The Public’s View on Technology and Data

Comprehensive Report on Survey & Focus Group Findings
Methodology

| Focus Group Participants | 1. Jackson, MS Tech Opinion Leaders  
|                          | 2. Washington, DC Policy Influencers  
|                          | 3. Seattle, WA Tech Opinion Leaders |

| Survey Audience | 1,000 Voters Nationwide  
|                 | 200 Voter Oversample in each of AZ, FL, HI, IL, MS, NC, OH, TX, WA |

| Focus Group Segmentation | Jackson: 1 Pro-tech, 1 Tech-neutral  
|                         | DC: 1 Republican Policy Elites, 1 Democratic Policy Elites  
|                         | Seattle: 1 Pro-tech, 1 Tech-neutral |

| Group Criteria | Jackson and Seattle: Individuals who are interested in tech (and are either supporters or neutral) who are highly educated, have a high household income, and are civically active.  
|                | DC: Individuals with a professional involvement in policymaking in Congress, a presidential administration, senior federal agency staff, think tanks, trade associations, or policy advocacy groups who are highly educated, have a high household income, and are civically active. |

| Survey Data Collection | Online |

| Date | Focus Groups: February 4, February 6, and February 7, 2019  
|      | National Survey: May 13 – May 25, 2019  
|      | State Oversample Survey: May 13 – June 4, |
Key Findings

From pragmatic benefits to emotional connections, Americans recognize and appreciate how technology has made life easier, better, and more efficient, and give tech companies enormous credit for those improvements.

However, that same ubiquity—coupled with lack of understanding of how data about themselves gets analyzed and used—spurs unease in a population that is aware of the risks but is unable or unwilling to cut the cord. This tension drives fear and frustration, and leads to support for additional tech sector regulation.

The path forward is two-fold: helping legislators understand that voters want collaboration and a private-sector solution of coalition of tech companies to help find the solutions; and empowering consumers to reduce fear by increasing clarity, choice, and security.
Key States: Most at-risk

North Carolina and Arizona show the greatest enthusiasm for regulation and view the tech sector skeptically

- Feel negatively towards technology companies (somewhat and very)
- Distrust technology companies (somewhat and very)
- Think technology companies should be regulated
- Think technology companies should be broken up into smaller parts
The Opinion Landscape

Tailwinds, headwinds, and how these differ between audiences
In the industry’s favor

Tech is a positive force

Despite vocal criticism of individual companies, Americans have an overwhelmingly positive view of the sector and the technology it creates.

**Impact on society**
- Technology: 84%
- Technology Companies: 81%

**Impact on you personally**
- Technology: 83%
- Technology Companies: 77%

**Thinking about the impact technology/technology companies have had on _______, do you think that impact has been...**

- More bad than good: 16%, 17%, 23%, 19%
- More good than bad: 84%, 83%, 77%, 81%
Tech is a positive force: State breakdown

Ohio and Texas residents are less inclined to think that technology companies have had a positive impact on their lives

<table>
<thead>
<tr>
<th>State</th>
<th>In the industry’s favor</th>
<th>More good than bad</th>
<th>More bad than good</th>
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<tbody>
<tr>
<td>Hawaii</td>
<td>84%</td>
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<td>Florida</td>
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<td>Washington</td>
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<tr>
<td>Illinois</td>
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<td>20%</td>
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<tr>
<td>Texas</td>
<td>77%</td>
<td>23%</td>
<td></td>
</tr>
<tr>
<td>Ohio</td>
<td>74%</td>
<td>26%</td>
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</tbody>
</table>
Young vs. Old
A gap emerges among older Americans, who appreciate the impact of technology, but view the sector far more skeptically

It makes my life easier by helping me stay connected with teachers when it’s late at night and I need help with my homework...
- 18-24 year-old voter

I greatly enjoy being able to google things right when I have a question about them, and not forget by the time I have access to an encyclopedia...
- 18-24 year-old voter

By using voice control to have things done for me or easier to pay bills...
- 75+ year-old voter

The biggest is keeping in touch with my extended family which is states away…I have seen great-grandchildren that I would never see without technology.
- 75+ year-old voter
This benefit is rooted in deeply personal experiences

In the industry’s favor

Americans articulate the benefits of technology through very personal connections

- **Innovation**
  - Data gives you direction, like where do you need to go?
  - MS Tech-Neutral

- **Inclusion**
  - There’s a lot of people coming online through mobile services in the developing world.
  - DC Dem

- **Peace of Mind**
  - If my house burned down, stuff that’s important to me would still be there.
  - WA Tech-Neutral

- **Efficiency**
  - It helps to bring down costs...in a number of realms just greater data sharing has made life a lot easier and better.
  - DC Dem

- **Surprise and Delight**
  - ...introducing me to a brand or a certain thing that I wouldn’t otherwise have been introduced to that I actually, it turns out, value quite a lot.
  - DC Dem
In what ways, specifically, do advances in technology make your life easier?
Trust in the industry is high

The tech sector is overwhelmingly trusted to address privacy concerns

Please indicate which of the four groups you trust MOST to come up with working solutions for...

- Protecting your personal data and privacy
  - A coalition of small and large technology companies working together (74%)
  - The U.S. government (43%)
  - Individual technology companies (31%)
  - Your own state government (5%)

Looking for an industry-led solution
Trust in the industry: State breakdown

While states generally agree that an industry-led approach to addressing privacy issues is best, the lowest trust comes from the progressive Western states of Hawaii and Washington.

Please indicate which of the four groups you trust MOST to come up with working solutions for ... Protecting your personal data and privacy.

- State government
- U.S. government
- Individual tech companies
- A coalition of tech companies
Current reskilling efforts fall short

Most voters do not believe that companies are doing enough to reskill or train employees to keep up with advances in technology.

66%
U.S. companies don't do enough to reskill or train employees as needed to keep up with technological advances in the workplace.

34%
U.S. companies do a good job of reskilling and training employees to ensure they are prepared to meet the needs of today's job market.
But faith in the industry’s ability to solve is high

The public’s confidence in the ability of tech companies to upskill workers rather than replace them sets the stage for tech companies to lead the charge on reskilling

How confident are you in tech companies’ ability to upskill or reskill workers, rather than replace them?

- 16% Very confident
- 42% Somewhat confident
- 33% Not too confident
- 9% Not confident at all
- 58% Confident
Reskilling: State breakdown

Texas, Florida, and Mississippi residents have the most confidence in tech companies’ abilities to reskill workers, while Hawaii and Washington continue to be among the most skeptical.
In the industry’s favor

Reskilling: Industry breakdown

The mining, travel, telecoms and media industries have the least amount of confidence in tech to be able to reskill workers rather than replace them

How confident are you in tech companies’ ability to upskill or reskill workers, rather than replace them?

- Not confident at all
- Not too confident
- Somewhat confident
- Very confident

In the industry’s favor

[Bar chart showing the distribution of confidence levels across various industries.]
Conflating privacy and security

Even when pressed to focus on privacy over security, individuals across focus groups had trouble differentiating between these issues.

I don’t think it’s so easy for us to separate the security aspect, although you’re asking us to.

*DC Democrat*

I feel like privacy implies that the onus is on you as the consumer to protect your own data and to control where it is, whereas security puts it on the corporation or the company that you’re working with.

*DC Republican*

The onus is on companies to clarify what they mean when they talk about “data privacy;” otherwise, the conversation will gravitate incessantly back to hacks and breaches.
Anti-trust concerns hold sway

Although the public is divided on whether large tech companies should be broken up

- **38%** Agree
  - Many tech companies have grown too large and they should be broken up into smaller companies
- **28%** Disagree
- **34%** Unsure
Anti-Trust: State breakdown

The sentiment is consistent among state oversamples

“Many tech companies have grown too large and they should be broken up into smaller companies”
Desire for regulation

Voters want to see the government regulate tech companies

50% say the U.S. government should be more active in regulating technology companies

US Voters

- Strongly agree: 8%
- Agree: 16%
- Unsure: 26%
- Disagree: 15%
- Strongly disagree: 35%

Democrats

- Strongly agree: 4%
- Agree: 15%
- Unsure: 24%
- Disagree: 40%
- Strongly disagree: 16%

Republicans

- Strongly agree: 11%
- Agree: 18%
- Unsure: 26%
- Disagree: 31%
- Strongly disagree: 14%
Desire for Regulation: State breakdown

Desire for regulation is highest in FL, IL, NC

“The U.S. government should be more active in regulating technology companies”

<table>
<thead>
<tr>
<th>State</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Unsure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
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</thead>
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<tr>
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<td>15%</td>
<td>23%</td>
<td>34%</td>
<td>12%</td>
</tr>
<tr>
<td>Illinois</td>
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<td>37%</td>
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<tr>
<td>North Carolina</td>
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<td>16%</td>
<td>25%</td>
<td>39%</td>
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<tr>
<td>Washington</td>
<td>8%</td>
<td>16%</td>
<td>24%</td>
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<td>Hawaii</td>
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<td>17%</td>
<td>30%</td>
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<td>Mississippi</td>
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<td>Ohio</td>
<td>7%</td>
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<td>Arizona</td>
<td>12%</td>
<td>19%</td>
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Working against us
## Meet our audience personas

### Supporter

<table>
<thead>
<tr>
<th>Age</th>
<th>Gen X</th>
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<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
</tr>
<tr>
<td>Education</td>
<td>Some college – 4-year degree</td>
</tr>
<tr>
<td>Income</td>
<td>$50,000-$150,000</td>
</tr>
<tr>
<td>Political Party</td>
<td>Independent (lean Repub.)</td>
</tr>
<tr>
<td>2016 Vote</td>
<td>Trump/Clinton (split)</td>
</tr>
<tr>
<td>Type of Area</td>
<td>Suburban</td>
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<tr>
<td>STEM Degree?</td>
<td>No</td>
</tr>
<tr>
<td>Sector</td>
<td>Education, Retail</td>
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</table>

### Persuadable

<table>
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<tr>
<td>Sector</td>
<td>Healthcare, Business Services</td>
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</tbody>
</table>

### Detractor

<table>
<thead>
<tr>
<th>Age</th>
<th>Baby Boomer</th>
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<tbody>
<tr>
<td>Gender</td>
<td>Female</td>
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<tr>
<td>Education</td>
<td>4-year degree</td>
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<td>Sector</td>
<td>Education, Healthcare</td>
</tr>
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</table>
Supporters

- Feel positively towards technology companies (somewhat and very)
- Trust technology companies (somewhat and very)
- Think technology companies should not be regulated
- Think technology companies should not be broken up into smaller parts

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</table>
Audience-specific considerations

Persuadables

✓ Feel positively towards technology companies (somewhat and very)
✓ Trust technology companies (somewhat and very)
✓ Think technology companies should not be heavily regulated (top 1 box)
✓ Think technology companies should not be broken up into smaller parts (top 1 box)

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Detractors

- Feel negatively towards technology companies (somewhat and very)
- Distrust technology companies (somewhat and very)
- Think technology companies should be regulated
- Think technology companies should be broken up into smaller parts

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Tension Points

What these findings mean for the tech sector
Respondents are concerned, but feel paralyzed

While opinion elites are uneasy about how companies analyze data, they acknowledge their own complicity in continuing to hand that data over

“You’re concerned that your personal, private data is accessible to other people…”

...but in turn, I do very little to try to protect my data.

DC Dem
Application matters

While data collection is widely considered acceptable, “offline” uses incite concern and mistrust

Q44: How comfortable are you with personal data being used in the following ways by technology companies today?
Trust but regulate

Tech companies are more trusted than government, but there is still an appetite for government involvement

How much do you trust the following to act in your best interests in the future?

- Technology companies: 72% completely trust, 57% somewhat trust, 21% somewhat distrust, 7% completely distrust, 28%
- State & local government: 55% completely trust, 45% somewhat trust, 31% somewhat distrust, 15% completely distrust, 46%
- Federal government: 41% completely trust, 33% somewhat trust, 37% somewhat distrust, 22% completely distrust, 59%

The U.S. government should be more active in regulating technology companies:

- 50% want more government regulation of tech companies

Strongly agree: 15%
Agree: 35%
Unsure: 26%
Disagree: 16%
Strongly disagree: 8%
But there’s ambivalence about regulatory intervention

While consumers want tech companies more heavily regulated, they have limited confidence in the government—federal or local—to get it right.

Please indicate which of the four groups you trust MOST to come up with working solutions for each:

- A coalition of small and large companies working together
- Individual technology companies
- The US government
- Your own state government

Only 34% think that policymakers and elected officials have an adequate understanding of how tech companies operate.
Reimagine—but follow through by retraining

The same positive associations the public has with the tech industry—as innovators, as disruptors—bring with them an expectation that tech companies take up the mantle of proactively reskilling the talent market they’ve upset.

Which of the following are the most important attributes that define a "technology company"?

66% believe U.S. companies don’t do enough to reskill or train employees as needed to keep up with technological advances in the workplace.

34% believe U.S. companies do a good job of reskilling and training employees to ensure they are prepared to meet the needs of today’s job market.
The Path Forward

How to navigate in this evolving landscape
Re-empowering is the key to getting privacy right

Tech companies can significantly address consumer privacy concerns by delivering on these three key expectations:

**Clarity**

When there’s stuff in the fine print that slips through, because it’s designed to slip through, frankly, I think that’s an issue.

WA Tech-Neutral

**Security**

I am putting all of my information online or into technology, which makes it easier for people to hack into and steal...

MI Voter

**Agency**

Every time that we hit “agree” on this phone or on this Apple Watch when we download something, we’re taking that chance... We just hit “agree” and go. Because I’m going to need that app to download.

MS Pro-Tech
Incentive to innovate is key

Voters who believe regulation slows innovation are more favorable and trusting toward tech companies.

Too much regulation on the tech sector will slow down innovation and take away the incentive for entrepreneurs to make the next great discovery.

- 80% have a positive opinion of tech companies (66% among rest of sample)
- 30% completely trust tech companies to act in their best interest (11% among rest of sample)
- 43% say the U.S. government should be more active in regulating tech companies (52% among rest of sample)
- 83% say tech companies promote equality because they have made a small percentage of society wealthy and powerful (69% among rest of sample)
License to lead

The tech industry can and should take the lead in proposing forward-facing data privacy solutions

- A coalition of small and large technology companies working together (31%)
- Individual technology companies (22%)
- Your own state government (5%)
- The U.S. government (43%)

74% are looking for an industry-led solution
Trustbusters

Key points on voters who think large tech companies should be broken up

Many tech companies have grown too large and they should be broken up into smaller companies

- **38%** Agree
- **25%** Unsure
- **22%** Disagree
- **7%** Strongly disagree
- **34%** Strongly agree

- **63%** have a positive opinion of tech companies, while **72%** of non-trustbusters have a positive opinion of tech companies

- **51%** believe technology is costing more jobs than it is creating; just one-third of non-trustbusters say the same

- **42%** say tech companies promote inequality, compared to just **21%** of non-trustbusters

Non-Trustbusters

- **63%** have a positive opinion of tech companies
- **72%** of non-trustbusters have a positive opinion of tech companies

- **49%** believe technology is costing more jobs than it is creating
- **67%** of non-trustbusters say the same

- **58%** say tech companies promote inequality
- **79%** of non-trustbusters say the same
Making main street front and center

Expanding people’s conceptions of tech companies to include small businesses, which have an unparalleled reputation among consumers, is key to telling the pro-tech story.

What is your overall opinion of the following types of companies?

Technology has really spurred entrepreneurship in this country in ways that we probably could have never thought or imagined...[it] allows those small businesses, the mom and pop shops, to still be able to expand and reach a greater audience.

DC Dem
Appendix I

Key mediagenic data points
### Pro-industry proof points

Support for industry led solutions is much higher than that of government

*Please indicate which of the four groups you trust MOST to come up with working solutions for each.*

<table>
<thead>
<tr>
<th>Industry-led solutions</th>
<th>Individual technology companies</th>
<th>A coalition of small and large technology companies working together</th>
<th>The U.S. government</th>
<th>Your own state government</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protecting your personal data and privacy</td>
<td>31%</td>
<td>43%</td>
<td>22%</td>
<td>5%</td>
</tr>
<tr>
<td>Fighting &quot;fake news&quot; and misinformation</td>
<td>23%</td>
<td>45%</td>
<td>25%</td>
<td>8%</td>
</tr>
<tr>
<td>Using technology to solve environmental and health challenges</td>
<td>22%</td>
<td>53%</td>
<td>20%</td>
<td>5%</td>
</tr>
<tr>
<td>Ensuring that tech companies use artificial intelligence responsibly and ethically</td>
<td>21%</td>
<td>40%</td>
<td>35%</td>
<td>5%</td>
</tr>
<tr>
<td>Creating the conditions for job creation and economic growth</td>
<td>19%</td>
<td>44%</td>
<td>24%</td>
<td>12%</td>
</tr>
<tr>
<td>Ensuring that tech companies pay their fair share in taxes</td>
<td>11%</td>
<td>18%</td>
<td>59%</td>
<td>12%</td>
</tr>
</tbody>
</table>
Pro-industry proof points

The technology industry is significantly more trusted than government

How much do you trust the following to act in your best interests in the future?

- **Technology Companies**
  - Distrust to act in my best interests in the future: 28%
  - Trust to act in my best interests in the future: 72%

- **Federal Government**
  - Distrust to act in my best interests in the future: 59%
  - Trust to act in my best interests in the future: 41%

- **State Government**
  - Distrust to act in my best interests in the future: 45%
  - Trust to act in my best interests in the future: 55%
Pro-industry proof points

The general public agrees that tech makes their lives easier, and the majority have great faith in them to solve the world’s biggest problems.

- Advances in technology make my life easier: 82%
- Advances in technology make my life riskier: 18%
- Technology companies have the ability to solve some of the world’s biggest problems: 83%
- Technology companies have limited impact on real-world problems: 17%
Pro-industry proof points

Respondents are confident in technology companies when it comes to a variety of action items, including innovating, creating jobs, and educating.

How confident are you in the abilities of technology companies when it comes to the following?

- **Ability to innovate**: 41% Very confident, 51% Somewhat confident, 6% Not too confident, 2% Not confident at all
- **Ability to create jobs**: 26% Very confident, 54% Somewhat confident, 16% Not too confident, 4% Not confident at all
- **Ability to create solutions to problems in society**: 23% Very confident, 54% Somewhat confident, 18% Not too confident, 5% Not confident at all
- **Contributing to the education system**: 22% Very confident, 49% Somewhat confident, 24% Not too confident, 6% Not confident at all
- **Adequately providing for employees**: 17% Very confident, 54% Somewhat confident, 24% Not too confident, 5% Not confident at all
- **Giving back to society**: 17% Very confident, 44% Somewhat confident, 30% Not too confident, 9% Not confident at all
- **Reducing costs for products, goods, and services**: 17% Very confident, 46% Somewhat confident, 30% Not too confident, 7% Not confident at all
- **Ability to upskill or reskill workers, rather than replace them**: 16% Very confident, 42% Somewhat confident, 33% Not too confident, 9% Not confident at all
- **Responsible handling of finances**: 15% Very confident, 48% Somewhat confident, 30% Not too confident, 7% Not confident at all
- **Ethical use of personal data and private information**: 13% Very confident, 30% Somewhat confident, 38% Not too confident, 19% Not confident at all