



EMBOLD
research

STAC | Toplines

1,981 interviews nationwide, June 12-July 13, 2023

Q1. When it comes to your employment status, are you now:

85%	Employed full-time
10	Employed part-time
6	Self-employed
0	Retired
0	Unemployed, looking for work
0	Not employed for pay
0	Disabled
0	Student
0	Something else

Q2. [Added on 7/5 - 'Yes' coded as business/finance] Do you work in business administration or management?

71%	Yes
29	No

Q3. In what industry do you work?

20%	Healthcare
19	Science, technology, engineering, or mathematics field (STEM)
19	K-12 education
18	Military/national defense
11	Finance
1	Business administration or management [Added on 6/30 and hidden on 7/5 - coded as business/finance]
12	Other/None of the above

Q4. Are you or anyone living in your household a member of a labor union?

31%	Yes, I am
8	Yes, someone in my household is
62	No

Q5. Approximately how many employees work for your company?

8%	1-10
11	11-50
19	51-250
14	251-500
21	501-5,000
27	More than 5,000

Polling was conducted online from June 12-July 13, 2023 Using its Bias Correct Engine to attain a representative sample, Embold Research polled 1,981 professionals across five industries nationwide. Post-stratification was performed on industry. The modeled margin of error is +/- 2.3%.

Q6. Which of the following best describes your level of seniority within your company?

- 2% Intern/Apprentice
- 12 Junior/entry-level
- 47 Mid-level
- 17 Senior/director-level
- 9 Executive
- 14 None of the above

Q7. Which of the following issues are you most concerned about? Select up to three.

- 35% Cost of health care
- 34 The economy and jobs
- 31 Immigration/border security
- 31 Crime
- 27 Political polarization
- 26 Climate change/environment
- 23 National security
- 19 Economic inequality
- 18 The quality/cost of education
- 18 Racism and discrimination
- 18 The condition of the nation's infrastructure (e.g., roads, bridges, and broadband)
- 14 Drug addiction
- 14 Health challenges
- 12 Poverty
- 12 Energy security
- 12 Misuse of artificial intelligence
- 11 War and terrorism
- 11 Food security/starvation
- 7 Water security/drought
- 4 The next pandemic
- 13 Something else (please specify)

Q8. When today's children in America grow up, do you think they will be:

- 70% Worse off than people are now
- 16 About the same as people are now
- 15 Better off than people are now

Q9. [If worse off] Why do you think today's children in America will grow up worse off? Select all that apply.

- 70% Growing social and political divides
- 57 Weakening economy
- 53 Decline of democracy
- 53 Increased crime
- 37 Increasing economic inequality
- 36 Worsening environment/effects of climate change
- 27 Worsening health
- 26 Emergence of new technologies, such as artificial intelligence (AI)
- 25 War and terrorism
- 14 Lack of scientific and technological innovation
- 24 Some other reason (please specify)

Q10. [If better off] Why do you think today's children in America will grow up better off? Select all that apply.

- 48% Advances in science and technology
- 47 Longer and healthier lifespans
- 41 Increased economic opportunities for all
- 39 Growing economy
- 27 Improved environment
- 25 Stronger government institutions
- 22 Greater global peace
- 16 Reduction of crime
- 5 Some other reason (please specify)

Q11. How would you rate the quality of each of the following in the United States?

	Excellent	Good	Fair	Poor	Not sure	Total Excellent / Good	Total Poor / Fair
Private investment in science and technology	14	35	31	14	7	49	45
Access to broadband	14	35	33	14	5	48	47
Post-high school STEM education	13	32	32	19	3	45	51
STEM workforce	11	32	35	18	3	43	54
Technical / vocational education	8	27	34	29	2	35	63
Federal government investment in science and technology	7	24	34	28	6	32	63
K-12 STEM education	7	22	35	34	2	29	69

Q12. Which of the following issues facing our country can science and technology play an important role in solving? Select all that apply.

- 53% Energy security
- 49 The condition of the nation's infrastructure (e.g., roads, bridges, and broadband)
- 46 National security
- 46 Health challenges
- 45 The economy and jobs
- 44 Climate change/environment
- 43 Water security/drought
- 42 Misuse of artificial intelligence
- 41 Food security/starvation
- 40 Cost of health care
- 38 The next pandemic
- 32 The quality/cost of education
- 29 Immigration/border security
- 28 Crime
- 28 War and terrorism
- 26 Drug addiction
- 23 Poverty
- 22 Economic inequality
- 15 Racism and discrimination
- 14 Political polarization
- 3 Something else (please specify)
- 3 None of the above

Q13. Which of the following best describes U.S. competitiveness in science and technology compared to other countries?

- 44% The U.S. has been overtaken by other countries
- 32 The U.S. is the global leader but is losing ground to other countries
- 13 The U.S. is staying even with other countries
- 8 The U.S. is the global leader and expanding its lead
- 3 Not sure

Q14. Which of the following countries are the United States' top competitors in science and technology? Select up to three.

- 82% China
- 53 Japan
- 30 South Korea
- 27 India
- 22 Countries in the European Union
- 20 Russia
- 14 Israel
- 12 United Kingdom
- 9 Singapore
- 8 Canada
- 6 Switzerland
- 5 Iran
- 4 Australia
- 2 Other county (please specify)

Q15. In five years, who do you think will be the global leader in science and technology?

- 60% China
- 33 United States
- 7 Other country (please specify)

Q16. How much do you believe China's increased presence in science and technology threatens the United States in the following areas?

	A great deal	Some	A little	Not at all	Not sure	Great Deal + Some	Little + None
Our national security	63	22	10	4	1	85	13
The national economy	59	26	10	3	2	85	13
Our quality of life	45	29	17	8	2	74	25

Q17. Who has the primary role of ensuring the strength of science and technology in the United States?

- 41% Federal government
- 23 Private companies
- 22 Academic institutions/universities
- 4 Nonprofit and philanthropic organizations
- 10 Not sure

Q18. What do you believe are the primary benefits for American society of increased investment in science and technology by the federal government? Select up to three.

- 49% Development of technologies/innovation
- 49 Stronger economy and job growth
- 41 Greater national security
- 40 Staying ahead of global competitors
- 40 Improving our quality of life
- 29 Overcoming critical issues facing society
- 27 Improving our health
- 22 Deepening our knowledge of how the world works
- 2 Something else (please specify)
- 6 There are no benefits from increased federal government investment in scientific research and development

Q19. What are the biggest obstacles to scientific and technological advancement in the United States? Select up to three.

- 42% The quality of K-12 STEM education
- 33 Foreign powers undermining or stealing our research and technology
- 32 Too much regulation and red tape
- 29 Lack of a national science and technology strategy
- 26 Lack of research and development funding
- 25 Inadequate science and technology infrastructure (e.g., access to broadband, national laboratories, etc.)
- 23 Lack of STEM opportunities in communities throughout the country
- 23 The quality of vocational/technical education
- 20 The quality of post-high school STEM education
- 18 Inadequate STEM workforce
- 12 Too few opportunities for minorities in STEM
- 10 Patent and trademark issues
- 10 Too few opportunities for women in STEM
- 10 Something else (please specify)

Q20. How important is it for the United States to be the global leader in science and technology for each of the following?

	<u>Important</u>		<u>Not Important</u>			Total Important	Total Not Important
	Very	Smwt	Not too	Not at all	Not sure		
For the strength of the U.S. economy	70	22	5	2	1	92	7
For the strength of our national defense	72	19	6	3	1	91	8
For the well-being of people across the world	52	33	10	4	1	85	14
For the future of your family	51	33	11	3	1	84	14
For the competitiveness of your industry or profession	54	29	12	4	1	83	16

Q21. How concerned are you about each of the following?

	<u>Concerned</u>		<u>Not Concerned</u>			Total Concerned	Total Not Concerned
	Very	Smwt	Not too	Not at all	Not sure		
Political influence on educational curriculum	75	14	7	2	1	89	10
Rising cost of higher education	64	22	10	3	1	86	13
Lack of scientific leadership informing policy decisions	51	30	12	4	2	81	16
Quality of STEM education	44	37	14	3	2	81	17
Technology companies putting profits ahead of the best interests of the public	53	26	13	6	1	80	19
Growing public distrust of scientists / scientific findings	53	26	13	7	1	79	20
Bias or misuse of artificial intelligence (AI)	48	31	14	5	2	79	19
Politicians discrediting scientists	57	19	14	7	2	76	22
Job displacement from artificial intelligence (AI)	31	34	26	7	2	65	33

Q22. When thinking about the impact of artificial intelligence (AI) technology on society, do you think it will have a net:

- 39% Negative impact
- 25 Neutral impact
- 24 Positive impact
- 12 Not sure

Q23. What role do you think the U.S. federal government should have in regulating artificial intelligence?

- 34% Work with technology companies to regulate AI
- 21 Work with other countries to regulate AI
- 17 Wait and see how AI use evolves before attempting to regulate it
- 12 Let the free market regulate AI
- 11 Independently take action to regulate AI
- 6 Not sure

Q24. Do you support or oppose requiring that products generated by artificial intelligence software have a disclaimer to make the presence of AI clear?

- 57% Strongly support
- 27 Somewhat support
- 8 Somewhat oppose
- 2 Strongly oppose
- 6 Not sure

84% Total Support
10 Total Oppose

Q25. Which of the following policies would have the greatest impact on America's ability to lead in science and technology? Select up to three.

- 39% Increase federal government funding to improve K-12 STEM education
- 34 Make technical/vocational education programs tuition-free
- 32 Increase federal government funding for research and development
- 30 Create science and technology centers in more communities across the country
- 29 Greater integration and communication among the 20 plus federal government agencies with scientific missions
- 29 Stronger enforcement of U.S. intellectual property (IP) rights
- 27 Increase federal government funding to improve post-high school STEM education
- 14 Increasing opportunities for minorities in STEM fields
- 14 Allow more foreign workers with STEM skills to come to the United States to work
- 13 Increasing opportunities for women in STEM fields
- 9 Something else (please specify)
- 3 None of the above

Q26. Do you agree or disagree with the following statements?

	<u>Agree</u>		<u>Disagree</u>		Not sure	Total Agree	Total Disagree
	Strongly	Smwt	Smwt	Strongly			
Innovations in science and technology improve the lives of all people, not just a select few	47	34	12	5	2	81	17
The federal government investing more in science and technology will strengthen our economy and create many new jobs	39	36	14	8	4	74	22
Federal government science and technology funding is so important to our future that it should be protected from budget cuts	32	37	16	11	4	68	28
Federal government funding should be directed toward more important issues than science and technology	16	22	31	26	5	38	57

Q27A. [1/3 saw version A] China currently spends twice as much as a percentage of its national income as America on research and development. Do you think the American federal government should spend:

- 33% Much more than it currently does on research and development
- 26 Somewhat more than it currently does on research and development
- 16 About the same as it currently does on research and development
- 10 Somewhat less than it currently does on research and development
- 7 Much less than it currently does on research and development
- 8 Not sure

59% Total More than It Currently Does
17 Total Less than It Currently Does

Q27B. [1/3 saw version B] America currently spends less as a percentage of its national income on research and development than we did 20 years ago. Do you think the federal government should spend:

- 37% Much more than it currently does on research and development
- 35 Somewhat more than it currently does on research and development
- 10 About the same as it currently does on research and development
- 8 Somewhat less than it currently does on research and development
- 6 Much less than it currently does on research and development
- 5 Not sure

72% Total More than It Currently Does
14 Total Less than It Currently Does

Q27C. [1/3 saw version C] As a percentage of its national income, do you think the federal government should spend:

- 27% Much more than it currently does on research and development
- 33 Somewhat more than it currently does on research and development
- 16 About the same as it currently does on research and development
- 7 Somewhat less than it currently does on research and development
- 8 Much less than it currently does on research and development
- 9 Not sure

60% Total More than It Currently Does
15 Total Less than It Currently Does

D1. Are you:

56% Male
43 Female
1 Non-binary

D2. Age

26% 18 to 34
30 35 to 49
37 50 to 64
6 65+

D3. What is your race?

76% White / Caucasian
8 Black or African American
7 Hispanic or Latino/a
5 Asian / Pacific Islander
1 American Indian or Alaska Native
3 Other

D4. What is the highest level of education you have completed?

6% High school diploma or less
16 Some college, but no degree
14 Associate's degree, or two-year college degree
34 Bachelor's degree, or four-year college degree
30 Graduate degree

D5. Census Region

37% South
24 Midwest
22 West
17 Northeast

D6. Party Identification

21% Strong Democrats
8 Weak Democrats
9 Independent lean Democrats
14 Pure independents
12 Independent lean Republicans
11 Weak Republicans
25 Strong Republicans

D6a. Party Identification

29% Base Democrats
35 Independents + Leaners
35 Base Republicans

D6b. Party Identification

38% Democrats
14 Independents
48 Republicans

D7. Industry (coded)

19%	Healthcare
19	K-12 Education
18	STEM Field
18	Military / National Defense
18	Business / Finance
8	Other

D8. Union Membership (coded)

69%	Not a Union Member
31	Union Member