



8 June 2018

The Director, Copyright Law Section
Department of Communications and the Arts
GPO Box 2154
Canberra ACT 2601

Dear Director,

COPYRIGHT MODERNISATION CONSULTATION – BSA RESPONSE

BSA | The Software Alliance (“**BSA**”) ¹ appreciates the opportunity to respond to the Department of Communications and the Arts’ (“**DCA**”) request for feedback to the issues raised in the Copyright Modernisation Consultation Paper (“**Consultation**”).² As the principal trade association for the world’s most innovative software companies, BSA is acutely aware of the critical role intellectual property policy plays in fostering both the creation and distribution of cultural and technological goods and services. A well-functioning copyright system remains integral to our member companies’ ability to bring their software to market.

We agree strongly with the DCA that the measure of a well-functioning copyright system is one that is effective, efficient, adaptable, and accountable.³ Changes in marketplace dynamics brought on by technological innovations will at times require updates to the Copyright Act to ensure that it remains fit for purpose and consonant with other national strategic priorities. Because the technological landscape has evolved dramatically in recent years, it is timely to assess whether the Copyright Act has kept pace.

The growth of the internet, the proliferation of connected devices, and the explosion in cloud-enabled processing capabilities have given rise to new opportunities to harness data in ways that have the potential to improve almost every aspect of our lives. BSA members are at the forefront of these data-driven innovations, including cutting-edge advancements in artificial intelligence (“**AI**”), machine learning, cloud-based analytics, and the Internet of Things. These

¹ BSA is the leading advocate for the global software industry before governments and in the international marketplace. BSA members are among the world’s most innovative companies, creating software solutions that spark the economy and improve modern life. With headquarters in Washington, DC, and operations in more than 60 countries, we pioneer compliance programs that promote legal software use and advocates for public policies that foster technology innovation and drive growth in the digital economy.

BSA’s members include: Adobe, Amazon Web Services, ANSYS, Apple, Autodesk, AVEVA, Bentley Systems, Box, CA Technologies, Cisco, CNC/Mastercam, DataStax, DocuSign, IBM, Informatica, Intel, Microsoft, Okta, Oracle, salesforce.com, SAS Institute, Siemens PLM Software, Splunk, Symantec, The MathWorks, Trend Micro, Trimble Solutions Corporation, and Workday.

² <https://www.communications.gov.au/have-your-say/copyright-modernisation-consultation>

³ Consultation at pg. 5.

innovations are helping to make our devices smarter, our businesses more competitive, and the delivery of government services more efficient. If Australia sets in place a policy framework that allows for the full potential of these technologies, economists estimate they will grow Australia's GDP by an incredible 1.2% per year, adding \$250 billion to the economy by 2025.⁴ To ensure Australia is able to maximise these benefits, the Turnbull Government recently announced that its forthcoming Digital Economy Strategy will recognise the importance of AI and machine learning to Australia's long-term strategic interests.⁵

We focus our submission on the elements of the Consultation we regard as most important to ensuring that the Copyright Act is conducive to Australia's innovation goals. To that end, we strongly support updates to the Copyright Act to provide a much-needed framework of flexible exceptions for the development and deployment of innovative technologies. In 2017, the Australian Government acknowledged the need for such reforms, noting support for a "modernised copyright exceptions framework that keeps pace with technological advances and is flexible to adapt to future changes."⁶ We concur.

In prior copyright consultations, BSA has endorsed the adoption of a flexible fair use provision as a means for future-proofing the Copyright Act.⁷ However, we are ultimately less concerned about the means by which much-needed flexibilities are added to the Copyright Act than we are about the underlying objective. Thus, should the DCA determine that a flexible fair use provision is infeasible, we urge support for the addition of new fair dealing exceptions. Among the exceptions identified in the Consultation, three are priorities:

- Text and Data Mining;
- Quotation; and,
- Incidental or Technical Uses.

Text and Data Mining

Text and data mining ("**TDM**") is an analytic technique that is foundational to the development of machine learning-based AI. At its core, TDM is a form of data analytics that enables the extraction of factual information from "unstructured data", such as written text, images, and audio-visual material. While the technology is still nascent and its full potential still unknown, TDM is now used by organisations of all sizes and in every sector of the economy to transform huge volumes of data into actionable intelligence that saves time, money and, in some cases, lives. For instance, TDM has enabled researchers to "mine" data from 22 years of archival newspapers in combination with 90 other online data sources to develop a software model that can predict outbreaks of infectious diseases nearly a year before they occur based on news stories about weather events.⁸ Similarly, because cybersecurity analysts are unable to read the more than 1 million security bulletins, threat reports, and news articles published each year,

⁴ Simon Blackburn, Michaela Freeland, and Dorian Gärtner, *Digital Australia: Seizing Opportunities From the Fourth Industrial Revolution*, McKinsey & Company (May 2017), available at <https://www.mckinsey.com/featured-insights/asia-pacific/digital-australia-seizing-opportunity-from-the-fourth-industrial-revolution>.

⁵ *Australian Government Response to Innovation and Science Australia 2030 Plan* (May 2018), available at <https://www.industry.gov.au/innovation/InnovationPolicy/Documents/Government-Response-ISA-2030-Plan.pdf>

⁶ *Australian Government Response to the Productivity Commission Inquiry into Intellectual Property Arrangements* (August 2017), available at <https://www.industry.gov.au/innovation/Intellectual-Property/Documents/Government-Response-to-PC-Inquiry-into-IP.pdf>

⁷ BSA Response to the Australian Law Reform Commission https://www.alrc.gov.au/sites/default/files/subs/598._org_bsa_attachment.pdf

⁸ Laura Owen, *How Two Scientists are Using the New York Times Archives to Predict the Future*, Gigaom, available at <https://gigaom.com/2013/02/01/how-two-scientists-are-using-the-new-york-times-archives-to-predict-the-future/>

TDM helps train models that can decipher real-time threat intelligence and defend against network attacks.⁹

In addition to being a key enabler of AI, a TDM exception would also help advance the underlying objectives of the Copyright Act. Ultimately, copyright protection is intended to provide incentives for the creation of new works. Exceptions to copyright are an important part of this incentive structure, particularly where they meet the criteria of: (1) serving an important public purpose, (2) stimulating the creation of new works and the use of existing works for new purposes, and (3) not harming the market for rightsholders' copyrighted works.¹⁰

An exception to permit TDM is consistent with each of these criteria. As noted above, the Government of Australia has declared the development and deployment of AI to be fundamentally linked to the national interest (criterion 1). The value of TDM lies not in the factual information that is gleaned from any single source, but rather in the discovery of entirely new forms of knowledge that emerge from the identification of patterns and correlations that exist between large bodies of disparate sets of data. In that sense, TDM both stimulates the creation of new research and also enables the use of existing works for new purposes (criterion 2). TDM is a quintessential example of a “non-expressive” use of copyrighted works. The value of the TDM process is unrelated to the expressive content of any of the works that are subject to the digital analysis. Instead, the purpose of TDM is to identify *uncopyrightable* factual information, such as metadata that can be used to understand relationships and correlations between large corpuses of works. Accordingly, the reproductions made during the TDM process do not conflict with the normal exploitation of a work nor do they unreasonably prejudice the legitimate interests of authors (criterion 3).¹¹

Incidental or Technical Uses

Fully leveraging the opportunities of cloud computing will also be critical in achieving Australia's innovation goals. By democratising access to massive computational power, cloud computing enables organisations of all sizes to integrate AI and other solutions into their products and services.¹² By their nature, cloud computing services often rely on technological processes that involve incidental or technical reproduction of copyright material.¹³ For instance, cloud providers may create cache or buffer copies in order to reduce latency and improve overall performance. Such copies should not be considered infringing insofar as they are not publicly accessible, lack independent economic significance, and are intended only to increase the efficiency of a technical process.

Quotation

Finally, we also support the Consultation's proposal for an exception to permit quotation of copyrighted works. Such an exception will be important to the development of “explainable” AI

⁹ *Arm Security Analysts with the Power of Cognitive Security*, IBM Security, available at <https://public.dhe.ibm.com/common/ssi/ecm/wg/en/wgs03087usen/security-ibm-security-solutions-wg-solution-brief-wgs03087usen-20170728.pdf>

¹⁰ See, e.g., Australian Law Reform Commission, *Copyright and the Digital Economy* (November 2013), at pg. 27.

¹¹ Some have argued that a TDM exception might interfere with the efforts of commercial scientific publishers to establish a licensing market to enable subscribers to perform TDM on works within their corpuses. Such efforts are to be applauded. However, such markets are unrelated to the legitimate interests that copyright is intended to protect. Moreover, the corpus of works owned by commercial publishers comprises only a tiny fraction of TDM-relevant works.

¹² Richard Waters, *Artificial Intelligence in the Cloud Promises to be the Next Great Disrupter*, Financial Times (May 2016), available at <https://www.ft.com/content/106ada72-ef52-11e5-9f20-c3a047354386>

¹³ Australian Law Reform Commission, *Copyright and the Digital Economy* (November 2013), at pg. 251.

systems.¹⁴ Providing context to help users understand the basis of an AI-generated recommendation can be critical. For instance, in the healthcare sector, AI systems are already being used to help doctors identify potential treatment options. Unless such systems can point doctors to relevant excerpts from the medical literature and clinical trials that formed the basis of a recommendation, their value may ultimately be diminished.¹⁵

Yours faithfully,



Darryn Lim
Director, Policy – APAC

¹⁴ Sanjay Srivastava, *The Path to Explainable AI*, CIO (May 21, 2018), available at <https://www.cio.com/article/3274566/artificial-intelligence/the-path-to-explainable-ai.html>

¹⁵ Daniela Hernandez, *Artificial Intelligence Is Now Telling Doctors How to Treat You*, Wired (June 2, 2014).