The EU’s Digital Services Act must provide researchers access to VLOPs’ experimental protocols

Alistair Knott, Victoria University of Wellington, Co-lead, GPAI Social Media Governance project
Dino Pedreschi, University of Pisa, Co-lead, GPAI Social Media Governance Project
Jonathan Stray, Centre for Human-Compatible AI, University of California Berkeley
Stuart Russell, Centre for Human-Compatible AI, University of California Berkeley

A key aim of the EU’s Digital Services Act is to improve transparency about the operation of very large online platforms (VLOPs). The goal of the Act is to shed light on how the algorithms and processes deployed by these platforms influence users, so that risks to users (and to society more widely) can be identified and mitigated. There are concerns that platforms expose users to a variety of harms: for instance, harms to mental health in teenagers, harms to body image and eating behaviour in women, and social harms arising from exposure to toxic content or political extremism. The aim of the DSA is to investigate such concerns ‘at source’, by providing investigators with carefully overseen access to company methods.

The DSA provides two different access mechanisms, through two Delegated Regulations. One Delegated Regulation, which has already been released, provides for access by external auditors to companies’ data and processes, to check their compliance with DSA obligations. The other Delegated Regulation provides for access by vetted independent researchers to company data and processes, to allow DSA-relevant aspects of company operation to be further studied, using data and methods that are only available within companies. This study is vital, because regulators don’t yet know enough about company operation to express detailed compliance measures. The Delegated Regulation for Data Access for External Researchers is currently under discussion, and will shortly be released. It’s crucial that this latter Regulation enables research that adequately informs auditing processes.

This blog post highlights a vital type of access the Regulation for researchers must enable: namely, access to companies’ experimental methodologies. Researchers must be able to access information about experiments that companies have already conducted. And they should have the access needed to run new experiments on platforms, if these are required.

A/B tests
When companies wish to understand the effects of their services on their users, they perform controlled experiments on user groups, commonly called A/B tests. In these tests, different
versions of a company system are developed, which vary in some specific respect. The different system versions are then deployed to different user groups, selected randomly from some population of interest, and the user groups are monitored for some period of time. If there are any differences between groups, on aggregate, either in user behaviour or user experience, these can be reliably attributed to the differences in the system they used.

Because A/B tests intervene in platform users’ experiences, these studies are the accepted method for testing causal hypotheses about the effects of platform technologies on users—and therefore the best way to study the risks of these technologies, and to evaluate methods for mitigating any risks that are identified. A/B tests are the acknowledged gold standard for studying platform impacts on users. It is vital that external researchers have access to these methods under the framework created by the DSA. They must be able to access information about A/B tests already conducted by companies—and also the ability to design and run new A/B tests using the experimental procedures that VLOPs already have, with no need to create new infrastructures but allowing controlled access to existing ones.

**Standards to be upheld in designing and running A/B tests**

Of course, experiments to be run on platforms need to be designed and overseen carefully. For one thing, intervening in users’ experiences must be done with their explicit consent. The ethical rationale for any intervention must also be convincingly argued, before an ethics board. Scientifically, all A/B tests should follow up on well-established concerns documented in existing research, and be pre-registered, so there is no cherry-picking of results. All of these provisions are already standard practice in other domains. For instance, new treatments in medicine (vetted under schemes like the US’s Federal Drug Administration) also involve randomised controlled trials, which actively intervene in the experience of consenting subjects. Any such trial must be thoroughly motivated by other scientific studies before it runs and signed off by an independent ethics board. When the trial runs, it must be pre-registered, in accordance with the best practices of open science.

It is worth noting that the A/B tests currently conducted by VLOPs often fall short of these high standards. They are often not conducted openly and often not preregistered. They frequently do not involve an explicit ethical approval process. User consent frequently comes from the general terms and conditions to which users agree, which include general consent to take part in experiments designed to ‘improve the platform’ in unspecified ways. Most importantly, companies’ own A/B tests are designed to serve commercial goals, rather than determining the positive or negative effects on users and society as a whole.

**What mechanisms should be enabled by the Delegated Regulation on Data Access?**

The DSA’s Delegated Regulation on Data Access provides a unique opportunity to initiate a parallel programme of A/B testing within VLOPs, in which tests are devised and conducted by independent researchers, in the public interest, and ethically vetted to the highest standards. The Delegated Regulation must enable two things, in the provisions it makes for data access,
and in the forthcoming interpretation of these provisions by the EU’s Digital Services Coordinators. Firstly, it must allow that the access permitted to vetted external researchers under the DSA includes the ability to conduct A/B tests. Secondly, it should set in train a process for soliciting proposals for A/B experiments from researchers, and vetting these proposals, scientifically and ethically, so that suitable proposals can be identified and pursued.

To frame these requests another way: the DSA’s Delegated Regulation on Data Access must enable external researchers to do *causal inference* using the company platforms to which they are given access. This typically requires *experiments*: interventions in the experiences of users. Experiments are the gold standard empirical paradigm for identifying the effects on users that the DSA is centrally concerned to understand. Lacking a controlled experiment, if there is an observed correlation between depression and social media use this could be because social media makes people depressed, or it could be because depressed people use social media more, or both. These cases are indistinguishable when looking at observational data – the data already available inside a platform – therefore good policy-making cannot rest on observational data alone.

External researchers must have the ability to use the same methods that companies use themselves to study how platforms impact users. In fact, the DSA’s Delegated Regulation for Auditors already gives auditors the ability to conduct “experiments” (Article 2.17). But DSA auditors will need to be *guided by research* in any experimental work they do. The only way the DSA can enable this guidance is to give external researchers the same ability to conduct experimental work.

The authors of this post participate in a project on social media governance, conducted by the Global Partnership on AI, an international grouping of AI experts. For several years, our reports have argued that external researchers should be able to participate in companies’ A/B testing regimes (GPAI, 2021, GPAI, 2022, GPAI, 2023) - a recommendation that was recently echoed by the Forum on Information and Democracy’s report on *AI as a Public Good*. As our reports demonstrate, and companies’ own publications about A/B experiments also attest, A/B studies can be conducted, and their results disseminated, without compromising the privacy of platform users or the IP of companies. Our reports review in detail why A/B tests are the best method for studying platform effects on users. They summarise a large body of circumstantial evidence about the harms caused to users through their engagement with platforms. These harms must be thoroughly and independently studied, using the best methods available; this is a key objective of the DSA. To realise this objective, the DSA’s Delegated Regulation on Data Access must allow external researchers to conduct A/B tests. If it does so, it will pave the way for a new and genuinely public science of tech platform effects.
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