

DIGITAL BIOPIRACY 2.0 MANDATING PRIOR INFORMED CONSENT FOR AI TRAINING ON TRADITIONAL KNOWLEDGE Vijay

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ABSTRACT:

Indigenous people and local populations have developed and maintained knowledge through their communities for thousands of years; however, this traditional knowledge (TK) has been increasingly susceptible to 'biopiracy', or the illegal appropriation and exploitation of TK via patenting and commercialization practices, and as artificial intelligence (AI) becomes more prevalent and sophisticated, it now poses a new type of threat to Indigenous communities through 'digital biopiracy'.

Digital biopiracy occurs as AI systems rely on massive amounts of data (big data) to 'learn.' Notably, many of the large scale datasets that AI systems are being trained on include TK, including digitized repositories of TK related to Medicinal Practices, Agricultural Methods, and Biodiversity. Therefore, the application of traditional knowledge in AI training raises the significant legal question—must there be prior informed consent (PIC) and equitable benefit sharing (EBS) from the Indigenous community that provides the TK (i.e., PIC and EBS should be required before any TK is permitted to be used to train an AI system)?

This article posits that using TK in AI training without community approval constitutes a use/abuse of TK in AI training, and such misuse of TK in AI training cannot be adequately addressed with the existing intellectual property (IP) regime. While PIC and access and benefit sharing (ABS) obligations are recognized in certain international legal instruments (e.g., the Convention on Biological Diversity and the Nagoya Protocol), both their applicability to the flow of digital knowledge and their applicability to the use of digital knowledge (data) utilized to train AI systems is uncertain. Similarly, while India has put in place the Biological Diversity Act and the Traditional Knowledge Digital Library (TKDL) to assist in preventing wrongful patents from being issued against TK, the legislation primarily focuses on preventing wrongful patents and does not adequately regulate the data-based exploitation of

TK.

This paper presents a framework based on a critical examination of legal deficiencies within domestic and international law concerning the expansion of the principles of prior-informed consent (PIC) and access and benefit-sharing (ABS) to artificial intelligence (AI) training processes. The paper argues that countries should recognize Indigenous sovereignty over their data and create sui generis-style protections that fit today's digital environment. Ultimately, this paper concludes that without regulations in place, AI will be able to continue the pattern of exploiting people as part of its technological advancement.

Keywords: Digital Biopiracy, Traditional Knowledge, Artificial Intelligence, Prior Informed Consent, Access and Benefit Sharing, Indigenous Rights