

A BALANCING ACT: SINGAPORE'S COMPUTATIONAL DATA ANALYSIS EXCEPTION

The Copyright Act 2021 came into force on 21 November 2021, replacing the Copyright Act 1987. A response to the changing global environment, the Copyright Act 2021 includes amendments and additions to update and future-proof Singapore's copyright regime. These include the Computational Data Analysis exception, designed to balance public benefit and creator rights in the age of Artificial Intelligence (AI).

"The boom in AI tools that draw on troves of content from across the Internet has begun to test the bounds of copyright law."

-New York Times,
30 December
2023



Background

On 27 December 2023, The New York Times filed a lawsuit accusing OpenAI and Microsoft of copyright infringement. It contends that such AI applications can be trained on news agencies' content to build "substitutive products without permission or payment".¹

Amidst the rapid boom in AI and data mining activities, governments around the globe are racing to update copyright regimes and AI governance frameworks. Singapore is one of them – a key addition to the revised Copyright Act 2021 tackles making copies for Computational Data Analysis purposes.

The Computational Data Analysis Exception

In Division 8 of the 2021 Copyright Act, Computational Data Analysis (CDA) is defined as:

“(a) using a computer program to identify, extract and analyse information or data from the work or recording; and

(b) using the work or recording as an example of a type of information or data to improve the functioning of a computer program in relation to that type of information or data.”²

CDA usually involves lifting data from bodies of material and analysing it for pattern identification, sentiment analysis or machine learning. An example of CDA is the use of data to train a Generative Artificial Intelligence (GAI) model, such as ChatGPT.

Section 244 of the Copyright Act 2021 enables one to make a copy of a work or a recording of a protected performance for the purposes of CDA. The key features of this exception are:

- 1) The copy should only be made for CDA purposes, such as data analytics and data mining.
- 2) The exception applies in both commercial and non-commercial contexts.
- 3) Copies made cannot be supplied to any other person, unless it is for the purposes of verifying results, collaborative research or a related study.
- 4) Usage of infringing copies is restricted.

- 5) This exception cannot be excluded or modified by contracts.
- 6) The exception applies to all forms of copyrighted works, including literary, artistic, dramatic and musical works, films, performances and recordings.
- 7) Users must have lawful access to the data (ie they cannot circumvent paywalls or breach databases.)

In an illustration provided by the Intellectual Property Office of Singapore (IPOS), a company can thus make copies of books to “teach” its AI programme how to translate books into different languages. As long as the company complies with the above conditions, such as having lawful access to the materials through purchasing the books, the company can rely on this exception to make the copies without prior permission from the copyright owners.³

Rationale Behind the CDA Exceptions

Singapore’s copyright regime has always been a balancing act between benefitting users and protecting creators.

During the Parliamentary debates on the Copyright Act 2021, former Second Minister for Law Edwin Tong claimed that such an exception serves public policy interests since the applications of CDA can support data-driven innovation.⁴ These exceptions also provide legal clarity for AI developers, advancing Singapore’s efforts to grow our AI and technology sectors. Companies like OCBC that use AI for operations have welcomed the flexibility provided by the CDA exception.

“This supports our Smart Nation initiatives, our push towards data-driven innovation, and Singapore’s efforts to grow our Artificial Intelligence and technology sectors.”

-Minister Edwin Tong

Safeguards in Place

When faced with concerns about the rights of content creators and data owners, Minister Edwin Tong emphasised that “computational data analysis treats the works as data points and does not make use of the expressive nature of the works, which is what copyright fundamentally seeks to protect”.⁵

Additionally, this exception only applies where a user has lawful access to the data, such as by paying a subscription fee to the database. This is to ensure that the revenue of content creators is not affected.

Furthermore, when users make a copy of the data, it must be for the purpose of data analysis and machine learning, not for the purpose of generating new works. According to Professor David Tan, fair use factors likely to be most significant regarding GAI are whether the use by GAI is “transformative”, and whether it threatens the livelihood of the original creator.⁶ This idea of “transformative use” was also affirmed by the Court of Appeal in *Global Yellow Pages v Promedia Directories*.⁷

A Look at Copyright Regimes Globally

Singapore is not the first to implement such an exception. Countries like Japan, UK and EU have also introduced Text and Data Mining (TDM) exceptions in copyright legislation.

UK’s Copyright Designs and Patents Act 1988 (CDPA) permits CDA-related copying solely for non-commercial research. The EU’s Directive on Copyright in the Digital Single Market 2019/790 (DSM Directive) extends this exception to commercial entities but permits most copyright owners to exclude the exception via contracts.

Interestingly, a 2022 comparative study of research and TDM exceptions found Singapore to be the second-most open country in this aspect.⁸

On the other hand, the copyright exceptions of Singapore and Japan are considered much broader. Singapore's CDA exceptions are relevant in both commercial and non-commercial contexts and cannot be overridden by contracts. Japan's copyright exception for TDM applies for "non-enjoyment purposes", (ie when the content is not meant to satisfy intellectual or emotional needs) and does not require lawful access to the content.

Implications for Content Owners

In light of this exception, content/copyright/data owners should note that:

- 1) As long as a user satisfies conditions for gaining lawful access to their work, such as by being a paid subscriber, he or she is entitled to use the work for CDA purposes even if the terms of use explicitly prohibit this.
- 2) Signing contracts that try to exclude/restrict the operation of this exception will be void.
- 3) This exception only applies to acts performed in Singapore.

If you are a content owner, this serves as a timely reminder to relook your business model. It may be advantageous to implement subscription schemes and paywalls to protect your revenue.

More clarity regarding the CDA exceptions is expected over time. As of now, Minister Edwin Tong mentioned that a "case-by-case determination by the Courts" is still required, likely since terms like "lawful access" and even "computational data analysis" are open to interpretation. With the rapid democratisation of information and generative AI, we can expect to see further developments in Singapore in this aspect.

At **Infinity Legal LLC**, we help clients navigate through the variety of legal issues including copyrights, intellectual property and data protection, providing a holistic yet practical approach to complying with government regulations.

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CONTACT US

INFINITY LEGAL LLC

无限法律事务所

6 Eu Tong Sen Street
#12-14 The Central
Singapore 059817

www.infinitylegal.com.sg

T: +65 6988 8986

F: +65 6988 8932

E: enquiry@infinitylegal.com.sg