

# Australia Age Assurance Technology Trial

## Persona placed top two in this foundational trial

The Australian government created the Age Assurance Technology Trial to test how today's technology can support the 16+ age threshold enforcement for Australia's upcoming Online Safety Amendment Act. The trial's comprehensive approach also evaluated the efficacy of meeting 13+ and 18+ thresholds.

**Persona placed top two in this foundational trial. Learn more about our effective end-to-end solution for both age verification and estimation.**

### Themes

#### No single solution fits every use case.

The trial confirmed that no single solution works for every use case or deployment. Age assurance approaches need to be tailored to the context of use, and the methods will continue to evolve over time.

#### Technical validation promotes ongoing age regulations.

The trial validated the Australian government's move to enforce age assurance requirements to protect minors online, paving the way for further regulation in other markets (which may have different requirements).

### Persona result highlights

Persona excelled in the Australian Age Assurance Trial, ranking as a leading age estimation solution for high accuracy and minimal bias. This proven performance for both age assurance and verification confirms our readiness for Australia's upcoming Social Media Minimum Age bill and every age-related global compliance and trust initiative.



#### Validated modeling

#### Accurate age restriction

Persona was one of only two vendors out of nine total, with an overall MAE\* <2 (the lowest performing model had a 6+ MAE). Persona was **the highest performing vendor for minor (under 13) detection** by MAE.



#### Limit bias

#### Modeling for a global audience

Age estimation was shown to have limited bias in field tests, with **Persona being the only vendor to never exceed medium (four percent) FPR\* bias**. Bias analysis was conducted across age, gender, and skin tone.



#### Successive validation

#### Proven Verification Options

Australia recommends successive validations, such as age verification using government ID or reusable digital identities, when age estimation isn't available. Persona offers both methods plus additional verification options.

*\*Note that definitions for MAE and FPR are found on the second page.*

# Testing methodology

## How the trial tested age estimation and verification

An overview of the sampling data sets, metric definitions, and methodologies used in the Australia Age Assurance Technology Trial for age estimation and age verification.

### Age estimation testing methodology

Two primary testing sets evaluated nine vendors' models: batch testing with a curated sample dataset representative of the overall population (1,100 portraits for individuals aged 14 to 23 years) and field testing conducted with participating schools.

#### Mean Absolute Error (MAE)

The average difference (both higher and lower) between the subject's actual age and estimated age in years. Using absolute values help gauge model performance for both false positives and false negatives.

#### False Positive Rates (FPR)

The percentage of subjects who passed the three tested "age gates:" under 13, under 16, and under 18. This is a primary metric for companies evaluating age estimation solutions to restrict minors from accessing inappropriate services and goods.

### Age verification testing methodology

Successive validation gives users the choice to implement multiple age verification methods. When combined with age estimation, this approach provides a good and fair user experience. Australia's trial, conducted with ACCS, builds on the UK Ofcom's early work and validates that multiple effective methods exist to verify age. This empowers users to choose methods they're comfortable with.

Methods of age verification include:

- Document (e.g., passport, driver's license) presented through photo or NFC
- Selfie biometrics with liveness detection to prevent spoofing
- Database cross-checks (e.g., against Australia's Document Verification Service)
- Reusable digital identities with passkey technology for a streamlined user experience

Persona offers all of these age verification methods and more, including verifications based on email, phone, and credit card. Reach out to our team for the full range of what we can offer because the list is always growing.



Extensively tested and certified by third party evaluators

Persona's identity platform and age assurance solutions are built in accordance with the highest privacy and ethical principles, and certified to the highest industry standards.