitive practices, data privacy, and data protection are becoming increasingly prominent. The rapid growth of major tech players and digital platforms has raised alarms about the impact of their market dominance and business practices on competition and consumer rights.

⁵⁴ Meta (2025). Company information. https://about.meta.com/company-info/

⁵⁵ PBS News (2023). A timeline of Apple's most influential product announcements. https://www.pbs.org/newshour/science/a-timeline-of-apples-most-influential-product-announcements

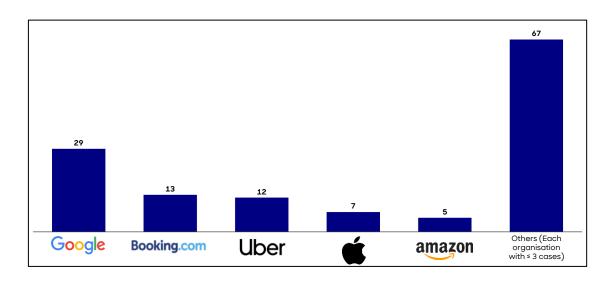
⁵⁶ Tencent (2025). About us. https://www.tencent.com/en-us/about.html

Figure 7: Anti-competitive cases by types of infringement in the digital economy sector worldwide, 2006-2022 [# of cases]⁵⁷



Source: World Bank

Figure 8: Anti-competitive cases by companies in the digital economy sector worldwide, 2006-2022 [# of cases]⁵⁸



Source: World Bank

⁵⁷ World Bank Group (2025). The Global Markets Competition and Technology Digital Antitrust Database (2006-2022). https://dataviz.worldbank.org/views/Global-Digital-Antitrust-Database/Overview?%3Aembed=y&%3AisGuestRedirectFromVizportal=y
⁵⁸ World Bank Group (2025). The Global Markets Competition and Technology Digital Antitrust Database (2006-2022). https://dataviz.worldbank.org/views/Global-Digital-Antitrust-Database/Overview?%3Aembed=y&%3AisGuestRedirectFromVizportal=y

Between 2006 and 2022, the number of anti-competitive cases experienced a compound annual growth rate (CAGR) of 20%. Notably, digital giants such as Google, Booking, Uber, Apple and Amazon account for a significant share of anti-competitive cases during this period.⁵⁹. This growing trend indicates a key concern: as the digital economy continues to evolve, the frequency of anti-competitive cases is likely to increase in the future.

With the expansion of digital platforms across various industries, it is expected that these practices could further disrupt competition, potentially harming consumers and smaller businesses.

Several high-profile cases underscored the rise of anti-competitive conduct within the digital economy:

⁵⁹ World Bank Group (2025). The Global Markets Competition and Technology Digital Antitrust Database (2006-2022). https://dataviz.worldbank.org/views/Global-Digital-Antitrust-Database/Overview?%3Aembed=y&%3AisGuestRedirectFromVizportal=y

Table 5: Selected 60 global anti-competitive cases related to the digital economy:

Year	Parties	Type of conduct	Case details
2012	U.S.	Anti-competitive	The U.S. DOJ charged Apple and five major book publishers
	Department of	agreement	Hachette, HarperCollins, Simon & Schuster, Macmillan, and Penguin
	Justice (DOJ)	(vertical	Group over a conspiracy to fix e-book prices. Before Apple entered
	and Apple with	restraints)	the e-book market, publishers used wholesale contracts, letting
	various		retailers like Amazon set steeply discounted prices, which publishers
	publishers		feared undermined their business model. In response, Apple and the
			publishers allegedly shifted to agency agreements, giving publishers
			control over retail pricing and limiting retailers' ability to discounts,
			thereby raising e-book prices across the market. Apple also
			negotiated a deal taking a 30% commission on e-book sales and
			included a "Most Favoured Nation" (MFN) clause to ensure that no
			other retailer could offer lower prices than Apple.
			In 2016, the U.S. Supreme Court declined to review an appeals court
			decision affirming that Apple conspired with five major publishers to
			fix e-book prices. This decision made final the lower court rulings that
			Apple orchestrated a price-fixing conspiracy, which led to higher e-
			book prices for consumers. As a result, Apple agreed to pay USD 400
			million to e-book purchasers, bringing the total recovery for

 $^{^{\}rm 60}$ Selected based on the size of the fine.

Year	Parties	Type of conduct	Case details
			consumers to USD 565 million when combined with settlements from
			the publishers ⁶¹ .
2013	EC and	Abuse of	·
	Microsoft	dominance	comply with its commitment to provide Window users with a
		(illegal tying)	browser choice screen. The EC had initially raised concerns over
			Microsoft's practice of tying Internet Explorer to the Windows
			operating system, which was installed on the majority of PCs
			worldwide, effectively giving Internet Explorer an unfair distribution
			advantage. Despite undertaking in 2009 to display a screen offering
			alternatives such as Google Chrome and Mozilla Firefox until 2014,
			Microsoft omitted it between May 2011 and July 2012, allegedly
			affecting up to 15 million EU users.
			The EC viewed this oversight as a serious infringement of
			competition law because it perpetuated Microsoft's dominant
			position in the browser market, depriving consumers of a
			straightforward method to select alternative browsers and thereby
			limiting genuine market competition ⁶² .

⁶¹ Archives, US Department of Justice (2016). Supreme Court rejects Apple's request to review E-books antitrust conspiracy findings. https://www.justice.gov/archives/opa/pr/supreme-court-rejects-apples-request-review-e-books-antitrust-conspiracy-findings
62 The Guardian (2013). Microsoft fined €561m for browser choice' error.

https://www.theguardian.com/technology/2013/mar/06/microsoft-fined-browser-

error#:~:text=Microsoft%20has%20been%20fined%20%E2%82%AC,it%20had%20made%20in%202009.

Year	Parties	Type of conduct	Case details
2018	EC and Google	Abuse of	The EC fined Google EUR 4.34 billion for abusing its dominant position
	(Android)	dominance	in the mobile operating system market. Google required Android
		(illegal tying)	device manufacturers to pre-install its search engine and Chrome
			browser to access the Google Play Store. Additionally, Google
			prevented manufacturers from selling devices with alternative
			versions of Android and offered financial incentives to pre-install
			only Google's search service. These practices violated EU antitrust
			laws, as they limited consumer choice and hindered competition. In
			2022, the General Court largely upheld this decision, slightly reducing
			the fine to EUR 4.12 billion ⁶³ .
2020	Autorité de la	Abuse of	FCA fined Google up to EUR 500 million for failing to comply with
	concurrence /	dominance	several injunctions issued in April 2020 regarding its obligations
	French	(self-preferencing,	under the law on related rights for press publishers and agencies.
	competition	unfair trading	
	authority	conditions)	Specifically, the authority found that Google's negotiations with
	(FCA) and		publishers and agencies were not conducted in good faith, as
	Google		Google insisted on including a new service, Publisher Curated News,
			in the negotiations, effectively preventing discussions on the
			remuneration for existing content usage.

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⁶³ Court of Justice of The European Union (2022). The general court largely confirms the Commission's decision that Google imposed unlawful restrictions on manufacturers of Andriod mobile devices and mobile network operators in order to consolidate the dominant position of its search engine. https://curia.europa.eu/jcms/upload/docs/application/pdf/2022-09/cp220147en.pdf

Year	Parties	Type of conduct	Case details
			Additionally, Google limited the scope of the negotiations by
			excluding certain content, such as press agency photos, and did not
			provide the information needed for fair negotiations. By restricting
			meaningful discussion of compensation and narrowing the scope of
			talks, Google's approach ultimately undermined competition and
			reinforced its dominant market position ⁶⁴ .
2021	Autorità	Abuse of	ICA imposed a fine of EUR 1.13 billion on Amazon for abusing its
	Garante della	dominance	dominant market position for intermediation services on
	Concorrenza e	(self-	marketplaces. The ICA concluded that Amazon tied key benefits,
	del Mercato	preferencing)	such as the Prime label and access to major shopping events,
	(AGCM) or		exclusively to its Fulfillment by Amazon (FBA), thereby pressuring
	Italian		third-party sellers to adopt its logistics services.
	Competition		
	Authority (ICA)		This practice restricted competition by disadvantaging competing
	and Amazon		logistics operators, who could not offer comparable visibility or sales
			benefits, and discouraged sellers from listing on other
			marketplaces ⁶⁵ .

Source: Secondary research

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⁶⁴ FCA (2021). Remuneration of related rights for press publishers and agencies: the Autorité fines Google up to 500 million euros for non-compliance with several injunctions. https://www.autoritedelaconcurrence.fr/en/communiques-de-presse/remuneration-related-rights-press-publishers-and-agencies-autorite-fines

⁶⁵ ICA (2021). Amazon, press release, case no. A528, 9 December 2021. https://en.agcm.it/en/mediaépress-releases/2021/12/A528

As observed in the above cases, anti-competitive practices typically revolve around tying and exclusivity (e.g., EC and Google, ICA and Amazon, EC and Microsoft), abuse of dominance (EC and Google, DOJ and Apple with various publishers), and lack of transparency (FCA and Google), all of which hinder competition by limiting consumer choice, raising barriers to entry, and entrenching the market power of dominant platform. Despite the harm caused by these practices, regulatory authorities face various challenges in effectively enforcing competition laws. Primary obstacles include:

- (a) Global operations of large technology companies: The EC's case against Google for Android restrictions underscores the challenges of regulating multinational companies. Google operates globally, and its practices, such as requiring Android device manufacturers to pre-install its search and browser apps, have had an impact on markets around the world, including regions outside the EU. The global nature of its business means that, even though EU regulators imposed a penalty, ensuring compliance across all markets where Google operates remains a complex task. In particular, jurisdictions with less developed regulatory frameworks may face difficulties addressing these practices in the same way, potentially allowing such practices to continue and affecting global competitive conditions.
- (b) Complexity of digital markets: Many digital platforms operate with complex, opaque and multi-sided business models, making it difficult for regulators to identify and assess anti-competitive behaviour. For example, in the case of the FCA against Google, the web of interconnected services (Search, News, and Discover) and convoluted data flows adds another layer of complexity in determining market boundaries, outcomes and practices. This presents a challenge for regulators in numerous ways including in determine the precise values for digital products and services or in ensuring that any renumeration or conditions imposed by the platform are fair and do not distort competition.
- (c) Uncertainty of harm and consumer benefit: Digital platforms typically emphasise that their practices benefit consumers

through low prices, innovation, and improved services. However, regulators face challenges in proving that these short-term benefits are outweighed by long-term anti-competitive effects, such as reduced innovation, monopolistic behaviour, or consumer exploitation through data. In the case of the EC's decision against Microsoft, the company defended its actions by pointing to its provision of free internet browsing to consumers. However, the long-term impact appeared to be a lack of competition in the browser market, where Internet Explorer's dominance may have hindered innovation and limited consumer choice, potentially slowing the development of better alternatives.

To address these challenges, various new regulatory frameworks have been introduced. For example, the Digital Markets Act (DMA) in the EU aims to regulate dominant companies in digital markets, ensuring that they operate fairly and do not limit competition through practices such as self-preferencing or restrictive clauses. Similarly, the Digital Services Act (DSA) focuses on increasing transparency and accountability for digital platforms, particularly concerning user content and advertising practices, thus reducing the risk of platforms leveraging their market power in ways that distort competition.

In addition to these regulations, data protection laws such as the GDPR in Europe and similar frameworks in other regions aim to limit how companies can use consumer data to maintain a competitive edge. By granting consumers with greater control over their personal information, these regulations help curb anti-competitive practices driven by data exploitation, such as exclusive access to vast datasets that can further entrench a dominant position.

4. Digital economy in Malaysia

4.1 Definition of digital economy in Malaysia

The digital economy has traditionally been defined as a business and/or government driven sector. According to the OECD, the sector "incorporates all economic activity reliant on, or significantly enhanced by the use of digital inputs, including digital technologies, digital infrastructure, digital services and data⁶⁶".

In Malaysia, the definition of the digital economy is broader. According to the Malaysia Digital Economy Blueprint (MDEB), the sector encompasses "economic and social activities that involve the production and use of digital technology by individuals, businesses and the government.⁶⁷" The definition ensures all parties' interests/activities (including social) are covered and should be addressed in any related-future endeavours.

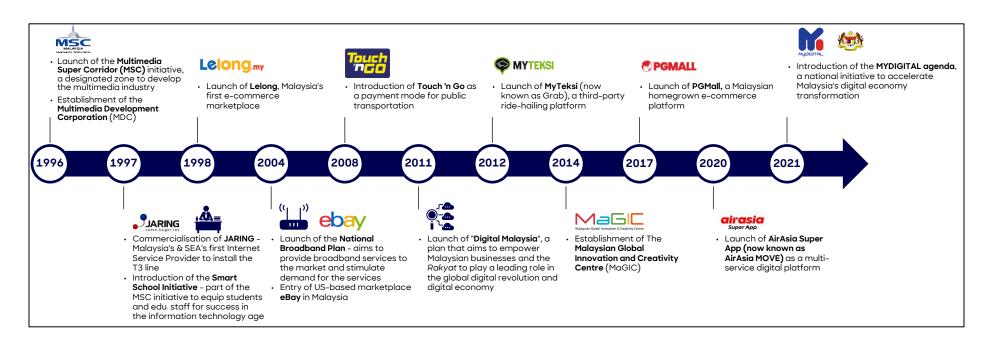
Furthermore, through the inclusion of social activities, it ensures a more comprehensive understanding of how digital technologies impact all aspects of life and can help support more informed decision-making.

https://www.ekonomi.gov.my/sites/default/files/2021-02/malaysia-digital-economy-blueprint.pdf

⁶⁶ OECD (2021). Digital supply-use tables: A step toward making digital transformation more visible in economic statistics, page 8. https://goingdigital.oecd.org/data/notes/No8_ToolkitNote_DigitalSUTs.pdf
67 Ministry of Economy (2025). Malaysia digital economy blueprint.

4.2 Development of digital economy in Malaysia

Figure 9: Selected developments in Malaysia's digital economy sector⁶⁸



Source: Secondary research and MyCC analysis

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⁶⁸ Secondary research, MyCC analysis.

Similar to global trends, Malaysia's digital economy journey began in the 1990s, with one of the key initiatives being the launch of the Multimedia Super Corridor (MSC) in 1996⁶⁹ which aimed to foster the development of the multimedia industry and attract investments in technology and digital services. This was subsequently followed by the establishment of Multimedia Development Corporation (MDC) (now known as the Malaysian Digital Economy Corporation - MDEC), which further supported the sector's growth. This era also saw the rise of first internet service providers (ISPs), such as Joint Advanced Research Integrated Networking (JARING), which helped increase internet access for businesses and consumers.

Recognising the significance of technology in education, the government introduced programmes such as the Smart School programme (MSSi). It was one of the seven flagship applications under the MSC, aimed to equip students and educators for the IT age, developing relevant curricula and teaching materials, as well as to foster a knowledge-based economy⁷⁰.

In the 2000s to 2010s, Malaysia made significant strides in its digital economy. The National Broadband Plan of 2004 was launched to enhance internet connectivity nationwide and facilitate broader access to online services. E-commerce platforms, including C2C sites like eBay and Lelong, began gaining traction, while digital payment solutions like Touch 'n Go laid the foundation for cashless transactions.

In 2011, the government introduced the Digital Malaysia initiative that set the stage for Malaysia's goal of becoming a developed digital economy by 2020.

During this period, key global players began to emerge and gain traction. YouTube, launched in 2005, became globally available and widely adopted in Malaysia. This was followed by Facebook in 2006, which transitioned from serving university students to becoming a global social media

5334-8c0c-d27071365544/content

⁶⁹ Lexology (2025). Multimedia Super Corridor (MSC) to Malaysia Digital (MD): A revamp of Malaysia's digital economy initiative. https://www.lexology.com/library/detail.aspx?g=5cb38784-44d8-4f4c-ad96-631ce458630b

World Bank Education (2016). Building and sustaining national ICT/education agencies: lessons from Malaysia. https://openknowledge.worldbank.org/server/api/core/bitstreams/7499a1ce-f135-

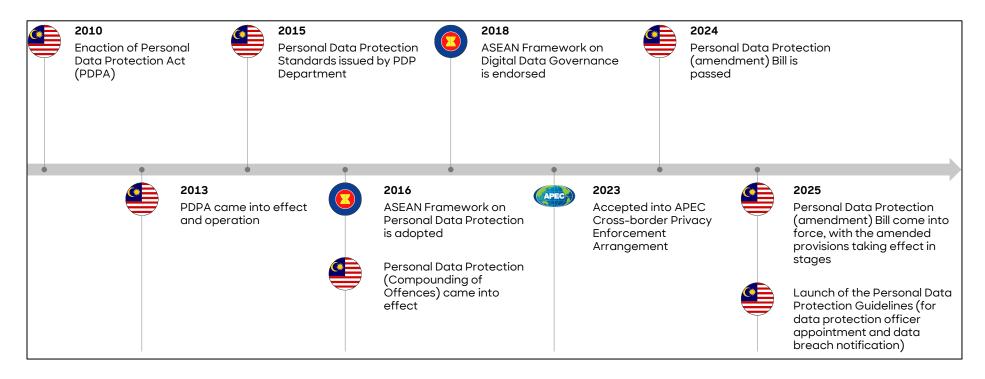
platform. Twitter (now known as "X") was also launched in the same year. These platforms, along with earlier ones like Friendster and MySpace, shaped digital interaction in Malaysia. The newer platforms gained widespread popularity due to their user-friendly features, global connectivity, and localised content that resonated with Malaysia.

From the 2010s onwards, startups such as MyTeksi (now known as Grab) emerged, shaping the ride-hailing space. During this same period, PGMall was established as a homegrown e-commerce platform, marking Malaysia's entry into the competitive B2C e-commerce marketplace. Most recently, in 2020, local airline AirAsia launched its Super App, shifting its focus from being an airline-centric company to expanding into broader digital services, such as accommodation, fintech, and gaming⁷¹.

At the same time, the government made various efforts to develop the digital economy sector. In 2014, it established the Malaysian Global Innovation & Creativity Centre (MaGIC), focusing on building a vibrant ecosystem for startups and the digital economy. In 2021, the agency then merged with Technology Park Malaysia Corporation (TPM) under Ministry of Science, Technology and Innovation (MOST)I, introducing a new agency called the Malaysian Research Accelerator for Technology and Innovation (MRANTI). In the same year, MyDIGITAL agenda was introduced and is overseen by MyDIGITAL Corporation, an agency under the Ministry of Digital.

Airasia (2020). Airasia.com is the Asean super app for everyone. https://newsroom.airasia.com/news/2020/10/8/airasiacom-is-the-asean-super-app-for-everyone

Figure 10: Timeline of Malaysia's development and participation in data privacy and protection



Source: Secondary research and MyCC analysis

As the digital economy expanded, concerns around protecting and ensuring the privacy of personal data grew. In response, Malaysia enacted the Personal Data Protection Act (PDPA) in 2010, which regulates the processing of personal data in commercial transactions. This regulation applies to any transaction of a commercial nature, even if the data controllers are not listed under the Personal Data Protection (Class of Data Users) Order 2013, which categorises specific types of data users such as banks, insurers, and telecommunication providers 72. While such data controllers are not required to be registered, they must still adhere to the Act's principles. These include ensuring data is processed lawfully and with consent, informing individuals about the purpose of data collection, protecting data from unauthorised access and allowing individuals to access and control their personal data.

To further protect consumer and public rights, the Personal Data Protection Standard 2015 was introduced. This standard provides businesses with detailed guidelines to safeguard personal data from loss, misuse, unauthorised access, and other threats, regardless of whether the data is processed electronically or otherwise. Key provisions include secure data storage, limiting access to authorised personnel, and maintaining audit trails to ensure accountability⁷³.

By 2016, Malaysia, as part of the Association of Southeast Asian Nations (ASEAN), adopted the ASEAN Framework on Personal Data Protection 2016 to align its data protection laws and practices with regional standards ⁷⁴. This framework sets strategic priorities for digital data governance and supports the growth of the ASEAN digital economy. In 2018, Malaysia endorsed the ASEAN Framework on Digital Data Governance ⁷⁵, which provides principles and initiatives to help ASEAN

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⁷² Personal Data Protection Commissioner (2025). Personal data protection order (class of data users). https://www.pdp.gov.my/ppdpv1/en/akta/personal-data-protection-order-class-of-data-users/

⁷³ Personal Data Protection Commissioner (2025). Personal data protection standard 2015. https://www.pdp.gov.my/ppdpv1/en/akta/personal-data-protection-standard-2015/

⁷⁴ Asean.org (2025). Framework on digital data governance. https://asean.org/wp-content/uploads/2012/05/10-ASEAN-Framework-on-PDP.pdf

⁷⁵ Asean.org (2025). Framework on digital data governance. https://asean.org/wp-content/uploads/2012/05/6B-ASEAN-Framework-on-Digital-Data-Governance_Endorsedv1.pdf

member states to enhance its data management, harmonise data regulations among the states and promote intra-ASEAN flows of data. The framework focuses on the key areas of data life cycle and ecosystem, cross-border data flows, digitalisation and emerging technologies, and legal, regulatory and policy frameworks. Furthermore in 2021, ASEAN (consisting of Malaysia) introduced the ASEAN Data Management Framework⁷⁶, a voluntary and non-binding detailed guidance for ASEAN businesses to adopt effective data management practices.

Recognising the opportunity of digitalisation and the challenges brought by the COVID-19 pandemic, Malaysia introduced the MyDIGITAL agenda in 2021 to accelerate its digital economy transformation. As part of this agenda, two key documents were introduced: the MDEB and the National 4IR Policy (N4IRP). These policies aim to position Malaysia as a technologically advanced economy by 2030, complementing the broader goals of the Shared Prosperity Vision 2030 (SPV 2030)⁷⁷. SPV 2030 seeks to ensure inclusive and sustainable economic growth while reducing income inequality among Malaysians.

In 2023, Malaysia joined the Asia-Pacific Economic Cooperation (APEC) Cross-Border Privacy Enforcement, demonstrating its commitment to international cooperation in protecting personal data. This move aligns with global efforts to create stronger data protection standards. Following this, the country took another significant step with the passing of the Personal Data Protection (Amendment) Bill in 2024. The bill introduces enhanced safeguards and more comprehensive provisions for personal data protection, focusing on areas such as the inclusion of biometric data, expanded legal obligations for data processors, increased penalties for non-compliance, the requirement to appoint a data protection officer, and mandatory data breach notifications, among others ⁷⁸. The amended provisions will take effect in stages starting in 2025, allowing businesses

⁷⁶ Digital Policy Alert (2021). Asean: Adopted Asean data management framework. https://digitalpolicyalert.org/event/7533-adopted-asean-data-management-framework

⁷⁷ MyDigital (2022). MyDigital progress report 2021: building a dynamic digital economy by 2030. https://www.mydigital.gov.my/mydigital-progress-report-2021-building-a-dynamic-digital-economy-by-2030/

⁷⁸ Department of Personal Data Protection (2024). Personal Data Protection (Amendment) Act 2024. https://www.pdp.gov.my/ppdpv1/wp-content/uploads/2024/11/Act-A1727.pdf

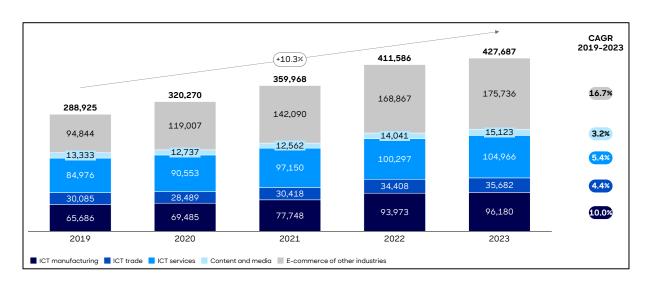
sufficient time to comply with the new requirements. Jabatan Perlindungan Data Peribadi (JPDP) subsequently in February 2025 released guidelines pertaining to data breach notification and protection officer appointment⁷⁹.

In line with global trends, Malaysia is also set to establish a Digital Trust and Data Safety Commission in the first half of 2025. This commission, spearheaded by the Ministry of Digital, aims to build a safe, secure, and trusted data ecosystem that promotes productive data flows across industries⁸⁰.

4.3 Performance in digital economy

4.3.1 Domestic performance

Figure 11: GDP contribution of Malaysia's digital economy, 2019-2023 [MYR million]



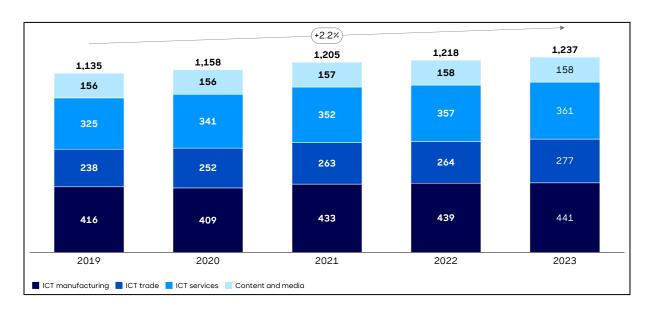
Source: DOSM

data-protection-act-2010/

⁷⁹ JPDP (2024). Pekeliling pelantikan pegawai perlindungan data dan pemberitahuan pelanggaran data susulan pindaan Akta Perlindungan Data Peribadi 2010. https://www.pdp.gov.my/ppdpv1/en/slaid-circular-on-the-appointment-of-data-protection-and-data-breach-notification-following-amendments-to-the-personal-

⁸⁰ The Star (2024). Gobind: proposal to set up a digital trust and data safety commission in the first half of 2025. https://www.thestar.com.my/business/business-news/2024/10/24/gobind-proposal-to-set-up-a-digital-trust-and-data-safety-commission-in-the-first-half-of-2025

Figure 12: Employment in Malaysia's ICT sector, 2019-2023 ['000 persons]



Source: DOSM

The digital economy sector is a key driver of Malaysia's economic growth. In 2023, the ICT and e-commerce sectors generated MYR 427.7 billion, accounting for 23.5% of the national GDP, up from 22.9% in 2022. Between 2019 and 2023, the sector experienced an average annual growth rate of 10.3%, surpassing the overall economy's growth of 2.4% during the same period⁸¹. Employment in the sector also grew, reaching 1.2 million jobs in 2023, making up 7.8% of total employment⁸².

The e-commerce sub-sector has been particularly significant. Specifically in 2022, 78,236 establishments involved in e-commerce transactions, generating an income of MYR 1,126.9 billion. The domestic e-commerce market outperformed the international market, contributing MYR 1,003.5 billion. B2B transaction recorded the highest contribution (MYR 786.5 billion), followed by B2C transactions (MYR 312.6 billion) and B2G (MYR 27.8 billion). This growth is largely driven by the digital transformation of

DOSM (2024).Malaysia digital 2024, economy page 125. https://storage.dosm.gov.my/gdp/digitaleconomy_2023.pdf DOSM (2024).Malaysia digital 2024, economy page 18. https://storage.dosm.gov.my/gdp/digitaleconomy_2023.pdf

businesses, as well as increasing preference for online shopping among Malaysian consumers⁸³.

Within the sub-sector, OTAs have contributed positively, where more Malaysians today turn to the internet for travel planning. Platforms such as AirAsia, Agoda, and Booking.com have gained popularity over the years, enabling them to easily compare prices and book flights, accommodations, and travel packages.

ICT services represent the second-largest sub-sector, contributing 24.5% to the overall digital economy in 2023. This sub-sector includes industries such as data management (data centres, data security, big data analytics), software and system design (application development, eplatforms) and creative and digital content (eSports, gaming, and animation).

One of the key industries is app development. With the increasing penetration of smartphones and mobile internet, apps have become essential tools for daily activities, from shopping and banking to healthcare and education. Recognising its importance, various government entities have launched specific programmes to support and nurture this subsector. For instance, MDEC's Digital Content Fund provides financial assistance to startups involved in digital content creation, including mobile apps.

Separately within ICT services, the government has prioritised data management as a core industry. From 2021 to 2023, investments totalling MYR 114.7 billion related to data centres and cloud services were approved, with contributions from global tech companies such as Amazon, GDS Holdings Ltd, Yeoh Tiong Lay (YTL) Corp Bhd, and ByteDance Ltd ⁸⁴. Additionally, in May 2024, the Ministry of Investment, Trade & Industry (MITI) secured a commitment from Google to invest MYR 9.4 billion, which will

⁸⁴ MIDA (2024). Data centres make up the bulk of RM144.7b in approved digital investments. https://www.mida.gov.my/mida-news/data-centres-make-up-the-bulk-of-rm144-7b-in-approved-digital-investments/

DOSM (2024). Malaysia digital economy 2024, page 45. https://storage.dosm.gov.my/gdp/digitaleconomy_2023.pdf

support the establishment of its first data centre and cloud region in Malaysia⁸⁵.

Following closely behind ICT services is ICT manufacturing, which contributed 22.5% to the total digital economy in 2023. Key industries in this sub-sector include components (e.g., semiconductors), electronic boards, communication equipment and consumer electronics. The government has placed particular emphasis on the semiconductor industry, aiming to attract MYR 500 billion in investment to advance its National Semiconductor Strategy. Several major players have already established operations in Malaysia, including US-based Intel, which plans to set up its first overseas facility for advanced Third Dimensional (3D) chip packaging and German-based Infineon, which unveiled the world's largest 200-millimetre silicon carbide (SiC) Power Fabrication facility in August 2024.

ICT trade follows, contributing 8.3% to the total digital economy. It includes ICT resale transactions among both wholesalers and retailers.

The smallest sub-sector within the digital economy is content and media, accounting for 3.5% of the total market. This includes industries such as motion picture, video, and television programme activities, along with online content and related services. The digital advertising services industry, which is highly relevant to this study, plays a vital role in fostering engagement and generating revenue for businesses within the digital landscape. The rapid growth of digital advertising is largely fuelled by increased engagement in various online activities, particularly social media and search platforms. At the same time, the industry is undergoing a rapid transformation, with emerging players like Retail Media Networks (RMNs)86 gaining prominence⁸⁷. These networks, which include major platforms and apps such as Grab, Shopee, and others, have the potential to disrupt traditional digital advertising models. They leverage real-time consumer data and purchasing behaviour within their own retail ecosystems, enabling highly targeted and personalised advertising that drives conversions on their platforms.

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⁸⁵ Bernama (2024). Malaysia approved RM114.7bln investments in data centres, cloud services from 2021 to 2023. https://www.bernama.com/en/news.php?id=2306763

⁸⁶ Advertising technology (AdTech) platform owned and/or operated by a retailer

⁸⁷ The Edge (2024). Trends: the rising advertising superpower of super-apps. https://theedgemalaysia.com/node/723900

4.3.2 Digitalisation in government, businesses, and among citizens

According to the Department of Statistics Malaysia's (DOSM) Malaysia Digital Economy 2024 report⁸⁸, there are varying levels of participation and activity among the government, business establishments, and citizens.

Getting information from Interacting with government government organisations organisations +1.6% 68.1% +3.2% 54.8% 55.4% 52.9% 51.9% 38.7% 38.4% 35.2% 2020 2021 2022 2020 2021 2022 2023 2023

Figure 13: Purpose of internet usage by individuals, 2020-2023 [%]

Source: DOSM

Getting information from government organisations

Interacting with government organisations

68.6%

63.2%

16.5%

Figure 14: Purpose of internet usage by establishments, 2015 and 2022 [%]

Source: DOSM

2015

2022

2022

2015

From the government's perspective, the two most prominent activities involve the level of digital interaction that businesses and individuals have with government organisations. These activities are measured by both parties' use of ICT to (a) get information and (b) interact with government organisations.

Overall, there has been an increase in their reliance on ICT tools to engage with the government by both individuals and businesses. While activities peaked during the COVID-19 pandemic in 2021, continuous efforts by the government are expected to further enhance its digital engagement with both individuals and businesses.

Various initiatives have driven the growth, starting with the 1996 "Electronic Government" initiative under the MSC Flagship Applications⁸⁹, aimed at optimising operational processes and improving government information delivery. This included projects such as E-Procurement, E-Syariah, and the Electronic Labour Exchange. More recently, the government and MDEC launched the Malaysia Digital initiative⁹⁰ to attract companies, talent, and investment, while enabling businesses and

⁸⁹ ePerolehan (2009). Overview. https://eperolehan.com/en/about/overview2.html

⁹⁰ MDEC (2022). Malaysia Digital. https://mdec.my/malaysiadigital

Malaysians to participate in the digital economy. Targeting nine key sectors, Digital Agriculture, Services, Cities, Health, Finance, Trade, Content, Tourism, and the Islamic Digital Economy, the initiative seeks to foster innovation, entrepreneurship, and investment.

96.8% 95.7% 96.0% 93.1% 94.8% 94.6% 93.0% 91.0% 89.9% 85.0% 74.4% 71.6% 70.8% 55.4% 54.8% **Agriculture Mining & Quarry** Manufacturing Construction **Services** A L á þ Computer Internet Web presence

Figure 15: Usage of computer, internet and web presence by various sector, 2022 [%]

Source: DOSM

The usage of ICT by businesses and establishments, in terms of computers, internet, and web presence, varies across sectors. Construction leads in both computer and internet usage, while manufacturing leads in web presence. Overall, the average usage of computers and internet among Malaysian businesses is high, at approximately 95.9% and 93.3%, respectively. However, web presence remains lower, with about 71.4% of businesses having an online presence. The service sector, which includes most of the sub-sectors in this report, performs largely above the national average across all three ICT elements, with 96.0% for computer usage, 93.1% for internet usage, and 71.6% for web presence⁹¹.

⁹¹ DOSM (2024). Malaysia digital economy 2024, page 65. https://storage.dosm.gov.my/gdp/digitaleconomy_2023.pdf

Specifically, the adoption of e-commerce by businesses in Malaysia has grown significantly, particularly during the COVID-19 pandemic. According to MyCC's Market Review under the Competition Act 2010 for the Service Sector in Malaysia, published in 2020⁹², the pandemic accelerated digital adoption for both consumers and industries. In particular, businesses have begun adopting digital platforms like Grab.

Businesses' digitalisation efforts are further supported by government initiatives, such as the National E-Commerce Strategic Roadmap (NESR 1.0), which aims to accelerate e-commerce adoption by enhancing areas such as last-mile delivery and online payment systems⁹³. With the global e-commerce market projected to reach USD 8.0 trillion by 2027⁹⁴, it is crucial for Malaysian businesses, particularly Small and Medium Enterprise (SMEs), to leverage digital platforms to expand their market reach and remain competitive.

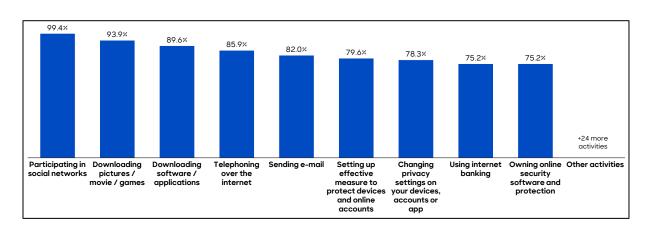


Figure 16: Top 10 activities by Malaysian using internet, 2023 [%]

Source: DOSM

Separately, Malaysians have varying levels of participation rates amongst the different activities made available via the internet, which is a large part of how Malaysians today interact with the ICT sector. The primary activities

⁹² MyCC (2020). Market Review under the Competition Act 2010 for the Service Sector in Malaysia, page 81. https://www.mycc.gov.my/market-review/final-report-market-review-for-service-sector

⁹³ MITI (2016). Malaysia's national eCommerce strategic roadmap, page 2. https://www.miti.gov.my/miti/resources/1._NeSR_Book_Final_.pdf

⁹⁴ EMarketer (2024). Worldwide retail ecommerce forecast 2024. https://www.emarketer.com/content/worldwide-retail-ecommerce-forecast-2024

that Malaysians perform using ICT tools is shown above, with the top five activities being communications-related and the highest being participating in social networks (e.g., Facebook, Whatsapp, Instagram, X, etc.) at ~99%. Emphasis on data privacy and protection is observed as the second core focus among Malaysians, with activities including setting up measures to protect devices, online accounts, and adjusting privacy settings⁹⁵.

4.3.3 International performance

Figure 17: Malaysia's performance in Institute for Management Development's (IMD) World Digital Competitiveness, 2024 [ranking]%

Country		World Digital Competitiveness 2024 global ranking
Singapore	(:	1
Malaysia		36
Thailand		37
Indonesia		43
Philippines		61

Source: IMD

Malaysia is ranked 36th out of 64 countries in the Swiss-based International Institute for Management Development (IMD)'s World Digital Competitiveness Ranking. Within ASEAN, it holds the second position behind Singapore, which ranks first globally⁹⁷.

posm (2024). Malaysia digital economy 2024, page 234. https://storage.dosm.gov.my/gdp/digitaleconomy_2023.pdf

⁹⁶ Ranks the extent to which countries adopt and explore digital technologies.

⁹⁷ IMD (2024). Rankings out of 67 economies. https://www.imd.org/centers/world-digital-ranking/#_tab_List

However, the country's ranking has been slipping over the years, dropping from a high of 26 in 2019 to 36 in 2024. According to the Malaysia Productivity Corporation (MPC), the challenges include embracing a digital-first mindset and enhancing digital technology across various sectors⁹⁸.

Published annually by the World Competitiveness Center (WCC), the ranking evaluates how prepared and capable economies are in adopting digital technologies for economic and social transformation. It assesses digital competitiveness through three main factors: knowledge, technology, and future readiness. The ranking relies on various in-country partners, including the MPC, to supply data from national sources and distribute survey questionnaires⁹⁹.

Figure 18: Malaysia's performance in International Telecommunication Union's (ITU) ICT Development Index, 2024 [%]¹⁰⁰

Country		ICT Development Index 2024 score (max. being 100%)
Singapore	(:	97.8%
Brunei Darussalam		95.7%
Malaysia		95.0%
Thailand		91.0%
Vietnam	*	85.0%
Indonesia		82.8%

Source: ITU

Malay Mail (2023). Malaysia falls to 33rd spot in world digital competitiveness ranking, trails Singapore. https://www.malaymail.com/news/malaysia/2023/12/02/malaysia-falls-to-33rd-spot-in-world-digital-competitiveness-ranking-trails-singapore/105384
 IMD (2025). Partner institutes. https://www.imd.org/centers/wcc/world-competitiveness-center/partnerships/

¹⁰⁰ Ranks the extent to which connectivity is universal and meaningful.

Despite these challenges, Malaysia has made significant progress in ICT development in recent years, with collaboration between the government and private sector driving investments in digital technology and infrastructure. In the 2024 ICT Development Index published by the International Telecommunication Union (ITU) ¹⁰¹, Malaysia scored 95%, surpassing the Asia Pacific average of 77.3% and the Upper Middle Income category's score of 79.1%.

One of the recent efforts contributed to the growth is the establishment of Digital Nasional Bhd (DNB), where it has accelerated the deployment of 5G infrastructure across Malaysia. As of 2024, Malaysia's 5G network has received global recognition for its quality and performance, earning various accolades, including:

- Ranked 1st globally for OOKLA 5G consistency score in 2023¹⁰².
- Winner of FutureNet World Global Award 2024 for automated operations Solution incorporating Al functionality¹⁰³.
- Malaysian Telco companies using DNB's 5G network continue to be the highest-ranked mobile operators globally for all categories in the Opensignal 5G Global Awards 2024¹⁰⁴.

As Malaysia continues to develop its digital infrastructure, it will not only improve its ranking in the IDI but also enhance overall competitiveness and readiness to adopt new digital technologies, positively impacting its IMD World Digital Competitiveness Ranking (as highlighted in the previous index). More importantly, it is projected to have a favourable effect on the economy. According to an Ernst & Young study commissioned by DNB, the

¹⁰² OOKLA (2024). 5G in Malaysia - single wholesale network driving regional leadership. https://www.ookla.com/articles/malaysia-5g-swn-q4-2023

¹⁰¹ ITU Data Hub (2024). Malaysia ICT development index. https://datahub.itu.int/dashboards/idi/?y=2024&e=MYS

¹⁰³ Ericsson (2024). DNB & Ericsson's AI intent-based operations solution wins third award, recognizing future-readiness of Malaysia's 5G network. https://www.ericsson.com/en/press-releases/2/2024/10/dnb--ericssons-ai-intent-based-operations-solution-wins-third-award-recognizing-future-readiness-of-malaysias-5g-network

Opensignal (2024). 5G global mobile network experience awards 2024. https://www.opensignal.com/2024/10/5g-global-mobile-network-experience-awards-2024

widespread adoption of 5G enterprise use cases could boost Malaysia's GDP by 5% (MYR 122 billion) by 2030¹⁰⁵.

Figure 19: Malaysia's performance in Huawei's Global Digitalisation Index ranking, 2024 [score]¹⁰⁶

Country		Huawei Global Digitalisation Index (GDI) 2024
Singapore		76.1
Malaysia		49.9
Thailand		47.2
Vietnam	\bigstar	36.7
Philippines		34.9
Indonesia		33.1

Source: Huawei

Separately, according to Huawei's Global Digitalisation Index (GDI) 2024, which evaluates digital economic development, industry progress, and talent ecosystem readiness across 77 countries, Malaysia scored 49.9 ranking second highest in Southeast Asia and classified as an "Adopter". This classification reflects Malaysia's rapid progress in digital development, driven by widespread basic connectivity and supportive industry policies.

As an adopter, Malaysia focuses on expanding reliable connectivity, which is essential for digital services and the development of cloud, data centres, and storage. By strengthening its digital foundations, Malaysia is positioned

¹⁰⁵ Ernst & Young (2021). Estimating the economic impact of the single wholesale 5G network in Malaysia. https://www.digital-nasional.com.my/themes/custom/dnb/pdf/estimating-the-economic-impact-of-the-single-wholesale-5G-network-in-malaysia.pdf

106 Huawei (2024). Global Digitalization Index (GDI) 2024. https://www.huawei.com/en/gdi

to foster economic growth and accelerate its digital transformation initiatives.

Figure 20: Malaysia's performance in UN's E-Government Index, 2024 [score]¹⁰⁷



Source: UN

On government services, Malaysia has made significant progress. According to the United Nations (UN) E-Government Index, which measures a country's readiness, capacity, and progress in using e-government for the provision of public services, Malaysia improved its score from 61.1% in 2014 to 81.1% in 2024, ranking third in Southeast Asia after Singapore and Thailand.

Various initiatives contributed to the improve in ranking, including but are not limited to, the digitalisation of motor vehicle licenses (road tax)¹⁰⁸, the introduction of MyDigital Identification (ID) as the sole verification system for other government-related apps¹⁰⁹, and the launch of Pangkalan Data

UN (2024). UN E-government survey 2024. https://publicadministration.un.org/egovkb/en-us/Reports/UN-E-Government-Survey-2024

MOT (2023). Digital road tax and licence explained., pages 1-3. https://www.mot.gov.my/en/News/DIGITAL%20ROAD%20TAX%20AND%20LICENCE%20EXPLAINED.pdf

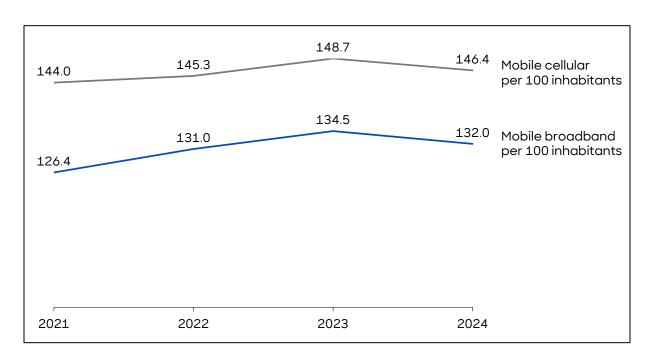
MyDigital ID (2024). Brochure. https://digital-id.my/pdf/MyDigital_ID_Brochure_2024.pdf

Utama (PADU)¹¹⁰, a centralised database hub designed to consolidate information on Malaysian citizens and support the government in better distributing benefits. These efforts have enhanced the efficiency and accessibility of public services, contributing to Malaysia's advancement in e-government development.

4.3.4 Key factors driving Malaysia's digital economy

4.3.4.1 Population's increasing connectivity

Figure 21: Mobile broadband and mobile cellular penetration rates, 2021- 2024^{111} [%]



Source: DOSM

Growing internet penetration in Malaysia is a significant catalyst for the expansion of the digital economy. According to DOSM, the percentage of individuals using mobile phones and computers is 99.4% and 80.4%, respectively as of 2023 ¹¹². DOSM also highlighted mobile broadband

¹¹⁰ PADU (2025). Homepage. https://padu.gov.my/

¹¹¹ Penetration rate for the year is based on the latest available figures from the most recent quarter.

DOSM (2024). Malaysia digital economy 2024, page 57. https://storage.dosm.gov.my/gdp/digitaleconomy_2023.pdf

penetration rate reaching 132.0 subscriptions per 100 inhabitants, while mobile cellular subscriptions reached 146.4 per 100 inhabitants by the Quarter 3 (Q3) of 2024^{113} .

As more Malaysians come online through the deployments of Fourth Generation (4G) and 5G high-speed networks coverage in both sub-urban and rural areas (80% of population coverage), it has enabled greater access to innovative digital services, further boosting economic growth and digital transformation across sectors¹¹⁴.

A key factor in this growth is the country's focus on improving connectivity, particularly through the recent push for 5G development. Malaysia's 5G network development began in 2018 with the establishment of the National 5G Taskforce. Initially, a Single Wholesale Network (SWN) model was adopted to accelerate the rollout and ensure inclusive coverage across the country. However, in May 2023, the government transitioned to a dual-network approach to mitigate risks associated with a single point of failure, ensure redundancy for 5G services, and foster a competitive 5G ecosystem¹¹⁵.

As of October 2024, 5G penetration stands at 51.5%, and the coverage of 5G infrastructure now extends to 82.1% of populated areas, benefiting more than 17.5 million subscribers¹¹⁶. This shows a rate of increase of ~20% per month from ~3.1% in March 2023. Various 5G use cases have been adopted across multiple sectors of the economy, including the implementation of Malaysia's first 5G private network in the oil and gas industry by Petronas in October 2023¹¹⁷.

DOSM (2024). Malaysia Digital Economy 2024, page 85. https://storage.dosm.gov.my/gdp/digitaleconomy_2023.pdf

¹¹⁴ Malaysia Network Operators Group (2024). Malaysia's unique approach on 5G network rollout. https://www.mynog.org/wp-content/uploads/2024/06/Plenary-1010-DNB-1.pdf

The Edge (2023). 5G: no rollback as Cabinet decides to stay with single wholesale network till DNB completes 80% coverage. https://theedgemalaysia.com/node/665485

Bernama (2024). 17.5 million 5G users in Malaysia - Gobind. https://www.bernama.com/en/news.php/crime_courts/sports/news.php?id=2370501

Petronas (2023). Petronas becomes first in Malaysia to adopt 5G private network for enterprise use. https://www.petronas.com/media/media-releases/petronas-becomes-first-malaysia-adopt-5g-private-network-enterprise-use

In terms of access to ICT tools, the country has experienced a sustained increase in key areas, including computers, internet connectivity, and mobile phone. Current statistics indicate that each of these areas has surpassed a penetration rate of 90% ¹¹⁸, reflecting a high level of accessibility and integration of technology within the population. This significant penetration highlights that the majority of the population is equipped with the necessary tools for digital engagement, positioning the country as well-prepared for the digital economy.

99.3% 99.5% 98.8% 96.4% 97.0% 93.6%

77.6% 78.3% 71.6%

Mobile Phone Internet Computer

Overall West Malaysia East Malaysia

Figure 22: Percentage of households with access to selected ICT services in Malaysia, 2023¹¹⁹ [%]

Source: DOSM

Despite Malaysia having high overall ICT development, variations in geography, population densities, economic activities, and cultural factors have led to slight disparities in access and development between West and East Malaysia. These differences are particularly evident in the penetration rates of ICT tools, as seen in the comparison between the two regions shown in **Error! Reference source not found.**

DOSM (2023). Malaysia digital economy 2024, page 220. https://storage.dosm.gov.my/gdp/digitaleconomy_2023.pdf

¹¹⁹ Figures from both West and East Malaysia are based on the average access rate across all states within each region.

4.3.4.2 COVID-19 and digitalisation

Similar to many countries, the pandemic has acted as a catalyst for Malaysia's digital economy, accelerating the adoption of digital technologies across various sectors.

During that period, various incentives were given to businesses by the government with the objective to stimulate economic growth.

In June 2020, the government launched the PENJANA (*Pelan Jana Semula Ekonomi Negara*) stimulus package, a short-term economic recovery plan worth MYR 35 billion. The package included various digital initiatives for businesses and citizens, such as¹²⁰:

- **Digital Adoption Grant and Loans:** Provision of MYR 700 million in grants and loans to eligible enterprises for the adoption or subscription of digitalisation services.
- Micro and SME E-Commerce Campaign: Initiative to encourage micro, small and medium enterprises (MSMEs) to adopt e-commerce, providing onboarding training, seller subsidies and sales support. This campaign is co-funded by the Government through MDEC and various e-commerce platforms.
- Shop Malaysia Online Campaign: Collaboration between the government and e-commerce platforms to co-fund e-commerce digital discount vouchers.
- ePenjana Credit: Credit of MYR 50 for e-wallet users, with an additional MYR 50 in value offered through cashback vouchers and discounts from e-wallet service providers.
- Dana PENJANA Nasional: MYR 1.2 billion fund aimed at providing capital to digital-focused Malaysian venture capital funds and startups.

84

Bernama (2020). List of 40 initiatives under Penjana. https://www.bernama.com/en/news.php?id=1848388

• **Promotion of Remote Learning and Work**: Provision of 1 gigabyte of free daily capacity for all users to access educational websites, news and video conferencing applications.

According to JENDELA (*Jalinan Digital Negara*), the Digital Network Plan introduced by the Malaysian Communications & Multimedia Commission (MCMC), Malaysia's internet traffic increased up to 70% ¹²¹. Additionally, internet usage in residential areas saw a similar rise of up to 70%. Lockdowns and social distancing measures compelled businesses and consumers to shift online, resulting in a surge in e-commerce, online education and remote work solutions. The need for contactless transactions also led to the rapid growth of digital payment systems and e-wallets, e.g., Touch 'n Go and DuitNow, making financial transactions more convenient and secure.

In line with Malaysia's push for digitalisation, the Sarawak and Sabah government have also introduced various state-level initiatives via its local entities ¹²² - Sarawak Digital Corporation (SDEC) ¹²³ and Sabah Creative Economy and Innovation Centre (SCENIC) ¹²⁴:

SDEC:

- Sarawak rural Broadband Network (MySRBN): Provision of highspeed broadband connectivity across suburban and rural areas in Sarawak.
- **Innovation hubs:** Platform for startups, creative industries, SMEs and social enterprises.

¹²¹ Malaysian Wireless (2020). Malaysia government wants 100% 4G coverage, 100mbps 5G speeds. https://www.malaysianwireless.com/2020/09/malaysia-government-jendela-4g-coverage-100mbps-5g-speeds/

¹²² SDEC is a wholly-owned company by the Sarawak Government through State Financial Secretary Inc. under the Ministry of Finance and Economic Planning. It serves as the state's implementing agency in driving the Sarawak Digital Economy initiatives; SCENIC is an initiative under the Sabah state's Ministry of Science, Technology and Innovation. It is responsible to accelerate industries in the state through entrepreneurship, technology, innovation and creativity.

¹²³ Sarawak Digital Economy Corporation (SDEC) (2025). https://sdec.com.my/

¹²⁴ Sabah Creative Economy and Innovation Centre (SCENIC) (2025). https://scenic.my/

- Sarawak Digital Mall: Platform aimed at boosting e-commerce adoption and sales performance of MSMEs.
- **GoDigital:** Purchase of hardware, software, and digital services aimed at assisting MSMEs in digitalising their business.

SCENIC:

- SCENIC-SATA Hasanah Special Fund: Provision of funds to Sabahan social entrepreneurs.
- **SEMAI Summit:** Summit with forums, sharing sessions focusing on social entrepreneurship.

4.3.4.3 Growing adoption of new technologies

Malaysia's digital economy is at the forefront of adopting new technologies, which are driving significant changes across various sectors. The adoption of AI and ML is noteworthy, with applications ranging from personalised shopping experiences in e-commerce to predictive analytics in digital advertising. For instance, e-commerce platforms are now increasingly using AI to recommend products based on user behaviour, resulting in higher engagement and sales conversion rates. In 2023, e-commerce player Lazada launched its AI-powered and augmented reality (AR) "Skin Test Technology", allowing consumers to diagnose their skin condition through phone cameras¹²⁵.

In the digital advertising sub-sector, publisher REV Media group in October 2024 introduced AI influencers Liz Spark and Adam Spark, offering brands innovative ways to engage with diverse markets ¹²⁶. Separately, Astro partnered with Talon Creative to launch an AI-driven initiative that utilises a social listening system to identify online posts expressing emotions like sadness and frustration. In response, AI-generated personalised messages,

¹²⁵ Retail Asia (2024). Lazada launches AI, AR-powered skin test technology. https://retailasia.com/e-commerce/news/lazada-launches-ai-ar-powered-skin-test-technology

¹²⁶ New Straits Times (2024). REV Media unveils new AI influencers as part of digital marketing push. https://www.nst.com.my/news/nation/2024/10/1117194/rev-media-unveils-new-ai-influencers-part-digital-marketing-push#google_vignette

crafted to mimic the style and tone of the series' cast members, are sent to offer support and encouragement¹²⁷.

In the online travelling sub-sector, AirAsia launched an AI-powered concierge, 'Ask Bo,' in February 2023. With enhanced ML capabilities, 'Ask Bo' offers more proactive and personalised customer service, providing live updates on flight status, boarding information, baggage tracking, and flight changes¹²⁸.

4.3.4.4 Government's push for startups

The vibrant startup ecosystem in Malaysia plays a crucial role in fostering innovation. While recognising its importance, the government is also aware of the key challenges faced by startups. According to the Malaysia Startup Ecosystem Roadmap (SUPER) 2021–2030, challenges such as funding for early-stage startups, a limited talent pool, particularly in tech and digital fields, and issues related to the regulatory environment and market access remain as hurdles¹²⁹.

In response, the government has introduced several initiatives to promote entrepreneurship and drive innovation. One of the notable efforts is the Ministry of Economy's KL20 Summit 2024, which aims to position Kuala Lumpur among the world's top 20 global startup hubs by 2030. Key activities outlined in this initiative include, but are not limited to 130:

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¹²⁷ Marketing Magazine (2024). Talon Creative works with Astro to leverage A.I. and inspire Positive Social Engagement featuring Mierul Aiman & Shasha Abedul. https://marketingmagazine.com.my/talon-creative-works-with-astro-to-leverage-a-i-and-inspire-positive-social-engagement-featuring-mierul-aiman-shasha-abedul/

¹²⁸ AirAsia (2023). "We have listened." Capital A fires chatbot AVA and introduces new Alpowered "Ask Bo" as part of commitment to more transparent, enhanced customer experience. https://newsroom.airasia.com/news/capital-a-welcomes-ask-bo#gsc.tab=0

¹²⁹ MOSTI (2021). Malaysia Startup Ecosystem Roadmap 2021-2030, pages 1-38. https://www.mosti.gov.my/wp-

content/uploads/repository/penerbitan/2021/(SUPER)%20 Malaysia%20 Startup%20 Ecosystem%20 Roadmap%202021-2030.pdf

¹³⁰ KL20 Summit (2024). Malaysia launches major initiatives at KL20 summit to boost global startup standing. https://www.kl20.gov.my/malaysia-launches-major-initiatives-at-kl20-summit-to-boost-global-startup-standing/

- Unicorn Golden Pass: Attractive incentives offered to startups, including waived fees for employment passes for senior management, subsidised rental options, concessionary tax rates on corporate profits, etc.
- **KL20 Action paper**: Comprehensive roadmap with initiatives that aim to make talent access easier (Visa Green-laning), investing and deal-sourcing more regular (Venture Capital (VC) Golden Pass) and Al Infrastructure more mature (Graphical Processing Units installation).
- **Kuala Lumpur Innovation Belt**: Initiative by MRANTI to create a onestop centre for startups and investors.

Furthermore, the Ministry of Science, Technology and Innovation (MOSTI) mandated Cradle Fund, Malaysia's early-stage startup influencer, to lead its ASEAN Startup initiative with the aim to foster greater collaboration, innovation, and growth among startups in the region. The initiative will unfold in two phases: the first phase in 2024 will focus on developing the ASEAN Startup Portal, while the second phase in 2025 will emphasise capacity-building programs.

4.3.5 Projected growth of Malaysia's digital economy

By 2025, the Ministry of Digital projects a total contribution of 25.5% from the digital economy to Malaysia's total GDP¹³¹. This target will be driven by various initiatives, including government-led projects and "Catalytic Projects" through Public-Private Partnerships (PPPs), where the private sector leads and finances the projects¹³².

https://www.malaymail.com/news/malaysia/2024/06/25/digital-minister-govt-targets-255pc-gdp-contribution-from-digital-economy-by-end-2025/141472

¹³¹ Malay Mail (2024). Digital minister: govt targets 25.5pc GDP contribution from digital economy by end-2025.

¹³² MyDigital (2022). MyDigital catalytic projects facilitating game-changing technological innovation for key sectors. https://www.mydigital.gov.my/mydigital-catalytic-projects-facilitating-game-changing-technological-innovation-for-key-sectors/

The overall target will be supplemented by the various sub-targets laid out in both MDEB and the National 4IR Policy (N4IRP) (see section **Error! R eference source not found.** for more information):

Target under MDEB (by 2025):

- Total investment in digitalisation: MYR 70 billion
- Number of MSMEs adopting e-commerce: 875,000
- Number of start-ups: Up to 5,000
- Number of unicorns (privately held startup company with a valuation of ≥ \$ 1 billion): at least two and being based in Malaysia
- Job opportunities in digital economy: More than 500,000

Target under N4IRP (by 2030):

- Transform 20% of semi- and low-skilled labour to highly skilled labour
- More home-grown Fourth Industrial Revolution (4IR) technology providers
- 3.5% in Gross Domestic Expenditure on R&D (GERD), including for 4IRrelated R&D
- Ranked Top 20 in Global Innovation Index
- 80% of online government services are integrated and supported by
 4IR technology application
- All teachers are trained to use 4IR technology

The MYDIGITAL agenda is overseen by the Council of Digital Economy and the Fourth Industrial Revolution (MED4IRN), led by the Prime Minister of

Malaysia. The Council includes Cabinet Ministers, private sector representatives, industry leaders, and think tank members¹³³.

Moreover, in October 2024, the government's Budget 2025 outlines various initiatives aimed at enhancing the digital economy, innovation and infrastructure 134 , and supporting the achievement of the abovementioned targets:

Supporting Digital Initiatives (Malaysia Budget 2025):

- Expansion of R&D funding to MYR 600 million is planned to encourage innovation and the development of new technologies.
- Allocation of MYR 320 million to improve internet access, including MYR 120 million for higher education institutions (HEIs), MYR 100 million for broadband in rural schools, and MYR 100 million for the National Information Dissemination Centres (NADI) over five years.
- MYR 10 million allocation to establish of the National Artificial Intelligence Office (NAIO), which will coordinate AI efforts and develop a strategic action plan for AI technology.
- The New Investment Incentive Framework (NIIF) includes a MYR 1 billion fund to support high-value activities like integrated circuit (IC) design services. Special tax deductions will also be given to HEIs that develop new courses in digital technology, AI, robotics, IoT, data science, Fintech, and sustainable technologies.

4.4 Digital economy-related policies

While digitalisation has been recognised in key policy documents such as the Malaysia Plan, a focused approach was only introduced in 2019 under

¹³⁴ Ministry of Finance (2024). Budget tabling for 2025. https://belanjawan.mof.gov.my/en/

¹³³ MITI (2021). Publication of information and communication technology satellite accounts (ICTSA) 2021 by Department of Statistic Malaysia (DOSM) - https://www.miti.gov.my/index.php/pages/view/8527

the SPV 2030 ¹³⁵, which identified Digital Economy as one of its 15 Key Economic Growth Areas (KEGA).

In 2021, the government formalised its commitment to the digital economy with the launch of the MYDIGITAL agenda, which introduced both the MDEB and the National Fourth Industrial Revolution Policy (N4IRP). These policies aim to streamline sectoral policies and align them with broader national goals, with the N4IRP serving as a central industrialisation policy focused on manufacturing and related services.

Subsequent policies were introduced to support the MDEB and N4IRP, with additional industry-specific policies developed in alignment with these frameworks. The figure below outlines the comprehensive policies governing the digital economy, along with related initiatives.

These policies reflect the government's commitment to the robust development of Malaysia's digital economy. The primary goals are to drive national growth, foster inclusiveness, and enhance competitiveness for the benefit of the economy, the people, and the country as a whole.

¹³⁵ Ministry of Economy (2019). Shared prosperity vision 2030. https://ekonomi.gov.my/sites/default/files/2020-

^{02/}Summary%20Shared%20Prosperity%20Vision%202030.pdf; New Straits Times (2023). Armizan: Malaysia Madani replaces SPV 2030, framework to be launched soon by PM. https://www.nst.com.my/news/nation/2023/02/883055/armizan-malaysia-madani-replaces-spv-2030-framework-be-launched-soon-pm

National MADANI policies Economy: Twelfth EKONOMI MADANI Rakyat 盦 Malaysia Plan Empowering (RMKe-12) the People Digital economy policies Malaysia Digital National 4IR Economy Policy Blueprint (N4IŔP) (MDEB) Related policies National National JENDELA New Industrial E-Commerce Policy on (National Master Plan Strategic Industry 4.0 Digital (NIMP) 2030 Roadmap Network Plan) (Industry4WRD) (NESR) National National National Artificial Guidelines National Cloud Policy Cyber National Intelligence (AI) Roadmap 2021 - 2025 on Al Security Cloud Policy Governance Strategy & Ethics Malaysia Startup Malaysia Competition Commission Ecosystem Roadmap Strategic Plan

Figure 23: National, key and supporting policies related to the digital economy¹³⁶

Source: Secondary research and MyCC analysis

(MyCC) Strategic Plan

2021-2025

(SUPER) 2021 - 2030

¹³⁶ MyCC analysis.

4.4.1 National policies

Table 6: Guiding national policies for the digital economy in Malaysia

#	Policy	Description	Competition aspect	Data privacy and protection aspect
1	Twelfth Malaysia Plan	Five-year, medium-term	Recognises the weak	Recognises the
	(RMKe-12) by Economic	plan with the objective of	digital global presence of	importance of
	Planning Unit (EPU) under	developing a "Prosperous,	Malaysian companies	improving data
	the Ministry of Economy	Inclusive, Sustainable	and proposes initiatives	integration and
		Malaysia."	such as developing	privacy for efficient
	344 Si		standards, setting up new	service delivery.
	MHCI2	It emphasises the	platforms, and fostering	
	THE STATE OF THE S	importance of digital	cross-border activities	Proposes formulating
		transformation across	promote competition in	policies on data
	TWELFTH	sectors, aiming to enhance	the digital economy.	sharing whilst
	MALAYSIA PLAN	digital literacy, promote e-		protecting data
	2021-2025 a prosperous, inclusive, sustainable malaysia	commerce and support	It also plans to expand	privacy such as
		technology adoption under	digitalisation by scaling	developing national
		the Policy Enabler 2:	up digital skills and	digital identification
		Accelerating Technology	opportunities for	policy to build trust
		Adoption and Innovation.	targeted groups to	and security for digital
			promote inclusiveness of	transactions and data
				movement, with the

#	Policy	Description	Competition aspect	Data privacy and protection aspect
			Malaysians in the digital economy.	goal of curbing fraud and enhancing individual rights alongside the PDPA.
2	MADANI 137 Economy: Empowering the People by the Prime Minister & Finance Minister of Malaysia, Datuk Seri Anwar Ibrahim	aim to restore Malaysia's economy, position it as a leading nation in Asia and to	digital economy and increase the exposure of MSMEs to the digital era through providing matching grants of 50% or up to MYR 5,000 for smaller businesses to equip them with financial capabilities to compete with larger, more	Digital ID, which is an initiative to verify people's identity on the internet or in the cyber world. It aims to foster the expansion of online businesses

¹³⁷ keMampanan (Sustainability), kesejAhteraan (Prosperity), Daya cipta (Innovation), hormAt (Respect), keyakiNan (Trust) and Ihsan (Compassion)

#	Policy	Description	Competition aspect	Data privacy and protection aspect
		innovation-led Industry'. A	Additionally, it highlighted	The Digital ID is
		'digital and innovation-led	the need to address all	designed to enhance
		industry' will be created	forms of malicious	trust in the digital
		through Domestic Direct	deception and fake news	ecosystem,
		Investment (DDI) from	in advertising that can	supporting the
		government-linked	sow division and mistrust	growth of Malaysia's
		companies (GLCs) and	within the digital	digital economy. It is
		government-linked	advertising sub-sector.	part of the broader
		investment companies		Malaysia Digital
		(GLICs).	These initiatives aim to	Economy Blueprint,
			enhance Malaysia's	aligning with the
		Through the promotion of	competitiveness in the	MADANI Economy's
		digital literacy and access to	digital economy by	aspiration to elevate
		technology, the plan seeks	supporting small	the country as an
		to empower individuals and	businesses and ensuring	Asian economic
		businesses, thereby	a trustworthy digital	leader and improve
		fostering a robust digital	advertising environment.	the well-being of its
		economy.		people.

Source: Secondary research and MyCC analysis

4.4.2 Digital economy policies

Table 7: Digital economy policies in Malaysia

#	Policy	Description	Competition aspect	Data privacy and protection aspect
1	Malaysia Digital Economy	Launched in early 2021, the	Contains various	Initiative of
	Blueprint (MDEB) by EPU	blueprint aims to transform	initiatives such as the	"Enhancing cyber
	under the Ministry of	Malaysia into a digitally	streamlining of	security awareness
	Economy	driven, high-income nation	regulatory requirements	among businesses
	MALAYSIA (5)	and regional leader (in the	to respond to the digital	and society
	DIGITAL	field of digital economy) by	economy and	members" which
	BLUEPRINT	2030. It focuses on three	encourage innovative	aimed to raise the
		outcomes:	business models.	public's confidence
				to go digital.
	M	1. Socio-environmental	The initiative focuses on	
	ндаатн	wellbeing for all;	adapting regulations to	This initiative includes
		2. Business growth in all	support the growth of	the development of a
		sectors; and	the digital economy and	multi-pronged and
		3. Fit-for-future	encourage innovative	sustained cyber
		government.	business models. It	security awareness
			includes streamlining	programme through
		The blueprint is driven by 22	regulatory requirements,	a People-Private-
		strategies, 48 national	reviewing existing	Public Partnership

#	Policy	Description	Competition aspect	Data privacy and protection aspect
		initiatives and 28 sector-	policies and competition	approach, promoting
		specific initiatives to achieve	laws, and using	platforms like the
		its goals within the 10-year	regulatory sandboxes to	CyberSafe website,
		timeframe (2021-2030).	test new rules before full	enhancing cyber
			implementation.	security month
		It highlights the need for		activities, and
		flexible regulations ("Agile	These efforts aim to	strengthening law
		Regulations") to address	ensure fair competition,	enforcement and
		challenges such as evolving	improve market	governance.
		technologies and new	monitoring by regulators,	
		business models. One key	and create a level	It also incorporates
		focus is ensuring fair	playing field for	the development of
		competition by streamlining	businesses. It also	guidelines for digital
		pro-competition measures	promotes better	users, including
		under its second thrust.	alignment and	consumer rights in
			interoperability between	commercial
		MyDIGITAL Corporation, an	policies and regulations	transactions.
		agency under the Ministry of	for more efficient	
		Digital, is responsible for	implementation and	Netiquette modules
		implementing the blueprint.	enforcement.	as part of the national
		It is also aligned with other		education curriculum
		policies, such as the Personal		

#	Policy	Description	Competition aspect	Data privacy and protection aspect
		Data Protection Act and		will also be
		strategies for the Fourth		implemented.
		Industrial Revolution (4IR).		
				This blueprint also
		Several states, including		addresses cross-
		Negeri Sembilan (Negeri		border data flows by
		Sembilan Digital Economy		promising that by
		Blueprint 2027) and		2025, all new trade
		Sarawak (Sarawak Digital		agreements will
		Economy Blueprint 2030),		incorporate cross-
		have introduced their own		border data
		digital economy blueprints in		protection elements.
		line with the national plan.		
2	National 4IR Policy	Comprehensive national	Introduces the initiative	Introduces an ethics
	(N4IRP) by EPU under the	framework aimed at guiding	to develop critical 4IR-	framework for
	Ministry of Economy	the use of 4IR technologies	_	•
		to enhance the country's	to enable wider	development and
		socioeconomic	application of 4IR	deployment to
		development.	technologies, as part of	•
			the strategy to	
			strengthen digital	technologies, specific

#	Policy	Description	Competition aspect	Data privacy and protection aspect
#	NATIONAL FOURTH INDUSTRIAL REVOLUTION (4IR) POLICY	It serves as a foundational document to various plans, including the RMKe-12 and the MDEB. The policy sets a timeframe of ten years (from 2021 - 2030) to improve the following, with 4IR technologies: 1. The rakyat to have an improved quality of life; 2. Businesses to become more productive, competitive and innovative through	infrastructure, which will enable higher accessibility and adoption of companies towards 4IR technologies to promote healthy competition. Another part of this policy addresses the need to expand the digital marketplace for the underserved rural community to bridge the technology adoption	legislation on cyber security and enhance personal data protection law, regulations and guidelines. This future-proofs the regulations, at the same time, improves the ease of doing business and safeguards the
		streamlined bureaucratic and policy processes; and		

#	Policy	Description	Competition aspect	Data privacy and protection aspect
		3. Government to be technologically enabled and able to provide more efficient and effective public services.		
		The policy will be realised through four policy thrusts, 16 strategies and 32 national initiatives. Similar to the MDEB, the N4IRP is being implemented by MyDIGITAL Corporation.		

Source: Secondary research and MyCC analysis

4.4.3 Related policies

Table 8: Related policies to the digital economy

#	Policy	Description	Competition aspect	Data privacy and protection aspect
1	National Policy on Industry	Aims to facilitate the	Indirectly addresses anti-	Highlights the
	4.0 (Industry4WRD) by MITI	adoption of Industry 4.0	competitive issues in the	importance of data
		technologies across the	digital economy by	integrity, security,
	and the same of th	manufacturing sector.	supporting firms in	and analysis as
			overcoming challenges	important areas to
		This policy promotes the	related to lack of	ensure seamless
		use of automation, AI and	awareness, adoption, and	data flow across
	Industry WRD	other advanced	high investment costs.	value chains.
	EATIONAL POLICY ON INDUSTRY 4.0 OMINIC SCHOOL STRANDON	technologies to enhance		
		productivity and	This is achieved through	Also covers the
		competitiveness.	assessment platforms and	need for
			tax-based incentives, which	centralised and
			are particularly beneficial	easily accessible
			for SMEs, enabling them to	information to
			compete more effectively	better help firms
			with larger, more dominant	protect their data
			players.	handling,
				ownership, and

#	Policy	Description	Competition aspect	Data privacy and protection aspect
				storage, ensuring compliance with relevant privacy and protection laws.
2	National E-Commerce Strategic Roadmap (NESR) by MDEC under the Ministry of Digital National E-Commerce Strategic Roadmap 2021-2025 E-Commerce at the Engine for Catalytic Growth by Businesses in Malaysia	Launched in 2016, the NESR was implemented from 2017 to 2020 and guided by the National E-Commerce Council. With a supportive governance framework and infrastructure, it was aimed at accelerating the growth of e-commerce with focus on six strategic thrusts: Accelerate seller adoption of e-	No explicit mention/highlight of anticompetition. However, various programmes are aimed at enhancing the competitiveness of logistics providers and sellers. These efforts indirectly support a more vibrant and competitive digital economy, which may help mitigate anti-competitive concerns.	No explicit mention/highlight of data privacy and protection within its framework.

#	Policy	Description	Competition aspect	Data privacy and protection aspect
		Increase adoption of eProcurement by businesses. Lift non-tariff barriers, Realign existing economic incentives. Make strategic investments in selected e-commerce players. Promote national brand to boost cross-border e-commerce. NESR 2.0 was developed at the end of NESR 1.0 in 2020. Led by the NESR taskforce, this initiative is a nationwide collaborative	 Improve Malaysia's regional performance and competitiveness in logistics Enhance seller competitiveness and improve consumer trust and confidence through Institut Piawaian dan Penyelidikan Perindustrian Malaysia (SIRIM) Trusted Mark Scheme 	

#	Policy	Description	Competition aspect	Data privacy and protection aspect
		effort between the public and private sectors aimed at boosting Malaysia's ecommerce ecosystem from 2021 to 2025. The roadmap focuses on three guiding principles:		
		 Intensify e-commerce adoption and growth Enhance ecosystem development Strengthen policy and regulatory environment 		
3	JENDELA (National Digital	,	Indirectly supports the	•
	Infrastructure Plan) by	infrastructure plan,	digital economy by ensuring	
	MCMC under the Ministry of Communications	starting from September 2020 until 2025. It is aimed	nationwide internet coverage, particularly	of data privacy and

#	Policy	Description	Competition aspect	Data privacy and protection aspect
			through improvements in 4G	protection within its
	endela Li Jalinan Digital Negara	,	connectivity in remote areas, fibre networks, and mobile broadband speeds.	framework.
		speed internet across the	These efforts enable digital	
		country.	businesses to operate effectively while preventing	
		By addressing connectivity	potential exploitation of	
		issues, JENDELA supports the digital economy by	consumers.	
		enabling more Malaysians	•	
		to engage in online activities.	tariffs for communications	
			services, aligned with industrial rates, helps create	
			a level playing field among	
			competitors. This prevents large companies from	
			leveraging their financial	
			advantages to negotiate lower electrical rates due to	

#	Policy	Description	Competition aspect	Data privacy and protection aspect
			their scale and purchasing	
			power.	
4	National Industrial Master	The NIMP 2030 is a seven-	Highlights the needs for	Emphasises the
	Plan (NIMP) 2030 by MITI	year industrial policy	companies to embrace	need for a national
		aimed at enhancing the	digital transformation to	digital platform for
		competitiveness and	improve productivity, create	analytics and to
	***************************************	sustainability of Malaysia's	value, and spur innovation,	facilitate data
	NEW INDUSTRIAL	manufacturing and	especially for SMEs.	sharing and
	INDUSTRIAL MASTER PLAN 2030	manufacturing-related		collaboration
		services sectors. It	Under Mission 2, the policy	among
		emphasises the	aims to streamline and	stakeholders.
		integration of digital	modernise all interactions	
	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	technologies, including	between the government	Proposes using
		automation, AI, and data-	and businesses, from start-	Generative AI in
		driven decision-making, to	up to operation, ensuring	various industries
		drive productivity and	efficiency, transparency,	such as healthcare
		innovation.	and ease of doing business.	and finance in line
		Specifically, chapter 6 of	These efforts will help	with parameters
		the plan focuses on the	businesses, especially SMEs,	under the PDPA to
		market structure of digital	to lower their operational	ensure compliance
		and ICT services,		

#	Policy	Description	Competition aspect	Data privacy and protection aspect
		recognising their critical	costs and reduce barriers to	with data
		role in supporting industrial	entry.	protection laws.
		growth. It outlines the		
		need to strengthen the	Under chapter 6, it highlights	
		ecosystem for digital and	the need to address market	
		ICT services by promoting	concentration in digital and	
		fair market practices,	ICT services by promoting	
		supporting the entry of	•	
			reducing barriers for smaller	
		addressing issues related	players. It emphasises	
		to market concentration	policies to foster innovation,	
		and dominance.	support new entrants, and	
			prevent anti-competitive	
		The chapter also highlights		
		the importance of	more balanced market	
		fostering collaboration	structure, the plan aims to	
		between public and	enhance opportunities for	
		private sectors to develop	SMEs and encourage a	
			dynamic and competitive	
		infrastructure that aligns	digital economy.	
		with global standards.		

#	Policy	Description	Competition aspect	Data privacy and protection aspect
			The policy also focuses on workforce measures such	
			as proposing a multi-tiered	
			levy mechanism to support	
			SMEs in upgrading their tech	
			and to ensure supply chain resilience.	
			resilierice.	
5	Malaysia Cyber Security	Aims to strengthen	·	Includes
	Strategy 2020-2024	Malaysia's cybersecurity		implementing
	(MCSS) by National Cyber	framework. It outlines	competition.	policies,
	Security Agency (NACSA)	strategic initiatives to		procedures, and
	under the National Security	protect the nation's critical		guidelines related

#	Policy	Description	Competition aspect	Data privacy and protection aspect
	Council (NCS) of Prime Minister's Department CYBER SECURITY CONTENTS CONTENTS	information infrastructure (CII), promote cybersecurity awareness, ensure the resilience of digital services against cyber threats and enhance public trust in digital services. It fosters a secure environment for online transactions and digital services and enhances consumer confidence in ecommerce and other online activities.	However, the initiative to ensure businesses are aware of data protection and strengthen cybersecurity leads to improved measures in safeguarding users' data. Not only will it ensure businesses are better equipped to protect their customers' information, enhancing overall data security and trust, but it will also encourage customers to engage with a wider range of businesses, further supporting a competitive and vibrant digital economy.	to data protection, public key infrastructure, and electronic information management. These efforts will be realised through the development of a data leakage protection mechanism, carried out under the National Cryptography Policy.
6	National Cloud Policy by Ministry of Digital	According to the Prime Minister's speech at Google's groundbreaking	No explicit mention/highlight of anticompetition.	Strengthening user trust and data security is one of

#	Policy	Policy Description		Data privacy and protection aspect
		ceremony on October 2,		the four core areas
		2024, the policy is set to be	However, the policy aims to	of the National
		finalised in 2025 and	ensure that SMEs and	Cloud Policy.
		designed to enhance	startups enhance their	
		Malaysia's digital	cloud technology for	Aims to establish
		ecosystem by fostering	innovation, operational	robust security
		public service innovation,	efficiency, and access to	frameworks and
		economic	global markets.	protocols to
		competitiveness, data		protect sensitive
		security and inclusivity	This means these	data and critical
			businesses will have the	infrastructure in
		By modernising public	resources to innovate and	both public and
		services through cloud	improve their operations,	private cloud
		technology, it seeks to	allowing them to compete	environments.
		make government	more effectively with larger	
		operations more	companies indirectly.	This focus ensures
		accessible, responsive and		that as digital
		transparent.		adoption increases,
				user data remains
		The policy also supports		secure, thereby
		economic growth by		fostering trust in
		helping SMEs and startups		digital services.

#	Policy	Description	Competition aspect	Data privacy and protection aspect
		adopt cloud technology, boosting their innovation and global reach. In addition, the policy emphasises user trust and data security, establishing safeguards across public and private sectors to protect sensitive information. Lastly, this policy promotes digital inclusivity, ensuring all		
		Malaysians have access to digital services and bridging the digital divide for an equitable digital society.		
7	Malaysia Artificial Intelligence Roadmap	Al-driven economy	Highlights the need for Malaysian organisations to invest in digital platforms,	for companies to

#	Policy	Description	Competition aspect	Data privacy and protection aspect
#	Policy 2021 - 2025 (AI-RMAP) by MOSTI MALAYSIA NATIONAL ARTIFICIAL INTELLIGENCE ROADMAP 2021-2025 (AI-RMAP)	It establishes AI governance with policies, standards and a National AI Park to guide responsible growth. National and global R&D initiatives will also be initiated to boost innovation across sectors, while digital infrastructure upgrades to enhance AI accessibility. Talent development is also prioritised through education and reskilling	such as hyper-scale intelligent cloud, rather than relying on traditional IT infrastructure, to maintain a competitive edge. Additionally, it aims to clarify the challenges of data sharing for Al implementations in the digital marketplace by developing clear data classification guidelines. This will promote responsible data sharing and collaboration, ensuring that data is exchanged fairly and transparently across	• •
		promote AI adoption across industries and		

#	Policy	Description	Competition aspect	Data privacy and protection aspect
		create a sustainable AI innovation ecosystem with the AI-Catalyst Hub connecting government, academia, industry and society, will be carried out.		
8	National Guidelines on Al Governance & Ethics by MOSTI THE NATIONAL GUIDELINES ON AI GOVERNANCE & ETHICS *N FOR MANATURA, AF DOR ALL* To Enhance The Development and Deployment of Al Technology	Aims to strengthen Malaysia's digital economy by promoting responsible, trustworthy AI aligned with Malaysia's National AI Roadmap (2021 - 2025). These guidelines are anchored in seven core principles (fairness, reliability, safety, privacy and security, inclusiveness, transparency, accountability and human-centred benefit).	Promotes responsible AI development, especially when it comes to promoting competition and preventing anti-competitive behaviour. Also proposes the development of national AI guidelines for policy makers, developers, designers, technology providers, and suppliers that will promote transparent, explainable, and fair AI practices.	Proposes consumer protection principles for AI, including the rights to information, to object, to be forgotten, and to interact with a human instead of AI, to collectively redress and be compensated. It also proposes synergistic implementation

#	Policy	Description	Competition aspect	Data privacy and protection aspect
#	Policy	By mitigating Al-related risks, this framework ensures equal distribution of Al's benefits and prioritises the well-being of citizens, while enhancing national productivity, driving economic growth and building a competitive edge. It also fosters public trust in Al technologies, maximising their value and	Competition aspect	
		ensuring fair, secure and transparent practices across sectors, enriching consumer experiences and advancing digital innovation.		

#	Policy	Description	Competition aspect	Data privacy and protection aspect
9	Malaysia Startup Ecosystem Roadmap (SUPER) 2021 - 2030 by MOSTI	startup ecosystems by 2030. This objective will be realised through 16 strategic initiatives	interventions to foster a competitive startup environment, including the establishment of a regulatory sandbox -	No explicit mention/highlight of data privacy and protection.
	MALAYSIA STARTUP ECOSYSTEM ROADMAP 2021-2030 SUPERcharging The Way To Our shared Future	focused on five main thematic drivers. By nurturing a vibrant startup ecosystem, Malaysia aims to drive economic growth, create employment		
		opportunities, and establish itself as a centre for innovation and entrepreneurship.	'	

Policy	Description	Competition aspect	Data privacy and protection aspect
		innovation and competition	
		within the ecosystem.	
Ministry of Domestic Trade	Aims to strongthon	Dotails various stratogic	Proposes
<u>-</u>			strengthening the
- · · · · · · · · · · · · · · · · · · ·	•		redress mechanism
Strategic Flan 2021-2023			through the
	·		Tribunal of User
	•		Claims Malaysia
	3 ,		(TTPM) and
	•	·	enhance user on
		,	their rights and
	Ministry of Domestic Trade and Cost of Living's (KPDN) Strategic Plan 2021–2025	Ministry of Domestic Trade and Cost of Living's (KPDN) Aims to strengthen domestic trade through	Ministry of Domestic Trade and Cost of Living's (KPDN) Strategic Plan 2021-2025 Strategic Plan 2021-2025 Ministry of Domestic Trade domestic trade through value creation and digitisation, push for the adoption of innovation and technology to serve as companies' foundation and instil rational innovation and competition within the ecosystem. Details various strategic initiatives aimed at creating a conducive business environment that encourages innovation, the application of technology, and ethical best practices among local industry

#	Policy	Description	Competition aspect	Data privacy and protection aspect
	PELAN STRATEGIK KPDNHEP 2021 2025	through empowering consumers and civil societies. The plan consists of five strategic thrusts, with a key focus on advancing domestic trade. To achieve this, the policy will encourage initiatives such as the increased usage of technology in businesses and strengthening of the business innovation ecosystem.	development of a technology-enabled supply chain aimed at enhancing supply chain effectiveness and optimisation, which could potentially reduce reliance on middlemen and mitigate the risk of monopolistic practices,	responsibilities. This will help users make more informed decisions regarding their data in a responsible manner. Additionally, the plan suggests optimising technology to provide efficient and appropriate services, including the development of a cyber-secure, cloud-based commercial environment that ensures data protection and

#	Policy	Policy Description Competition		Data privacy and protection aspect
11	MyCC's Strategic Plan	This Strategic Plan marks	Ensures that businesses	security against cyber threats. No explicit
11	2021-2025 STRATEGIC PLAN 2021-2025	the commission's third five-year plan. With overall economic growth set to	refrain from engaging in anti-competitive practices, such as cartels and abuse of dominant positions in the marketplace (including digital markets). Plan also includes to continue advise other sector regulators, ministries, and government agencies on	mention/highlight of data privacy and

#	Policy	Description	Competition aspect	Data privacy and protection aspect
		study on digital markets to enhance its understanding of the rapidly evolving digital economy. This indepth analysis aims to identify potential competition concerns arising from the accelerated digitisation of businesses in Malaysia. The study underscores MyCC's commitment to adapting its regulatory approach in response to	MyCC's cooperation and collaboration at both international and regional levels. With the goals established in this plan, the MyCC has decided to conduct market studies in the digital economy to better understand and identify potential competition issues, extending beyond the ecommerce sector to include other critical elements of	

Source: Secondary research and MyCC analysis

4.5 Digital economy-related regulation

Malaysia's digital economy is supported by a regulatory framework that promotes innovation, protects consumer rights, and ensures data security. Although there is no specific act for the sector, 13 relevant laws can be considered as governing regulations for Malaysia's digital economy¹³⁸:

Table 9: Digital economy-related regulation in Malaysia

#	Act	Description	Relevance to the 4 sub-sectors		Relevance to data privacy and protection
1	Competition Act	Aims to protect the	Relevant across	Key legislation that	Indirectly covers
	2010 (Act 712) by	competition process	all sub-sectors	establishes a legal	data privacy and
	the MyCC under	by prohibiting anti-	by ensuring fair	framework to prevent	protection in the
	the Ministry of	competitive	business	and address business	context of
	Domestic Trade	agreements such as	practices in	behaviours and	preventing sensitive
	& Cost of Living	price-fixing and the	pricing and	activities that could	data sharing during
	(KPDN)	abuse of dominant	service delivery.	harm competition in	investigations and
		position in the market.		the market.	proceedings,
	\\/ Mvcc	It is also to ensure fair			subsequently rights
	SURUHANJAYA PERSAINGAN MALAYSIA MALAYSIA COMPETITION COMMISSION	business operations to		Key provisions include:	of action for relief for
		improve quality,		• Section 4:	individuals.
		provide better choices		Prohibition of	
		and offer competitive		horizontal and	

¹³⁸ MyCC analysis.

#	Act	Description	Relevance to the 4 sub-sectors	Relevance to competition	Relevance to data privacy and protection
		prices for goods and services.		vertical agreement; • Section 10: Prohibition of abuse of dominant position.	Key provisions include: • Section 21: Protection of confidential information • Section 64: Rights of private action
2	Personal Data	•		Strict data protection	-
	Protection Act			•	-
	2010 (Act 709) by	•	_		to ensure consumers'
	the JPDP under		O.	collaboration between	
	•	personal information is collected, stored, and	•	•	acknowledgement of
	Digital	used. Personal data	•		
		refers to any	_	exploiting consumer's	•
		information about an	'	. •	
		individual, such as their		own benefit (except	, ,
	Tomas and the	name, address,	personal data is	for the purpose of	
		contact details, and	treated with	credit reporting).	

#	Act	Description	Relevance to the 4 sub-sectors	Relevance to competition	Relevance to data privacy and protection
		even sensitive data (e.g., physical and mental health condition, political opinions, religion beliefs, etc.). The act applies to data processed either automatically or as part of a relevant filing system, requiring data controllers and processors to protect this information to prevent misuse or abuse.	protection.	Key provisions include: Section 6: General principle of processing personal data Section 8: Disclosure principle Section 129: Transfer of personal data to places outside Malaysia	 Section 7: Notice and choice principle Section 9: Security principle Section 30: Right of access to personal data Section 38: Withdrawal of consent to process personal data Section 40: Processing of sensitive personal data Section 43: Right to prevent processing or

#	Act	Description	Relevance to the 4 sub-sectors	Relevance to competition	Relevance to data privacy and protection
					purposes of direct marketing • Section 130: Unlawful collecting etc. of personal data
3	& Multimedia Act 1998 (Act 588) by MCMC under the Ministry of Communications	Regulates the communications and multimedia industries and provides a legal framework for the development of the industries.	all sectors by ensuring equitable access to	Fosters a competitive market, encourages innovation and the introduction of new services and technologies; also prevents anticompetitive practices which aims to promote fair competition by regulating monopolistic	inquiry or report excludes confidential information and prevents unlawful interception and disclosure of communications that may contain sensitive

#	Act	Description	Relevance to the 4 sub-sectors	Relevance to competition	Relevance to data privacy and protection
				Key provisions include: Section 133: Prohibition on anti-competitive conduct Section: 135: Prohibition on entering into collusive agreements Section 136: Prohibition on tying or linking arrangements Section 137: Determination of dominant licensee Section 138: Guidelines as to the meaning of	 Section 63: Confidential material not to be disclosed Section 65: Report on an inquiry Section 80: Publication of information Section 211: Prohibition on provision of offensive content Section 233: Improper use of network facilities or network service Stion 234: Interception

#	Act	Description	Relevance to the 4 sub-sectors	Relevance to competition	Relevance to data privacy and protection
				"dominant	and disclosure
				position"	of
					communication
					s prohibited
4	Electronic	Ensure electronic	Directly	Indirectly promotes	Promotes some form
	Commerce Act	transactions are as	relevant to e-	competition by	of protection or steps,
	2006 (Act 658) by	legally binding and	commerce,	lowering market entry	to ensure the integrity
	KPDN	enforceable as	underpinning	barriers for new and	of information in its
		traditional paper-	online	small businesses,	original form is
	▲ (**)	based counterparts.	transactions	ensuring that	protected and
			and digital	electronic	completely unaltered.
	<u> </u>		marketplaces.	transactions are	
				legally valid and	Key provisions
				enforceable.	include:
					• Section 12:
				Key provisions include:	Original
				• Sections 6 - 7:	
				Legal	
				recognition of	
				electronic	
				message	

#	Act	Description	Relevance to the 4 sub-sectors	Relevance to competition	Relevance to data privacy and protection
				 Sections 8 - 16: Fulfilment of legal requirements by electronic means Sections 17 - 24: Communication of electronic message 	
5	Digital Signature Act 1997 (Act 562) by MCMC under the Ministry of Communications	and enforceability of	, and the second	Enables secure digital transactions, therefore indirectly lowers barriers to entry and promotes market participation by establishing trusted digital signature standards. Key provisions include:	guidance to ensure that private keys are kept secure and that

#	Act	Description	Relevance to the 4 sub-sectors	Relevance to competition	Relevance to data privacy and protection
				 Sections 22 - 26: Requirements of licensed certification authorities Sections 38 - 42 Representations and duties upon acceptance of certificate Section 26: Requirements as to advertisement 	private key • Sections 62 - 67: Effect of digital signature • Section 72: Obligation of secrecy • Section 73:
6	Consumer Protection Act 1999 (Act 599) by KPDN	Ensure fair trade practices, prevent exploitation and provide redress mechanisms for consumers.	sectors, especially e- commerce and	related aspects of market competitions	provisions covering protection of consumers' personal

#	Act	Description	Relevance to the 4 sub-sectors	Relevance to competition	Relevance to data privacy and protection
			consumer rights.	comprehensive regulatory environment that supports both consumer rights and fair competition. Key provisions include: • Section 10: False or misleading representation • Section 12: Misleading indication as to price • Section 28: Defence of innocent publication of advertisement	Use of

#	Act	Description	Relevance to the 4 sub-sectors		Relevance to data privacy and protection
7	Postal Services Act 2012 (Act 741) by MCMC under the Ministry of Communications	Pursuant to Section 12(1) of the Postal Services Act 2012, the licensing requirement under the Act does not apply to the categories specified in the First Schedule. As such, these categories fall outside the MCMC's jurisdiction for licensing, and any competition issues related to these categories will fall within MyCC's purview: 1. Trade announcements, circulars, printed extracts from	relevant to e-commerce logistics and delivery services.	Provides guidelines on anti-competitive conduct in the postal sector, with specific guidelines to be determined by MCMC to ensure fair competition and consumer protection. Key provisions include: Section: 34: Postal financial services Sections 36 - 37: Regulation of rates Sections 38 - 48: General competition practices	acknowledgement that only authorised officers conducting search with a warrant can access computerised data. Key provisions include: • Section 81: Access to

#	Act	Description	Relevance to the 4 sub-sectors	Relevance to competition	Relevance to data privacy and protection
		newspapers, or		• Sections 49 - 56:	
		advertisements,		Consumer	
		without any name,		protection	
		address or other			
		particulars of the			
		recipient.			
		2. Postal articles			
		delivered by an			
		employee of the			
		sender.			
		3. Postal articles			
		delivered by a			
		messenger on request by the			
		request by the sender specifically			
		for that purpose,			
		not being a person			
		employed or			
		engaged in the			
		course of his			
		business or			
		employment in			

	Description	Relevance to the 4 sub-sectors	competition	Relevance to data privacy and protection
	delivering or procuring the delivery of postal articles. 4. Postal articles exceeding two kilograms in weight per postal article. 5. Postal articles sent with the goods and delivered together with the goods. 6. Postal articles carried to or from a post office. 7. Postal articles carried in accordance with an agreement entered into by the licensee.			

#	Act	Description	Relevance to the 4 sub-sectors	Relevance to competition	Relevance to data privacy and protection
#	Act	8. Transfers between document exchanges. 9. Electronic postal services. 10. Postal articles carried and delivered by a private friend without hire, reward or other profit. 11. Postal articles carried and delivered personally by the sender.		competition	privacy and protection

#	Act	Description	Relevance to the 4 sub-sectors	Relevance to competition	Relevance to data privacy and protection
8	Cyber Security Act 2024 (Act 854) by Ministry of Digital	framework	sectors reliant on digital transactions and	Helps to protect consumer data, thereby enhancing trust and encouraging competition among businesses. Key provisions include: • Sections 25 - 26: Code of practice • Sections 27 - 34: Cyber security service provider	companies with national critical information should conduct themselves or act in the event of a cyber-security breach. Key provisions include: • Section 21: Duty

#	Act	Description	Relevance to the 4 sub-sectors	Relevance to competition	Relevance to data privacy and protection
					notification on cyber security incident • Section 24: Cyber security exercise • Section 35: Cyber security incident
9	Financial Services Act 2013 (Act 758) by BNM BANK NEGARA MALAYSIA CENTRAL BANK OF MALAYSIA	Regulates financial institutions, payment systems and other relevant entities, as well as oversees money market and foreign exchange market to promote financial stability.	operating and payment systems, governing payment	regulatory framework to promote the stability and integrity of the financial sector, indirectly fostering competition by ensuring consumer trust in financial institutions. Key provisions include:	Provides a framework to safeguard customer information by establishing obligations for financial institutions to ensure confidentiality and specify conditions for lawful disclosures, reinforcing data privacy and

#	Act	Description	Relevance to the 4 sub-sectors	Relevance to competition	Relevance to data privacy and protection
				 Sections 8 - 29: Authorization and registration Sections 30 - 45: Payment systems Section 124: Prohibited business conduct Sections 135 - 139: Restrictions relating to consumer protection 	financial sector. Key provisions include: • Sections 131 - 134: Information and secrecy
10	Islamic Financial Services Act			Indirectly supports competition in the	

#	Act	Description	Relevance to the 4 sub-sectors	Relevance to competition	Relevance to data privacy and protection
	2013 (Act 759) by	payment systems, and	operating	Islamic finance sector	safeguarding
	BNM	other relevant entities,	systems,	by ensuring fair and	customer
		and oversight of the	payment	transparent	information in Islamic
		Islamic money market	systems, and e-	operations in line with	financial institutions
		and Islamic foreign		regulatory	by outlining
	BANK NEGARA MALAYSIA CENTRAL BANK OF MALAYSIA	exchange market to	Islamic finance.	requirements,	obligations to
		promote financial		fostering innovation	maintain
		stability and Sharia		and consumer choice	confidentiality and
		compliance.		in financial services.	conditions for lawful
					disclosures, thereby
				Key provisions include:	reinforcing trust and
				• Sections 8 - 26:	•
				Authorization	the Islamic finance
				• Sections 27 - 28:	sector.
				Shariah	Key provisions
				requirements	include
				• Sections 39 - 55:	• Sections 142 -
				Payment	146:
				systems	Information
				• Section 136:	and secrecy
				Prohibited	

#	Act	Description	Relevance to the 4 sub-sectors	Relevance to competition	Relevance to data privacy and protection
				business conduct • Sections 147 - 151: Restrictions relating to consumer protection	
11	Copyright Act 1987 (Act 332) by MyIPO under KPDN	Governs the protection of original works, including literary, artistic, and software creations, detailing ownership, duration, and enforcement of copyright rights.	commerce and digital advertising, regulating the use of creative	Protects creative works, thereby encouraging innovation and competition in the digital economy. Ensures businesses can safeguard their intellectual property, which is crucial for maintaining competitive advantages.	Prohibits unauthorised disclosure of information obtained under the Act, safeguarding sensitive data Key provision • Section 52: Disclosure of information

#	Act	Description	Relevance to the 4 sub-sectors	Relevance to competition	Relevance to data privacy and protection
				 Key provisions include: Sections 13 - 25A: Nature and duration of copyright Sections 26 - 27 - Ownership and assignment of copyright Sections 27A - 27L: Copyright licensing 	
12	Computer Crimes Act 1997	Addresses cybercrimes such as	Relevant to all	Enhances competition by reducing risks of	_
	(Act 563) by	unauthorised access,		data theft and	
	,	data breaches, and		sabotage, protecting	-

#	Act	Description	Relevance to the 4 sub-sectors	Relevance to competition	Relevance to data privacy and protection
	Ministry of Communications	misuse of computer systems.	environment, particularly for e-commerce and digital advertising.	businesses from malicious attacks	personal and sensitive data. Key provisions include: Section 3: Unauthorised access to computer material Section 5: Unauthorised modifications of the contents of any computer
13	Electronic Government Activities Act 2007 (Act 680) by	Provides the legal framework for electronic government services,	commerce by legitimising	Promotes a level playing field for businesses engaging in government	Ensures secure data handling in digital government transactions.

#	Act	Description	Relevance to the 4 sub-sectors		Relevance to data privacy and protection
	Ministry of Communications	J ,	1 '	tenders through e- platforms	Key provision includes: • Section 7: Confidentiality and security in e-transactions

Source: Federal Legislation Portal Malaysia and MyCC analysis

Despite the above-mentioned policies and regulations provide a strategic direction for the digital economy, several potential gaps in the policy and regulatory landscape have been identified, including:

4.5.1 Lack of comprehensive digital economy framework

In Malaysia, there is currently no comprehensive framework specifically designed to regulate competition within the digital economy. Considering the uniqueness and rapid development of this industry, existing regulations may not be sufficient to address the potential challenges and complex dynamics it presents.

This situation is further complicated by the fragmented regulatory landscape across existing sub-sectors. Following table provides an overview of the various regulations governing the four sub-sectors:

Table 10: Key sub-sector regulations governing the sub-sectors' operations

Government's role	Coverage area	Mobile operating and payment system players	E-commerce marketplaces and logistics players	Digital advertising intermediaries	OTAs
Policy	Sub-sector	-	KPDN: The	-	MOTAC: The
oversight	direction		Electronic		Tourism Industry Act
			Commerce Act		1992 covers the
			2006 provides the		licensing and
			legal framework		registration of
			governing		tourism operators,
			electronic		travel agencies, tour
			transactions and		guides, hotels, and
			online business		other tourism-
			activities in		related businesses.
			Malaysia.		
			Amendment to the		Amendment to the
			act is currently		act is underway to
			underway (as of		also cover digital
			August 2025).		platforms (as of
					August 2025).
			MDEC: The National		
			E-Commerce		
			Strategic Roadmap		

Government's role	Coverage area	Mobile operating and payment system players	E-commerce marketplaces and logistics players	Digital advertising intermediaries	OTAs
Operational	Company	SSM: Under the Comp	(NESR) aims to boost e-commerce adoption and drive digital trade growth. canies Act 2016, SSM	oversees company ind	corporation,
oversight	licensing	registration, and state	utory compliance.		
	Sub-sector operating license	No regulatory supervision by any ministry/agency.	MCMC: Under the Postal Services Act 2012, all logistics providers offering postal or courier services for items weighing 2 kg or less are required to obtain a license. MOT: Regulates postal or courier services for items weighing above 20 kg.	No regulatory supervision by any ministry/agency.	MOTAC: Under the Tourism Industry Act 1992, OTA and digital travel service operators with a physical office in Malaysia must obtain a Travel Operating Business and Travel (TOBTAB) license.

Government's role	Coverage area	Mobile operating and payment system players	E-commerce marketplaces and logistics players	Digital advertising intermediaries	OTAs
	Tax payment	LHDN: Under the Incorenforcement of incore			
		RMCD: Under the Serv (increased to 8% in 20 providers to Malaysian	24) service tax on diç	, •	•
					MOTAC: Under the Tourism Tax Act 2017, it imposes a
					MYR 10 per night rate on foreign
					tourists, which in 2021 included bookings from digital platform service providers.
	Consumer protection	 ensuring fair trade, product safety, and protection against misleading practices. JPDP: Under the PDPA 2010, data controllers must ensure responsible handling of personal data—including collection, processing, and lawful cross-border transfers 			
	Data privacy and protection				

Government's role	Coverage area	Mobile operating and payment system players	E-commerce marketplaces and logistics players	Digital advertising intermediaries	OTAs
	Competition	MyCC: Under the Com	npetition Act 2010, it p	orohibits anti-competi	tive agreements and
		abuse of dominant po	sition in the market.		
			MCMC: Under the		
			Postal Services Act		
			2012, courier and		
			logistics activities		
			related to e-		
			commerce		
			fulfilment are		
			regulated, including		
			oversight of		
			competition		
			practices.		
	Dispute	No regulatory supervi	sion by any ministry/d	agency.	
	resolution				
	(for				
	businesses)				

Source: Federal Legislation Portal Malaysia and MyCC analysis

There are existing foreign regulations that specifically target the digital economy market, with a particular focus on efforts to regulate Big Tech companies. Developed countries and regions, such as the UK and the EU have made strides toward more proactive or ex-ante regulation for example the EU's DMA, introduced in 2022 and effective in 2023 and the UK's Digital Markets, Competition and Consumers (DMCC) Act, published in 2024 and already set into force in 2025.

Specifically, on the DMA, it aims to establish a framework for fair and competitive markets in the digital sector. It applies to all platforms operating in the EU, regardless of their physical location, with a particular focus on 'gatekeepers.' These are large online platforms that have a significant impact on digital markets, defined by¹³⁹:

- Either with an annual turnover of at least EUR 7.5 billion in the last three financial years or a market value of at least EUR 75 billion in the previous financial year and operations in at least three member states.
- Served more than 45 million monthly active end users.
- More than 10,000 yearly active business users during the last three
 years on a number of core platform services, such as social network,
 Number-Independent Interpersonal Communication Service (NIICS), video sharing, intermediation, video sharing, search, browser,
 ads and operating system.

Consequently, as of May 2024, seven companies have been considered as gatekeepers, after being assessed and found to fulfill the criteria outlined in the act. The gatekeepers are Alphabet, Amazon, Apple, Booking, ByteDance, Meta and Microsoft¹⁴⁰. The DMA has set out some specific dos and don'ts for "gatekeepers" to abide by, as below:

¹⁴⁰ EU (2023). Gatekeepers. https://digital-markets-act.ec.europa.eu/gatekeepers_en

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¹³⁹ European Commission (2023). Remarks by Commissioner Breton: Here are the first 7 potential "Gatekeepers" under the EU Digital Markets Act. https://ec.europa.eu/commission/presscorner/detail/en/STATEMENT_23_3674

Dos:

- Enable third-party integration with the gatekeeper's services under specific circumstances.
- Permit business users to access the data they generate while using the gatekeeper's platform.
- Equip companies advertising on their platform with the necessary tools and information for independent verification of their advertisements.
- Allow business users to promote their goods or services and establish contracts with customers outside of the gatekeeper's platform.

Don'ts:

- Favouring the gatekeeper's own services and products in rankings over similar offerings from third parties on the platform.
- Restricting consumers from connecting to businesses outside the gatekeeper's platform.
- Preventing users from uninstalling any pre-installed software or app (for instance, on a new smartphone).
- Tracking end users outside the gatekeeper's core platform service for targeted advertising without effective consent.

While regulation aims to improve market fairness, over-regulation can sometimes lead to unintended consequences. For example, the DMA requires platforms to provide third-party developers with equal access to certain functionalities, such as Apple's AirDrop and AirPlay¹⁴¹. While this may promote fairness, it can also discourage key players from continuing

digital-markets-act-security-and-innovation-challenges-in-tech-regulation/

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American Enterprise Institute (2025). The Digital Markets Act: Security and innovation challenges in tech regulation https://www.aei.org/technology-and-innovation/the-

to innovate, creating a situation where it becomes more attractive to copy existing features rather than investing in the development of new solutions.

Furthermore, due to the extensive reach of these large companies, any regulation on them often affects other businesses as well. For instance, under the DMA, Google Search can no longer showcase its own vertical services such as Google Maps or Google Hotel Ads on search results, as these were deemed as "self-preferencing." As a result, when a Google user searches for hotels in Europe, they can no longer view key hotel details directly and easily in the search results, such as prices or locations ^{142,143}. Instead, users must click through to the preferred search result to view the information. According to Mirai ¹⁴⁴, a hospitality digital marketing and technology solutions company, this change has led to an estimated 30% drop in clicks to hotel websites and a 36% decline in direct bookings.

A balanced regulatory approach is therefore essential to ensure market fairness without stifling innovation and impacting business growth.

4.5.2 Unclear jurisdictional boundaries between regulatory bodies

The legal infringement on anti-competitive or unlawful market practices in the digital market primarily fall under the purview of the MyCC. However, it may also extend to other regulatory bodies, such as the MCMC, Malaysian Aviation Commission (MAVCOM) and the Energy Commission.

While the Competition Act 2010 (Act 712)¹⁴⁵, administered by MyCC, serves as the primary law for competition issues across all sectors, other acts,

Google (2024). An update on our compliance with the DMA. https://blog.google/around-the-globe/google-europe/dma-compliance-update/

Mirai (2024). DMA implementation sinks 30% of clicks and bookings on Google Hotel Ads. https://www.mirai.com/blog/dma-implementation-sinks-30-of-clicks-and-bookings-on-google-hotel-ads/

¹⁴² D-Edge (2024). The DMA is changing Google search, but not how hoteliers had hoped. https://www.d-edge.com/the-dma-is-changing-google-search-but-not-how-hoteliers-had-hoped/

¹⁴⁵ The Competition Act also does not apply to the Petroleum Development Act 1974, which grants Petronas exclusive upstream rights for petroleum exploration, extraction, and initial control.

such as the Postal Services Act 2012 (PSA)¹⁴⁶ and the Communications and Multimedia Act 1998 (CMA) ¹⁴⁷ under MCMC, Malaysian Aviation Commission Act 2015 under MAVCOM and Energy Commission Act 2001 under EC also address competition concerns within their respective domains.

For example, in assessing the dominant position of a licensee or player, PSA and CMA consider a market share exceeding 40% in the postal and communication market as "high", whereas MyCC considers a market share threshold of over 60%¹⁴⁸ as an indicator of a dominant enterprise in relation to general markets.

In 2023, MyCC and MCMC signed a memorandum of understanding (MoU) to address exclusivity arrangements between telecommunications service providers and property developers or building management companies in high-rise buildings, including residential complexes¹⁴⁹. While this collaboration does not yet focus on digital platforms, there is potential for further cooperation between the two agencies, as well as with other relevant ministries and agencies (e.g., JPDP), to harmonise regulatory frameworks.

At present, such situation creates a "substantive policy multiplicity ¹⁵⁰", where different focuses or approaches address the same issue or concern. As a result, potential inconsistencies may arise in how the issue is managed or regulated, leading to inefficiencies and confusion for businesses, as well as challenges for regulators in enforcement and compliance efforts.

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¹⁴⁶ MCMC (2024). Guidelines on dominant position (postal services industry). https://mcmc.gov.my/skmmgovmy/media/General/Resources/Guidelines-on-

Dominant-Position-Postal-Services-Industry.pdf

¹⁴⁷ MCMC (2014). Guideline on dominant position. https://mcmc.gov.my/skmmgovmy/media/General/pdf/Commission-Guideline-on-Dominance-in-a-Communications-Market-Final.pdf

¹⁴⁸ MyCC (2012). Guidelines on abuse of dominant position. Chapter 2: Prohibition, page 4. https://www.mycc.gov.my/sites/default/files/pdf/newsroom/MYCC%204%20Guidelines %20Booklet%20BOOK2-6%20FA%20copy.pdf

¹⁴⁹ MyCC (2023). MyCC and MCMC strengthen collaboration with MOU signing. https://www.mycc.gov.my/announcement/mycc-and-mcmc-strengthen-collaboration-with-mou-signing

 $^{^{150}}$ Kovaic, W (2025). Is it true that the big tech companies are being victimised?, page 19. MyCC Competition Law Symposium.

In the realms of policies and roadmaps, the same challenges may persist where seemingly similar strategic initiatives with overlapping themes are managed or steered by different ministerial bodies, which is particularly evident when it comes to new advanced technologies.

For example, Industry4WRD: National Policy on Industry 4.0 is governed by the MITI whereas National 4IR Policy (N4IRP) is governed by the Ministry of Economy. Similarly, AI-related matters fall mainly under the Ministry of Digital as it involves data but at the same time, addressing the risks and harms of AI requires involvement from the Ministry of Science, Technology, and Innovation. Unclear boundaries are also further pronounced when policies and legislative acts are embedded or referenced by one another, potentially creating challenges for businesses navigating the competitive landscape¹⁵¹.

4.5.3 Coverage on new developing technology

The PDPA 2010 (Act 709) by JPDP, serves as the Malaysia's main form of legislation that regulates the processing of personal data in commercial transactions. However, it has faced challenges in addressing the complexities introduced by emerging technologies such as AI and ML. These technologies often function as "black box (where internal processes are not transparent or easily understood)", which complicates compliance with PDPA's requirements for transparency and accountability, which are critical for fostering trust and competition in the digital economy.

Some of the risks involved in trying to regulate new technologies alongside PDPA include:

- Overregulation that is excessively implemented could stifle innovation and growth within the industry and hinder development for new technologies.
- Compliance burdens as companies may face significant compliance costs to meet the requirements of the act, which could deter smaller

¹⁵¹ Tech for Good Institute (2024). Shaping the digital future: Regulatory updates from Malaysia. https://techforgoodinstitute.org/blog/expert-opinion/shaping-the-digital-future-regulatory-updates-from-malaysia/

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companies from entering the market and increase operational costs for existing businesses.

- Legal ambiguities should the definitions be unclear and misunderstood may result in additional precaution by companies to navigate these complexities and could lead to less competitive market behaviour as businesses err on the side of caution to avoid legal pitfalls.
- Flexibility challenges because as new technology continues to evolve, so will the regulations to remain effective, which requires balancing innovation with compliance to prevent market distortions.
- Implementation risks as regulation may disproportionately affect players in the industry depending on how well regulators understand the market structure and competitive dynamics.

4.5.4 Coverage on existing data protection regulation

In 2013, an additional requirement was introduced under the PDPA, mandating that specific classes of data users register as "data users". However, this requirement excluded foreign companies from mandatory registration. While the JPDP encourages foreign companies to comply voluntarily, enforcement remains challenging due to limited resource. Furthermore, the PDPA only applies to personal data processed for commercial transactions, exempting government entities (largest data processors in Malaysia) and not covering data processed outside Malaysia. These limitations created gaps in the legal framework.

To address various gaps and align with international standards, Malaysia introduced the PDPA (Amendment) Act 2024. Key amendments include:

- Data Transfer Abroad: Effective 1 April 2025, data controllers can transfer personal data outside Malaysia if the destination has laws substantially like PDPA or ensures an adequate level of protection equivalent to the PDPA.
- Mandatory Data Protection Office (DPO) Appointment: Starting 1 June 2025, data controllers and processers engaged in large-scale

data processing must appoint a DPO. The DPO will oversee compliance with PDPA requirements, ensuring the data protection measures are effectively implemented.

• **Data Portability Rights:** Effective 1 June 2025, data subjects gain the right to request the transfer of their personal data from one data controller to another, provided the transfer is technically feasible and compatible with existing data formats. This empowers individuals with greater control over their personal data.

The reliance or co-regulation alongside PDPA extends to national and digital-related policies, such as the MDEB. These policies often reference the PDPA to address data privacy and protection without elaborating on the necessary boundaries and coverage. For instance, under Strategic Thrust 4: Strengthen Cross-Border Data Transfer Mechanisms and Protection, the blueprint mandates both the Ministry of Communications and MITI to co-lead efforts in establishing cross-border data transfer provisions. This initiative aims to facilitate seamless data flows while maintaining adequate levels of protection¹⁵².

The PDPA (Amendment) Act 2024, particularly in section 129, complements this by removing the whitelist regime for cross-border transfer. While this amendment aligns the PDPA with international practices, its implementation relies heavily on collaboration between regulators, such as MCMC, MITI, and the JPDP. Furthermore, national policies often incorporate the PDPA without clearly defining its boundaries or specifying how co-regulation should function in practice. This lack of clarity can result in fragmented enforcement and inconsistent application of data protection measures, particularly when addressing emerging technologies and cross-border data transfer. The absence of unified approach could hinder Malaysia's efforts to establish itself as a secure and competitive digital economy.

blueprint.pd

¹⁵² Ministry of Economy (2019). Malaysia Digital Economy Blueprint, page 60. ttps://ekonomi.gov.my/sites/default/files/2021-02/malaysia-digital-economy-

4.5.5 Lack of coverage on key players

Certain key players in the identified sub-sectors are not covered by the relevant regulatory framework. For example:

E-commerce (retail marketplace): Merchants on the platform are not obligated to be Suruhanjaya Syarikat Malaysia- (SSM) certified. They can register as individual sellers using a valid personal identification document, which means they are not subject to the Companies Act 2016.

OTAs: While the Tourism Industry Act 1992 mandates licensing for all travel agencies operating in Malaysia, only a few OTAs are licensed as of December 2024¹⁵³:

- Malaysia Airlines Holidays Sdn Bhd
- AirAsia.Com Travel Sdn Bhd
- Global Airlines Holiday Sdn Bhd (airpaz.com)
- Traveloka Sdn Bhd
- BEX Travel Malaysia Sdn Bhd (expedia.com)
- Klook Travel Technology Sdn Bhd
- Ctrip International Travel Malaysia Sdn Bhd (trip.com)

Furthermore, when it comes to policy and roadmap objectives and strategic initiatives, a lack of definition of relevant players has led to low adoption rates of digital adoption especially amongst SMEs and low outreach efficacy of suitable programmes by the responsible agencies. For instance, inadequate clarity regarding the obligations and rights of SMEs in relation to data governance under the PDPA may hinder their ability to comply effectively and leverage support programmes. Examples include

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¹⁵³ MOTAC (2025). List of travel operating business and travel (TOBTAB). https://www.motac.gov.my/en/check/tobtab

the lack of awareness amongst eligible SMEs regarding schemes such as MSME Digital Grant and Smart Automation Grant under Madani policy¹⁵⁴.

4.5.6 Regulation of foreign participation in unregulated service sector

The "Guidelines on Foreign Participation in Distributive Trade Services in Malaysia 2010" introduced by the Ministry of Domestic Trade and Cost of Living (KPDN)¹⁵⁵, aims to regulate various activities in the distributive trade sector. The guidelines originally required businesses with more than 50% foreign equity to obtain prior approval from KPDN.

However, the 2020 update¹⁵⁶ to the guidelines shifted the approach from mandatory approvals to a more flexible framework, where obtaining KPDN's approval is now encouraged and recommended rather than strictly mandatory¹⁵⁷. This change potentially allows foreign digital players to operate without formal approval, particularly if they structure their operations to avoid meeting regulatory thresholds that would trigger approval requirements.

This is particularly relevant for digital platform operators who may not have a physical presence in Malaysia but still serve Malaysian consumers.

Additionally, some local businesses can operate in Malaysia without being incorporated locally, which bypasses the Companies Act 2016. This further complicates enforcement and leaves certain sectors unregulated.

¹⁵⁵ Ministry of Domestic Trade, Co-operatives and Consumerism (2010). Guidelines on foreign participation in the distributive trade services Malaysia (Amendment) 2010. https://jkt.kpkt.gov.my/wp-content/d/sites/default/files/2022-02/Bil_3_Lampiran_1.pdf ¹⁵⁶ Ministry of Domestic Trade and Consumer Affairs (2020). Guidelines on Foreign Participation in Distributive Trade Services in Malaysia 2020. https://www.kpdnhep.gov.my/ms/images/dokumen/perdagangan/perdagangan-pengedaran/FINAL_GP_2020.pdf

¹⁵⁴ The Malaysian Reserve (2024). Are Malaysian SMEs falling behind in the digital age? https://themalaysianreserve.com/2024/07/10/are-malaysian-smes-falling-behind-in-the-digital-age/

¹⁵⁷ An administrative refresh of the guidelines was published in 2023, with no changes made; Ministry of Domestic Trade and Cost of Living (2023). Guidelines on foreign participation in distributive trade services in Malaysia. https://www.kpdn.gov.my/images/muat-turun/gp-2022-1.pdf

MCMC's Application Service Provider Class

Recognising these challenges, regulatory authorities are gradually taking steps to address the challenge of jurisdictional boundaries. For instance, in August 2024, the MCMC introduced a new regulatory framework. This requires selected locally incorporated applications service providers^{158, 159} in the areas of internet messaging (internet messaging service) and social media (content-sharing media platform) with eight million or more registered users to register for an Application Service Provider Class (ASP (C)) License by 1 January 2025. A grace period of five months from the Gazettement date (1 August 2024) was provided to all eligible providers to apply for the license and comply with the requirements. Full effect of the license took place on 1 January 2025.

The move sees selected providers required to comply with the license conditions, CMA 1998 and its subsidiary legislations (licensing regulations, licensing and exemption order and universal service provision regulations) and PDPA 2010¹⁶⁰.

It also allows the government to take proportionate measures based on risk assessments to address online harms, particularly online harms such as scams, cyberbullying, and sexual exploitation of minors. As of December 2024, the Malaysian government identified eight platforms that must obtain a license: WhatsApp, Facebook, Instagram, X, YouTube, Telegram, WeChat, and TikTok ¹⁶¹. Additionally, a code of conduct outlining best

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¹⁵⁸ Broad definition of "Applications Service Providers" under the CMA 1998 - person who provides an Applications Service

¹⁵⁹ PDP (2017). The personal data protection code of practice. https://www.pdp.gov.my/ppdpv1/wp-content/uploads/2024/07/KOD-TATA-AMALAN-PERLINDUNGAN-DATA-PERIBADI-UNTUK-SEKTOR-KOMUNIKASI-ENGLISH-VERSION.pdf ¹⁶⁰ MCMC (2024). Frequently asked questions (FAQ) on the regulatory framework for internet messaging service and social media service providers in Malaysia, page 3. https://www.mcmc.gov.my/skmmgovmy/media/General/pdf2/FAQ-for-Regulatory-Framework.pdf

¹⁶¹ New Straits Times (2024). Govt names 8 platforms that must obtain license. https://www.nst.com.my/news/nation/2024/12/1150721/govt-names-8-platforms-must-obtain-licence

practices was published ¹⁶² on 20 December 2024, following the public consultation report on the draft code released on 18 December 2024 ¹⁶³, and a public consultation session held in October 2024 ¹⁶⁴. The code will undergo periodic reviews to ensure its relevance and effectiveness in addressing emerging online issues ¹⁶⁵.

As of 10 March 2025, three service providers have been successfully registered under the ASP(C) licence regime, namely (1) WeChat, (2) TikTok and (3) Telegram. According to MCMC, X is not required to register as its number of Malaysian users does not meet the 8 million user threshold stipulated under the regulatory framework. YouTube has contested its classification, highlighting that it functions primarily as a video-sharing platform, not a social media service¹⁶⁶.

In the case of Facebook, WhatsApp and Instagram. a ministerial notice pursuant to subregulation 23(2) of the Communications and Multimedia (Licensing) Regulations 2000 has been issued on 28 January 2025. The notice permits the two foreign companies under Meta to apply for registration as ASP(C) licensees. As of June 2025, the companies are in the process of preparing and submitting the required documents and information¹⁶⁷.

In view of the rapid evolution of technology and increasing convergence of digital services, MCMC further noted that it may expand the scope of the Regulatory Framework under the CMA 1998 to other services in the future. Naturally, prior to any such expansion, a comprehensive study taking into

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¹⁶² MCMC (2024). Code of conduct (best practice) for internet messaging service providers and social media service providers. https://www.mcmc.gov.my/skmmgovmy/media/General/Resources/MCMC_Code-of-Conduct-Best-Practice-for-Service-Providers.pdf

¹⁶³ MCMC (2024). Public consultation report on the draft code of conduct (best practice) for internet messaging service providers and social media service providers. https://www.mcmc.gov.my/skmmgovmy/media/General/PressRelease/MCMC_Public-Consultation-Report-on-Draft-Code-of-Conduct-Best-Practice-for-Service-Providers-18122024.pdf

¹⁶⁴ Malaysia Kini (2024). MCMC releases social media code of conduct public consultation report. https://www.malaysiakini.com/news/729345

¹⁶⁵ The Star (2024). MCMC publishes code of conduct for internet and social media providers. https://www.thestar.com.my/news/nation/2024/12/20/mcmc-publishes-code-of-conduct-for-internet-and-social-media-providers

¹⁶⁶ Written response from MCMC.

¹⁶⁷ Written response from MCMC.

consideration existing legal frameworks, jurisdictional boundaries, risk assessment and potential impact on the broader digital ecosystem will take place¹⁶⁸.

As Malaysia continues to navigate the complexities of the digital economy, it is essential for regulators, businesses, and other stakeholders to collaborate in creating a competitive, fair and secure digital environment that benefits all Malaysians. Thus, addressing these regulatory gaps, enhancing cooperation among regulatory bodies, and focusing on the regulation of emerging technologies will further strengthen the framework, ensuring it remains robust and responsive to the dynamic digital landscape.

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¹⁶⁸ Written response from MCMC.

4.6 Digital economy-related taxation

Taxation of digital economy companies in Malaysia is governed by four main regimes:

Table 11: Digital economy-related tax regimes in Malaysia

Tax	Applicable party	Rate as of June 2025	Responsible ministry/agency
Service tax on digital services (SToDS) ¹⁶⁹	 Foreign digital service providers with > MYR 500,000 annual sales to Malaysian consumers (known as Foreign Registered Person - FRP) 		Royal Malaysian Customs Department (RMCD)
Withholding tax ¹⁷⁰ (WHT)	 Malaysian businesses paying non-resident entities or individuals (e.g., foreign companies). Payments specified to following areas only: Contract payments: services performed outside Malaysia under contract Interest payments Royalty payments: Intellectual Property (IP) rights, software, and digital advertising 		LHDN

¹⁶⁹ RMCD (2025). MySToDS. https://mystods.customs.gov.my/about-mystods; RMCD (2018). Service tax (Rate of digital services tax) (Amendment) order 2024. https://mystods.customs.gov.my/storage/app/media/pdf/legislation/7-pua-67-2024-service-tax-rate-of-digital-services-taxamendment-2024.pdf

¹⁷⁰ LHDN (2025). Withholding tax. https://www.hasil.gov.my/en/legislation/withholding-tax/

Tax	Applicable party	Rate as of June 2025	Responsible ministry/agency
	 Special classes of income: Services, technical advice, or rental of movable property performed in Malaysia Non-resident public entertainers: Remuneration paid to public entertainers Others: All other payments to non-resident individuals) 		
Sales & service tax (SST) ¹⁷¹	 Service: applies to imported B2B services if not already covered under SToDS Sales: applies to imported digital goods (e.g., electronics) or digital hardware. 	5-10%	RMCD
Sales tax - Low Value Goods (LVG) ¹⁷²	 Foreign sellers of imported goods < MYR 500 per shipment to Malaysian consumers (sold online and delivered via land, sea or air mode) 		

Source: MyCC analysis

¹⁷¹ RMCD (2025). FAQs services tax. https://mysst.customs.gov.my/FAQServicesTax; RMCD (2025). Guidelines for the transition of sales tax effective rate changes on 1 July 2025. https://mysst.customs.gov.my/assets/document/Industry%20Guides/GI/GUIDELINES%20FOR%20THE%20TRANSITION%20OF%20SALES%2 0TAX%20RATE%20CHANGES.pdf

¹⁷² RMCD (2023). Sales tax on low value goods. https://mylvg.customs.gov.my/Home?utm

While the overall framework is comprehensive, including provisions for cross-border transactions, several broad issues are observed:

4.6.1 Unclear enforcement

While Malaysia has legislated digital tax rules through mechanisms such as the SToDS, enforcement remains unclear, especially against non-resident digital platforms. As of 2021, there are no reported SToDS-related matters¹⁷³.

Foreign service providers with no physical presence in Malaysia can choose to not comply with local tax obligations, knowing enforcement is logistically difficult. Should this occur, this will leave local businesses the burden to absorb the tax.

At present, voluntary registration remains the primary compliance approach for foreign service providers. In cases of non-compliance, experts have recommended that authorities to block access to non-compliant platforms through Internet Protocol (IP) restrictions as a potential enforcement measure¹⁷⁴.

4.6.2 SME compliance

SMEs may face complex and fragmented compliance obligations, dealing with multiple layers of indirect taxes: SToDS (paid by foreign vendors), withholding tax (borne by SMEs), and SST (on local services). Many SMEs may lack the internal tax expertise or financial capacity to correctly classify digital transactions, determine taxability, and manage cross-border withholding and service tax obligations¹⁷⁵.

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¹⁷³ International Tax Review (2021). The evolving world of Malaysia's digital services tax https://www.internationaltaxreview.com/article/2a68rfy5bw2ycq1zyexto/the-evolving-world-of-malaysias-digital-services-tax

¹⁷⁴ The Edge (2019). The state of the nation: The digital tax conundrum. https://theedgemalaysia.com/article/state-nation-digital-tax-conundrum

¹⁷⁵ Business Today (2024). SMEs warned of tax compliance issues amid digital waves. https://www.businesstoday.com.my/2024/12/08/smes-warned-of-tax-compliance-issues-amid-digital-waves

4.6.3 Profit taxation gap

Despite the introduction of indirect tax mechanisms such as the SToDS and WHT, Malaysia currently lacks a direct tax regime that effectively captures the profits earned by foreign digital companies from Malaysian consumers. Under existing income tax framework, a non-resident entity is only subject to Malaysian income tax if it has a permanent establishment (PE) in the country¹⁷⁶.

To address this gap, Malaysia has joined the global tax reform effort under the OECD's Base Erosion and Profit Shifting (BEPS) 2.0 initiative¹⁷⁷, which consists of two pillars:

- Pillar One aims to reallocate taxing rights to market jurisdictions, allowing countries to tax a share of the profits of large multinational enterprises even if those companies have no physical presence in the country. As of June 2025, Malaysia has yet to enact legislation to implement Pillar One's digital nexus and profit reallocation rules.
- Pillar Two introduces a global minimum effective tax rate of 15% for large MNEs (those with annual global revenues exceeding EUR 750 million¹⁷⁸) to discourage profit shifting to low- or no-tax jurisdictions. As of January 2025, Malaysia has implemented the Global Minimum Tax (GMT) regime, reflecting the core elements of Pillar Two¹⁷⁹.

¹⁷⁶ LHDN (2025). Non-resident company. https://www.hasil.gov.my/en/company/non-resident-company/

¹⁷⁷ OECD (2025). Base erosion and profit shifting (BEPS). https://www.oecd.org/en/topics/policy-issues/base-erosion-and-profit-shifting-beps.html

¹⁷⁸ OECDPillars (2023). Minimum tax implementation handbook (Pillar Two), page 9. https://www.oecd.org/content/dam/oecd/en/topics/policy-sub-issues/global-minimum-tax/minimum-tax-implementation-handbook-pillar-two.pdf

¹⁷⁹ LHDN (2025). What is Malaysia's position on GloBE Rules? https://www.hasil.gov.my/en/international/global-minimum-tax-gmt/what-is-malaysia-s-position-on-gmt/

4.7 Malaysia's digital economy and competition

Similar to the global landscape, anti-competitive cases and allegations are on the rise in Malaysia. Since 2023, a number of public complaints were raised to MyCC, of which majority is related to unfair trading conditions on suppliers and customers, such as inability to choose courier providers, unreasonably withholding or releasing money, and unfair operational policies.

Additionally, complaints related to limiting market access such as restricting users who favour overseas sellers in e-commerce and restricting access to the platform despite having required documentation were raised.

Aside from public complaints, various formal allegations and actions have been taken in recent years:

Table 12: Digital economy-related anti-competition cases in Malaysia

#	Year	Relevant sub-sector	Parties	Details
1	2015	Online trade	MyCCDagang Net	MyCC investigated and found that Dagang Net had abused its dominant position in the provision of trade facilitation services in Malaysia under the National Single Window (NSW) system. The abuse involved imposing an exclusivity clause in the MyChannel Partner Agreement (MCPA) with software providers over 2015 - 2016, preventing them from providing similar services for the upcoming uCustoms system and by refusing to supply electronic mailboxes to noncomplaint end users.
				In the end, the MyCC, pursuant to section 40(4) of the Competition Act 2010 imposed a financial penalty of MYR 12,878,094.97 (later reduced to MYR 10,302,475.98 in consideration of COVID-19) for an infringement period of October 2015 to November 2017. It also directed Dagang Net to cease its anti-competitive practices and required its directors and senior management executives to enrol in in a competition law compliance program ¹⁸⁰ .

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¹⁸⁰ MyCC (2024). Case. https://www.mycc.gov.my/case

#	Year	Relevant sub-sector	Parties	Details
2	2016	Government services	MyCCMyEG	MyCC found MyEG guilty of abusing their dominant position in the sale of mandatory insurance for online Pas Lawatan Kerja Sementara (PLKS) renewal applications in Peninsular Malaysia by imposing different conditions on equivalent transactions, thereby harming competition in the downstream market for such insurances.
				MyEG made it mandatory for employers to purchase Foreign Workers Insurance Guarantee (FWIG) through its platform and induced them to buy other mandatory insurances from MyEG by creating additional steps and delays for those who chose other insurers. This led to significant increase in MyEG's market share and commissions, putting competitors at a disadvantage.
				As a result, MyEG was fined a total of MYR 9,644,700 and directed to cease these anti-competitive practices immediately, provide an efficient gateway for all competitors within 60 days, and comply with General Insurance Association of Malaysia's (PIAM) rules and regulations or risk paying higher penalties ¹⁸¹ .

¹⁸¹ MyCC (2024). Case. https://www.mycc.gov.my/case

#	Year	Relevant sub-sector	Parties	Details
3	2021	E-commerce (retail marketplace)	 The Federation of Malaysian Consumers Associations (FOMCA) Consumers' Association of Penang (CAP) MyCC Shopee 	In 2021, FOMCA and CAP urged MyCC to investigate Shopee for allegedly offering MYR 3,000 in vouchers to sellers for discounts on service fees to close their Lazada stores during the 9/9 sale event, arguing that this stifles competition and unfairly attracts sellers to Shopee. The allegations were based on a leaked WhatsApp conversation from 2020 ¹⁸² .
4	2022	E-commerce (retail marketplace)	MyCCShopee	MyCC engaged with Shopee in response to escalating complaints from consumers and merchant's about Shopee's practices concerning dissatisfaction with its first and last mile delivery services. The engagement aimed to gain a better understanding of the online marketplace and logistics industries and to inquire into Shopee's practices that raised concerns.

¹⁸² FOMCA (2021). Consumer groups call on MyCC to probe e-commerce giant. https://www.fomca.org.my/v1/index.php/fomca-di-pentas-media/fomca-di-pentas-media-2021-21/1350-consumer-groups-call-on-mycc-to-probe-e-commerce-giant

#	Year	Relevant sub-sector	Parties	Details
				Shopee was required to justify its conduct and provide a detailed plan by the end of October 2022 on how it will address these issues without further jeopardising user interests.
				This has led to MyCC to continue monitoring other industry players in the relevant market and consider enforcing legal action if necessary to ensure a conducive environment for users in the digital economy ¹⁸³ .

Source: MyCC and FOMCA

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MyCC (2022). Shopee to respond to MyCC's enquiries. https://www.mycc.gov.my/sites/default/files/pdf/newsroom/NEWS%20RELEASE%20-%20SHOPEE%20TO%20RESPOND%20TO%20MyCC% E2%80%99S%20ENQURIES.pdf

On data privacy and protection-related cases, several recent accounts of data breach allegations and investigations (data protection related) in Malaysia have been made over the past few years including:

Table 13: Data privacy and protection-related cases in Malaysia

#	Year	Relevant sub-sector	Parties	Details
1	2022	E-commerce (retail marketplace)	• Shopee online user	An online user claimed that there were various listings on Shopee offering personal data for sale. One listing allegedly offered a million phone numbers for MYR 18, while another offered phone numbers of 'online shopping addicts' for MYR 15, among several others. Shopee had responded and stated that it is planning to take action against these sellers and has removed and blacklisted these listings as a start ¹⁸⁴ .
2	2022	E-commerce (C2C marketplace)	CarousellOnline users	Around 2.6 million Carousell users from Malaysia and Singapore were subjected to a data breach where the stolen data was sold online for USD 1,000. Information relating to usernames, full names, email addresses, phone numbers, and more were publicly listed posted online by the hackers.

¹⁸⁴ The Star (2024). Netizens express concern over online sales of Malaysian phone numbers (Updated with Shopee's response). https://www.thestar.com.my/tech/tech-news/2022/03/18/netizens-express-concerns-over-online-sales-of-malaysian-phone-numbers

#	Year	Relevant sub-sector	Parties	Details
				As a result, Carousell contacted all affected users and advised them to look for phishing emails or Short Message Service (SMSes) and to ignore any communications that request for sensitive information ¹⁸⁵ .
3	2022	Payment gateway	iPay88Online users	Payment gateway iPay88 for e-commerce and retail encountered a cybersecurity incident after its customers' card data from online transactions was compromised.
				As a result, banks were notified to immediately notify affected cardholders of the additional protective measures that will be taken to further protect them against risks of fraudulent or unauthorised transactions ¹⁸⁶ .

Source: MyCC, The Star, Malay Mail and The Straits Times

¹⁸⁵ The Straits Times (2022). Data of alleged 2.6m Carousell users being sold on Dark Web, hacking forums. https://www.straitstimes.com/singapore/data-of-alleged-26m-carousell-accounts-being-sold-on-dark-web-hacking-forums breaches Malaysia Malay Mail (2022).Major data in the past 24 months. https://www.malaymail.com/news/malaysia/2022/12/31/major-data-breaches-in-malaysia-in-the-past-24-months/47722

As the local digital economy continues to evolve, the need for a deeper understanding of market dynamics by regulators will grow. This, in turn, will require more efficient governance to effectively address emerging anti-competitive challenges specific to each sub-sector, as demonstrated by the above cases or allegations.

5. Sub-sector deep dive

5.1 Digital advertising services

5.1.1 Study scope

This sub-sector encompasses activities that support brands (advertisers) in promoting products and/or services to targeted audiences (customers) to achieve specific marketing goals in the digital space. This can be done through various digital channels (publishers), e.g., search engines, social media platforms, websites and video platforms.

The primary facilitators of the interaction between digital advertisers and digital publishers are intermediaries, including ad exchanges, ad networks, supply-side platforms (SSP), and demand-side platforms (DSP). These platforms are defined by several key characteristics: Firstly, they operate through digital systems, allowing advertisers and publishers to carry out transactions for their ad campaigns and ad inventories respectively, both parties benefit from having data driven targeting capabilities to inform their buying and selling decisions.

Secondly, online advertising benefits from data-driven targeting capabilities, where the use of big data and algorithms allow advertisers to refine their audience targeting and continuously optimise their campaign performance. This is done via data management platforms (DMP) to leverage vast amounts of data for analysis, informing strategies and optimisations made on SSPs and DSPs. Digital advertising can also be carried out via direct interaction between brands and digital publishers.

The activities of the digital advertising services sub-sector impact the following MSIC industries:

Table 14: MSIC codes relevant to the digital advertising services subsector

MSIC Code	MSIC Industry Description		
58190	Publishing of catalogues, photos, engraving and postcards,		
20140	greeting cards, forms, posters, reproduction of works of art,		

MSIC Code	MSIC Industry Description			
	advertising material and other printed matter, not elsewhere classified			
62099	Other information technology service activities, not elsewhere classified			
63112	Data processing activities			
63120	Web portals			
73100	Advertising			

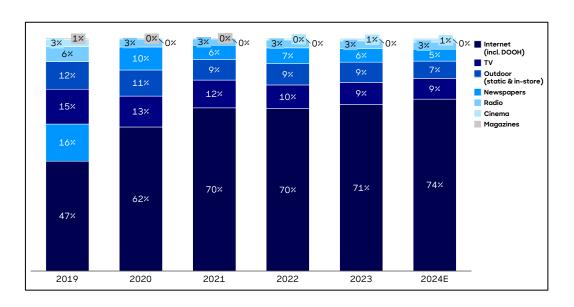
Source: MSIC

5.1.2 Market structure and supply chain

5.1.2.1 Market structure

The advertising industry in Malaysia has experienced robust growth in recent years. From 2019 to 2023, total advertising expenditure has increased from MYR 5.2 billion to 7.2 billion (8.6% in CAGR)¹⁸⁷.

Figure 24: Overall advertising market in Malaysia by media type, 2019 - 2024E [%]



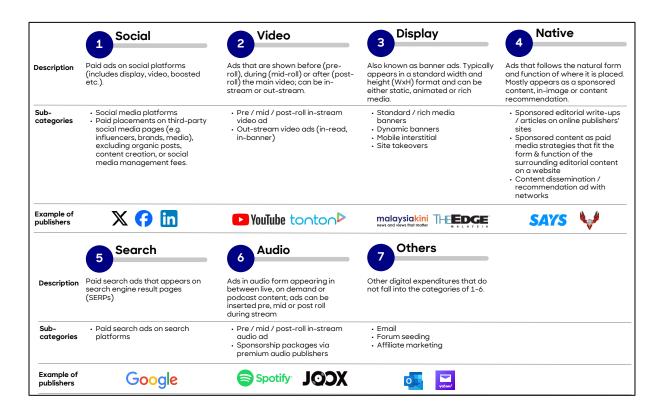
Source: Malaysian Advertisers Association (MAA)

Digital advertising is the main driver of the overall market expenditure. In 2023, approximately 71% of the total advertising market (MYR 5.1 billion) comes from the internet (inclusive of Digital-Out-Of-Home - DOOH). This trend is expected to continue growing in 2024, reaching MYR 5.5 billion and accounting for 74% of total expenditure¹⁸⁸.

Key types of digital advertising contributing to this market include:

187 MAA (2024).Malaysian Digital ADEX 2024. report https://www.malaysiaadvertisers.com.my/category/adex (2024).Malaysian ADEX report 2024. Digital https://www.malaysiaadvertisers.com.my/category/adex

Figure 25: Description of reported ad formats



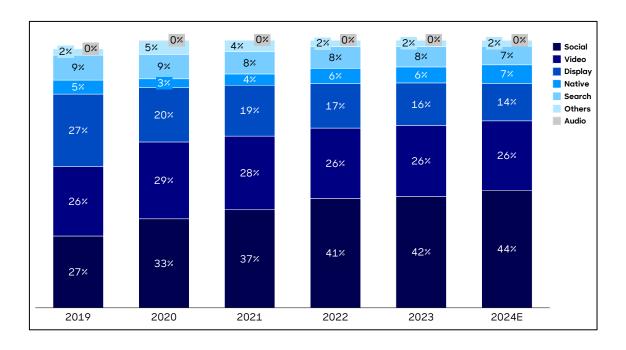
Source: MyCC analysis

Specifically on digital online platforms (excluding DOOH), the market as of 2023, is dominated by social media at 42%. This is followed by 26% on video and 16% on display. This trend aligns with MyCC's survey findings, where most advertisers prefer to invest in social ads, followed by video, with display attracting the least spending. The trend is also expected to strengthen for social, with an estimated 44% share of total digital advertising expenditure by the end of 2024¹⁸⁹.

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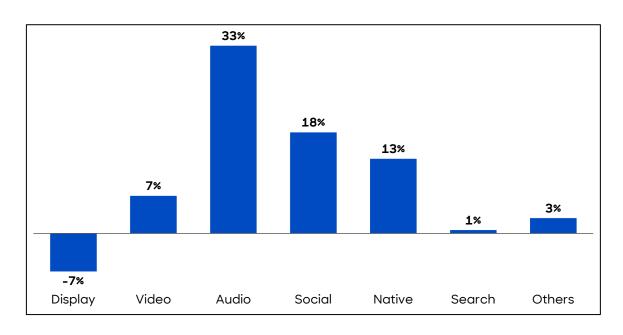
¹⁸⁹ Estimation from Media Specialist Association, with collaboration with MAA and MDA. Based on data from 21 agencies, which is estimated to cover ~60% of the total digital advertising expenditure in Malaysia.

Figure 26: Digital internet advertising mix in Malaysia, 2019 - 2024E [%]190



Source: MAA

Figure 27: Digital advertising channels CAGR in Malaysia, 2019-2024E [%]191



Source: MAA

190 (2024). MAA Malaysian Digital ADEX 2024. report https://www.malaysiaadvertisers.com.my/category/adex (2024).Malaysian 2024. Digital ADEX report https://www.malaysiaadvertisers.com.my/category/adex

Over the past five years, video, audio, social, and native ads have shown the highest growth rates as more Malaysians prefer to consume these types of content. Inventory volume of display ads, especially static display ads, is reducing as newer ad formats prove to be more effective and interactive. Search ads continue to maintain a presence in the market due to the continued trust and reliance of larger local players and multinational corporations (MNCs) on this type of ad format.

Several key trends are shaping the digital advertising landscape in Malaysia, with the rise of digital media being a significant driver of growth. As Malaysians increasingly engage with online content, brands have shifted their focus to digital platforms (e.g., e-commerce stores), recognising the importance of reaching audiences where they spend most of their time. This trend has also been accelerated by the proliferation of smartphones and improved internet connectivity, allowing for a seamless transition to digital platforms.

Separately, data analytics and personalisation have also become crucial in digital advertising, with advertisers increasingly using sophisticated analytics tools to gain insights into consumer behaviour, allowing for highly personalised ad campaigns. This tailored approach increases engagement and conversion rates, making it a key strategy for success.

5.1.2.2 Supply chain

The digital advertising ecosystem consists of several key actors, each playing a critical role in the supply chain:

Data Service Providers / Data **Management Platform** Social / search platforms and content creators **Intermediaries Demand side** Supply side Ad agencies **Publishers** Advertisers **Audience** Ad Ad platforms ◆ platforms exchanges networks (SSP) (DSP)

Figure 28: Supply chain of the digital advertising services sub-sector

Source: Interaction with industry players and MyCC analysis

Advertisers: Companies that seek to promote their products, services, or brands through digital advertising channels. The primary goal is to reach target audiences effectively, driving brand awareness, engagement and conversions. Advertisers may interact with advertising agencies for strategic campaign development and with DSPs for automated ad purchasing. Advertisers can also connect directly with publishers for advertising opportunities. Examples of Malaysian advertisers include Mondelez Malaysia, Celcom Digi and Gerbang Alaf Restaurants (McDonald's).

Advertising agencies: Serve as partners for advertisers, involved in the designing, managing and executing digital marketing campaigns. They offer a range of services, including creative development, media planning, and analytics, often charging clients through retainer fees or a percentage of ad spend. Agencies collaborate closely with content creators to develop engaging content and with DSPs and ad networks to optimise ad placements. Example of advertising agencies operating in Malaysia include Dentsu, WPP Group, Group M.

Demand-side platforms (DSPs): Facilitate the automated purchasing of ad impressions for advertisers, enabling them to target specific users based on online behaviour and demographics. These platforms take part in real-time bidding systems, allowing advertisers to bid for ad space across multiple publishers efficiently. Their revenue models often involve subscription fees, or a percentage of the total ad spend. DSPs provide advertisers with the tools to manage and analyse their digital advertising campaigns effectively. DSPs interact with advertisers to optimise campaign performance and with ad networks to access inventory. Selected DSP players include The Trade Desk and Google Display & Video 360.

Ad networks: Act as intermediary in the ecosystem, providing platforms where advertisers can buy, and publishers can sell ad inventory. Ad networks aggregate inventory from various publishers and offer it to advertisers, often taking a commission on sales. Selected players include Google Display Network, Adzymic, Meta Audience Network.

Ad exchanges: Enables a marketplace by aggregating inventory from publishers selling via SSPs and connecting them with advertisers seeking to buy ad inventories via DSPs based on their ad campaigns goals, often including factors such as audience segments, contextual relevance, and geographic location. This marketplace is where real-time auctions are facilitated, allowing multiple advertisers to bid on the same ad inventory, thus increasing competition and driving up potential revenue for publishers. Nowadays, an important aspect of ad exchanges is the practice of dynamic allocation to allow publishers to optimise their ad inventory by prioritising the highest-paying ad sources on a real-time competition basis to ensure every impression is served to the highest bidder, thus maximising revenues for publishers. Selected players include Google AdX¹⁹², Magnite, PubMatic.

Supply-side platforms (SSPs): Facilitates interactions between publishers and various ad networks and exchanges, aiming to optimise revenue opportunities through bidding processes. They enable publishers to manage and monetise their digital ad inventory, using data analytics to determine the best pricing and placement strategies for maximum revenue potential. They often charge fees based on a percentage of ad revenue or a flat monthly rate, allowing publishers to benefit from a more competitive bidding process for their inventory. Selected players include Google Ad Manager, Meta Audience Network, Magnite, PubMatic.

Search / social platforms & content creators:

- Search platforms: Platforms that provide search results based on user queries. They provide advertising spaces within their ecosystems, allowing advertisers to reach highly targeted audiences actively seeking specific information or products. Search platforms utilise auction-based pricing models, where advertisers bid for placements based on demand and ad relevance. Key players include Google, Bing.
- **Social platforms:** Online networks that enable users to create, share, and engage with content and connect with others. These platforms

¹⁹² Google AdX provides the opportunity to outbid reserved or guaranteed deals, not automatically prioritising the highest paying ad source; Google (2025).

provide advertising spaces that allow advertisers to reach highly targeted audiences based on user interests, behaviours, and demographics. They also utilise auction-based pricing models, enabling advertisers to bid for placements within users' feeds and timelines. Key players include Facebook, Instagram, X, TikTok.

Content creators: Utilising social platforms, individuals or teams develop engaging and relevant content tailored to target audiences. They play a crucial role in digital advertising by producing videos, blog posts, social media content and more, which help capture attention and foster connections with consumers. Content creators interact with advertisers or advertising agencies for direct sponsored deals and may also work with publishers to ensure their content is effectively distributed within the platform.

Publishers: Websites, apps, or digital platforms that provide advertising space and monetise their content by displaying ads to their audience. They earn revenue through direct sales of ad inventory, or programmatically via ad networks, and other means, including affiliate marketing, sponsored content, subscription fees, and selling user data. Selected publishers such as news site, video platforms rely heavily on traffic in order to gain ad revenue.

Publishers often leverage Search Engine Optimisation (SEO) ¹⁹³ and content marketing to enhance their visibility and audience engagement, ensuring a steady flow of revenue from their advertising efforts while maintaining a balance between content quality and ad placements. Publishers collaborate with advertisers to sell their ad inventory, while partnering with agencies and content creators to ensure ad content resonates with their target audience. Example publishers include The Star Online, The Edge, Astro Media.

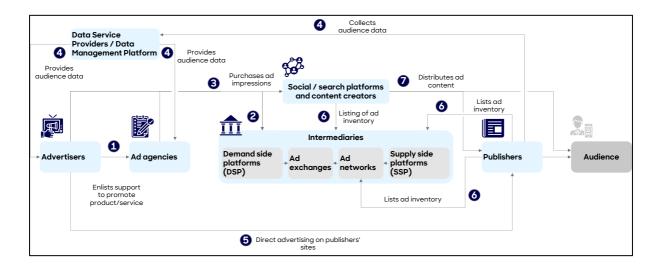
Data service providers / Data Management Platforms (DMPs): Centralised systems used for aggregating, organising, and analysing data from various sources to create detailed audience segments. They enable advertisers to personalise ad experiences, integrating first-, second-, and

¹⁹³ Practice of optimising a website's visibility and ranking in search engine results pages.

third-party data to optimise campaign ads in real-time. DMPs provide the tools advertisers and publishers need for audience targeting across different platforms and measuring campaign performance. DMPs also help manage data in compliance with privacy regulations, ensuring legal and ethical use of consumer information. Selected players include Nielsen, Oracle, Kantar.

5.1.3 Market practices

Figure 29: Key relationships along the digital advertising supply chain



Source: Interaction with industry players and MyCC analysis

1. Advertisers and ad agencies

In Malaysia, outsourcing of advertising planning and execution to ad agencies is common amongst large local brands.

Key practices between the two parties are as follows:

a. Selection and contractual agreements

Advertisers typically start by selecting ad agencies through a competitive process involving Request for Proposals (RFPs), pitches, and meetings to ensure a good fit. Once selected, agencies are engaged through various contractual agreements, such as retainers (recurring contract), project-based contracts, or performance-based contracts. These agreements define the scope of work (including campaign design, medium, management, and ad inventory bidding), deliverables, timelines, and compensation structures.

Larger advertisers tend to form long-term partnerships under retainer models, supported by pricing structures tied to either media spend or dedicated headcount, offering both stability and resource commitment. Smaller clients (budgets under MYR 20,000/month) are typically engaged through project-based contracts, reflecting more flexible and short-term needs¹⁹⁴.

In recent years, the rise of digital and data-driven marketing has led to more specialised contractual arrangements, particularly for programmatic advertising. These contracts often include clearly defined roles for data usage, audience segmentation, and campaign execution, alongside measurable performance outcomes such as click-through rates, conversions, and return on ad spend. Due to the fluctuating nature of digital ad inventory costs ¹⁹⁵ and competitive bidding environments, flexibility, transparency, and ongoing optimisation are key features of these agreements ¹⁹⁶. There is also a shift toward outcome-driven relationships, with some contracts incorporating key performance indicators (KPI-based) remuneration and performance bonuses to strengthen accountability and value delivery¹⁹⁷.

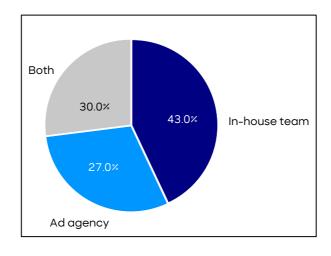
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¹⁹⁴ Input from IDI.

¹⁹⁵ Costs fluctuate because they depend on real-time demand, targeting, and competition among advertisers.

¹⁹⁶ NKMH media (2024). Programmatic advertising agency: Programmatic ads. https://www.nkmhmedia.com.my/programmatic-advertising-agency
¹⁹⁷ Input from IDI.

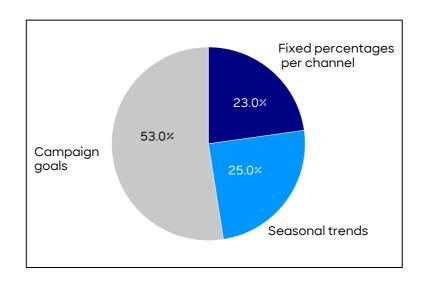
Figure 30: Advertisers' preferred method for buying ads



Source: MyCC's survey

However, it is important to note that majority of advertisers prefer to manage their advertising in-house. This is supported by the MyCC's survey which found that 43% of Malaysian advertisers buy ads in-house, while only 27% rely on agencies and 30% use both. Convenience is cited as a key reason for using in-house teams ¹⁹⁸. This is likely intended to maintain greater control over campaign execution and reduce coordination complexity compared to working with external partners.

Figure 31: Advertisers' budget allocation strategy



Source: MyCC's survey

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¹⁹⁸ MyCC's survey.

In terms of budget allocation, most advertisers prefer to allocate their budgets flexibly based on campaign goals (e.g., objective-driven KPIs) (53%), while others use fixed percentages per channel (e.g., allocation between social, video and display channels) (25%) or adjust based on seasonal trends (22%), such as increasing spending prior to Hari Raya, Chinese New Year and Deepavali.

(a) Collaboration & execution

Both parties maintain collaboration through detailed briefing sessions, regular check-ins, and sometimes integrated teams from the advertiser's side. Agencies take charge of creative development, media planning, and buying, ensuring that the campaign's visuals, words and messaging, and strategy align with the advertiser's objectives. They also handle the execution and management of campaigns, including budget oversight and compliance with legal standards.

Specifically on standards, advertisers/agencies must follow the Communications and Multimedia Act 1998 (CMA), which prohibit misleading, obscene, or deceptive ads. Industry-specific laws, such as the ban on tobacco ads and restrictions on alcohol advertising, further regulate content.

(b) Analytics and optimisation

As part of the performance tracking and optimisation, ad agencies can provide:

- I. Comprehensive analytics and reporting services typically delivered in the form of proprietary dashboards or reports. This provides real-time data or ad trends for monitoring purposes in addition to what ad intermediaries platforms provide to measure campaign performance. The key metrics used include:
 - Impressions: Number of times an ad is displayed or viewed on a digital platform.

- **Click-through rates**: Percentage of users who click on an ad after seeing it, calculated as (Clicks/Impressions).
- Return on Investment (ROI): Profitability of an ad campaign, calculated as profit divided by cost over campaign duration.
- II. Industry expertise and a strong understanding of trends by employing innovative strategies such as:
 - A/B testing: A method of comparing two versions of an ad or webpage to determine which one performs better in terms of user engagement or conversions.
 - **Market research**: Involves gathering and analysing data on consumers' preferences, behaviours, and needs to inform and improve marketing strategies and decisions.

Based on these insights, agencies recommend optimisations to the advertisers for them to enhance their ad campaign effectiveness amongst the target audience.

2. Advertisers (including ad agencies) and intermediaries

Ad tech (intermediaries) facilitates connections between publishers, advertisers with potential buyers, helping to streamline the online advertising process with relatively low upfront costs. It can contribute to more competitive bidding for ad space, assist publishers in selling unsold inventory, and offer smaller publishers the tools to compete alongside larger players. In some cases, this may support efforts to increase advertising revenue and operational efficiency.

Ad tech solutions also address issues such as ad fraud, brand safety, and webpage latency. For MSMEs, these technologies may help reduce advertising costs and improve access to digital advertising channels.

Interaction between both parties (excluding content creators) is focused solely on programmatic advertising, which is the automated process of purchasing ad space using software and algorithms. It allows advertisers

to target specific audiences with precision, using data to determine the most effective placement for their ads. This improves efficiency and scalability for better campaign performance.

Advertisers and ad agencies can carry out three types of programmatic ad buying:

- I. Real-time bidding (RTB): The most common form of programmatic ad buying (on impressions basis) through instantaneous auction using algorithms that target specific audience criteria. The auction is open to all parties until all available ad inventory has been sold. There are two main strategies used by players:
 - **Header bidding:** Where publishers offer ad inventory via SSPs and ad exchanges to multiple demand sources simultaneously, including DSPs and ad exchanges, therefore increasing visibility and bidding on the inventory.
 - **Waterfall method:** Where inventory is offered to one group of advertisers, ad exchange, or ad network at a time.

In addition, some platforms use hybrid strategies. For example, Google Display Ads' real-time bidding occurs via an internal auction within the Google Ads platform, where eligible ads are evaluated based on Ad Value, a combination of bid price and quality metrics such as predicted engagement and user relevance. The ad with the highest effective cost per mille (eCPM) wins. When bidding for non-Google inventory (e.g. through third-party exchanges), Google forwards the winning internal bid to the external auction, where it competes against bids from other DSPs or ad networks¹⁹⁹.

II. **Private Marketplace (PMP):** An ad exchange platform for selected advertisers to participate in an auction for premium ad inventory on an invite-only basis from publishers or SSPs. This provides greater control over ad quality and pricing.

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¹⁹⁹ Input from written response.

For context, within the Google ecosystem, these types of transactions are supported via Google Ad Manager (GAM), where PMPs operate under Google's Unified Auction framework. GAM allows publishers to compare PMP bids from Google's buy-side platforms (Google Ads, DV360) against those from external DSPs and ad exchanges in a first-price auction setting²⁰⁰.

III. **Programmatic Direct (PD):** Similar to traditional media buying where advertisers and publishers work one-to-one to create deals; advertisers can get priority to work with premium ad inventories, fixed pricing, and better audience targeting whilst publishers have certainty of filling premium inventory.

For instance, Google supports PD transactions via Programmatic Guaranteed deals on DV360 and GAM. In this setup, campaigns are booked in advance, but delivery and optimisation remain programmatic, allowing advertisers to combine certainty with automation²⁰¹.

All available ad inventory is sent to header bidder, including preferred

2 Unfilled ad inventory is sent back

3 Premium, high CPM ad inventory is sold to most suitable advertiser or platform

4 Unfilled ad inventory is sent back

5 Medium CPM ad inventory is sold through real-time auction amongst ad exchanges

6 Unfilled ad inventory is sent back

7 Low CPM, high quantity ad inventory is sold via ad networks in "wholesale" quantities

8 Unfilled ad inventory is sent back

Figure 32: Example of a real-time bidding process

Source: MyCC analysis

²⁰⁰ Input from written response.

²⁰¹ Input from written response.

The modern programmatic buying process usually starts with header bidding where publishers send out requests via code to get bids from multiple advertisers, DSP, and ad networks at the same time. The remaining ad impressions that are not filled during header bidding then goes through subsequent rounds of waterfall bidding on PMP, PD, ad exchanges and ad network platforms. Ad inventory prices will continue to drop in each stage either until all available ad inventory is sold off or there are no willing buyers in the marketplace.

A significant portion of programmatic ad buying in Malaysia is executed through Google's Display & Video 360 (DV360), a DSP that is tightly integrated with Google Ads and Google Ad Manager. According to Google's DV360, it allows marketers to manage their reservations, RTB, PMP, and Programmatic Guaranteed campaigns within a single interface 202. Google's ad tech stack allows advertisers to manage campaigns across YouTube, the Google Display Network (GDN), and thirdparty exchanges, often giving it access to high-quality inventory and data. It is deeply integrated with Google Ads, Google Ad Manager, and other Google-owned media (YouTube, Gmail, Search), enabling end-to-end control over campaign execution and optimisation²⁰³.

In Malaysia, there have also been initiatives to establish a local platform for programmatic buying. Examples include:

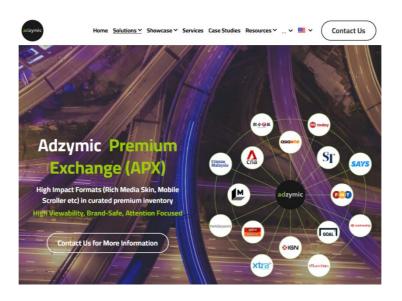
Malaysian Premium Publishing Marketplace (MPPM): One of the first and larger consortium of premium digital publishers in Malaysia which currently includes publishers such as China Press, GuangMing.com.my, Sinar Harian, Malaysiakini, World of Buzz, and NovelPlus²⁰⁴.

Google Marketing Platform (2025).Display & video 360. https://marketingplatform.google.com/about/resources/display-and-video-360product-overview/

²⁰³ Input from written response.

²⁰⁴ Malaysian Premium Publisher Marketplace (MPPM) (2025). The first publisher-led programmatic advertising marketplace in Malaysia. https://mppm.my/#about

Figure 33: MPPM ads exchange and Adzymic ads exchange





Source: MPPM and Adzymic

II. Adzymic: A regional leader in dynamic creative technology that created Adzymic Premium Exchange (APX) to integrate its creative management platform and dynamic creative optimisation technology. It facilitates high-impact and non-intrusive rich media ad units across premium publishers. It is listed as a solution partner for both Rev Media Group and Astro²⁰⁵.

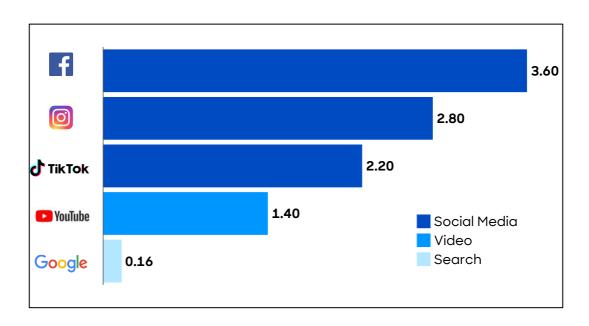
Different pricing models are utilised by intermediaries depending on the advertiser's goals. The few common pricing models include:

²⁰⁵ Adzymic (2023). Adzymic launches premium advertising network, Adzymic Premium Exchange (APX), in Singapore and Malaysia. https://www.adzymic.co/blog/adzymic-launches-premium-advertising-network-adzymic-premium-exchange

- I. **Cost per Mille (CPM)**: Measures the cost incurred by an advertiser for every 1,000 ad impressions.
- II. Cost per Click (CPC): Measures the cost incurred by an advertiser each time a user clicks on their ad.
- III. Cost per Acquisition/Action (CPA): Measures the cost incurred by an advertiser for each specified action, such as a sale or sign-up.
- IV. **Cost per View (CPV)**: Measures the cost incurred by an advertiser each time a video ad is viewed.

Generally, advertisers prefer to pay for ad space on a CPC basis as it allows them to align it with performance-based outcomes, whereas publishers favour CPM as it ensures revenue is based on impressions and is the most widely adopted metric in the industry. Intermediaries that can reliably calculate and reconcile the two metrics can stand to gain by converting advertisers' CPC, CPA, and CPV demand to publishers' CPM supply. However, methods of this conversion and calculation vary between intermediaries and are not transparent.

Figure 34: Approximate average CPM rates of search, video, and social ad formats in Malaysia, 2024 [USD]²⁰⁶



Source: Bridging Points Media

Online research shows that there are distinct differences in average CPM rates across different ad formats. Social media, due to its effectiveness, demands a higher CPM rate compared to other ad formats like video and the traditional search. Advertisers also indicated overall rates have either

²⁰⁶ Bridging Points Media (2021). Google AdSense CPM rates by countries. https://www.bridgingpointsmedia.com/google-adsense-cpm-rates-by-countries; (2025). World Population Review Adsense CPC rates bv country. https://worldpopulationreview.com/country-rankings/adsense-cpc-rates-by-country; Is This Channel Monetized (2025). YouTube CPM in 2025 (full data analysis): rates by country and category how to increase https://isthischannelmonetized.com/data/youtube-cpm; Silver Mouse (2019). Which ad (with highest CPM) for YouTubers? the best https://www.silvermouse.com.my/blog/best-cpm-ad-format-for-youtubers/; The SR Zone (2025). YouTube CPM & RPM rates by country 2025 [with list]. https://www.tsz.com.np/2021/07/youtube-cpm-and-cpc-rates-by-country.html; Lebesgue (2024). Optimizing Facebook ads CPM in different countries. https://lebesgue.io/facebook-ads/facebook-cpm-by-country; Enhencer (2025). 2024 CPM: Facebook ads country stats for e-commerce Shopify. https://enhencer.com/blog/cpm-of-facebook-ads-2024; (2024).Droixagency Instagram ads price Malaysia. https://droixagency.com/blog/b/instagram-ads-pricemalaysia; Marketing Lancers (2024). TikTok ads Malaysia: 2024 cost guide & ROI analysis [updated]. https://marketinglancers.com.my/tiktok-ads-cost-malaysia/

remained stable or increased, reflecting moderate upward pressure on costs²⁰⁷.

In addition to their role in ad delivery and performance reporting, major ad tech platforms provide various forms of user support, onboarding assistance, and transparency-related resources to advertisers. These measures are aimed at improving platform usability, addressing technical issues, and helping advertisers especially those with limited in-house expertise navigate campaign implementation more effectively. Most major platforms offer publicly accessible self-help resources, including:

- Product overviews and feature documentation,
- Policy guidance on ad approvals and restrictions,
- Explanations for common issues (e.g. ad disapprovals),
- Educational content in multimedia formats (e.g. video tutorials, infographics).

These materials are designed to reduce platform friction, promote compliance, and enable users, particularly small or new advertisers to self-serve more effectively.

3. Advertisers/ad agencies and social/search platforms and content creators

(a) Social / search network marketing

Advertisers and ad agencies utilise social media and search platforms for advertising to leverage the platform's established large audience base. Specifically, it is common for MSMEs in Malaysia to utilise social platforms such as Facebook, Instagram, and TikTok to keep up with consumer trends and preferences. As for larger enterprises and MNCs, they continue to rely on search platforms to maintain their internet and online presence, with Google being the most widely used search platform in Malaysia²⁰⁸.

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²⁰⁷ MyCC's survey.

²⁰⁸ Input from IDI.

(b) Influencer marketing

This relationship enables advertisers to effectively target and engage potential customers through trusted and influential voices. Historically, platforms like Meta (Facebook) supported publishers with solutions such as Instant Articles, enabling them to post content integrated with ads, which helped Meta grow its audience significantly. However, the dynamics have shifted over time, with content creators gaining more influence alongside changes in Meta's policies. This has led to rapid growth in influencer content that offers a larger and more accessible audience. This evolution has sparked discussions on the need to regulate and improve digital marketing practices, as existing regulations often overlook these recent developments.

Ad formats through this type of interaction are typically native, done seamlessly with the platform or content they are associated with, making the promotion feel natural or non-disruptive to their audience, and are increasingly gaining traction. They are widely used as part of a brand's affiliate marketing strategy.

Advertisers may access influencers or content creators via ad agencies such as Nuffnang²¹⁰ and Involve Asia²¹¹, who both have strong presences in Malaysia. These agencies help connect advertisers with content creators and influencers to organise affiliate marketing campaigns through social media platforms. Local publishers such as REV Media²¹² and Astro²¹³, have their own influencer marketing platforms or subsidiaries

²⁰⁹ Projected to grow 36% from 2024 and 2025 to reach MYR 140.1 billion; The Edge (2025). Influencer marketing gains ground as global ad budgets tighten. https://theedgemalaysia.com/node/759021

²¹⁰ Influencer and content marketing company with over 15 years of experience which caters to brands (e.g., Guardian, F&N, Mamee etc.) and creators within its ecosystem. https://www.nuffnang.com.my/

²¹¹ Affiliate marketing platform for advertisers (e.g., Bike, Zalora, and Sephora etc.) and over 500 partner brands (e.g., Shopee, Lazada, and Tokopedia etc.) https://involve.asia/blog/what-is-involve/

²¹² Digital publisher in Malaysia specialised in data-driven digital marketing solutions aimed at engaging its consumers (e.g., SAYS, OHBULAN!, etc.) https://revmedia.my/about-us/

²¹³ Malaysian satellite television, streaming television and IPTV provider; it possesses a Media Solutions division that uses targeting technology to create audience segments for multi-channel campaigns. https://astro-malaysia.com/

such as SPARK²¹⁴ to grow and consolidate all sponsored social media content and influencer marketing within Media Prima and Rocketfuel Entertainment²¹⁵ to power influencer marketing space with its dynamic approach to talent management and talent-driven digital content via Astro. This allows content creators to utilise their digital assets, or publishing mediums the flexibility to generate income via the gig economy.

Should advertisers or brands choose to access influencers directly, social platforms also provide tools for advertisers to identify and collaborate with creators who align with their brand and have significant following, while search engines help in discovering creators whose content matches relevant keywords and user interests to generate more authentic engagement with the brands' customers. Examples include:

- **TikTok:** Creator Marketplace serves an analytics tool within TikTok that allows brands to see an influencer's engagement reach, views, and demographic, allowing them to search for influencers and contact them directly via the TikTok platform²¹⁶.
- **Facebook:** Branded Content Tools provide advertisers with the ability to identify creators who have tagged their posts as branded content. This functionality offers visibility into engagement metrics and facilitates the approval and subsequent amplification of such posts through Facebook Ads Manager²¹⁷.
- **Instagram:** Creator Marketplace enables advertisers to search for influencers based on audience attributes, content categories, and engagement data, supporting direct outreach and campaign management within the Instagram platform²¹⁸.

²¹⁴ REV Media Group (2025). Spark. https://revmedia.my/brand/spark/

²¹⁵ Marketing Magazine (2017). Rocketfuel Entertainment to ignite influencer marketing with stardom. https://marketingmagazine.com.my/rocketfuel-entertainment-to-ignite-influencer-marketing-with-stardom/

TikTok (2025). Creator academy. https://www.tiktok.com/creator-academy?tag=sales%252520ready%252520leads

²¹⁷ Meta (2025). Branded content. https://creators.facebook.com/tools/branded-content/

²¹⁸ Instagram (2025). About Instagram's creator marketplace. https://help.instagram.com/337707278243327?locale=en_US

• YouTube: BrandConnect (formerly FameBit) is integrated into YouTube's ecosystem to connect advertisers with creators for branded content initiatives, using YouTube's internal data to suggest creators whose audience profiles and engagement trends align with specified campaign parameters²¹⁹.

4. Data management platforms and advertisers/ad agencies/publishers

(a) Data collection and analytics

Data management platforms enhance targeting precision by segmenting audiences based on integrated data from various sources, including:

- First-party: Data collected by e-commerce and offline transactions, Customer Relationship Management (CRM) systems, and website & mobile app analytics.
- II. **Second-party:** First-party data information collected by one company and sold or traded to another.
- III. **Third-party:** Supplied by data brokers that collect data via trackers in publishers' and merchants' websites.

Traditional data service providers such as Nielsen, Kantar, and Comscore who have a significant active presence in Malaysia, mainly through larger companies or MNCs. These providers usually adopt subscription-based revenue models to provide either data licensing or custom analytics services for advertisers. Their services include access to vast datasets, audience segmentation tools, and real-time analytics for optimising ad campaign strategies and achieving better ROIs. Services such as these are continuously evolving due to the increasing awareness of data privacy and protection in many countries around the world.

Some of the more popular social and search companies such as Google and Meta have integrated DMPs (e.g., Google Analytics or features within

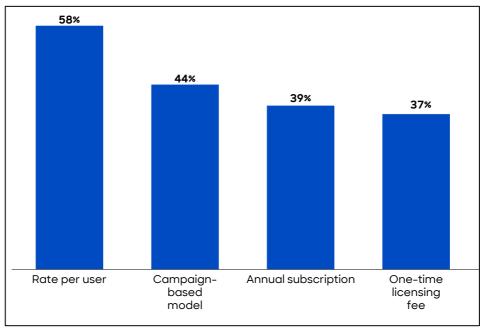
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YouTube (2025). Get started with YouTube BrandConnect. https://support.google.com/youtube/answer/9385307?hl=en

Meta Audience Network) to integrate seamlessly into their advertising ecosystem, which is widely accessible by anyone who has an account and utilises its platform.

Some local players in Malaysia (e.g., REV Media Group) are attempting to rival and better market their publishing services to more advertisers by investing in creating their own data collection and management platforms. Through REV ID, a single sign-on and data management platform launched in 2022, REV Media Group integrates first-party data from its various assets, including digital platforms, BIGTREE (its out-of-home advertising network), Wowshop (e-commerce), and on-ground events like *Jom Heboh*. The system consolidates both personal data (such as login credentials) and behavioural insights (including content preferences, shopping habits, location, and event engagement) to build a unified audience profile for advertisers²²⁰.

Figure 35: Methods used by advertisers to obtain user data, June 2025 [%]



Source: MyCC's survey

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²²⁰ REV Media Group (2022). REV Media Group accelerates first party data with unifying audiences across digital out of home, e-commerce and on-ground events. https://revmedia.my/rev-media-group-accelerates-first-party-data-with-unifying-audiences-across-digital-out-of-home-e-commerce-and-on-ground-events/

Such move is favourable towards local players due to advertisers' growing appreciation of localisation and contextual targeting amongst its Malaysian audience. According to the MyCC's survey, advertisers typically access user data through pay-per-profile (58%), where they purchase individual user data segments (often based on demographics or behaviour for precise targeting). The second is the campaign-based package (44%), where data is bundled as part of a broader media or campaign offering by publishers or platforms, providing pre-aggregated audience insights aligned with the campaign's objectives.

In terms of cost, annual spending on user data typically ranges from MYR 10,000 to MYR 40,000. Over the past two years (2023 to 2024), the cost of user data has mostly increased, with many reporting cost hikes between 5% and 30%. This reflects growing reliance on data-driven targeting and rising demand for high-quality, actionable audience insights²²¹.

Although advertisers value first-party data for its accuracy and compliance with privacy regulations, access to such data remains costly, resulting in low adoption among Malaysian advertisers. According to the MyCC's survey, most advertisers reported low reliance on first-party data, moderate use of second-party data, and a heavy dependence on third-party data²²², highlighting a disconnect between strategic priorities and current practices.

Separately, concerns also persist around the potential misuse of first-party data by dominant platforms²²³. While first-party data offers benefits like improved personalisation and reduced reliance on third-party cookies, its limited scale and reach pose challenges for marketers aiming to expand their audience base ²²⁴. This limitation often necessitates partnerships or data sharing, raising concerns about data silos and the potential for misuse by entities with extensive access to such data.

²¹ Mv/

²²¹ MyCC's survey.

²²² MyCC's survey.

²²³ Appsflyer (2025). The marketer's guide to first-party data. https://www.appsflyer.com/resources/guides/marketers-first-party-data/
²²⁴ Martech (2024). Why first-party data alone won't solve marketers' challenges.

https://martech.org/why-first-party-data-alone-wont-solve-marketers-challenges

Instances of data misuse have been reported, such as gambling firms in the UK covertly sharing user data with Meta without consent, leading to targeted ads for vulnerable individuals ²²⁵. Additionally, investigations by WIRED have revealed that platforms like Google's DV360 allowed targeting of sensitive user segments, including individuals with chronic illnesses and national security decision-makers, raising significant privacy concerns²²⁶.

5. Advertisers/ad agencies and publishers

(a) Direct ad buying

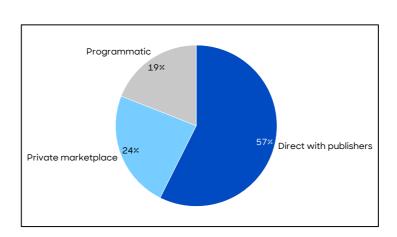


Figure 36: Ad purchasing channels, June 2025 [%]

Source: MyCC's survey

Manual direct ad buying is the traditional method where advertisers/ad agencies engage directly with local publishers (e.g., REV Media and Astro) to purchase ad inventories. This form of buying is the most common form amongst local advertisers due to the immaturity of the programmatic ad buying market in Malaysia. According to MyCC's survey with industry

²²⁵ The Guardian (2025). Revealed: gambling firms secretly sharing users' data with Facebook without permission.

https://www.theguardian.com/society/2025/feb/08/gambling-firms-secretly-shared-users-data-with-facebook-without-permission

²²⁶ Wired (2025). Google ad-tech users can target national security 'decision makers' and people with chronic diseases. https://www.wired.com/story/google-dv360-banned-audience-segments-national-security

players, more than half of the advertisers prefer using direct buys with publishers.

Furthermore, a survey performed by Forrester Consulting found that approximately 58% of Malaysian companies had yet to implement programmatic buying as of 2017²²⁷. Primary research conducted with industry players highlighted various concerns contributing to the lack of programmatic buying adoption. Specifically, the lack of transparency in tracking and validating these programmatic ads spend, particularly on major social media platforms such as Meta and Google, which do not consistently disclose revenues generated from Malaysia through programmatic buying ²²⁸. Astro, for example, noted that it still heavily utilises direct deals for high-impact and premium video ads, which are often preferred for branded content and premium inventory placements. According to them, advertisers engaging through direct buys are supported by a dedicated Digital Ad Ops team²²⁹.

In this relationship, advertisers/ad agencies often negotiate contracts that guarantee a specific number of ad impressions and involve fixed pricing agreements like Programmatic Direct, allowing brands a higher chance to secure preferable advertising slots on publisher sites that they are comfortable with which is often by larger companies due to the higher costs. This approach provides cost certainty and brand-safety for advertisers and revenue assurance for publishers. In Astro's case, rates for direct buys are typically negotiated at the beginning of the year, giving advertisers pricing clarity and predictability, which adds further appeal to the direct buying approach²³⁰. Consequently, advertisers/ad agencies can secure premium ad placements, such as prominent or large digital spaces on a publisher's widely viewed webpage or content, which offers higher visibility, engagement, and audience reach.

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Exchange Wire (2016). Almost half of APAC marketers buy programmatically; Indian consumers annoyed by mobile ads.

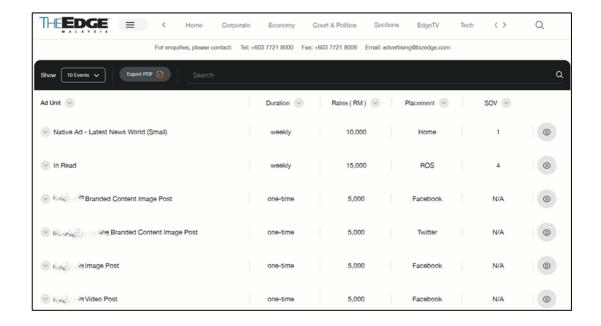
https://www.exchangewire.com/blog/2016/05/20/almost-half-of-apac-marketers-buy-programmatically-indian-consumers-annoyed-by-mobile-ads/

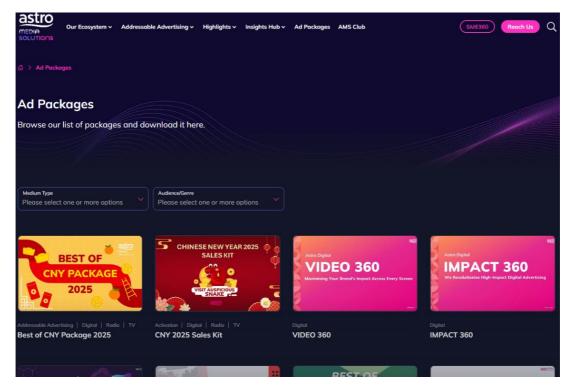
²²⁸ Input from IDI.

²²⁹ Input from IDI.

²³⁰ Input from IDI.

Figure 37: The Edge website and Astro Media Solutions website





Source: The Edge and Astro

Publishers can also reach out to advertisers/ad agencies via their own channels. For example, local news publisher The Edge and media conglomerate Astro post their ad inventory via packages or rate cards on

their website to allow interested advertisers to contact them directly for the ad inventory purchase.

(b) Ad performance measuring

Publishers also provide detailed performance metrics and custom reporting to help advertisers/ad agencies optimise their campaigns. Long-term partnerships between advertisers/ad agencies and publishers can often lead to better rates, priority placements, and collaborative opportunities, such as joint marketing initiatives.

Global players, in particular, hold a competitive edge in performance measurement due to their comprehensiveness. For example, Meta's platform offers "Call to Action" options linked to Cost per Action (CPA), providing advertisers with a more predictable understanding of campaign outcomes.

Choose an objective

Select an objective to see which calls to action are available.

Awareness

Choose a conversion location

The conversion location is the place where you want people to take action. For some objectives, the conversion location is automatically selected for you.

On your ad

View available calls to action

Not all calls to action may be available to you, depending on your industry.

Apply now

Apply now

Book now

Download

Learn more

Get quote

Send message

Order now

Figure 38: Example of Meta's guide for display ad

Source: Meta

Shop now Sign up

(c) Ad campaign collaboration

Both parties can collaborate to create custom content and native ads that align with the editorial style to engage the audience effectively. Advertisers/ad agencies can leverage the publishers' first-party data for precise audience targeting based on demographics, behaviour, and interests, and utilise contextual targeting to place ads in relevant content environments. These practices ensure a non-disruptive user experience and enhance ad relevance and engagement.

(d) Brand and publisher safety

Brand safety, or accountability between advertisers and publishers, has become more important in recent times due to the prevalence of ad fraud. This is caused by bots or unscrupulous actors generating false clicks or impressions, which leads to wasted ad spend, inaccurate reporting, and

ineffective campaigns for advertisers. Publishers' reputation may also be tainted when there is a high presence of fraudsters impersonating legitimate websites that manipulate ad placements or sell non-genuine, low quality ad spaces. Previous survey conducted by Statista conducted has shown that the potential cost of ad fraud worldwide is upwards of USD 81 billion²³¹.

Additionally, CHEQ's State of Fake Traffic 2023 report²³² found that 11.3% of inbound traffic from more than 15,000 websites and campaigns was invalid. This translated into an estimated USD 35.7 billion in wasted advertising spend. The study also found that click hijacking grew 125% year-on-year, malicious bot attacks grew 112%, and web scraping increased 101%. These artificial traffic inflated ad impressions and video views, misleading advertisers into believing their ads were reaching genuine audiences.

Separately, as part of its effort to promote brand safety, Meta is observed to have offer various tools to advertisers to control ad placement without removing underlying content. These include inventory filters that allow advertisers to limit exposure next to sensitive content, and block lists to avoid ads appearing on selected pages, creators, or types of content the advertiser deems unsuitable. Decisions on where ads appear are made by advertisers using these settings²³³.

(e) Ad fraud trend in Malaysia

As digital ad spending continues to grow domestically, the risk and occurrence of fraud are expected to rise proportionally.

Mile (2024). Are publishers the real victims of ad fraud? https://www.mile.tech/blog/are-publishers-the-real-victims-of-ad-fraud

²³² CHEQ (2023). Examining the state of fake traffic in 2023. https://cheq.ai/blog/state-of-fake-traffic-2023/

²³³ Written input from industry players.

According to the MAA, ad fraud in the country manifests through various tactics such as click bots, ad-stacking²³⁴, pixel stuffing²³⁵, and malicious applications. These methods are used to generate illegitimate impressions, clicks, or conversions, misleading advertisers and inflating campaign performance metrics.

While ad fraud is a growing concern among advertisers, the Media Specialists Association (MSA) has noted that Malaysia currently has one of the lowest ad fraud risk levels in SEA. This is attributed to the relatively small local publisher landscape, with limited domestic competition. In Malaysia, the majority of digital advertising spend is concentrated on just two dominant platforms - Facebook and Google, which have more robust fraud prevention mechanisms in place. As a result, the local market is considered less fertile ground for fraudsters compared to more fragmented digital ecosystems²³⁶.

6. Publishers/social & search platforms, content creators and intermediaries

1. Selling/buying ad slots

Publishers manage their ad inventory using first-party ad servers, which handle the allocation and display of various ad formats such as display, video, sponsored posts, and native ads. These ad servers prioritise direct ad sales but can also manage ads from RTB auctions and other sources. The servers decide which ads to show based on targeting criteria set by advertisers and then serve the ads. Additionally, ad servers can perform inventory forecasting to predict future ad availability and optimise the performance of ad campaigns based on stored historical data.

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²³⁴ Fraudulent practice where multiple ads are layered on top of each other in a single ad placement, so only the top ad is visible to users. However, all the ads in the stack register impressions, falsely inflating viewability metrics and charging advertisers for unseen ads.
²³⁵ A technique where an advertisement is shrunk into a tiny size (often 1×1 pixel), making it invisible to human viewers but still counted as an impression by ad servers. This manipulates viewability statistics and waste advertiser budgets on ads that cannot actually be seen.

The Edge (2020). Cover Story: Fighting digital ad fraud. https://theedgemalaysia.com/article/cover-story-fighting-digital-ad-fraud

Social media platforms and search engines can also play a role of the middleman to connect content creators and their products with these ad servers. Publishers, social platforms, and search engines then use intermediary exchange platforms to ensure optimal fill rates and revenue generation while maintaining high ad quality standards through the bidding process. This comprehensive approach allows publishers to offer custom creative solutions to meet different campaign objectives, effectively manage their ad slots, and maximise revenue.

Beyond traditional direct and programmatic sales, publishers are increasingly leveraging partnerships with other publishers to extend their reach and enhance monetisation strategies. For example, as seen in Astro's Digital YouTube Category Targeting Packages²³⁷, publishers can bundle their inventory with others to create category-specific ad packages. This allows advertisers to access a more targeted audience across multiple platforms rather than just a single publisher's ecosystem. By leveraging both direct sales and publisher-to-publisher collaborations, ad sellers can offer custom creative solutions, optimise ad slot allocation, and maximise revenue, all while maintaining strong targeting capabilities. This evolving model highlights the increasing importance of strategic partnerships in the digital advertising landscape.

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²³⁷ Astro (2023). Astro's YouTube category targeting packages, pages 4-10. https://astromedia.com.my/wp-content/uploads/2024/02/DigitalYouTube-Category-Targeting-Packages.pdf

Publisher's ad server

DSP

Ad Exchange

SSP

Ad Slot

Advertiser's ad server or CDN

Figure 39: Simplified process of publishers filling an ad slot

Source: Secondary research

- a. A user visits a webpage (example.com).
- b. The page has an ad slot with JavaScript that requests an ad from the ad server, sending user's information like location and device type.
- c. The ad server checks for matching direct campaigns. If none, it sends a tag for an RTB auction.
- d. The browser runs the SSP ad tag, sending user and page details to the ad exchange.
- e. The ad exchange notifies potential bidders of the available ad spot.
- f. Bidders analyse the bid request and submit their bids with the ad content they want to display.
- g. The ad exchange then awards the ad slot to the highest bidder in a second-price bid format including a small markup for intermediary fees of ~ USD 0.01. The winning ad is sent to the browser.

- h. The browser loads the winning ad, which often comes from a content-delivery network (CDN), and an impression-tracking pixel activates.
- i. The ad is displayed to the user within 100 150 milliseconds of the user accessing the website.

It is important to note that recent trends in internet users, especially the younger generation, using ad blockers to avoid intrusive or irrelevant ads does affect the way ads are being properly filled into an ad slot and also how users engage with them. This is especially impactful towards SMEs and smaller publishers that rely heavily on online ads for revenue will be severely impacted financially as their ability to monetise content reduces.

Other larger publishers such as Meta and Google may have advanced algorithms to allow ads to bypass ad blockers. This will pose anti-competitive behaviour as larger companies will continue to be preferred over other smaller players²³⁸.

7. Social & search platforms, content creators and audiences

Social media platforms and search engines enable content creators to engage with their audience instantly through live streams, real-time comments, and interactive posts. This immediate connection allows content creators to respond to their audience's feedback and preferences on the spot, fostering a dynamic and engaging environment. Publishers also benefit from real-time interaction by updating their content based on current trends and user behaviour, ensuring that their audience receives the most relevant and timely information.

Higher engagement is another crucial practice that enhances the interaction between these players, which is supported by more tailored and personalised content. Social media platforms and search engines help give content creators a platform to understand their audience's interests and behaviours, allowing content creators to craft tailored messages and stories that resonate with their followers, leading to higher engagement

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²³⁸ ExpressVPN (2018). Facebook vs. ad blockers: no matter who wins, you lose. https://www.expressvpn.com/blog/facebook-adblockers-sponsored-posts/

and loyalty. Publishers can then leverage tailored content to further attract and retain visitors by presenting articles, videos, and other media that align with their audience's preferences. This personalised approach not only improves the user experience but also encourages end-consumers to spend more time interacting with the content, thereby deepening their connection with the creators and publishers, increasing the effectiveness of this ad format.

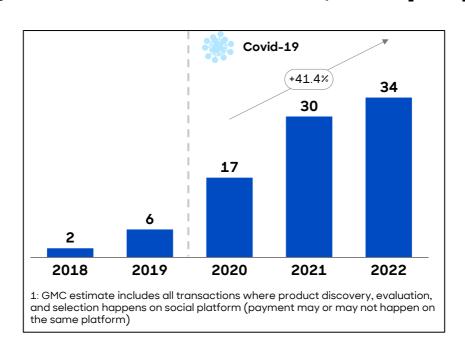


Figure 40: SEA e-commerce GMV on social platforms [USD b]²³⁹

Source: Cube Asia

This trend towards social commerce and interactive experiences was growing even before Covid-19 and has significantly accelerated post-pandemic. This was due to consumers' inability to physically access products during lockdowns, which heightened the appeal of live commerce. The surge in interest reflects a broader shift towards digital engagement and real-time interaction, making live commerce a vital tool for connecting with consumers in a more engaging and dynamic way. For example, on platforms such as TikTok Shop, buyers, from the comforts of their own homes, can get a first look at products via live demonstrations and opportunities to interact directly with their sellers, who then become

²³⁹ Cube Asia (2022). Social commerce in Southeast Asia 2022 https://cube.asia/social-e-commerce-in-southeast-asia/

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Report.

trusted figures to consumers, increasing their presence and engagement²⁴⁰.

²⁴⁰ The Edge (2023). Is the future of commerce social? https://www.theedgesingapore.com/digitaledge/digital-economy/future-commerce-social

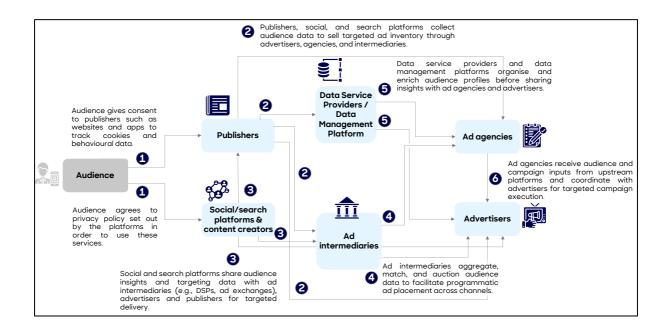
5.1.4 Data privacy and protection

The digital advertising ecosystem involves diverse stakeholders with differing data interests. Advertisers and publishers seek richer data for campaign effectiveness, while consumer preferences vary between valuing privacy or personalised ads.

Overall, the ecosystem relies heavily on the collection and use of consumer data to optimise ad targeting, measure campaign effectiveness, and enhance user experience. Various players in this ecosystem, including advertisers, ad agencies, DSPs, ad exchanges, ad networks, SSPs, social media platforms, search platforms, data service providers, and publishers, gather and process different types of data. These entities collect information through cookies, device identifiers, user registrations, and browsing behaviour to create detailed user profiles.

Each entity plays a unique role in the advertising supply chain and leverages data for specific purposes, such as personalising ads, optimizing bidding strategies, and improving ad placements. The table below provides an overview of the types of data collected by different digital advertising players, how this data is gathered, and what it is used for.

Figure 41: Data collection practices among digital advertisement service providers²⁴¹



Source: MyCC analysis

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²⁴¹Mix digital (2023). Cracking the code: how data is revolutionizing digital advertising. https://mixdigital.agency/blog/data-digital-advertising/; The Trade Desk (2025). Privacy and The Trade Desk Platform. https://www.thetradedesk.com/legal/privacy; Google (2025). Ads that respect your privacy. https://safety.google/privacy/ads-and-data/; Meta (2024). Privacy policy. https://www.facebook.com/privacy/policy/; Meta (2024). Privacy policy. https://www.facebook.com/privacy/policy/; Google (2024). Privacy policy. https://policies.google.com/privacy?hl=en-US#infocollect; Rev Media (2022). Privacy policy. https://www.revmediatv.com/page/privacy-policy; Astro (2024). Astro privacy notice - customers. https://product.astro.com.my/privacy; Oracle (2025). Oracle general privacy policy. https://www.oracle.com/my/legal/privacy/privacy-policy/; Nielsen (2025).Website https://www.nielsen.com/legal/privacyprivacy notice. principles/website-privacy-statement/

Data Service Providers / Data Social / search platforms **m** Publishers Personal data collected Demographic data (Age, gender Personal information Personal information (Email address, phone number, full · Personal information (Name, phone Personal Personal
information
(name, phone
number(s), email
address, address)
Financial data (name, email, phone, postal address) Business or professional information (e.g., name/identifying info, location information) number, payment details), Location data (ID address GDS Identifiers data (device info_birth date_IP addresses) User-generated content (Posts, photos, videos, comments), coordinates, zip code) First-party data (Email addresses Device and app Information (Device company, role) cookies as identifiers) IDs, operating system, IP address) Location and (billing/payment geographic data (IP address, geolocation) • Device and browser Location data (GPS, IP-based details) location, nearby devices)

Third-party and integration data Account security related information info (device type, browser, cookies, unique IDs) (Data from partners, synced contacts) security questions) Tracking and cookies (e.g., cookies pixel tags, browser data). records (emails, chats call recordings) Site usage and behavioural data
 Transaction or Behavioural data · User activity (Click-through rates, time · User activity (Sites visited, apps used, searches made) · User activity (Search history, conten-· Usage data of interactions, app usage patterns) spent on a page, search queries. purchase history, cookies as activity purchase history trackers) Contextual data . Current user activities (Keywords on a webpage, topic of a social media post, hashtaas in a post)

Figure 42: Types of data collected by key players along the supply chain²⁴²

Source: MyCC analysis

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²⁴² Mix digital (2023). Cracking the code: how data is revolutionizing digital advertising. https://mixdigital.agency/blog/data-digitaladvertising/; The Trade Desk (2025). Privacy and The Trade Desk Platform. https://www.thetradedesk.com/legal/privacy; Google (2025). https://safety.google/privacy/ads-and-data/; Ads respect your privacy. Meta (2024).policy. https://www.facebook.com/privacy/policy/; Meta (2024). Privacy policy. https://www.facebook.com/privacy/policy/; Google https://policies.google.com/privacy?hl=en-US#infocollect; (2022).(2024).Privacy policy. Media Privacy policy. https://www.revmediatv.com/page/privacy-policy; Astro (2024). Astro privacy notice - customers. https://product.astro.com.my/privacy; Oracle (2025). Oracle general privacy policy. https://www.oracle.com/my/legal/privacy/privacy-policy/; Nielsen (2025). Website privacy notice. https://www.nielsen.com/legal/privacy-principles/website-privacy-statement/

Key user data collected by each player along the supply chain include:

Table 15: Types of data collected by key players along the supply chain

Player	Data collected	
Advertisers and ad agencies ²⁴³	Demographic data (age, gender, education level, income), behavioural data (click-through rates, time spent on a page, search queries), contextual data (keywords on a webpage, topic of a social media post), location data (IP address, Global Positioning System - GPS coordinates, zip code), first-party data (email addresses, website behaviour, purchase history).	
Ad intermediaries ²⁴⁴	Personal information (email address, phone number, full name / identifying info, location information), Identifiers derived from device info, birth date, IP addresses, user activity data (sites visited, apps used, searches made).	
Search and social platforms ²⁴⁵	Personal Information (name, phone number, payment details), User-generated content (e.g., posts, photos, videos, comments), device and app Information (e.g., device IDs, operating system, IP address), activity and interaction data (e.g., search history, content interactions, app usage patterns), location data (e.g., GPS, IP-based location, nearby devices), third-party and integration data (e.g., data from partners, synced contacts), tracking and cookies (e.g., cookies, pixel tags, browser data).	
Publishers ²⁴⁶	Personal information (name, phone number(s), email address, address), financial data (billing/payment details), usage data of products/services, account	

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²⁴³Mix digital (2023). Cracking the code: how data is revolutionizing digital advertising. https://mixdigital.agency/blog/data-digital-advertising/

The Trade Desk (2025). Privacy and The Trade Desk Platform. https://www.thetradedesk.com/legal/privacy; Google (2025). Ads that respect your privacy. https://safety.google/privacy/ads-and-data/

²⁴⁵ Meta (2024). Privacy policy. https://www.facebook.com/privacy/policy/; Google (2024).Privacy policy. https://policies.google.com/privacy?hl=en-US#infocollect

²⁴⁶ Rev Media (2022). Privacy policy. https://www.revmediatv.com/page/privacy-policy; Astro (2024). Astro privacy notice- customers. https://product.astro.com.my/privacy

Player	Data collected		
	security-related information (passwords, security questions).		
Data	Personal information (name, email, phone, postal		
management	address), Business or professional information (e.g.,		
platforms ²⁴⁷	company, role), location and geographic data (IP address, geolocation), device and browser info (device		
	type, browser, cookies, unique IDs), site usage and		
	behavioural data, communications records (emails,		
	chats, call recordings), transaction or purchase history.		

Source: Secondary research

Oracle (2025). Oracle general privacy policy. https://www.oracle.com/my/legal/privacy/privacy-policy/; Nielsen (2025). Website privacy notice. https://www.nielsen.com/legal/privacy-principles/website-privacy-statement/

5.1.4.1 Data privacy and protection assessment

The assessment focuses on Google (specifically Google Search and YouTube), and Meta (specifically Facebook and Instagram), due to their digital dominant share in the global advertising space. Both players' business models heavily reliant on advertising revenue, which in turn depends on the extensive collection and utilisation of user data.

Facebook, Instagram, and YouTube leverage users' behavioural and social data, such as search queries, viewing habits, social interactions, and engagement patterns, to create detailed behavioural profiles. These profiles enable precise ad targeting and personalised content, maximising user engagement and advertiser value. Despite differences in presentation, these platforms operate within a unified data-driven advertising ecosystem.

Google Search's data management differs from platforms like YouTube, Facebook, and Instagram as it primarily builds user profiles based on recent search queries, making the data more transient and highly contextual ²⁴⁸. Unlike social platforms that accumulate long-term behavioural and social graph information to create persistent, detailed profiles, Google Search focuses on capturing a user's current intent during specific search sessions. This intent-driven approach emphasises immediate relevance over historical or social context, resulting in a data model centred around what users want at the moment rather than their broader digital footprint.

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²⁴⁸Search engine land (2020). Google is suggesting searches based on users' recent activity. https://searchengineland.com/google-is-suggesting-searches-based-on-users-recent-activity-334309.

Figure 43: Assessment of Google and Meta's alignment to PDPA principles

PDPA principle	Player	Data privacy and protection policies ²⁴⁹
General	Google	 Obtains user consent, including for ad-related data collection through cookie banners and privacy settings. Provides tools like "My Ad Centre" for users to manage ad personalisation settings.
	Meta	 Obtains user consent before collecting personal data and clearly communicates what data is collected, data usage. Consent is embedded through user acceptance of Meta's terms and privacy settings when using Meta products.
Notice and choice	Google	 Provides detailed information on the types of data collected and the purposes of collection, including ad personalisation and measurement. Users can modify their data sharing preferences and opt out of personalised ads through "Ad Settings."
	Meta	 Notifies users about data collection and its purposes, including ad targeting. Provides options to manage ad preferences, opt out of certain data uses, and control data shared with third parties.
Disclosure	Google	 Ensures sharing is done with user consent or as required by law. Discloses when personal data is shared with third-party partners for analytics, legal reasons, or service delivery, including advertising partners.

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²⁴⁹ Google (2025). Privacy policy. https://policies.google.com/privacy; Meta (2025). Privacy Policy. What is the Privacy Policy and what does it cover? https://www.facebook.com/privacy/policy/

PDPA	Player	Data privacy and protection policies ²⁴⁹
principle	Meta	 Data is shared with integrated partners and third parties under strict conditions, including for ad delivery, measurement, analytics, and legal compliance. Explicitly states that personal data is not sold.
Security	Google	 Implements device encryption (AES-256 encryption) and employs Transport Layer Security (TLS) protocols to secure data while in transit and at rest. Uses sandboxing, user biometric authentication, and security patches for Android devices.
	Meta	Uses encryption, multi-factor authentication, and regular security patches to safeguard personal data processed within its services.
Retention ²⁵⁰	Google	 Users are allowed to control how long data retention is kept via auto-delete settings. Users can delete web activity, location history, and ad-related data via their privacy dashboard. However, Google retains certain categories of data for defined durations, some indefinitely for account functionality and others for regulatory or security reasons but does not comprehensively disclose exactly which data sets are held for each purpose.
	Meta	Keeps data as long as necessary to provide services, comply with law, or protect interests.

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²⁵⁰ While enabling users to delete or control the retention period of their personal data can support compliance with the Retention Principle, the ultimate responsibility lies with the data controller. It is the controller's duty to take reasonable steps to ensure that all personal data is securely destroyed or permanently deleted once it is no longer required for the original purpose for which it was processed.

PDPA principle	Player	Data privacy and protection policies ²⁴⁹	
		Users can manage and delete data through tools like privacy settings.	
Data integrity	Google	 Allows users to edit or update ad-related preferences (e.g. interests, topics) via My Ad Centre. Ensures ad personalisation is based on recent activity (e.g. Search, YouTube history). 	
	Meta	 Users can manage and update their data through account and privacy settings. This includes modifying interests and information used for ad targeting. 	
Access	Google	 Users can view and manage ad-related data in Google Account and My Ad Centre. Provides the Google Takeout tool to export data, including ad-related history²⁵¹. Allows deletion of ad activity manually or through auto-delete settings. 	
	Meta	 Provides access tools enabling users to view, export, and delete their personal data through privacy settings and the "Access Your Information" feature. 	

Source: Google, Meta

Although Google and Meta appear to align well with Malaysia's PDPA in their official policies, there have been instances where their actual practices have deviated from these stated commitments.

In terms of the General criteria, in 2022, Google was fined USD 85 million by the State of Arizona for allegedly continuing to collect users' location data even after they had turned off location tracking. The State also noted that this data was used to serve targeted advertisements, contributing to

²⁵¹ Google (2025). Google takeout. https://takeout.google.com/

approximately USD 130 billion in advertising revenue in 2019²⁵². Separately, in January 2023, Meta was fined EUR390 million by the Irish Data Protection Commission for unlawfully processing user data for personalised ads on Facebook and Instagram ²⁵³. Meta allegedly embedded consent for targeted ads into its Terms of Service, requiring users to accept personalised advertising without a clear opt-in. The data included users' browsing activity, engagement patterns, and profile details.

Separately, on the Notice and Choice principle, starting May 27, 2025, Meta plans to train its AI models using personal data from Facebook and Instagram users in the EU without obtaining explicit opt-in consent ²⁵⁴. Instead, it relies on the "legitimate interest" basis under the General Data Protection Regulation (GDPR). The data includes user posts, interactions, and other profile activity. Austrian privacy group Noyb issued a cease-and-desist letter, threatening a class action lawsuit. They argue Meta is violating GDPR by not clearly informing users in advance and by restricting their ability to opt out, failing to provide genuine notice and choice over the use of their personal data.

On the Disclosure principle, in 2018, Indian digital payment company Paytm accused Google Pay of sharing consumer data with its affiliated entities, including third parties, for purposes such as targeted advertising. Paytm pointed out that although Google Pay's policy allowed access to user navigation, logs, and correspondence data, it did not disclose that this information would be used for advertising, nor did it seek additional user consent for such use²⁵⁵.

On the Security principle, in December 2024, the Irish Data Protection Commission fined Meta Platforms Ireland Limited EUR 251 million for GDPR

²⁵² Arizona Attorney General (2022). Attorney general Mark Brnovich achieves historic 85 million settlement with Google. https://www.azag.gov/press-release/attorney-general-mark-brnovich-achieves-historic-85-million-settlement-google.

²⁵³ BBC (2023). Meta fined €390m over use of data for targeted ads. https://www.bbc.com/news/technology-64153383

²⁵⁴ The Hacker News (2025). Meta to train AI on E.U. user data from May 27 without consent; Noyb threatens lawsuit. https://thehackernews.com/2025/05/meta-to-train-ai-on-eu-user-data-from.html

²⁵⁵ Business Today (2018). Paytm picks a fight with Google, alleges internet giant shares data with third parties. https://www.businesstoday.in/latest/corporate/story/paytm-accuses-google-pay-of-sharing-customer-data-with-affiliates-third-party-users-110289-2018-09-21

violations linked to a 2018 Facebook data breach. The breach was caused by a design flaw in Facebook's video upload feature. When users accessed the 'View As' function (used to preview their profile from another person's perspective), Facebook's system mistakenly triggered the video uploader and issued full access tokens. The tokens, which are meant to verify a user's identity, were incorrectly granted to the viewing session. As a result, attackers could use these tokens to log in as other users and access their accounts without needing passwords.

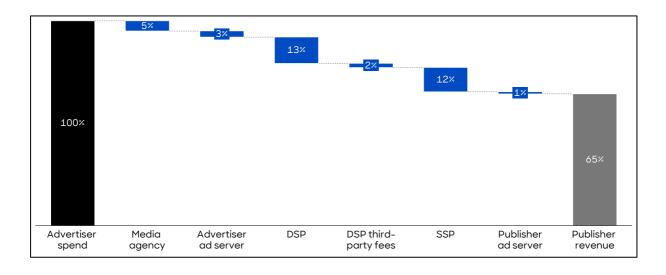
From 14 to 28 September 2018, attackers used automated scripts to exploit this flaw and gain unauthorised access to about 29 million accounts globally, including three million in the EU/European Economic Area (EEA). The accessed data included names, phone numbers, email addresses, and children's personal data²⁵⁶.

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²⁵⁶ Data Protection Commission (2024). Irish data protection commission fines Meta €251 million. https://www.dataprotection.ie/en/news-media/press-releases/irish-data-protection-commission-fines-meta-eu251-million

5.1.5 Supply chain take rates and approximate earnings by supply chain players

Figure 44: Take rates across UK's digital advertising services supply chain, 2019 [%]



Source: Competition and Markets Authority (CMA)

According to the Competition and Markets Authority (CMA), ad intermediaries capture at least 35% of the value in the display and video segments, which is largely due to intermediaries claiming that they are providing value-added functions by providing ad-tech to connect the supply chain seamlessly²⁵⁷.

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²⁵⁷ CMA (2020). Online platforms and digital advertising market study, page 65. https://www.gov.uk/cma-cases/online-platforms-and-digital-advertising-market-study

5.1.6 Sub-sector regulations

5.1.6.1 Relevant regulations

#	Act	Description	Relevance to competition	Relevance to data privacy and protection
1	Personal Data Protection Act 2010 (Act 709) by the Department of Personal Data Protection (PDP) under the Ministry of Digital	data in commercial transactions by regulating how personal information is	 implications for fair competition. Key provisions include: Section 8: Disclosure principle Section 43: Right to prevent processing for purposes of direct marketing. Section 129: Transfer of personal data to places outside Malaysia. 	to adhere to ensure consumers' awareness and acknowledgement of having their personal data processed. Key provisions include: Section 6: General Principle Section 7: Notice and choice principle Clause 9: Security principle

#	Act	Description	Relevance to competition	Relevance to data privacy and protection
		political opinions, religion beliefs, etc.). The Act applies to data processed either automatically or as part of a relevant filing system, requiring data controllers and processors to protect this information to prevent misuse or abuse. Other related rules, regulations and orders:		 Section 40: Processing of sensitive personal data Section 43: Right to prevent processing for purposes of direct marketing Section 129: Transfer of personal data to places outside Malaysia Section 130: Unlawful collecting, etc., of personal data
		Personal Data Protection		

#	Act	Description	Relevance to competition	Relevance to data privacy and protection
		Regulations 2013 Personal Data Protection (Class of Data Users) Order 2013 Personal Data Protection (Registration of Data User) Regulations 2013 Personal Data Protection (Fees) Regulations 2013		
2	Consumer	Ensure fair trade	, ,	·
	Protection Act	, ,	•	
	1999 (Act 599) by	-		
	Ministry of	provide redress	may provide positive impacts on	

#	Act	Description	Relevance to competition	Relevance to data privacy and protection
	Domestic Trade and Cost of Living (KPDN)		the issue of competitions in digital advertising industry. Key provisions include: Section 10: False or misleading representation. Section 12: Misleading indication as to price. Section 13: Bait advertising Part XI, Section 84A: Committee on Advertisement	 Section 24x: Restriction on disclosure or circulation of personal data Section 139: Use of confidential information
3	The Trade	Regulates false or	No explicit mention of matters	Supports data privacy by
	Descriptions Act	•	related to competition. However,	restricting misleading claims
	2011 (Act 730) by		it may promote fair competition	about data usage, security, and
	the Ministry of	statements, and	by prohibiting misleading	consumer rights in digital
	Domestic Trade	•	advertisements that could distort	advertisements. It helps to
	and Cost of Living	trade and	competition.	prevent fraudulent or deceptive
	(KPDN)	commerce to		data-related marketing
		prevent deceptive	Key provision include:	practice.

#	Act	Description	Relevance to competition	Relevance to data privacy and protection
		marketing practices. In the context of	 Section 18: False or misleading statement in advertisement 	Key provision include: • Section 35: Confidentiality
		digital advertising services, it ensures transparency in online advertisements, prohibits false claims, and protects consumers from misleading digital marketing tactics.		
4	Indecent Advertisements Act 1953 (Act 259) by the Royal Malaysia Police (PDRM) under the Ministry of Home Affairs	publication and distribution of obscene, indecent, or offensive advertisements to	No explicit mention of matters related to competition.	No explicit mention of matters related to data privacy and protection.

#	Act	Description	Relevance to competition	Relevance to data privacy and protection
		advertising standards. In the context of digital advertising services, it prevents the dissemination of inappropriate or misleading online content that may be harmful or exploitative.		
5	(Advertisement & Sale) Act 1956 (Act 290) by the	advertisement and	No explicit mention of matters related to competition.	No explicit mention of matters related to personal or private data privacy and protection.

#	Act	Description	Relevance to competition	Relevance to data privacy and protection
	Sedia Membernius VISAV	it mandates that all online advertisements for medicines obtain prior approval from the Medicine Advertisements Board (MAB) before publication, ensuring that digital platforms disseminate accurate and authorised medical information.		
6	Food Act 1983 (Act 281) by the Ministry of Health (MOH)	for the public against health hazards and fraud in the preparation,	•	data privacy and safeguard confidential business

#	Act	Description	Relevance to competition	Relevance to data privacy and protection
	Sedia Membanta VISA PILATAN KESIHATAN KESIHATA	In the context of the digital advertising industry, it regulates the promotion of food products to ensure that advertisements are not false, misleading, or deceptive, thereby safeguarding consumer interests.	Key provisions include: • Section 17: Advertisement	 Section 26: Non-disclosure of information Section 27: Manufacturing process and trade secret
7	Control of	Regulates the	No explicit mention of matters	This Act does not address data
	Smoking Products	registration,	related to competition.	privacy and protection in digital
	for Public Health	advertisement, sale,		advertising. It is specifically
	Act 2024 (Act 852)	packaging, and		about authorised officers'
	by the Ministry of	labelling of tobacco		discretion to withhold facts or
	Health (MOH)	products, smoking		documents if such disclosure is
		substances, and		deemed to be against the public
		their substitutes in		interest.
		Malaysia. It aims to		

#	Act	Description	Relevance to competition	Relevance to data privacy and protection
	VENTAL Sedia Membange VISAV	safeguard public health by controlling the promotion and availability of smoking products, particularly through digital platforms.		 Key provisions include: Section 44: Protection of informer Section 46: Nondisclosure of information

5.1.6.2 Relevant guidelines

#	Guidelines	Description	Relevance to competition	Relevance to data privacy and
				protection
1	Guideline for	Regulates the	Supports fair competition by	No explicit mention of matters
	Cosmetic	advertising of	prohibiting exaggerated,	related to personal or private
	Advertisement by	cosmetic	misleading or unverifiable claims	data privacy and protection.
	the National	products,	and requiring all advertising	
	Pharmaceutical	ensuring that	content to be substantiated. This	
	Regulatory	promotional	ensures a level playing field for all	
	Agency (NPRA)	content remains	cosmetic brands and protect	
	under the Ministry	truthful, non-	consumers from deceptive	
	of Health (MOH)	misleading, and	marketing.	
		complies with		

#	Guidelines	Description	Relevance to competition	Relevance to data privacy and protection
	MALAYSIA	legal and ethical standards, including in digital advertising.	 Paragraph 4.8(a): Advertisements shall not be similar in general layout, copy, slogans, visual presentation, music or sound effects to other advertisement as to likely mislead or confuse. Paragraph 5.1(a): Direct comparison advertisements against competitors' products or service are strictly not allowed. Paragraph 5.1(b): Comparison advertising may be permitted provided it does not use symbols, slogans, titles, or statements that are clearly identified or directly associated with competitive brands. Competitive claims 	

#	Guidelines	Description	Relevance to competition	Relevance to data privacy and protection
			inviting comparison with a group of products or with other products categories (without identifying any specific brands) may be allowed provided these are adequately substantiated. Paragraph 5.1(c): Advertisements should not directly or indirectly disparage, ridicule or unfairly attack competitors, competing products or services including distinguishing feature of their advertising campaigns such as specific layout, copy, slogan, visual presentation, music/jingle or sound effects. Paragraph 5.1(d): Advertisement shall not contain any statement which	

Guidelines	Description	Relevance to competition	Relevance to data privacy and
		oithean eagraphic on lead	protection
		profession, product, services	
		or advertisers in an unfair or	
		misleading way.	
Guidelines on	Provide a general	Indirectly prevents anti-	No explicit mention of matters
Advertising for	framework for	competitive behaviour in the digital	related to personal or private
Capital Markets	advertising and	advertising industry by promoting	data privacy and protection.
Products and	promotional	fairness through requiring all	
Related Services	activities within	advertisements to be clear, fair,	
by the Securities	the capital	and not misleading.	
Commission	market, including		
Malaysia (SC)	digital advertising,	Key paragraphs include:	
under the Ministry	to promote	• Chapter 5: General	
of Finance (MOF)	responsible	Requirements, Paragraphs	
, ,	advertising and	5.01-5.06	
		Appendix I: Guidance in	
	'	Relation to Specific	
		Components (Provides	
Securities Commission Malaysia	,	•	
		•	
	Guidelines on Advertising for Capital Markets Products and Related Services by the Securities Commission Malaysia (SC) under the Ministry of Finance (MOF)	Guidelines on Advertising for Capital Markets Products and Related Services by the Securities Commission Malaysia (SC) under the Ministry of Finance (MOF) Suruhanjaya Sekuriti Securities Securities on Provide a general framework for advertising and promotional activities within the capital market, including digital advertising, to promote responsible advertising and promotion while allowing for greater flexibility	either expressly, or by implication disparage any profession, product, services or advertisers in an unfair or misleading way. Guidelines on Advertising for Capital Markets Products and Related Services by the Securities Commission Malaysia (SC) under the Ministry of Finance (MOF) Suruhanjaya Sekuriti Securitias Securities Securities Securities advertising and promotion while allowing for greater flexibility in conducting Beither expressly, or by implication disparage any profession, product, services or advertisers in an unfair or misleading way. Indirectly prevents anticompetitive behaviour in the digital advertising industry by promoting fairness through requiring all advertisements to be clear, fair, and not misleading. Key paragraphs include: Chapter 5: General Requirements, Paragraphs 5.01-5.06 Appendix I: Guidance in Relation to Specific Components (Provides practical guidance on key

#	Guidelines	Description	Relevance to competition	Relevance to data privacy and
			messaging, third-party involvement, and comparisons. It ensures consistent standards and supports fair competition by requiring clear, accurate, and balanced advertising.) • Appendix II: Guidance in Relation to Media Platforms (Outlines how advertising requirements apply across different media formats. Emphasises clarity and accessibility of key information, helping prevent misuse of platform limitations to mislead investors.)	
3	Control of		No explicit mention of matters	•
	Tobacco Product		related to competition.	related to personal or private
	Regulations 2004	in Malaysia,		data privacy and protection.

#	Guidelines	Description	Relevance to competition	Relevance to data privacy and protection
	by the Food Act	including		
	1983	advertising and		
		sales.		
	tani sedia Membang	In the context of		
	* define the state of the state	the digital		
	Arsia	advertising		
	KENTENTHAN KESIHATAH HILI	sector, the		
	A VESTINA.	regulations		
		impose strict		
		prohibitions on		
		the promotion		
		and		
		advertisement of		
		tobacco products		
		across all media		
		platforms.		
4	Medical Device		•	•
	(Advertising)	matters relating	related to competition.	related to personal or private
	Regulations 2019			data privacy and protection.
	by theMalaysian	and conditions for		

#	Guidelines	Description	Relevance to competition	Relevance to data privacy and
				protection
	Medical Device	advertising of		
	Authority (MDA)	medical devices,		
	under the Ministry	to ensure that		
	of Health (MOH)	online		
		promotions, social		
		media marketing,		
	Medical Device AUTHORITY	and other digital		
	MALAYSIA	content are		
		accurate, not		
		misleading, and		
		ethically		
		compliant. The		
		Regulations aim		
		to protect		
		consumers from		
		deceptive claims		
		while fostering		
		transparency and		
		trust in the digital		
		healthcare		
		market.		

#	Guidelines	Description	Relevance to competition	Relevance to data privacy and protection
5	Marketing and Advertising of Intoxicating Liquor Guidelines by the Malaysian Communications and Multimedia Content Forum (Content Forum)	Provide a comprehensive framework for marketing and advertising of intoxicating liquor on digital platforms in Malaysia. Ensure that all marketing communications	Indirectly support fair competition by mandating responsible and ethical advertising standards for all market players, thereby preventing misleading promotions or unfair advantages. Key parts include: Part 1 (Basic Principles): All marketing communications must be legal, decent,	Indirectly support data privacy protection by requiring brands to comply with the Personal Data Protection Act 2010 when collecting personal information, thereby promoting responsible handling of user data in digital advertising.
		are based on accepted principles of fair competition, social responsibility, and good business practice.	honest, and truthful; based on accepted principles of fair competition and good business practice; and must not offend or disrespect cultural, religious, or social values. They must not appeal to underage viewers. • Part 2 (Preventing Underage Appeal): Requires implementation of age-	Part 13 (Privacy policy): Brands must prioritise user privacy and ensure compliance with the Personal Data Protection

#	Guidelines	Description	Relevance to competition	Relevance to data privacy and
			affirmation mechanisms (e.g. age-gating) to ensure access is restricted to individuals aged 21 and above. Also applies the 70/30 audience composition rule and prohibits targeting content at persons below the Legal Purchasing Age. • Part 3 (Responsible Drinking Messages): Requires all marketing communications to include clear and visible Responsible Drinking Messages (RDMs), placed appropriately across platforms, with specific formatting and placement guidance. • Part 4 (Product Placement): Sets standards for responsible product	protection

# G	uidelines	Description	Relevance to competition	Relevance to data privacy and
				protection
			placement, requiring brands	
			to avoid association with	
			intoxication, underage	
			drinking, or harmful	
			behaviours, and to ensure	
			placements comply with	
			audience composition rules.	
			• Part 9 (Use of Influencers):	
			Influencers must be at least	
			25 years old, have an	
			audience of at least 70%	
			above the Legal Purchasing	
			Age, disclose material brand	
			affiliations, and avoid content	
			that appeals to underage	
			viewers or promotes	
			irresponsible behaviour.	
			Part 10 (User-Generated)	
			Content): All user-generated	
			,	
			• •	
			•	
			content (UGC) on brand- owned platforms must be regularly moderated to	

#	Guidelines	Description	Relevance to competition	Relevance to data privacy and protection
			remove content inconsistent with the guideline. UGC policies should be made visible.	
6	Guidelines to Prevent False or Misleading Advertisements by the Ministry of Domestic Trade and Cost of Living (KPDN)	guide to ensure advertisements do not mislead consumers,	Indirectly prevent anti-competitive behaviour by promoting fairness in the advertisement of goods, services, pricing, and promotional claims. The Guidelines ensure all market players are held to the same ethical and factual standards, avoiding unfair advantages gained through deceptive advertising. Key paragraphs include: Paragraph 4.1.1: Advertisers are not allowed to make false or misleading statements in relation to particular	protection by requiring advertisers to obtain permission before using published testimonials, endorsements, or excerpts, and to ensure such content is genuine and not misleading. Where personal data is involved, this encourages responsible use of individual information in promotional materials. Key paragraphs include: • Paragraph 4.9.1:
			manufacturing place, manufacturer, type,	

#	Guidelines	Description	Relevance to competition	Relevance to data privacy and protection
			standard, quality, grade, quantity, composition, style or model of the goods or services being advertised. • Paragraph 4.2.1: The advertiser shall ensure that any claims made relating to goods or services being advertised are able to be duly proved. • Paragraph 4.3.1: Advertisers are not allowed to exaggerate or make extreme claims of their goods or services which do not meet the true description so as to mislead consumers. • Paragraph 4.4.3: The advertiser is not allowed to advertise any cheap sales which displays price discounts such ("up to" or	•

#	Guidelines	Description	Relevance to competition	Relevance to data privacy and protection
			"from"). Discounts or sales must be clearly stated and specified for a product or service that is advertised as not to confuse customers. • Paragraph 4.8.1: Any comparisons made amongst competitors using superlative claims must be supported and substantiated by valid evidence. • Paragraph 4.8.2: If advertisers use comparison in their advertisements, the said advertisement should not mislead consumers towards the goods or services owned by the advertisers or those owned	from research centres or professional journals without permission
			by competitors.	

#	Guidelines	Description	Relevance to competition	Relevance to data privacy and protection
7	Guide On:	Serves as a guide	No explicit mention of matters	No explicit mention of matters
	Advertising	to understanding	related to competition. However,	related to personal or private
	Services by the	the service tax	by requiring all businesses involved	data privacy and protection.
	Royal Malaysia	treatment on	in advertising services to operate	
	Customs	advertising	under the same fiscal rules and tax	
	Department	services under the	treatment, the guide indirectly	
	(RMCD) Sales and	Service Tax Act	supports a level playing field,	
	Service Tax	2018, including	contributing to fairness across the	
	Division Putrajaya	conventional and	advertising industry.	
		digital formats.		
		Clarifies the	Key paragraphs include:	
		scope of taxable	 Paragraph 7 (Treatment of 	
		services,	service tax on advertising	
		exemptions (such	services): Sets out that	
		as B2B), imported	advertising services whether	
		taxable services,	in print, digital, outdoor,	
		and the	broadcast, or mobile formats	
		responsibilities of	provided by registered	
		registered service	persons are subject to 6%	
		providers.	service tax.	
			• Paragraph 13 (Exemption	
			from payment of service tax	

#	Guidelines	Description	Relevance to competition	Relevance to data privacy and
				protection
			(business to business exemption): Explains that advertising service providers who are registered persons may receive advertising services without being charged service tax, provided the conditions under Item 2, Schedule of the Service Tax (Persons Exempted from Payment of Tax) Order 2018 are fulfilled.	
8	Advertising	Complement the	While competition is not explicitly	Indirectly support privacy by
	Guidelines for	provisions of the	addressed, the guidelines ensure	prohibiting the publication of
	Healthcare	Medicines	fairness and transparency in	patient testimonials, reducing
	Facilities and	(Advertisement	healthcare marketing by	
	Services by	and Sale) Act	prohibiting misleading or	'
	Medicine	1956 and the	comparative advertising. This helps	
	Advertisements	Medicine	maintain a level playing field	-
	Board, Ministry of	Advertisements	among healthcare providers,	maintain ethical standards in
	Health (MOH)	Board	promoting ethical standards and	healthcare marketing.
		Regulations 1976.	public trust.	

#	Guidelines	Description	Relevance to competition	Relevance to data privacy and protection
		Provide detailed requirements for how private hospitals, clinics, radiological clinics, and medical laboratories may advertise their services to the general public.	 Key paragraphs include: Paragraph 2.2: The information provided in the advertisements must be factually accurate and capable of being substantiated. Paragraph 5.1: Comparison, either direct or implied between healthcare facilities is prohibited. 	 Key paragraphs include: Paragraph 5.3: Testimonials from patients shall not be publicised or printed. Paragraph 5.4: The use of celebrities to promote the services of a healthcare facility is not allowed. This includes celebrities, models, athletes, patients, and healthcare professionals.
9	Registered Medicinal Products Advertising Approval Guidelines by Medicine Advertisements	Serve as a guide for industry members, advertising agencies, and broadcasting organisations on the preparation of advertisements	While competition is not explicitly addressed, the Guidelines promote fairness and transparency in healthcare marketing by prohibiting misleading or comparative advertising. This helps maintain a level playing field among healthcare providers,	Indirectly support data privacy by requiring advertisers to obtain written consent for the use of individual endorsements or testimonials and to ensure these are authentic and not misleading. Where personal data is involved, this promotes responsible use of individual

#	Guidelines	Description	Relevance to competition	Relevance to data privacy and
				protection
	Board, Ministry of	for registered	promoting ethical standards and	information in promotional
	Health (MOH)	medicinal	public trust.	materials.
		products, in line		
		with Section 4B of	Key paragraphs include:	Key paragraphs include:
		the Medicines	• Paragraph 3.9(ii)	Paragraph 4.2 (Celebrity
		(Advertisement	(Denigration, Refutation and	Recommendation/Endor
		and Sale) Act	Disparagement towards	sement/Testimonial):
		1956 and the	Other Parties):	Outlines rules for
		Medicines	Advertisements must not	celebrity endorsements,
		Advertisements	contain any statements,	including the need for
		Board	images, audio, video,	consent and disclaimer
		Regulations 1976.	representations, or practices	statements.
			that can be interpretated,	• Paragraph 4.4
		These Guidelines	either directly or indirectly, as	(Consumer Testimonial):
		outline the	refute or discredit the	Requires genuine
		approval	products, advertisers or	consumer testimonials
		procedures and	advertisements of other	and consent forms, valid
		principles of good	companies.	only for a one-year
		advertising	• Paragraph 4.8.1	period.
		practices,	(Comparative Advertising):	• Paragraph 4.6 (Star
		including the	The following comparative	Rating/Consumer
		requirement for		Satisfaction Survey):

#	Guidelines	Description	Relevance to competition	Relevance to data privacy and protection
#	Guidelines	advertisements to be true, accurate, and not misleading. They also emphasise responsible promotional content that does not compromise consumer safety.	claims, whether direct or implied, are prohibited: (i) Comparison with competitor or products or other company's products; (ii) Comparison of ingredients contained in competing products or products produced by other companies; (iii) Comparison with	protection Prohibits the use of unverified star ratings and consumer surveys.
			food products; (iv) Comparison with modern health services, traditional health tips/practices and other healthcare services.	

5.1.6.3 Relevant codes

#	Codes	Description	Relevance to competition	Relevance to data privacy and protection
1	Malaysian Code of Advertising Practice (MCAP) by the Advertising Standards Malaysia	regulates	Prevents unfair competition by prohibiting misleading claims, false comparisons, and deceptive advertising tactics. It requires all advertisements to be fair and substantiated, thereby ensuring a level playing field among advertisers.	The Code does not explicitly govern personal data protection, it requires marketers to respect
	AUTHORITY MALAYSIA	advertisements are legal, decent, honest, and truthful as well as prepared with a sense of responsibility to consumers and society.	Key sections include: • Section I, Part iii, Paragraph 1.8: All advertisements should conform to the principles of fair competition as generally accepted in business. • Section II, Paragraph 7.1: Advertisements containing comparisons with other advertisers, or other	personal data in advertising.

#	Codes	Description	Relevance to competition	Relevance to data privacy and protection
			products are permissible in the interest of vigorous competition and public information, provided they comply with the terms of the Code.	compliance with data protection laws (with guidance from MCMC)
2	Cosmetic	Ensures that the	Prevents unfair competition by	While the Code does not
	Advertising Code by	marketing and	prohibiting exaggerated claims,	explicitly address data privacy,
	the National	advertising of	misleading product benefits, and	it requires that testimonials be
	Pharmaceutical	cosmetics to the	false or disparaging comparisons.	genuine, based on actual
	Regulatory Agency	public are		personal experience, and
	(NPRA) under	conducted in a		·
	Ministry of Health	socially	and level playing field among	-
	(MOH)	responsible	cosmetic brands.	risk of misuse of personal or
		manner,		professional information in
	NPRA	promote the	, , , , , , , , , , , , , , , , , , ,	promotions.
	MALAYSIA	quality use of	• Paragraph 2.2(a):	
		cosmetics, and	Advertisements should not	Key provisions include:

#	Codes	Description	Relevance to competition	Relevance to data privacy and protection
		do not mislead or deceive consumers.	be so framed as to abuse the trust of the consumer or exploit his/her lack of experience or knowledge. Paragraph 2.6(a): Advertisements shall not be similar in general layout, copy, slogans, visual presentation, music or sound effects to other advertisement as to likely mislead or confuse. Paragraph 3.1(a): Direct comparison advertisements against competitors' products or service are strictly not allowed. Paragraph 3.1(b): Comparison advertising may be permitted provided it does not use symbols, slogans, titles, or statements	 Paragraph 4(a): Advertisements shall not contain or refer to any testimonial or endorsement unless it is genuine and related to the personal experience over a reasonable period or time of the person giving it. Testimonials or endorsements which are obsolete or otherwise no longer applicable, (e.g. where there has been a significant change in formulation of the product concerned) shall not be used. Paragraph 4(b): Testimonials of professionals should observe the ethics of

#	Codes	Description	Relevance to competition	Relevance to data privacy and protection
			that are clearly identified or directly associated with competitive brands. Competitive claims inviting comparison with a group of products or with other products categories (without identifying any specific brands) may be allowed provided these are adequately substantiated. • Paragraph 3.1(c): Advertisements should not directly or indirectly disparage, ridicule or unfairly attack competitors, competing products or services including distinguishing feature of their advertising campaigns such as specific layout, copy, slogan, visual presentation,	their professions and not violate regulations of the government bodies or institutions regulating that profession.

#	Codes	Description	Relevance to competition	Relevance to data privacy and protection
3	Medical Device Guidance Document - Code of Advertisement by the Malaysian Medical Device Authority (MDA) under Ministry of Health (MOH) Medical Device Authority authority of Medical Device Authority Medical Device Authority Medical Device	medical devices in a manner that	accurate, evidence-based, and non-disparaging. It prohibits unfair comparative claims, misleading endorsements, and inducements that could distort purchasing behaviour. Key paragraphs include: Paragraph 4.3: Advertising	No explicit mention of matters related to personal or private
		use, protects	, , , , , , , , , , , , , , , , , , , ,	

#	Codes	Description	Relevance to competition	Relevance to data privacy and protection
		healthcare professionals, and prevents misleading or fraudulent claims.	to-date, and capable of substantiation; misleading or unverifiable claims are prohibited. • Paragraph 4.12.5(a): Comparative claims shall be made factual and fair. The intent advertisement should be to inform and not to discredit, disparage, degrade or attack competitors, competing medical devices or services directly or by implication. • Paragraph 4.12.5(d): Comparative claims shall not explicitly identify the competitive medical device, whether by name, brand name, company, or any form of identification that clearly	

#	Codes	Description	Relevance to competition	Relevance to data privacy and protection
			exposes the identity of the competition. • Paragraph 4.17.3: Contests and competitions linked to a brand and company is allowed without mention of specific devices. However, inducement of unnecessary purchase of medical devices via the use of contests and	
4	The Malaysian	Establishes	competitions is not allowed. Promotes fair competition by	Addresses data privacy
	Communications	guidelines for	·	, , ,
	and Multimedia	content	respect the principles of fair	compliance with the Personal
	Content Code 2022	dissemination	business practices, while still	Data Protection Act 2010 and
	by the	across various	allowing for vigorous competition	other applicable laws. It
	Communications	digital platforms.	and comparative advertising.	underscores the importance of
	and Multimedia	It aims to		safeguarding personal data in
	Content Forum of	promote	Key paragraphs include:	content dissemination,
	Malaysia (CMCF)	responsible	• Part 3, Paragraph 3.1(d): All	especially in digital advertising.
	under Malaysian		advertisements shall respect	
	Communications	and distribution,	the principles of fair	Key paragraphs include:

#	Codes	Description	Relevance to competition	Relevance to data privacy and
				protection
	and Multimedia Commission (MCMC) COMMUNICATIONS AND MULTIMEDIA CONTENT FORUM OF MALAYSIA Forum Kardungan Kamunikasi dan Multimedia Malaysia	ensuring that all content adheres to legal and ethical standards.	competition generally accepted in business, however, the Code is not intended to suppress free and vigorous competition. Part 3, Paragraph 4.8(a) (Comparisons): Advertisements containing comparisons with other advertisers, or other products are permissible in the interest of vigorous competition and public information, provided they comply with the terms of the Code.	 Part 1, Paragraph 6.4: Notwithstanding this Code and apart from the relevant legislation under the Act, all applicable Malaysian Laws including but not limited to sedition, pornography, defamation, data protection, protection of intellectual property and other related legislation are to be complied with. Part 2, Paragraph 11.1: Code Subjects shall respect the privacy of individuals with due regard to the requirements under the Personal Data Protection Act 2010. There shall be no intrusion into an

except where required by law and/or necessary in the interest of the public. Any references to the Personal Data Protection Act 2010 will include any subsequent amendments made to the said Act. Part 4, Paragraph 3.8(f): Broadcasters shall ensure that Content of news programmes and Current Affairs Content programmes are presented with due respect to privacy of an individual. However, in the public interest, an	#	Codes	Description	Relevance to competition	Relevance to data privacy and protection
					individual's privacy except where required by law and/or necessary in the interest of the public. Any references to the Personal Data Protection Act 2010 will include any subsequent amendments made to the said Act. Part 4, Paragraph 3.8(f): Broadcasters shall ensure that Content of news programmes and Current Affairs Content programmes are presented with due respect to privacy of an individual. However, in the public interest, an

#	Codes	Description	Relevance to competition	Relevance to data privacy and protection
				be justified such as in detecting or exposing crime or a serious misdemeanour, protecting public health or safety and preventing the public from being misled by some statement or action of an individual or organisation.
5	Guide On Digital		No explicit mention of matters	No explicit mention of matters
	Services by Foreign	·	related to competition.	related to personal or private
	Service Provider (FSP) by the Service Tax 2018 under Royal Malaysian Customs Department (RMCD) Internal Tax Division Putrajaya	provided by foreign service providers (FSPs) to consumers in		data privacy and protection.

#	Codes	Description	Relevance to competition	Relevance to data privacy and protection
	DIRAJA MALAYSIA	thresholds, accounting, invoicing, and compliance requirements for FSPs supplying digital services such as software, online platforms, advertisements, streaming services, and cloud hosting.		

5.1.6.4 Issues and gaps in the digital advertising regulatory environment

1. Lack of regulatory framework

The current regulatory framework does not address new challenges in the digital advertising space, such as algorithmic decision-making, selfpreferencing, ad pricing transparency, etc.

Existing regulations, such as the Communications and Multimedia Act (CMA), primarily focus on content oversight. The CMA regulates license holders involved in digital advertising, including retail-related application service providers (internet and social media messaging) and content application service providers. However, it does not provide any view on the operational aspects in digital advertising. This is similar for key acts, standards and codes such as the Indecent Advertisements Act, Malaysian Code of Advertising Practice, The Malaysian Communications and Multimedia Content Code, Guidelines on Advertising for Capital Markets Products and Related Services, etc.

While Malaysia's framework remains largely content-focused, other jurisdictions have begun addressing these operational gaps more directly. In contrast, several jurisdictions have introduced measures that directly address the operational aspects of digital advertising. For instance, the European Union's Digital Markets Act (DMA) imposes obligations on designated gatekeepers such as Google and Meta to ensure transparency in ad pricing and access to performance metrics. Article 5(9) and (10) of the DMA require these platforms to disclose to advertisers and publishers the pricing and remuneration information for each ad placed, while Article 6(8) mandates access to performance measurement tools for independent verification.

In the UK, the Digital Markets, Competition and Consumers Act 2024 empowers the Competition and Markets Authority (CMA) to designate certain firms with "strategic market status" in specific digital activities and impose tailored conduct requirements to ensure fair competition in digital markets, including digital advertising. The Act also introduces new consumer protections, such as bans on fake reviews and stronger rules against misleading advertising practices. In China, the 2022 amendment to the Anti-Monopoly Law explicitly prohibits anticompetitive conduct

through the use of algorithms and data in digital markets. Germany has also integrated ePrivacy provisions into national competition law, allowing competitors and consumer associations to challenge unfair data practices through private enforcement mechanisms.

These examples show that other jurisdictions are moving towards directly regulating not only content but also the mechanisms by which digital ads are bought, sold, and delivered, offering potential models for Malaysia.

2. Regulatory disparities between local and foreign players

Malaysia's digital advertising landscape is shaped by various regulatory frameworks that govern both local and foreign advertisers. However, disparities in regulatory treatment create an uneven playing field, with local advertisers often facing stricter compliance burdens than their foreign counterparts. These differences arise due to variations in taxation, licensing, data protection laws, and enforcement mechanisms, which ultimately impact competition, market access, and business sustainability for Malaysian advertisers.

Advertising regulation: Local advertisers are subject to laws such as CMA 1998, the Content Code 2022, and PDPA 2010. These laws prohibit misleading advertising, unfair trade practices, and inappropriate content. The MCMC and KPDN actively monitor and enforce these regulations on local businesses. Foreign advertisers, however, operate on platforms where compliance is dictated by platform policies rather than Malaysian law. While MCMC can request foreign platforms to take down certain ads, enforcement mechanisms remain weaker compared to how local businesses are regulated. Foreign digital platforms such as Google, Meta and TikTok do not require local advertising licenses, nor are they subject to local advertising registration or content vetting requirements, allowing them to operate with lighter oversight in Malaysia.

Data protection and privacy: Malaysia's PDPA 2010 applies to any person who is established in Malaysia, or who, although not established in Malaysia, uses equipment in Malaysia to process personal data otherwise than for the purposes of transit. The definition of "established" is interpreted

broadly and may include entities that maintain a regular practice of processing personal data in Malaysia. Therefore, foreign advertisers that regularly collect and process data of Malaysian users may, in principle, be subject to the PDPA 2010.

However, in practice, enforcement challenges remain in practice, and the compliance burden continues to fall more heavily on Malaysian entities. This regulatory gap is particularly significant in the context of digital advertising, where foreign platforms often control vast amounts of user data, behavioural insights, and automated ad delivery infrastructure. Without equivalent obligations being consistently enforced, these platforms operate with lower compliance costs and greater targeting capabilities, raising concerns around competitive neutrality and long-term market fairness for domestic advertisers.

5.1.7 Consumer behaviour

Figure 45: Digital advertising consumer journey

Exposure	Consideration	Action
Consumers discover new products and services through various online channels, including: Social media Search engines Retail websites	Consumers evaluate ads, influenced by the key factors of: • Personal relevance • Entertainment value • Own curiosity	Consumers being redirected to: • E-commerce platforms • Brand's official websites • App download pages (e.g., Google Play and Apple App Store) • WhatsApp (click-to-chat)

Source: MyCC analysis

The digital advertising consumer journey begins with the exposure phase, where consumers encounter new products, services, and brands through ads displayed across various digital channels such as social media, search engines, and retail websites. Following that, consumers move into the consideration phase, where they evaluate the ads more thoroughly, influenced by key factors such as the ad content's relevance, entertainment value and their own curiosity.

This culminates in the action phase, where consumers take the final step of engaging with ads by clicking on them, often being redirected to product pages on e-commerce platforms, brand websites, or other relevant landing pages.

5.1.7.1 Exposure

Malaysian consumers primarily discover new products, services and brands via three main channels: social media ads, search engines and retail websites²⁵⁸.

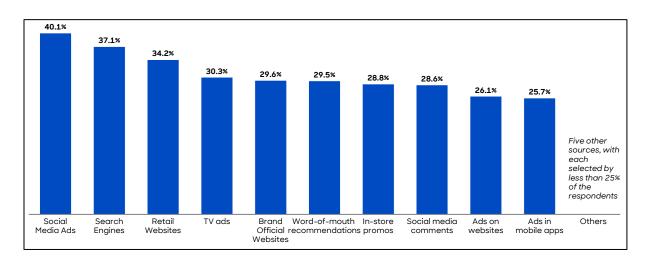


Figure 46: Brand discovery channels in Malaysia, 2024 [%]²⁵⁹

Source: DataReportal

258	DataReportal	(2024).	Digital	2024:	Malaysia,	page	108.
https:/	/datareportal.com	/reports/dig	gital-2024-r	nalaysiad			
259	DataReportal	(2024).	Digital	2024:	Malaysia,	page	108.
https:/	/datareportal.com	/reports/dig	gital-2024-r	nalaysia			

Following creators Networkina 3% 7% Education 8% Keeping in 10% touch with Key drivers of friends social media use 60% 12% Entertainment News

Figure 47: Key drivers of social media use, June 2025 [%]

Source: MyCC's survey

Social media ads: Approximately 40.1% of Malaysian consumers discovered new brands or products through social media ads²⁶⁰. This high figure is largely attributed to Malaysia's significant number of active social media users. In 2024, the country recorded 28.7 million active users, representing 83.1% of the total population²⁶¹. Users are found to spend an average of 2 hours and 48 minutes daily²⁶² on these platforms which is higher than global average daily time spent on social media, approximately 2 hours and 21 minutes²⁶³. According to MyCC's survey, these platforms are primarily used for purpose for entertainment (60%), keeping up with news (12%) and staying in touch with friends (10%)²⁶⁴.

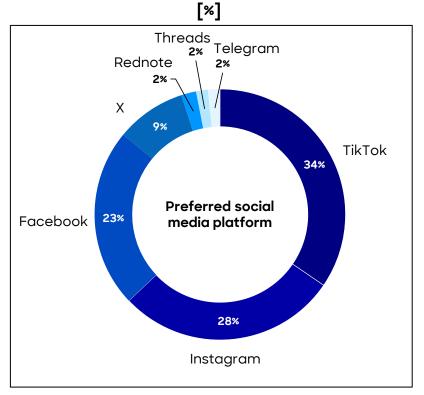
20

260	DataReportal	(2024).	Digital	2024:	Malaysia,	page	108.
https:/	//datareportal.com	n/reports/dig	gital-2024-r	nalaysia			
261	DataReportal	(2024).	Digital	2024:	Malaysia,	page	57.
https:/	//datareportal.com	n/reports/dig	gital-2024-r	malaysia			
262	DataReportal	(2024).	Digital	2024:	Malaysia,	page	25.
https:/	//datareportal.com	n/reports/dig	gital-2024-r	malaysia			

²⁶³ Smart insights (2025). Global social media statistics research summary. https://www.smartinsights.com/social-media-marketing/social-media-strategy/new-global-social-media-research/

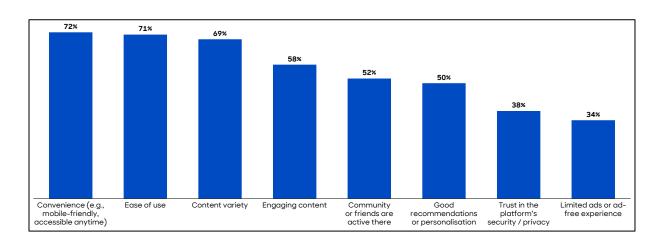
²⁶⁴ MyCC's survey.

Figure 48: Survey respondents' preferred social media platform, June 2025



Source: MyCC's survey

Figure 49: Top factors influencing platform choice, June 2025 [%]



Source: MyCC's survey

TikTok, Facebook and Instagram are the top three social media platforms among Malaysians, primarily valued for their mobile-friendly convenience (72%), intuitive ease of use (71%), diverse content offerings (69%), strong

content engagement (58%) and community driven engagements with friends or peers (52%).

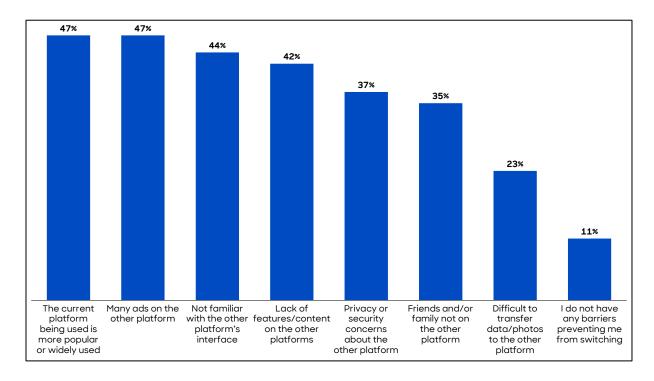


Figure 50: Barriers for platform switching, June 2025 [%]

Source: MyCC's survey

Many survey respondents show a degree of stickiness to their current platforms, with main barriers to switching including the entrenched popularity of their current platform (47%), excessive ads on alternative platforms (47%), and unfamiliarity with the interfaces of other options $(44\%)^{265}$.

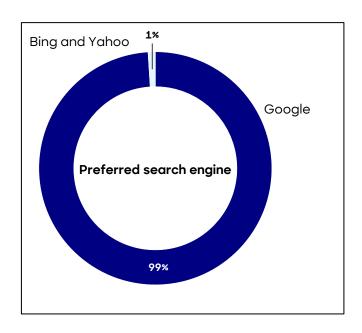
Search engines: Approximately 37.1% of Malaysians discover new brands, products, and services through search engines²⁶⁶.

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²⁶⁵ MyCC's survey.

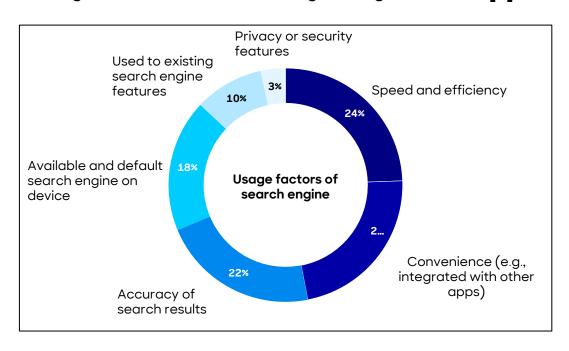
DataReportal (2024). Digital 2024: Malaysia, page 108. https://datareportal.com/reports/digital-2024-malaysia

Figure 51: Preferred search engine, June 2025 [%]



Source: MyCC's survey

Figure 52: Factors of search engine usage, June 2025 [%]



Source: MyCC's survey

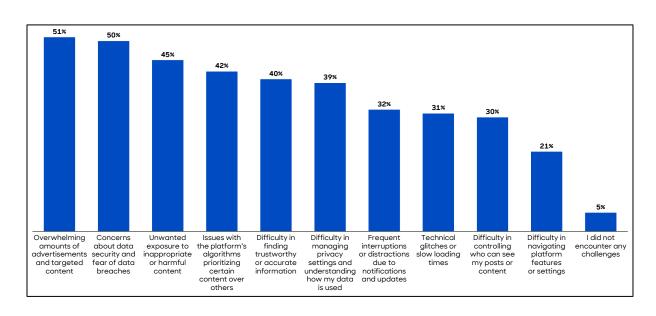
Consumer preference is strongly skewed towards Google. According to MyCC's survey, 99% of survey respondents have reported to use Google as their preferred choice of search engine, with Bing and Yahoo at less than

 $1\%^{267}$. Google Search users have indicated their preference are due to factors such as speed and efficiency (24%), convenience (e.g., integrated with other apps) (23%) and accuracy of search results (22%)²⁶⁸.

Retail websites: 34.2% of Malaysians discover new brands or products through retail websites ²⁶⁹. For many, Shopee is the go-to platform, attracting around 42.9 million visits each month, while Lazada follows with 15.3 million²⁷⁰. These platforms serve more than shopping sites; but also, a way for consumers to explore new brands.

Other discovery channels include TV ads, official brand websites, word-of-mouth recommendations, in-store promotions, social media comments, advertisements on websites and mobile apps, as well as video platforms. Specifically, the MyCC's survey found that YouTube is the most popular video platform, preferred by 70% of respondents²⁷¹.

Figure 53: Challenges faced when using social media, video and search engine platforms, June 2025 [%]



Source: MyCC's survey

²⁶⁷ MyCC's survey.

²⁶⁸ MyCC's survey.

DataReportal (2024). Digital 2024: Malaysia, page 108. https://datareportal.com/reports/digital-2024-malaysia

²⁷⁰ Semrush (2025). Most visited retail websites in Malaysia, updated April 2025. https://www.semrush.com/website/top/malaysia/e-commerce-and-retail/ ²⁷¹ MyCC's survey.

Despite preference for the above-mentioned platforms, MyCC's survey also highlighted various challenges faced by survey respondents when interacting with the platforms. Key challenges include being overwhelmed with large number of ads (51%), concerned about data security (50%), exposed to inappropriate or harmful content (45%), algorithmic bias in content prioritisation (42%), and difficulties in finding trustworthy or accurate information $(40\%)^{272}$. These challenges highlight the complexities of consumer engagement in the digital advertising setting and the need for brands to navigate beyond content in order to effectively engage with their audience.

5.1.7.2 Consideration

At this stage, various elements of the ad influence consumers, potentially driving their engagement and interaction with the content. Key aspects include:

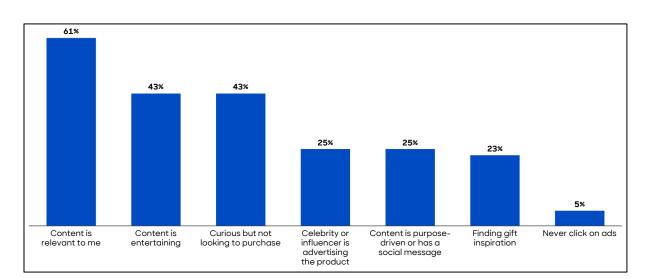


Figure 54: Key reasons for clicking on advertisements in Malaysia, 2023²⁷³

Source: Rakuten Insight

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²⁷² MyCC's survey.

²⁷³ Rakuten Insight (2023). Reasons for clicking on advertisements on social media platforms in Malaysia as of July 2023. https://insight.rakuten.com/

• **Personal relevance:** 61% of Malaysians clicked on ads on social media because the content was personally relevant to them²⁷⁴. Further studies also shown a positive relationship between Malaysian millennials' attitudes toward personalised advertising and their purchasing behaviour²⁷⁵.

However, despite the preference for personalised content, MyCC's survey found that only 1 in 3 respondents felt that the ads they encountered on their preferred video or social platforms were "often" or "always" relevant" ²⁷⁶. This suggests a disconnect between consumers' expectations and the actual performance of ad targeting by advertisers.

- Entertainment value: Entertaining content (e.g., element of storytelling, humour, culturally relevant) plays a crucial factor in driving engagement with digital ads among Malaysians, with 43% having clicked on advertisements because they found the content entertaining²⁷⁷.
- **Curiosity-driven:** Approximately 43% of Malaysians engage with ads on social media platforms out of curiosity, without any intention to make a purchase²⁷⁸. This is further supported by findings that 39% of consumers rarely purchase an item after viewing a social media ad, while 14% never do²⁷⁹.

Despite these positive factors, there are also several elements that deter consumers from engaging and interacting with an ad:

²⁷⁴ Rakuten Insight (2023). Reasons for clicking on advertisements on social media platforms in Malaysia as of July 2023. https://insight.rakuten.com/

²⁷⁵ RSIS International (2025). The relationship between attitude on personalised advertising and buying behaviour among millennials in Malaysia. https://rsisinternational.org/journals/ijriss/articles/the-relationship-between-attitude-on-personalised-advertising-and-buying-behaviour-among-millennials-in-malaysia/ ²⁷⁶ MyCC's survey.

²⁷⁷ Rakuten Insight (2023). Reasons for clicking on advertisements on social media platforms in Malaysia as of July 2023. https://insight.rakuten.com/

²⁷⁸ Rakuten Insight (2023). Reasons for clicking on advertisements on social media platforms in Malaysia as of July 2023. https://insight.rakuten.com/

²⁷⁹ Rakuten Insight (2023). Frequency of purchasing an item after viewing an advertisement on social media platforms in Malaysia as of July 2023. https://insight.rakuten.com/

- **Growth of intrusive ad formats:** A study by Kantar Millward Brown found that 61% of Malaysians perceive ads to have become more intrusive, particularly on platforms like YouTube, where unskippable ads can extend up to 60 seconds²⁸⁰. This has contributed to rising adskipping behaviour and even migration to alternative platforms such as TikTok, which are perceived to offer a less disruptive content experience²⁸¹.
- **Data privacy concerns:** MyCC's survey revealed that 27% of respondents do not feel their data is being safely protected on these platforms, while 37% expressed uncertainty or a lack of confidence in the data handling practices. Concerns cited include unexplained ad targeting, cross-platform data syncing, and the perceived listening or surveillance capabilities of their devices²⁸².

In response to these concerns, consumers are observed to be taking proactive steps to control their digital ad exposure. According to DataReportal, 33.1% of Malaysian internet users now use ad blockers, and 38.3% decline cookies at least some of the time²⁸³.

5.1.7.3 Action

This stage marks the final step in the digital advertising consumer journey, where users click on the ad. Upon clicking, they are usually redirected to a customised webpage that aligns with the ad's message, offering further product details, promotions, or an easy path to complete a desired action, such as making a purchase or signing up.

Common redirection destinations include product pages on popular ecommerce marketplaces or a brand's official website. Other redirection

Marketing Magazine (2018). Ads not integrated, also intrusive: Malaysians. https://marketingmagazine.com.my/ads-not-integrated-also-intrusive-malaysians/
Marketing Magazine (2024). YouTube's ad apocalypse: is TikTok about to dethrone the video giant in Malaysia? https://marketingmagazine.com.my/youtubes-ad-apocalypse-is-tiktok-about-to-dethrone-the-video-giant-in-malaysia/
MyCC's survey.

DataReportal (2024). Digital 2024: Malaysia, page 117. https://datareportal.com/reports/digital-2024-malaysia

directions are to WhatsApp (Click-to-Chat)²⁸⁴ and app download pages such as Google Play and App Store.

5.1.7.4 Implication on competition

The majority of Malaysian consumers are exposed to new products, services and brands through a few key platforms, namely TikTok, Facebook, Instagram and Google Search. Due to their extensive reach, advertisers may feel compelled to allocate budgets to these platforms in order to effectively reach consumers. This reliance can lead to diminished bargaining power, potentially higher advertising costs, and fewer innovative ad options.

For smaller, niche or domestic ad publishers such as The Star, Astro Awani, Media Prima, this poses a challenge. Despite offering potentially more tailored or cost-effective solutions, these publishers may struggle to gain traction in a market where user traffic and engagement are overwhelmingly directed toward the dominant players. Over time, this could lead to their gradual displacement in the market.

Sustained preference by consumers for major platforms can also create a lopsided advantage, as these companies are able to collect significant amounts of consumer data, therefore strengthening their ad targeting and personalisation capabilities.

Separately, the growing use of ad blockers and tendency to decline cookies may signal a broader issue for digital advertisers. As this trend continues, it could reduce the overall competitiveness of the digital advertising ecosystem, particularly for smaller ad publishers who lack the financial resources to invest in alternative targeting technologies or offer premium, less intrusive ad formats.

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²⁸⁴ Seekflow (2024). Click to WhatsApp ads: best tool to reduce cost per result on Facebook ads. https://sleekflow.io/blog/click-to-whatsapp-ads

5.1.8 Innovative trends

5.1.8.1 Integration of GenAI in digital advertising campaign

GenAI is increasingly being used by digital advertising platforms to automate content, tailor messages for different audiences, and adjust creatives in real time. For consumers, this shift manifests as ads that are more conversational, hyper-personalised, and seamlessly embedded into content formats they already engage with. Examples include Facebook Stories, Instagram Reels and YouTube Shorts.

Platforms like Meta and Google are seen actively embedding GenAI into their core systems, enabling advertisers to generate entire ad campaigns with minimal manual input, while personalising ad formats based on userlevel interaction data:

Campaign planning Optimisation and personalisation Automates ad planning in Real-time optimisation of ads areas such as campaigns based on: · Audience targeting · User interactions · Budget allocation • User engagements • Bidding optimisation · User preferences · Channel selection Performance reporting Content generation Automate production of Insights on performance audience-relevant ad creatives management, in the areas of: across various formats: · Asset-level reporting (Clicks, costs, Text (headlines, captions) impressions, conversion value, cost & average CPC) Visuals (product images) Video Search term insights Budget pacing Audio

Figure 55: GenAl in end-to-end digital advertising campaign, June 2025

Source: MyCC analysis

 Campaign planning: GenAI enables automation of campaign planning management across audience targeting, budget allocation, bidding optimisation, and channel selection. Platforms such as Meta's Advantage+ and Google's Performance Max highlights this shift, using Machine Learning (ML) to identify high-intent audience segments, optimise media placements, and adjust creative delivery in real time²⁸⁵.

Meta's Advantage+ eliminates the need for manual segmentation by interpreting campaign objectives and historical performance data to automatically identify and target the most conversion-likely profiles. Similarly, with Google's Al-powered "Max" for Search campaigns, ads are dynamically assembled and delivered in search results based on real-time query intent, user context, and past engagement signals²⁸⁶.

- Content generation: A significant application of GenAI is in the automated generation of creative assets. This includes the creation of ad visuals, copywriting, video variants, and audio elements tailored to specific audiences. For instance, Meta's Advantage+ Creative utilises GenAI to optimise visuals and captions that resonate with target audiences, adjusting elements like colour, layout, and format based on platform-specific engagement signals ²⁸⁷. Similarly, Google's Performance Max employs GenAI to generate ad headlines and descriptions informed by landing page content, historical performance data, and keyword context²⁸⁸. In 2023, Google introduced a text-to-image feature within Performance Max powered by Imagen, its proprietary GenAI image model ²⁸⁹. This has allowed advertisers to generate high-quality images directly from text prompts, without requiring separate graphic design tools.
- Optimisation and personalisation: GenAI facilitates real-time optimisation of ad campaigns by analysing user interactions and engagement metrics to personalise ad content dynamically. This ensures that advertisements remain relevant and engaging to

https://support.google.com/google-ads/answer/10724817?hl=en

²⁸⁵ GR0 (2023). Meta Advantage+ shopping campaigns: Can they help you scale? https://gr0.com/blog/advantage-plus-shopping-campaigns; Meta (2025). About Meta Advantage+. https://www.facebook.com/business/help/733979527611858

²⁸⁶ Google (2025). About Performance Max campaigns.

Meta (2025). About Advantage+ creative. https://www.facebook.com/business/help/297506218282224?id=649869995454285

Boogle (2023). Get creative with generative AI in Performance Max.

²⁸⁸ Google (2023). Get creative with generative AI in Performance Max. https://blog.google/products/ads-commerce/get-creative-with-generative-ai-in-performance-max/

²⁸⁹ Google (2023). Imagen 2. https://deepmind.google/technologies/imagen-2/

individual users, enhancing the likelihood of conversion. By continuously learning from user behaviour, GenAI systems can adjust targeting parameters and creative elements to align with evolving consumer preferences. For example, Meta's Advantage+ utilises AI to dynamically adjust ad delivery based on user engagement, ensuring that the most relevant ads are shown to each individual ²⁹⁰. Similarly, Google's Performance Max campaigns leverage Machine Learning (ML) to optimise ad placements across various channels, such as Search, Display, YouTube, and Gmail, in real-time, maximising conversion opportunities²⁹¹.

• **Performance reporting:** Integration of GenAI allows for more advanced performance analysis, offering advertisers granular and actionable insights into campaign effectiveness. For example, Google's 2025 update to Performance Max introduces several AI-powered enhancements that strengthen reporting transparency, control, and strategic feedback loops²⁹². Furthermore, advertisers would be able to access granular metrics such as clicks, cost, impressions, conversion value/cost and average CPC²⁹³. This empowers advertisers to quickly iterate on underperforming assets without overhauling entire campaigns.

Aside from ad intermediaries integrating GenAi into their products, ad publishers have also started utilising GenAI, primarily to improve internal efficiencies in areas such as content creation, audience engagement, and operations. For example, Media Prima Group's Berita Harian adopted AI tools to convert written news articles into video formats, enabling more

Meta (2024). About Advantage+ audience. https://www.facebook.com/business/help/273363992030035?id=1629569087788063

Parameter (2024). Mastering Google Ads: Effective Use of Performance Max Campaigns. https://medium.com/%40swiftpropel/mastering-google-ads-effective-use-of-performance-max-campaigns-46bc0be7aff9

²⁹² BrightBid (2025). Mastering performance max: A deep dive into 2025 analysis & optimization. https://brightbid.com/blog/how-to-analyze-performance-max-campaigns/

²⁹³ Google (2025). Channel performance and more reporting coming to Performance Max. https://blog.google/products/ads-commerce/channel-performance-reporting-coming-to-performance-max/

dynamic content delivery²⁹⁴. Similarly, Astro has embraced GenAI for news innovation, launching the country's first Chinese-language news programme hosted by an AI avatar ²⁹⁵. Meanwhile, Star Media Group partnered with Antsomi to implement the Customer Data Platform (CDP) 365 platform, using AI-driven personalisation to integrate first-party data and enhance content recommendations and targeted marketing strategies²⁹⁶.

5.1.8.2 Emergence of retail media networks (RMNs)

RMNs are emerging as a key growth segment within the digital advertising industry, driven by the convergence of commerce and media. At their core, RMNs allow retailers to monetise their digital and physical assets by offering ad inventory to brands and third-party advertisers. RMNs provide advertisers with access to high-intent shoppers within a closed-loop environment, where ads are delivered near or within the point of purchase, and performance can be directly linked to sales outcomes²⁹⁷.

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²⁹⁴ New Straits Times (2024). Media Prima to integrate AI tech across all its companies by year-end:

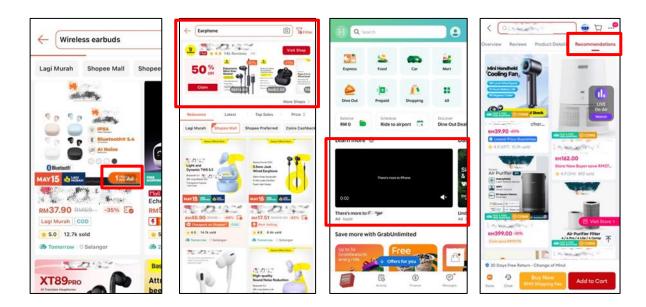
https://www.nst.com.my/business/corporate/2024/10/1113426/media-prima-integrate-ai-tech-across-all-its-companies-year-end

²⁹⁵ Astro (2024). Astro AEC: Al news flash. https://astromedia.com.my/ai-news-flash/

²⁹⁶ Marketing Interactive (2025). Star Media Group partners Antsomi to enhance customer data strategy. https://www.marketing-interactive.com/star-media-group-partners-antsomi-to-enhance-customer-data-strategy

Medium (2024). Introduction to retail media networks. https://medium.com/@EchoMedia/introduction-to-retail-media-networks-5029ac8d58c9

Figure 56: Digital ads on RMNs



Sponsored listing

Keyword-based search ads

Display placements

Sponsored discovery

Source: Shopee, Grab, Lazada

The shift toward RMNs is driven by structural changes in the digital advertising ecosystem, particularly the erosion of third-party data and broader signal loss across mobile and web platforms. With tightening privacy regulations (e.g. Google's General Data Protection Regulation and Apple's App Tracking Transparency - ATT) and deprecation of cookies, advertisers are likely to be increasingly constrained in their ability to target and measure performance through traditional programmatic channels. In this context, RMNs offer an alternative by providing access to rich first-party data within closed ecosystems. This has enabled more deterministic targeting, real-time performance attribution, and direct proximity to the point of purchase.

Unlike social or display ad networks, RMNs can tie ad exposure directly to transactional outcomes, thus providing advertisers with a more accountable and outcome-based media investment²⁹⁸. Retailers, in turn, are capitalising on this shift by repackaging their shopper data and owned

²⁹⁸ MDM (2021). Everything is an ad network. https://mobiledevmemo.com/everything-is-an-ad-network/

media assets into high-margin advertising assets that are sold to brands and advertisers.

Global major retailers such as Walmart (U.S.), Amazon (U.S.) and Alibaba (China) have rapidly expanded their RMN capabilities by leveraging first-party transaction data, shopper behaviour insights, and omnichannel touchpoints to deliver more precise and measurable ad targeting. These networks typically include placements across onsite (e.g. sponsored listings, display ads), offsite (e.g. programmatic ads, social media), and instore assets (e.g. screens, kiosks). Key examples include:

- Amazon Ads: The largest retail media network in the United States, capturing 75.2% of RMN market share as of 2023 ²⁹⁹. Amazon's competitive advantage lies in its extensive ecosystem of consumer touchpoints, including Amazon.com, Alexa, Fire TV, and Twitch, through which it collects first-party data encompassing shopper profiles, product search behaviour, and transaction history. This allows for granular ad targeting across the purchase funnel. Its advertising portfolio includes a wide range of formats such as sponsored products, sponsored brands, sponsored display, streaming TV ads, and audio placements³⁰⁰. By embedding these ad units natively within its platform and integrating them with a closed-loop attribution system, Amazon enables advertisers to directly link media spend to conversions, reinforcing its position as a performance-driven alternative to traditional digital advertising channels.
- Walmart Connect: Walmart leveraging its extensive U.S. customer base and first-party shopping data to offer targeted advertising solutions across its omnichannel retail ecosystem. Its ability to monetise consumer intent data gathered across millions of in-stores and online transactions. This enables advertisers to target high-intent shoppers through a range of ad formats embedded directly within the purchase journey. Walmart Connect's ad inventory spans multiple touchpoints,

https://advertising.amazon.com/blog/retail-media-networks

278

²⁹⁹ Emarketer (2023). The power of Amazon's advertising: The retail media network maintains its dominance amid mounting https://www.emarketer.com/content/power-of-amazon-s-advertising-retail-medianetwork-pioneer-maintains-its-dominance-amid-mounting-competition (2025).media Amazon Α guide to retail networks.

including sponsored product search, onsite display ads, curated brand shops and digital shelves, as well as offsite media placements via programmatic and social channels powered by Walmart's data³⁰¹.

• Alibaba: Alimama (Alibaba Group's monetisation platform) facilitates highly targeted ad placements that are natively embedded across key consumer touchpoints. This allows brands to promote products directly within the shopping environment, including on search result pages, recommendation feeds, and product detail sections. Through Alimama, merchants and advertisers are able to optimise exposure and drive conversion by aligning ad placements closely with consumers' purchase intent within retail platforms such as Taobao and Tmall 302.

In Malaysia, the RMN landscape remains at a nascent stage, gaining traction as leading digital marketplaces begin formalising their ad offerings. E-commerce marketplaces such as Lazada and Shopee have introduced RMN features through Lazada Sponsored Solutions and Shopee Ads, offering brands self-serve sponsored listings, sponsored discovery, keyword-based search ads, and display placements embedded within the shopping journey. Vertical-specific networks are also emerging as Grab has expanded its RMN by partnering with Jaya Grocer, integrating GrabAds with in-store, online, and delivery touchpoints ³⁰³. This omnichannel approach enables brands to activate campaigns that influence consumers at multiple stages and across Grab's ecosystem, including ride-hailing, food delivery, and instant retail.

5.1.8.3 Implications on competition

The integration of GenAI into digital advertising offerings is reinforcing the dominance of major players like Google and Meta. As GenAI models improve through access to vast behavioural datasets, these platforms benefit from compounding performance advantages that smaller

301 Walmart (2025). Walmart Connect. https://www.walmartconnect.com/

³⁰² Alibaba (2018). Simplifying marketing with AI: Introducing Alimama's new ad tech. https://www.alibabacloud.com/blog/simplifying-marketing-with-ai-introducing-alimamas-new-ad-tech_594221

³⁰³ Marketing Magazine (2024). Grab and Jaya Grocer Elevate Retail Media Advertising in Malaysia Through O2O Integration. https://marketingmagazine.com.my/grab-and-jaya-grocer-elevate-retail-media-advertising-in-malaysia-through-o2o-integration

competitors and third-party tools struggle to match. This also inevitably increases the barrier of entry for new entrants to the digital advertising space.

Furthermore, advertisers would increasingly depend on platform-native AI features such as Meta's Advantage+ and Google's Performance Max due to its easy access and operability, resulting in higher switching costs and diminishing incentives to diversify ad spend across channels.

Moreover, the transparency of GenAI optimisation processes raises growing concerns. These systems operate through proprietary machine learning algorithms that offer limited visibility to advertisers. As campaign outcomes are driven by automated decision-making with minimal manual inputs, advertisers face challenges in interpreting performance drivers or validating audience reach, further entrenching their reliance on platform ecosystems without clear mechanisms for accountability or transparency.

Separately, as RMNs gain traction in Malaysia, particularly through platforms like GrabAds and Shopee, early-stage market development may obscure emerging anti-competitive risks. A key concern is self-preferencing, where platform operators that also sell their own products may prioritise ad visibility for in-house brands over third-party advertisers. This could manifest in preferential placements within search results or homepage features, limiting fair access for independent merchants and undermining competition in high-traffic retail categories.

Another potential issue lies in the exclusive control of first-party shopper data. RMN operators leverage proprietary consumer behaviour insights to offer targeted advertising, creating a closed ecosystem that disadvantages external publishers or smaller platforms lacking equivalent data. As advertiser reliance on RMNs increases, this data asymmetry may reduce overall market transparency and increase concentration of ad spend within a few dominant platforms, potentially stifling diversity and innovation in Malaysia's digital advertising landscape.

5.1.9 Key players and level of competition

5.1.9.1 Key players along the supply chain

(a) Advertiser key players

In Q2 2024, MAA reported on the split between digital advertising expenditure share among industry players as follows:

100% 19% 19% 17% 9% 9% 7% 20% Tech & Food & Total Personal Shops **Automotive** Finance & Others* **Electronics Beverage** Care **Banking** * Including travel & tours, pharmaceuticals, housing, clothing, household care, education, health & wellness, and others

Figure 57: Digital advertising expenditure share by industry, Q2 2024 [%]³⁰⁴

Source: MAA

The data collected above is an estimate of the Malaysian digital advertising market from all players. This estimation is based on the methodology outlined in the Malaysia Digital Advertising Expenditure (ADEX) Report for Q2 2024, which states that the 21 participating media agencies account for about ~60% of the total digital advertising expenditure in Malaysia. To estimate the remaining total market size, an additional ~40% is added to account for the untracked portion of ad spend, which is a large portion and primarily attributed to MSMEs' informal and unsophisticated participation

MAA (2024). Malaysian Digital Adex report for Q2, 2024, page 1. https://www.malaysiaadvertisers.com.my/wp-content/uploads/MALAYSIAN-DIGITAL-ADEX-REPORT_Q2-2024.pdf

in the advertising market through social media due to the higher cost and knowledge required to properly participate in other more formal advertising channels.

In Q2 2024, Tech & electronics, food & beverage, and personal care continue to be the top industry spenders when it comes to utilising digital advertisements in the Malaysian market. Example key players that are active in the online digital advertising marketplace in Malaysia are as the following table:

Figure 58: Digital advertiser players in Malaysia by industries (nonexhaustive)



Source: MyCC analysis

(b) Ad agency key players

Majority of advertising agencies that operate in Malaysia are through larger enterprises, who have the financial capabilities to procure these services and MNCs through their regional offices due to existing contracts from their headquarters or base of origin. Examples of key players globally are as shown in the following table. Majority of these ad agencies are conglomerates or a group of companies, with subsidiaries strategically located in countries where their expertise is required.

Table 16: Global ad agency key players

Companies	Focus areas	Subsidiaries in Malaysia	2023 Revenue [USD billion]*
WPP	Specialising in media planning and buying, data analytics, and creative services	₩ vwr.ver group mogilvy	18.5
Omnicom Group	Strong emphasis on digital and data-driven marketing	nogaddb tribal	14.7
PUBLICIS GROUPE	Offers advertising, media planning and buying, digital marketing, data analytics and consulting services	Lo Gunet Starcom	16.0
IFG	Specialises in public relations and specialty communications	McCANN Initiative	9.4
dentsu	Specialises in advertising, marketing, and public relations especially in creative services, data analytics, and customer experience management	dentsu X CARAT	9.3
HAVAS	Provides integrated services in advertising, digital marketing, public relations and communication		2.5
S4 CAPITAL	Focuses on digital content creation, data analytics, and media planning and buying with emphasis on tech-driven marketing solutions	.monks	1.3
* Global revenues			

Source: MyCC analysis

(c) Intermediary key players

Historically, the top technology companies such as Google and Meta dominate the ad tech intermediary scene due to their vertically integrated nature of owning publishing and social media sites. However, Meta plays a more limited role than Google in the open ad tech supply chain by primarily operates a closed system (Ads Manager), with only minor involvement via Audience Network³⁰⁵.

Other ad exchanges do exist but are competing for a small portion of the market by differentiating themselves and offering more unique and tailored services for their advertiser or publisher clients, separating themselves from directly competing with the more dominant players. The following are key players that are used by Malaysia advertisers.

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³⁰⁵ Written input from industry players.

Table 17: Ad tech intermediary key players³⁰⁶

Companies	Focus areas	2023 Revenue [USD billion]**
Google	Comprehensive advertising platform via Google Ads and Google Ad manager across search, display, video, and mobile platforms*	307.4
∞ Meta	Specialises in social media advertising via its existing platforms Facebook, Instagram, Whatsapp and Messenger*	134.9
theTradeDesk	Caters more strongly towards demand-side patforms (DSP), enabling advertisers to purchase digital ad across various channels	1.9
Magnite	Leading SSP that helps publishers monetise ad inventory across multiple formats, especially access to premium inventory	0.6
Teads	Specialises in video advertising, providing innovative ad formats and premium inventory between advertisers and publishers	n/a
	Includes demand-side platforms (DSP) Xandr Invest and supply-side platforms (SSP) Xandr Monetise to facilitate ad transactions across digital, TV, and video channels	n/a
nexxən	Specialises in programmatic video advertising via its ad network / exchanges Amobee and Unruly, ensuring more precise targeting for video-centric campaigns	0.3
Tab@la	Has expertise in native advertising, helping publishers monetise content through perosnalised content recommendations	1.4
nnity	Prominent in Asia-Pacific, including Malaysia. Operates programmatic ad transactions for most ad formats and leverages its local market knowledge	0.03
⊚utbrain	Specialises in native advertising with a focus on content discovery and recommendation. It also has robust analytics and optimisation tools	0.9
* Involved in multiple segm ** Global revenues from C	nents of the digital advertising value chain capital IQ	

Source: MyCC analysis

(d) Data service provider/data management platforms key players

Data service providers/data management platforms are often used by larger enterprises or MNCs due to their sufficient financial capabilities, which is what enables them to continue maintaining their market position due to better audience understanding and targeting efforts compared to smaller advertisers. As a result, most of the international data service providers and data management platforms are international firms.

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³⁰⁶ Capital IQ.

On the other hand, smaller advertisers may resort to Google and Meta, which is more accessible due to their web-based analytics platform Google Analytics and Audience Insights, being integrated with their other advertising applications, making it more accessible to smaller advertisers who utilise these platforms. Some of the key players in space are in the following table.

Table 18: Data service provider/data management platform key players

Companies	Focus areas	2023 Revenue [USD billion]**		
Google	Integrated web analytics platform via Google Analytics 360 focusing on use behaviour and website traffic, especially search and video*	282.8		
∞ Meta	Within Meta Audience Insights, provides user interaction, engagement, and retention metrics on all Meta apps for optimized marketing and targeting*	116.6		
Adobe	Digital marketing and media performance analytics via Adobe Audience Manager*	19.4		
◆ Nielsen	Audience measurement across TV, radio, digital, and mobile platforms	n/a		
KANTAR	Media monitoring, evaluation, and consumer insights	n/a		
Ipsos	Media, content, and technology research with audience measurement and media consumption specialization	2.53		
Circana.	Consumer / retail market data analytics, with media measurement and optimization tools	n/a		
* Involved in multiple segments of the digital advertising value chain ** Global revenues from Capital IQ				

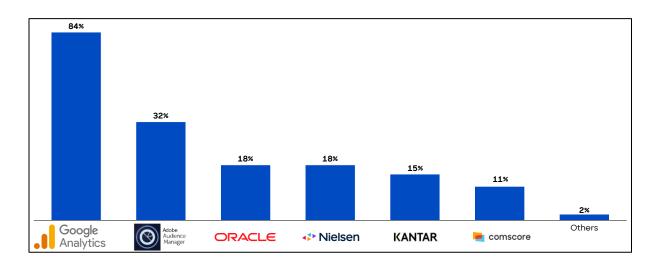
Source: MyCC analysis

MyCC's survey shows that Google Analytics dominates as the preferred data management platform (84%), followed by Adobe Audience Manager (32%), while traditional providers like Nielsen, Oracle, and Kantar each hold between 15% to 18% usage, and Comscore is used by 11%. This reflects a strong preference for global platforms integrated with popular digital ecosystems, alongside continued but smaller reliance on traditional data providers³⁰⁷.

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³⁰⁷ MyCC's survey.

Figure 59: Preferred data management platforms and service providers for digital advertising campaigns



Source: MyCC's survey

(e) Key publishers

Social and video make up the majority at ~66% of digital advertising spend in Malaysia in 2023, followed by display, native, search, audio, and others. This is in line with industry sentiment and consumers' growing trends in increased screen time towards social media and video sharing apps on mobile platforms. Below is the breakdown of digital advertising by publishing format.

100% 44%

26%

7%

7%

2%

0%

Total Social Video Display Search Native Others Audio

Figure 60: Split of digital advertising by publishing formats, Q2 2024 [%]308

Source: MAA

In Malaysia, as in much of the world, social media and video platforms are dominated by major players such as Google, Meta, and TikTok. Each targets a different segment of the market:

- Google ads target a broad demographic including professionals and older users, with users often showing strong purchase intent, especially via Search. It supports diverse ad formats (text, video, responsive display) and offers detailed keyword, demographic, and location targeting. Advertisers benefit from analytics integration (Google Analytics). While CPC and CPM can be relatively high, the platform can be effective for conversion-focused campaigns. Google's bidding algorithms use factors such as keyword relevance and quality score to optimise performance. Available campaign features include real-time reporting, A/B testing, retargeting, and audience segmentation³⁰⁹.
- Meta (Facebook) ads reach an older, more affluent demographic (Baby Boomers, Gen X) as younger users migrate to TikTok and

³⁰⁸ MAA (2024). Malaysian Digital Adex report for Q2, 2024, page 1. https://www.malaysiaadvertisers.com.my/wp-content/uploads/MALAYSIAN-DIGITAL-ADEX-REPORT_Q2-2024.pdf

³⁰⁹ Upbeat (2023). Google ads vs TikTok ads - the digital marketing showdown. https://upbeatagency.com/tiktok-ads-vs-google-ads/

Instagram. Advertisers must use a business account and tools like Facebook Pixel for tracking. Although costs (CPC/CPM) have risen, ROI remains the primary factor guiding advertisers' platform choices³¹⁰. The AI-driven algorithm optimises ad delivery by rotating high-performing ads. Recent privacy changes, such as Apple's iOS updates and GDPR, have limited third-party tracking, leading to increased reliance on first-party data and server-side tracking solutions like Aggregated Event Measurement (AEM). The platform supports scalable campaign management, offering tools for audience targeting, A/B testing, and performance monitoring. While rising competition and costs have impacted advertising efficiency, Meta continues to be a popular ad platform for small and large businesses³¹¹.

• **TikTok ads** primarily engage a younger audience, Gen Z and millennials, with high interaction on short-form, full-screen mobile videos. It favours top-funnel marketing (awareness and interest) using formats like In-Feed and Top View Ads. Costs (CPM) are generally lower, but ROI depends heavily on creative quality and virality. TikTok's algorithm promotes viral content based on engagement rather than followers. It offers interest- and behaviour-based targeting³¹².

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³¹⁰ Input from industry players.

³¹¹ Latitude Park (2025). Why Meta advertising costs are increasing in 2025 (and what you can do about it). https://latitudepark.com/why-meta-advertising-costs-are-increasing-in-2025/

³¹² Upbeat (2023). Google ads vs TikTok ads - the digital marketing showdown. https://upbeatagency.com/tiktok-ads-vs-google-ads/

Figure 61: Overview of publishing players by ad publishing formats³¹³

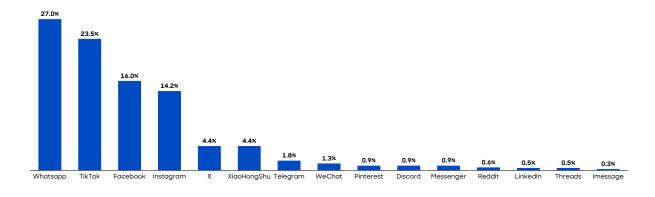
Ad formats	Companies
Social	
Video	▶YouTube to∩to∩▶ >vi∪ iQ Y 爱奇艺
Display	malaysiakini news and views that matter
Native	SAYS 🙀 😋 lowyat.net
Search	Google yahoo!
Audio	Spotify JOX
Others	Affiliate marketing, emails, forum seeding etc.

Source: MyCC analysis

Further details into the top four ad formats are detailed below:

I. Key social publishers

Figure 62: Preferred social media platforms in Malaysia, Feb 2025 [%]314



Source: Meltwater

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³¹³ MAA (2024). Malaysian Digital Adex report for Q2, 2024, page 1. https://www.malaysiaadvertisers.com.my/wp-content/uploads/MALAYSIAN-DIGITAL-ADEX-REPORT_Q2-2024.pdf

Data reportal (2025). Digital 2025: Malaysia, page 90. https://datareportal.com/reports/digital-2025-malaysia.

In social media usage, WhatsApp emerges as the most used social media platform, followed by TikTok, Facebook, and Instagram as of February 2025. Other platforms like X (formerly Twitter), Xiaohongshu, Telegram, and WeChat attract smaller user bases, while platforms such as Discord, Messenger, Reddit, and LinkedIn see limited engagement. This distribution reflects a clear preference for messaging and short-form video platforms among users. For advertisers, social media platform choice is primarily influenced by cost, budget constraints, and the ability to reach targeted audiences. While most publishers platforms offer support such as performance analytics and creative guidance, advertisers also assess value based on reach, predictability, and engagement.

Despite the strong dominance of Meta (encompassing Facebook and Instagram) in the social media landscape, the overall dynamics of market competition remain fluid, with numerous new platforms emerging rapidly. As of 2021, TikTok³¹⁵ achieved a milestone by amassing one billion monthly active users just five years after its launch in 2016. This growth trajectory starkly contrasts with that of established players: Facebook reached a similar user base in approximately 8.7 years, YouTube in about 8.1 years, and Instagram in 7.7 years³¹⁶.

II. Key video publishers

Video in Malaysia is largely dominated by Google (via YouTube) due to it being one of the first movers in the online video sharing platform. Adjacent players like over-the-top (OTT) platforms such as Viu, TonTon, WeTV, and iQIYI have adopted advertisement-supported streaming services which also takes up some market share in this space. Overall, this segment mostly sees international players with a presence in Malaysia.

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³¹⁵ Not tracked by StatCounter.

³¹⁶ Axios (2021). TikTok hits 1 billion users. https://www.axios.com/2021/09/28/tiktok-hits-1-billion-users

Table 19: Key players in the OTT video segment

Companies	Focus areas	2023 Revenue [USD b]*
► YouTube	Focus on high engagement through user-generated content, targeted advertising and more interactive videos	31.5
tonton	Emphasises localised content for Malaysian audience with a combination of ad-supported videos and exclusive access to Media Prima's shows	n/a
⊗viu	Primarily hosts Asian dramas and variety shows, also caters for localized ads for Southeast Asia audience	0.3*
◯ WeTV	Provides a wide range of Asian content, including some interactive ads and localised content for Malaysian viewers especially with its iflix acquisition previously	7.3**
iQIYI爱奇艺	Specialises in Chinese dramas and similar ad-supported business models as the other OTT players in Viu and WeTV	0.9*
	om company annual report's OTT revenue segment (advertising where applicable om company annual report's Online Advertising revenue segment)

Source: Secondary research

III. Key display publishers

In the Malaysian market, the display advertising landscape is dominated by three major players: Star Media Group, Media Prima Berhad, and Astro Malaysia Holdings. These legacy service providers have successfully transitioned from traditional print and TV media into digital platforms, continuously integrating digital advertising opportunities. Additionally, smaller publishing groups and niche players focusing on regional, language-specific, and specialised content also contribute to the market. Overall, most of these companies leverage their established customer bases and local presence to maintain strong engagement with the Malaysian audience.

In Malaysia, global platforms like Google and Meta operate alongside local players such as Astro Malaysia Holdings, Media Prima Berhad, and Star Media Group within the broader advertising market. While local advertisers may prefer domestic media due to easier interaction and a better understanding of local preferences, these players have yet to fully substitute the role of global platforms. Survey data reflects this trend: Meta

is the most used advertising platform, well ahead of TikTok and Google. In contrast, traditional local media platforms see significantly lower usage by advertisers, with Media Prima at 16%, Star Media at 12%, Astro Media at 11%, and just 3% selecting other platforms³¹⁷. Local media reportedly lose up to MYR 2 billion in ad revenue annually, underlining the challenge³¹⁸. Astro, for instance, reported MYR 126 million in ad revenue in Q4 FY2023, with only 2% from digital ads³¹⁹. Media Prima's digital revenue grew 42% from 2021 to 2023, reaching MYR 1.5 billion and capturing an estimated 22% of the local digital ad segment³²⁰. This suggests a growing digital presence among local players but also highlights the continued dominance and competitiveness for global advertising platforms in Malaysia.

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³¹⁷ MyCC's survey.

³¹⁸ New Straits Times (2023). Local media loses RM2 bln advertisement revenue annually to Meta, Google and TikTok. https://www.nst.com.my/business/corporate/2023/12/990695/local-media-loses-rm2-bln-advertisement-revenue-annually-meta

Malay Mail (2023). Astro Malaysia FY2023 net profit falls to RM259m. https://www.malaymail.com/news/money/2023/03/27/astro-malaysia-fy2023-net-profit-falls-to-rm259m/61807

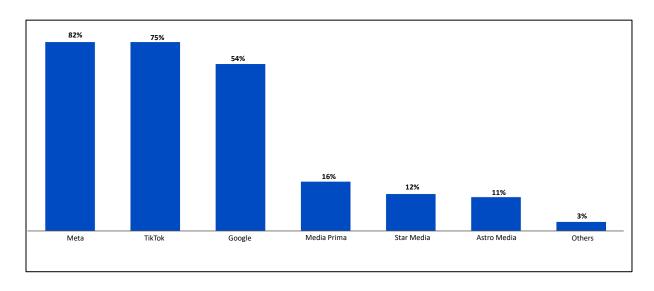
³²⁰ I3investor (2024). Media - topline remains under pressure. https://klse.i3investor.com/web/blog/detail/AmInvestResearch/2024-03-26-story-h-185530222-MEDIA_Topline_Remains_Under_Pressure

Table 20: Key players in the display publishers' segment³²¹

Companies	Focus areas	Display publishing subsidiaries	2023 Revenue [USD m]*
media prima	Focus on digital transformation, multimedia content creation, news and entertainment-based publishing	STRAITSTMES Metro	218
ATTS WILHTEN FOLINGS STRING	Emphasis is on subscription-based video streaming but has some presence in the website publishing space that cater to different demographics in Malaysia	AWANI XUQO astrou	821 ılagam
Star MEDIA GROUP	Covers comprehensive news, digital journalism, and community engagement content	The Star Majorit CärSifu Majorit	i 7 47.8 Star .versatil
世界	Focuses on delivering chinese-language news, content, cultural publications and some regional reporting	星洲 図 enange sinchew.com.my	泽
THE EDGE	Specialises in financial news, business intelligence, investment advice, and data-driven journalism	EdgeProp	15
KTS	A timber company with stake in publishing. It focuses on East Malaysia regional news, community reporting, diversified media offerings, and educational content	東方ONLINE BOTTLE Outline	n/a
Sabah Publishing House	East Malaysia based publisher also highlighting local news cultural stories of Sabah. Also attempts to promote tourism and local business through its platforms	Daily Express harianekspres	n/a
* Revenues obtain	ned from Capital IQ and company annual reports		

Source: Secondary research

Figure 63: Platforms and publishers engaged by advertisers for ad spend allocation



Source: Secondary research

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Media Pod (2023). List of digital media publishing groups in Malaysia. https://www.mediapod.co/blog/digital-media-publishing-groups-list-malaysia/

IV. Key search publishers

As of August 2024, Google holds a significant 95.3% market share in search engine usage by Malaysians, followed by Bing at 3.0%, with other platforms like Yahoo!, Yandex, and DuckDuckGo making up the remainder ³²². Google's overwhelming market share underscores its pioneering and dominant status in the search engine market, driven by its algorithms, features and integration with other Google services that are also widely adopted/used by users. In response, smaller search engines are innovating and carving out their niches.

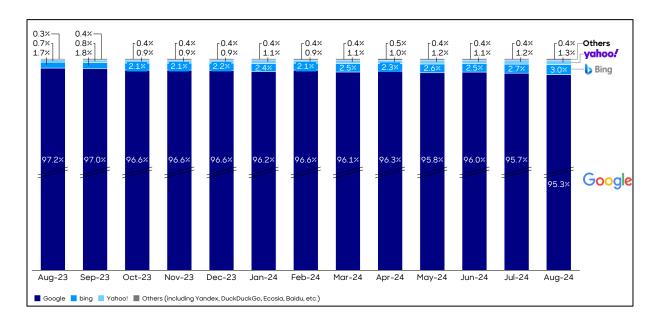
For example, Bing has introduced enhanced image and video search capabilities, leveraging AI technology such as Copilot, while DuckDuckGo focuses on privacy and user anonymity, appealing to users concerned about data security by not tracking or logging search queries. Yandex, in contrast, offers a geo-targeted search experience tailored to users' locations. Although they all compete in search advertising, they appeal to different target audiences such as those who don't mind personalised ads at the expense of their data getting tracked (e.g., Bing or Google etc.), those who want privacy but less personalised ads (e.g., DuckDuckGo etc.) or those who want ads specialised to specific locations or regions (e.g., Yandex for Russia, and Baidu for China etc.).

The overwhelming dominance creates a competitive environment where advertisers are heavily reliant on Google's platform, driving up competition among advertisers to secure visibility and optimise their bids for ad placements.

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StatCounter (2024). Search engine market share Malaysia. https://gs.statcounter.com/search-engine-market-share/all/malaysia

Figure 64 : Search engine market share in Malaysia, August 2022 - August 2023 [%]



Source: StatCounter

5.1.9.2 Key digital advertising players

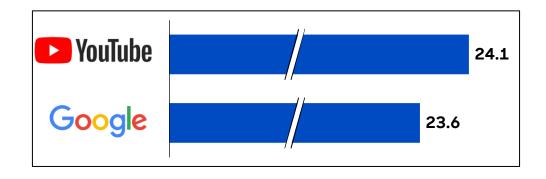
In Malaysia, the digital advertising market features a significant presence of Google and Meta, particularly among SMEs that rely on these platforms for reach and business tools. Any disruption, such as regulatory intervention affecting Meta, could potentially impact SME access to commonly used advertising tools. Growth of alternatives such as TikTok and Grab has been gradual, with limited scale compared to the leading players. Both Google and Meta do not charge technology fees, allowing full budget allocation to media spend. However, fund flow and cost transparency remain key challenges for advertisers. Google offers broader data coverage across its platforms, while Meta provides more psychographic and interest-based audience targeting.

a. Google

Founded in 1998 as a search engine, the company has since transformed into a versatile technology leader. It is renowned for products like Android and Google Chrome, as well as services such as Google Maps and YouTube. In the digital advertising ecosystem, Google plays a pivotal role

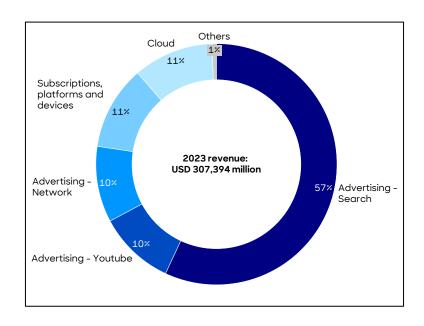
by connecting consumers, advertisers and content creators. Consumers interact with content through Google's platforms, while advertisers leverage Google's extensive data to target specific audiences. Content creators, e.g., on YouTube, produce engaging material that attracts viewers.

Figure 65: Number of Malaysian YouTube and Google users, 2024 [million]



Source: Data Reportal

Figure 66: Alphabet Inc.'s (Google) global revenue breakdown, 2023 [%]324



Source: Alphabet Inc.

³²³ DataReportal (2024). Digital 2024: Malaysia. https://datareportal.com/reports/digital-2024-malaysia

³²⁴ Alphabet Inc. (2023). Form 10-K, page 35. https://abc.xyz/assets/43/44/675b83d7455885c4615d848d52a4/goog-10-k-2023.pdf

Google's revenue model is heavily reliant on digital advertising, with approximately 77% of its earnings stemming from this segment in 2023. Other sources of revenue for Google include subscriptions and platforms (10%), cloud services (10%) and miscellaneous income (1%).

Its primary advertising type is search advertising, where advertisers bid for placements on search results pages, effectively targeting users based on their search intent. Google's services in the ad tech supply chain encompass a range of tools: Google Ads enables advertisers to manage campaigns; Google AdSense allows publishers to monetise content; and the Google Display Network extends display advertising across millions of websites. YouTube serves as a platform for video advertising, while Google Analytics offers insights into campaign performance.

This is complemented by display advertising across the Google Display Network, video ads on YouTube and various ad formats on other platforms like Gmail and Google Maps. The company's browser application (Chrome) plays a critical role in driving traffic and engagement within its ecosystem, contributing to its dominance in the search advertising market.

Table 21: Ad related services offered by Google

Google Ads Service	Role	Integration	Offers to Businesses	Offers to Consumers
Search Ads	Targets users based on search intent via keyword bidding.	Integrated with Google Search and Google Analytics for conversion tracking	High-intent leads, better ROI, measurable campaign success.	Relevant product/service results when actively searching.
Display Ads	Shows image and banner ads across the Google Display Network (GDN).	Works with AdSense for publisher placements and Google Analytics for	Brand awareness, retargeting potential, reaches across	Discover new brands and products while browsing.

Google Ads Service	Role	Integration	Offers to Businesses	Offers to Consumers
		performance tracking.	millions of sites.	
Shopping Ads	Displays product listings with images and pricing in search results.	Integrated with Google Merchant Center and Google Analytics for sales tracking.	Direct product visibility, competitive positioning, increased conversions.	See product details instantly in search, compare options easily.
Video Ads (YouTube)	Serves video- based advertisements before, during, or after videos.	Integrated with YouTube and Google Ads for precise audience targeting.	Engaging storytelling, massive reach on YouTube, better user engagement.	Relevant ads based on interests, non- intrusive skippable ad options.
Gmail Ads	Displays interactive ads within Gmail inboxes.	Integrated with Google Ads audience targeting and Gmail interface.	Personalised direct engagement, high open rates, effective for remarketing.	Relevant promotions in inbox, engaging ad format within emails.
Google Maps Ads	Shows location-based ads in Google Maps search results.	Integrated with Google My Business and Google Ads location extensions.	Drives foot traffic to stores, enhances local business visibility.	Easily find nearby businesses and special offers.

Source: Google

Google's dominance in search advertising is significantly bolstered by strategic partnerships through Google's Partners program³²⁵. This initiative is designed for advertising agencies and third parties that manage Google Ads accounts on behalf of other brands or businesses. By collaborating with these partners, Google extends its reach and enhances the effectiveness of its advertising services. The Google Partners directory lists companies with Premier Partner or Partner status, providing businesses with access to advertising experts who can optimise their campaigns. These partnerships enable Google to maintain a strong presence in the advertising ecosystem, ensuring that its services are effectively utilised across various industries and markets. Through these collaborations, Google not only broadens its advertising network but also ensures that its tools and platforms are leveraged to their fullest potential, reinforcing its leadership in the search advertising market.

More importantly, its first-mover advantage in the search engine market allowed it to build a comprehensive search index early and accumulate vast amounts of click and query data, providing a significant head start in delivering highly relevant and accurate search results. This strength is further amplified by leveraging extensive user data from its broad ecosystem, including Search, YouTube, Maps, and Android. The integration of data across these platforms enables more precise audience targeting by combining user intent signals from multiple touchpoints. Additionally, key services like YouTube come pre-installed on Android devices under the MADA agreement, granting Google a strategic advantage over competitors by ensuring greater user reach and engagement.

In addition to its owned inventory, Google offers third-party ad tech solutions through tools like Google Ad Manager and AdMob, allowing publishers to manage, auction and monetise their digital ad spaces, either through direct deals or open auctions. It is also expanding its AI-powered ad solutions to assist advertisers in creating dynamic creatives, identifying optimal audiences, and automating campaign performance across formats³²⁶.

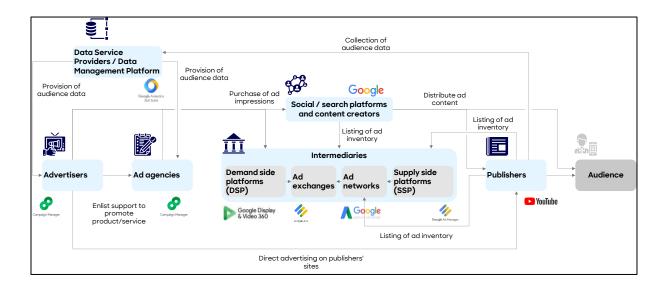
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Google Partners Directory (2025). Partners directory. https://partnersdirectory.withgoogle.com/intl/en-gb/

³²⁶ Written input from industry players.

I. Google's companies in digital advertising

Figure 67: Google's involvement in the entire digital advertising services supply chain (not exhaustive)



Source: MyCC analysis

Google has strategically strengthened its presences in the digital advertising sector through acquisitions, vertical integration and leveraging its vast data advantage. Part of Google's strategy is by acquisition and thereafter owning multiple components of the ad tech supply chain. Google creates an ecosystem that streamlines the advertising processes. Google's vertical integration benefits advertisers by offering a seamless, cost-efficient solution. Publishers benefit from Google's automated optimisation tools, which help maximise ad revenue through premium advertiser access. Some advertisers find using Google's ad network beneficial as it lowers their cost of operation, providing an all-in-one platform for ad placement, targeting, and performance tracking³²⁷.

A key component of Google's strategy is its series of acquisitions, which have expanded its reach across digital advertising industry. The following are some of Google's major acquisitions related to digital advertising.

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³²⁷ Input from IDI.

Table 22: Google's major acquisitions related to digital advertising

Acquired company	Description	Year of acquisition	Acquisition price	Supply Chain Category
Applied Semantics	Online advertising	2003	\$102 million ³²⁸	Ad Network
dMarc Broadcasti ng	Radio advertising company	2006	\$102 million ³²⁹	Ad Network
YouTube	Video-sharing platform allowing users to upload, view, and share videos	2006	\$1.65 billion ³³⁰	Social platform
DoubleClic k	Online adserving and reporting platform.	2008	\$3.1 billion ³³¹	Ad Exchange
AdMob	Mobile advertising network specializing in in-app ads	2009	\$750 million ³³²	Ad Networks

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Digiday (2013). Today in history: Google buys Applied Semantics. https://digiday.com/media/today-in-history-google-buys-applied-semantics/

³²⁹ Information Week (2006). Google acquires dMarc Radio for \$102 million. https://www.informationweek.com/it-leadership/google-acquires-dmarc-radio-for-102-million

³³⁰ The New York Times (2020). This deal helped turn Google into an ad powerhouse. Is that a problem? https://www.nytimes.com/2020/09/21/technology/google-doubleclick-antitrust-ads.html

³³¹ The New York Times (2020). This deal helped turn Google into an ad powerhouse. Is that a problem? https://www.nytimes.com/2020/09/21/technology/google-doubleclick-antitrust-ads.html

Quartz (2022). The acquisitions that made Google a search monopoly. https://qz.com/1920334/the-acquisitions-that-built-googles-monopoly-on-search

Acquired company	Description	Year of acquisition	Acquisition price	Supply Chain
				Category
Teracent	Online ad- advertising company offering real- time ad customization	2009	Undisclosed 333	Ad Network
Invite Media	Demand-side platform enabling programmatic ad buying.	2019	\$70 million ³³⁴	Demand side platforms
AdMeld	Supply-side platform assisting publishers in optimising ad sales.	2011	\$400 million ³³⁵	Supply side platforms
Adometry	A marketing analytics and attribution firm that provides cross-channel analysis to help advertisers measure and optimise their ROI.	2014	Undisclosed ³³⁶	Ad Network

³³³ TechCrunch (2009). Google acquires Teracent to apply machine smarts to display ads. https://techcrunch.com/2009/11/23/google-acquires-teracent-to-apply-machine-smarts-to-display-ads/

³³⁴ Search Engine Land (2010). Report: Google buys Invite Media, optimization and media buying platform for ad exchanges. https://searchengineland.com/report-google-buysinvite-media-optimization-and-media-buying-platform-for-ad-exchanges-43414 335 AdExchanger (2011).Industry reaction: Google buys Admeld. https://www.adexchanger.com/ad-exchange-news/reaction-google-buys-admeld/ AdExchanger (2011). Industry reaction: Google buys Admeld. https://www.adexchanger.com/ad-exchange-news/reaction-google-buys-admeld/

Acquired company	Description	Year of acquisition	Acquisition price	Supply Chain
			·	Category
mDialog	A video	Undisclose	Undisclosed	Supply side
	advertising	d	337	platform
	company			
	focusing on			
	dynamic ad			
	insertion for			
	streaming			
	content,			
	enhancing video			
	monetisation			
	strategies.			

Source: Secondary research

Although there is strong competition from major platforms offering closed advertising ecosystems ("walled gardens") as well as direct sales channels and self-service tools used by publishers, Google's acquisitions have nonetheless allowed it to consolidate its influence and maintain a dominant position. Its acquisition strategy in digital advertising follows a trend of building a broad presence across key segments of the ad supply chain, including ad networks, DSPs, SSPs, and ad exchanges.

Google's early acquisitions focused on expanding its ad network capabilities, such as Applied Semantics, which laid the foundation for AdSense, dMarc Broadcasting for radio advertising, AdMob for mobile ads, and Teracent for real-time ad customization. To enhance its offerings on the advertiser side, Google acquired Invite Media, a DSP that enabled programmatic ad buying across multiple exchanges. On the publisher side, Google broadened its capabilities by acquiring AdMeld, an SSP that optimised ad inventory management for publishers. However, the most impactful move was the acquisition of DoubleClick, which positioned Google as a major player in ad transactions by providing an industry-leading ad-serving and reporting platform. By acquiring companies across

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TechCrunch (2014). Google acquires mDialog to improve DoubleClick's video advertising. https://techcrunch.com/2014/06/19/google-acquires-mdialog

all key segments of the supply chain, Google has established an integrated approach to its ad business, helping shape how digital ads are created, targeted, bought, and sold in a competitive and evolving landscape.

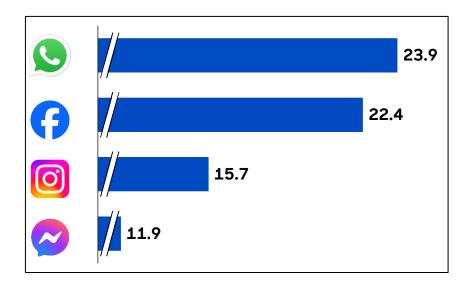
Google's prominent position in digital advertising is supported not only by its acquisition strategy and vertical integration, but also by its role in managing the auction infrastructure. Serving as both the auction operator and a participant through platforms like Google Ads and DV360, Google establishes the auction rules, runs the exchange (AdX), and places bids, which allows it to prioritise its own inventory and influence bidding dynamics. Additionally, its wide ecosystem, including Search, YouTube, Chrome, and Android, provides access to user data that supports highly targeted and optimised bids. These advantages, combined with bidding infrastructure and data access, enable Google to perform strongly in real-time auction³³⁸.

(a) Meta

Formerly known as Facebook and was initially founded as a social media platform in 2004. It has since grown to become a leading technology company, offering a suite of platforms and services, including Facebook, Instagram, WhatsApp and Messenger. The company rebranded to Meta in 2021 to reflect its focus on building the metaverse, a collective virtual shared space that merges the physical and digital worlds.

³³⁸ Srinivasan, D. (2020). Why Google Dominates Advertising Markets, page 97-99. https://law.stanford.edu/wp-content/uploads/2020/12/Srinivasan-FINAL-Why-Google-Dominates-Advertising-Markets.pdf

Figure 68: Number of Malaysian Meta users [m] 339



Source: DataReportal

Meta derives most of its revenue from advertising across its "Family of Apps," which includes (but not limited to) Facebook, Instagram, WhatsApp and Messenger. As of 2023, advertising accounted for 97.8% of Meta's total revenue, with other revenue sources contributing only 0.8% (mainly from WhatsApp Business Platform revenue, where it consists of fees received from developers using Meta's payments infrastructure and revenue from various other sources) and Reality Labs, which includes the delivery of consumer hardware and software, accounted for 1.4%³⁴⁰. In Malaysia, Meta was estimated to have earned ~ MYR 2.5 billion³⁴¹.

³³⁹ Data Reportal (2024). Digital 2024: Malaysia. https://datareportal.com/reports/digital-2024-malaysia

³⁴⁰ Meta (2024). Meta investor relations. https://investor.fb.com/financials/default.aspx ³⁴¹ New Straits Times (2024). Govt names 8 platforms that must obtain license. https://www.nst.com.my/news/nation/2024/12/1150721/govt-names-8-platforms-must-obtain-licence

Other revenue Reality Labs

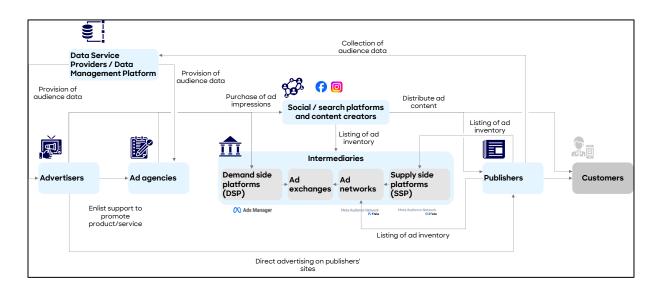
2023 revenue:
USD 134,902
million

Advertising

Figure 69: Meta's global revenue breakdown, 2023 [%]

Source: Meta

Figure 70: Meta's involvement in the entire digital advertising services supply chain



Source: MyCC analysis

In the digital advertising services supply chain, Meta offers several key services: Meta Ads Manager, a self-service tool, enables advertisers to create, manage, and optimise campaigns across Meta's platforms. While it

offers similar functionalities to a DSP, such as audience targeting and campaign optimisation, it operates exclusively on Meta's owned-and-operated properties and does not participate in bidding for third-party ad inventory like traditional DSPs.

Ad delivery is determined through a blind auction triggered whenever a user becomes eligible to see an ad. Ads are ranked based on "Total Value," which comprises the advertiser's bid, estimated action rates, and ad quality. Advertisers can set bids manually or use Meta's automated bidding tools, which include spend-based strategies (e.g., maximising reach or value) and goal-based strategies (e.g., cost-per-result or return on ad spend)³⁴².

On the other hand, Meta Audience Network extends advertising beyond Meta's own apps to partner sites and apps, contribute to approximately 2% of total ad impressions ³⁴³; and Instagram Shopping allows brands to showcase products directly within the Instagram app. MyCC's survey revealed that 75% of advertisers mostly use Meta Ads Manager to analyse and optimise their campaigns, compared to Google Analytics and other tools.

Additionally, Meta includes classified advertising options, enabling businesses to list products in the marketplace and run targeted ads based on user demographics and interests. This advertising infrastructure allows businesses to engage consumers across Meta's ecosystem while leveraging targeting capabilities and tools like Meta Business Suite to measure the effectiveness of their campaigns.

In summary, Meta Ads leverages demographic and interest-based targeting, utilising extensive user data from Facebook and Instagram. Advertisers can reach specific audiences based on age, gender, interests, and behaviours, enabling highly personalised campaigns that resonate with users on a personal level. Additionally, Meta's "lookalike audience feature" finds users who share similar traits, behaviours, and demographics with an advertiser's existing customers or leads. It then creates new audiences of users who are likely to engage with ads or

³⁴² Written input from industry players.

³⁴³ Written input from industry players.

convert, improving ad performances and driving more relevant traffic for advertisers. Meta Ads focuses on visual storytelling through engaging formats such as carousel ads, video ads, and stories. These formats are ranked based on predicted engagement³⁴⁴. It aims to capture attention and encourage interaction within social feeds which allows Meta Ads to build brand awareness through immersive visual content. In terms of performance reports, Meta Ads Manager provides detailed and customisable reports on engagement metrics and audience demographics.

Carousel

Stories

Video

Video

Summer holiday in Chaniá?

Chaniá, Entire home/apt, 3 bed... Learn More home/apt

Like Comment Share

Share

Stories

Video

Spruce up your hone

Figure 71: Example of Carousel, Story, and Video ad formats

Source: Meta

(b) TikTok

Originally known as Douyin in China, TikTok was launched by Chinese technology company ByteDance in 2016 and rapidly gained global popularity as a short-form 15 - 60 second video platform. By 2018, TikTok

³⁴⁴ Written input from industry players.

had merged with another ByteDance app, Musical.ly to consolidate its presence in the international market, including Malaysia.

In 2023, the number of Malaysian users across TikTok's digital advertising publishing platforms is ~28.7 million³⁴⁵.

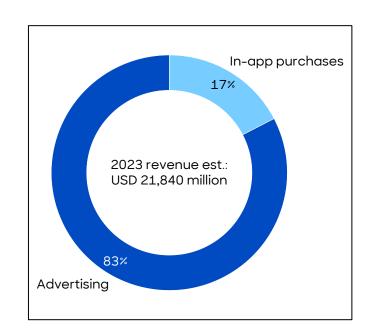


Figure 72: TikTok's global estimated revenue breakdown, 2023 [%]346

Source: TikTok

In Malaysia, TikTok has seen high growth rates by becoming a significant player in the social media landscape, especially among the younger demographics. Its algorithm-driven feed, known as the "For You" page, curates content tailored to individual user preferences or via user-followed hashtags and hence high engagement and prolonged user sessions, attracting advertisers and content creators alike who look to establish their brand presence beyond existing followers. TikTok is growing rapidly, especially with TikTok Shop, which includes both affiliate marketing and

³⁴⁵ DataReportal (2024). Digital 2024: Malaysia. https://datareportal.com/reports/digital-2024-malaysia

³⁴⁶ TechCrunch (2023). TikTok becomes first non-game app to reach \$10B in consumer spending. https://techcrunch.com/2023/12/11/tiktok-becomes-first-non-game-app-to-reach-10b-in-consumer-spending; EMarketer (2022). TikTok surpasses Snapchat as the favorite app of teens. https://www.emarketer.com/content/tiktok-surpasses-snapchat-favorite-app-of-teens

traditional ads, making the platform a dual-purpose space for both selling and promoting products.

TikTok generates revenue in Malaysia primarily through advertising and inapp purchases. Advertising includes branded hashtag challenges, in-feed ads, TopView ads, and sponsored effects whereas in-app purchases are driven by the sale of virtual coins that users can gift to their favourite creators during live streams, which also contribute to the platform's financial success. Overall, through users' interaction with these features, TikTok is able to collect customer data and browser behaviour to optimise its ad targeting experience, which also supports its other services on its platform³⁴⁷, including TikTok Shop and merchants using the platform³⁴⁸.

Figure 73: Example of For You, Branded Hashtag, and Top View features

Following For You Q

BEST
CARIBBEAN
TO N D O N

TO N D

For You

Branded hashtag



Top View



Source: TikTok

TikTok (2024). About data sharing with TikTok Pixel partners. https://ads.tiktok.com/help/article/data-sharing-tiktok-pixel-partners?lang=en

TikTok (2024). Privacy policy. https://www.tiktok.com/legal/page/row/privacy-policy/en

In the digital advertising ecosystem, TikTok offers several key services: TikTok Ads Manager which provides advertisers with tools to create, manage, and optimise their campaigns across the platform; TikTok Creator Marketplace which connects brands with popular local creators for influencer marketing campaigns; and TikTok Shop, which is in its early stage and aims to integrate e-commerce capabilities directly within the app to allow Malaysian brands to showcase and sell products seamlessly. TikTok Shop operates similarly to Shopee and Lazada but integrates video content into the shopping experience, allowing users to view product reviews in video format and make purchases with just a few clicks, enhancing user engagement and convenience.

⋛ } Collection of audience data **Data Service** Providers / Data Provision of audience data Management Platform TikTok Provision of Purchase of ad Distribute ad Social / search platforms and content creators Listing of ad Listing of ad 卿。 囯 Intermediaries Demand side Publishers Advertisers Ad agencies Audience Ad platforms (DSP) exchanges networks Enlist support to TikTok for Business promote product/service TikTok Shop TikTok Creator Listing of ad inventory Direct advertising on publishers'

Figure 74: TikTok's involvement in the entire digital advertising services supply chain (not exhaustive)

Source: Secondary research

TikTok's advertising infrastructure enables businesses in Malaysia to engage with an active and diverse user base, leveraging its targeting capabilities and analytics tools to measure campaign effectiveness to bring value to advertisers and publishers across Malaysia. The value is enabled by TikTok's algorithms that initially pick up on numerous signals such as likes, comments, follows, video watch time. This is then further refined through other interactions such as "For You" page, hashtags, search keywords, and more, allowing its algorithm to continuously learn

and adapt based on users' interactions, improving its targeted advertising capabilities over time.

TikTok provides an effective platform for advertising, allowing anyone to access and promote their products with relative ease, democratizing advertising beyond large brands to smaller merchants and individuals. While TikTok is not yet at the level of Google and Meta, the platform is striving to reach that level and compete effectively in the advertising industry, which has become increasingly popular.

(c) Local players

Aside from Google, Meta and TikTok, several established local players are present in this sub-sector:

Media Prima Group: Founded in 2000, Media Prima Berhad has since grown to become Malaysia's leading fully integrated media group, offering a suite of platforms and services, including television, radio, print, digital media, and out-of-home advertising.

Home shopping

Digital media
Print media
Outdoor media
Broadcasting

2023 revenue:
MYR 1,376 million

Omnia (marketing solutions provider)

Figure 75: Media Prima's revenue breakdown, 2023 [%]349

Source: Media Prima

Media Prima (2023). Annual report 2023. https://www.insage.com.my/ir/cmn/downloading.aspx?sFileName=23298000054685&s ReportType=AR&sCompanyCode=MEDIA (2023 figures have been pro-rated from a third of 2023 annual report's 18-month figures ending 30-June 2023 and half of 2024 annual report's 12-month figures ending 30 June 2024)

Media Prima derives most of its revenue ~ 90% from advertising across its diverse media platforms including broadcasting (ad-supported free-to-air, commercial radio broadcasting, video-on-demand streaming), outdoor media, print media (printing and publishing), digital media (digital media and online advertising services) and its integrated advertising solutions platform Omnia. Despite its currently smaller online digital segment business at ~ 12% of revenue, it continues to attempt to enhance its digital offerings and increase its digital revenue contribution.

media prima Minia Media Prima television **[]**NSTP **BIGTREE** networks SAYS STRAITS TIMES BH BH holfm KURNIA) IGN sundaytimes BH BH VOCKET KOOL MOLEKE STRAITSTIMES **UPD** BH BH TRC Metro ei@ht... **EKLIK** tonton GOTCHA Metro PRIMA FUDIO+ alternate ETISJ primeworks Coffline presence Online presence

Figure 76: Media Prima corporate structure, 2023

Source: Media Prima

In digital advertising services, Media prima offers several key services via REV Media Group, which provides advertisers with solutions to create, manage, and optimise their campaigns across Media Prima's digital platforms; Big Tree extends advertising beyond traditional media to out-of-home advertising solutions; Tonton is its streaming service that allows brands to showcase products directly within the app via video ads. Through its digital news platforms, Media Prima also enables Malaysian businesses to list classified ads to target relevant user demographics and interests. It is currently integrating AI technology across its group of companies such as piloting AI to generate reels on its Berita Harian channel

on Instagram's platform, which aims to generate 7 - 8 million views each month, enhancing productivity³⁵⁰.

Lastly, Media Prima, through OMNiA, its omnichannel solution provider that offers creative services and integrated marketing solutions, helping client's advertising needs end-to-end across all Media Prima platforms. It integrates best in class adtech and martech (advertising and marketing technology) to ensure that its media assets, such as Digital Out of Home (DOOH), e-commerce, and on-ground work together to connect data points to create a unique singular audience tailored to Malaysia. This will enable advertisers to work with REV Media and target local premium Malaysian websites whilst support the local ecosystem. Global players such as Meta, Google, and TikTok, although big, may not show the same enthusiasm or focus on developing local expertise, which allows REV Media to continue compete by differentiating itself from the big players through better content localisation³⁵¹.

Astro Malaysia: One of the largest media and entertainment companies in Malaysia, providing satellite television, radio and digital content. It offers a wide range of channels, catering to diverse audiences with programming in various languages. Its advertising division, Astro Media Solutions, provides comprehensive advertising solutions across its own assets: television, radio, digital platforms (over 40 with focus on news, entertainment, lifestyle) and celebrity/ Key Opinion Leader (KOL) (102 talents)³⁵².

The company has also focused on improving its advertising services, as evidenced by the launch of its Addressable Advertising solution in 2022. According to Astro, the approach merges the precision targeting capabilities of digital advertising with the persuasive power of television.

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³⁵⁰ New Straits Times (2024). Media Prima to integrate AI tech across all its companies by year-end:
Rafiq.

https://www.nst.com.my/business/corporate/2024/10/1113426/media-prima-integrate-ai-tech-across-all-its-companies-year-end

³⁵¹ REV Media (2022). Rev Media group accelerates first party data with unifying audiences across digital out of home, e-commerce and on-ground events. https://revmedia.my/rev-media-group-accelerates-first-party-data-with-unifying-audiences-across-digital-out-of-home-e-commerce-and-on-ground-events/
³⁵² As of October 2024.

Through leveraging first-party data collected directly from Astro viewers, it allows advertisers to deliver relevant ads to specific households³⁵³.

Astro emphasises its strength as a premium publisher with unique first-party data capabilities, enabling the delivery of localised, brand-safe content across multiple platforms. This multi-channel integration, spanning TV, radio, digital, and influencer marketing, supports more engaging, high-impact advertising campaigns tailored specifically for the Malaysian audience. (From Astro responses Q1,2,8).

Star Media Group: Established in 1971, Star Media Group is one of Malaysia's largest media organisations, operating newspapers, radio stations and digital platforms. Its flagship publication, The Star, is widely read in the country. Its advertising services offer integrated solutions across its print, digital (e.g., The Star Online, mStar, Majoriti, myStarjob.com, StarProperty, Car Sifu, Kuali.com) and broadcast media.

Table 23: Key digital advertising players in Malaysia

Key players	Advertising services			
no, players	Campaign management	Intermediary / programmatic	Social media / content creator	Publishing
Google	Campaign Manager	Google Display & Video 360 Google Google Ad Manager DISPLAY NETWORK	n/a	▶ YouTube Google
∞ Meta	™ Meta Ads Manager	Meta Audience Network	(3 © © Ø	n/a
† TikTok	TikTok for Business	TikTok for Business	TikTok: Creator Marketplace TikTok	n/a
media prima	Omnia	n/a	SPARK	STRAITSTIMES BH
NETER ANALYSIA MARKATI MIRADO	astro media solutions	n/a		astro AWANI XUQ\(\text{\alpha}\) astro ulagam
Star MEDIA GROUP	n/a	n/a	n/a	The Star Majoriti7 CärSifu **Star

Source: Secondary research

According to the above table, local players are actively competing in the digital advertising market in the publishing segment but focusing on more

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³⁵³ Astro (2025). Addressable advertising. https://astromedia.com.my/addressable-advertising/

traditional ad formats (non-social and video). As social media and video ad formats continue to grow and Malaysia's digital advertising market starts to mature, local players may struggle to compete as they are currently not in the intermediary/programmatic segment of the value chain, and they are also heavily utilising global players' social media channels to carry out their own social media ad campaigns and initiatives.

However, local players are continuously trying to differentiate themselves in segments where they are lacking such as through offering talent management services under the social media/content creator segment and establishing themselves as the go-to for campaign creation and management, providing end-to-end marketing and advertising solutions for brands and advertisers.

5.1.10 Key market-related issues

Based on the current review, no significant market-related issues were observed.

5.1.11 Competition assessment

5.1.11.1 Market concentration

The digital advertising industry is highly dominated by a few players, with Google and Meta controlling a significant portion of global ad tech entities. According to the U.S. Department of Justice, Google's dominance in ad tech results in market shares ranging from 40% to 90%. Similarly, the Canadian Competition Bureau (CCB) highlighted that Google holds a dominant position in publisher ad servers at 90%, 70% in advertiser networks, 60% in demand-side platforms, and 50% in ad exchanges³⁵⁴:

In Malaysia, insights from industry stakeholders indicate that Meta holds a notable presence in the digital advertising market, particularly among SMEs. However, these figures are not tracked by relevant associations or national statistics.

5.1.11.2 Market dynamics

The evolution of digital advertising in Malaysia has been shaped by global players from the early days of the internet to present-day key players such as Google (incl. YouTube), Meta (Facebook and Instagram), and TikTok.

From a social media perspective, Facebook (now Meta), gained traction in Malaysia with its global launch back in 2004 and quickly became the dominant social networking platform by early 2010's, quickly displacing industry incumbents such as Friendster and MySpace, the former of which was around four times bigger than both Facebook and MySpace in 2008 in Malaysia³⁵⁵. Instagram, another popular social media platform famous for visual content started off in 2010 has quickly integrated other short-form video content such as "stories" in 2016, beating out originator Snapchat that launched in 2011 to become a key player in Malaysia today. The new

³⁵⁴ Government of Canada (2024). Backgrounder: Competition Bureau sues Google for anti-competitive conduct in online advertising in Canada. https://www.canada.ca/en/competition-bureau/news/2024/11/backgrounder-competition-bureau-sues-google-for-anti-competitive-conduct-in-online-advertising-in-canada.html

MCMC (2009). Advertising development in Malaysia. https://mcmc.gov.my/skmmgovmy/media/General/pdf/Ad_Dev_Malaysia_compressed.pdf

entrant disrupting the social media landscape in Malaysia is TikTok, which emerged most recently in 2018 and has quickly risen to become one of Malaysia's most used apps especially amongst *Gen Z* due to its engaging short-form video format.

From a video publishing perspective, Google acquired YouTube in 2006, just one year after it launched, and has remained the dominant video sharing platform in Malaysia ever since. Google also launched a localised YouTube site in 2012 for Malaysia to solidify its influence, offering tailored content and advertising opportunities for Malaysian creators and brands.

In order to strengthen its local presence, Google launched a localised YouTube site in 2012, providing tailored content and advertising opportunities for Malaysian creators and brands. Beyond its direct platforms, Google has also actively partnered with various digital agencies and advertisers to optimize ad performance and drive business growth. Through its Premier Partner program, Google collaborates with leading agencies and marketing firms to provide businesses in Malaysia with cutting-edge digital advertising solutions, further cementing its role as a key driver of the country's digital advertising ecosystem.

From a display publisher perspective, Star Media Group was a pioneer in the digital advertising market in the 1990s, launching its e-portal, The Star Online³⁵⁶. Similarly, Astro Malaysia Holdings, established in 1996, made its mark in the digital space. Media Prima Group, while its individual brands like New Straits Times (NST) and Berita Harian had e-versions in the 1990s, launched a dedicated digital business unit, Media Prima Digital, in 2012 to streamline and optimise its digital operations across multiple platforms³⁵⁷. In 2017, Media Prima further expanded its digital presence with the acquisition of digital media group REV Media³⁵⁸.

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³⁵⁶ The Star Online (2024). Our history. https://www.starmediagroup.my/about-us/our-history

³⁵⁷ Marketing Interactive (2012). Media Prima Digital launched. https://www.marketing-interactive.com/media-prima-digital-launched

³⁵⁸ Digital News Asia (2017). REV Asia enters into US\$24mil deal with Media Prima Digital. https://www.digitalnewsasia.com/business/rev-asia-enters-landmark-deal-media-prima-digital

From a search platform perspective, Google launched Google Ads globally back in 2000 but officially established a local office in 2011 to enhance its presence and bring aboard local businesses onto Google Ads. Google managed to overtake Yahoo due to its superior search results and user experience. It has since remained the dominant search engine in Malaysia and globally.

5.1.11.3 Degree of horizontal and vertical integration

Integration activities within the digital advertising sub-sector are active among key players. In the late 2000s and early 2010s, major companies like Google and Meta made significant efforts to strengthen their positions in ad tech and the publishing side.

Google's acquisitions of DoubleClick (2007), AdMob (2009), and Invite Media (2010) enabled it to control both the supply and demand sides of the advertising market. Additionally, Google acquired YouTube in 2006 as part of its strategy to expand its advertising capabilities. Meanwhile, Meta expanded beyond Facebook through acquisitions such as Instagram (2012) and WhatsApp (2014), to reinforce its dominance in social advertising. These integrations may allow companies to offer end-to-end advertising solutions, potentially reducing reliance on third-party platforms.

However, not all pursue full vertical integration. For instance, Meta, maintained a more limited role in the open ad tech supply chain and focused primarily on closed platforms³⁵⁹.

5.1.11.4 Level of entry barriers

Entering the digital advertising market has become increasingly challenging due to high capital requirements, data access limitations, and regulatory constraints. Such investments are typically feasible only for established players who can also cross-subsidise these activities.

For example, programmatic advertising platforms necessitate advanced Al-driven bidding systems, extensive user data, and integration with various ad networks, making it prohibitively expensive for new entrants.

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³⁵⁹ Written input from industry players.

Furthermore, dominant players often maintain exclusive relationships with key advertisers and publishers, creating network effects that further entrench their market positions.

5.1.12 Key anti-competitive issues

Lack of **Vertical integration** Discrepancy in ad Removing 3rd party transparency in ad of incumbent performance mechanisms tracking players metrics 1 5 2 4 6 Limited access to **Horizontal Potential violation** selected ad collusion of data privacy inventory between players

Figure 77: Summary of key anti-competitive issues

Source: MyCC analysis

5.1.12.1 Vertical integration of incumbent players

Description: Highly integrated players can create significant barriers to entry in the digital advertising space, making it challenging for other players to compete. Firstly, these companies dominate the market through their extensive reach along the value chain via sophisticated targeting capabilities, exclusive control over critical platforms, and longstanding relationships with both advertisers and publishers alike. Secondly, their size and resources enable them to implement strategies that further enhance their market power, such as cross-subsidisation. This requires robust technology, effective data analytics capabilities, and strong cash flow to use profits and information from one product or service to support another.

According to the World Bank Group's Digital Antitrust Database, which tracks global market competition and technology, Google remains a prominent player in the digital advertising space. Of the 23 online search and advertising-related cases recorded between 2006 and 2022, 19 (83%) involved Google. The remaining cases were linked to the Korean platform,

Naver and the Russian platform, Yandex (more details can be found in the relevant cases sub-section)³⁶⁰.

An example can be seen from Google overseeing multiple levels of the ad tech supply chain, especially through its previous notable acquisitions in DoubleClick (ad inventory management platform) in 2007 and Invite Media (exchange bidding platform) in 2010. Alongside its already owned AdWords (advertiser demand side platform) and publishing sites such as Google.com and Youtube.com, this structure enables possibilities for conflicts of interest and self-preferencing, wherein Google may prioritise its own ad inventory over that of competitors. This may potentially violate competition law and reduce market competitiveness and choice for advertisers and publishers. Alongside its Android operating platform, it can assign IDs to a user that is persistent across its consumer-facing services to quickly or accurately link together data collected from all first- and thirdparty sources³⁶¹.

However, from another perspective, vertical integration can offer several more consistent advantages, including measurement, interoperability between tools, and reduced transaction friction across systems. Integrated firms like Google often point to internal controls and compatibility with third-party systems as safeguards³⁶².

The above-mentioned issues are global in nature, affecting all players who utilise ad tech in their digital advertising efforts. However, while the Malaysian advertising market is developed, the adoption of ad tech is still in its early stages. As ad tech adoption grows, these challenges are likely to become more prevalent.

³⁶⁰ World Bank Group (2025). The global markets competition and technology digital database. https://dataviz.worldbank.org/views/Global-Digital-Antitrustantitrust Database/Overview?%3Aembed=y&%3AisGuestRedirectFromVizportal=y

ACCC (2019).Digital advertising services inquiry, 39. page https://www.accc.gov.au/system/files/Digital%20advertising%20services%20inquiry%20-%20final%20report.pdf

³⁶² Written input from industry players.

Implication on competition:

- **Limiting advertisers' choices** and increasing dependence on dominant players.
- **Self-preferencing**, where key players may prioritise own ad inventory.
- **High barriers to entry** for smaller platforms and publishers face as they might need substantial investments to compete, but still risk being undercut by dominant players.
- Increased reliance on advertisers to selected players, therefore
 potentially leading to higher fees, less effective ad spending, and
 publishers losing control over their ad inventories and revenue
 opportunities.
- **Uneven playing field** where local businesses face different regulatory expectations compared to larger, often foreign-based, platforms operating in Malaysia.

Relevant case(s): In January 2023, the Department of Justice (DOJ) and 17 states filed a lawsuit against Google, accusing the company of illegally monopolising the digital ad tech market. The DOJ argues that Google engaged in practices such as manipulating ad prices in auction systems to favour Google's own tools and acquiring and eliminating competitors to strengthen its market dominance.

Sell-Side Inventory Buy-Side Demand ± 80% Market Share Google Ads Google AdExchang **Advertiser** Ad Network (Google) Website Publishers Ad OR **Advertisers** Exchange Demand Side Platform (DSP) > 90% Market Share ≥ 50% Video 360 Market Share ± **40**% Market Share

Figure 78: Dominance of Google along the ad tech supply chain in US³⁶³

Source: US DOJ

It also noted that Google controls the largest ad exchange, Google Ad Exchange, and owns several key ad tech products, including Google Ad Manager and two ad-buying tools, DV360 and Google Ads, with market shares ranging from 40% to 90%.

Effectively, the DOJ and states seek a ruling declaring:

- Google's monopoly as illegal;
- A break-up of Google's ad tech business (requiring the sale of its publisher ad server and ad exchange); and
- An injunction against further anti-competitive practices.

In September 2023, the DOJ launched its second antitrust lawsuit against Google, alleging that it had illegally monopolised the search market and controlled how people view the internet and what ads they see through its Chrome browser, which holds about two-thirds of the global market. The DOJ accused the company of using acquisitions and anti-competitive

³⁶³ US DOJ (2023). Case document, page 31. https://www.justice.gov/atr/case-document/file/1566706/dl

practices to dominate both the supply and demand sides of online advertising, overcharging advertisers, and underpaying publishers. One proposal included breaking up parts of the company, such as potentially selling off its Chrome business, to restore fair competition³⁶⁴.

In April 2025, a U.S. federal judge ruled that Google illegally built monopoly power in its online advertising business by tying together its publisher ad server and publisher ad exchange. This vertical integration was said to have allowed Google to establish and protect its monopoly, depriving rivals of the ability to compete and substantially harming publishers, the competitive process, and consumers. While the court rejected one claim related to Google's advertiser ad networks, it upheld the anti-competitive conduct involving Google's publisher tools. Google announced it will appeal the ruling³⁶⁵.

Separately, in November 2024, the Canadian Competition Bureau (CCB) accused Google of abusing its dominant position in online advertising by granting preferential access to its own tools, sometimes selling ads at a loss to block competitors, and imposing restrictive terms on the use of third-party ad tech. The CCB highlighted that no other ad tech provider rivals Google's scale, noting that over CAD 200 billion in web ad transactions flowed through Google's platforms in 2022. It further pointed out Google's dominant market share in Canada: 90% in publisher ad servers, 70% in advertiser networks, 60% in demand-side platforms, and 50% in ad exchanges. In response, the CCB is seeking three actions against Google³⁶⁶:

• The sale of two key ad tech tools: its publisher ad server, Google DoubleClick, and its ad exchange, Google Ad Exchange;

Reuters (2024). DOJ to ask judge to force Google to sell off Chrome, Bloomberg News reports. https://www.reuters.com/technology/doj-ask-judge-force-google-sell-off-chrome-bloomberg-reports-2024-11-18/

³⁶⁵ CNN (2025). Google is an online advertising monopoly, judge rules. https://edition.cnn.com/2025/04/17/tech/google-adtech-trial-decision/index.html 366 Government of Canada (2024). Backgrounder: Competition Bureau sues Google for anti-competitive conduct in online advertising in Canada. https://www.canada.ca/en/competition-bureau/news/2024/11/backgrounder-competition-bureau-sues-google-for-anti-competitive-conduct-in-online-advertising-in-canada.html

- An administrative monetary penalty, calculated as three times the value of the benefit derived from Google's anti-competitive practices, or, if that amount cannot be determined, 3% of Google's worldwide gross revenues;
- A prohibition on Google from continuing its anti-competitive conduct and practices.

In February 2024, Google faced a EUR 2.1 billion lawsuit filed by 32 European media organisations, including Axel Springer and Schibsted, alleging that Google's dominant position in digital advertising undermines fair competition. The lawsuit claims Google's role as the dominant ad server, broker, auctioneer, and sales agent creates a conflict of interest, resulting in financial losses for publishers. The plaintiffs argue that these practices have reduced advertising revenues and increased fees for ad tech services, further harming European media landscape³⁶⁷.

Observations in Malaysia: Local players highlighted that there is still a long way for local publishers to compete effectively, particularly when it comes to differentiation and technological capabilities. The dominance of global platforms makes it challenging for smaller, local publishers to offer comparable value or advanced tools for advertisers.

Additionally, it will be difficult to persuade SMEs to shift their advertising spend away from Google and Meta due to the long-standing market dominance of these companies. This reliance on global platforms also creates a regulatory challenge for governments, as they must address the power these companies hold while considering the impact on SMEs that rely heavily on their services for effective advertising (advertisers and agencies highlighted that a large percentage of ad spend in Malaysia is assumed to come from SMEs, but this is not accurately tracked).

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³⁶⁷ CNBC (2024). Google hit with \$2.3 billion lawsuit by Axel Springer, other media groups. https://www.cnbc.com/2024/02/28/google-hit-with-2point3-billion-lawsuit-by-axel-springer-other-media-groups-.html

5.1.12.2 Horizontal collusion between players

Description: Another key anti-competitive issue in the digital advertising sector is collusion between dominant players to manipulate market conditions in their favour. Collusion typically involves agreements either explicit or implicit between competitors to limit competition, fix prices, or unfairly allocate market opportunities. This reduces transparency and prevents smaller players from competing on equal footing. According to the disclosure of The New York Times, the increase in recent antitrust cases filed against big tech giant like Google and Facebook casted a spotlight on lucrative deals among tech giants to close off competition and manipulate the market³⁶⁸.

Nevertheless, cooperation between firms does not always constitute illegal collusion and there may also be tacit understandings around various issues including competition for talent that do not amount to illegal collusion. There can be debate about the impact or value some of these interactions, but they occur in a wide range of industries and often can help yield best practices around complicated issues. This may include novel issues that similarly situated companies may be facing in a rapidly evolving industry such as technology. Additionally, responding to similar market pressures may result in similar responses that, without appropriate understanding and analysis, may initially appear suspicious to those not in the industry or familiar with enforcement³⁶⁹.

Implication on Competition:

- Reducing transparency in digital advertising transactions by allowing dominant players to control pricing and auction dynamics without oversight.
- **Restricting competition** by preventing ad tech providers from entering or expanding in the market.

³⁶⁸ The New York Times (2021). Behind a secret deal between Google and Facebook. https://www.nytimes.com/2021/01/17/technology/google-facebook-ad-deal-antitrust.html

The American Action Forum (2021). Are big tech companies colluding? https://www.americanactionforum.org/insight/are-big-tech-companies-colluding/

 Increasing ad costs for other advertisers and reducing revenue for publishers due to unfair pricing structures and lack of alternative platforms.

Relevant case(s): A notable case of alleged collusion in the digital advertising sector is the "Jedi Blue" agreement between Google and Facebook (now Meta), which emerged in a 2020 lawsuit³⁷⁰. The lawsuit claims that the two tech giants conspired to manipulate the digital advertising market through a secret deal. Under this agreement, Google allegedly granted Meta preferential treatment in its ad auctions in exchange for Meta supporting Google's "Open Bidding" system instead of rival header bidding technology, which could have increased competition in the market.

Both companies have denied any wrongdoing. Google has stated that the claims are meritless and that its advertising technologies have fostered competition, benefiting publishers and advertisers. Facebook has asserted that such partnerships are common in the industry and that their agreement with Google has not hindered competition.

The impact of the alleged collusion has been significant for various players in the digital advertising sector. Due to its restrictive nature, "Jedi Blue" may have caused online publishers, advertisers, and consumers significant financial damages. If Facebook had chosen header bidding, the market would likely have been more competitive, and the position of Google in adtech might have been challenged³⁷¹. As of June 2025, legal proceedings are ongoing.

5.1.12.3 Lack of transparency in ad mechanisms

Description: Lack of transparency happens both in ad pricing and delivery mechanisms. Advertisers and publishers alike often struggle to understand the decision-making processes behind digital advertising due to opaque

³⁷⁰ European Commission (2022). Antitrust: Commission opens investigation into possible anticompetitive conduct by Google and Meta, in online display advertising. https://ec.europa.eu/commission/presscorner/detail/nl/ip_22_1703

³⁷¹ Cartel Damage Claims (2022). Jedi Blue Agreement (Google/Facebook). https://carteldamageclaims.com/2022/04/04/spain-collusion-in-the-markets-related-to-football-rights-acquisitions/

algorithms and auction processes which are used to allocate and match ad campaigns to ad inventories.

These platforms use proprietary complex algorithms that process large amount of real-time data to deliver targeted advertising. When a user visits a website or app, an ad inventory opportunity triggers an auction. Advertisers then bid based on factors like user demographics, browsing behaviour, location, and ad relevance. The winning ad is determined not just by the bid amount, but by an "ad rank," which incorporates the quality of the ad, the bid, and its relevance to the user. This auction process occurs in milliseconds, making it dynamic and challenging to predict. The complexity arises because these algorithms continuously optimise by analysing massive datasets to improve targeting and performance. Some platforms have introduced tools like ads.txt, sellers.json, and SupplyChain Object to improve visibility. However, the opaque nature of these processes still makes it challenging for all parties along the supply chain to fully grasp how decisions are made, specifically:

- Advertiser's point of view (POV): Without clear visibility into how some platforms or intermediaries prioritise the ad inventory, advertisers may face higher costs as these platforms can favour large advertisers with higher ad spend or long-term contracts, reducing opportunities for smaller advertisers to compete effectively. Additionally, the lack of transparency hampers' advertisers' ability to assess the actual effectiveness and ROI of their ad campaigns, leaving them uncertain about how their budgets are allocated.
- Intermediary's POV: Limited access to detailed bid data and parameters restricts smaller intermediaries from effectively competing with established players. This lack of clarity in auction rules and data sharing discourages new entrants from challenging dominant platforms, further stifling innovation, and reducing competitive dynamics in the intermediary market.
- Publisher's POV: Lack of transparency in auction bidding can result in skewed revenue distribution and potentially self-preferencing by platforms. Larger integrated players may prioritise their own or their

partner's publishing sites, undermining smaller publishers' ability to secure fair ad placements.

There is also growing trend where major players are introducing "black box" tools, positioned to simplify the advertiser's job by integrating ML and AI into ad tech, further complicating the issue:

- Google: In 2021, Google launched Performance Max (PMax), a goal-based campaign type that allows advertisers to access all Google Ads inventory through a single campaign. This tool gives advertisers limited control over where their ads appear, as AI takes over audience targeting and channel selection across Google's platforms, including YouTube, Display, Gmail, Maps, and more³⁷².
- **Meta:** In 2022, Meta introduced Advantage+ Shopping Campaigns. Advertisers input their goals, budgets, and product feeds, and Advantage+ uses ML and Al algorithms to take over, optimising campaigns by analysing the intended results and applying advertising best practices across Meta's various platforms³⁷³.

Implication on competition:

- **Unfair operating conditions**, as advertisers are largely unable to assess the effectiveness and ROI of their campaigns.
- Barriers for new intermediary entrants as unclear auction rules and limited data sharing discourage new players from challenging dominant platforms.
- **Skewed revenue distribution** as dominant platforms may favour own inventory or that of their partners, therefore limiting smaller publishers' ability to earn fair ad revenues.

Google Ads Help (2025).Performance campaigns. About Max https://support.google.com/google-ads/answer/10724817?hl=en (2023).Funnel How do Meta's Advantage+ campaigns work?

https://funnel.io/blog/meta-advantage-plus

Relevant case(s): Google was previously found to have a "Last Look" advantage around the time when header bidding was introduced in 2014-2015, whereby its SSPs had the opportunity to submit a real-time bid to beat the winning bid from other SSPs in header bidding auctions³⁷⁴.

This practice raised concerns about fairness and transparency in ad transactions from publishers and competing exchanges. In response, Google removed this "Last Look" advantage entirely in 2017 across all markets³⁷⁵, making its auction process more neutral and transparent. Now, all participating exchanges, including Google's AdExchange (AdX), submit their final bids simultaneously, and the highest bid wins. While this change addressed some transparency issues and levelled the playing field for other ad exchanges, Google retains advantages due to its unparalleled access to user data and its control over other ad tech platforms taking part in these bids³⁷⁶.

Separately in 2024, the Alliance of Digital India Foundation (ADIF) who represents startups and app developers, filed a complaint with the Competition Commission of India (CCI) against Google, alleging anti-competitive practices in the online advertising sector. ADIF contends that Google's dominance in the ad-tech stack and initiatives like the Privacy Sandbox impose unfair conditions on advertisers, thereby distorting competition³⁷⁷.

ADIF argues that Google's control over the ad-tech ecosystem creates an environment where advertisers struggle to assess the effectiveness and ROI of their campaigns. By leveraging its dominant position, Google can impose opaque policies and practices that limit advertisers' access to

³⁷⁴ AdExchanger (2017). Google removes its 'last-look' auction advantage. https://www.adexchanger.com/platforms/google-removes-last-look-auction-advantage/

³⁷⁵ MarTech (2017). Countering header bidding, Google drops its 'last look' advantage. https://martech.org/countering-header-bidding-google-drops-last-look-advantage/
³⁷⁶ ACCC (2021). Digital advertising services inquiry, page 11. https://www.accc.gov.au/system/files/Digital%20advertising%20services%20inquiry%20-%20final%20report.pdf

³⁷⁷ Brand Equity (2024). ADIF challenges Google's dominance in online advertising; files complaint with CCI.

https://brandequity.economictimes.indiatimes.com/news/advertising/adif-challenges-googles-dominance-in-online-advertising-files-complaint-with-cci/112282944

critical performance data, leading to inefficient ad spend and reduced transparency³⁷⁸.

ADIF also raised concerns about Google's control over major online platforms and its ability to favour its own inventory or that of its partners. This preferential treatment limits smaller publishers' ability to earn fair ad revenues, as they are often sidelined in favour of Google's offerings. Such practices can lead to a concentration of advertising spend within Google's ecosystem, disadvantaging independent publishers and reducing diversity in the digital advertising market.

In 2025, Turkey's Competition Authority launched an antitrust investigation into Google's Performance Max campaign, examining whether the campaign creates unfair conditions for advertisers by consolidating access to Google's ad inventory, favouring its own services, and leveraging data across its platforms in ways that may hinder competition³⁷⁹.

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³⁷⁸ Medianama (2024). Alliance of Digital India Foundation accuses Google of anti-competitive ad-tech practices in India. https://www.medianama.com/2024/08/223-alliance-of-digital-india-foundation-adif-accuses-google-of-anti-competitive-ad-tech-practices-in-india/

Google Over Digital Advertising Practices. https://www.pymnts.com/cpi-posts/turkey-opens-antitrust-investigation-into-google-over-digital-advertising-practices/

7% 8% 10% 15% 8% 1% 100% 51% Ad spend Agency fee DSP fee Tech fee Unknown SSP fee Technology Pulisher (demanddelta fee (supply revenue side) side)

Figure 79: Programmatic advertising supply chain take rates

Source: Incorporated Society of British Advertisers

Lack of transparency along the digital advertising supply chain poses significant challenges as it is widely understood in the industry that there are still some discrepancies in fund flow and costs along the value chain. For example, in an advertiser-funded supply chain transparency study in the UK 380 in 2022 estimated ~15% of costs within the digital advertising supply chain that were unaccounted for (labelled "unknown delta"). These discrepancies highlight ongoing concerns about opaque fund flows and hidden costs along the value chain, which can undermine confidence in the system and disadvantage smaller players unable to afford or adapt to such inefficiencies.

In this context, Google in 2022 introduced "Confirming Gross Revenue", a tool within GAM³⁸¹, which enables publishers and advertisers to verify without compromising user privacy that no hidden fees are deducted

³⁸⁰ Incorporated Society of British Advertisers (2023). Programmatic Supply Chain Transparency Study. https://www.isba.org.uk/knowledge/programmatic-supply-chain-transparency-study

³⁸¹ Google (2023). Building towards greater transparency in media buying. https://blog.google/products/ads-commerce/building-towards-greater-transparency-in-media-buying

during digital ad transactions. This solution is available to all publishers using GAM360 at no additional cost and is positioned as a broader industry solution that other ad tech providers can adopt.

Beyond this, Google also participates in several industry transparency standards, such as³⁸²:

- ads.txt / app-ads.txt and sellers.json: Helps identify authorised digital ad sellers;
- SupplyChain Object: Discloses all parties involved in ad transactions and integration of SupplyChain Object data into Ads Data Hub, allowing marketers to view the full path of an impression using Google's Display & Video 360 (DV360).

Observations in Malaysia: Local ad publishers noted that the auction bidding processes used by key ad tech players are opaque, revealing only the identity of the losing bidder rather than the winning bid price. This lack of transparency impacts advertisers' ability to understand the competitive landscape, making it difficult to optimise their bidding strategies and resulting in less effective campaign management.

Additionally, platforms only share benchmark data, such as industry averages or performance metrics, leaving advertisers with limited insight into how they can improve their own campaigns. This restriction on detailed data sharing further limits advertisers' ability to fine-tune their ad strategies for better targeting and higher ROI.

5.1.12.4 Potential violation of data privacy

Description: Data privacy is a critical issue in digital advertising, as the extensive collection of user data offers companies significant competitive advantages. These advantages include better audience insights, higher-quality ad inventory, and more precise targeting for advertisers. However, in their pursuit of capturing more data, many companies may engage in invasive and unethical practices. This is especially common among

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Google (2025). Bid transparency with the SupplyChain object. https://support.google.com/admanager/answer/10368261?hl=en

vertically integrated companies or those within large corporate groups, where they can use user data extensively to generate competitive advantages or share it across affiliated companies within the conglomerate, often without user consent. This allows them to gain an unfair edge over smaller competitors by tailoring their products and services more effectively.

One factor contributing to these companies' ability to collect data from users is the lengthy and complex nature of terms and conditions, which often discourage users from engaging with privacy settings. The UK CMA reports that less than 5% of users actively manage their privacy settings on platforms like Google and Facebook ³⁸³. Similarly, the Australian Competition & Consumer Commission (ACCC), in its Digital Platform Services Inquiry 2020–2025, highlights that lengthy and ambiguous privacy policies, often using "take-it-or-leave-it" terms, make it difficult for consumers to understand and control how their data is used³⁸⁴.

As these industry practices have evolved, consumers are left with limited control over their personal data, raising privacy concerns. The disparity in how user data is controlled by larger platforms versus smaller players further exacerbates competition issues, as it creates an uneven playing field where dominant companies can further entrench their position in the market.

Implication on competition:

- **Uneven playing field** where large players have the advantage of accessing extensive data, strengthening their market position.
- **High entry barriers** for smaller players who lack access to the same data resources.

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³⁸³ Competition & Markets Authority (2020). Online platforms and digital advertising market study, page 174.

 $https://assets.publishing.service.gov.uk/media/5fa557668fa8f5788db46efc/Final_report_Digital_ALT_TEXT.pdf$

³⁸⁴ Australian Competition & Consumer Commission (2024). Consumers lack visibility and choice over data collection practices. https://www.accc.gov.au/media-release/consumers-lack-visibility-and-choice-over-data-collection-practices

Relevant case(s): In February 2019, Meta was accused by Bundeskartellamt of anti-competitive practices. Specifically, the authority found fault with how Meta combined data from different sources, such as Facebook, Instagram and third-party apps, without obtaining explicit consent from users. The ruling emphasised that Meta's approach violated users' rights and created an unfair competitive advantage by consolidating data across platforms to reinforce its market power. This practice enabled Meta to build a data-driven competitive edge, limiting competition in the digital market. To address these concerns, the authority sought to enhance user control over data and foster a fairer competitive environment, instructing Meta to amend its data practices in compliance with privacy laws³⁸⁵. Following scrutiny from Bundeskartellamt, Meta took several steps to address the issues. The main initiatives included:

- Launch of the Accounts Centre: Allowing users to separate their data across different platforms such as Facebook and Instagram.
- **Updated cookie settings:** New cookie settings to separate Facebook data from other data types.
- Clearer consent notifications: Made sure users received clear and prominent notifications when accessing Facebook, directing them to easily accessible consent options.
- **Temporary data retention for security:** Committed to storing data only temporarily for security reasons, specifying the duration for which data would be retained.

In July 2024, Meta was accused of violating EU antitrust rules with its adsupported subscription service, which the EC describes as a "pay or consent" model. This means users must either pay to access ad-free versions of Facebook and Instagram or agree to have their data processed for personalised advertising. The EC founds this practice breached the DMA, stating it limits users' ability to freely consent and consolidates Meta's market power by using consent as a condition for access. Regulators also

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³⁸⁵ The Economic Times (2024). Germany closes Meta case after data measures agreed. https://economictimes.indiatimes.com/tech/technology/germany-closes-meta-case-after-data-measures-agreed/articleshow/114121675.cms?from=mdr

noted that Meta's model lacks an option for a less personalised service equivalent to its ad platforms, raising concerns over user autonomy and competitive fairness³⁸⁶.

In an attempt to address the concerns, Meta made updates to its subscription model in November 2024. The company reduced the price of its ad-free subscription by 40% and provided free users with the option to see fewer personalised ads³⁸⁷. However, by January 2025, the changes were still met with criticism, particularly from the European Consumer Organisation (BEUC), which labelled the adjustments as "cosmetic change". BEUC has since urged the EU to take further action in response to the issue³⁸⁸.

The European Commission subsequently concluded that Meta's model remains non-compliant with the DMA because it does not allow users to choose a service with reduced data use on the same terms as the basic version. Separately, Meta tightened rules on Facebook Marketplace, reducing the number of business users below DMA thresholds so it no longer qualifies as an important gateway for businesses. This followed a request submitted by Meta in March 2024³⁸⁹.Ultimately, in May 2025, the European Commission imposed a landmark EUR 200 million fine on Meta for violating the Digital Markets Act by failing to provide users with a less personalised service option alongside its "consent or pay" model, marking the first penalty enforced under the DMA. Meta has announced plans to appeal the decision³⁹⁰.

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³⁸⁶ PBS News (2024). European Union says Meta breaking digital rules with paid ad-free option for Facebook and Instagram. https://www.pbs.org/newshour/world/european-union-says-meta-breaking-digital-rules-with-paid-ad-free-option-for-facebook-and-instagram

³⁸⁷ Facebook (2024). Facebook and Instagram to offer subscription for no ads in Europe. https://about.fb.com/news/2024/11/facebook-and-instagram-to-offer-subscription-for-no-ads-in-europe/

³⁸⁸ The European Consumer Organisation (2025). Consumer groups red card Meta's latest pay-or-consent policy. https://www.beuc.eu/press-releases/consumer-groups-red-card-metas-latest-pay-or-consent-policy

³⁸⁹ European Commission (2025). Commission finds Apple and Meta in breach of the Digital Markets Act. https://ec.europa.eu/commission/presscorner/detail/en/ip_25_1085 ³⁹⁰ FMT (2025). Meta says will appeal 'unlawful' EU fine. https://www.freemalaysiatoday.com/category/business/2025/07/03/meta-says-will-appeal-unlawful-eu-fine

In June 2025, Meta has announced plans to introduce ads in WhatsApp's Updates tab, including personalised ads in the Status feature, likely using cross-platform data from Facebook and Instagram³⁹¹. This has sparked concerns that Meta may be applying the same model. Critics argue the move undermines user expectations and may trigger formal legal complaints under the DMA and GDPR³⁹².

Observations in Malaysia: According to various local publishers, there is a growing push for stricter regulation on data privacy, which could hinder the competitiveness of local players. As the existing data pool for local publishers is already small, further regulation will make it difficult for them to compete with major players like Meta and Google, who have access to vast amounts of user data.

5.1.12.5 Removing 3rd party tracking

Description: Third-party cookies are small pieces of data stored on a user's device by a website other than the one they are currently viewing. In the context of digital advertising, these cookies are used by advertisers and marketers to collect information about a user's browsing behaviour across multiple websites such as pages visited, time spent on sites, and interactions with content. This data then allows advertisers to build detailed profiles of users, enabling them to deliver highly targeted and personalised ads to improve user engagement and increase conversion rates for their products and services. Different stakeholders in the ecosystem have distinct concerns and priorities related to third-party cookies. Extensive use of third-party cookies over time has led to user privacy and trust concerns as companies track their online activities and information without explicit consent and without users knowing which entities are obtaining their information.

Over time, this data allows advertisers to build detailed profiles of users, enabling them to deliver targeted and personalised ads to improve user

³⁹¹ The Edge (2025). WhatsApp to show ads, offer paid subscriptions for first time. https://theedgemalaysia.com/node/759197

³⁹² Noyb (2025). WhatsApp is getting ads using personal data from Instagram and Facebook. https://noyb.eu/en/whatsapp-getting-ads-using-personal-data-instagram-and-facebook

engagement and increase conversion rates for their products and services.

Two types of third-party cookies are collected:

- **Strictly necessary:** Websites typically use mandatory cookies that are essential for the site to function properly. These cookies, such as those for session management or authentication (e.g., login cookies), require user acceptance before accessing the site.
- Functional: Cookies that are used for analytics, advertising, or social media tracking, are typically not essential for the site's core functionality but are used for improving user experience or delivering targeted content.

Both cookie types, once disabled, will still allow users to access the website, but certain functionalities, such as personalised ads or content recommendations, may be limited. Some websites might also restrict access to certain services or require minimal cookie acceptance to ensure basic functionality, like enabling shopping cart features or keeping users logged in.

A key growing concern is that the extensive use of third-party cookies has led to privacy and trust issues, as companies track users' online activities and gather information without explicit consent, leaving users unaware of which entities are collecting their data. Today, the trend with third-party cookies is shifting toward a "blocked by default" or "opt-in" model, giving internet users more control over what is tracked, particularly through the browsers they use. Popular browsers like Safari and Firefox have already implemented the "block by default" approach, but Google Chrome, one of the most widely used browsers globally, has yet to remove third-party cookies. Despite several delays, Chrome's eventual removal of third-party cookies may mark a significant shift in digital advertising, potentially disrupting traditional tracking methods and challenging advertisers', publishers and ad tech's ability to target audiences effectively.

In response, advertisers today are testing alternative such as contextual targeting and identify resolution strategies to adapt the growing prevalence of cookieless environments³⁹³.

Below summarises the impact of third-party cookies on various parties along the supply chain:

- Advertisers: According to MyCC's survey, it revealed that the removal
 of third-party cookies is the biggest challenge for advertisers, with a
 combined total of 43% of advertisers either agreeing or strongly
 agreeing. The potential loss of third-party cookies means advertisers
 may struggle to maintain precise targeting, potentially reducing the
 effectiveness of campaigns and lowering ROI. Additionally, they may
 face increased costs to reach their targeted audience.
- **Publishers**: Cookies allow publishers to deliver more targeted and relevant ads. Without them, targeting could become less effective, potentially lowering CPM rates and reducing overall ad revenue.
- Ad Tech: The loss of third-party cookies makes it challenging for ad tech providers to offer detailed targeting and reporting features.
 Without these cookies for tracking and reporting, ad tech providers may find it difficult to sell more relevant ad inventory and optimize bidding.
- **End-users**: Many users view third-party cookies as an invasion of privacy since they track browsing behavior across multiple websites without explicit consent, leading to growing privacy concerns.

• Reduced competition as the removal of third-party cookies may

Implication on competition:

benefit established global players (due to vast access to first-party data), reinforcing its dominance in digital advertising.

³⁹³ Forbes (2024). What advertisers should do now: Google reverses decision to eliminate third-party cookies. https://www.forbes.com/sites/forrester/2024/07/25/google-reverses-decision-to-eliminate-third-party-cookies/

- Uneven playing field for smaller advertisers as they will struggle to compete due to the high costs of adapting to new targeting methods. Consequently, a substantial portion of this segment remains underrepresented or overlooked, forming what is often referred to as the "shadow market." This shadow market consists of smaller advertisers whose activities are not always captured in primary data sources, leading to an incomplete picture of the overall advertising landscape.
- Weakened competition among publishers as smaller players face difficulties selling ad inventories at lower rates, consolidating market power among a few dominant players.

Relevant case(s): In April 2021, Apple introduced ATT with the iOS 14.5 update, requiring apps to ask for user permission before tracking their activities across other apps and websites. This initiative aimed to enhance user privacy and provide consumers with more control over their personal data. The response from users was largely positive (from the perspective of the end user). According to Singular³⁹⁴, a marketing analytics company, ATT opt-in rate (allow tracking) is only at 14% globally across all verticals.

However, the move faced criticism from industry players. Advertisers, especially smaller ones, expressed concerns about reduced targeting accuracy, weakened measurement capabilities and the increased cost of reaching desired audiences. The lack of third-party tracking data led to less personalised ad campaigns, decreasing their effectiveness and ROI. App developers also feared user churn due to the additional consent prompts, which could alienate users and negatively impact engagement³⁹⁵.

Separately, Google previously made similar efforts to follow in Apple's footsteps, but has recently rolled back on this decision to remove third party cookie tracking from Chrome in July 2024³⁹⁶. Despite this, Google plans to continue investing in its Google Privacy Sandbox, an initiative

³⁹⁴ Singular (2024). ATT opt-in rates 2024: down, down, down (but here's how to improve). https://www.singular.net/blog/att-opt-in-rates-2024/

³⁹⁵ Written input from industry players.

³⁹⁶ Wired (2024). What Google's U-turn on third-party cookies means for Chrome privacy. https://www.wired.com/story/google-chrome-third-party-cookies-privacy-rollback/

which proposes new technology, including Topics API, Attribution Reporting, Private Aggregation API, and Protected Audience API, which aim to balance interest-based advertising with user privacy³⁹⁷. This means continuing to serve targeted ads based on user interests while respecting privacy rights, by reducing reliance on third-party cookies and limiting cross-site tracking.

However, regulators have raised antitrust and privacy concerns, such as Google's control over Privacy Sandbox and risks of user fingerprinting. In April 2025, Google announced it will continue to support third-party cookies in Chrome and will not implement the planned standalone prompt to phase them out. This decision was influenced by industry feedback and ongoing discussions with regulators. Google stated that while Privacy Sandbox initiatives will continue, their role may change, with some features like IP Protection for Incognito users rolling out later in 2025³⁹⁸.

Additionally, Google recently reversed its previous stance "fingerprinting," a data collection technique that generates unique digital IDs by combining multiple hardware and software attributes to track users across devices and websites, making it difficult for users to opt out. This policy change, implemented on February 17, 2025, aims to enhance advertisers' ability to target ads more effectively across a broader range of devices, including game consoles and smart TVs. However, the move has drawn criticism from privacy advocates and regulators. The U.K.'s Information Commissioner's Office (ICO) described Google's policy as "irresponsible" and emphasised that such tracking must be lawful and transparent. Critics contend that fingerprinting compromises user privacy, risks exposing sensitive data to third parties, and prioritises commercial interests over privacy protections, marking a reversal from Google's 2019 position, when it condemned fingerprinting as unfair and invasive³⁹⁹.

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Olearcode (2024). Google's privacy sandbox explained. https://clearcode.cc/blog/chrome-privacy-sandbox-explained/

³⁹⁸ Digiday (2025). Google Chrome will now continue to use third-party cookies. https://digiday.com/media/google-chrome-will-now-continue-to-use-third-party-cookies/

³⁹⁹ CCN (2025). Google's new fingerprinting policy sparks privacy backlash as ads become harder to avoid. https://www.ccn.com/news/technology/googles-new-fingerprinting-policy-sparks-privacy-backlash-as-ads-become-harder-to-avoid/

Observations in Malaysia: According to local ad publishers, Meta and Google's exclusive access to first-party data within their own publishing ecosystems (e.g., Facebook, Instagram, YouTube) enables highly effective audience targeting. Their large scale and data availability create a challenging environment for local players to compete.

While some Malaysian advertisers are growing more cautious about sharing their data, opening opportunities for new players to emerge, this shift remains a distant goal for the local market.

5.1.12.6 Limited access to selected ad inventory

Description: According to MyCC's survey, restricted/limited access to ad inventory caused by platform control is a major challenge for advertisers, with a combined 41% of respondents agreeing or strongly agreeing. Such limitation exists due to:

Firstly, the exclusivity of certain popular ad inventories, such as those on Facebook or YouTube, which are only accessible through their own platforms like Meta Audience Network or Google Ads, may limit competition by restricting the channels through which advertisers can purchase these ads. Even advertisers with sufficient resources to navigate these complex platforms may face higher costs and less effective ad rates, particularly for premium ad inventories. These ad spaces are often priced based on their exclusivity and the platform's control over a large volume of inventory, rather than the actual effectiveness of the ad placements. As a result, large advertisers may experience lower ROI in their campaigns. This dynamic further entrenches the dominance of major platforms, making it more difficult for smaller players to compete, and stifles innovation and competition within the market.

Secondly, there are challenges in the limited availability of skilled users' adept at using these proprietary ad management platforms. In particular, small advertisers often lack the resources and skill sets (e.g., technical proficiency in the ad platforms, targeting and segmentation skills, etc.) to fully utilise the advanced services and offerings of major platforms, leaving them with fewer alternative channels and strategies to execute their ad campaigns. As a result, their advertising efforts become fragmented, with

inconsistent messaging, and weakened competitive positioning in the marketplace. This fragmentation not only hampers their ability to reach and engage target audiences effectively but also diminishes their overall ROI in advertising.

Implication on competition:

- High barriers to entry for smaller advertisers due to the specialised skill sets required to effectively utilise advanced ad tech services and offerings.
- **Reduced competition** in the ad tech space due to the exclusivity of certain platforms, limiting access to premium ad inventories and consolidating control among major players.

Relevant case(s): In June 2021, EC raised concerns about Google's requirement for advertisers to use its Ad Manager and services like Display & Video 360 (DV360) and Google Ads to display ads on YouTube. This practice potentially restricted rivals' access to YouTube ad inventory, giving Google an unfair advantage. This investigation followed over EUR 8 billion in fines⁴⁰⁰ for Google over the past decade for blocking rivals in various markets, including online advertising. To address these concerns, Google proposed allowing third-party ad tech providers access to YouTube's inventory. The proposal, which aims to prevent further fines, remains under assessment by the EC⁴⁰¹.

JFTC recently found that Google imposed restrictive conditions on Yahoo Japan's keyword-targeted search advertising services, limiting its ability to compete fairly in the digital ad market. These restrictions, in place for over seven years, led to reduced competition and market consolidation. Following an investigation, Google agreed to lift these restrictions but was not found to have violated anti-monopoly laws. Google will remain under

⁴⁰¹ Reuters (2022). Exclusive Google offers to let ad rivals place YouTube ads in EU antitrust probe - sources. https://www.reuters.com/technology/exclusive-google-offers-let-adrivals-place-youtube-ads-eu-antitrust-probe-2022-06-13/

⁴⁰⁰ Reuters (2021). Google in EU crosshairs again with advertising antitrust inquiry. https://www.reuters.com/technology/eu-antitrust-regulators-investigate-googles-adtech-business-2021-06-22/

regulatory review for three years to ensure compliance 402. These developments underscore the global scrutiny of Google's practices in the digital advertising ecosystem and highlight the ongoing efforts by regulatory bodies to ensure fair competition.

Observations in Malaysia: In Malaysia, advertisers continue to rely heavily on global platforms like Google and Meta for access to premium ad inventory, as many of the leading ad format publishers operate on a global scale. Local ad inventories, in comparison, often lack the variety and scalability required to compete, making it challenging for advertisers to secure high-quality placements in the local market.

5.1.12.7 Discrepancy in ad performance metrics

Description: A key challenge in digital advertising is the lack of consistent, coherent standards for performance metrics across platforms and publishers. Metrics such as CPM, CPA, and CPV often differ in definition and calculation depending on the platform, making cross-platform comparisons difficult. This inconsistency can hinder advertisers' ability to assess performance and optimise campaigns effectively. MyCC's survey highlights this concern, with 40% of respondents agreeing or strongly agreeing that inconsistent metrics hinders their advertising efforts⁴⁰³.

This non-standardisation may be driven by various factors, including the unique data models and algorithms used by each platform, differences in tracking user interactions, variations in reporting periods, and the strategic use of metrics as a competitive advantage over other players.

These inconsistencies can disadvantage smaller platforms or publishers that may not have the same reporting capabilities or access to robust analytics as larger, more dominant players. These advertisers may need to invest additional resources to understand and experiment with different platforms and publishers to determine which metrics are most suitable for their ad campaigns.

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⁴⁰² Yahoo Finance (2024). Japan's anti-monopoly body orders Google to fix ad search limits affecting Yahoo. https://finance.yahoo.com/news/japans-anti-monopoly-body-orders-083206187.html

⁴⁰³ MyCC's survey.

Additionally, the unfamiliarity with the derivation or calculation of these metrics often drives new or less experienced advertisers to rely on dominant international platforms, limiting their willingness to trial smaller ad exchanges or publishers. Over time, the lack of opportunities for smaller ad exchanges and publishers to showcase their capabilities can stifle innovation and reduce the diversity of offerings in the marketplace.

Implication on competition:

- High barriers to entry due to the need to invest in robust reporting capabilities.
- **Uneven playing field** where smaller platforms heavily rely on established players.
- Weakened competitive landscape for new intermediaries and publishers.
- Reduced market innovation and diversity, as new players have fewer opportunities to bring alternative offerings to the market.

Relevant case(s): Although common in digital advertising, ad discrepancies are still closely monitored across different platforms. A recent article in June 2024 showed that Facebook Ads and Google Analytics report different metrics for clicks and conversions due to their different tracking methods. Facebook attributes conversion to when a user interacts with an ad, while Google Analytics tracks based on when the conversion happens. These discrepancies may negatively affect advertisers' decision-making, leading to poor budget allocation, ineffective campaign adjustments, and inaccurate ROI calculations. From a competition perspective, smaller advertisers face greater challenges, as reconciling these discrepancies requires additional technical expertise and resources⁴⁰⁴.

Observations in Malaysia: According to local players, a key reason for the non-standardised metrics used by key players is that by creating

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⁴⁰⁴ OWOX (2023). Differences between Facebook ads and Google analytics 4 conversions (and how to fix that). https://www.owox.com/blog/articles/differences-facebook-ads-google-analytics-4/

proprietary or unique methods to measure and report performance, platforms can make it harder for advertisers to directly compare their effectiveness with competitors. This complexity and lack of transparency may encourage advertisers to remain within a particular ecosystem, ultimately benefiting the platform.

5.1.13 Recommendations

This section is divided into two sections:

- Targeted recommendations that are specific to individual subsectors
- **General recommendations** that apply across all sub-sectors to address broader systemic issues

It is important to emphasise that these recommendations are presented solely for consideration during the market review stage. Prior to any implementation, a comprehensive assessment should be undertaken, grounded in relevant theories of harm, and with careful evaluation of potential impacts on innovation, competition, and investment.

This approach will help ensure that any policy responses are evidence-based, effectively address the concerns identified, and preserve the flexibility and dynamism essential to Malaysia's digital economy and its long-term competitiveness.

On implementation, due to the complex and multifaceted nature of the digital economy, a flexible and adaptive approach is essential. This means taking into account the cross-cutting characteristics of the digital subsectors involved, as well as the existing mandates of various ministries and government agencies.

To support smooth and coordinated execution, the proposed central digital economy body (see general recommendation 1) should take the lead. The central body will also play a key role in ensuring alignment across stakeholders without imposing additional governance burdens to various ministries and government agencies.

Targeted recommendations

Three targeted recommendations are proposed to address the competition and regulatory issues identified specifically within the digital advertising sub-sector.

1. Develop digital advertising sub-sector guideline

• Vertical integration of incumbent players Linkage to issue Horizontal collusion between players • Lack of transparency in ad mechanisms Potential violation of data privacy Limited access to selected ad inventory • Lack of regulatory framework Regulatory disparities between local and foreign players **Description** • Establish a clear and specific set of guidelines for digital advertising players operating in Malaysia Guideline to serve as a foundation to the unified digital economy legislation (see general recommendation 1), with key areas being: o **Platform definition**: Specific to digital advertising intermediaries (e.g., DSP, SSP, ad exchanges) and platforms & publishers (e.g., social media platforms, search engines, news sites) o Fair business conduct rules: Ensure transparent and non-discriminatory access to ad inventory and bidding processes, responsible use of advertiser and publisher data, with limits on selfpreferencing and unfair targeting practices o User rights: Enable users to opt out of personalised advertising easily, ensure transparent ad labelling o Access & transparency requirements: Provide transparent processes for ad inventory allocation, bidding, and auction dynamics, enable fair and non-exclusive access to all

	relevant ad inventory, including premium placements
Government stakeholders to be involved Time horizon	 Ministry of Digital KPDN MyCC Short-term (1 year)
Expected outcomes	 Provides regulatory clarity for key digital platforms in the sub-sector. Promotes fair platform practices and strengthens user rights. Lays the foundation for future unified digital economy legislation.
Case study	E.U. 405: In 2022, the European Union adopted the Digital Services Act (DSA), which came into force in November 2022 and began applying in phases from 2023. The regulation introduces binding transparency obligations for online platforms and Very Large Online Platforms (VLOPs). Platforms must ensure clear and real-time disclosure of advertisements, including labelling of ads, the identity of the advertiser, and the main targeting criteria used. In addition, DSA requires VLOPs to maintain a publicly accessible, searchable repository of all advertisements served on their platforms. These obligations are designed to enhance consumer choice, allow independent auditability across the advertising supply chain, and reduce information asymmetries between platforms, advertisers, regulators, and users. By targeting transparency gaps, the DSA aims to curb manipulative practices in digital advertising and

_____ 405 EU (2022). Regulation on Digital Services https://commission.europa.eu/document/download/6820737a-985e-4398-a284-30a482c844b2_en Act.

improve accountability in the governance of online ecosystems.

2. Provide support programmes to local players in the cookieless transition

Linkage to	Removal of 3rd party tracking
issue	
Description	 Provide support to help local advertisers adopt cookieless technologies (shift from using third-party cookies to identify and track users across websites), including but not limited to: Targeted grants to subsidise the adoption of cookieless technologies Tax incentives for companies investing in privacy-respecting ad tech Capacity-building initiatives, including workshops and online training, to equip small businesses with the skills to transition effectively Also to encourage platforms to continuously provide advertisers with greater access to relevant data, enhancing transparency and enabling informed decision-making. Key activities that platforms can undertake include the periodic publication of segment-specific trends, highlighting insights such as consumer behaviour shift, key interests and emerging keywords.
Government	MDEC
stakeholders	MCMC
to be	• MOF
involved	
Time horizon	Short-term (1 year) Maya layah alaying field whore layah advertisang gain.
Expected	 More level playing field where local advertisers gain access to advanced ad tech solutions, reducing
outcomes	dependence on dominant platforms.
	 Greater innovation and local participation in the
	digital advertising ecosystem.

3. Establish industry standards for ad performance metrics and market pricing transparency

Linkage to issue	Discrepancy in ad performance metrics
Description	 Supplement platform-specific metrics with industry-standard definitions for common performance metrics like CPM, CPA, and CPV to ensure consistency and transparency Standard metrics would provide advertisers with a common basis for comparison To be done through a public-private partnership, with collaboration with the Advertising Standards Association (ASA). To also collect and publish anonymised pricing data on ad inventories across platforms, allowing advertisers to make better-informed decisions
Government	• ASA
stakeholders to be	MCMC MDEC
involved	• MDEC
Time horizon	Medium-term (2-3 years)
Expected	Transparent and consistent comparability across
outcomes	platforms
	 Aligns with international best practices for ad measurement and auditing.
Case study	U.S. ⁴⁰⁶ : In the United States, the Media Rating Council (MRC) defines minimum global standards for media measurement and accredits services that adhere to them. Through rigorous annual audits by independent accountants, the MRC ensures that measurement systems reporting metrics like CPM, CPA, and CPV are valid, reliable, and transparent. By establishing a trusted baseline for media metrics, the MRC enables advertisers to compare campaign performance across platforms

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⁴⁰⁶ Media Rating Council (2025). About MRC. https://mediaratingcouncil.org/about-mrc/mission

with confidence and promotes consistency and integrity in digital advertising measurement.

General recommendations

General recommendations are proposed to complement the targeted recommendations and ensure a more coherent regulatory approach. Specifically, they are aimed at:

- Addressing common structural issues across the sub-sectors: Key
 competition concerns like opaque platform operations, data access
 asymmetries and market concentration are found across all four
 sub-sectors. As such, cross-cutting recommendations are needed to
 tackle these underlying challenges in a consistent and coordinated
 manner.
- Preventing policy fragmentation: While tailored, sector-specific recommendations are important for addressing unique or targeted challenges, they must be supported by an overarching regulatory framework to ensure coherence. General recommendations can serve as a unifying foundation, helping to align regulatory approaches across sub-sectors and ensuring that actions in one area reinforce, rather than contradict those in another.
- Building internal capacity: Effective regulation of the digital economy requires strong regulatory capacity, both in terms of technical expertise and coordination. Many of the issues raised demand collaboration across ministries, agencies, and even regional counterparts. General recommendations in this area focus on supporting capacity building, facilitating inter-agency coordination, and promoting knowledge sharing to strengthen oversight and regulatory responsiveness across the entire digital ecosystem.

Six general recommendations are proposed:

1. Appoint a central digital economy taskforce

Description

- Creation of permanent portfolio within an existing government agency or establish a specialised taskforce.
- Taskforce to be made up of different Ministries and agencies, including:
 - MyCC: Enforcement of competition law in digital markets, including extraterritorial conduct.
 - JPDP: Oversight of personal data processing and cross-border data flows.
 - o **MCMC:** Regulation of digital platforms, content governance, and network services.
 - MOTAC: Oversight of digital intermediaries in tourism, licensing of tourism operators.
 - BNM: Regulation of digital payments, ewallets, and financial technology.
 - MOF: Fiscal policy, digital taxation, and crossborder digital trade.
 - o **KPDN:** E-commerce, consumer protections, digital marketplace conduct.
 - o Others: MITI, SME Corp, MDEC, LHDN.
- Key responsibilities include:
 - Oversee legislative coherence, and managing inter-agency regulatory alignment.
 - Regularly assess regulatory gaps across areas such as competition, data protection, platform governance in the context of digital economy.
 - Coordinate overlapping jurisdictions between agencies (e.g., MyCC, MCMC)
 - Conduct periodic legal reviews (e.g., every 3 to 5 years), enabling timely updates to legislation and policies in response to evolving technologies and market dynamics.

- Establish a digital platform ombudsman to support users and businesses by providing an independent point of contact (see below for more details)
- Develop a central digital economy information hub (see below for more details)
- Develop comprehensive guideline on the do's and don'ts for digital platform based on various benchmark countries; violation of guideline, especially on competition-related matters, can lead to potential investigation from MyCC (see below for more details)
- Develop and implement a regional-level digital economy legislative framework (see below for recommended framework).

Establish a digital platform ombudsman

- Established a neutral and accessible party, acting as an intermediary between consumers, businesses, and digital platform operators.
- Ombudsman may be created as a standalone institution, or hosted within existing agencies such as the MyCC or the Ministry of Digital.
- Serves as an alternative channel for redress, allowing businesses and consumers to seek assistance after all internal (within platforms) or ministry-level complaint mechanisms have been exhausted.
- Receives and addresses complaints related to digital platform practices, especially in areas involving unfair treatment, lack of transparency, or platform conduct.
- Provides dispute resolution services with methods such as mediation and conciliation, promoting faster outcomes.
- May be empowered to conduct market studies and issue observations on emerging trends, behaviours, or systemic issues in the digital market.

Central digital economy information hub

- Develop a one-stop central platform that consolidates key digital economy sub-sectors information, including but not limited to:
 - Regulatory: Up-to-date guidelines, licensing requirements, policy frameworks, and compliance obligations from relevant regulators
 - o Market: Key statistics
 - Consumer protection resources: Explanations of consumer rights, platform obligations, dispute resolution procedures, and educational materials
 - Access to official complaint channels: Direct links and submission portals for lodging complaints to the relevant authorities, with guidance on which agency to approach based on the nature of the issue (e.g., content complaints to MCMC, anticompetitive behavior to MyCC, consumer disputes to KPDN)
- Platform to serve as an information hub for businesses, consumers, and other relevant stakeholders

Develop comprehensive digital economy guideline:

- Establish a clear and sector-specific set of guidelines for key digital platforms operating
- Guidelines to provide clarity and predictability to digital platform operators, as well as encourage self-regulation
- Guidelines can serve as a precursor to a unified digital economy legislation, with key areas being:
 - Platform definition
 - Fair business conduct rules: Fair access, support equal treatment, encourage responsible use of data, allow flexible commercial terms
 - User rights: Provide users with freedom to choose and personalise, offer clear, user-friendly

- policies, enable informed consent and control over personal data, ensure transparent pricing
- Access and transparency requirements:
 Transparency in pricing, fees and commissions,
 maintain fair and open processes
- Non-compliance with the guidelines may lead to regulatory review/action by the MyCC

Regional digital economy legislative framework:

- Establish a comprehensive and integrated regional (ASEAN)-level legal framework to govern the digital economy.
- Framework to apply to all digital economy players operating in ASEAN, regardless of physical presence, to ensure consistent and fair regulation.
- Framework to cover the key areas of:
 - Platform definition: Criteria that determine whether a digital platform falls within the scope of the regulatory framework.
 - Fair business conduct rules: Defined obligations and prohibited practices for regulated platforms, including self-preferencing, data access restrictions, user lock-in, limited user choice, lack of interoperability with third-party services,, restrictions on third-party competition and other anti-competitive behaviours.
 - User rights: Consumers' freedom of choice and information, including access to platform advertising processes, data portability, and the freedom to uninstall apps or change default settings.
 - Access and transparency requirements: Mandate that platforms provide clear and accessible information and hardware, such as ranking systems, fees, recommendation algorithms, infrastructure and data usage practices.
 - Compliance and enforcement mechanisms:
 Define the regulator's responsibilities, including

	powers to conduct audits, monitor potential violations, and enforce compliance through appropriate legal measures. • Framework to be anchored/aligned with existing legislations (e.g., Competition Act, PDPA, CMA, Companies Act). • Leverage MCMC's current licensing framework for social media and internet messaging services, the forthcoming amendments to the Electronic Commerce Act 2006, and the PDPA's Automated Decision Making and Profiling Guidelines as foundational elements for the proposed legislative framework.
Government	Ministry of Digital
stakeholders	• MyCC
to be	• JPDP
involved	MCMC MOTA C
	MOTAC DNIM
	BNMMOF
	KPDN
	MyDIGITAL
	MITI
	SME Corp
	MDEC
	• LHDN
Time horizon	Medium to long-term (2-5 years)
Expected	• Reduced regulatory fragmentation and
outcomes	jurisdictional confusion
	 Better alignment between digital economy strategy and regulation

Case study

U.K.⁴⁰⁷: The Digital Regulation Cooperation Forum (DRCF) was established in 2020 as a collaborative body bringing together the Information Commissioner's Office (ICO), the Competition and Markets Authority (CMA), Ofcom, and the Financial Conduct Authority (FCA). The DRCF was created to address the increasingly complex and crosscutting nature of digital platform regulation, where issues of competition, data protection, online safety, and financial services oversight often intersect.

The forum's mandate includes aligning regulatory approaches, reducing duplication, and ensuring consistent oversight of digital platforms and services. It also leads joint projects and initiatives on emerging issues such as algorithmic auditing, online safety, and Al governance, while conducting horizon scanning to anticipate risks from new technologies.

By fostering regulatory coherence, the DRCF aims to prevent regulatory gaps or overlaps that could undermine enforcement or create uncertainty for market participants.

Japan 408: In 2020, Japan enacted the Act on Improving Transparency and Fairness of Specified Digital Platforms (TFDPA), establishing a co-regulatory framework for large online platform operators such as app stores and ecommerce marketplaces. The Act requires designated providers to disclose their terms and conditions, develop procedures and systems to ensure fairness (including complaint and dispute handling), and submit annual reports on their business operations and self-evaluation to the Ministry of Economy, Trade and Industry (METI).

⁴⁰⁷ DRCF (2025). About the DRCF. https://www.drcf.org.uk/about-us

⁴⁰⁸ Ministry of Justice Japan (2020). Act on Improving Transparency and Fairness of Digital Platforms (Act No. 38 of 2020). https://www.japaneselawtranslation.go.jp/ja/laws/view/4532/en

Under this model, METI reviews and publishes evaluations of the annual reports, combining platform self-assessment with government oversight. By mandating disclosure and fair procedures, the Act seeks to reduce information asymmetry between dominant platforms and smaller businesses, while preventing unfair practices such as sudden changes to terms, opaque ranking mechanisms, or discriminatory treatment. The framework reflects Japan's approach of balancing innovation with accountability, ensuring that digital platform markets remain open, transparent, and competitive.

2. Consolidate competition oversight under a single authority

Clarify and delineate the regulatory boundaries **Description** between MyCC (competition regulation) and other sectoral regulators with competition mandates, in with the anticipated consolidation competition oversight under RMK-13 as outlined in Strategy A6.2: Strengthening the Competitive Ecosystem. This includes coordination between MyCC, Communications Multimedia Malaysian and Commission (MCMC), Malaysian **Aviation** Commission (MAVCOM), and the Energy Commission (EC). The effort will require amendments to the Competition Act 2010 to incorporate existing competition-related provisions currently found in: the Communications and Multimedia Act 1998. and Postal Services Act 2012 (under MCMC), o the Malaysian Aviation Commission Act 2015 (under MAVCOM), and the Energy Commission Act 2001 (under the EC). • These reforms will help eliminate jurisdictional overlaps and provide clearer regulatory authority, enforcement addressing improving and competition issues more effectively. In the short-term, potential establishment of a structured coordination framework among relevant commissions (i.e., MyCC, MCMC, MAVCOM and EC) to facilitate information sharing and joint market intelligence. Government MyCC stakeholders MCMC MAVCOM to be involved EC Time horizon Medium to long-term (2-5 years)

Expected outcomes

- Clarifies institutional roles and reduces regulatory overlaps in competition enforcement.
- Enhances coordination and information-sharing among sectoral regulators.

3. Strengthen government's revenue-generation mechanisms

Description	 Enhance existing RMCD efforts in requiring foreign digital service providers to report Malaysia-sourced revenue (under the Service Tax on Digital Services - SToDS regime), verified using geo-location tools such as IP addresses, billing information, and user registration data. This can be complemented with the potential introduction of new legal/enforcement powers to block non-compliant digital platforms that fail to register or remit tax. Strengthen Malaysia's participation in the OECD BEPS Pillar One regime by introducing a new nexus rule that allows for the taxation of foreign digital businesses that operate outside Malaysia but serve Malaysian customers. Rule could apply only to large firms, with the threshold to be benchmarked against (as a reference point) existing Application Service Provider (ASP) licensing criteria set by MCMC.
Government stakeholders to be involved	 MOF RMCD LHDN MCMC Ministry of Digital BNM
Time horizon	Medium-term (2-3 years)
Expected outcomes	 Broader tax base capturing user-driven digital revenue Reduced compliance burden on local businesses Higher voluntary compliance by global digital players

4. Strengthen businesses and consumers' awareness on data privacy and protection

Description	 Enhance awareness and education to empower businesses and consumers in better protecting their personal data and making informed choices in the digital economy. This can be done in collaboration with key players and civil societies to promote greater data protection practices and strengthen accountability among platforms. Potential programmes include digital literacy campaigns, development of educational materials, interactive online modules.
Government	• JPDP
stakeholders	MDEC
to be	Ministry of Digital
involved	• KPDN
Time horizon	Short-term (1 year)
Expected outcomes	 Increased businesses and public awareness of personal data rights, leading to more informed digital behaviour. Reduced risk of data misuse and abuse by digital platforms due to better consumer scrutiny.
Case study	Singapore 409: In 2023, Singapore's Infocomm Media Development Authority (IMDA) partnered with Google to launch PET x Privacy, a joint initiative that integrates Google's Privacy Sandbox solutions into IMDA's Privacy-Enhancing Technologies (PET) Sandbox. The PET Sandbox provides a secure test environment for businesses to explore new technologies that enable

(2023). IMDA-Google: PET x

Privacy

https://services.google.com/fh/files/events/imda_google_pet_x_privacy_sandbox_202 3.pdf

responsible data use and sharing while safeguarding consumer privacy.

Through this initiative, businesses in Singapore can trial privacy-preserving advertising and data solutions that aim to reduce reliance on third-party cookies, improve transparency, and strengthen user privacy. collaboration reflects Singapore's co-regulatory approach of working with major technology players to balance innovation, privacy protection, and competition in the digital economy. By enabling early trials, IMDA helps firms adapt to global shifts in data governance and ensures that local businesses are not disadvantaged as dominant platforms roll out privacy-focused technologies that may reshape digital advertising markets.

5. Capacity building across entire public sector delivery

Description	 Entire public service to enhance in-house capabilities and understanding in AI, data science, analytics and algorithmic auditing Assignment of specific sub-sector portfolio to relevant Ministries Key ministries/agencies relevant to the four sub-sectors should also: Proactively track emerging trends, technological shifts, and issues affecting businesses and users, including market access barriers, algorithmic bias, and platform constraints Conduct frequent engagement with relevant key players to understand practices and build connections Platform regulation and policy enforcement Digital monitoring to detect changes in platform practices and identify potentially unfair or discriminatory behaviours Serve as a central liaison for coordinating with other ministries and agencies in addressing identified issues Act as mediator in fostering greater dialogue between businesses and key platforms Proactively publish public reports on the status, challenges, and developments within the sub-
	 Proactively publish public reports on the status, challenges, and developments within the sub- sectors
Government	Ministry of Digital
stakeholders	• KPDN
to be	• MOTAC
involved	• MyCC
Time horizon	Medium-term (2-3 years)
Expected outcomes	 Strengthens government capabilities in AI, data, and digital platform oversight.

- Enhances proactive monitoring and policy responsiveness across key digital sub-sectors.
- Improves coordination, transparency, and stakeholder engagement with platforms and businesses.

6. Enable the growth of local digital economy champions through a supportive ecosystem

Description	 Continuous development and promotion of more local digital economy champions (existing MDEC programmes, e.g., Malaysia Digital Acceleration Grant (MDAG), Digital Content Grant (DCG), 4IR Catalyst Grant - (4ICG)) Support through provision of financial incentives such as grants, subsidies, or low-interest loans Provide capacity-building programmes, technical assistance, and marketing support to enhance digital capabilities and market reach, alongside encouraging mergers, consolidations, or joint ventures among Malaysia-founded platforms to compete more effectively with large foreign digital players.
Government	Ministry of DigitalMDEC
stakeholders to be	MOTAC
involved	• MOF
	• BNM
	• MITI
Time horizon	Medium-term (2-3 years)
Expected	Increases the competitiveness and scalability of
outcomes	local digital platforms.
	 Encourages consolidation and collaboration to strengthen Malaysia's digital ecosystem.



Malaysia Competition Commission

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