

THOUGHT LEADERSHIP





Generative AI is here—and could fundamentally reshape what it means to be human

Over the past several months, an enormous amount of digital ink has been spilled covering the latest developments in the field of generative AI-with some experts predicting that we could be on the cusp of the most radical technological revolution of our lifetimes. Google's Sundar Pichai, for one, has gone so far as to describe it as "the most profound technology humanity is working on-more profound than fire or electricity."1

But the story of AI is, at its core, not just a story of technology. It's a story about people.

If previous socio-technological shiftslike the personal computing revolution of the 1980s, or the smartphone revolution of the late 2000s-have taught us anything, it's that we are shaped and molded by the technology we rely on as much as we shape it. So, if the AI revolution is as dramatic and all-encompassing as many analysts predict it will be, it will inevitably throw up a whole host of fundamental questions about our identities, our conceptions of ourselves, and our relationships to others.

The sophistication of AI-generated outputs is progressing at breakneck speed. Already, these developments have started to blur the boundaries of human and machine intelligence-in

Beatrice Nolan, "<u>Sundar Pichai says AI technology could</u> be more profound than fire or electricity," Business Insider, April 17, 2023

the process compelling us to reassess some of our most deeply held assumptions about the nature of consciousness and sentience.

Ultimately, the emerging next generation of AI has the potential to radically alter our relationship with technology and the role that it plays in our lives. And could, in the long-run, even force us to rethink what it means to be human.

In this report, we'll unpack the human impact of the AI revolution. We'll examine the profound impact that AI could have on daily life across the planet-and the consequences for our understanding of ourselves and our place in the world.



IN THIS REPORT, YOU'II FIND.

Public awareness and understanding of generative Al.

The most compelling territories for next generation Al's killer apps.

A comparative analysis of the applications for AI that potential users are most excited about.

Americans' hopes and fears

for the impact of AI on their daily lives, on themselves, and their communities.

THREE KEY TAKEAWAYS

Americans are cautiously optimistic about the potential applications of generative Al to their daily lives, and are open to using it in a wide range of contexts-from improving personal and professional productivity to acting as a tool for creativity and self-expression.

To many, AI represents the long-awaited fulfillment of technology's most alluring promises-the possibility of eliminating the mundane and the tedious from everyday life, allowing them to live a more frictionless existence and transform into idealized versions of themselves.

While concerns persist about the accuracy and reliability of Alpowered systems, an even bigger fear among the public is that we could go too far in our reliance on them. Many are worried that, as the lines between humans and machines start to dissolve, we could lose sight of the creativity and ingenuity that make life meaningful.



This paper was created using NRG's unique NRG Labs methodology-a process that uses cutting-edge technology to enable rapid co-creation with end users.

Through a series of in-person co-creation sessions, we identified the range of use cases for next generation AI that users saw as most compelling-and then validated these findings through quantitative research. For more on this process, see page 5.

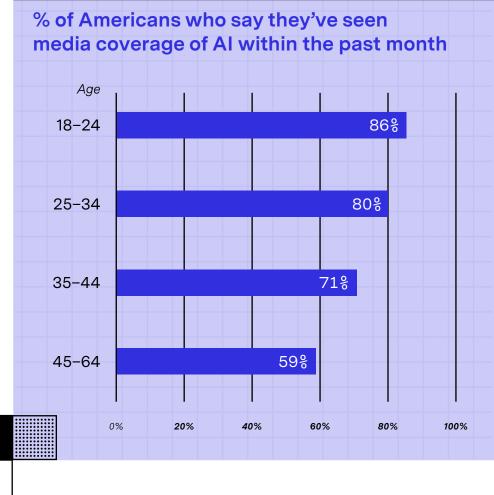
The transformative social and personal implications of Al.



AI has become a major flashpoint in a broader public conversation about the role of technology in our lives

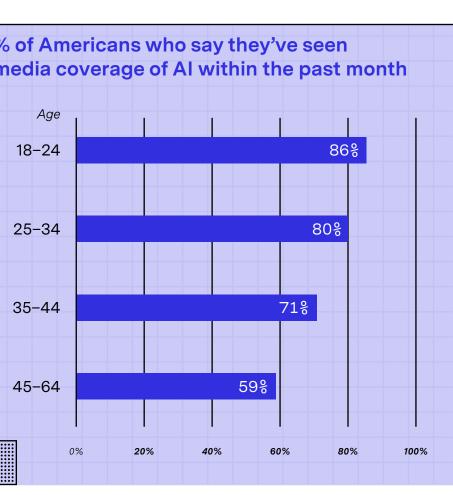
It's no exaggeration to say that news stories about AI have been close to inescapable over the past few months. Whether you're reading about the stock market², geopolitics³, or the latest trends in popular music4, sooner or later the topic is bound to come up.

Around three quarters of Americans (73%) say that they've seen at least one story about generative AI within the past month-with younger people among the most likely to have seen coverage. And the topic's ubiquity in the press has helped to establish a strong baseline of interest in and awareness of AI among a general audience. A full 80% of people have at least some awareness of "generative AI", while almost half (46%) say that they have a "good" understanding of what the term means.





^{3.} Ben Judah, "The impact of the AI revolution on geopolitics is going to be terrifying", Evening Standard, May 11, 2023



For the most part, the stories about generative AI that ordinary people have been seeing in the press have tended to skew mostly positive in tone-focusing on the personal and social benefits of the technology, rather than its potential for abuse or its negative externalities. As of May 2023, 47% of Americans said that the recent press coverage they'd seen about AI had been mostly positive, while only 28% said that they'd seen more negative stories (although a recent wave of more skeptical reports in major publications⁵ could foreshadow a looming shift in the tone of coverage in this space).

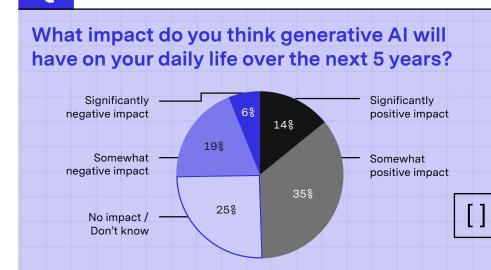
For now at least, most people are broadly optimistic about the potential use cases for AI within the context of their daily lives. Around half of Americans (49%) expect that, over the next 5 years, these technologies will have a net positive impact on their lives. The remaining half are evenly split between those who could be classed as "AI skeptics"-i.e. those who think the dangers and downsides of AI will outweigh the rewards-and those who don't yet feel they have enough information to decide exactly where they stand.



VOICE OF THE CONSUMER

I saw a story in the news about scammers who used AI to replicate someone's voice and used it to call her mom and tell her she'd been kidnapped. That made me think about all the ways this technology could be used to commit crimes.





^{4.} Ben Beaumont-Thomas, "We soon won't tell the difference between AI and human music - so can pop survive?", The

^{5.} Kevin Rose, "A.I. Poses 'Risk of Extinction,' Industry Leaders Warn", New York Times, May 30, 2023





VOICE OF THE CONSUMER

I had to learn
that the best way
of using ChatGPT
was helping me
find resources
to educate myself
and learn new
skills-not look
up information
for me. How much
these technologies
add to your life
depends so much on
how you decide to
use them.

Previous NRG studies have already found evidence of what could best be described as "cautious optimism" among the public when it comes to the impact of AI on specific industries such as travel or gaming. This data suggests that these attitudes also extend into the more mundane, dayto-day use cases for the technology. In other words, while there may be small but highly vocal contingents of AI evangelists and hardcore skeptics out there, most people fall somewhere in the middle, but skewing-for the time being, at least-towards the optimistic side of the divide.

The demographics most likely to take a positive view towards AI include men, millennials, and college graduates. Notably, there's also a strong correlation between income level and attitudes towards AI: the

more that people earn, the more likely they are to be excited, rather than anxious, about the impact the technology will have on their lives.

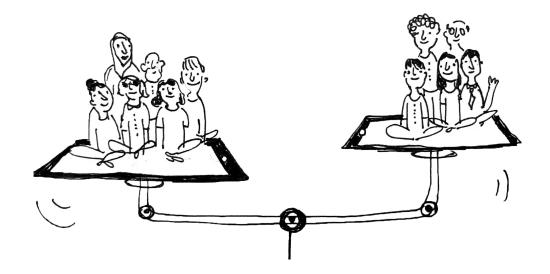
This could indicate the nascent emergence of a class divide between AI optimists and pessimists. To a certain extent, this divide may be driven by differences in perceived job security-between those in senior or managerial roles who see their careers as "AI-proof", and people in lower-level positions who may be more worried about the potential impact of AI on labor markets. Or, put another way: between those who think they'll be the decision makers buying and using AI-powered business solutions, and those who think they'll be competing against those AIs.

Alternatively, it's possible that these differences in attitudes among socio-economic groups are rooted in expectations around the cost and availability of AI-powered products. It's only natural, after all, that those on lower incomes would be more likely to fret about being priced out of the market for AI. And certainly, leaders in this space ought to be taking steps to address concerns that this technological revolution could end up entrenching and reinforcing existing social divisions. For example, if AI-powered health tools end up becoming a luxury product, there's a real danger that healthcare inequalities in the US could become even more stark than they are today.

It would be a mistake, however, to try to understand public attitudes towards AI in a vacuum. It's becoming increasingly clear that, for both the media and the average consumer, debates about the implications of generative AI are best understood as reflections of a much broader conversation about the social ramifications of new technologies. In this respect, AI is a totem of something much greater than itself; the latest front in an ongoing social reckoning with technological shifts.

After all, the issues that frequently come up in public discourse about AI—its impact on personal privacy, its role in the spread of misinformation, its potential effects on job security, and so on—are not new ones. Over the past two decades, the ascent of Big Tech has had a profound impact on the lives of people around the world; but it's also brought with it a counter-current

6. Data from a study of 1,500 US consumers, ages 18-64. Participants were selected and weighted to be representative of national demographics in terms of age, gender, race/ethnicity, and region. This study was conducted online in December 2022.



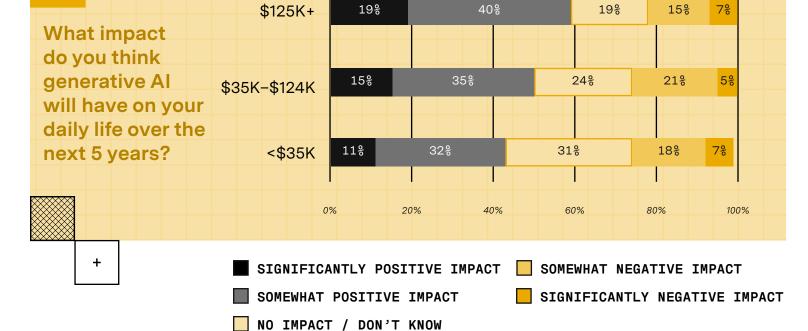
of social unease and uncertainty, as ordinary people have had to reckon with the implications of becoming so reliant on a small handful of platforms and products. And this has started to shape the way that people feel about the future. Fifty percent of Americans, for example, expect that technological progress will erode their personal freedoms over the coming decade, while 70% expect that it will put even more power into the hands of big corporations.⁶

Seen in this context, the public's hopes and fears around generative AI are extensions of much deeper underlying feelings about technology and its impact on the world. Ultimately, it's impossible to fully separate out public sentiment towards AI from this broader social and technological backdrop. And indeed, part of what makes this new generation of AI tools so exciting—and so dangerous—is the possibilities they

hold for upending and reframing our relationship with technology.

So, while everyone—the public, the media, and the experts—may be talking about AI right now, what they're *really* talking about is something much more fundamental. At their core, these conversations are about the power dynamics between individuals, corporations, and algorithms.

The technological shifts of the past three decades have already created a situation where our identity, as a species, is in a state of flux. The AI revolution looks set to turbocharge a complex debate that was already playing out across society—one that is fundamental to our direction and identity as a species.





Next generation AI assistants could revolutionize daily life

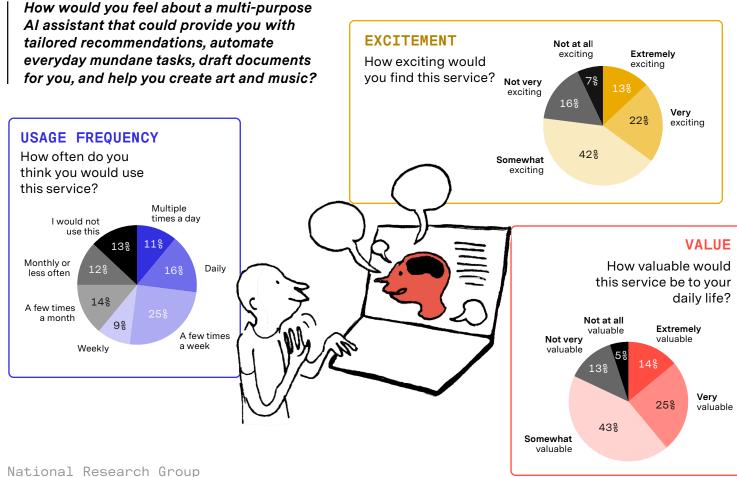
While some early-adopters have already started incorporating AI tools like ChatGPT and Midjourney into their personal and professional routines, the vast majority of Americans have yet to explore the full potential that this technology has for improving and streamlining everyday activities.

Through in-person quantitative surveys and facilitated co-creation sessions conducted over the course of a single day, NRG identified five key domains of daily life where the average person could benefit from generative AI:

- 1 Personal admin
- 2 Work
- 3 Creativity & self-expression
- 4 Connecting with others
- 5 Wellbeing & personal development

The following section of this report documents the specific pain points and needs cited by Americans across these different domains-and the role that AI could play in helping to address those needs.

PUBLIC SENTIMENT TOWARDS AI VIRTUAL





METHODOLOGY

The following use cases for AI were identified through multiple rounds of in-person co-creation sessions, conducted using our unique NRG Labs methodology.

NRG Labs provides a flexible, secure, and fast approach to product

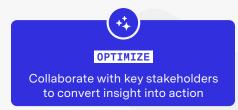
and service optimization. Utilizing an iterative methodology that blends direct, in-person consumer feedback with cutting-edge technology and scale, Labs sessions allow for rapid and effective co-creation, delivering meaningful output and same-day results.

OUR APPROACH

NRG Labs utilizes a three-step process, optimizing over the course of three sessions all held on the same day.









EXPLORE

Small group of 6 participants curated from the survey results for deeper, textured insight

END OF DAY OUTPUT

+ OPTIMIZED STIMULUS

based on rigorous, iterative process

+ CRITICAL INSIGHTS

derived from intersection of quantitative scale and qualitative depth

VISUAL REPORTING

delivered through NRG Labs Command Center for stakeholder socialization

THE COMMAND CENTER

The Labs' Command Center allows research teams to conduct data exploration in real time, drastically accelerating the focus group selection process. This experiential platform has the unique ability to immediately identify the right participants for same-day discussion-bringing consumers, creators, and researchers together in one place to iterate, optimize, and generate actionable insights.



DOMAIN 1

Personal Admin



// VOICE OF THE CONSUMER

Having an AI personal shopper would transform the experience. No wasted time buying things that don't look good on me, always knowing what's in my fridge when I'm grocery shopping... sign me up!



1. PAIN POINTS

- Time poor
- Challenge of juggling work, life, and family
- Existing tech isn't helpful enough
- Not everything is in one place; often feel overwhelmed

2. CONSUMER NEED

To streamline and organize my life in order to alleviate stress, reduce time on mundane tasks, achieve goals, and be more present.



1. PAIN POINTS

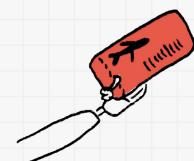
- Planning for travel can involve a significant amount of work
- Challenges of managing at-home needs (e.g. pet care) during vacations

2. CONSUMER NEED

To bring the joy back to travel by eliminating friction in planning, adjusting, and experiencing.

3. ROLE OF AI

Integrate all interactions from a person's online history to provide recommendations and personalized travel itineraries and budgets for every stage of the vacation process.









1. PAIN POINTS

- In-person shopping can be time consuming
- Can be difficult to find the right products when shopping online, factoring in price, size, style, and fit

To make more accurate, efficient, and effective purchasing decisions.

2. CONSUMER NEED

3. ROLE OF AI

Make recommendations for new items based on learned preferences from previous shopping experiences, and allow users to see what the items will look like on themselves using 3D Al-generated images.

AUTOMOTIVE

1. PAIN POINTS

- Current in-car technology is quite limited; can often be clunky and ineffective
- Temptation to engage with phone/device while driving can be high

3. ROLE OF AI

Level up from current in-car tech offerings to provide a truly intuitive, frictionless voice-activated assistant to provide meaningful help across a variety of tasks-such as cascading schedule changes and personal communication needs.

2. CONSUMER NEED

3. ROLE OF AI

Become a single source of

current options. Including:

table at a restaurant.

productivity that helps individuals

routines in a more sophisticated,

responsive and personalized way to

Automating mundane tasks such

as booking a flight or reserving a

Generating emails, messages, and

other forms of communication.

manage their time, tasks, and

To maximize effectiveness and efficiency of navigation and other tasks, while delivering a seamless, easy conversational experience with minimal to no visual or other distractions.



1. PAIN POINTS

- Impossible to safeguard kids online and control the content they see
- Safeguarding settings on different platforms can be hard to understand and constantly change

2. CONSUMER NEED

To feel 100% confident that my children will not be exposed to inappropriate or harmful content when online or engaging with media, and won't be vulnerable to bad actors.

3. ROLE OF AI

Assist in managing content access for children based on learned preferences over time, navigating settings of various platforms on the user's behalf to ensure rules are followed consistently.





DOMAIN 2

Work



PROFESSIONAL PRODUCTIVITY

1. PAIN POINTS

- Jobs often now require a broad spectrum of expertise beyond the core skillset
 - Can be intimidating to know where to start when preparing documents
 - Difficulty finding accurate information

2. CONSUMER NEED

To streamline or eliminate mundane foundational tasks, freeing up time and energy to focus on more important and rewarding activities.

VOICE OF THE CONSUMER

It would be great if AI could make my life easier at work-but I don't want it taking my job away from me.

3. ROLE OF AI

Eliminate the "blank slate" problem by providing users with Al-generated first drafts of emails, letters, spreadsheets, or any other sort of professional document.



CODING

1. PAIN POINTS

- Difficulty of navigating the wide variety of coding resources that exist
- Learning new programming languages can be timeconsuming
- Challenge of finding and fixing bugs

2. CONSUMER NEED

To effectively translate natural language requirements to code as quickly as possible, while also optimizing the quality control and assurance processes.

3. ROLE OF AI

Generate code faster and more efficiently using AI that suggests code based on context of what you're programming.

DOMAIN 3

Creativity & Self-Expression



2. CONSUMER NEED

To have more options for

when performing errands,

entertaining, or listening

personalized playlists

at home.

J

MUSIC

1. PAIN POINTS

 Time-consuming to find new artists that speak to your personal taste

3. ROLE OF AI

Create original music customized around your taste and inspired by your favorite artists.

SOCIAL MEDIA

1. PAIN POINTS

- Hard to create engaging and exciting content
- Need to compete with other influencers and content creators

2. CONSUMER NEED

To create engaging content to share with my friends and followers, that showcases my personality and style.

3. ROLE OF AI

Generate custom portraits of yourself in otherworldly situations for posting on social platforms.

(C)

1. PAIN POINTS

- High cost of buying original artwork
- Difficulty finding pieces that feel meaningful and personal

2. CONSUMER NEED

To have one of a kind art and design that's bespoke to me, my interests and memories.

3. ROLE OF AI

Generate a piece of original art to hang in your home, tailored to your stylistic preferences and even incorporating images of your family or favorite places.

11

VOICE OF THE CONSUMER

I love the idea of a world where everyone could create art without requiring professional training.



DOMAIN 4

Connecting with Others

VOICE OF THE CONSUMER

Finding local groups or events to get involved with is always hard. AI could be a helpful tool for making me feel more connected to my local community.



1. PAIN POINTS

- Awkward encounters
- Wasted time and money on incompatible matches

2. CONSUMER NEED

To take the quesswork out of online dating so it can be more fun and efficient and I don't have to waste my time on unpleasant experiences.

3. ROLE OF AI

Program an AI with your dating preferences and have them go on "virtual dates" with other Al avatars, then make recommendations on who you should contact in real-life based on the success of these virtual dates.

Then, before going on a date, make suggestions for the ideal location and activities based on your interests and your date's.

COMMUNITY ENGAGEMENT

1. PAIN POINTS

- Don't know where to start when it comes to meeting new people online or in-person
- Online interactions don't feel personal or meaningful enough

2. CONSUMER NEED

To connect with likeminded individuals in my community and those who share similar interests.

3. ROLE OF AI

Explore various online communities to find the ones that you would most enjoy-including communities based on your passions and interests and those that would allow for personal and professional networking.

DOMAIN 5

Wellbeing & Personal Development

HEALTHCARE

1. PAIN POINTS

- of mental health and Ioneliness
- Growing social problems · Support helplines often overwhelmed
 - · High cost of healthcare in the US

2. CONSUMER NEED

To better understand my own physical, mental, and emotional healthcare needs and how to address them.

3. ROLE OF AT

Diagnose potential mental and physical health issues by analyzing biometric data and health data that you share with it, acting as an early warning system for when you should see a healthcare professional.

VOICE OF THE CONSUMER

An AI robot could deliver constant attention and conversation on demand. That could be really impactful for someone with an illness or who doesn't have enough human interaction.



EDUCATION

1. PAIN POINTS

- Standardized approaches to education don't fit all needs
- Students with learning disabilities often get left behind
- Hard to know where to get started when learning new skills as an adult

2. CONSUMER NEED

To feel more empowered in my institutional and self-directed learning, and to improve my skills across a wide variety of different topic areas.



3. ROLE OF AI

Create tailored learning experiences (for children and adults alike) based on an understanding of your preferences and needs, scheduling lessons based on the times when you're most focused and identifying the right mix of learning techniques.

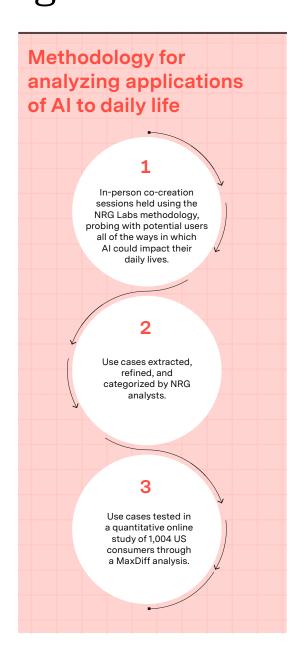


Americans say they're particularly excited about the role that AI can play in facilitating their personal wellbeing and growth

The use cases for AI outlined over the previous pages of this report were the result of conversations with potential users across in-person co-creation sessions run using the NRG Labs methodology.

To enable more in-depth analysis and cross-comparison of these various applications for AI, NRG conducted a follow-up quantitative study of US consumers. In this study, respondents were presented with subsets of the use cases outlined earlier (using variations of the wording found in the "Role of AI" segments) and asked to identify the ones that they felt were most innovative, and the ones that would be most beneficial to them personally. The chart opposite shows the findings of this MaxDiff analysis.

This analysis suggests that, while Americans can certainly see the value in using AI as a day-to-day productivity booster, they're even more excited about the role it could play in helping them manage their physical and intellectual well-being. In fact, respondents cited healthcare and education as both the most beneficial and most innovative applications for generative AI.

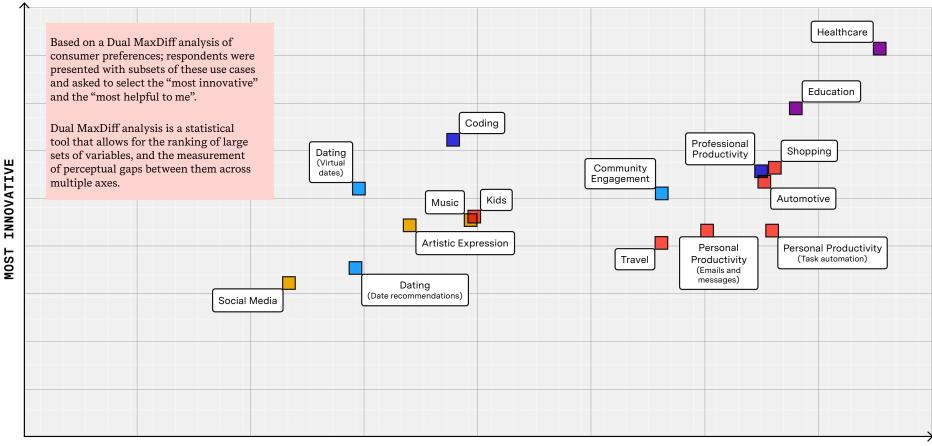




Both of these use cases speak to the way in which AI, at its best, can be a powerful tool for helping individuals to navigate the complex social institutions and bureaucracies that govern our daily lives. Attending a class or getting a health check-up can sometimes feel like cold, impersonal experiences-especially given the ratios of qualified healthcare professionals and educators to people that need their services. So it's easy to see why people would be excited about the possibility of making these experiences feel more personalized and more tailored to their unique situations and needs.

Personalized healthcare plans and learning pathways are similar in that both of them require the synthesis of a broad range of complex inputs into an end product that can be understood and acted on by the end-user. And that's exactly the sort of task that, in theory, AI is wellplaced to assist with. In that sense, AI-powered healthcare and education solutions could help to democratize expertise in these professions, giving ordinary people the kind of best-in-class advice previously only accessible to those who could both find and afford the services of worldclass doctors or teachers.

USE CASES FOR GENERATIVE AI



MOST HELPFUL



However, these use cases also reinforce the need for AI developers to be investing in the right sorts of safeguarding features. If people are going to be making healthcare decisions on the basis of AI-generated advice—even if it's presented as simply a first-line tool rather than a replacement for qualified medical professionals—then it's absolutely vital that these tools are providing safe and accurate recommendations, and that there are features in place to mitigate against the risk of AI hallucination.

Moreover, both of these use caseshealthcare and education–speak to the growing threat that AI now poses even to industries that were once thought largely impervious to automation. While it's unlikely that we'll wake up one day and find that we no longer need doctors or teachers in our society, it is possiblelikely, even-that the nature of these kinds of jobs, and the skills required to succeed in them, will change in response to the mass adoption of AI tools. If more patients start going to their doctors armed with AIsourced diagnostics, then healthcare professionals will need to learn how to engage with those AI outputs. Ultimately, what it means to be an expert in a topic may change in response to this new technological landscape and the democratization of knowledge it enables.

Outside of these two use cases, many of the applications for AI featured in the top-right quadrant of the MaxDiff chart revolve around personal productivity—whether that be at home, at work, or in the car. In these cases, the benefits case for AI isn't about simulating expertise; instead, it's about outsourcing the cognitive load of menial tasks and reducing day-to-day friction across a wide variety of activities.

Arguably, these types of use cases are less radically transformative than the concept of an AI-powered doctor or teacher—which may be why respondents tended to rank them as less innovative. But there are still enormous potential benefits to them. The realities of modern life place huge demands on our time; so anything that pushes back against that, and helps free up that time for more meaningful social and interpersonal experiences, could be a great boon for society.

Many respondents also expressed strong interest in the idea of AIpowered personal shoppers. Over the next few years, this could be a gamechanger for retailers and consumer product brands. Getting your products recommended by Als could one day be as critical for brand growth as featuring highly on Google results is today. It wouldn't be surprising if this became one of the crucial battlegrounds for brands over the rest of the 2020s-potentially leading to the emergence of a new subfield of marketing, just as the growth of search engines in the 2000s created the field of SEO.

11

VOICE OF THE CONSUMER

I work in education, and I'm already seeing lots of students relying on automated writing. And a lot of it isn't accurate at all. I've seen essays that had twelve different references and all of them were made up by ChatGPT.



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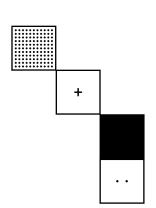
VOICE OF THE CONSUMER

I could see AI
helping to create
a true one-stop
shop for all your
travel needs.
By taking away
the stress and
security concerns
from travelling,
you could make the
world a lot more
accessible
to people.

But there are also a number of questions that still need to be resolved around what these AIpowered shopping assistants will look like in practice-and what commercial arrangements will underpin them. For one thing, it's not clear yet who will end up owning the experience: brands themselves, platforms like Amazon, or a third party? Will recommendations be based purely on an objective assessment of customer needs, or will brands be able to pay for increased visibility? And will there be some kind of referral fee for purchases facilitated through these services? All of these questions are likely to be key points of tension as

retailers and tech companies launch their initial offerings in this space.

Notably, one of the areas that scored particularly poorly in the MaxDiff analysis was the idea of using AI to help improve one's dating life. This, perhaps, helps to shed some light on the limits of the technology. While people may see AI as a powerful tool for synthesizing and sourcing information, they're more skeptical about its application in areas of their lives that they see as driven by emotion and human connection instead of reason and intellect.





As machines become more human, will humans become more like machines?

It's clear that there are a wide range of potential applications for generative AI across many different domains of consumers' daily lives. But this raises an obvious question: what will the net effect of those applications be on our lifestyles and our social relations? And if we outsource so much of our cognitive load to machines, do we risk losing something of our humanity?

Bill Gates recently went on record saying that generative AI would be "every bit as important" as the internet⁷; Alexis Ohanian, meanwhile, has predicted it will be "bigger than the smartphone8". Both of those technologies had profound and far-reaching effects not just on the way we live, but the way we saw the world-they were paradigm-shifting revolutions that recontextualized the meaning of physical distance and interpersonal connectivity. So, if the experts are right and we really are on the cusp of another revolution of a similar scale, it stands to reason that we should expect to see some similarly radical conceptual shifts in the way we see the world and our place in it.

- 7. Grace Kay, "Bill Gates calls ChatGPT 'every bit as important as the PC' or the internet", Business Insider
- 8. Alexandra Garfinkle, "Reddit co-founder: The Al revolution is 'bigger than the smartphone'", Yahoo!Finance, May 9, 2023

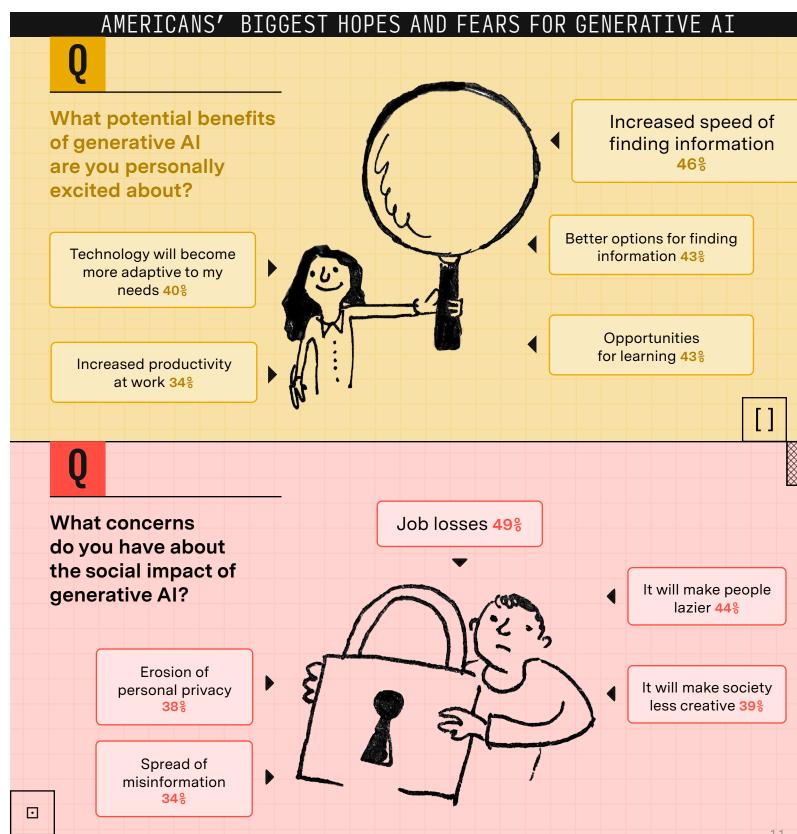
We can get an early sense of what that shift might look like by examining the specific hopes and fears that people have for how generative AI might impact themselves and society. On the one hand, Americans say that they're excited about the possibility that AI could help them find information more easily and more efficiently-and, consequently, that it could make them more productive at work or better able to learn new skills.

At the same time, however, they're also worried about the possibility that AI platforms could be used to harvest personal data and erode their sense of privacy-and the looming threat of bad actors using AI-generated content to spread misinformation. But an even bigger threat, in the eyes of the public, is the possibility that AI could end up acting as a replacement for-rather than an augmentation to-human labor and creativity. This, they say, would not only be bad news for the labor market; it could also lead to us becoming less creative and generally lazier, as we become overly reliant on AI tools to create art and perform day-to-day tasks.



VOICE OF THE CONSUMER

Everyone learns in different ways-so it would be great if AI could help people become more confident learners, adapting content into different forms based on what works for them.





If there's a common theme that runs through these hopes and anxieties, it's the notion that the integration of AI into our daily lives could, in the long-run, lead to a blurring of the boundaries between the human and the machine—and a shifting of the power dynamic between us and the technology we use.

The AI revolution has upended traditional notions of what can be achieved through computing power. Creative expression is no longer the sole domain of humans; indeed, many experts have argued that traditional metrics for distinguishing "true" intelligence from machines, like the Turing test, are now almost entirely obsolete⁹. But, by the same token, this also means that AIs have begun to inherit human foibles and fallibilities. A year ago, the idea that a computer could tell a lie would have seemed patently absurd. Now, the

phenomenon of "AI hallucination" is well-documented¹⁰.

And as machines become more human, humans may become more like machines-for better and for worse. AI-powered chatbots and search platforms promise to put the entire universe of digital information at our fingertips in a way never before thought possible, bridging the gaps between the human mind and the online content ecosystem, and allowing us to attain almost machinelike levels of productivity. The danger, according to consumers, is that these increased levels of connectivity and productivity could come at the cost of our human capacities for innovation and creativity: a kind of "Wall-E syndrome"11, where we outsource so much of our thinking and content creation to machines that we lose sight of what made the human experience so uniquely special.

The shifting boundaries between human and machine intelligence More connected to information Improved ability to create art and take instruction in natural language More likely to fabricate information or misintrepret instructions

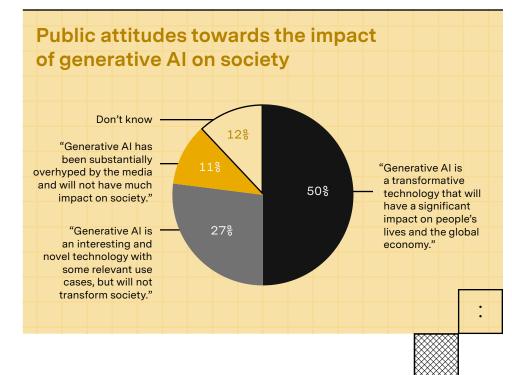
This shift could have a profound impact on our perception of ourselves and our relations to others

It remains to be seen whether this blurring of the lines between human and machine intelligences will prove to be a net positive for humanity. But one thing is certain: such a radical shift in our understanding of ourselves would inevitably have far-reaching consequences for how we organize our communities and our society.

Fifty percent of Americans agree that generative AI will prove to be a "transformative technology" with a significant social footprint; only 11% believe that it has been overhyped by the media and will have little to no impact on society. There's an emerging public consensus that, whether you're an AI optimist or a doomer, it's time to make peace with the fact that some degree of social upheaval will be an inevitable byproduct of the AI revolution-and the core question will be how we manage and navigate that period of disruption to produce the best possible longterm outcomes.

- 9. Darren Orf, "The Turing Test for Al Is Far Beyond
- 10. Karen Weise and Cade Metz, "When A.I. Chatbots Hallucinate", The New York Times, May 1, 2023
- 11. Tristan Greene, "<u>A beginner's guide to the Al apocalypse:</u>
 <u>Wall-E syndrome</u>", The Next Web, January 23, 2020







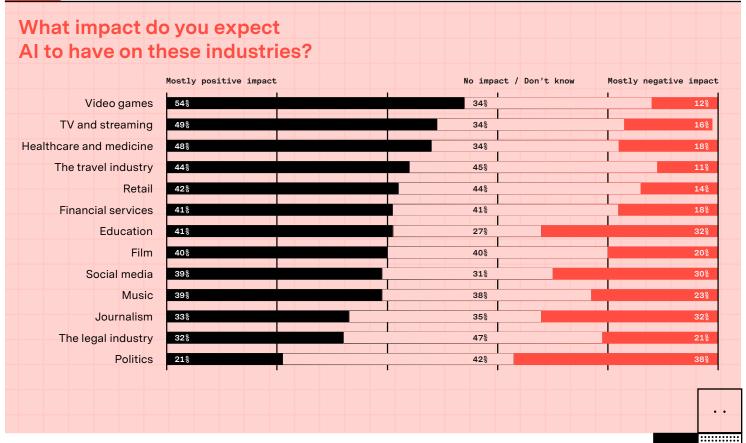
Of course, the form this disruption will take will vary considerably from industry to industry.

In the case of gaming and TV/ streaming, consumers appear to be broadly excited about the possibilities that generative AI is starting to open up. These technologies could be powerful behind-the-scenes tools for creatives, while also enabling entirely new types of context experiences; imagine, for example, the possibility of having completely unscripted interactions with an NPC in a video game, or watching an interactive streaming show where the outcome of the story changes based on your inputs. It's important to note, however, that previous NRG research has found that people are most likely to be receptive to the idea of AI in these industries when it's framed as a tool to be used at the discretion of human creatives—not as a potential threat to their livelihoods.

Healthcare is another industry where the public is optimistic about the potential applications for AI. Not coincidentally, the healthcare industry has traditionally been one of the major drivers of AI advancements: in 2021, it alone accounted for almost a fifth of global investment into AI¹². And AI models have already had success at accelerating the discovery process for new medications—and could soon be used to create personalized treatment plans and lead to breakthroughs in longevity research¹³.



Q



Similarly, people are also excited about the potential applications for AI when it comes to retail and travel. Already, travel brands like Expedia have begun to roll-out AI-powered travel assistants¹⁴, while online retailers like Amazon have announced plans to bring chatbot capabilities to their platforms¹⁵. In both cases, these tools could add a level of personalization to the customer experience traditionally available only to those who could afford the services of a travel advisor or personal shopper.

On the other side of the equation, journalism, politics, and the legal industry rank as the three areas of the economy where the public is

- 14. Megan Cerullo, "Expedia launches ChatGPT-powered travel planning tool", CBS News, April 7, 2023
- 15. Matt Day, "Amazon Plans to Add ChatGPT-Style Search to Its Online Store", TIME, May 16, 2023
- 16. Noor Al-Sibai and Jon Christian, "BuzzFeed Is Quietly
 Publishing Whole Al-Generated Articles, Not Just
 Quizzes", Futurism, March 30, 2023
- 17. Kathryn Armstrong, "ChatGPT: US lawyer admits using Al for case research", BBC News, May 28, 2023

most skeptical about the benefits

of AI; in all of these cases, fewer than a third of people expect the technology to have a net positive impact. It seems that concerns around the reliability of AI systems may be making Americans nervous about their application to fields where accuracy is of paramount importance. There have already been concerns raised in the press about publishers using AI to farm engagement through low-quality articles¹⁶-and we've seen at least one case of a lawyer getting called out for using ChatGPT to generate fake case citations¹⁷. It's possible that stories like these have made consumers skeptical that AI is ready for deployment in these kinds of scenarios.

VOICE OF THE CONSUMER

I think AI will be particularly impactful for people who don't get enough chances to interact with others-like people in nursing homes who just want more company.

^{12.} State of Al 2021 Report, CB Insights, March 9, 2022

^{13.} Peter Rejcek, "Why AI Will Be the Best Tool for Extending
Our Longevity". Singularity Hub. December 8, 2019



The dawn of the AI-powered human is on the horizon—and businesses will need to adapt to survive

While experts and the press continue to debate the social value of AI, most Americans are cautiously optimistic about the impact this technology could have on their lives. They feel that, on balance, it's likely to have a net positive effect on them as individuals—and they are, at the very least, willing to experiment with AI-powered tools across a wide variety of different spheres within their daily routines. And—with a few notable exceptions—they think AI is likely to have a positive impact on a wide variety of different industries.

Indeed, many of the most common worries and concerns that people express about generative AI aren't really about the technology itself; instead, they're about the longer-term social ramifications it could have, and how it could reframe what it means to live in and experience the world.

To a certain degree, any truly transformative technology will inevitably have some profound impacts on our conception of ourselves and our relations to others. So the challenge, in the case of AI, is to figure out a path forward that maximizes the benefits of this social shift while guarding against the downsides.

In other words: how can we use this technology to herald a new era of hyper-connectivity, personalization and productivity, without allowing human creativity and ingenuity to wither or atrophy? How can we secure the benefits of offloading much of our day-to-day cognitive load to AIs, without sacrificing a core part of what it means to be human? And how do we ensure that the AI boom doesn't tip the balance of power too far away from ordinary people in favor of big corporations and tech companies?

These are far from simple questions—and answering them will require the coordinated efforts of the private sector, policymakers, and AI thought leaders. One thing, however, is clear: the rise of the AI-powered human is coming. And daily life may never be the same again.

IN SUMMARY

Three ways Al could revolutionize daily life

01

Democratizing expertise: In fields like healthcare and education, Al-powered tools look set to lower the barriers to access for information, giving ordinary people the kind of tailored experiences once reserved for the rich. In the long-run, this could change the nature of what it means to be an expert in any given topic.

02

Reducing cognitive load: By outsourcing boring and mundane activities to AI assistants, we can free up time to focus on what really matters and invest in wellbeing.

03

Personalized recommendations:

Al-powered personal shoppers could have a dramatic impact on the way we buy goods and services, potentially changing the rules of the game for brands and retailers.

11

VOICE OF THE CONSUMER

I think AI is going to usher in a new era where it's harder to tell what's real and what's fake. And I worry about what impact that's going to have on kids growing up today.

nrg

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METHODOLOGY

Consumer quotes and AI use cases are from sessions run using the NRG Labs methodology in May 2023. This was conducted in a facility in New Jersey and included 3 focus groups and 150 quantitative participants. For more on this process, see page 5. Consumer quotes have been edited for clarity.

Unless otherwise specified, data in this report is based on a study of 1,004 US consumers, ages 18 to 64. This study was conducted online in May 2023. Respondents were selected to be demographically representative of the US population based on census data.

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For more on how generative and conversational AI are reshaping the consumer experience across industries, download NRG's recent reports:



Pressing Play on Al: A Game-Changing Power-Up?



Generative AI:
A Lifeline for
Conversational
Commerce?



Planes, Trains and Large Language Models: Will Conversational Al Revolutionize the Travel Experience?