Abstract: Open science is prompting active efforts to make data from research available for broader use. But making data open is complicated by important protections on the data (e.g., protections of privacy and intellectual property). The spectrum between shared everything (open access) and shared nothing has been limited to the release of partial or obscured data. This position paper puts forth another solution on the spectrum: Capsule framework, a socio-technical framework consisting of policies, human processes, and technologies to enable controlled access and use of restricted data. Using experience gathered through implementing one such framework for computational, analytical access to a massive collection of copyrighted texts, we illustrate the synergies and tradeoffs that exist between what could be implemented in software versus implemented through policy and process in striking the right balance between safety, ease of use, and efficiency.

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