Initial Familiarity & Perceptions of Facial Recognition Technology

<u>INTRO</u>: In this survey, we will be asking you questions about facial recognition technology.

For a variety of uses, facial recognition technology is a way of identifying a person based on their unique facial features.

Facial recognition is an image analysis tool that compares select facial features to determine whether one facial image matches another that is saved on a device or in a database, in order to verify a person's identity or help identify the person in an image.

1) Generally speaking, how familiar are you with facial recognition technology, which can identify someone based on a picture or video that includes an image of their face?

TOTAL FAMILIAR	64%
TOTAL NOT FAMILIAR	32%
Very familiar	25%
Somewhat familiar	39%
Not very familiar	19%
Not familiar at all	13%
Not sure	4%

2) Do you have a favorable or unfavorable view of facial recognition technology?

TOTAL FAVORABLE	59%
TOTAL UNFAVORABLE	24%
Very favorable	24%
Somewhat favorable	35%
Somewhat unfavorable	16%
Very unfavorable	8%
Not sure	17%

- 3) Please indicate if you agree or disagree with each of the following statements.
 - Facial recognition technology can make transactions more secure by preventing identity fraud.

TOTAL AGREE TOTAL DISAGREE	75% 12%
Strongly agree Somewhat agree	36% 39%
Somewhat disagree	7%
Strongly disagree	5%
Not sure	13%

• Facial recognition technology can make society safer.

TOTAL AGREE	68%
TOTAL DISAGREE	20%
Strongly agree	28%
Somewhat agree	40%
Somewhat disagree	14%
Strongly disagree	6%
Not sure	12%

• Facial recognition technology can help find criminals and prevent crime.

TOTAL AGREE	73%
TOTAL DISAGREE	12%
Strongly agree	32%
Somewhat agree	41%
Somewhat disagree	8%
Strongly disagree	4%
Not sure	15%

• Facial recognition technology can help find missing people.

TOTAL AGREE	77%
TOTAL DISAGREE	12%
Strongly agree	32%
Somewhat agree	45%
Somewhat disagree	9%
Strongly disagree	3%
Not sure	11%

• Facial recognition technology can improve security systems.

TOTAL AGREE	78%
TOTAL DISAGREE	12%
Strongly agree	41%
Somewhat agree	37%
Somewhat disagree	8%
Strongly disagree	4%
Not sure	10%

• Facial recognition technology can speed up security lines at airports and large events.

TOTAL AGREE	74%
TOTAL DISAGREE	15%
Strongly agree	34%
Somewhat agree	40%
Somewhat disagree	12%
Strongly disagree	3%
Not sure	11%

• Facial recognition technology is highly accurate.

TOTAL AGREE	61%
TOTAL DISAGREE	22%
Strongly agree	23%
Somewhat agree	38%
Somewhat disagree	15%
Strongly disagree	7%
Not sure	17%

• Facial recognition technology can reduce racial injustice and discrimination in law enforcement.

TOTAL AGREE TOTAL DISAGREE	47% 29%
Strongly agree	17%
Somewhat agree	30%
Somewhat disagree	16%
Strongly disagree	13%
Not sure	24%

5) How accurate do you think facial recognition technology is in identifying people of all races and ethnicities?

TOTAL ACCURATE	70%
TOTAL NOT ACCURATE	19%
Very accurate	23%
Somewhat accurate	47%
Not very accurate	14%
Not accurate at all	5%
Not sure	11%

6) For each of the following groups, please indicate if you favor or oppose them using facial recognition technology.

1	
TOTAL FAVOR	59%
TOTAL OPPOSE	22%
Strongly favor	30%
Somewhat favor	29%
Somewhat oppose	12%
Strongly oppose	10%
Not sure	19%

• Tech companies

• Homeowners in their home security systems

TOTAL FAVOR	63%
TOTAL OPPOSE	20%
Strongly favor	29%
Somewhat favor	34%
Somewhat oppose	15%
Strongly oppose	5%
Not sure	17%
Security at office buildings	
TOTAL FAVOR	70%
TOTAL OPPOSE	18%
Strongly favor	31%
Somewhat favor	39%
Somewhat oppose	10%
Strongly oppose	8%
Not sure	12%
Retail stores and businesses	
TOTAL FAVOR	51%
TOTAL OPPOSE	30%
Strongly favor	22%
Somewhat favor	29%
Somewhat oppose	17%
Strongly oppose	13%
Not sure	19%
Police and law enforcement	
TOTAL FAVOR	66%
TOTAL OPPOSE	22%
Strongly favor	33%
Somewhat favor	33%
Somewhat oppose	14%
Strongly oppose	8%
Not sure	12%

• Banks

• Daliks	
TOTAL FAVOR	68%
TOTAL OPPOSE	25%
Strongly favor	29%
Somewhat favor	39%
Somewhat oppose	14%
Strongly oppose	11%
Not sure	7%
Border security	
TOTAL FAVOR	59%
TOTAL OPPOSE	24%
Strongly favor	36%
Somewhat favor	23%
Somewhat oppose	16%
Strongly oppose	8%
Not sure	17%
• Airlines	
TOTAL FAVOR	75%
TOTAL OPPOSE	18%
Strongly favor	32%
Somewhat favor	43%
Somewhat oppose	11%
Strongly oppose	7%
Not sure	7%
• TSA or other airport security	
TOTAL FAVOR	69%
TOTAL OPPOSE	18%
Strongly favor	31%
Somewhat favor	38%
Somewhat oppose	11%
Strongly oppose	7%
Not sure	13%

• Elementary, middle, and high schools to screen adult visitors

TOTAL FAVOR	67%
TOTAL OPPOSE	20%
Strongly favor	32%
Somewhat favor	35%
Somewhat oppose	15%
Strongly oppose	5%
Not sure	13%
Colleges and universities	
TOTAL FAVOR	57%
TOTAL OPPOSE	25%
Strongly favor	24%
Somewhat favor	33%
Somewhat oppose	15%
Strongly oppose	10%
Not sure	18%

7) Would you be comfortable if your facial image were included in a database of images used for facial recognition if it were used to promote public safety?

TOTAL COMFORTABLE	57%
TOTAL UNCOMFORTABLE	30%
Very comfortable	21%
Somewhat comfortable	36%
Somewhat uncomfortable	13%
Very uncomfortable	17%
Not sure	13%

8) In order to make it easier to pass through security in airports, would you be comfortable if your facial image was captured to match your identity with the ID you provide to TSA?

TOTAL COMFORTABLE TOTAL UNCOMFORTABLE	69% 20%
Very comfortable	36%
Somewhat comfortable	33%
Somewhat uncomfortable	11%
Very uncomfortable	9%
Not sure	11%

9) Okay, and would you choose to use this type of facial recognition process if it was offered to you by TSA at airports?

I would choose to participate	60%
I would not choose to participate	22%
Not sure	18%

10)Would you be comfortable if your facial image were included in a facial recognition system's database if it was used to reduce financial fraud and identity theft?

TOTAL COMFORTABLE	60%
TOTAL UNCOMFORTABLE	27%
Very comfortable	24%
Somewhat comfortable	36%
Somewhat uncomfortable	15%
Very uncomfortable	12%
Not sure	13%

11)Would you be comfortable if your facial image were included in a facial recognition system's database in order to allow you to more conveniently and securely enter your workplace?

TOTAL COMFORTABLE	58%
TOTAL UNCOMFORTABLE	27%
Very comfortable	26%
Somewhat comfortable	32%
Somewhat uncomfortable	15%
Very uncomfortable	12%
Not sure	15%

12)Would you be comfortable if facial recognition were used to improve security in your workplace or other buildings you visit by alerting staff to the presence of unauthorized visitors?

TOTAL COMFORTABLE	70%
TOTAL UNCOMFORTABLE	19%
Very comfortable	35%
Somewhat comfortable	35%
Somewhat uncomfortable	9%
Very uncomfortable	10%
Not sure	11%

Facial Recognition Technology Tradeoffs

Next, we will ask some questions about facial recognition technology being used by law enforcement and how comfortable you may be with that use.

In the United States, law enforcement often uses eye-witness testimony, finger printing, or DNA testing both to identify criminal suspects and clear innocent people. Facial recognition is a more recent technology that law enforcement uses to identify criminal suspects.

LAW ENFORCEMENT: NO CONTACT VS. DANGEROUS ARRESTS

13)Some say that facial recognition technology is non-invasive and helps improve law enforcement because it increases the accuracy of investigations and reduces unnecessary physical interactions between police and the public, creating more safe engagements in all areas.

Others say that facial recognition technology is an invasion of privacy and should not be used to help law enforcement.

Which is closer to your view?

Facial recognition is non-invasive and helps	54%
improve law enforcement	
Facial recognition is an invasion of privacy and	24%
should not be used to help law enforcement	
Not sure	22%

14)Some law enforcement agencies are looking into using facial recognition to share identity information during routine interactions like traffic stops.

In this type of interaction, a driver would confirm their identity by sharing information on their mobile device, without them or the officer leaving their cars. The driver would also receive information on the officer's identity.

Would this type of system make you feel more or less safe when interacting with law enforcement?

More safe	46%
Less safe	18%
Not sure	36%

15)Okay, and would this type of system make you make you more or less trusting of law enforcement?

More trusting	42%
Less trusting	25%
Not sure	33%

TECHNOLOGY: NON-INVASIVE VS. INVASION OF PRIVACY

16)Some say that facial recognition databases used by law enforcement do not invade people's privacy and are appropriate because they are generated from publicly available images available on the Internet that can be found on a search engine like Google, or images already available to investigators through criminal mugshots and other public records.

Others say that facial recognition searches by investigators are invasive, inappropriate, and should not be used to help law enforcement.

Which is closer to your view?

Facial recognition searches by investigators are non-invasive	66%
and appropriate	
Facial recognition searches by investigators are invasive,	17%
inappropriate, and should not be used to help law enforcement	
Not sure	17%

FACIAL RECOGNITION VS. EYE-WITNESSES

17)Some say that facial recognition technology is a more accurate and trustworthy way of identifying criminal suspects and clearing innocent people than eyewitness accounts because it uses a database of images and videos to identify a person rather than a person's recall from memory and traditional police line-ups, which studies show are prone to human error.

Others say they eye-witness testimony is a more accurate and trustworthy way of identifying criminal suspects and clearing innocent people because they don't trust the technology to perform accurately.

Which is closer to your view?

Facial recognition technology is a more accurate and trustworthy	64%
way of identifying criminal suspects and clearing innocent people	
Eye-witness testimony is a more accurate and trustworthy way of	11%
identifying criminal suspects and clearing innocent people	
Not sure	25%

REDUCING RACIAL BIAS

18)According to the National Academy of Sciences, eye-witness testimony can be prone to racial bias, especially when people are identifying faces of a race different from their own. Meanwhile, the latest versions of facial recognition technology have demonstrated high levels of accuracy across all races when used properly and reviewed by trained professionals.

Do you believe that facial recognition technology can help reduce the racial bias in law enforcement that comes from eye-witnesses and investigators alone or will it have no impact on racial bias?

Facial recognition technology can help reduce the racial	54%
bias in law enforcement that comes from eye-witnesses	
and investigators alone	
Facial recognition technology will have no impact on	25%
racial bias in law enforcement	
Not sure	21%

Benefits of Facial Recognition Technology

Next you will see some of the benefits of facial recognition technology. After each, please indicate if it makes you more supportive or less supportive of the use of facial recognition, or if it does not impact on your opinion.

19)**[EFFICIENT LAW ENFORCEMENT]** Facial recognition has helped law enforcement do their work more efficiently and focus on keeping the public safe, rather than losing time trying to catch criminal suspects.

Does this make you more supportive or less supportive of the use of facial recognition or does it not impact on your opinion?

More supportive	51%
Less supportive	15%
No impact	22%
Not sure	12%

20) **[SAVING PEOPLE FROM DANGER AND FRAUD]** Facial databases have made it possible for law enforcement to save children and women from sexual predators, apprehend financial fraud rings involving tens of millions of dollars, and solve murder cases.

Does this make you more supportive or less supportive of the use of facial recognition or does it not impact on your opinion?

More supportive	56%
Less supportive	14%
No impact	15%
Not sure	15%

21)**[EXONERATIONS]** Facial recognition technology can help the criminal justice system to clear innocent people of crimes they did not commit by accurately identifying suspects.

More supportive	59%
Less supportive	9%
No impact	18%
Not sure	14%

22)**[US AI LEADERSHIP]** Artificial Intelligence, which is the computing technology that helps drive the speed and accuracy of facial recognition, is one of the most important components of America's technology sector. Within the next ten years, it is estimated that AI will account for 15% of U.S. jobs and \$15 trillion in value to the U.S. economy.

Does this make you more supportive or less supportive of the use of facial recognition in the United States or does it not impact on your opinion?

More supportive	37%
Less supportive	19%
No impact	28%
Not sure	16%

23)**[CYBER/IDENTITY SECURITY]** Facial recognition allows a person to verify their identity without exchanging personal information that could be sold or transferred to others and used for identity theft.

The technology creates a unique numerical code for the features of a person's face that is compared with the code associated on file for their identity.

Since each facial recognition provider also has a different and proprietary way of creating and reading this code, it cannot be used to recreate an image or used in any other way outside the system.

Does this make you more supportive or less supportive of the use of facial recognition or does it not impact on your opinion?

More supportive	47%
Less supportive	13%
No impact	20%
Not sure	20%

24)**[NO CONTACT]** Facial recognition is a non-invasive, zero contact way to provide access to buildings or other secure spaces for authorized users. It removes the need to hand over forms of I.D.'s, touch many surfaces, and other in-person inconveniences that could spread germs or disease.

More supportive	48%
Less supportive	11%
No impact	26%
Not sure	15%

25)**[THERMAL SCREENING]** Facial recognition, combined with thermal imaging, can automate the thermal screening process for entry to protected areas of hospitals, government, and commercial buildings. This eliminates the need for a "human operator" at every screening point and is safer for everybody.

Does this make you more supportive or less supportive of the use of facial recognition or does it not impact on your opinion?

More supportive	48%
Less supportive	17%
No impact	20%
Not sure	15%

26)**[SCHOOL SAFETY]** Without being used to track students or staff, facial recognition can allow school administrators and school safety personnel to be alerted if a person who is not allowed on school grounds arrives. This could include sex offenders and others that a school district has identified as a local threat. In fact, most mass shooter attacks on schools have been perpetrated by individuals who were known threats.

More supportive	62%
Less supportive	9%
No impact	20%
Not sure	9%

27)**[REDUCING WRONGFUL CONVICTIONS]** The American criminal justice system is based largely on eye-witness testimony. Unfortunately, human eye witnesses can be prone to error. One prominent pro-defendant organization, The Innocence Project, showed that faulty eye-witness testimony was the cause of 70% of more than 350 wrongful convictions that were later overturned by DNA evidence.

Similar to DNA evidence, facial recognition technology can help identify criminal suspects more accurately and reduce wrongful convictions further. As with most technologies, facial recognition can be subject to error on occasion. However, when used properly, it is more reliable and has less bias than human eyewitnesses.

Does this make you more supportive or less supportive of the use of facial recognition or does it not impact on your opinion?

More supportive	54%
Less supportive	11%
No impact	19%
Not sure	16%

28)**[IMPROVING ACCURACY]** Facial recognition is a more recent technology that law enforcement uses to identify criminal suspects. As with most technologies, facial recognition has improved significantly over time. The latest versions of facial recognition have achieved accuracy rates as high as 99%. In combination with human oversight and review, facial recognition has helped improve law enforcement's ability to accurately identify criminal suspects, clear innocent people, and arrest child predators, bank robbers, and murderers who might not have been caught otherwise.

57%
10%
19%
14%

DEMOGRAPHICS

29)What is your gender?

Man	49%
Woman	51%
Other	
30)What is your age?	
Under 18 [END]	
18-29	21%
30-39	20%
40-49	18%
50-64	22%
65 or older	19%
	19%0
31)What is your race or ethnicity?	
White or Caucasian	69%
Black or African-American	12%
Hispanic or Latino	9%
Asian	8%
Other	2%
other	270
32)Do you consider yourself conservative, moderate or libe	ral?
Very Conservative	17%
Conservative	18%
Moderate	35%
Liberal	15%
Very Liberal	11%
Not sure	4%
Not sure	470
33)What is the highest level of education you have complete	ed?
Some high school or less	3%
High school graduate	16%

Some nigh school or less	3%
High school graduate	16%
Some college	22%
College graduate	29%
Some graduate school	3%
Graduate degree	23%
Technical school	3%
Refused	1%

Schoen Cooperman Research SIA Facial Recognition Study August 2020 34)Is the area in which you live urban, suburban, or rural?

Urban	30%
Suburban	52%
Rural	16%
Not sure	2%

35)In which area do you live?

Midwest	19%
Northeast	20%
South	38%
West	23%

36)Which of the following ranges best describes your annual income?

Less than \$20,000 annually	13%
\$20,000 to \$40,000	16%
\$40,000 to \$60,000	13%
\$60,000 to \$75,000	14%
\$75,000 to \$100,000	17%
More than \$100,000	23%
Not sure	4%