

## Why age verification is so difficult for websites

Karen Renaud

A number of countries are exploring stricter laws about age verification for sites that have adult content or sell products such as tobacco. PHOTO: Siung Tjia/WSJ

As parents, lawmakers and activists push for stronger rules to keep children off websites meant for adults, the question of how to verify age online has taken on new urgency. More sites are asking users to certify they are over 18, and companies are rolling out innovations aimed at better age checks.

The trouble is that most methods of verifying age create new problems of their own. Requiring material such as a user's credit card or driver's license to buy alcohol or view pornography, for instance, creates privacy issues and new opportunities for data leaks. They also make it hard for users to browse anonymously. What's more, enterprising children will be able to find ways to defeat all but the most intrusive verification processes.

Despite the hurdles, a number of countries are exploring stricter laws about age verification for sites that have adult content or sell products such as tobacco.

Last year, the U.K. [<https://ico.org.uk/media/for-organisations/guide-to-data-protection/key-data-protection-themes/age-appropriate-design-a-code-of-practice-for-online-services-2-1.pdf>] began enforcing new standards for websites likely to be accessed by users under 18, including age verification. In Australia, online age verification is being tested for alcohol purchases, with the possibility of extending it to gambling and adult sites. France threatened [<https://www.csa.fr/Reguler/Espace-juridique/Les-textes-adoptes-par-l-Arcom/Les-decisions-du-CSA/Decision-du-13-decembre-2021-mettant-en-demeure-la-societe-MG-Freesites-Ltd-en-ce-qui-concerne-le-service-de-communication-au-public-en-ligne-Pornhub>] to block pornography sites unless the owners implemented more-thorough age verification in December. In the U.S., the information revealed by the Facebook Files [<https://www-wsj-com.proxy.lib.strath.ac.uk/articles/the-facebook-files-11631713039>] investigation about the social-media giant's impact on young people has renewed interest in updating the Children's Online Privacy Protection Act, the primary American law for underage internet users.

'Verification theater'

There is no shortage of strategies for checking users' age. The most common option is to ask the user to check a box declaring they are 18 years of age or

older, according to a survey of practices across the web by Karen Renaud and Chelsea Jarvie, researchers out of Strathclyde University in Glasgow.

"We call this verification theater, because it pretends to verify but it actually doesn't do a great job," Prof. Renaud says.

Increasingly, adult sites require users to upload a government ID such as a passport that can be checked against a database. Some companies put a small charge on the user's credit card to make sure it is legitimate, then reverse the fee. Others check a mobile phone's registration information, which contains the age of the user. At least one company says that it can confirm someone's age by analyzing their social media, and multiple companies check third-party database companies, which run ID checks at places like credit bureaus and ping government services.

All these methods have varying success, but none have mastered a combination of privacy, efficiency and affordability yet.

For users determined to flout rules, "there are going to be straightforward workarounds," says Jake Wiener, domestic surveillance law fellow at the Electronic Privacy Information Center, a nonprofit research group.

For instance, children could use a parent's cellphone or a prepaid credit card to sign up for a site, or an older sibling could help them. Also, giving out sensitive information to websites can create vulnerabilities for users. Credit-card information and other identity documents held by websites could be hacked or leaked.

At the same time, adults will have to jump through more hoops to do legal things online, like looking at pornography. And it puts groups with less access to identification or in more need of privacy—such as undocumented people, LGBT youth and sex workers—at higher risk. "History has shown that marginal communities will be impacted more severely by these laws," says Daly Barnett, staff technologist at the Electronic Frontier Foundation, a nonprofit online-rights organization.

### Protecting anonymity

One possible solution is to create age tokens, such as a QR code, that users can provide to merchants' sites without giving out additional information. The National Association of Convenience Stores created TruAge, a free open-source platform that lets a buyer scan a driver's license. The license is verified with databases, after which TruAge generates a single-use QR code that can confirm the buyer's age for merchants.

TruAge is currently pilot testing only for in-person transactions, but Doug Kantor, the general counsel for the convenience-stores association, says the group plans to extend the program for digital purchases.

The association says TruAge records the ID number, document number, date of birth and document expiration date, and stores the data for as long as the QR code is actively being used, but without the person's name. Mr. Kantor says the recorded data isn't capable of identifying the individual.

Some of the biggest online companies are turning to artificial intelligence to estimate age without requiring additional data. Last year, [Meta Platforms Inc.](#) outlined its use of AI to continually cross-check accounts on its [Facebook](#) and [Instagram](#) sites for information that can belie or confirm a user's stated age. For instance, if someone lists their age as 18 but has a friend sending them a "Happy Quinceañera"—15th birthday—message, that could be a red flag.

[YouTube](#) is using machine learning [<https://blog.youtube/news-and-events/using-technology-more-consistently-apply-age-restrictions/>] to automatically block younger viewers from certain videos. If a video has been determined by the machine-learning tool or a human censor to be for viewers over 18, [YouTube](#) will ask a user to sign in to their [Google](#) account. A [Google](#) spokesperson directed us to a help page that says users can manage their own account only if they "meet the minimum age requirement for the country associated with your account." If the company suspects that a user is underage, according to the page, they must verify their age with a government-issued ID or, in some places, they may use a credit card.

For a limited time

Some companies are offering AI verification as a service—a potential solution for small companies that don't have the technical and financial capabilities to implement their own systems.

[Yoti](#), a London-based digital-identity and biometrics company, says it trained its AI by showing it hundreds of thousands of photos of different faces, each labeled with information about the person's age and gender. After learning from these examples, the neural network that powers the software is able to look at photos of new faces that don't have age information and come up with a guess of its own.