COMMERCIALIZING EXISTENCE

Millennial Habits Survey Series Phase II: Who among us cares when companies sell our data?

1H2019



JEFFERIES MILLENNIAL HABITS SURVEY SERIES

Millennials (born 1981-1996) are increasingly senior decision makers, leaders, and founders of alternatives funds.

The Jefferies Capital Intelligence team has launched a series of surveys to understand **generational differences in how information is created, consumed, and** *valued*.

This, Phase II, digs into the behaviors and standards of acceptability around personal data safety, transparency, and ownership.

It follows Phase I, which focused on content consumption broadly vis-a-vis social media, news, apps and devices.

JEFFERIES MILLENNIAL SURVEY SERIES RECAP: KEY TAKEAWAYS

Phase I

Social Media and Content Habits

- Millennials think in pictures, with more than 75% of them checking Instagram at least once per day.
- •They have a **fierce hunger for information and news**, out-consuming older generations in virtually every source of media except live TV.
- Millennials have a **growing interest in podcasts**, which makes the research process a 24/7 endeavor.
- About half of respondents use technology to enhance their health or fitness regimes, regardless of age cohort.
- Email is the great generational equalizer. No matter their age, respondents to our survey behave the same in their inboxes—and less than half of them read their emails

Phase II: Commercializing Existence

Who among us cares when companies sell our data?

- •Much of the working-age population are still forming an opinion on key issues surrounding data and privacy. The terms of the debate are still being defined.
- Dual Reality. Protomillennials and millennials hold entirely different baseline assumptions about what counts as personal data, if they're entitled to privacy, and who "owns" this information.
- Compared to older generations, millennials generate more data and have more interest in seeing it but care less about how it is repurposed by third parties.
- Millennials are 30% likelier to rest easy knowing a company is commercializing their data—and they don't feel entitled to compensation.
- Across generations, respondents are comfortable creating passwords with only mid-level security.

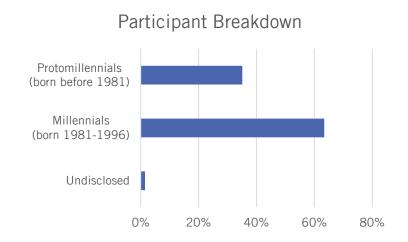
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JEFFERIES MILLENNIAL HABITS SURVEY SERIES

The Jefferies Millennial Data Privacy Habits Survey Phase II polled over 200 people and explored:

- 1. What are the **differences in assumptions about privacy** between "protomillennials" (those born before 1981) and millennials (born in or after 1981)?
- 2. How do these differences translate into professional, consumer, and social behaviors?
- 3. How do these differences impact *expectations for the future* of personal data privacy and the related rights?
- 4. What does this tell us about who will be the winners and losers of next generation business leaders for alternatives funds and the companies they invest in?
- 5. What conclusions can be drawn about future ownership, valuing, valuation, and commercialization of data—the "new oil" of the modern economy?



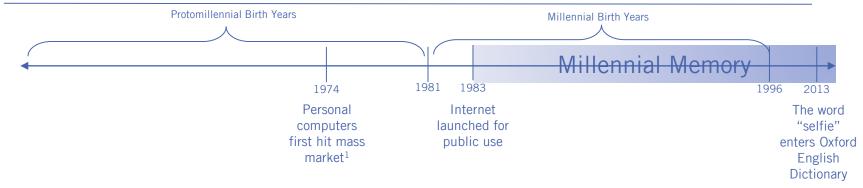
The responses to this survey suggest that much of the population aged 23 and older **are still forming an opinion on various key issues**—from what counts as personal data to whether others can know it, if we are entitled to rights related to the privacy of our own data and, if so, what those rights might be?

How we answer these questions is core to defining the culture of a country and its commerce. By extension, how we answer them will decide how we conduct business, what kinds of companies will flourish in the future, who is willing to conduct business with us, and what global commerce looks like.

The terms of this debate are still being defined. These questions are big. They sit at the intersection of issues like individual identity, privacy, commercial culture, and our rights related to each—as consumers, adults, and simply people. Who will answer them is still not clear. Whether it is policymakers, specialists, business leaders, or some combination of these, defining these answers represents a profound opportunity to shape markets, culture, and even history.

SAME PLAYING FIELD, DIFFERENT GAME

Protomillennials and millennials hold entirely different baseline assumptions about what counts as personal data, if they're entitled to privacy, and who "owns" it.



Setting the Scene:

 $\label{eq:most_millennials} \mbox{Most millennials have } \mbox{\bf no memory of the world without the internet}$

Meanwhile, many protomillennials came of age and launched careers in a world that pre-dated the internet

This translates into distinct baseline ideas about data and privacy:

Protomillennials

- Tend to expect privacy and ownership of their personal data
- This colors their worldview and personal and professional interactions
- It shapes their expectations for how service providers and counterparties should conduct business
- Most importantly, it informs how they expect to be treated

Millennials

- Often do not broadly assume or expect privacy or obscurity surrounding their lives or Personally Identifiable Information (PII). Put another way, they are less surprised or disturbed to learn their data is in the hands of a party they did not explicitly give it to
- May expect their personal information to be public knowledge
- Enter interactions assuming that counterparts may already know details about their personal and professional accomplishments

Millennials' and protomillennials' different assumptions about what counts as personal data and whether they're entitled to privacy are likely rooted in the different cultural contexts they grew up in:

- Protomillennials were born in the years before the internet became available and ubiquitous. This shapes how they value and view ownership of data
- By contrast, few if any millennials have memories of a world without
 the internet. Or, for that matter, before selfies. And this matters.
 Google Photos reported that 24 billion selfies were posted on their
 servers in 2015.² And "selfie culture" is about more than just pictures. It
 represents a notable shift in how humans perceive, process, and
 present their identities to the world.
- While protomillennials' growth, education, and maturity processes were
 punctuated and shaped by a reckoning with the advent of the internet,
 millennials have always taken its existence as a fact of life and have a
 different set of social norms as a result

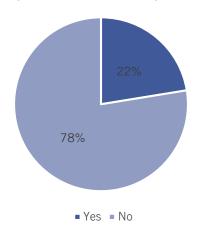
Jefferies

THE DOWNLOAD ON DATA

Everyone "has" data, but **millennials generate** *more* **of it** because of their social media use patterns (see <u>Millennial Survey Phase 1</u>). Fittingly, they are more data-savvy than their protomillennial counterparts.

Less than a quarter of respondents have ever taken an interest in downloading their data:

Have you ever downloaded your data?



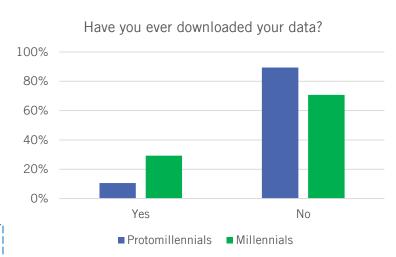
In one study, a millennial and Baby Boomer compared how much data Google and Facebook had collected on them:

- Google held as much as 68x as much data on the millennial as the Baby Boomer
- Facebook had collected nearly 9x as much data on the millennial as the Boomer³

One **might argue or infer that companies "know" millennials more thoroughly** than they know their older consumers.

Data on individuals and their daily habits fuels marketing, advertising, and ultimately thoughtful business structuring. Now that we have more information on consumers by many orders of magnitude, it is worth considering the implications for **exponential growth in businesses' intelligence, efficiency, and profit margin in the future.**

A minority of those surveyed have taken an interest in seeing theirs. More often than not, millennials—who generate more personal data—are the ones who care to see it



Millennials:

- 1. Generate more data
- 2. Have more interest in what data exists about them
- 3. Care **less** about how their personal data is used or repurposed by third parties

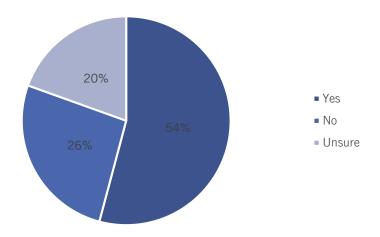
COMMERCIALIZING EXISTENCE

Privacy, personal data, and price—who sets the value for a person's data...and can there ever be consensus on valuation?

Over half of those surveyed prefer a "cheap" life over a "private" (un-traceable) one:

Are you okay with a company commercializing your data if it means a product you currently use remains free?

(Everyone)



It is meaningful that an overwhelming majority of both protomillennials and millennials **prefer free services to private (fee-for-anonymity) services**. This potentially indicates:

- Deep integration and frequent usage. It is not hard to imagine how certain applications, sites, or services might be used so often that an additional, premium payment for data privacy might become cost-prohibitive
- Desensitization. Fundamental cultural shifts in how we communicate, network, run businesses, travel, shop, and even access healthcare have changed so dramatically that baseline assumptions about privacy and safety may simply be shifting across the board.
- Data: Capital Asset...or Labor? As the volume of data at our disposal expands and explodes, the question of how to value it becomes more pertinent, challenging, and relevant.

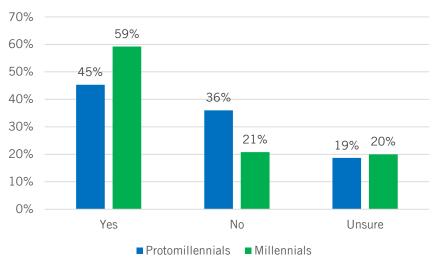
But at the same time that thought leaders and bankers are considering how to value data *as an asset*, some economists are pointing out that *data can be considered a form of labor*, since it is the direct result of the actions (commutes, purchases, decisions, and more) perpetrated by individuals on a daily basis.⁴

DAREDEVILS, DREAMERS, OR DISENFRANCHISED?

Privacy, personal data, and price—who sets the value for a person's data...and can there ever be consensus on valuation?

...but protomillennials are more likely to expect ownership of data that is pertinent to their individual identity:

Are you okay with a company commercializing your data if it means a product you currently use remains free?



Of note:

 Daredevils, dreamers, or disenfranchised? Millennials are 30% likelier to rest easy knowing a company is commercializing their data.

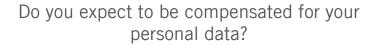
And they also don't feel entitled to compensation.

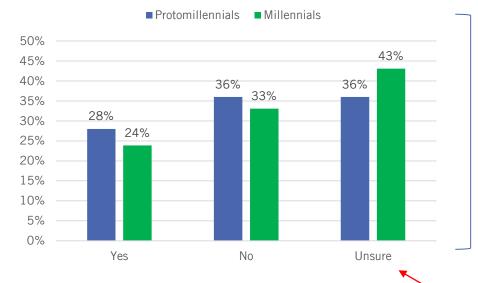
While this kind of behavior has earned them the reputation of being imprudent, it begs the question: Can we reasonably expect millennials, who were born just 24 months before the internet hit the masses, to demand privacies they never witnessed?

- BUT: as many as one fifth of millennials still report they're not comfortable with their data being commercialized. This suggests that perhaps the majority of millennials are not daredevils so much as unaware of their rights or unable to articulate them.
- Frugal or fearful? To further the above point, a statistically significant minority—about a fifth of both generational groups—have not yet formed an opinion about whether a "cheap" or "private" life is preferable.

EXISTING IN A CULTURE OF COMMERCE

Commercialization hits squarely at the heart of regulatory issues as well as the fundamental tectonic shifts in our culture that will persist for years to come.



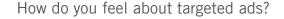


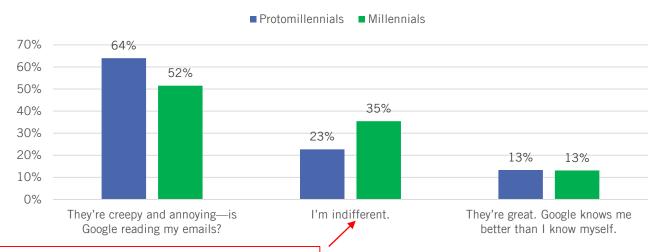
Key takeaways:

- Only a quarter of respondents expect to be compensated for their data
 - 15% more protomillennials expect to be compensated for their personal data than millennials. This may be due to the cultural context they grew up in, which predated the internet.
- Free to Be You and Me. More than a third of respondents do not expect to be compensated for their data.
- Still Unclear out Here on the Frontier. Almost half of respondents are "unsure" if they expect to be compensated for their personal data.
 - It's notable that so many are still forming an opinion on this question, which sits at the intersection of several daily considerations—identity, compensation, and safety, to name just a few. This speaks to the newness of the issue and the lack of clarity around its implications for the future.
 - Millennials over-index for responses in this category, revealing that they remain hesitant to form firm opinions on the matter this early in its development
 - With 40% of total respondents claiming that they are "unsure" if they expect to be compensated for their personal data, we want to know: who will step in to shape this debate and their opinions?

EXISTING IN A CULTURE OF COMMERCE

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Millennials are more likely than their elder counterparts to have no opinion on the ethics, normalcy, or acceptability of targeted ads.

Refresher: Targeted ads allow companies to collect your personal data and/or online activity and disseminate it to third parties. This allows these third parties to mount highly targeted and specific advertising campaigns on your personal device.

Advertising—though not historically driven by Artificial Intelligence and machine learning—is one of the longest-standing motivations for businesses to leverage consumer data for business ends.

Besides Targeted Ads, Where's My Personal Data Going?⁵

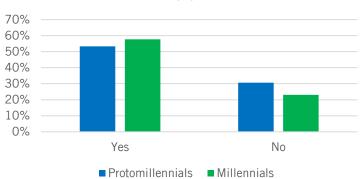
- Political campaigns
- Artificial Intelligence Researchers/Developers
- Suggestion Engines on Media Platforms
- Various government agencies (e.g. Immigration and Customs Enforcement)
- Insurance Companies

- Though protomillennials are generally more disturbed by targeted ads than millennials, the younger generation is not immune to feeling spied upon
- More than half of millennials find targeted ads to be creepy, and over 60% of protomillennials share this view
- Interestingly, more than a third of millennials are indifferent to the use of their personal data in creating targeted ad campaigns.
 - This stat may at first appear to be a non-event, but to the contrary—it is astounding.
 - Today, a third of the generation of rising leaders has no particular opinion about the fact that their personal data drives revenue for some of the biggest, highlyvalued, and most influential companies in the market

WHO EXPECTS PRIVACY AND OWNERSHIP OF PERSONAL DATA?

Millennials are more attuned to data privacy issues...

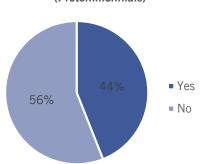




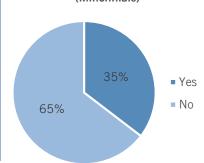
...and less likely to adjust their behaviors accordingly.

Has a widely-publicized data breach ever scared you into materially changing your privacy behaviors?

(Protomillennials)

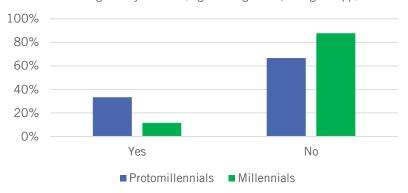






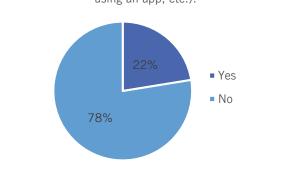
...but less likely to allow them to interrupt their plans...

Do concerns about keeping your data private ever stop you from doing what you want (e.g. visiting a site, using an app)?



But at the end of the day, almost no one lets privacy concerns dictate their behavior.

Do concerns around keeping your data private ever keep you from doing what you want (visiting a site, using an app, etc.)?



OPEN SESAME: TO UNLOCK CROSS-GENERATIONAL COMMONALITIES, LOOK NO FURTHER THAN PASSWORD CREATION

Protomillennials and millennials exhibit virtually identical behaviors when it comes to locking their iPhones and computers.

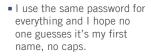
How do you approach password-creation for your

various accounts?

(Protomillennials)

21%

5%



 My password is hard to guess, but if you figure it

out, you could hack any and

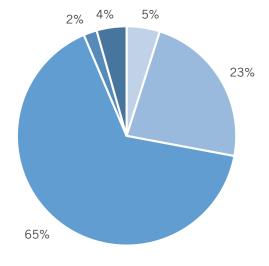
all of my accounts.

- I use a few different passwords for my various accounts. I think it'd be hard to hack my whole life in one fell swoop.
- Compliance officers love me. All my passwords are different and impossible to guess.
- I'm next-level. I use a password encryption service like LAST PASS, which works like a two-step authentication process for all of my accounts.

How do you approach password creation for your various accounts?

(Millennials)

- I use the same password for everything and I hope no one guesses it's my first name, no caps.
- My password is hard to guess, but if you figure it out, you could hack any and all of my accounts.
- I use a few different passwords for my various accounts. I think it'd be hard to hack my whole life in one fell swoop.
- Compliance officers love me.
 All my passwords are different and impossible to guess.
- I'm next-level. I use a password encryption service like LAST PASS, which works like a two-step authentication process for all of my accounts.

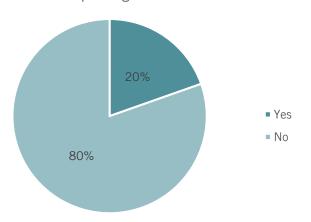


67%

IN TERMS OF THE "TERMS OF SERVICE"

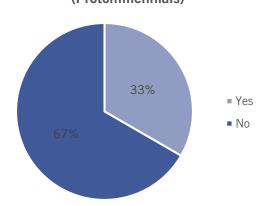
We're still waiting patiently for the day someone reads the fine print...

Does **anyone** read the Terms of Service or Privacy before consenting when using an app, downloading software, or updating a device?



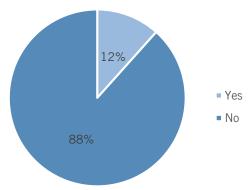
Do you ever read the Terms of Service or Privacy before you consent to them when using an app, downloading software, or updating devices?

(Protomillennials)



Do you ever read the Terms of Service or Privacy before you consent to them when using an app, downloading software, or updating devices?

(Millennials)



THE DATA DEBRIEF: DELINEATING DEMOGRAPHIC DATA DIFFERENCES

Phase II in 1 slide

Most millennials have no memory of the world without the internet. Protomillennials, on the other hand, launched their careers before or during its integration into daily life. As a result, each demographic's fundamental values differ greatly on various topics that make up the bedrock of today's culture—including but not limited to personal data privacy, the freedom and ease with which we access data and content, using social media platforms, and taking selfies:

Born before 1981

Tend to expect privacy and ownership of their personal data

This colors their worldview and personal and professional interactions

It shapes their expectations for how partners should conduct business and how they expect to be treated

brokers-quietly-buying-and-selling-your-personal-information

Expect their personal information to be public knowledge

Enter interactions assuming that counterparts may already know details about their career and past Born in/after 1981

Data Dichotomies

- 1. Millennials are more attuned to data privacy issues, but less likely to allow them to interrupt their plans, and less likely to adjust their behaviors accordingly. At the end of the day, almost no one lets privacy dictate their behavior.
- 2. Millennials generate more data and have more interest in what data exists about them, but care less about how their personal data is used or repurposed by third parties

LOOKING FORWARD

Upcoming surveys in the Jefferies Millennial Survey Series

Personal Data and Privacy Survey

Media, Corporate, and Governmental Trust Survey



Footnotes

- 1. "History of Computers: A Brief Timeline," Kim Ann Zimmerman, https://www.livescience.com/20718-computer-history.html
- 2. "Google Photos: One year, 200 million users, and a whole lot of selfies," Anil Sabharwal, Google Blog, https://www.blog.google/products/photos/google-photos-one-year-200million/
- 3. "Who Owns Americans' Personal Information and What is It Worth?," Robert Shapiro and Siddhartha Aneja, https://assets.futuremajority.org/uploads/report-for-future-majority-onthe-value-of-people-s-personal-data-shapiro-aneja-march-8-2019.pdf
- 4. "Should we treat data as labor? Let's open up the discussion," Brookings, February 21, 2018, https://www.brookings.edu/blog/techtank/2018/02/21/should-we-treat-data-as-
- labor-lets-open-up-the-discussion/ Indeptite the Data Brokers Quietly Buying and Selling Your Personal Information," Fast Company, 2 March 2019, <a href="https://www.fastcompany.com/90310803/here-arg-the-fasta-the-fast

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