**Request for submissions on children's privacy**

About Yoti

1. This response is made on behalf of an organisation, Yoti.
2. Yoti owns and operates a free digital identity app and wider online identity platform that allows organisations to verify who people are, online and in person. This could be using the Yoti app, which allows individuals to share verified information about themselves on a granular basis or it could be using Yoti’s ‘embedded’ services which allow organisations to add a white label identity verification flow into their website or app. It could also be using Yoti’s authentication algorithms such as facial recognition, age estimation, voice recognition or lip reading.
3. Yoti has a team of around 230 based in London, with offices in Bangalore, Los Angeles, Melbourne and Vancouver. There have been over 8 million installs of the Yoti app globally, following its launch in November 2017. Similarly, over 360 million checks have been conducted using the Yoti age estimation algorithm since February 2019.
4. Yoti holds the ISO 27001 certification and continues to be audited every year. Further, Yoti was certified to SOC 2 Type 2 for its technical and organisational security controls by a top four auditing company. Audits are carried out biannually. The SOC 2 standard is an internationally recognised security standard. Yoti also holds the Age Verification Certificate of Compliance, issued by the BBFC. Yoti is certified to the publicly available specification PAS:1296 Age Checking.
5. If there are any questions raised by this response, or additional information that would be of assistance, please do not hesitate to contact Yoti at:

Julie Dawson

Director of Regulatory & Policy

julie.dawson@yoti.com

Samuel Rowe

Legal & Policy Associate

samuel.rowe@yoti.com

1. Yoti is happy for this response to be published.

Evidence on the strengths and challenges of ‘age based’ and ‘age verification’ approaches

1. Yoti suggests that age based and age verification approaches have matured sufficiently to enable online platforms to deliver age-appropriate services and preclude children from accessing adult content online. Moreover, it is demonstrable that such approaches can be delivered in a way that is compatible with privacy.
2. Yoti provides age verification services to social media platforms, adult content websites, online gaming sites, e-commerce sites and physical retailers. Yoti has also bid to create a pan-European interoperable infrastructure for age verification and parental consent, as part of an EU 2020 Horizon project. Further, Yoti has entered a submission to the UK Information Commissioner’s Office’s sandbox in line with the Age Appropriate Design Code, including age verification of under 13s, partnering with GoBubble and the British eSports Association.
3. Yoti was the first organisation certified to the BBFC’s Age Verification Certificate scheme, which was put in place to regulate the provision of age verification services under the Digital Economy Act 2017, part 3. This required Yoti’s age verification services to adhere to very high standards for privacy and data security. Yoti has also been awarded the seal of approval from the German Association for Voluntary Self-Regulation of Digital Media Service Providers (FSM) to provide age verification services in Germany.
4. Users can perform age verification using the Yoti Digital ID app, which allows individuals to share verified information about themselves on a granular basis or it could be using Yoti’s ‘embedded’ services which allow organisations to add a fully integrated identity verification flow into their website or app. It could also be using Yoti’s authentication algorithms such as age estimation. These three verification options can be integrated as standalone solutions, or via a single age verification portal offering more choice to the end users and configuration options to organisations.
5. In all three verification scenarios, Yoti calculates if the user meets the minimum age requirement to access the website.
6. If the Yoti Digital ID app is used, an individual will scan a Yoti QR code with the Yoti app to share their age attribute. Then Yoti generates a hashed age token, which tells the website that the user is over the required age. The token and Yoti’s record of the individual’s age, or characteristic as over an age threshold, only last for the browsing session and do not identify the individual personally. Further, no personal information is shared with the adult site beyond the age attribute, making this a private and secure solution. The user’s interaction with the website itself remains entirely anonymous.
7. Yoti generates a share receipt that only shows a date, timestamp, and that an age attribute was shared. Yoti stores this receipt securely in Yoti’s data centre and the individual can view it in the Activity tab of the Yoti Digital ID app. These receipts can be archived by a user. Yoti cannot undertake tracking of user through the receipting mechanism.
8. If Yoti’s fully integrated identity verification solution is used, the end user scans or uploads their ID document straight from their web browser or mobile app. An age is computed from the date of birth included in their ID document, and used to establish whether the person is old enough to pass the age verification test.
9. If the user uses Yoti’s age estimation algorithm, users simply look into their phone’s camera or their computer’s webcam, and Yoti Age Scan will estimate their age. The image is captured and securely transmitted to Yoti’s server using 256-bit encryption. Then, Yoti’s algorithm gives a result in approximately 1.5 seconds. The image is immediately deleted from Yoti’s servers and no record of the user is retained. The only output is an anonymous, hashed age token, used to determine if they are old enough to access the age-restricted content material
10. Yoti Age Scan does have a margin of error. For initial rollout, after consultation with the nominated UK regulator, the BBFC, Yoti agreed to implement a three to five year safety buffer in its off-the-shelf solution. The accuracy continues to improve and now some organisations are looking at lowering this buffer, depending on their risk profile. The safety buffer can be configured accordingly in the Yoti solution. More on Yoti’s approach to privacy, ethical oversight and accuracy can be found in Yoti’s white paper on age estimation.[[1]](#footnote-1)
11. Yoti has developed a method of detecting masks and images presented to a camera in an attempt to fool Yoti’s age estimation solution. Yoti also relies on third party anti-spoofing methods.
12. Yoti has an ongoing programme of R&D reviewing spoofing techniques and challenges, such as make-up, masks, facial hair pieces. Yoti is alive to the fact that young people may try to ‘game the system’. As a result Yoti has established a threshold for image quality, and an uncertainty value for the age estimation prediction. These two thresholds enable Yoti to create a bar of what is an acceptable image.
13. From the above, it is evident that age estimation and age verification technology has reached a maturity that means it can, and is, deployed broadly across digital platforms.
14. Moreover, it is evidence that age estimation and age verification technology is not anathema to privacy. Instead, age estimation and age verification can enhance the privacy of individuals undertaking digital activities as it mitigates the need to perform invasive tracking in order to ascertain the age of an individual. By enhancing privacy online, such age estimation and age verification methods can increase child autonomy whilst lowering the likelihood of them encountering inappropriate content.
15. Therefore, it is clear that there is significant evidence concerning the strengths of age estimation and age verification methods.
1. https://www.yoti.com/blog/yoti-age-scan-whitepaper/ [↑](#footnote-ref-1)