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# Close encounters of the AI kind:

## The increasingly human-like way people are engaging with language models

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ELON UNIVERSITY | Imagining the Digital Future Center

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Imagining THE Digital Future CENTER

## Key datapoints in this survey

**52%** of American adults now use AI large language models (LLMs) like ChatGPT, Gemini, Claude and Copilot

**51%** of LLM users say their main activity on the tool is for **personal, informal learning**, twice as many as use LLMs **for work purposes (24%)**; among workers, 46% say their main purpose is personal and 32% say their main purpose is for work

**65%** of users have had **spoken conversations** involving back-and-forth interactions with an LLM, including **34%** who regularly do this at least several times a week

**49%** of LLM users think the models they use **are smarter than they are**

**76%** of LLM users are satisfied with the performance of LLMs, including **25%** who are very satisfied

**54%** say their use of LLMs has improved their **productivity** a lot/somewhat; **42%** say their use has improved their **creativity**

### Human-like traits

- **39%** say the main LLM they use shows the capacity **to think and reason** at least some of the time.
- **32%** say it seems to have a **sense of humor.**
- **25%** say it acts like it **makes moral judgments** about right and wrong.
- **24%** say it seems like it expresses **hope.**
- **17%** say it seems to respond **sarcastically.**
- **11%** say it seems to express **sadness.**

### Darker impacts

- **50%** of LLM users say they have felt **lazy** when they use LLMs.
- **35%** have felt they were **cheating**.
- **35%** have felt frustrated or **confused**.
- **33%** have felt they were becoming **too dependent** on LLMs for answers rather than thinking through things themselves.
- **23%** say they made a **significant mistake or bad decision** by relying on information generated by LLMs.
- **21%** have felt **manipulated** by the model.

## Insights into our survey

The material reported here comes from a nationally representative survey of 500 users of large language models (LLM) conducted between Jan. 21-23, 2025. It has a margin of error of +/- 5.1 percentage points. An LLM user is someone who answered “yes” to this question: “Do you ever use artificial intelligence (AI) large language models (also known as LLMs or generative AI), such as ChatGPT, Google’s Gemini, Anthropic’s Claude, Microsoft’s Copilot or an open source LLM?”

# Close encounters of the AI kind
## Executive summary

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Half of Americans now use artificial intelligence (AI) large language models like ChatGPT, Gemini, Claude, and Copilot. Since the launch of ChatGPT on Nov. 30, 2022, the spread of LLM usage in this country represents one of the fastest, if not the fastest, adoption rates of a major technology in history.

The growth and spread of these AI systems in the U.S. population are especially striking for their diversity. Younger, well-educated, relatively wealthy, and employed adults are somewhat more likely than others to be using LLMs now. Yet, it is also the case that half of those living in households earning less than $50,000 (53%) use the tools. Moreover, Hispanic adults (66%) and Black adults (57%) are more likely than White adults (47%) to be LLM users.

## Key usage patterns

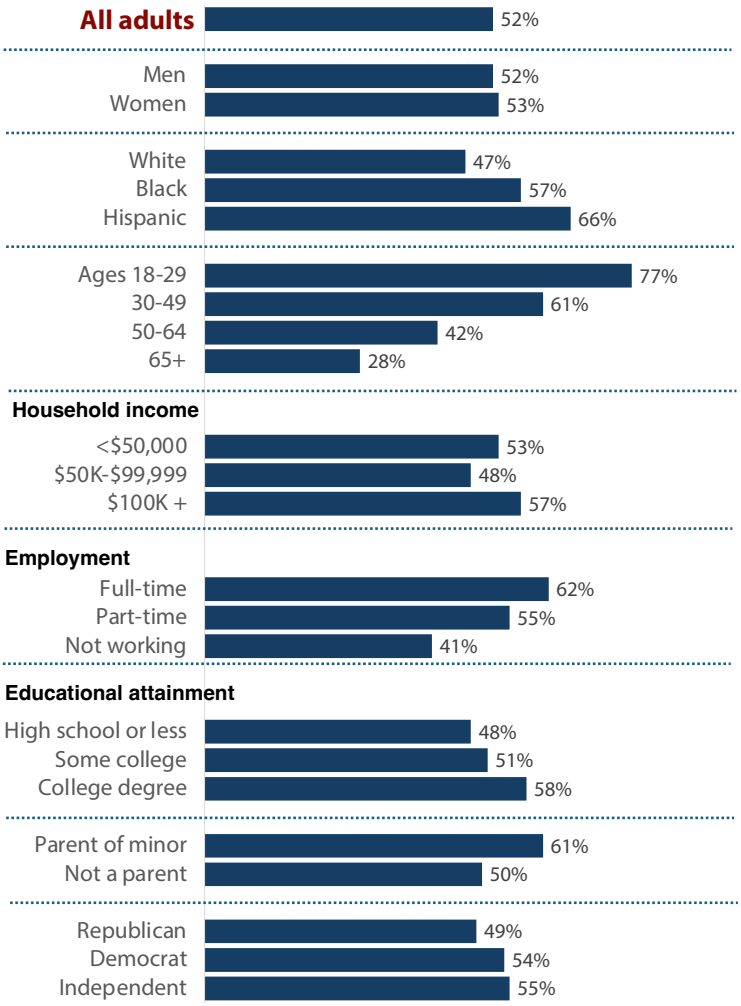
**What LLMs people use:** ChatGPT stands out as the most commonly used LLM. **Fully 72% of LLM users say they have used ChatGPT**, while 50% have used Google's Gemini, 39% have used Microsoft's Copilot, 20% have used Meta's LLaMa, 12% have used xAI's Grok and 9% have used Anthropic's Claude and 9% say they have used other LLMs.

**How they use LLMs:** 34% of LLM users say they do so at least **once a day**, including 10% who say they use the tools "almost constantly." Another 18% say they use LLMs several times a week.

**Why they use LLMs:** Personal uses, rather than work-related uses, are the main activity. Half (**51%) say the main purpose for their LLM use is personal, informal learning** on their own. Some 24% say for **work** purposes; 11% say for **school** purposes. Fully two-thirds (68%) have ever used LLMs for informal learning on their own; 60% have ever used them to amuse or entertain themselves and 52% have ever used them for work activities. Among those who work, 46% say their main purpose is personal, compared with 32% who say the main purpose is work.

### Half of American adults use AI large language models such as ChatGPT, Gemini, Copilot or Claude

% of U.S. adults who ever use (AI) large language models




Note: There is not enough sample to report Asian American results
Source: Elon University Imagining the Digital Future Center survey conducted Jan. 21-23, 2025

**Special uses of LLMs:** The survey covered a host of particular uses of LLMs and found that: Two-thirds use them like **search engines**; about half use them for **brainstorming ideas** and summarizing documents; a third use them to create presentations and **plan things like trips**; a quarter use them for planning **social gatherings** and **writing computer code**. And 23% have used LLMs to look up **what the models say about people** they know, while 18% have looked up what a model says about themselves.

# Close encounters of the AI kind
## Executive summary

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### Human-like interactions with LLMs

A notable share of LLM users have had human-like social interactions with these tools. Indeed, 38% of users believe it is very or somewhat likely that in the next decade LLMs will form **deep relationships with humans**. Right now, LLM users say this:

- 65% have had **spoken conversations** with back-and-forth interactions with LLMs, including 34% who regularly do this at least several times a week.
- 40% say the LLM they use most acts like it **understands** them at least some of the time.
- 25% say the LLM they mostly use **cheers them up.**
- 22% say their primary LLM seems to express **empathy.**
- 9% of LLM users said the main purpose they use LLMs is for **social kinds of encounters like casual conversation and companionship.**
- 7% say the main model they use seems to respond in a **jealous way.**

### Attributes of LLMs

Half of LLM users (49%) think the models they use are **smarter than they are**, including 26% who think their LLMs are "a lot smarter." Another 18% think LLMs are as smart as they are. Here are some of the other attributes they see:

- **Confident:** 57% say the main LLM they use seems to act in a confident way.
- **Reasoning:** 39% say the main LLM they use shows the capacity to think and reason at least some of the time.
- **Sense of humor:** 32% say their main LLM seems to have a sense of humor.
- **Morals:** 25% say their main model acts like it makes moral judgments about right and wrong at least sometimes.
- **Sarcasm**: 17% say their prime LLM seems to respond sarcastically.
- **Sad:** 11% say the main model they use seems to express sadness, while 24% say that model also expresses hope.

### Performance and impact

**Overall performance:** Three-quarters of LLM users are **"very"** or **"somewhat" satisfied** with the LLMs performance, including 25% who are very satisfied.

- **Productivity:** 54% say their use of LLMs has improved their productivity a lot or somewhat.
- **Learning:** 50% say their use of LLMs has improved their ability to learn new skills and concepts a lot or somewhat.
- **Creativity:** 42% say their use of LLMs has improved their creativity a lot or somewhat.
- **Darker impacts:** People have felt **lazy** when they use LLMs (50%); felt they were **cheating** (35%); felt frustrated or **confused** (35%); felt they were becoming **too dependent** on LLMs for giving them answers rather than thinking through things themselves (33%), made a **significant mistake or bad decision** by relying on information generated by LLMs (23%); compromised their privacy (21%); felt **manipulated by the LLM (21%).**

## Future expectations about the impact of LLMs on people's daily lives

These LLM users render mixed judgments about how these models will evolve and affect the quality of people's daily lives in the future: 28% believe the effect will be **more positive** than negative; 20% think it will be **more negative** than positive; 32% think there will be an **equal mixture of positive and negative** impacts and 6% think there will not be much of an impact. Asked about a variety of outcomes in the next decade, people are **mostly positive** about these:

- 62% think it is very or somewhat likely that the spread of LLMs will lead to **major new medical and scientific breakthroughs**.
- 55% say it is likely LLMs will be **controlled by human beings and responsive to human needs**

LLM users are **more negative** about these future outcomes:

- 63% think it is very or somewhat likely that the spread of LLMs will cause **social isolation by replacing a lot of human-to-human communication.**
- 59% think it is likely that the models will cause a significant **loss of jobs, even after counting the new jobs that are created**.
- 53% say LLMs will likely **surpass human intelligence in most important ways**.
- 45% think the models will contribute to **serious social upheaval**.
- 40% believe LLMs will likely **develop their own identity and goals**.

These LLM users also predict some general impacts:

- 43% think the spread of LLMs in the next decade will **considerably change the way they spend their leisure time.**
- 40% think the models will **dramatically change the kind of work they do**.
- 38% think LLMs will **form deep relationships with people**.

These are among the key findings of an Imagining the Digital Future Center national survey representing the full range of LLM users in the U.S. adult population. It is among the first, if not the first, nationally representative probability sample of all adult LLM users on how they use and think about the models and their role in their lives. The survey was conducted among 500 language model users drawn from the national SSRS Opinion Panel between Jan. 21-23 and has a margin of error of +/- 5.1 percentage points.

## The user population

The rise of large language models has been historic. In less than two-and-and-half years, half the adults in America say they have used LLMs. Few, if any, communications and general technologies have seen this pace of growth across the entire population.

A surging wave of adoption in the past year has been added to the early adopters. It is now the case that the share of women using LLMs is the same as that of men. Notably higher shares of Hispanic adults and Black adults use LLMs, compared with White adults. There are strikingly small differences among those with different levels of household income and those with different levels of educational attainment. Those who work full-time (62%) and part-time (55%) are relatively likely to use LLMs. Yet, it is also true that 41% who are not employed – such as retirees, homemakers and those with disabilities – use the models.

There are some interesting differences among different classes of workers: High-level executives, science professionals and licensed professionals such as educators and even junior managers are particularly likely to use LLMs. Still, these other groups are LLM users: 62% of frontline retail and service workers such as store clerks and restaurant wait-staff, 56% of junior-level clerical workers and 43% of skilled farmers and factory workers.

Notably, households with minor children (61%) are more likely than those without minors (50%) to be LLM users.

Two other significant developments have occurred since LLMs were launched in a friendly interface in ChatGPT: The first is the explosive growth of specialized LLMs that focus on specific subjects like law, chemistry or climate issues. When it comes to people's use of **specialized models** among these LLM users, we found:

- 80% of LLM users have tried special models that help them **do research.**
- 75% have tried special models that help them **write.**
- 67% have tried special models that help them with **tutoring and learning.**
- 66% have tried special models that help them **pursue lifestyle and hobby activities.**
- 59% have tried special models that help them **design creations.**
- 42% have tried special models that help them with **computer coding.**

The second way LLMs are spreading is the inclusion of LLM bots and tools in commonly used digital applications such as email, document creation, and social media apps. The fact that LLMs are now incorporated in common applications suggests that the total universe of LLM users is larger than we captured in our overview because people might be using LLMs without knowing the tools are employed in the everyday products they use. Our questions about **LLM use in existing digital applications** found:

- 61% of these LLM users have used language model applications inserted into **social media platforms.**
- 58% have used LLM apps inserted into **text messaging systems.**
- 58% have used LLM apps inserted into **photo-editing software.**
- 51% have used LLM apps inserted into **email programs.**
- 47% have used LLM apps inserted into **video conferencing software such as Zoom.**
- 41% have used LLM apps inserted into **word-processing programs.**
- 38% have used LLM apps inserted into **presentation software** such as PowerPoint.
- 36% have used LLM apps inserted into **graphic design software.**
- 34% have used LLM apps inserted into **spreadsheets.**
- 25% have used LLM apps inserted into **project management or collaboration tools such as Slack.**

**Frequency of use of LLMs**
LLM use is becoming a habit with a portion of users, including the third of users who say they employ the models daily:

- 10% say they use LLMs almost constantly.
- 14% use them several times a day.
- 10% use them about once a day.
- 18% use them several times a week.
- 48% use them less often.

Usage patterns exist relatively consistently across most groups. At the same time, it is the case that younger LLM users are more likely to use LLMs daily than older users.

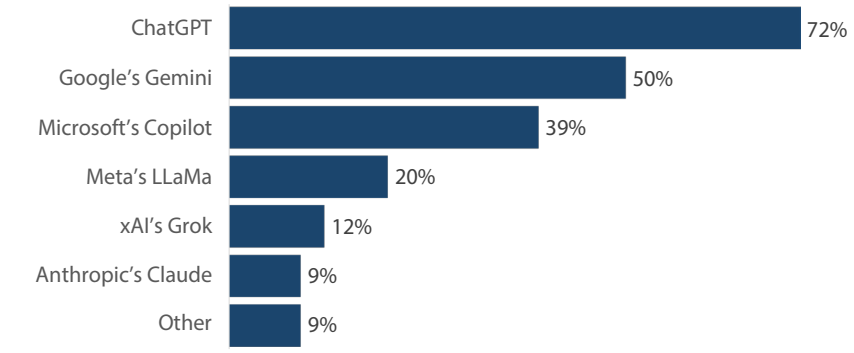
At this moment, most users are still getting a feel for the tools and do not think they are experts. Some 16% self-describe as extremely or very skilled, while 28% believe they are moderately skilled, 29% say they are slightly skilled and 27% say they are "not skilled at all."

**The language models they use**
ChatGPT is the most commonly used LLM, followed by Gemini. Some 58% of LLM users have tried two or more models. ChatGPT also stands out as the LLM that people use the most.

When asked if they have a **paid subscription** for the LLMs they use, 20% said they do, and most of those using paid-for models have the subscription costs covered by another party rather than themselves. Just 4% of LLM users say they pay for a subscription themselves. Fully 80% of model users say they use the free versions.

**ChatGPT is the most commonly used large language model**

*% of AI large language model users who ever use these tools*




Source: Elon University Imagining the Digital Future Center survey conducted Jan. 21-23, 2025

We also asked these LLM users if they had ever **used AI image generators** such as DALL-E, Midjourney, Adobe Firefly or ImageFX. Fully 67% of LLM users said they also have used such image generators: 18% said they did so at least once a day or more often; 12% said they had done so several times a week and 36% said they had used image generators less often than that.

## How and why people use LLMs

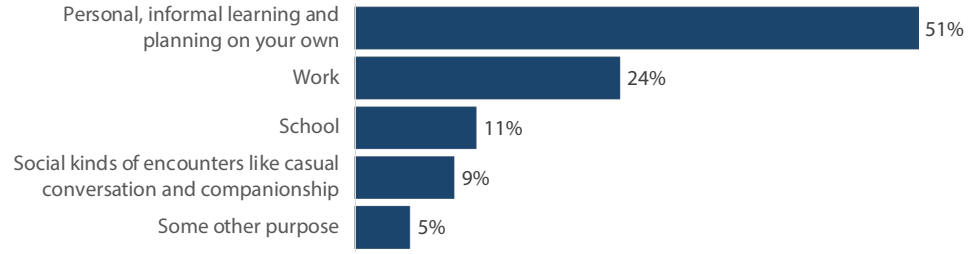
Much of the focus on the rise of LLMs has been on people's use of the models in workplaces. This survey finds that when a probability sample of the whole adult population is canvassed, people are **far more likely to say that personal uses are more common than work-related uses.** Among a range of possible uses, more people cite personal uses like informal learning and personal amusement than cite work activities. When they are asked about the main purpose they use LLMs, twice as many say personal, informal learning and planning (51%) than say work activities (24%).

There are serious implications in these findings. Among other things, they show the degree to which LLMs are now being used in the way that people have used search engines for decades, including quick access to information, queries about products and services and getting news and information.

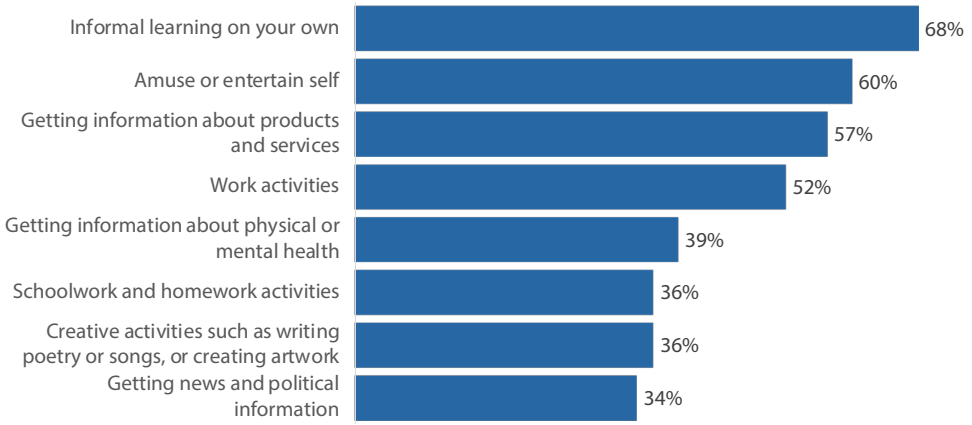
This has enormous implications for media, marketing and the basic sale of goods and services. It also suggests the profound impact LLMs might have on political and civic processes. Moreover, they suggest that for segments of the LLM-user cohort, the models are being incorporated into their basic learning and exploration activities and the creative process. Here are some of the demographic insights these findings generate:

**People use large language models for a variety of activities, starting with personal, informal**

*% of AI large language model users who say this is the **main purpose** they use LLMs*




*% of AI large language model users who **ever use** LLMs for these activities*




Source: Elon University Imagining the Digital Future Center survey conducted Jan. 21-23, 2025

**Informal learning on their own:** This is particularly true for the LLM users who are men.

**Amuse or entertain themselves:** This is especially true for men and LLM users without college degrees.

**Information about products and services:** This is particularly true for men who are LLM users and those ages 55 and older.

**Work activities:** LLM users under age 55, those who live in higher-income households, and those with college degrees are more likely to pursue these activities.

**Physical and mental health:** Adults under age 65 and those in households earning less than $50,000 are particularly likely to use LLMs.

**Creative activities such as writing poetry or songs or creative artwork:** This use of LLMs is especially popular with users under age 55 and those living in households earning less than $100,000.

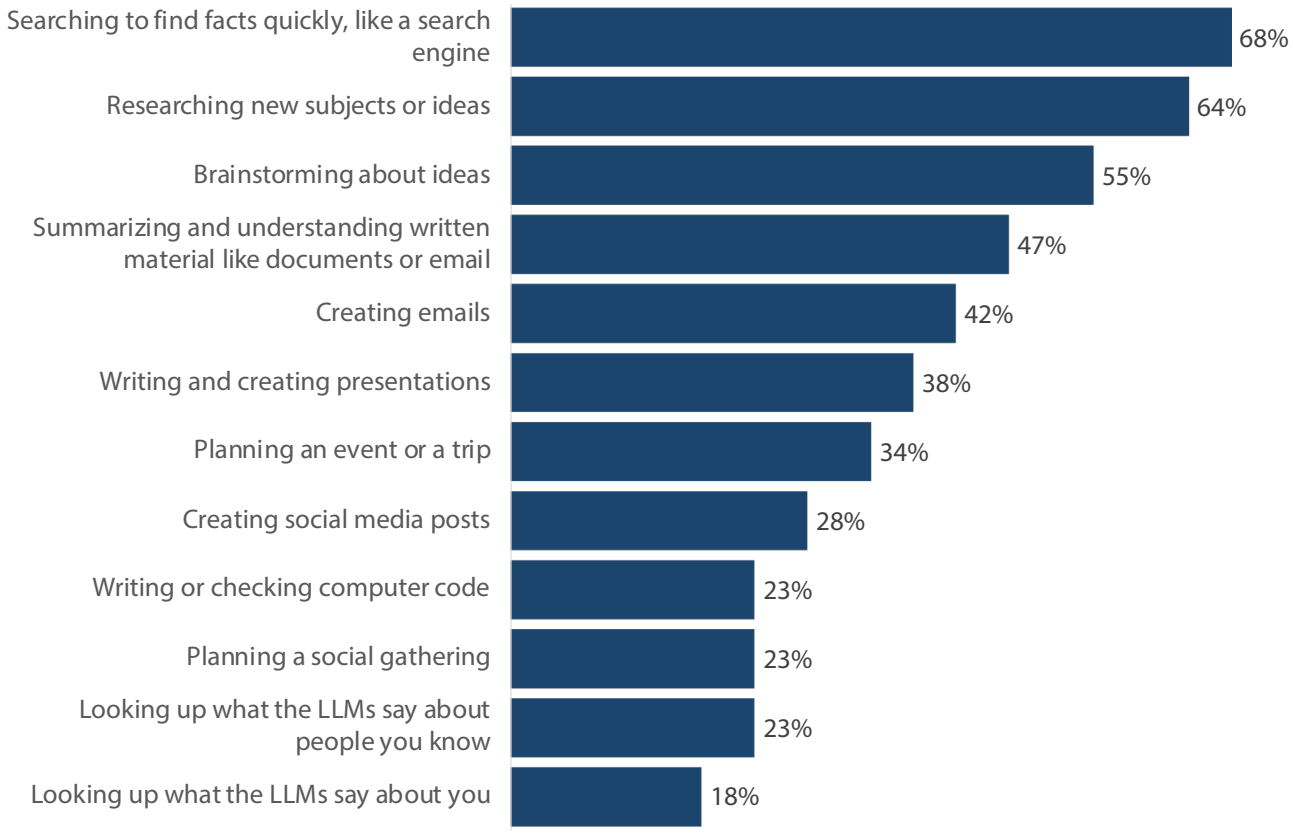
**Schoolwork and homework:** This is especially true for the LLM users under age 55 and those who live in a household earning less than $50,000.

**Political news and information:** The LLM users who are Republicans are more likely than Democrats to use the models this way, as are those who do not have college degrees.

The survey also covered a dozen other specific possible uses of LLMs. The responses show some of the diverse purposes that LLMs are serving, ranging from using them like search engines and for researching new subjects to planning social gatherings and even checking up on what the models say about them.

## People use AI large language models for these tasks

*% of AI large language model users ever use LLMs for these tasks*




Source: Elon University Imagining the Digital Future Center survey conducted Jan. 21-23, 2025

Some interesting demographic differences exist in some of the activities queried here. They include:

- **By gender:** Men who are LLM users are more likely than women to use the models to research new subjects or ideas. On the other hand, women who use LLMs are more likely than men to use the models to plan an event or trip and to plan a social gathering.
- **By education:** Those with college degrees are more likely than those who ended their education at high school or less to use LLMs for researching new subjects or ideas and for writing and creating presentations. In contrast, those with high school or less are more likely than those with college degrees to use LLMs to create social media posts.
- **By race and ethnicity:** Comparing White LLM users with non-White LLM users, non-White users are more likely to use the models to summarize and understand material like documents or emails; to use the models to write or check computer code; to write social media posts and to look up what LLMs say about people they know.
- **By age:** Younger LLM users are more likely than older users to employ LLMs to write code.

## The traits of language models – intelligence and conversation

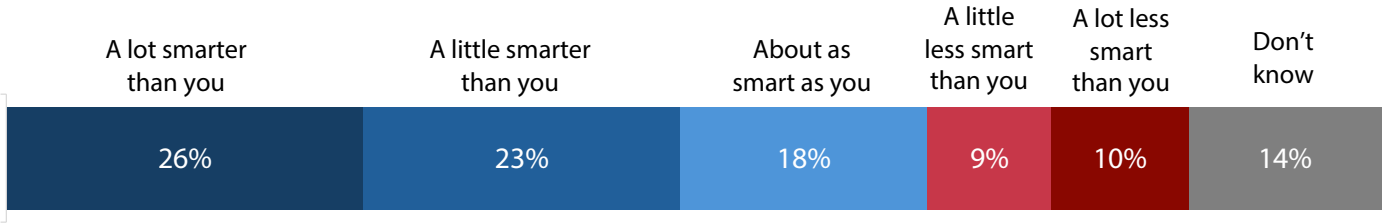
Those who use LLMs experience the models in a wide range of encounters and think the models seem to show diverse reactions and stances toward them. This illustrates the degree to which these generative AI tools represent new ways for people to experience and exploit technology – and also new ways for technology to mimic, exploit and even surpass human-like "behaviors" with people. These findings have special relevance as model builders feverishly **rush to create AI agents** that they hope to promote as entities that can act on their users' behalf and represent their users.

LLM systems are often benchmarked against standard human intelligence tests. The race to create human-level artificial general intelligence (AGI) is the driving force behind big tech firms' development of LLM systems.

In this survey, LLM users were asked about this, and about half (49%) said they thought the models were at least a little smarter than they are. A quarter said the models they use are a lot smarter than they are; another 23% said the models are a little smarter and 18% said the models are about as smart as they are. Women who use LLMs were more likely than men to think the models are a lot smarter (30% vs. 20%). The LLM users with college degrees were more likely than those with less education to say the models are a lot less smart than they are.

### Large language model users think the AI systems are at least a little smarter than they are

*% of AI large language model users who think the LLMs they use are _____*




* Those who did not answer are not shown. **Numbers may not add up to 100% due to rounding. | Source: Imagining the Digital Future survey, Jan. 21-23, 2025

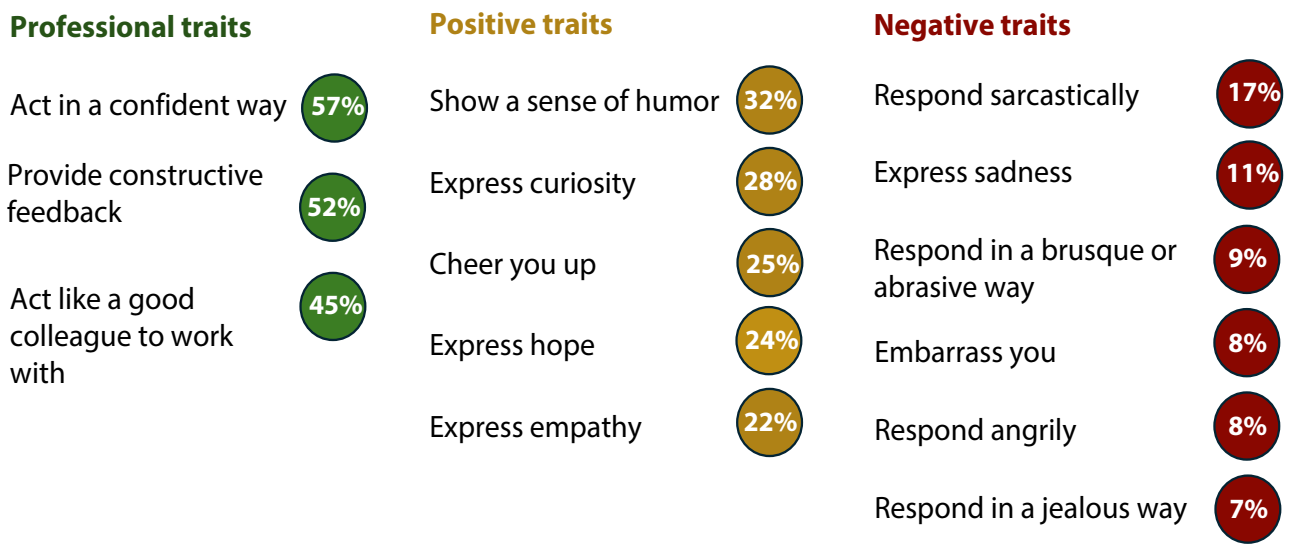
Another dramatic example of how LLMs show human-like traits is their capacity to be involved in conversation and social interaction with users. The survey shows that **65% of LLM users have had a back-and-forth discussion with an LLM where they used their voice and the model replied in a realistic voice.** Their demographic profile is significant: 76% of the LLM users in households earning less than $50,000 have conversations with the models and 83% of the non-White users have such conversations.

A third of LLM users can be viewed as **"regular conversation users"** – they say they have conversations with LLMs almost constantly (3%), several times a day (11%), about once a day (6%) or several times a week (13%). Another 31% say they have conversations less often than that. Those regular conversation users are especially likely to be ages 18-34, in lower-income households and hold a high school diploma or less. These regular conversation users stand out from other LLM users in a host of ways for their attachments to LLMs and the use of LLMs (see section **"The special habits and views of LLM conversation users"** below).

This survey sought to capture model-user views across several traits. Users were the most enthusiastic about the professional-looking traits. They were generally more likely to say the models exhibited positive traits like humor, curiosity, hope, and empathy than negative traits like jealousy, anger, sadness and sarcasm.

## Language models have a range of personality traits, users say

*% of AI large language model users who think LLMs seem to exhibit these traits*

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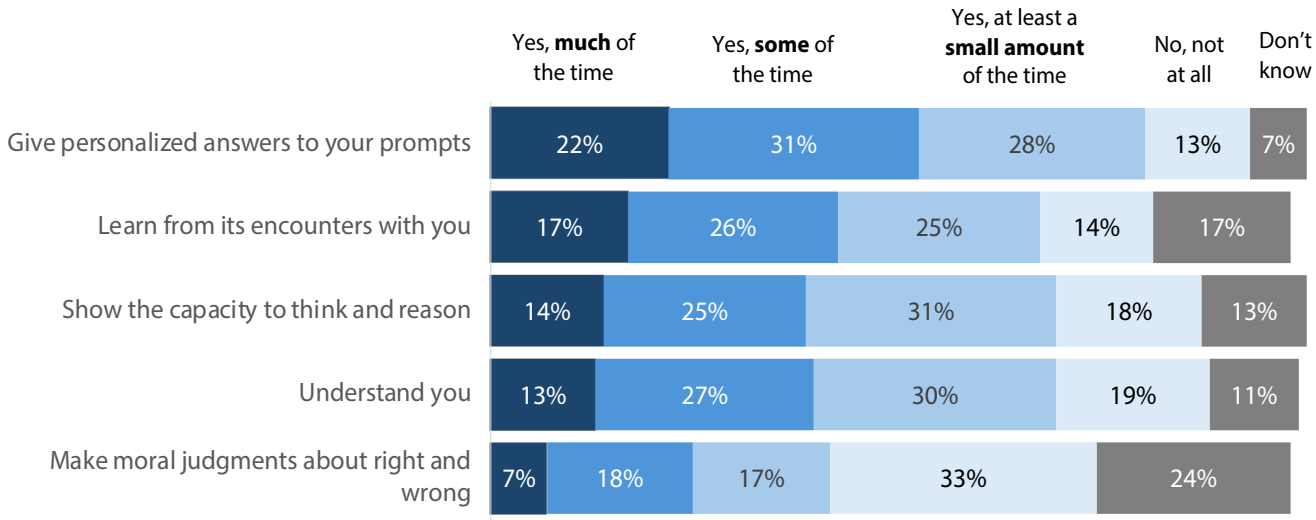
Interestingly, the demographic data on these questions do not show strikingly different patterns. People of all groups of LLM users tend to see these personality traits in the same way.

We also asked about some possible attributes of the models on some kinds of social behavior and social learning activities that are possible with LLMs. About half of model users (53%) say the LLMs they use **give personalized answers** to their prompts much of the time or some of the time. In addition, 43% say the models **learn from their encounters** with them much/some of the time. More strikingly, shares of model users say LLMs show the **capacity to think and reason**, to **understand the user** and **make moral judgments** about right and wrong. In all these examples, notable shares say LLMs "at least a small amount of the time" show each attribute.

## Large language model users think the models at times have some human-like social attributes

*% of AI large language model users who think the LLMs they use act like they _____*




* Those who did not answer are not shown. **Numbers may not add up to 100% due to rounding. | Source: Imagining the Digital Future survey, Jan. 21-23, 2025

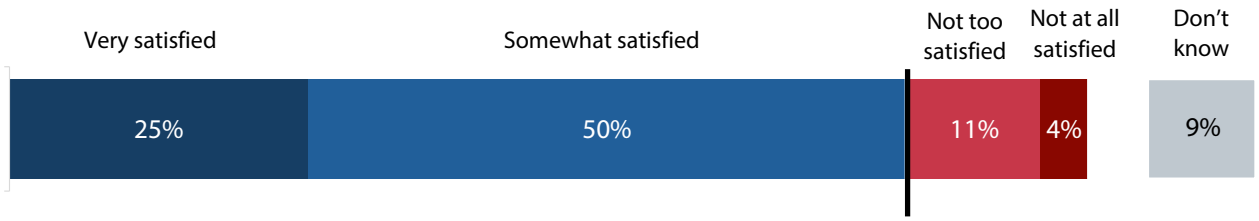
## How LLMs perform for users and affect them

In all, 76% of LLM users say they are very satisfied (25%) or somewhat satisfied (50%) with the overall performance of the models. Just 11% are not too satisfied and 4% are not at all satisfied. Young adults ages 18-34 are particularly likely to express satisfaction – 81% are very/somewhat satisfied. Otherwise, there are no notable demographic differences.

Unpacking that issue a bit, we asked about certain dimensions of LLMs' performance and found majorities of users were very or somewhat satisfied with the models' accuracy, the completeness of the answers they get and the fairness of the models. Additionally, 47% said they were very/somewhat satisfied with the models' care in following ethics, compared with 25% who said they were not too satisfied or not at all satisfied.

## Large language model users are pretty satisfied with their performance

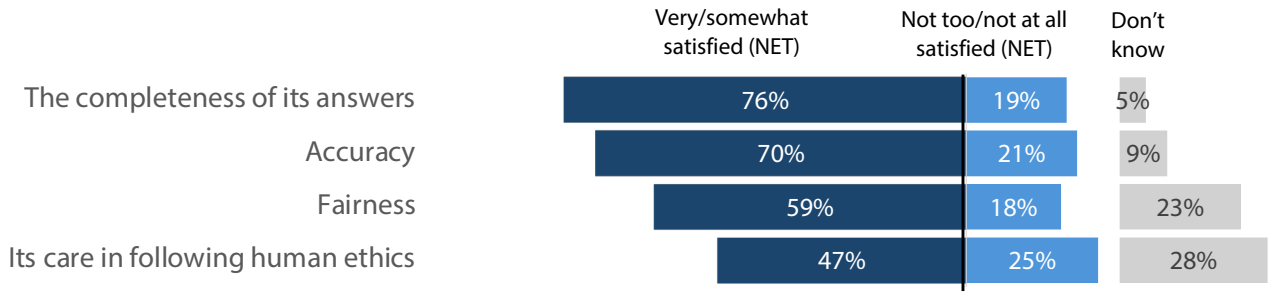
*% of AI large language model users who say they are _____ with the overall performance of LLMs they use*




* Those who did not answer are not shown. **Numbers may not add up to 100% due to rounding. | Source: Imagining the Digital Future survey, Jan. 21-23, 2025

## Large language model users appreciate key aspects of the models' performance

*% of AI large language model users who say they are _____ with the overall performance of LLMs when it comes to ...*

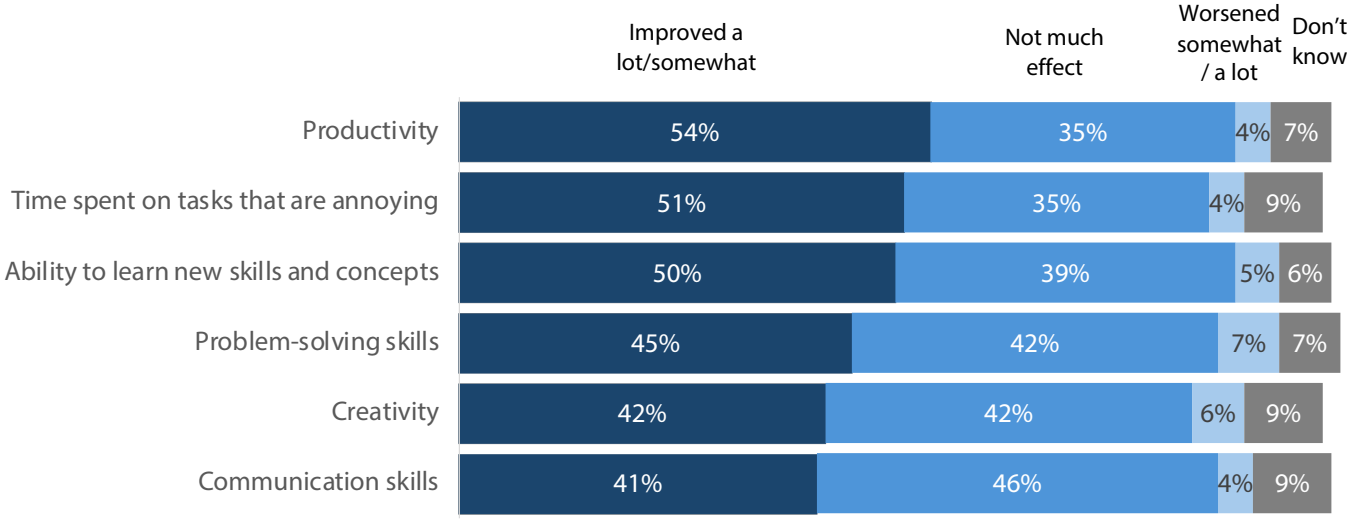



* Those who did not answer are not shown. **Numbers may not add up to 100% due to rounding. | Source: Imagining the Digital Future survey, Jan. 21-23, 2025

One demographic difference worth noting: 74% of the women who use LLMs are satisfied with the models' accuracy, compared with 65% of LLM users who are men. We also used several different lines of questioning to assess LLMs' impact on users. One batch of questions looked at some of the possible ways LLM use might affect some practical aspects of everyday life. Modest majorities reported that their use of the models improved their productivity a lot or somewhat, lessened the amount of time they spend on annoying activities, and improved their **ability to learn new skills** and concepts. In addition, about 4-in-10 reported some level of improvement in their **problem-solving skills**, their **creativity** and their **communications skills** thanks to their use of LLMs.

## Some of the ways large language model users say the models have affected them

*% of AI large language model users who say their use of LLMs has affected their _____*




* Those who did not answer are not shown. **Numbers may not add up to 100% due to rounding. | Source: Imagining the Digital Future survey, Jan. 21-23, 2025

LLM users with college degrees were particularly likely to report that their LLM use had improved their productivity and lessened the time they spend on annoying tasks. Those without college degrees were especially likely to report that their LLM use had improved their ability to learn new skills and concepts and their creativity. Non-White users were more likely than White users to say their use of the models improved their communication skills and their problem-solving abilities.

Significant shares of LLM users also report that they have turned to the models when they were seeking help on **major life moments:**

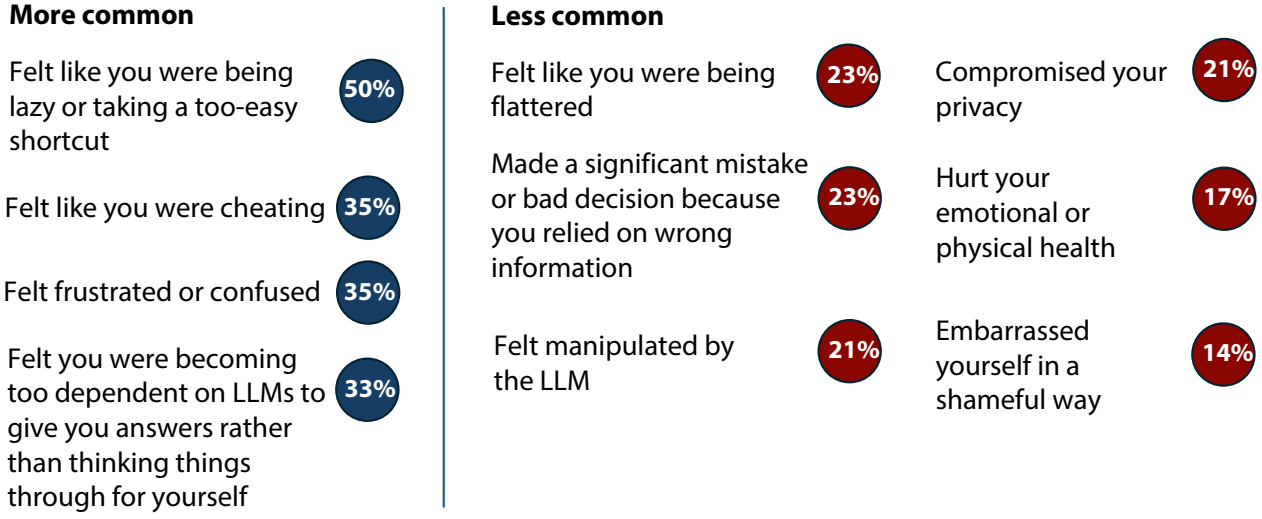
- 41% of LLM users reported they had gotten help from an LLM **getting training or more education to upgrade their job skills**: 12% said the LLM had played a major role in helping them and the rest said the LLM played a minor role.
- 37% reported getting help from the LLM **treating an illness or medical condition**: 9% said the LLM played a major role.
- 28% said they had gotten help **seeking or changing jobs**: 9% said the LLM played a major role .
- 25% reported getting help **making a major investment or financial decision**: 7% said the LLM played a major role .
- 18% said they had gotten help **deciding where to live**: 6% said the LLM played a major role.

Beyond those uses, notable shares of LLM users also report a number of negative experiences with the LLM systems: Half say they felt at least at times like they were **lazy or taking a too-easy shortcut** in using the systems; a third felt they were **becoming too dependent** on LLMs to give them answers rather than thinking things through for themselves; and a third felt they were **cheating** and **felt frustrated or confused** as they used the models.

Some 23% said a lot of the time or sometimes they had made a **significant mistake or bad decision** when they relied on wrong information from an LLM. Around a fifth of the users also said they **felt manipulated** by an LLM and a similar share felt their use of an LLM had **compromised their privacy**. Some users also reported that their **emotional and physical health** had been hurt or that they had **embarrassed themselves in a shameful way** by relying on the LLM. For all of these questions there were additional respondents who said they had felt that way "but not very often."

## Users describe how their experiences with LLMs made them feel

*% of AI large language model users who say they have experienced these things when using LLMs*




* Those who did not answer are not shown. **Numbers may not add up to 100% due to rounding. | Source: Imagining the Digital Future survey, Jan. 21-23, 2025

## The special habits and views of regular LLM conversation users

As noted above, the 34% of LLM users who have human-like conversations with the models stand out in almost every way from other kinds of model users. Here are some of the main differences between regular LLM conversation users and those who do not have conversations with the models:

**Usage:** 84% of regular LLM conversation users use the models at least several times a week vs. 33% of those who never converse with LLMs.

- 82% of regular conversation users use the models for **informal learning on their own** vs. 58% of those who never converse.
- 75% of regular conversation users use the models for **getting information about products and services** vs. 37% of those who never converse.
- 67% of regular conversation users use the models to **amuse or entertain themselves** vs. 48% of those who never converse.
- 63% of regular conversation users use the models for **work activities** vs. 45% of those who never converse.
- 58% of regular conversation users use the models for **getting information about physical or mental health** vs. 21% of those who never converse.
- 55% of regular conversation users use the models for **getting news and political information** vs. 12% of those who never converse.
- 53% of regular conversation users use the models for **creative purposes such as writing poetry or songs** vs. 30% of those who never converse.

These regular conversation users are also far more likely than non-conversers to use models to write and create presentations (63% vs. 24%), brainstorm about ideas (73% vs. 46%), summarize and understand written material (77% vs. 23%), write and check computer code (47% vs. 10%), research new subjects or ideas (78% vs. 50%), create emails (62% vs. 32%), create social media posts (47% vs. 12%), plan an event (48% vs. 19%), plan a social gathering (38% vs. 8%), look up what LLMs say about people they know (43% vs. 4%) and look up what LLMs say about them (30% vs. 5%).

**Impacts:** 83% of regular conversation users say they are very or somewhat satisfied with the performance of LLMs they have used vs. 70% of those who never converse.

- 75% of regular conversation users are very/somewhat satisfied with the **accuracy** of the models vs. 56% of those who never converse.
- 62% of regular conversation users are very/somewhat satisfied with the **fairness** of the models vs. 45% of those who never converse.
- 58% of regular conversation users are very/somewhat satisfied with the models' **care in following human ethics** vs. 26% of those who never converse.
- There were no differences between the two groups when it comes to the completeness of the answers LLMs delivers.

**Attributes**

- 87% of regular conversation users feel their primary LLM acts like it **gives personalized answers to their prompts** vs. 70% of those who never converse.
- 82% of regular conversation users feel their primary LLM acts like it l**earns from its encounters with them them** vs. 52% of those who never converse.
- 82% of regular conversation users feel their primary LLM acts like it **understands** them vs. 53% of those who never converse.
- 79% of regular conversation users feel their primary LLM acts like it **shows the capacity to think and reason** vs. 51% of those who never converse.

These regular conversation users are also far more likely than non-conversers to say the main LLM they use seems to cheer them up, provides constructive feedback, acts like a good colleague, expresses curiosity, acts in a confident way, shows a sense of humor, expresses hope and expresses sadness.

Regular conversation users are also considerably more likely than non-converses to say the main LLM they use responds in a brusque manner, embarrasses them, responds angrily and responds in a jealous way.

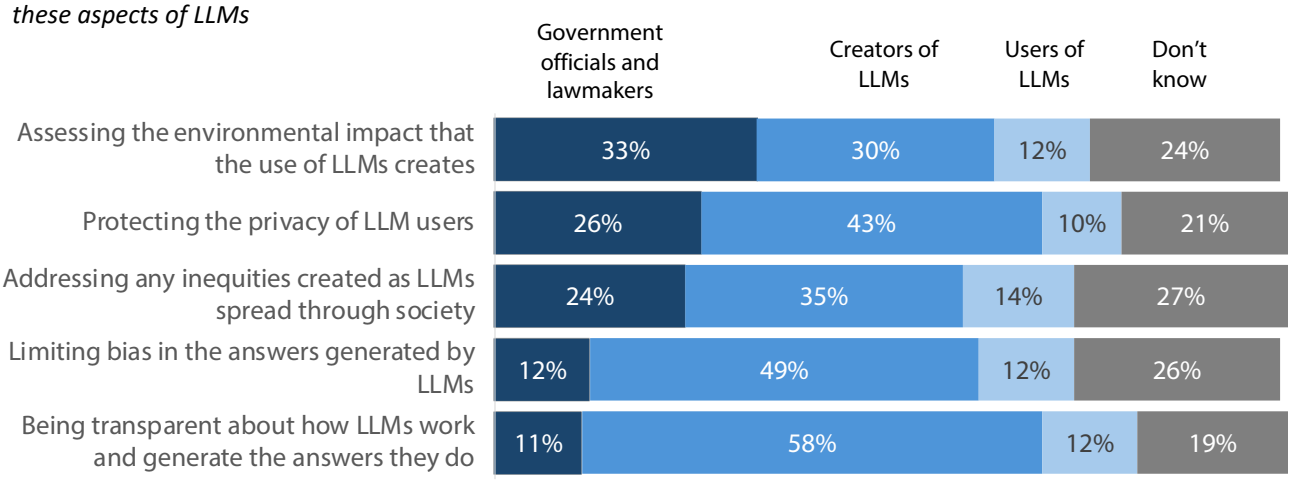
## Policy issues

The Imagining the Digital Future Center and several other organizations have conducted surveys to gather public attitudes about some policy issues swirling around LLMs, such as their problems with generating wrong information and hallucinating; their problems with bias and discrimination; their environmental impact; and the opaque and mysterious ways of answering people's prompts and queries. In this survey, we asked a question about which stakeholders should be mainly responsible for handling some of these issues.

As a rule, these LLM users feel that the creators of LLMs themselves should be mainly responsible for addressing problems.

### Who should be mainly responsible for managing key issues tied to LLMs?

*% of AI large language model users who think these actors should be mainly responsible for managing these aspects of LLMs*




* Those who did not answer are not shown. **Numbers may not add up to 100% due to rounding. | Source: Imagining the Digital Future survey, Jan. 21-23, 2025

There are some partisan differences on these issues among LLM users. Those who are Democrats and the independents who lean Democratic are more than Republicans and leaners to say government officials should assess the environmental impacts that the use of LLM creates (42% vs. 25%). In addition, Democrats are more likely to say government officials should address any inequities created by LLMs (31% vs. 16%). While majorities of LLM users from both parties think the creators of LLMs should be responsible for being transparent about how LLMs work, Democrats are somewhat more likely than Republicans to pick government officials (15% vs. 8%). There are not partisan differences on the other issues listed here.

## The longer-term impact of LLMs

These LLM users render mixed judgments about how these models will evolve and affect the quality of people's daily lives in the future. More think the effect will be more positive than negative than think the opposite. Still, a third think there will be an equal mixture of positive and negative impacts, and 6% think there will not be much of an impact.

### How LLM users think the models will affect people's daily lives in the next 10 years

*% of AI large language model users who think the increased use of LLMs will have this effect on the quality of people's daily lives over the next 10 years*


* Those who did not answer are not shown. **Numbers may not add up to 100% due to rounding. | Source: Imagining the Digital Future survey, Jan. 21-23, 2025

Asked about some more specific possible outcomes in the next decade, LLM users think these positive outcomes are very/somewhat likely to happen: **major new medical and scientific breakthroughs** and that LLMs will be **controlled by human beings and responsive to human needs**.

On the other hand, major segments of LLM users also think these negative outcomes are very/somewhat likely to occur as a result of the spread of LLMs in the next decade: social isolation, the **loss of a significant number of jobs**, LLMs will **surpass human intelligence in most important ways**, **serious social upheaval** will occur and they worry LLMs will **develop their own identity and goals**.

Notable shares of LLM users also predict some general impacts, including the fact that LLMs will **considerably change the way they will spend their leisure time**, will **dramatically change the kind of work they do** and will **form deep relationships with people**.

## In the eyes of LLM users, these will be the long-term impacts of the models

*% of AI large language model users who think these impacts are very or somewhat likely in the next decade*

### Benefits

- Lead to major new medical and scientific breakthroughs — 62%
- Be controlled by human beings and responsive to human needs — 55%

### General impacts

- Considerably change the way you spend your leisure time — 43%
- Dramatically change the kind of work you do yourself — 40%
- Form deep relationships with humans — 38%

### Problems

- Cause social isolation by replacing a lot of human-to-human communication — 63%
- Cause a loss of a significant number of jobs, even after counting the new jobs that are created — 59%
- Surpass human intelligence in the most important ways — 53%
- Be a factor contributing to serious social upheaval — 45%
- LLMs will develop their own identity and goals — 40%

* Those who did not answer are not shown. **Numbers may not add up to 100% due to rounding. | Source: Imagining the Digital Future survey, Jan. 21-23, 2025

# About the Imagining the Digital Future Center

**Imagining the Digital Future** is a non-partisan, public-good research initiative at Elon University. It was established in 2000 as Imagining the Internet and renamed with an expanded research agenda in 2024. It is funded and operated by Elon University, a nationally ranked private university in central North Carolina

The Center focuses on the digital revolution's impact and what may lie ahead. Its mission is to discover and broadly share a diverse range of opinions and ideas about the potential future impact of digital change, informing important conversations and policy formation and helping to promote a positive future for humanity. The center draws on insights gathered through canvassings of thoughtful and far-sighted experts in a wide range of fields. Those qualitative contributions are complemented by a range of methodologies, including public opinion polling, computational analysis and other data-driven research.

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**About Lee Rainie**

Imagining the Digital Future Center Director **Lee Rainie** joined Elon University in 2023 after 24 years of directing Pew Research Center's efforts to study the internet and technology. While leader of Pew's Internet and Technology Project, he and his team produced more than 850 reports about the social, political and economic impact of four newly emerging technology revolutions: the internet/broadband revolution, the mobile connectivity revolution, the social media revolution and the artificial intelligence revolution. He co-authored "Networked: The New Social Operating System" (MIT Press).

Prior to his long career at Pew, Rainie was managing editor of the newsweekly magazine U.S. News & World Report from 1987 to 1999, and he previously covered American politics for several publications, including the New York Daily News, where he worked from 1975 to 1987. Contact: lrainie@elon.edu.

**About Elon University**

**Elon University** is a mid-sized private university in Elon, North Carolina, with a national reputation for experiential learning, teaching excellence and close relationships between students and their faculty and staff mentors. Elon enrolls more than 7,200 undergraduate and graduate students from 49 U.S. states and 52 countries. Elon was founded in 1889 and includes a law school campus in Greensboro, NC, and national campus locations in Los Angeles, Charlotte, New York City and Washington, D.C.

## Methodology overview

This study was conducted by SSRS via its Opinion Panel platform among n=500 adults 18 and older who have used a large language model (LLM). The SSRS Opinion Panel is a multi-mode panel (web and phone), where most panelists take self-administered web surveys; however, the option to take surveys conducted by a live telephone interviewer is available to those who do not use the internet as well as those who use the internet but are reluctant to take surveys online. Data collection was conducted from January 21 – January 23 among a total sample of 500 respondents. The survey was conducted via web (n=498) and telephone (n=2) and administered in English (n=473) and Spanish (n=27). More information about the SSRS Opinion Panel can be found at www.ssrs.com.

The SSRS Opinion Panel data for this study are weighted to represent the target population of U.S. adults ages 18 or older who have used Large Language Models (LLMs). The margin of error for total respondents is +/- 5.1 percentage points at the 95% confidence level. The target sample's design effect for this survey is 1.37. To determine the overall incidence of LLM use among U.S. adults and key demographic subgroups, results for the n=939 screened panelists (both eligible and ineligible) were weighted to represent the full US adult population. The margin of error for results based on all screened panelists is +/- 3.2%.

Some of the questions were posed to half the sample. The margin of error for FORM 1 (n=261) is +/- 7.0 percentage points at the 95% confidence level (with a design effect of 1.33), while the margin of error for FORM 2 (n=239) is +/- 7.5 percentage points at the 95% confidence level (with a design effect of 1.40).

Data collection was conducted via web and telephone. Verbiage in this topline reflects web wording. Telephone wording may differ slightly due to interviewer-administered data collection.

# Topline findings

**Unless otherwise noted, all results are based on Large Language Model users, N=500**

Screening question: *Do you ever use artificial intelligence (AI) large language models (also known as LLMs or generative AI), such as ChatGPT, Google's Gemini, Anthropic's Claude, Microsoft's Copilot or an open source LLM?*

| | Total |
|---|---|
| **NET users** | **52** |
| Yes – almost constantly | 5 |
| Yes – several times a day | 7 |
| Yes – about once a day | 5 |
| Yes – several times a week | 10 |
| Yes – less often | 25 |
| No – not at all | **47** |
| | (939) Margin of error is +/- 3.2% |

**All questions in the rest of this topline cover the large language model users that were identified in the screening question. Thus, the answers should be attributed to "LLM users" – not all adults.**

Q2. Do you ever use artificial intelligence (AI) **image generators**, such as DALL-E, Midjourney, Adobe Firefly, or ImageFX?

| | Total |
|---|---|
| **Yes (NET)** | **67** |
| Yes – almost constantly | 5 |
| Yes – several times a day | 6 |
| Yes – about once a day | 7 |
| Yes – several times a week | 12 |
| Yes – less often | 36 |
| No – not at all | 33 |
| No opinion | 0 |
| | (500) |

Q3. Do you ever use specialized language models that focus on these kinds of activities:
**[ITEMS ASKED IN RANDOM ORDER]**

| | Yes (NET) | Yes – almost constantly | Yes – several times a day | Yes – about once a day | Yes – several times a week | Yes – less often | No – not at all | No opinion |
|---|---|---|---|---|---|---|---|---|
| a. Tutoring and learning | **67** | 7 | 7 | 7 | 17 | 30 | 33 | 0 |
| b. Writing | **75** | 6 | 6 | 10 | 19 | 35 | 25 | 0 |
| c. Doing research | **80** | 9 | 10 | 11 | 20 | 30 | 20 | 0 |
| d. Designing creations | **59** | 6 | 5 | 6 | 10 | 32 | 41 | 0 |
| e. Pursuing lifestyle and hobby activities | **66** | 6 | 7 | 9 | 16 | 28 | 34 | 0 |
| f. Computer programming | **42** | 5 | 5 | 5 | 9 | 18 | 58 | 0 |
| | | | | | | | | (500) |

Q4. Have you used any of the LLM and other artificial intelligence capabilities that have been inserted into these digital tools?
**[ITEMS ASKED IN RANDOM ORDER]**

**FORM 1 (n=261)**

| | Yes | No | No opinion |
|---|---|---|---|
| a. Email programs | 51 | 49 | 0 |
| b. Text-message programs on mobile devices | 58 | 42 | 0 |
| c. Word-processing programs | 41 | 59 | 0 |
| d. Spreadsheets | 34 | 66 | 0 |
| e. Presentation software (e.g., PowerPoint) | 38 | 62 | 0 |

Q4. Have you used any of the LLM and other artificial intelligence capabilities that have been inserted into these digital tools?
**[ITEMS ASKED IN RANDOM ORDER]**

**FORM 2 (n=239)**

| | Yes | No | No opinion |
|---|---|---|---|
| f. Photo editing software | 58 | 42 | 0 |
| g. Graphic design software | 36 | 64 | 0 |
| h. Social media platforms | 61 | 39 | 0 |
| i. Video conferencing software (e.g., Zoom) | 47 | 53 | 0 |

| | | | |
|---|---|---|---|
| j. Project management or collaboration tools (e.g., Slack) | 25 | 75 | 0 |

Q5. Which, if any, large language model(s) do you use?
**[ITEMS ASKED IN RANDOM ORDER, EXCEPT FOR ITEM G, ASKED LAST]**

| | Yes | No | Don't know/ Refused to answer |
|---|---|---|---|
| ChatGPT | 72 | 28 | * |
| Google's Gemini | 50 | 50 | 0 |
| Anthropic's Claude | 9 | 91 | 0 |
| Microsoft's Copilot | 39 | 61 | 0 |
| xAI's Grok | 12 | 88 | 0 |
| Meta's LLaMa | 20 | 80 | 0 |
| Other | 9 | 90 | 1 |
| | | | (500) |

Q6. Which of the LLMs that you use is the one you use the most?
**[ITEMS ASKED IN RANDOM ORDER]**

**[ASKED OF THOSE WHO USE MORE THAN ONE LLM (Q5). THOSE WHO REPORTED ONLY USING ONE LLM WERE AUTOPUNCHED AT Q6]**

| | Yes |
|---|---|
| ChatGPT | 52 |
| Google's Gemini | 20 |
| Anthropic's Claude | * |
| Microsoft's Copilot | 10 |
| xAI's Grok | 2 |
| Meta's LLaMa | 5 |
| Other | 2 |
| Don't know/ Refused to answer | 8 |
| | (500) |

Q7. How skilled do you feel you are at using LLMs?
**[SCALE ROTATED AT RANDOM]**

| | Total |
|---|---|
| **Extremely/Very skilled (NET)** | **16** |
| Extremely skilled | 6 |
| Very skilled | 10 |
| Moderately skilled | 28 |
| Slightly skilled | 29 |
| Not at all skilled | 27 |

| | |
|---|---|
| No opinion | 0 |
| | (500) |

Q8. How often do you have back-and-forth conversations with LLMs where you use your voice, and the model replies in a realistic voice?

| | Total |
|---|---|
| **Have Conversations Regularly (NET)** | **34** |
| Almost constantly | 3 |
| Several times a day | 11 |
| About once a day | 6 |
| Several times a week | 13 |
| Less often | 31 |
| Never | 35 |
| No opinion | 0 |
| | (500) |

Q9. Do you have access to a paid subscription for your use of LLMs?

| | Total |
|---|---|
| **Yes (NET)** | **20** |
| Yes, I pay for a subscription | 4 |
| Yes, I have access to a subscription LLM that someone else pays for | 16 |
| No, I use free versions | 80 |
| Don't know/ Refused to answer | * |
| | (500) |

Q10. Do you ever use LLMs for the following **purposes**?
**[ITEMS ASKED IN RANDOM ORDER]**

| | Yes | No | No opinion |
|---|---|---|---|
| a. For work activities | 52 | 48 | 0 |
| b. For schoolwork and homework activities | 36 | 64 | 0 |
| c. For informal learning on your own | 68 | 32 | 0 |
| d. To amuse or entertain self | 60 | 40 | 0 |
| e. For creative activities such as writing poetry or songs, or creating artwork | 36 | 64 | 0 |
| f. For getting information about physical or mental health | 39 | 61 | 0 |
| g. For getting news and political information | 34 | 66 | 0 |
| h. For getting information about products and services | 57 | 43 | 0 |
| | | | (500) |

Q11. What is the main purpose you use LLMs for?

| | Total |
|---|---|
| Work | 24 |
| School | 11 |
| Personal, informal learning and planning on your own | 51 |
| Social kinds of encounters like casual conversation and companionship | 9 |
| Some other purpose | 5 |
| No opinion | 0 |
| | (500) |

Q12. Do you ever use large language models for any of the following **tasks**?
**[ITEMS ASKED IN RANDOM ORDER]**

**FORM 1 (n=261)**

| | Yes | No | No opinion |
|---|---|---|---|
| a. Writing and creating presentations | 38 | 62 | 0 |
| b. Brainstorming about ideas | 55 | 45 | 0 |
| c. Summarizing and understanding written material like documents or email | 47 | 53 | 0 |
| d. Writing or checking computer code | 23 | 77 | 0 |
| e. Researching new subjects or ideas | 64 | 36 | 0 |
| f. Creating emails | 42 | 58 | 0 |

Q12. Do you ever use large language models for any of the following **tasks**?
**[ITEMS ASKED IN RANDOM ORDER]**

**FORM 2 (n=239)**

| | Yes | No | No opinion |
|---|---|---|---|
| g. Creating social media posts | 28 | 72 | 0 |
| h. Planning an event or a trip | 34 | 66 | 0 |
| i. Planning a social gathering | 23 | 77 | 0 |
| j. Looking up what the LLMs say about you | 18 | 82 | 0 |
| k. Looking what the LLMs say about people you know | 23 | 76 | 0 |
| l. Searching to find facts quickly, like a search engine | 68 | 32 | 0 |

Q13. How satisfied or dissatisfied are you with the overall performance of LLMs as you use them?
**[SCALE ROTATED AT RANDOM]**

| | **Total** |
|---|---|
| **Very/Somewhat Satisfied (NET)** | **76** |
| Very satisfied | 25 |
| Somewhat satisfied | 50 |
| **Not too/ Not at all Satisfied** | **15** |
| Not too satisfied | 11 |
| Not at all satisfied | 4 |
| Don't know | 9 |
| No opinion | 0 |
| | (500) |

Q14. How satisfied or dissatisfied are you with the performance of the LLMs you have used when it comes to…

**[ITEMS ASKED IN RANDOM ORDER; SCALE ROTATED AT RANDOM]**

| | **Very/ Somewhat Satisfied (NET)** | **Very satisfied** | **Somewhat satisfied** | **Not too/ Not at all satisfied (NET)** | **Not too satisfied** | **Not at all satisfied** | **Don't know** | **No opinion** |
|---|---|---|---|---|---|---|---|---|
| a. Accuracy | **70** | 20 | 49 | **21** | 16 | 5 | 9 | 0 |
| b. Fairness | **59** | 20 | 39 | **18** | 17 | 2 | 23 | 0 |
| c. The completeness of its answers | **76** | 26 | 50 | **19** | 15 | 4 | 5 | 0 |
| d. Its care in following human ethics | **47** | 16 | 31 | **25** | 19 | 6 | 28 | 0 |
| | | | | | | | | (500) |

Q15. Do you think the LLMs you use are:
**[SCALE ROTATED AT RANDOM HOLDING Don't know LAST]**

| | Total |
|---|---|
| **A lot/A little Smarter (NET)** | **49** |
| A lot smarter than you are | 26 |
| A little smarter than you are | 23 |
| About as smart as you are | 18 |
| **A little/ A lot less Smart** | **20** |
| A little less smart than you are | 9 |
| A lot less smart than you are | 10 |
| Don't know | 14 |
| No opinion | 0 |
| | (500) |

Q16. Now, thinking about the LLM you use the most, [INSERT LLM,] do you feel that it **acts like** it...
**[ITEMS ASKED IN RANDOM ORDER]**

| | Yes (NET) | Yes, much of the time | Yes, some of the time | Yes, at least a small amount of the time | No, not at all | Don't know | No opinion |
|---|---|---|---|---|---|---|---|
| a. Understands you | **70** | 13 | 27 | 30 | 19 | 11 | 0 |
| b. Learns from its encounters with you | **69** | 17 | 26 | 25 | 14 | 17 | 0 |
| c. Gives personalized answers to your prompts | **81** | 22 | 31 | 28 | 13 | 7 | 0 |
| d. Shows the capacity to think and reason | **69** | 14 | 25 | 31 | 18 | 13 | 0 |
| e. Makes moral judgments about right and wrong | **43** | 7 | 18 | 17 | 33 | 24 | 0 |
| f. Expands the range of your thinking | **73** | 18 | 29 | 26 | 18 | 8 | 0 |
| | | | | | | | (500) |

Q17. Does this LLM ever seem to...
**[ITEMS ASKED IN RANDOM ORDER]**

**FORM 1 (n=261)**

| | Yes | No | Don't know |
|---|---|---|---|
| a. Cheer you up | 25 | 56 | 19 |
| b. Provide constructive feedback | 52 | 31 | 17 |
| c. Act like a good colleague to work with | 45 | 32 | 22 |
| d. Respond in a brusque or abrasive way | 9 | 76 | 15 |

Q17. Does this LLM ever seem to...
**[ITEMS ASKED IN RANDOM ORDER]**

**FORM 2 (n=239)**

| | Yes | No | Don't know |
|---|---|---|---|
| e. Embarrass you | 8 | 83 | 9 |
| f. Express curiosity | 28 | 50 | 22 |
| g. Express empathy | 22 | 54 | 23 |
| h. Respond sarcastically | 17 | 64 | 19 |

Q18. Still thinking about the LLM you use most often, does this LLM ever seem to...
**[ITEMS ASKED IN RANDOM ORDER]**

| | Yes | No | Don't know | No opinion |
|---|---|---|---|---|
| a. Show a sense of humor | 32 | 52 | 17 | 0 |
| b. Respond angrily | 8 | 80 | 12 | 0 |
| c. Express sadness | 11 | 72 | 18 | 0 |
| d. Express hope | 24 | 54 | 21 | 0 |
| e. Act in a confident way | 57 | 29 | 14 | 0 |
| f. Respond in a jealous way | 7 | 81 | 12 | 0 |
| | | | | (500) |

Q20. How much would you say you rely on LLMs to help you do things that are important to you?

| | Total |
|---|---|
| **A lot/ Some (NET)** | **38** |
| A lot | 10 |
| Some | 28 |
| **A little/ Not at all (NET)** | **62** |
| A little | 35 |
| Not at all | 27 |
| | (500) |

21. How much, if at all, has using LLMs affected your...
**[ITEMS ASKED IN RANDOM ORDER; SCALE ROTATED AT RANDOM WITH Don't know HELD LAST]**

| | Improved a lot / some-what (NET) | Improved a lot | Improved some-what | Not had much of an effect at all | Worsened some-what / Worsened a lot (NET) | Worsened some-what | Worsened a lot | Don't know | No opinion |
|---|---|---|---|---|---|---|---|---|---|
| a. Productivity | **54** | 13 | 41 | 35 | **4** | 3 | 1 | 7 | 0 |
| b. Communication skills | **41** | 9 | 33 | 46 | **4** | 3 | 1 | 9 | 0 |
| c. Problem-solving skills | **45** | 13 | 31 | 42 | **7** | 5 | 2 | 7 | 0 |
| d. Ability to learn new skills and concepts | **50** | 14 | 36 | 39 | **5** | 4 | 1 | 6 | 0 |
| e. Creativity | **42** | 13 | 29 | 42 | **6** | 5 | 1 | 9 | 0 |
| f. Time spent on tasks that are annoying to do | **51** | 15 | 37 | 35 | **4** | 2 | 2 | 9 | 0 |
| | | | | | | | | | (500) |

Q22. Have you ever experienced these things when you used LLMs?
**[ITEMS ASKED IN RANDOM ORDER]**

**FORM 1 (n=261)**

| | Yes (NET) | Yes, a lot of times | Yes, sometimes | Yes, but not very often | No | Don't know | No opinion |
|---|---|---|---|---|---|---|---|
| a. Made a significant mistake or bad decision because you relied on wrong information | **23** | 3 | 8 | 13 | 68 | 9 | 0 |
| b. Embarrassed yourself in a shameful way | **14** | 1 | 3 | 10 | 80 | 6 | 0 |
| c. Felt frustrated or confused | **35** | 6 | 11 | 18 | 55 | 11 | 0 |
| d. Felt you were becoming too dependent on the LLM to give you answers rather than thinking things through for yourself | **33** | 4 | 12 | 17 | 63 | 4 | 0 |
| e. Compromised your privacy | **21** | 5 | 9 | 7 | 55 | 24 | 0 |

Q22. Have you ever experienced these things when you used LLMs?
**[ITEMS ASKED IN RANDOM ORDER]**

**FORM 2 (n=239)**

| | Yes (NET) | Yes, a lot of times | Yes, sometimes | Yes, but not very often | No | Don't know | No opinion |
|---|---|---|---|---|---|---|---|
| f. Felt manipulated by the LLM | **21** | 4 | 7 | 10 | 70 | 9 | 0 |
| g. Hurt your emotional or physical health | **17** | 2 | 6 | 9 | 75 | 8 | 0 |
| h. Felt like you were cheating | **35** | 5 | 12 | 18 | 57 | 8 | 0 |
| i. Felt like you were being lazy or taking a too-easy shortcut | **50** | 9 | 17 | 24 | 43 | 7 | 0 |
| j. Felt like you were being flattered | **23** | 4 | 8 | 11 | 67 | 10 | 0 |

Q23 and q24 are not reported in this publication

Q25. Has using an LLM ever helped you in these areas of your life?
**[ITEMS ASKED IN RANDOM ORDER]**

| | Yes (NET) | Yes, an LLM played a major role in helping me | Yes, an LLM played a minor role in helping me | No | No opinion |
|---|---|---|---|---|---|
| a. Treating an illness or medical condition | **37** | 9 | 29 | 63 | 0 |
| b. Seeking or changing jobs | **28** | 9 | 19 | 72 | 0 |
| c. Making a major investment or financial decision | **25** | 7 | 17 | 75 | 0 |
| d. Deciding where to live | **18** | 6 | 12 | 82 | 0 |
| e. Getting training or more education to upgrade your job skills | **41** | 12 | 29 | 59 | 0 |
| | | | | | (500) |

Q26. Who do you think should be mainly responsible for managing each of these aspects of LLMs?
**[ITEMS ASKED IN RANDOM ORDER]**

| | Government officials and lawmakers | The creators of LLMs | The users of LLMs | Don't know | No opinion |
|---|---|---|---|---|---|
| a. Being transparent about how LLMs work and generate the answers they do | 11 | 58 | 12 | 19 | 0 |
| b. Limiting bias in the answers generated by LLMs | 12 | 49 | 12 | 26 | 0 |
| c. Protecting the privacy of LLM users | 26 | 43 | 10 | 21 | 0 |
| d. Assessing the environmental impact that the use of LLMs creates | 33 | 30 | 12 | 24 | 0 |
| e. Addressing any inequities created as LLMs spread through society | 24 | 35 | 14 | 27 | 0 |
| | | | | | (500) |

Q27. Overall, how will the increased use of LLMs affect the quality of people's daily lives over the next 10 years? The impact of LLMs will be…

**[FIRST TWO OPTIONS ROTATED AT RANDOM ORDER]**

| | **Total** |
|---|---|
| More positive than negative | 28 |
| More negative than positive | 20 |
| Equally positive and negative | 32 |
| There won't be much of an impact | 6 |
| Don't know | 14 |
| No opinion | 0 |
| | (500) |

Q28. As you think about the development of artificial intelligence and LLMs in the **next decade** how likely do you think it is that the models will…
**[ITEMS ASKED IN RANDOM ORDER]**

**FORM 1 (n=261)**

| | **Very/ Some- what likely (NET)** | **Very likely** | **Some-what likely** | **Not very/ Not at all likely (NET)** | **Not very likely** | **Not at all likely** | **There won't be much of an impact** | **Don't know** | **No opinion** |
|---|---|---|---|---|---|---|---|---|---|
| a. Surpass human intelligence in the most important ways | **53** | 17 | 36 | **30** | 15 | 14 | 4 | 13 | 0 |
| b. Be controlled by human beings and responsive to human needs | **55** | 12 | 43 | **26** | 19 | 6 | 5 | 15 | 0 |
| c. Cause a loss of a significant number of jobs even after counting the new jobs that are created | **59** | 23 | 36 | **25** | 19 | 5 | 3 | 13 | 0 |
| d. Dramatically change the kind of work you do yourself | **40** | 12 | 28 | **35** | 20 | 15 | 13 | 12 | 0 |
| e. Be a factor contributing to serious social upheaval | **45** | 13 | 32 | **31** | 22 | 9 | 4 | 20 | 0 |

Q28. As you think about the development of artificial intelligence and LLMs in the **next decade** how likely do you think it is that the models will…
**[ITEMS ASKED IN RANDOM ORDER]**

**FORM 2 (n=239)**

| | Very/ Some - what likely (NET) | Very likely | Some-what likely | Not very/ Not at all likely (NET) | Not very likely | Not at all likely | There won't be much of an impact | Don't know | No opinion |
|---|---|---|---|---|---|---|---|---|---|
| f. Considerably change the way you spend your leisure time | **43** | 16 | 28 | **43** | 24 | 18 | 6 | 9 | 0 |
| g. Lead to major new medical and scientific breakthroughs | **62** | 24 | 38 | **27** | 17 | 9 | 2 | 9 | 0 |
| h. Develop their own identity and goals | **40** | 11 | 29 | **42** | 28 | 14 | 7 | 11 | 0 |
| i. Form deep relationships with humans | **38** | 10 | 27 | **44** | 25 | 19 | 6 | 12 | 0 |
| j. Cause social isolation by replacing a lot of human-to-human communication | **63** | 27 | 36 | **22** | 13 | 10 | 7 | 8 | 0 |

Z10. Are you of Hispanic or Latino origin or descent?

| | Total |
|---|---|
| Yes | 22 |
| No | 74 |
| Don't know/ Refused to answer | 5 |
| | (500) |

CO1. Were you born in the United States, in a United States territory, or in another country?

| | Total |
|---|---|
| United States (one of the 50 states or DC) | 81 |
| Puerto Rico | 4 |
| Other United States territory | * |
| Another country | 10 |
| Don't know/Refused to answer | 5 |
| | (500) |

CO1A. Were any of your parents born outside the United States?

**Asked of those born in the US**

| | Total |
|---|---|
| Yes | 19 |
| No | 77 |
| Don't know/ Refused to answer | 4 |
| | (416) |

CO2. The next question asks about you and your family's heritage. Are you Mexican, Puerto Rican, Cuban, Dominican, Salvadoran, or are you and your ancestors from another country?

**Asked of those with Hispanic or Latino origin or descent**

| | Total |
|---|---|
| Mexican (Mexico) | 46 |
| Puerto Rican (Puerto Rico) | 19 |
| Cuban (Cuba) | 4 |
| Dominican (the Dominican Republic) | 1 |
| Salvadoran (El Salvador) | 2 |
| Spanish (Spain) | 8 |
| Other Central American (Central America) | 1 |

| | |
|---|---|
| Other South American (South America) | 7 |
| Other country | 5 |
| Don't know/ Refused to answer | 6 |
| | (108) |

EDUC. What is the highest level of school you have completed or the highest degree you have received?

| | **Total** |
|---|---|
| Less than high school graduate | 7 |
| High school diploma or GED or alternative credential | 22 |
| **Some college credit, no degree (NET)** | **16** |
| Less than one semester | 2 |
| One or more semester | 14 |
| Associate's degree (for example: AA, AS) | 12 |
| Bachelor's degree (for example: BA, BS) | 24 |
| Master's degree, Professional degree beyond a bachelor's degree, or Doctorate degree (for example: PhD, EdD) | 17 |
| Don't know/ Refused to answer | 1 |
| | (500) |

POLPARTY. Generally speaking, do you usually think of yourself as…?

| | **Total** |
|---|---|
| A Republican | 28 |
| A Democrat | 27 |
| An Independent | 32 |
| Something else | 13 |
| No opinion | 0 |
| | (500) |

POLLEAN. As of today, do you lean more to the Democratic Party or the Republican Party?

**Asked of those who are not Republicans or Democrats**

| | **Total** |
|---|---|
| Democratic party | 49 |
| Republican party | 48 |
| Refuse to lean | 3 |
| | (223) |

POLPARTY/PPOLLEAN Combo Table Political party identification

| | Total |
|---|---|
| **Republican or Republican Leaners (NET)** | **49** |
| Republican | 28 |
| Republican Leaners | 21 |
| **Democrats or Democrat Leaners (NET)** | **49** |
| Democrat | 27 |
| Democrat Leaners | 22 |
| Pure Independents | 1 |
| | (500) |

Z9/Z9a/Z9b Combo Table. What is your total annual household income from all sources, and before taxes?

| | Total |
|---|---|
| Less than $15,000 | 11 |
| $15,000 to less than $20,000 | 4 |
| $20,000 to less than $25,000 | 5 |
| $25,000 to less than $30,000 | 5 |
| $30,000 to less than $40,000 | 6 |
| $40,000 to less than $50,000 | 6 |
| $50,000 to less than $75,000 | 15 |
| $75,000 to less than $100,000 | 15 |
| **$100,000 and over (NET)** | **32** |
| $100,000 to less than $150,000 | 12 |
| $150,000 to less than $200,000 | 7 |
| $200,000 to less than $250,000 | 5 |
| $250,000 or more | 7 |
| Don’t know | * |
| No opinion | 0 |
| | (500) |