

Your Face, Your Privacy?

Whether the misuse of facial recognition technology will be an issue when it comes to privacy.



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The technology enabling Face ID is some of the most advanced hardware and software ever created. Face ID is a face recognition unlocking technology where a user's facial identity is scanned into Apple devices and stored. Apple's Face ID is a facial-recognition technology launched in 2017 on the iPhone X. Does Apple keep your privacy? Many people have been worried about whether this will lead to information leakage.

The "True Depth Camera System" is a system projecting thousands of invisible dots on the user's face. The device will analyse the dots and create visual information with depth data maps and infrared images of accurate face data. The system consists of sensors, cameras, and a dot-matrix projector located in a recess at the top of the iPhone display, which creates a detailed 3D map of the face when looking at the device. You can quickly and intuitively unlock your device or make payments if the check is passed. Facial recognition is a way of identifying or



confirming an individual's identity using their face and is a biometric security category.

Face ID uses machine learning technology, which is more useful and faster than Touch ID because it can adapt to changes in your face over time. The device has a complicated layer of protection, and much like Touch ID, Face ID can be bypassed with a passcode. The phone is unlocked when it picks up and makes eye contact. The iPhone X offers substantially more screen area than earlier models because of the removal of Touch ID, which is an additional benefit. Face ID is so simple to use and has a sleek appearance that you hardly notice it is there.

Apple appears to have secured data very well. The secure enclave processor (SEP) is a separate co-processor and is designed for security and cryptography tasks in Apple's most recent system-on-a-chip (SOC) processors. This processor is separate from the primary processor and runs its operating system. Therefore the map of the face model on your device never leaves it. Data doesn't save in the cloud or is sent via a network. Face ID data is specially saved in something called the iPhone's secure enclave, much like your digital Touch ID fingerprint. The main Computer system never sees or handles a digital key that the device saves in the SEP (like your Face ID model). It only gets the "outcomes" of critical processes. In other words, the operating system simply receives the "matched" or "not matched" results from the protected enclave and never sees the model of your face. Simply put, Apple has created a system that makes it impossible for attackers to get your Face ID data.

References:

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Facial recognition ID: How safe is your face? How safe is your face ID. (2018, March 28). Retrieved October 17, 2022, from <https://this.deakin.edu.au/innovation/facial-recognition-id-how-safe-is-your-face#:~:text=It%27s%20a%20new%20and%20more,up%20and%20look%20at%20it>

Apple doesn't have access to your face ID, and personal ID does not sell your data to third-party advertisers. The company has the right to show Apple user ads on the app store and other apps. That means your data is only used by Apple to show ads but not sold to your other advertisers. Advertisers may pay Google or Apple to display their ads on their iPhone or Android devices.

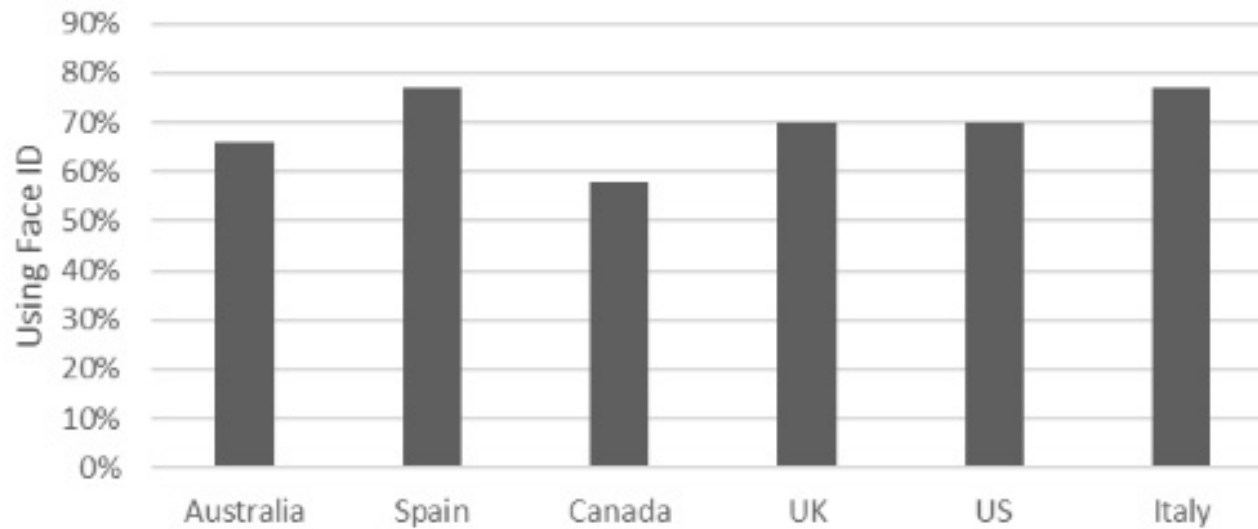
Apple has addressed many of these concerns and has proven that it is safe to use face id, but they have not yet made a fundamental adjustment to face id that would increase user trust and safety. However, the most favoured security feature has vanished, raising apparent security and privacy issues. Face id is a cutting-edge technology that will pave the way for advanced phone security and open up a world of future possibilities.

Nachreiner, C. (2019, January 22). Apple's face ID: No match for multifactor security. TechBeacon. Retrieved October 17, 2022, from <https://techbeacon.com/security/apples-face-id-no-match-multifactor-security>

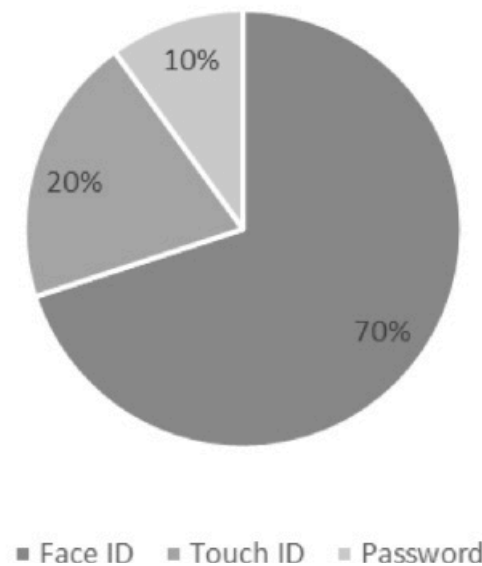
Pocket-lint. (2022, March 4). What is Apple Face ID and how does it work? what is apple ID. Retrieved October 17, 2022, from <https://www.pocket-lint.com/phones/news/apple/142207-what-is-apple-face-id-and-how-does-it-work>



How many people used face authentication on their iPhone



Preference of unlocking an iPhone



How To Get There And Set Up

