

Dear Louise,

Following the comments in Parliament in terms of the Digital Economy Bill reading on Friday; we'd welcome the opportunity to brief you on some elements of how Yoti works which were misinterpreted.

In brief, Yoti for a consumer is an app they can download to prove their identity or their age - to another person or company, face to face or online. It is free for consumers.

Set up

- There is a one time setup of a Yoti. The simple process is: download the Yoti app, take a selfie; use the app to take a scan of your Government ID document - either passport or driving licence, then set up a 5 digit PIN.
- When you scan the document Yoti checks the MRZ - the long set of digits - and where possible reads inside the passport chip. Yoti also checks for liveness to ensure that the person is a live person (not a mask, photo, video, hologram...). Those attributes are hashed and each attribute is cryptographically stored separately in local data centers. (This has been reviewed by CESG on behalf of a large Government department).
- Where an individual presents a chip passport with an NFC phone, Yoti reads inside the biochip of the passport to confirm that the chip has not been tampered with, and in the same way as at border control checks, the original digital image of the photo, with the photo in the document and the live person. This is the ICAO standard for securely checking biometric passport chip details of citizens in 61 countries.
- Where there is not a 'chip read' of a passport, Yoti performs other liveness tests to ensure that a person is a real human. We may also undertake one-off check of e.g. address detail or driving licence number to a classic IDP such as Equifax. The terms and conditions explain that this one-off check does not affect the individual's credit score.

Anonymisation of data

- Yoti allows attributes to be set up associated with an individual.
- No passport numbers are shared for an 18+ check, only the 18+ attribute; no name or face or date of birth is shared.
- The site knows only that an unnamed 18+ individual (whose Government issued ID document states that they are over 18) wants to access the site.
- Only the owner of the Yoti, with their device, their face, and their PIN can access and elect to share their data. Whenever two counterparties share limited details, Yoti is only aware that certain detail fields (e.g. an 18+ field or a name field have been received by the organisation counterparty). The team operating Yoti have no knowledge of which person's 18+ is shared. This information remains private to the two counterparties.

Ongoing usage

- Once a user has a Yoti and they enter a mobile site, they can login with Yoti via their phone and tap once to enter - the site recognising if they are still 18+. Each time the site only receives the 18+ confirmation. The user can then visit the adult site.

'Parties involved'

At the creation stage when it is not possible to do a chip passport read, then there may be an additional party to perform a data check, limited to a name, date of birth and address match check to an IDP; however no further details are shared with the third party than are required for that check.

For ongoing logins into a site - there are three parties: the consumer, Yoti and the content site.

Wider applications of Yoti & data minimisation

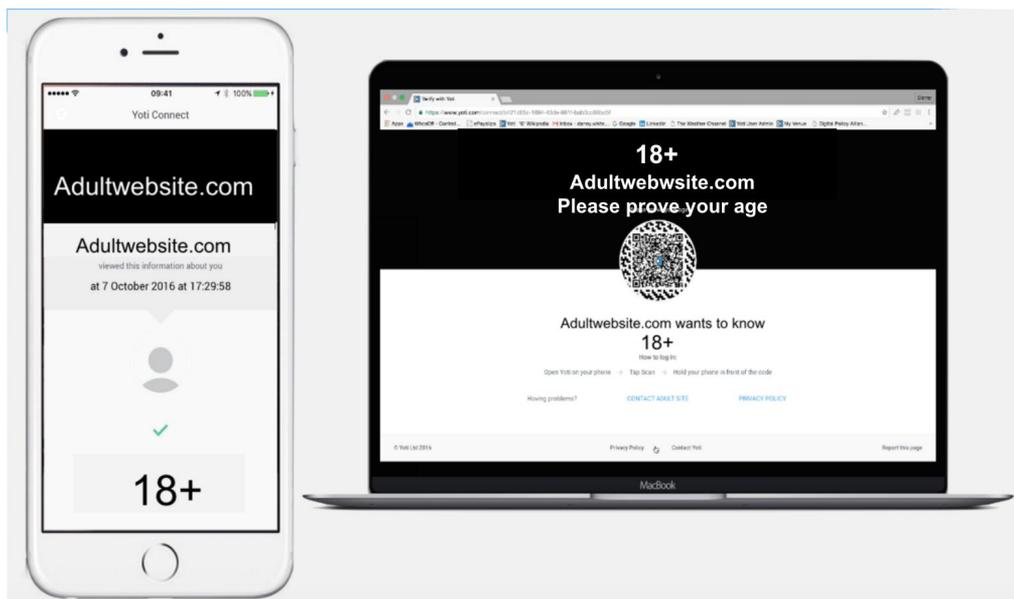
- Yoti provides an identity and attribute platform, as well as age checking. This means that the same technology can assist in age checking for access to childrens' sites, again where solely an '18-' or under 18 attribute can be transferred with anonymity where required. Yoti can also support parental consent as required by the GDPR.
- HMT asked Yoti to present at the launch of the Pensions Dashboard in terms of strong authentication and biometric permissioning to enable a spouse or IFA to access pension details.
- Yoti has applications in multiple sectors where knowing who someone is, either in person or online, is required, with upfront explicit consent and data minimisation. This is game changing for existing sectors which have regulated KYC requirements such as recruitment - right to work checks, lettings - right to rent checks, financial services onboarding, proof of age in the online and night-time economy. It can also be sued by unregulated industries such as online dating, classified sites, global business directories and ticketing.
- Yoti is also receiving significant interest from public sector organisations such as councils, NHS trusts and universities.

We will be in touch with your office to request a meeting with you and your research team to explain more about Yoti with its widespread applications across the economy and answer any questions you may have. We will in parallel be in touch with the Public Bill Committee; as you can imagine it is important for us to clarify for public record the key aspects of anonymity in terms of age checking so that is clearly understood.

Kind Regards

Julie Dawson

Appendix



Hansard text

“install the Yoti App...use the app to take a selfie to determine that you are a human being...use the app to take a picture of Government ID documents”—passport or driving licence, I imagine—“the app sends both documents to Yoti...Yoti (the third party) now send both pictures to a fourth party; it was unclear whether personal data (e.g. passport details) is stripped before sending to the fourth party...Fourth party tells Yoti if the images (selfie, govt ID) match...Yoti caches various personal data about user” to confirm that they are over 18. The user can then visit the porn site—whatever porn site they would like to visit at that time—and then the “porn site posts a QR-like code on screen...user loads Yoti app...user has to take selfie (again) to prove that it is (still) them...not a kid using the phone...user scans the on-screen QR-code, is told: ‘this site wants to know if you are >18yo, do you approve?’...User accepts...Yoti app backchannel informs porn

site...that user >18yo"and then the user can see the pornography. I do not know whether any Committee members watch online pornography; I gather that the figure is more than 50% of the general population, and I am not convinced that hon. Members are more abstinent than that. I ask Members to consider whether they would like to go through a process as absurd as the one suggested.

Yoti Background

Yoti will launch in the App Store in November offering individuals a free to use digital identity based on (initially) selfie face recognition matched to the facial biometric held in the passport NFC chip. Yoti allows individuals to easily prove who they are to other individuals and businesses. The consumer consents upfront to checks; the system allows for data minimisation (e.g. just sharing an 18+ attribute) and both parties get a receipt. The business model is that Yoti is free for individuals; businesses in many sectors who need to do KYC - strong authentication for regulatory reasons or to reduce fraud - pay a disruptively small fee. BBFC regulated adult content providers and charities get to use Yoti for free.

We have some very large business brands and government organisation wanting to use it and lots of evidence from ad testing that young people in particular (who crazily have to often use passports to prove their age at cinemas, when buying travel tickets and at nightclubs and bars) want to get Yoti on their phone. We also can write attributes onto an NFC tag to put on a key ring or stick to a student card.

We are ISO 27001 and B Corps certified. <https://www.bcorporation.net/community/yoti>

Yoti has an international Council of Guardians with representatives from Consumer Rights, Human Rights, Last mile technologies, with minutes published on the Yoti website.

The technology has been reviewed by CESG on behalf of a large Government department. Cigital, a professional penetration test firm has tested our systems - no successful attack vectors were reported. Yoti was asked by HMT to present at the launch of the Pensions Dashboard, in terms of strong authentication using biometric login and permissioning. Several government ministers have visited us to see the technology including Lord Maude. We demonstrated it to the Home Secretary and Baroness Shields recently and Ben Gummer, Minister for the Cabinet Office - is due to visit soon. We are on the London Mayor's International Business Programme.

We are receiving significant interest from companies across a range of sectors including recruitment (Reed Recruitment), and lettings agents, global payment processors, global business and non profit directories. Large supermarkets are interested for Age Verification at the EPOS till; one of the largest wants to pilot it in some stores. Two of the largest nightclub chains want to pilot it in the coming months. The Yoti approach also elegantly solves issues like ticket touting by tying a unique identity to a ticket.

Yoti has an easy to integrate with API and a mobile SDK. The world's largest payments processor has already done the 1/2 day API integration to test it. Yoti is a company of 110 people, based in London with offices in Mumbai and a presence in the US. Website www.yoti.com. Yoti is securely funded and has patents lodged in the areas of facial recognition, liveness testing and document anti-tampering.

Identities are verified using NIST approved facial recognition software, our in-house biometric anti-spoofing technology, and government issued identity documents (including but not limited to passports). Third party attributes can be assigned to a Yoti e.g. qualifications, awards, memberships.

Yoti Portal allows a small or large business to create a company account and then:

- Create a Yoti for a group (like a company or charity)

- Create website pages where users can enter with a Yoti, choose the details people need to share in order to enter
- Get the Yoti software development kit
- Assign user profiles, see usage volumes and more...

Over the past two years whilst we have been developing the core technology, we have met with the following key UK regulators and bodies:

Chartered Trading Standards Institute
 City of London Police
 Competition and Markets Authority
 Department for Culture, Media & Sport
 Department for Work & Pension
 Disclosure and Barring Service
 eIDAS DG CNECT Brussels
 Financial Conduct Authority
 Games Rating Authority
 HM Revenue & Customs
 HM Treasury
 Information Commissioner's Office
 Joint Money Laundering Steering Group
 Law Society & Solicitors Regulation Authority
 National Fraud Intelligence Bureau
 National Police Chiefs Licensing Group
 New Scotland Yard Super recognisers Unit
 Operation Amberhill
 Operation Falcon
 The Home Office
 The Metropolitan Police
 Video Standards Council

Yoti is a member of

- Biometrics Institute
- CIFAS cross industry fraud prevention service
- CBI (Confederation of British Industry)
- CiSP (Cyber-security Information Sharing Partnership, run by CERT UK)
- Digital Policy Alliance
- Open Identity Exchange
- TechUK; SME Representative Justice & Emergency Services Committee
- UKShareCO, SEUK
- Digital Catapult Personal Data & Trust Network
- Signatory to iRights charter (now 5 Rights charter)
- The Parent Zone
- Institute of Community Safety
- UK Council for Child Internet Safety (UKCCIS) Associate Member