NTIA Privacy Multistakeholder Process
Commercial Facial Recognition Technology
Proposed Use Cases that Might be Addressed by a Code of Conduct
(Stakeholder Submitted)
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I. Facial Recognition Technology Employed by Organizations for the Purpose of Identification

1. A pro-pot legalization march is held in Sacramento, CA within full view of dozens of public and private surveillance cameras. Corporations use facial recognition technology to sell pot tours to Colorado and other products that they have found to be linked to favorable views on marijuana. Law enforcement agencies seek to obtain facial recognition data from companies to identify law breakers.

2. A kiosk located in a busy retail space is equipped with a camera. As shoppers walk past, the camera surreptitiously and automatically takes pictures of their faces, generates biometric identifiers, and retains them.

3. A casino uses facial recognition to identify its "high rollers" when they pass by cameras inside the casino. The facial recognition system recognizes the individual and records the restaurants, games, and shows he visits, in order to better serve the high roller.

4. Photos are taken of people in casinos and matched with photos from social networking sites for purposes of identifying them and selling that information to data brokers who would put them on lists of "people who like to take chances." These lists could then be used to solicit them for bogus sweepstakes and lotteries, investments, and business opportunities.

5. A consortium of retailers join forces to implement facial recognition devices in their stores, and to network the devices together. Individuals who enter the stores are logged, and recognized the next time they enter a participating store. The system is used to reward frequent visitors and to alert for known or suspected shoplifters.

6. A security company produces a facial recognition program for digital eyewear designed for use by private security guards. Various retailers use the program to enable their guards to identify potential criminals.

7. An airline company issues to its employees digital eyewear with facial recognition technology pre-installed, for the purpose of identifying high-value customers and storing their preferences.

8. A hospital employs facial recognition technology to assist health care providers to identify patients quickly and accurately. This technology reduces the risk of medical error and medical fraud. It further allows health care providers to more successfully manage patients because the providers are not required to commit so many facts and faces to memory. This will also improve patient experience by offering a more customized interaction with a provider. For instance, facial recognition technology could pull up the patient's file, so that that doctor immediately recalls the patient's allergies, other medications, or previously specified care and treatment preferences.

9. A company holding a large faceprint database generated from a separate aspect of its business (drivers' license processing, social networking) offers its services to a range of brick-and-mortar commercial establishments – from car dealerships to corner grocery stores. The company uses facial recognition to identify individuals as they walk into the store and provide a range of information about those individuals to the company, including name, occupation, likely household income, and criminal record.

10. At a pro-pot legalization march, lots of cell phone and other photos are taken and uploaded. Employers use facial recognition to identify workers in potential violation of their drug policies. Individuals use the technology to see and tag their friends on Internet sites.

11. Users can opt-into a convenience store program that uses facial recognition to associate the individual with their purchases using cameras at checkout. For participating in the program, consumers receive coupons for the items they purchase most often. The convenience store uses the information obtained through this program to provide wholesalers with anonymized demographic information about the age and gender of purchasers of their products.

II. Facial Recognition Technology Employed by Individuals for the Purpose of Identification

12. A mobile application lets individuals obtain a broad range of personal information – including a person's name, photos, and dating website profiles – by capturing a person's face with a mobile device's camera and employing facial recognition.

13. A software developer launches a program for digital eyewear that allows users to store facial recognition data about persons they meet, and associate the user's notes about that person with the data, so that the notes automatically come into view whenever the user encounters that person again.

14. An app helps individuals suffering from prosopagnosia (face blindness) identify those around them. The app allows the user to take a picture of an individual and enter their information. In future encounters the app automatically identifies individuals in the closed database to the user.

15. A social network allows users to anonymously scan the faces of strangers and associate digital content or commentary with that person, so that when other users of the network scan that person, they will see all the data previously associated with that person by other users.

16. A social network creates a faceprint database of all of its users, and uses facial recognition technology to automatically identify and suggest "tags" for those users in posted photos from a broad range of settings – social events, peaceful political demonstrations, and work conferences.

17. A popular social network adds facial recognition capability to its mobile app, so that users can use it to recognize people who are already their "friends" within the network.

18. A mobile-based massively multi-player role playing game (MMORPG) requires users to submit facial data when they register. Players can use their mobile devices to scan other players' faces to learn whether they are "friend" or "foe" within the game, along with other in-game information associated with the player.

III. Facial Recognition Technology Employed for the Purpose of Authentication

19. A mobile device owner uses the device to capture a photograph of her face, generating a biometric that can be used to authenticate her to the device itself and applications loaded on the device.

20. A National Bank's ATM uses multi-factor authentication to prevent fraudulent withdrawals, including facial recognition matched to stored images on the bank's computers. National Bank performs the authentication when their customers use National Bank ATMs and when their customers use non-National Bank ATMs.

21. Airport security uses an opt-in service to help flyers get their ticket and move through security quickly. Facial recognition is used to verify the passport and ticket match the face of the traveler in-lieu of existing airport security programs. (Note: this program is already in use in Australia and can be used by US citizens entering Australia http://www.customs.gov.au/site/page5831.asp)

22. An Internet company offers business-to-business software as a service (SaaS) solutions. The company utilizes facial recognition as an additional step to prevent unauthorized access to sensitive financial information.

23. A hospital incorporates facial recognition to prevent unauthorized access to rooms.

24. A company uses facial recognition technology to manage its payroll time clock system. This reduces risk of employees clocking each other in and out of work, thereby increasing worker productivity and reducing fraud. It also provides convenience by eliminating the need for access cards, which can be lost or stolen, and require replacement.

25. A company that manages critical infrastructure uses facial recognition technology to secure areas of the building that require special levels of clearance. This technology provides more protective security. Further, this use reduces the risks associated with access card theft. It also reduces administrative security training because employees no longer need to rely on either visual inspection or a separate, less reliable card access system. Finally, it eliminates problems associated with access card loss, accidental card deactivation, and cards forgotten at home or at an employee's desk.

26. A vehicle uses facial recognition technology to identify different drivers within a family. The vehicle automatically adjusts its settings to the current driver's preferences. Parents could have the option to restrict a child's driving privileges, so that the facial recognition system will not allow the child to operate the vehicle past a certain time at night.

IV. Other Uses of Facial Recognition Technology

27. A child safety organization receives photos of children from social services and law enforcement agencies that they compare against a database of known abducted children to try to find matches.

28. A consumer group announces the creation of a "NoFace" symbol that individuals can choose to wear on their person, indicating their desire not to be scanned with facial recognition technology. The idea is similar in concept to the "robots.txt" file used by web pages to prevent crawling by search engines, and the "nopin" tag used by web pages to prevent indexing of photos on Pinterest. A few commercial users of facial recognition agree to honor the system, but most do not.

29. Participants in a public demonstration wear accessories designed to prevent facial recognition technology from identifying them. By applying more advanced algorithms, however, companies manage to overcome these countermeasures, and add the demonstrators' identities to a database. Law enforcement agencies seek to obtain facial recognition data from companies to identify law breakers.