## National Opinion Survey on Automation and Artificial Intelligence

February 19-21, 2020

800 Adults

MOE +/- 3.46%

The NOSAAI is a national representative survey measuring American attitudes and opinions on automation, Artificial Intelligence and their effects on the economy. The study was conducted February 19-21, 2020 of 800 adults and has a Margin of Error of +/-3.46% at the 95% Confidence Level. Media with questions, as well as researchers who would like additional access to the full data set, please contact matthew.detzler1@gmail.com for the quickest response.









## **Highlight of Some Findings**

- Americans report strong favorability toward automation.
  However, they are concerned about its effects on jobs and wages.
- Americans are willing to sacrifice privacy for convenience, but also believe that corporations have been reckless with their private information. Their patience is starting run thin.
- 72% believe that we will enter another Great Depression unless we address the economic effects of automation, with 61% believing automation and other similar technologies will be commonplace in less than 20 years.



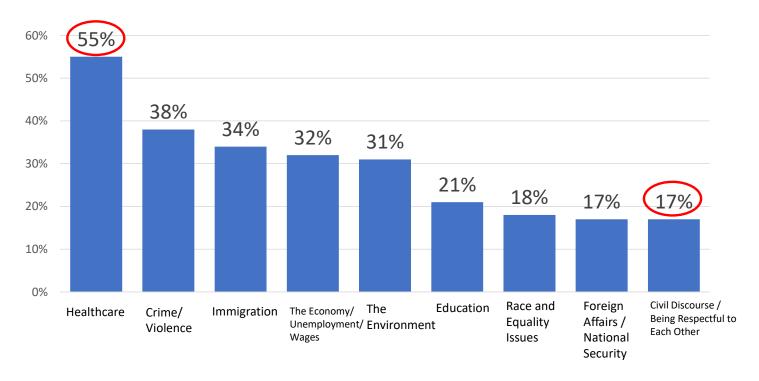
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A majority place <u>Healthcare</u> in <u>the top three</u> in issue importance, with Civil Discourse a distant last place.



Q: Of the following, in your opinion what are the three most important issues facing the country today.



## Americans report having an overall favorable view of Automation and Artificial Intelligence.

		<u>+19%</u>	<u>+28%</u>	<u>+27%</u>
		Automation	Artificial Intelligence	Machine Learning
Favorable	U.	41%	46%	43%
Neutral / DK	1	36%	37%	41%
Unfavorable	11	22%	18%	16%

Q: For each of the following topics, please indicate your overall favorable or unfavorable view of that topic?



Use of

**Machine Learning** 

47%

43%

47%

40%

36%

38%

49%

35%

46%

**Favorable** 

Use of

A.I.

36%

41%

49%

41%

40%

33%

43%

38%

44%

#### **FAVORABILITY: Regional Analysis**

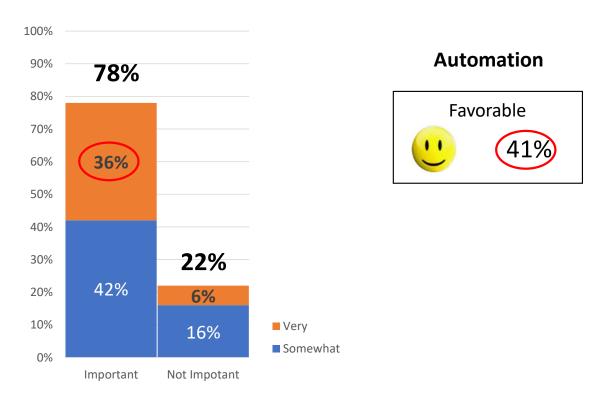
## There is some differentiation by region on favorability of Automation, A.I. and Machine Learning.





#### **SPECIFIC ISSUE IMPORTANCE: Automation**

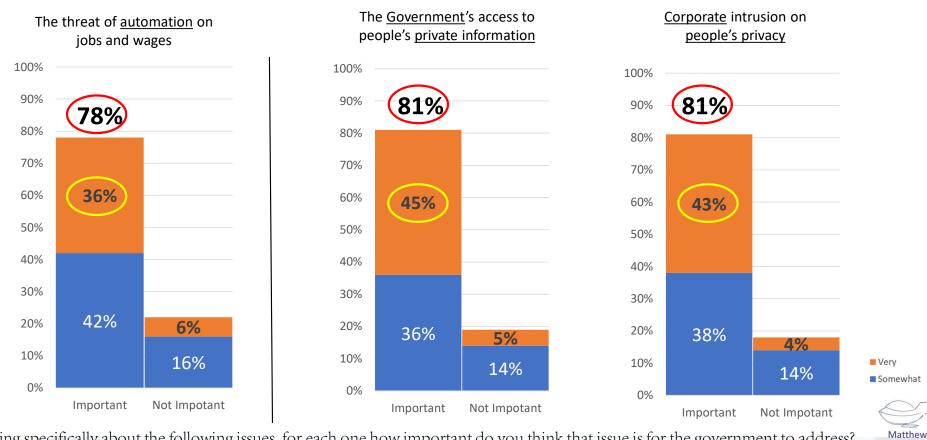
78% think the threat of Automation on wages and jobs is an important issue for the Government to address.



Q: Thinking specifically about the following issues, for each one how important do you think that issue is for the government to address? (The threat of automation on jobs and wages)



### Near comparable amounts of importance placed on issues of automation and privacy.

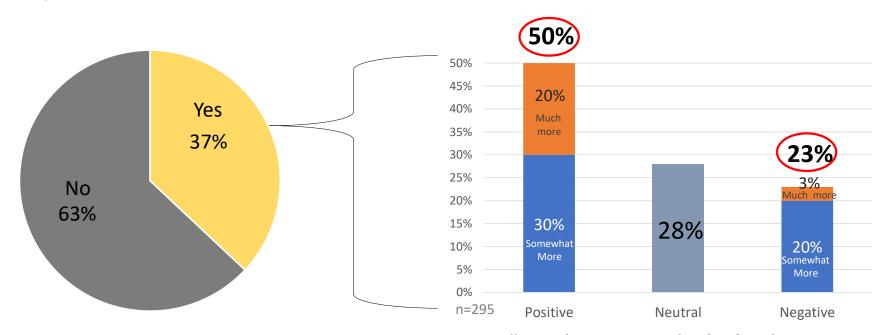


Q: Thinking specifically about the following issues, for each one how important do you think that issue is for the government to address?

#### SEEN, READ, AND/OR HEARD: Automation

Just over a <u>third</u> have been exposed to media on <u>automation</u> and the economy.

50% of what Americans S/R/H about the effects of automation on the economy made them more <u>positive</u>.



Q: Over the past month, have you seen, read and/or heard anything in the media (television, radio or the internet) about the effects of automation on the economy?

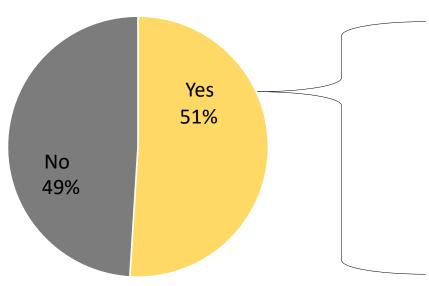
Q: Overall, was what you saw, read and/or heard more positive or negative about the effects of automation on the economy?



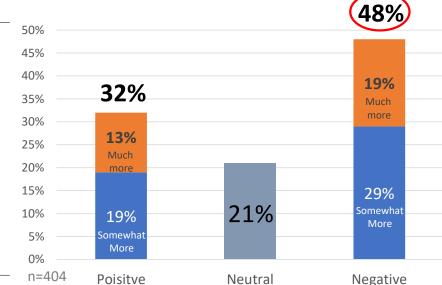
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A <u>majority</u> of Americans report being exposed to media on the use of <u>private personal information</u>.

Nearly a majority of what they S/R/H was <u>negative</u>.



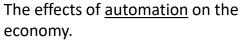
Q: Over the past month, have you seen, read and/or heard anything in the media about the use of private personal information?

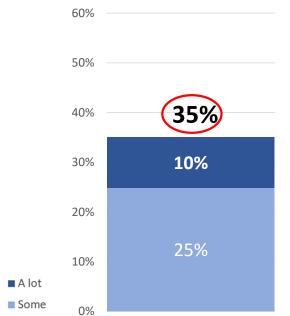


Q: Overall, was what you saw, read and/or heard more positive or negative about the use of private personal information?

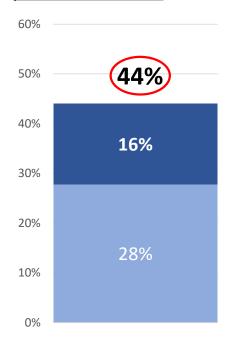


## The topic of <u>privacy</u> is talked about more with family, friend and coworkers than <u>automation</u>.





## Issues regarding the use of <u>private</u> personal information.



Q: Over the past month, have you discussed with family, friends and/or co-workers about...



#### **PRIVACY POSITIONS**

## American's more intensely want protection from each other than corporations.

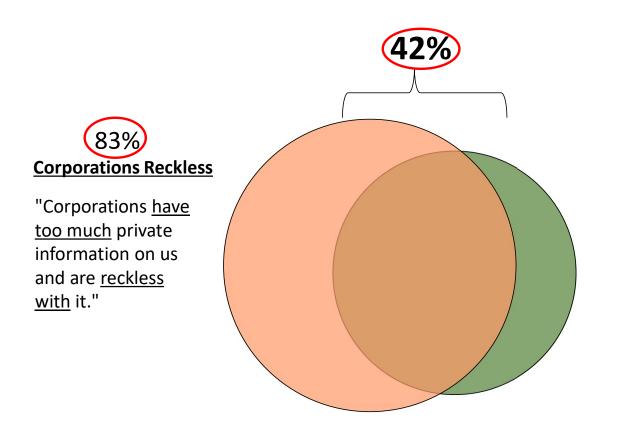
		Strongly Agree	Somewh at Agree	Somewhat Disagree	Strongly Disagree	Total Agree	Total Disagree
Available to Anyone	Private information, including your address and phone number, should not be available on the internet for anyone to see.	55%	27%	12%	6%	82%	18%
Corporations Reckless	Corporations have too much private information on us and are reckless with it.	42%	41%	13%	4%	83%	17%
Worth It	It's worth giving up some privacy to corporations for the services they provide.	16%	35%	28%	22%	51%	50%
Government Needs	The Government needs unrestricted access to our private fata to protect us.	12%	25%	27%	35%	37%	62%

Q: Please indicate how much you agree or disagree with each of the following statements.



#### **PRIVACY POSITIONS: Overlap**

42% say both corporations are reckless and that sacrifice for some privacy is worth it for what they provide.



51% Worth It

"It's worth giving up some privacy to corporations for the services they provide."

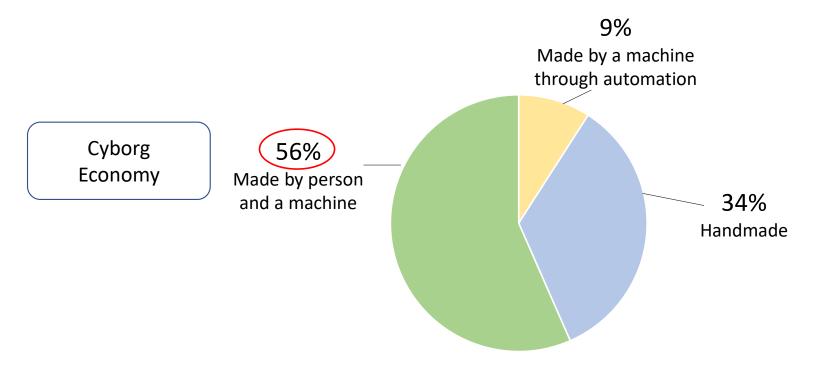


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## A majority of Americans connect quality as coming from person and machine working together.

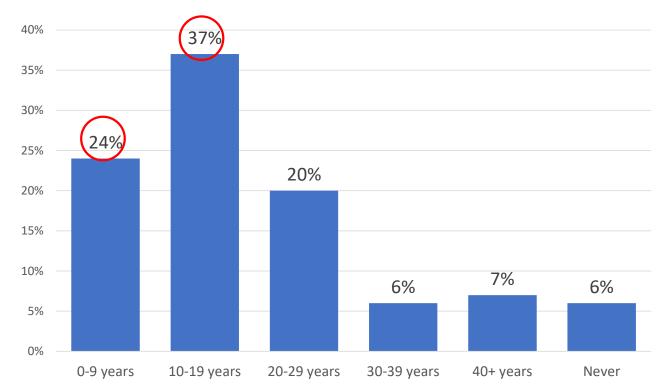


Q: In your opinion, which of the following ensures better quality. Something that is...



#### YEARS TILL COMMONPLACE

61% of Americans believe automatic driving vehicles, AI and other similar technologies will be common place in less than 20 years.

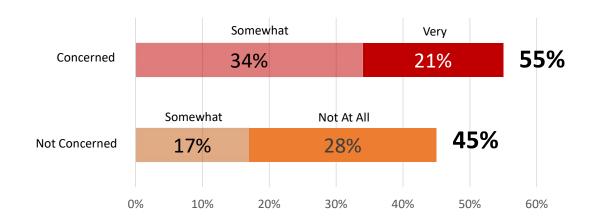


Q: How many years do you believe it will be until technology such as automatic driving vehicles, artificial intelligence and other similar advancements will be commonplace.



#### **CONCERNED**

A majority are concerned that automation and artificial intelligence. could replace them or significantly reduce their wage.



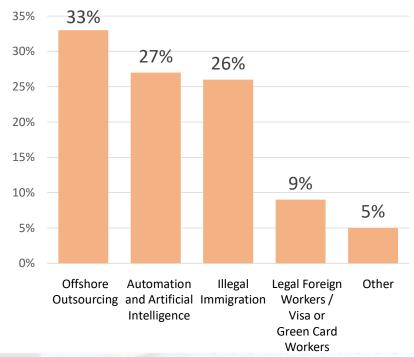
Q: How concerned are you that automation, artificial intelligence or other similar advancements will replace you in your job or significantly reduce your wage?



#### **THREAT TO JOBS AND WAGES**

A third of Americans see Offshoring as a threat to jobs and wages.

Q: Which of the following do you believe is the biggest threat to jobs and wages?



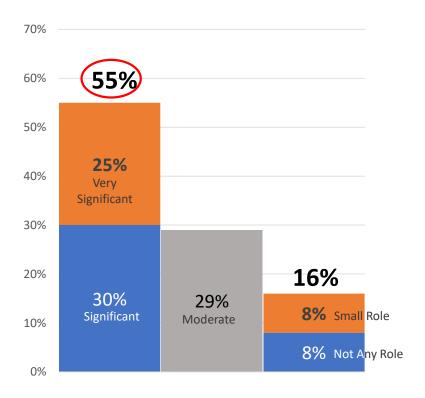
Liberals and High Income Americans are more likely to be concerned with Offshoring than Automation.

	Offshore	Automation/AI	Illegal Immigration
Male	32%	27%	25%
Female	34%	27%	27%
Conservative (	27%	24%	35%
Independent	30%	30%	28%
Liberal (	41%	30%	15%
18-24	18%	33%	21%
25-34	32%	28%	25%
45-64	32%	26%	29%
65+	46%	22%	25%
<\$35K	28%	28%	27%
\$35-\$49K	35%	29%	24%
\$50-\$99K	32%	28%	27%
\$100K+ (	41%	22%	22%



#### **ROLE OF GOVERNMENT**

55% of Americans want the Government to take a significant or even greater role in addressing income inequality and job loss due to automation.



Q: To what degree do you believe the government should or should not take a role in addressing income inequality and job loss due to automation. The Government should take...

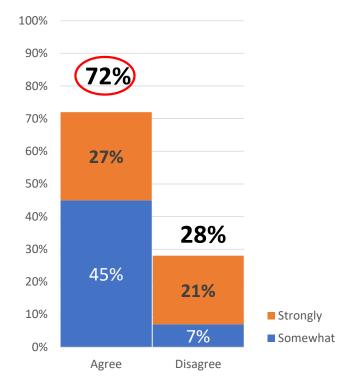


#### AGREE/DISAGREE ON NEXT GREAT DEPRESSION STATEMENT

72% agree Automation and similar technology could lead to the next Great Depression.

Q: How much do you agree or disagree with the following statement?

"Unless we begin to address the issues of automation and other similar technologies, we will face a new Great Depression with high unemployment, poverty and income inequality."





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#### STATEMENTS ON NEGATIVE EFFECTS OF AUTOMATION: Highest Scoring

### Simple logic arguments, which lacked evidence, performed best.

Highest scoring statements on the <u>negative</u> effects of automation		Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree	Total Agree	Total Disagree
Jobs Gained ≠ Jobs Lost	The number of people to maintain robots will never equal the amount of people the robots replaced.	32%	49%	15%	4%	81%	19%
Fewer Small Companies	Automation takes considerable investment, meaning fewer small companies will be able to compete.	29%	50%	17%	4%	79%	21%
Eliminate Good Paying	America did best when it provided good paying jobs that didn't require a high-level education, automation will eliminate those jobs.	29%	43%	21%	6%	72%	27%
No Trickle Down	Companies haven't been generous in sharing productivity gains since the 1970s. New automation technology will just increase the income gap between the rich and working class.	29%	43%	23%	5%	72%	28%

Q: Thinking about the effects of automation on the economy, how much do you agree or disagree with each of the following statements? (Respondents saw 4 of the 8 statements)



#### STATEMENTS ON NEGATIVE EFFECTS OF AUTOMATION: Lowest Scoring

### Arguments which stated facts scored the lowest.

	Lowest scoring statements on the <u>negative</u> effects of automation	Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree	Total Agree	Total Disagree
2.3 Million Call Center Jobs	It's believed that within ten years Artificial Intelligence systems will be so advanced that many, though not all, of the 2.3 million call center jobs that are in the US will be eliminated.	28%	47%	21%	4%	<b>7</b> 5%	25%
Not Able to Absorb Job Loss	As Automation and Artificial Intelligence matures whole groups of jobs will be eliminated in a sweep. With so many jobs becoming obsolete at the same time, the economy will not be able to absorb the massive amounts of people looking for work.	28%	44%	23%	5%	<b>72</b> %	28%
Competition to Reduce Wages	As people lose jobs to automation, additional competition will be put on those still employed, significantly reducing wages	23%	49%	25%	4%	<b>72</b> %	29%
5 million Driver Jobs	Automatic driving vehicles will take the jobs of approximately 5 million people who make their living driving vehicles. That means 3% of the US total workforce will lose their job.	22%	39%	32%	7%	61%	39%

Q: Thinking about the effects of automation on the economy, how much do you agree or disagree with each of the following statements? (Respondents saw 4 of the 8 statements)



#### STATEMENTS ON POSITIVE EFFECTS OF AUTOMATION

## Arguing for the benefits of automation, while recognizing it's draw backs worked best for a positive position.

Statements on the <u>positive</u> effects of automation		Strongly Agree	Somewhat Agree	Somewhat Disagree	Strongly Disagree	Total Agree	Total Disagree
Creative Destruction	Like other technological advances automation in the short-term may cause some people to lose their job, in the long run though more jobs will be created due to technological advancements.	21%	43%	29%	7%	64%	36%
Mundane and Dangerous	Automation will mostly be limited to doing the mundane and dangerous jobs.	18%	37%	35%	10%	55%	45%
Cheaper Goods	Automation will provide cheaper goods, allowing people to buy more for far less money.	16%	45%	30%	9%	61%	39%
Far Off	Full automation is so far off that we need not worry about it now.	15%	33%	36%	15%	48%	51%

Matthew Detzler

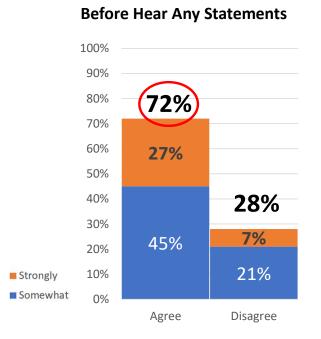
Q: Thinking about the effects of automation on the economy, how much do you agree or disagree with each of the following statements? (Respondents saw all 4 statements)

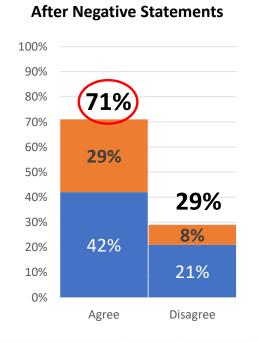
#### **AGREE/DISAGREE ON NEXT GREAT DEPRESSION STATEMENT: Series Analysis**

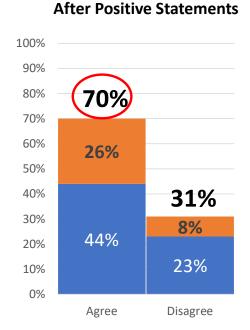
## Fatalism towards the inevitability of automation may explain the lack of movement in overall and even intensity of positions.

Q: How much do you agree or disagree with the following statement?

"Unless we begin to address the issues of automation and other similar technologies, we will face a new Great Depression with high unemployment, poverty and income inequality."









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### Majority of Americans support a livable wage.

Q:Thinking about Automation and Artificial Intelligence, which of the following proposals would you support? (Select All That Apply)

Ensure a livable wage.	50%
Stricter regulations on automatic driven vehicles on public roads.	43%
Removing the payroll tax to encourage the hiring of people.	29%
A technology dividend in the form of guaranteed minimum income for all adults whether they work or not.	28%
Property tax on robots and other automation equipment.	24%
None of the above.	15%



## **Summary of Findings**

- Great opportunity for a political leader to emerge on addressing automation.
  American's currently have a fatalist approach to the issue, but also are have high expectations that Government officials will address it.
- Americans are possibly coming to a breaking point in what they are willing to tolerate in their invasion of privacy. They especially want to be protected from each other's prying eyes.
- Simple logic arguments are replacing traditionally successful evidence-based arguments.
- Advocating a livable wage, without the clouding of other more aggressive social agendas, may prove to be potent political force.



# National Opinion Survey on Automation and Artificial Intelligence

For more information as well as access to the full data set, please contact <a href="matthew.detzler1@gmail.com">matthew.detzler1@gmail.com</a> or visit <a href="www.nosaai.org">www.nosaai.org</a>.