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Australian Information Industry Association

Submission to

the Select Committee on adopting Artificial Intelligence

17 May 2024

Introduction

The Australian Information Industry Association (AIIA) thanks the Select Committee on adopting Artificial Intelligence for the opportunity to respond to its consultation.

Context - object of a responsive regulatory framework

The AIIA is supportive of AI regulation but emphasises the importance of an intelligent and responsive regulatory framework that remains fit for purpose as the technology advances. By fit for purpose, we mean it should support the following objects:

(1) Encourage product innovation and work productivity to benefit the Australian economy.
(2) Prevent harm.
(3) Punish criminal acts.

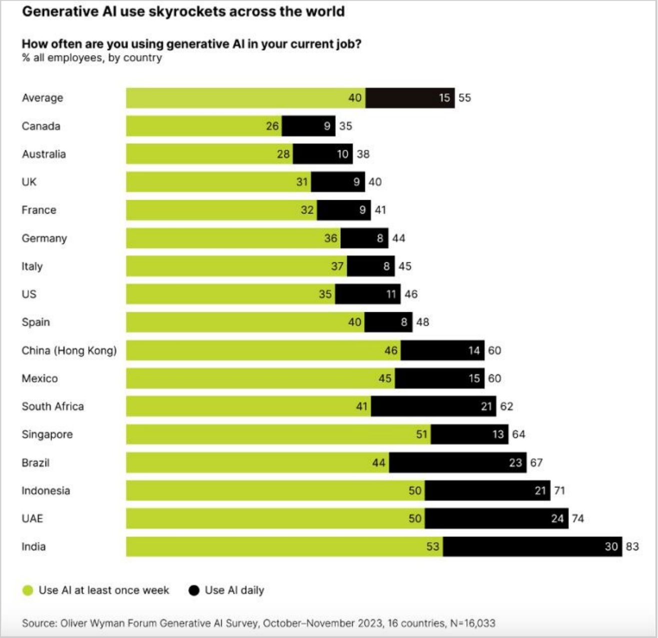
Its principal foundation should support the rapid adoption and investment in AI across the Australian economy as the priority whilst also ensuring that existing laws meet community expectations.

Numerous submissions on Safe and Responsible AI consultation affirm the coverage of current Australian laws and regulations on AI being used now widely across the economy, with emerging copyright and privacy concerns being addressed though updated legislation where gaps have been identified.

The AIIA further supports in principle the Testing, Transparency and Accountability (TTA) guardrails being adopted where they are directly referenced to current (AI) and emerging (content credentials) ISO standards and User impact assessments from the builder of the AI.

Current State – Australia falling behind in AI adoption and thus, global competitiveness

A major report by the Productivity Commission found AI could add between $1-4 trillion to the economy in the next decade, supercharging Australia's current annual GDP of about $1.5 trillion.[1] However, Australia is placed second last of the thirteen countries assessed in deploying and exploring AI, according to the 2022 IBM Global AI Adoption Index.[2] Correspondingly, the economy is seeing a decline in skills development, and productivity benefits. According to the inaugural AIIA Tech Index, Machine Learning/Artificial Intelligence for internal business processes are the second highest technologies that need to be adopted by organisations in the next 1-2 years, behind cloud for application functionality.[3]


Generative AI use skyrockets across the world

How often are you using generative AI in your current job?
% all employees, by country

Source: Oliver Wyman Forum Generative AI Survey, October–November 2023, 16 countries, N=16,033

[1] ABC, Artificial Intelligence Technologies Could Be Classified by Risk, as Government Consults on AI Regulation, 1 June 2023.

[2] IBM, Global AI Adoption Index 2022.

[3] AIIA, Australia's First Australian Tech Index Launched to Measure Buying Sentiment, 12 February 2024.

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Leveraging AI to drive productivity across the Australian economy.

AI is the gamechanger technology, whose adoption will optimise sectors across the economy and give the Nation its competitive edge. The following existing AI use cases demonstrate why the technology industry is keen to ensure AI usage and the associated productivity gains that ensue are not curtailed unnecessarily. These examples highlight the potential for AI to assist Government in meeting environmental targets and economic growth.

Environment
Smart data centers

Kyndryl help lower 4000 client's emissions by addressing its own emissions. Its data centers use AI and automation to enhance efficiency. Once the emissions baseline was developed, it built a unique model that quantitatively projects emissions reductions through 2030, taking into account its business strategy, supply chain, and emissions reduction plans.

Health
Organ sectioning and volume calculation in radiology

An experimental algorithm devised by medical and computer scientists dramatically reduces organ volume calculation time for radiologists from 45 minutes to under 1 minute per patient. This innovation promises to grant radiologists 44 additional minutes daily, enhancing patient care and reducing radiology service waitlists.

Environment
Coral reef composition estimation

The Australian Institute of Marine Science (AIMS) and Accenture collaborated to create ReefCloud, an open-access tool that automates analysis of reef photos, providing standardised data interpretation and rapid reporting across languages and scientific methodologies. Powered by AI, ReefCloud accurately estimates coral reef composition 80-90% faster than manual methods, fostering global scientific collaboration with over 200 users.

Cyber security
It takes AI to beat AI

AI-driven Security Operations Centers (SOCs) transform cybersecurity by slashing detection and response times. Through automating event analysis and alert prioritisation, AI enables teams to tackle high-priority threats, boosting operational efficiency. Early adoption demonstrates marked reductions in the mean time taken to detect and respond to incidents, condensing billions of daily cyber events to just a handful for manual scrutiny.

Transport
Supply chain optimisation.

Supply chain management in today's global landscape entails more than just efficiency and cost reduction—it necessitates adaptability to shifting demand and product dynamics. Australian increasingly intricate supply chains, face challenges from unpredictability due to events like natural disasters and pandemics, driving the need for AI-enabled solutions to optimize operations and mitigate risks effectively.

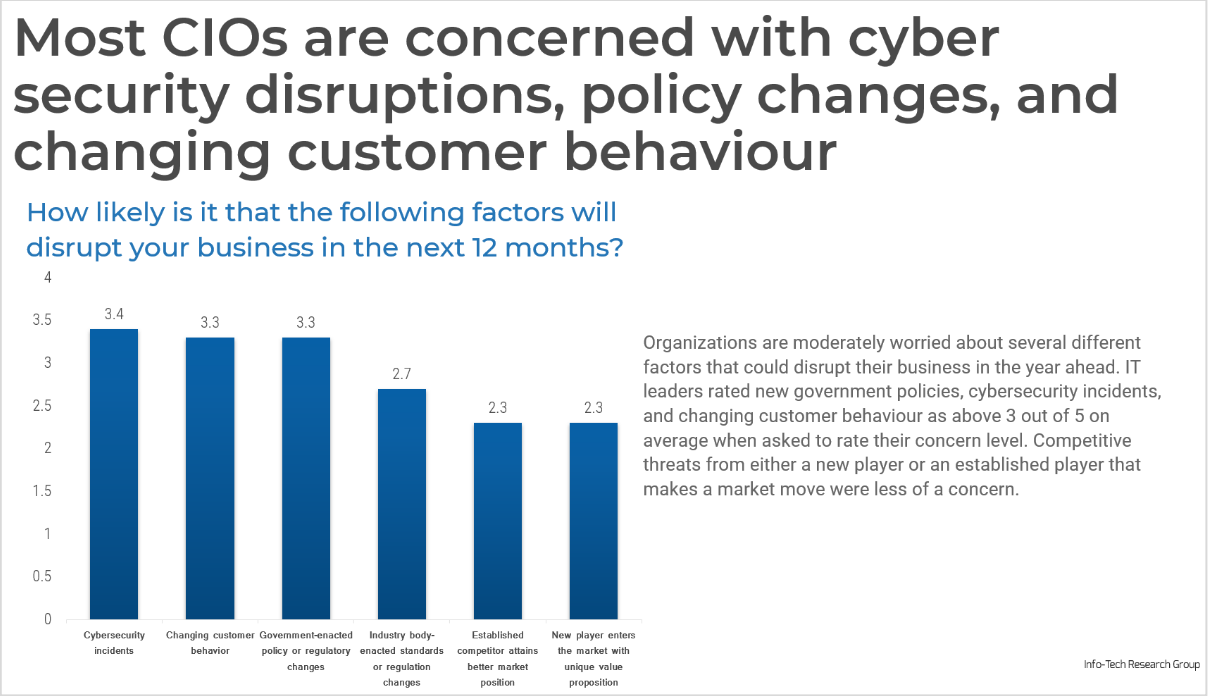
Payment
Invoice automation

AI can revolutionize invoice management for Australian businesses, reducing manual tasks. Tools like SAP's AI-powered optical character recognition scan and process invoices, matching them with purchase orders for payment. Staff only need to verify and correct errors, saving time and minimising mistakes, potentially boosting national productivity significantly.

Challenges of developing AI regulatory framework and interim measures

1. **Technophobia**

   Current AI regulatory proposals is disproportionately motivated by a lack of trust and the fear of AI rather than excitement over the opportunities it presents. There is a rush to discuss ethics, risks of harm, future work trends, accessibility and inequality but such fear-based discourse is not founded on a full understanding of the technology. In line with potential disruption, our AIIA Tech Index found CIOs more concerned over Government-enacted policy of regulatory changes than competitive threats in the market.



Most CIOs are concerned with cyber security disruptions, policy changes, and changing customer behaviour

How likely is it that the following factors will disrupt your business in the next 12 months?

Organizations are moderately worried about several different factors that could disrupt their business in the year ahead. IT leaders rated new government policies, cybersecurity incidents, and changing customer behaviour as above 3 out of 5 on average when asked to rate their concern level. Competitive threats from either a new player or an established player that makes a market move were less of a concern.

Info-Tech Research Group

These AI fears stem from a fear of the unknown, increasing depersonalisation or detachment from human interaction and sensational, and biased media coverage. Our research found, for example, that since the start of 2024 a prominent national broadcaster has published four fear-based AI stories for every one benefit-based AI story. We note the many recent “worst” implemented and widely published AI or Automated Decision-Making (ADM) IT projects in the Government has exacerbated public perception of AI risks and harms.

Addressing AI technophobia involves education and open dialogue about potential benefits and risks, distinguishing genuine ethical dilemmas from myths. The Government and media play a key role in commoditising the knowledge about AI and how best to use it. In lieu of this, Australians are attempting to learn more about AI by themselves as evident from the 50 per cent spike in individual online searches about AI during the past year.[4] This can create a further digital divide between the digitally savvy and disadvantaged communities.

[4] AAP, Aussie curiosity about AI tech reaches all-time high, 11 April 2024.

AIIA Recommendations

The AIIA recommends the following interim solutions to raise AI awareness and understanding among the Government, businesses and citizens concurrently.

Government	Businesses	Citizens
• **Government must set a higher AI governance and assurance standard for itself,** demonstrating the benefits of AI. It should become an exemplar of a safe and responsible AI developer/user and championing trust around adoption. • **APS Commission to invest in a Digital & Data Academy to build public servants' (and Ministers'/their offices) capabilities.** This can be modelled on the Singapore Government's Academy including on the job learning and making completion a prerequisite for any senior executive in the public service by 2027. • **APS Commission to innovate secondment or scholarship opportunities** e.g. public servants can experience AI development and governance practices in a tech company for a specific term.	• **Update Board representation and create tech-specific committees** to have timely tech understanding, including AI and cybersecurity.[5] • **Designate a responsible owner for AI governance in the C-suite** (e.g. Chief AI Officer) and forums to discuss AI governance or any issues associated with AI system. • **Implement routine auditing of algorithms, involving independent external auditors** and a wide range of stakeholders (e.g. system developers, users and end-users) • **Facilitate regular training and knowledge sharing sessions** regarding ethical AI and safe by design principles as well as workshop any risks or issues identified, or lessons learnt.	• **Government to designate a public-facing outfit, focused on communicating Government initiatives and raising AI awareness**. E.g. Encourage safe play with AI technologies in low risk setting such as creating meeting summaries or artworks using AI. • **Government to encourage return to schools or training institutions for AI upskilling** with small grants.

2. **Sector-led regulatory and co-regulatory approach.**

Getting the right balance between regulation and innovation will be vital for both government and business. Both government and the business community need to come together to create a framework that is adaptable yet enforceable. The more business is involved in the dialogue with society to shape regulation, the more informed all parties will be.

AIIA Recommendation

The AIIA recommends a co-regulatory approach, which leverages cross-society and cross-sector collaboration to create the building blocks for successful future regulation – whether it is the principles of AI adoption or formulating a series of industry standards for AI. Such approach

[5] AICD, Innovation in the Boardroom, see page 25.

bodes well for creating an agile regulatory framework that prevents harm from happening in the first place.

One example is the AI Verify tool co-developed by the Singapore Government and major AI developers, which is designed to test new AI systems and recommend areas for change. AI Verify is an AI governance testing framework and software toolkit that validates the performance of AI systems against a set of internationally recognised principles through standardised tests and is consistent with international AI governance frameworks such as those from European Union, OECD and Singapore. AI Verify was first developed in consultation with companies from different sectors and of different scale. These companies include – Amazon Web Services, DBS Bank, Google, Meta, Microsoft, Singapore Airlines, NCS (Part of Singtel Group)/Land Transport Authority, Standard Chartered Bank, UCARE.AI, and X0PA.AI.

Incompatibility of adopting the EU AI Act in the Australian context

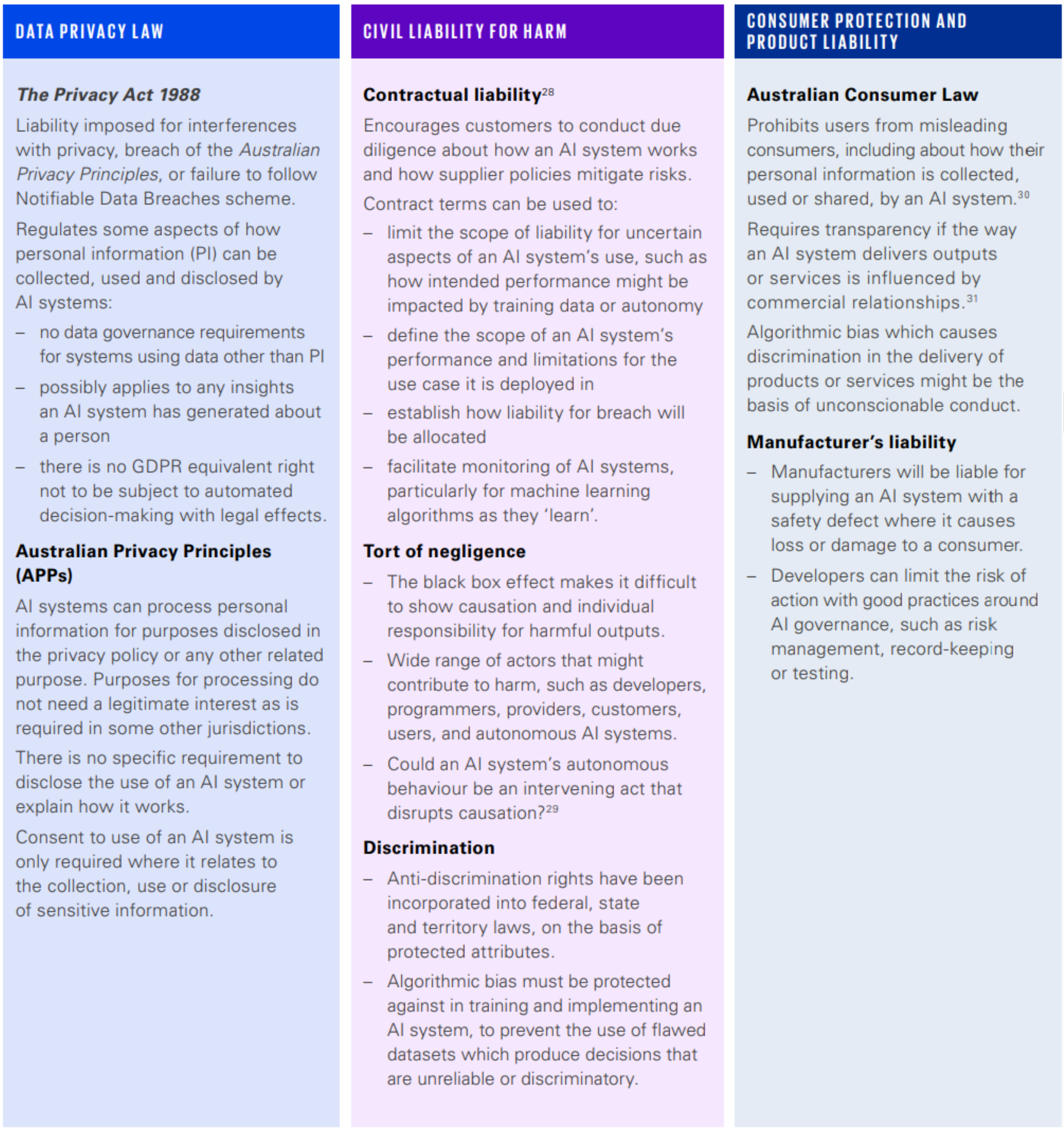
The EU AI Act is the world's first comprehensive legal framework, but it is a fallacy to conflate being first as being better. On closer inspection, the alignment of the Act with existing sectorial regulation is incomplete, which would then add unnecessary and highly detrimental red tape. The Act, when paired with delegated legislation, also gives rise to concerning legal principles which can lead to substantial compliance cost.

Overlooking existing Australian laws

Submissions from prominent law firms such as Gilbert + Tobin, King & Wood Mallesons and Law Council of Australia to the Safe and Responsible AI consultation share the view that it is critically important for Australia to strike the right balance between managing risk and promoting our innovation and productivity agenda.

They also affirm that Australia's multi-layer regulatory framework, which is primarily technology neutral, is already reasonably exhaustive in terms of seeking to address the types of harms that can occur as a result of the use of AI (See table in the next page[6]).

[6] AIIA, Navigating AI: Analysis and Guidance on the Use and Adoption of AI, 28 March 2023, page 25.



DATA PRIVACY LAW

The Privacy Act 1988

Liability imposed for interferences with privacy, breach of the *Australian Privacy Principles*, or failure to follow Notifiable Data Breaches scheme.

Regulates some aspects of how personal information (PI) can be collected, used and disclosed by AI systems:

- no data governance requirements for systems using data other than PI
- possibly applies to any insights an AI system has generated about a person
- there is no GDPR equivalent right not to be subject to automated decision-making with legal effects.

Australian Privacy Principles (APPs)

AI systems can process personal information for purposes disclosed in the privacy policy or any other related purpose. Purposes for processing do not need a legitimate interest as is required in some other jurisdictions.

There is no specific requirement to disclose the use of an AI system or explain how it works.

Consent to use of an AI system is only required where it relates to the collection, use or disclosure of sensitive information.

CIVIL LIABILITY FOR HARM

Contractual liability[28]

Encourages customers to conduct due diligence about how an AI system works and how supplier policies mitigate risks.

Contract terms can be used to:

- limit the scope of liability for uncertain aspects of an AI system's use, such as how intended performance might be impacted by training data or autonomy
- define the scope of an AI system's performance and limitations for the use case it is deployed in
- establish how liability for breach will be allocated
- facilitate monitoring of AI systems, particularly for machine learning algorithms as they 'learn'.

Tort of negligence

- The black box effect makes it difficult to show causation and individual responsibility for harmful outputs.
- Wide range of actors that might contribute to harm, such as developers, programmers, providers, customers, users, and autonomous AI systems.
- Could an AI system's autonomous behaviour be an intervening act that disrupts causation?[29]

Discrimination

- Anti-discrimination rights have been incorporated into federal, state and territory laws, on the basis of protected attributes.
- Algorithmic bias must be protected against in training and implementing an AI system, to prevent the use of flawed datasets which produce decisions that are unreliable or discriminatory.

CONSUMER PROTECTION AND PRODUCT LIABILITY

Australian Consumer Law

Prohibits users from misleading consumers, including about how their personal information is collected, used or shared, by an AI system.[30]

Requires transparency if the way an AI system delivers outputs or services is influenced by commercial relationships.[31]

Algorithmic bias which causes discrimination in the delivery of products or services might be the basis of unconscionable conduct.

Manufacturer's liability

- Manufacturers will be liable for supplying an AI system with a safety defect where it causes loss or damage to a consumer.
- Developers can limit the risk of action with good practices around AI governance, such as risk management, record-keeping or testing.

AIIA Recommendations

We recommend that Australia continue to adopt the harms-focused and technology neutral approach to regulation wherever possible, to avoid a very inefficient regulation that could quickly become out of date.

For this reason, we welcome:

- efforts in updating current legislation, which can be performed at a faster pace since these are already regulated areas. One such example is the *Privacy Act* reforms and addition of ADM and transparency in the recommended changes, which is expected to be introduced to the Parliament in August 2024.[7]

[7] Innovationaus, Privacy Bill to Come Before Parliament in August, 6 May 2024.

- Clearly and narrowly delineated scope of regulation for high-risk scenarios, focusing on situations with a substantial risk of harm. These include the management and operation of critical infrastructure, encompassing AI systems designed as safety components for overseeing supplies of water, gas, heating, electricity, and essential digital infrastructure. Additionally, high-risk situations involve AI systems utilised for recruitment processes and targeted job advertisement placements.

As examples of how Australia can adapt its existing laws, the AIIA prefer the UK, US and Singapore models, noting we share their common law legal systems (including legal precedents and principles) and their focus on innovation.

- The UK model applies a pro-innovation and international collaboration approach to AI regulation, emphasising and recognising that it is not a global player in AI and wants the innovation and economic benefits for its economy. We support the Bletchley Declaration where alignment is considered best practice along with a pro-innovation approach while managing risks.
- AIIA members are also supportive of the US approach as outlined in the US Executive Order on AI (on the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence).
- Singapore model adopts a soft law framework. It focuses on safe adoption with testing tools (the previously mentioned AI Verify) and increasing trade through harmonisation of standards (U.S.-Singapore Critical and Emerging Technology Dialogue). The Dialogue emphasises the importance of promoting trust, privacy, and ethical standards in technology development.

In comparison, adopting the EU AI Act would require significant adaptation to align with Australian laws, which might involve complex legal amendments and administrative processes.

Concerning new legal principles e.g. presumption of causality and reversal of burden of proof

Alongside the EU AI Act, the EU Product Liability Framework reforms will be expanded to include AI systems for the first time and reverse the burden of proof in certain circumstances, so claimants no longer need to prove elements of their case. In particular, the revised regime introduces circumstances in which defect or causation can be presumed.[8] Two of these circumstances are:

1. Where there is noncompliance with relevant EU product safety regulations; and
2. If it is excessively difficult on account of the technical or scientific complexity of a product for a claimant to prove either that
   - A product is defective; or
   - There is a causal connection between the defect and the damage.

According to the American Chamber of Commerce to the European Union (AmCham EU), while the proposal does not intend to reverse the burden of proof, the presumption of defectiveness and causality effectively amount to a reversal of the burden of proof for products that are particularly technically or scientifically complex. Together, the EU AI Act and the proposed EU Product Liability Framework will create unintended consequences, increasing risks of lawsuits and dampening AI innovation.

[8] EU Briefing, EU Legislation In Progress: New Product Liability Directive, see page 6 and 8.

Overlooking rapid technological changes

The EU AI Act necessitates a level of prescriptiveness during codification, for example, of regulatory scope and risk thresholds. Here are two examples in which the explicit AI Act could be wrongly prescriptive and thus, unresponsive to technological changes:

Example 1: AI Definition

Art 3(1) 'AI system' means a machine-based system that is designed to operate with varying levels of autonomy and that may exhibit adaptiveness after deployment, and that, for explicit or implicit objectives, infers, from the input it receives, how to generate outputs such as predictions, content, recommendations, or decisions that can influence physical or virtual environments;

In this unqualified form, this is a definition of software, not of AI. Take an auto-sum function in an excel sheet. It has an objective (building a sum), input (entries), and an output that may influence environments (as per the relevance of the sum for any decisions).[9]

The EU attempted to clarify this definition with Recital 6, which emphasises the distinction between traditional software and AI systems. AI systems are characterised by their capability to infer, utilizing machine learning or knowledge-based approaches to go beyond basic data processing, enabling learning, reasoning, or modelling. This definition aims to exclude simple rule-based systems or basic software functions like an auto-sum function in Excel from being classified as AI.

However, the term "inference" remains the key determinant, leaving ambiguity, particularly regarding rule-based systems and statistical modelling. The concept of autonomy is also addressed, requiring both independence from human intervention and significant adaptability or learning capacity to qualify as AI. But this emphasis on adaptability is indirect, placing the responsibility of differentiation between traditional software and AI solely on the criterion of "inference."[10]

Example 2: Risk thresholds

The AI Act delineates the potential dangers associated with foundation models depending on the computational resources used in their training. These foundation models, often referred to as general-purpose AI, possess significant potency owing to their diverse applications. According to the legislation, a benchmark of 10^25 floating point operations per second (FLOPs), a metric indicating computer performance, is established. AI technologies surpassing this threshold are considered to pose "systemic risk" and are subjected to stricter regulatory measures.

However, the flops threshold confuses compute with risk. Regardless of their size, these models have risks around bias, misinformation, data protection and hallucinations. It is also a clear example of how technology-specific provisions can become obsolete as technology outpaces regulation. It is expected that numerous foundation models will pass this threshold or a new leap in technology will bring down the computational requirements for powerful foundation models.[11]

[9] Professor Dr. Philipp Hacker, LL.M. (Yale), Research Chair for Law and Ethics of the Digital Society, European New School of Digital Studies, European University Viadrina Frankfurt (Oder), Comments on the Final Trilogue Version of the AI Act, 23 January 2024.

[10] Ibid.

[11] Euractiv, Hard-fought provision on the AI Act could become obsolete, experts say, (16 March 2024).

The two EU AI Act examples provided above demonstrate how an explicit AI Act will require significant revision in the short to medium term due to:

- the ubiquity of embedded AI in products;
- technological changes in a range of different AI programs and systems (and potential exponential change): and
- change in cultural norms around acceptable use of AI.

Conclusion

The AIIA thanks the Committee for the opportunity to share the tech industry insights and assessment on the Nation's AI adoption, interim measures to drive safe uptake and the compatibility of regulatory models in overseas jurisdictions. We are keen to discuss the content of this submission. Should you have any questions, please contact Ms Siew Lee Seow, General Manager, Policy and Media at siewlee@aiia.com.au.

Yours sincerely
Simon Bush
CEO, AIIA

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About the AIIA

The AIIA is Australia's peak representative body and advocacy group for those in the digital ecosystem. Since 1978, the AIIA has pursued activities to stimulate and grow the digital ecosystem, to create a favourable business environment for our members and to contribute to Australia's economic prosperity.

We are a not-for-profit organisation to benefit members, which represents around 90% of the over one million employed in the technology sector in Australia. We are unique in that we represent the diversity of the technology ecosystem from small and medium businesses, start-ups, universities, and digital incubators through to large Australian companies, multinational software and hardware companies, data centres, telecommunications companies and technology consulting companies.