The technology we can't live without

Consumer trends on the most useful tech, generative AI, data privacy, sustainability, and social media

KPMG Consumer Technology Survey

kpmg.com/us

Contents

Foreword

While technologies are omnipresent in today's digital age, they are not all created equal. Some are so intertwined in our daily lives that they are almost extensions of our physical selves. Others work in the background, making innovation possible through the power of technology convergence—yet the average person hardly even registers them. And some are just entering the sphere of consumer awareness but look poised to transform our behaviors and experiences. Regardless, we are all massive consumers of technology every day.

KPMG conducted the Consumer Technology Survey to quantify how useful the public at large considers different technologies in their lives. We surveyed 1,507 adult US consumers across all age groups about how they are using 22 different technology products and services today and how they expect to use them over the next year. We also captured perspectives on generative AI (Gen AI), data privacy, sustainability, and social media.

This report dives into the most meaningful consumer insights for executives to digest, especially leaders at electronics, hardware, semiconductor, cloud, fintech, software, artificial intelligence, telecommunications, media, entertainment, and gaming companies.

Highlights include both eye-opening and expectation-confirming insights on a variety of topics:

- The technologies consumers consider most indispensable today, plus consistencies and inconsistencies among age groups

- Gen AI, data privacy, sustainability, and social media

- Considerations for how businesses can use these insights in their planning

> *Our aim is to present executives with a multidimensional view of how ordinary people use and think about common tech products and services in their daily lives. Whether or not businesses sell directly to consumers, understanding the latest consumer trends, behaviors, and preferences can help all makers of technology solutions optimize their product portfolio, create more engaging customer experiences, enhance ways of working, attract technical skills, and inform strategic decisions.*

– Mark Gibson,
Global Head of Technology, Media & Telecommunications (TMT), KPMG International, and Head of TMT, KPMG LLP

Highlights

Today's most indispensable technologies

1. Wireless phones and tablets
2. GPS/mapping/directions apps
3. PC and laptop computers
4. Streaming services
5. Music apps

Generative AI
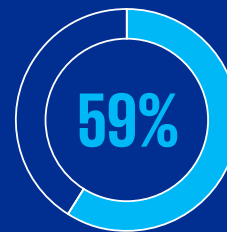
1 in 4 already view Gen AI as very useful

15% plan to increase Gen AI usage over the next year

42% do not want to consume creative content produced by AI
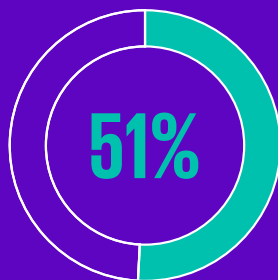
Data privacy

59% will not download **specific apps** due to data privacy concerns

More than **2X** indicated their data privacy concerns **were with the companies rather than the tech itself**

Sustainability

51% prefer to use technology from **sustainable companies**

Social media

24% **use 5 or more** unique social media services

75% **rate social media** at least somewhat useful

84% **plan to use social media** the same or more over the next year

Top 5 most indispensable technologies

1 Wireless phones and tablets

2 GPS/mapping/directions apps

3 PC and laptop computers

4 Streaming services

5 Music apps

Wireless phones, GPS/directions apps, computers, streaming services, and music apps stand out for usefulness today and tomorrow

Technologies exist on a continuum. All serve a purpose and add value to society, but specific utility can wax and wane for different users at different times and in different ways, based on factors such as age, geography, and particular interests. Our expectation was that the survey population has been exposed, in some way, to all 22 technologies included in the survey. With this assumption, we asked them to rate the usefulness of each technology to them today and describe how they expect to use that technology over the next 12 months.
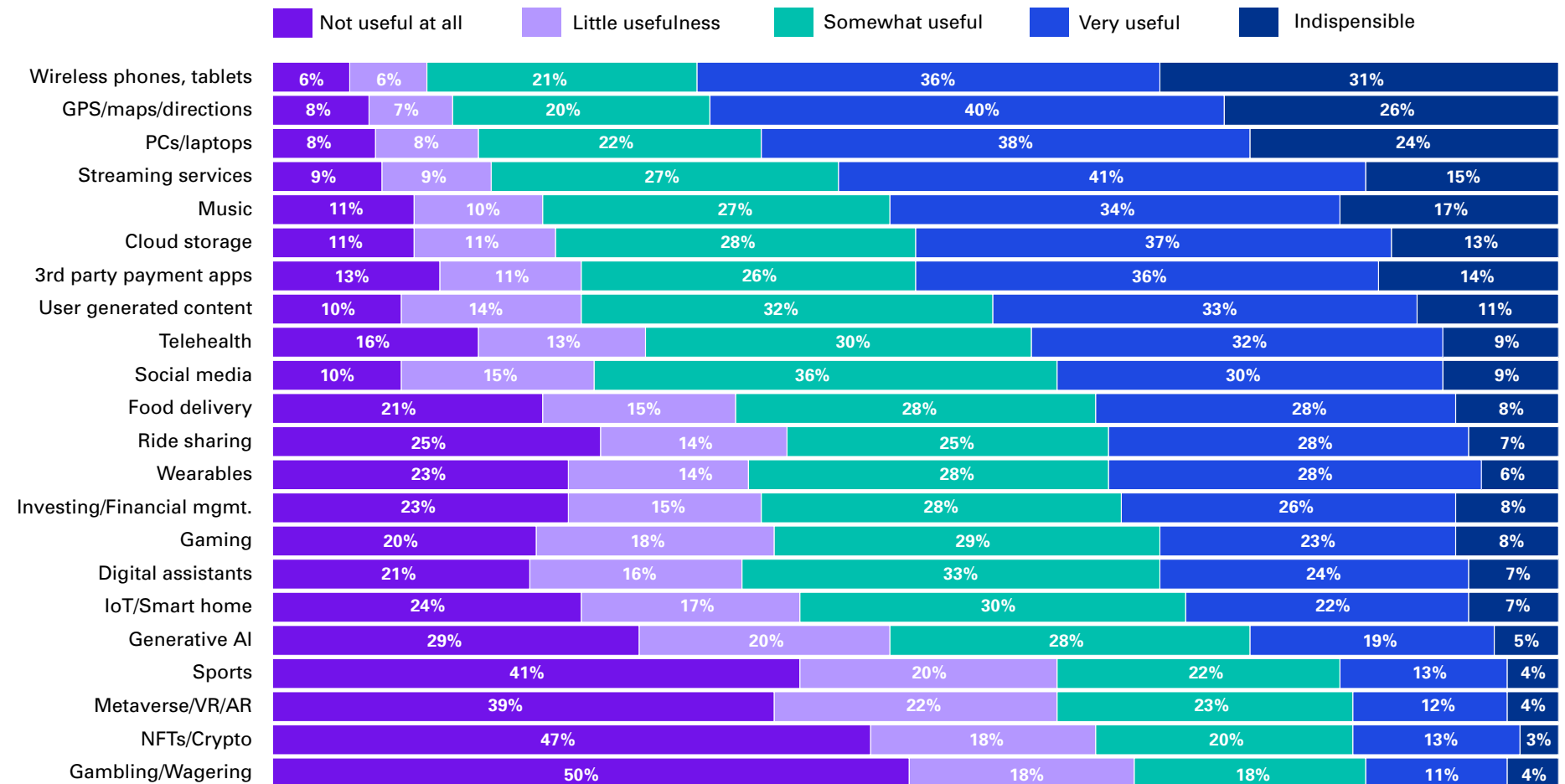
Five technologies stood out on both counts: Wireless phones and tablets, GPS/mapping/directions apps, PC/laptop computers, streaming services, and music apps. Consumers rated these highest for overall usefulness today, with at least 50 percent rating them very useful/indispensable. In addition, the same technologies ranked as the top five for increased expected use over the next 12 months.

The results for wireless devices and computers were anticipated as they are the great enablers and gateways to many other technologies used by consumers. Without these devices, we can't stream our entertainment, listen to our music, call for a ride share, check out with our digital wallet, order food with a click, have a virtual checkup, or trade stocks online, among other activities.

Somewhat surprising were how highly useful and indispensable leisure technologies such as streaming services and music apps were rated over other productivity and convenience technologies. This could be due to widespread adoption and a broad user base. While nearly every American enjoys music and videos in one form or another, a smaller slice of the population are heavy users of online food delivery, rideshare services, and gaming platforms, for example.
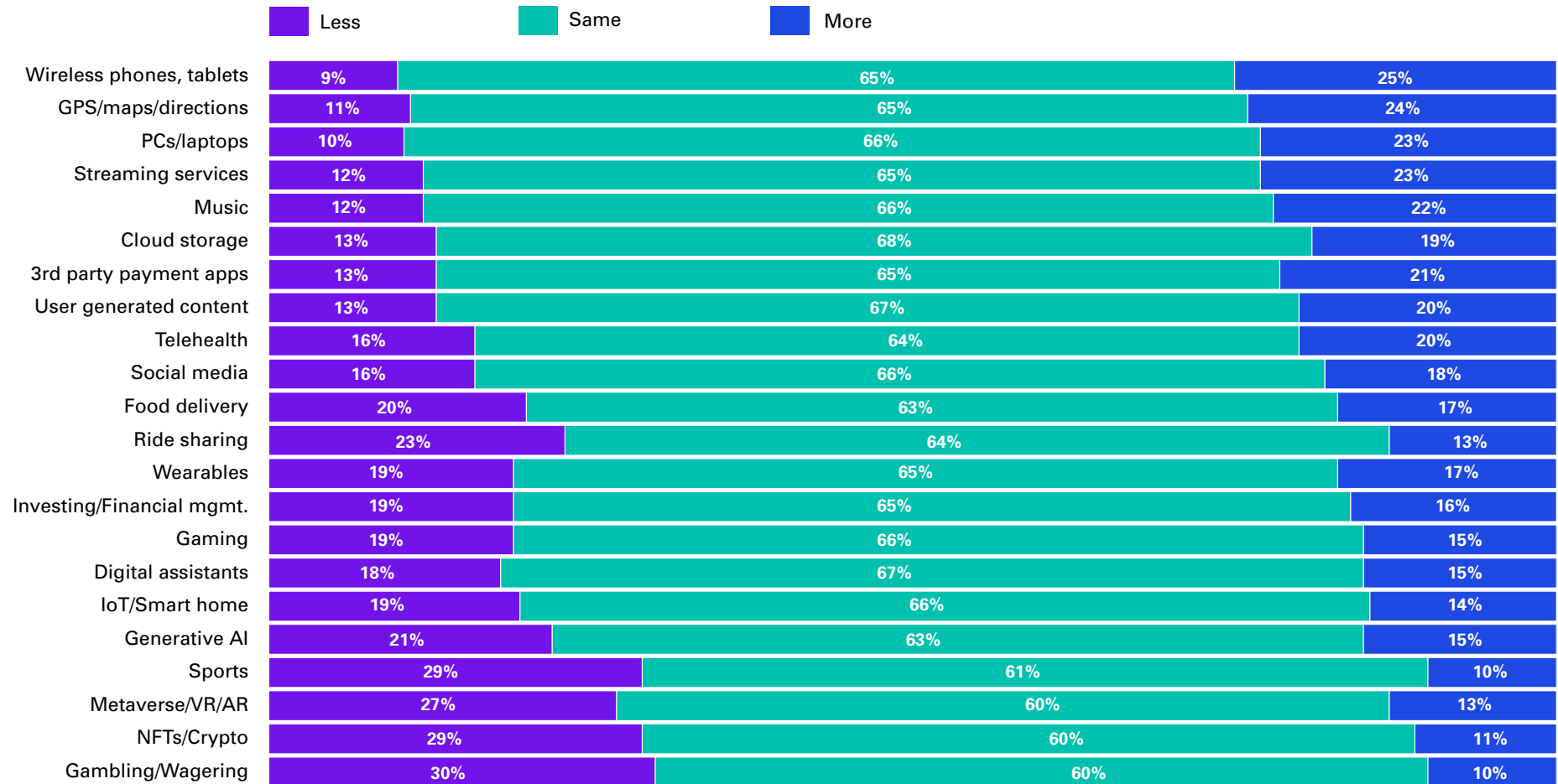
Technology usefulness today

For each of the technologies listed below (including types of apps, platforms, and software), respondents were asked to describe the usefulness of each technology to them today.

	Not useful at all	Little usefulness	Somewhat useful	Very useful	Indispensible
Wireless phones, tablets	6%	6%	21%	36%	31%
GPS/maps/directions	8%	7%	20%	40%	26%
PCs/laptops	8%	8%	22%	38%	24%
Streaming services	9%	9%	27%	41%	15%
Music	11%	10%	27%	34%	17%
Cloud storage	11%	11%	28%	37%	13%
3rd party payment apps	13%	11%	26%	36%	14%
User generated content	10%	14%	32%	33%	11%
Telehealth	16%	13%	30%	32%	9%
Social media	10%	15%	36%	30%	9%
Food delivery	21%	15%	28%	28%	8%
Ride sharing	25%	14%	25%	28%	7%
Wearables	23%	14%	28%	28%	6%
Investing/Financial mgmt.	23%	15%	28%	26%	8%
Gaming	20%	18%	29%	23%	8%
Digital assistants	21%	16%	33%	24%	7%
IoT/Smart home	24%	17%	30%	22%	7%
Generative AI	29%	20%	28%	19%	5%
Sports	41%	20%	22%	13%	4%
Metaverse/VR/AR	39%	22%	23%	12%	4%
NFTs/Crypto	47%	18%	20%	13%	3%
Gambling/Wagering	50%	18%	18%	11%	4%

Source: KPMG Consumer Technology Survey, 2023, KPMG LLP
Percentages may not sum to 100% due to rounding.

Expected technology use over the next 12 months

For each of the technologies listed below (including types of apps, platforms, and software), respondents were asked to describe how they expect to use this technology over the next 12 months.

Less | **Same** | **More**

Technology	Less	Same	More
Wireless phones, tablets	9%	65%	25%
GPS/maps/directions	11%	65%	24%
PCs/laptops	10%	66%	23%
Streaming services	12%	65%	23%
Music	12%	66%	22%
Cloud storage	13%	68%	19%
3rd party payment apps	13%	65%	21%
User generated content	13%	67%	20%
Telehealth	16%	64%	20%
Social media	16%	66%	18%
Food delivery	20%	63%	17%
Ride sharing	23%	64%	13%
Wearables	19%	65%	17%
Investing/Financial mgmt.	19%	65%	16%
Gaming	19%	66%	15%
Digital assistants	18%	67%	15%
IoT/Smart home	19%	66%	14%
Generative AI	21%	63%	15%
Sports	29%	61%	10%
Metaverse/VR/AR	27%	60%	13%
NFTs/Crypto	29%	60%	11%
Gambling/Wagering	30%	60%	10%

Source: KPMG Consumer Technology Survey, 2023, KPMG LLP
Percentages may not sum to 100% due to rounding.

Top 5 most indispensable technologies

1. Wireless phones and tablets

Wireless phones and tablets reigned, with nearly 70 percent ranking them the most useful/indispensable technology in their lives today. This did have some variation by generation. Surprisingly, only 58 percent of Gen Z labeled wireless devices as very useful/indispensable, compared to millennials (68 percent), boomers (71 percent), and Gen X (75 percent).

Across generations, though, the dominance of wireless phones is not in doubt. One-quarter (25 percent) of consumers overall expect to use wireless services more over the next 12 months, the highest expected increase in usage among all 22 technologies.

However, wireless carriers are not immune to economic realities or shifting customer preferences. The KPMG 2023 Telecom Consumer Survey investigated how the current economic and industry landscape has impacted consumers' wireless preferences. The research found that cost is top of mind, but other factors such as perks and carrier options can test customer loyalty. For example, while most respondents used one of the big three US carriers, 57 percent said they would be willing to explore new wireless plans from cable companies, satellite providers, or other providers.[1]

---

[1] KPMG 2023 Telecom Consumer Survey

2. GPS/mapping/directions apps

Sixty-five percent of consumers rated mapping apps as very useful/indispensable, with little variation by generation. Usage is also expected to increase in the next year, with more than double the number of consumers saying they will use the technology more versus less (24 percent versus 11 percent).

3. PC and laptop computers

Computers ranked third on the list of indispensable technologies. Sixty-two percent rated the technology very useful/indispensable. Interestingly, digital natives Gen Z (52 percent) and millennials (58 percent) rated computers lower for usefulness than consumers who grew up without them: Gen X (67 percent) and boomers (71 percent). In total, 23 percent expect to use PCs and laptops more over the next year, versus 10 percent who said they will use them less.

4. Streaming services

Fifty-six percent of consumers rated streaming services very useful/indispensable, with a fair amount of consistency across all generations (Gen Z at 53 percent, millennials at 58 percent, Gen X at 61 percent, and boomers at 50 percent). Overall, more consumers expect to use streaming services more in the next year (23 percent) versus less (12 percent).

The KPMG 2023 Media Consumer Survey also found that while higher prices due to inflation have raised consumer concerns about how much they are spending on their streaming subscriptions, most consumers have no plans to cut back more in the next six months than they already have. Further, consumers were more likely to cut other forms of entertainment, such as dining out.[2]

It should be noted that this Consumer Technology Survey was conducted during the 2023 WGA and SAG-AFTRA strikes, so perhaps respondents were anticipating making use of the streamers' vast content libraries to satisfy their upcoming entertainment needs. It also remains to be seen how future changes in the broader media landscape could shift consumer views and behavior when it comes to streaming. For example, steps by streaming providers to increase revenue—such as raising subscription prices—could test the loyalty of some consumers and increase the risk of subscription cancellation.

5. Music apps

Music apps were rated as very useful/indispensable by more than half of overall consumers (51 percent) and even more so by the three youngest generations (Gen Z at 59 percent, millennials at 58 percent, and Gen X at 54 percent). Having grown up enjoying music available across a range of mediums (radio, vinyl records, cassette tapes, and CDs), only 34 percent of boomers rated music apps as very useful/indispensable. Across generations, 22 percent expect to use music apps more over the next 12 months, and 12 percent expect to use them less.

Considerations for business leaders

Use active portfolio management to create value

Technology products come in a variety of types, from consumer electronics and apps to the enterprise software and hardware that powers them like servers, processors, and networking. In order to provide greater customer utility—hopefully leading to greater adoption and revenue—these technology products are continually upgraded with new models, versions, features, enhancements, and pricing tiers. In the past, product portfolio management involved milking cash cows, divesting dogs, and investing in stars. Research has shown that markets nowadays penalize companies that hold onto products with incongruent growth and margins in the absence of a clear rationale. How can business leaders begin to adjust? It requires an analytics-enabled approach that combines solutions typically applied in the deal environment—such as due diligence, economic value assessments, tax-efficient planning, and performance improvement—to help management make difficult product decisions.

Read more here

---

[2] KPMG 2023 Media Consumer Survey
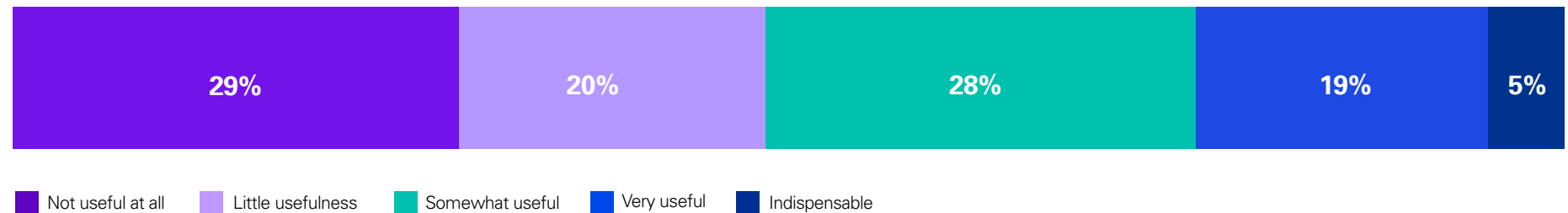
Consumers rapidly adopting Gen AI

A remarkable upswing for a young technology

In late 2022, our social consciousness exploded when a natural language processing chatbot was made available to anyone with internet access. Fast-forward to today, and the pace at which consumers have adopted Gen AI is unlike anything we have ever witnessed. More than half of consumers (52 percent) said Gen AI was at least somewhat useful to their lives. That includes 5 percent who said it was indispensable, 19 percent who said it was very useful, and 28 percent who said it was somewhat useful.

This is a remarkable show of adoption for such a young technology, considering that until recently, few people outside of the machine learning space had ever heard of Gen AI. Indeed, over the next year, 15 percent of consumers said they plan to use Gen AI more than they do today. That number slightly increases for Gen Z at 18 percent, as well as millennials and Gen X (16 percent each). Only boomers trail at 10 percent.

The finding may even be understated considering that average consumers likely are not aware of every time Gen AI influences their digital experience. The survey only inquired about the usefulness of their direct, intentional interactions with a Gen AI platform. We doubt many consumers fully realize the integral role Gen AI already has in powering applications such as personalized product recommendations, showing the best route to avoid traffic on their GPS, or interacting with them as a customer service chatbot. The most beneficial consumer uses are still being determined and will continue to evolve over time.

How respondents describe the usefulness of consumer Gen AI today

29%	20%	28%	19%	5%

- ■ Not useful at all
- ■ Little usefulness
- ■ Somewhat useful
- ■ Very useful
- ■ Indispensable

Source: KPMG Consumer Technology Survey, 2023, KPMG LLP
Percentages do not sum to 100% due to rounding.

Concerns persist about Gen AI ethics and its role in content creation
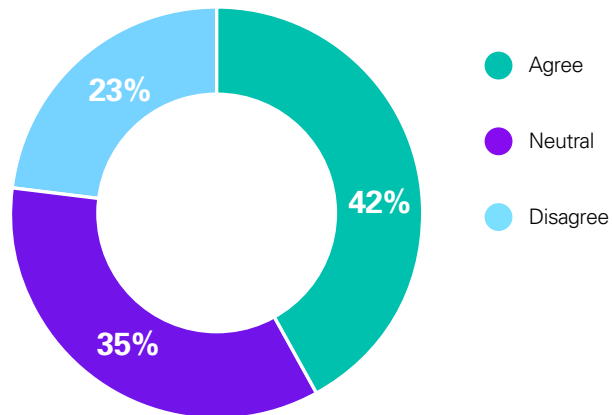
Although the disruptive impact of Gen AI is not in question, consumers have shown some hesitancy about certain ways in which Gen AI is used. In particular, they are skeptical about the role of Gen AI in the creative economy. Forty-two percent indicated they do not want to consume movies, TV shows, and music created by AI versus 23 percent who indicated an openness to consuming this AI-created content. Thirty-five percent of respondents were neutral to the idea. The younger generations were slightly more open to consuming content produced by AI.

The debate over AI-produced content is relevant given it was a central topic of the 2023 WGA and SAG-AFTRA strikes, and since among the 22 technologies surveyed, streaming services and music apps rated among the top five most indispensable technologies.

Also, 21 percent of consumers said they plan to use Gen AI less over the next 12 months. The top reason cited was they do not feel the technology is socially conscious.

Many company leaders are also attuned to this concern. In the KPMG 2023 US CEO Outlook , ethical challenges were the most cited obstacle to successfully implementing Gen AI.[3] However, a trusted AI program can provide a clear roadmap to navigate the end-to-end AI lifecycle with ethical, safe, and responsible decision-making. With the right governance, policies, and controls, organizations can move faster and scale AI with confidence.

And in October 2023, the US government issued an Executive Order designed to seize the promise of AI while managing the risks. It establishes new standards for AI safety and security, privacy protection, and worker support among other pillars.

Consumer appetite for AI-created content

I do not want to consume content produced by artificial intelligence (such as movies, television/streaming series, music, etc.) because it is important to me that the content is created by someone with living experiences and emotions.

- Agree
- Neutral
- Disagree

42%
35%
23%

Source: KPMG Consumer Technology Survey, 2023, KPMG LLP

Considerations for business leaders

Jumpstart your Gen AI agenda

With so many potential use cases, fast-acting companies can capture first-mover advantages with Gen AI. KPMG has identified five key actions that companies can begin taking right now to jumpstart their Gen AI agendas:

1. **Address data and data systems**
2. **Identify and pursue use cases**
3. **Develop a deployment and governance strategy**
4. **Ready the workforce**
5. **Look for the right partners**

Read more here

[3] KPMG 2023 US CEO Outlook

Most consumers are savvy about data privacy

Data privacy is paramount with consumers, according to our research. Despite having numerous apps on their wireless devices, the majority of respondents (59 percent) said they will not download specific apps due to data privacy and sharing concerns. This varies widely based on generation, with boomers (80 percent) and Gen X (60 percent) more likely to abstain from downloading specific apps compared with millennials (52 percent) and Gen Z (46 percent).

Taking it a step further, consumers were asked whether their data privacy concerns lie more with individual companies or with a whole category of technology. More than double indicated their concerns were with the company rather than the tech itself (43 percent versus 19 percent).

Apps and data privacy

I will not download certain apps due to data privacy and sharing concerns.
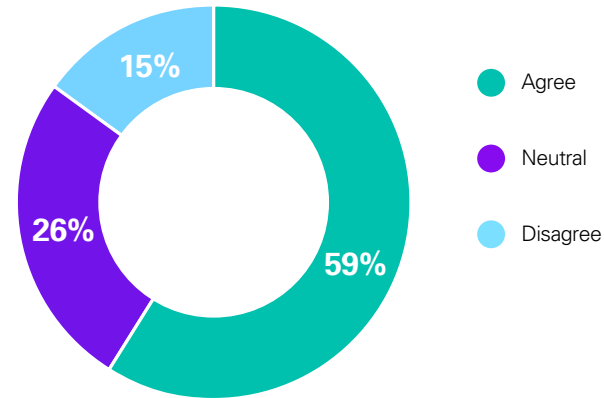
- Agree — 59%
- Neutral — 26%
- Disagree — 15%

Source: KPMG Consumer Technology Survey, 2023, KPMG LLP

Considerations for business leaders

Gain trust on data privacy via customer authentication

Data privacy and cookie laws continue to evolve, and in the US can even vary state to state. Customers have been given the right to choose how, when, and where their data is collected and used. Before willingly giving you their information, customers will want assurances that their information will be kept safe, secure, and private, and that they have a say in when it's used. Companies that are successful in getting this message across and delivering on it will be rewarded with increased trust, loyalty, and ideally, revenue. Your customer authentication process can be the key to strengthening customer trust, improving customer experience, and gathering better, more accurate data.

Read more here

Corporate sustainability influences consumer purchase decisions

For several years, KPMG has tracked the changing nature of consumer buying behavior through our research and thought leadership entitled "Me, my life, my wallet." This research program explores what really matters to consumers, what motivates them, what gets their attention, and the trade-offs they make in their purchasing decisions.

The most recent study examined the link between implicit consumer values and explicit buying behavior—specifically, the rising importance of sustainability. A central finding is that the traditional gap between consumer values and subsequent behavior has narrowed. Historically, consumers have "talked green but bought brown." This is no longer the case as most consumers, at some level, practice sustainable behaviors. Consumers are now voting with their wallets when it comes to selecting organizations whose practices are consistent with their values.

In this Consumer Technology Survey, half of consumers (51 percent) prefer to use or purchase technology products and services from companies that are actively working to become more sustainable. Unlike some other survey results, all generations were consistent in this attitude, with Gen Z at 54 percent, millennials at 53 percent, boomers at 51 percent, and Gen X at 46 percent.

Consumers prefer to purchase from sustainable companies

I prefer to use/purchase technology products/services from companies that are actively working to become more sustainable.

- **Agree**
- **Neutral**
- **Disagree**

12%
51%
37%
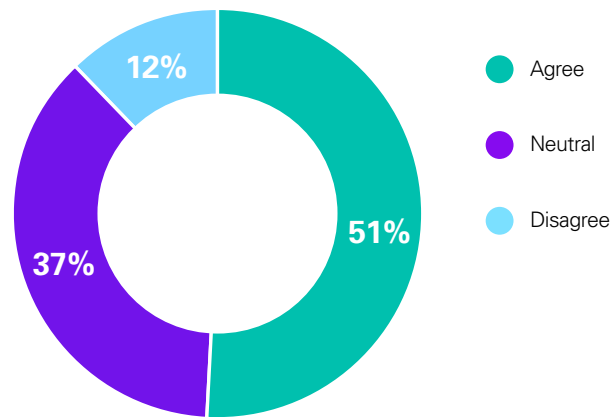
Source: KPMG Consumer Technology Survey, 2023, KPMG LLP

Business leaders are in sync with this sentiment, with many companies continuing to focus on sustainability initiatives. Data from the KPMG 2023 US CEO Outlook survey reveals that addressing environmental challenges (such as achieving net zero) is the top priority among corporate environmental, social, and governance (ESG) investment strategies.[4] Operationalizing ESG should be fully incorporated into the organization's approach to customer centricity and hardwired into operating models, processes, and practices.

Considerations for business leaders

Unlock ESG opportunities to enhance trust and create new value

The survey showed half of US consumers prefer to use or purchase technology products and services from companies that are actively working to become more sustainable. Further the KPMG 2023 US CEO Outlook revealed that over the next three years, corporate ESG commitments are expected to have the greatest impact on building customer relationships, driving financial performance, building brand reputation, and attracting the next generation of talent.[4] Here are steps businesses can take to start transforming with the power of ESG:

1. **Assess and design your ESG strategy**
2. **Embed ESG across your operations**
3. **Measure progress and tell your ESG story**
4. **Make future steps transformational**

Read more here

[4] KPMG 2023 US CEO Outlook

Social media remains widely used

Although social media did not rank at the top of the list of very useful/indispensable technologies, three-quarters (75 percent) of consumers said social media was at least somewhat useful, with some differences by generation. Millennials and Gen Z (both 44 percent) were more likely than Gen X (39 percent) and boomers (28 percent) to rate social media as very useful/indispensable.

Over the next 12 months, 18 percent of consumers across all age groups plan to use social media more than they do today, compared to 16 percent who said they will use it less. Sixty-six percent expect to use it the same amount.

Social media consumer use

How often do you plan to use social media over the next 12 months?

16%	66%	18%

■ Less   ■ Same   ■ More
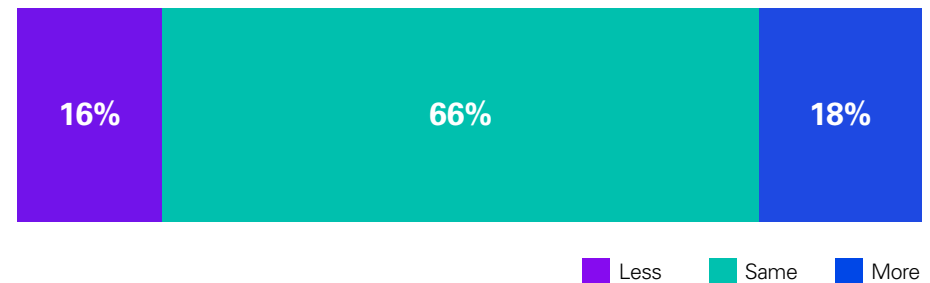
Source: KPMG Consumer Technology Survey, 2023, KPMG LLP

Most consumers said they use two to three unique social media services. However, one quarter (24 percent) use five or more services, with Gen Z and millennials most likely to reach this threshold at 29 percent and 31 percent, respectively.

Social media service use

How many unique social media services (including smartphone apps) have you used in the past month?

6%	15%	21%	23%	11%	24%

■ 0   ■ 1   ■ 2   ■ 3   ■ 4   ■ 5 or more
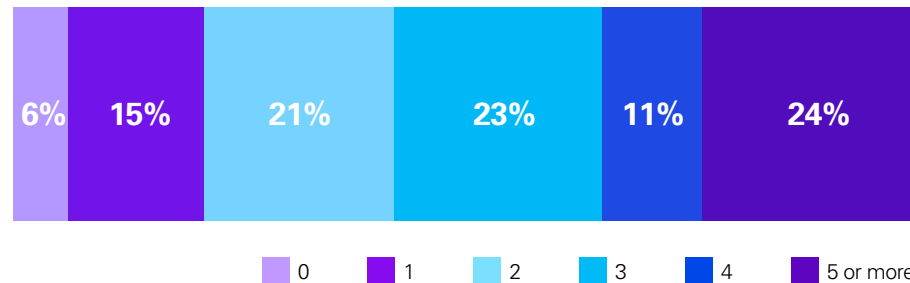
Source: KPMG Consumer Technology Survey, 2023, KPMG LLP

Social media remains a primary tool for companies to manage their reputation, communicate with their customers, and provide information to the market. Given these survey results regarding the usefulness of social media, it is critical that businesses understand what platforms their customers use and have a robust social media strategy incorporated into their customer experience (CX) journey.

Considerations for business leaders

Maximize customer experience investments with a CX Economics model

The link between an organization's CX investment and financial performance has often been challenging to document. A CX Economics model can help find the optimal investment levels and quantify the expected return on investment (ROI). Quantifying ROI can serve as both a justification of past CX spend and a business case for future spend based on historical returns. It also helps ensure the highest-impact CX initiatives are prioritized. Here are some ways organizations can start thinking about CX Economics:

1. **Understand customer lifetime value to put the customer at the center of every decision**

2. **Prove the value of CX**

3. **Empower your organization to act on customer feedback and drive cultural change toward customer centricity**

Read more here

About the research

KPMG conducted the Consumer Technology Survey in the third quarter of 2023 to quantify how useful the public at large considers different technologies in their lives. We surveyed 1,507 adult US consumers across all age groups about how they are using 22 different technology products and services today and how they expect to use them over the next year. We also captured perspectives on generative AI, data privacy, sustainability, and social media.
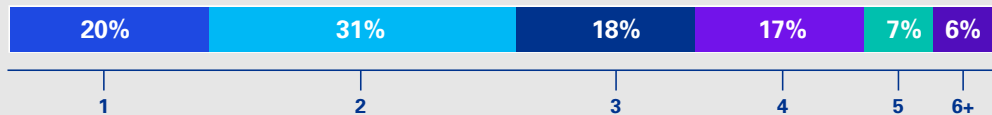
Respondent demographics

Percentages may not sum to 100% due to rounding.

Age/Generation

25%	25%	25%	24%
18-26 I Gen Z	27-42 I millennial	43-58 I Gen X	59-77	boomer

Household Size

20%	31%	18%	17%	7%	6%
1	2	3	4	5	6+

US Region

- South — 37%
- West — 24%
- Midwest — 22%
- Northeast — 17%

Gender

- Female — 53%
- Male — 45%
- Other — 2%
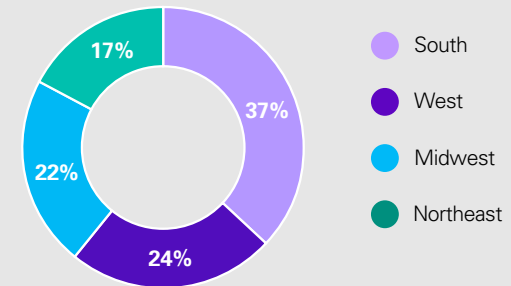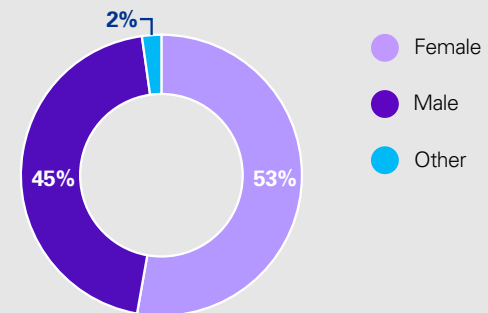
How KPMG can help

Disruptive technologies and new business models are continuously re-defining and re-aligning companies within every sector. We can help you drive value and growth as you evolve. The KPMG network of professionals helps business leaders navigate today's pressing issues.

Generative AI

As rapidly as Gen AI is changing the field, the fundamentals of a successful implementation have not changed: a sound strategy, a compelling business case, specialized talent, and assurance over data quality, security, compliance, and risks. We bring together talented professionals with extensive experience in all these areas. So, whether you're just starting to explore Gen AI or ready to implement it, we're ready to help.

Trusted AI

Despite its ubiquity, AI is arguably a nascent technology, posing an array of risks often not fully understood let alone accounted for. Successful adoption requires an approach to designing, building, and deploying systems in a safe, trustworthy, and ethical manner. Our highly skilled people, advanced AI tools, and strong industry alliances can help you accelerate the value of AI solutions with confidence.

Strategy

As new technologies emerge and sector convergence sets industries on collision courses, both opportunities and threats present themselves in the shape of new markets, propositions, channels, capabilities, and behaviors. From innovation to results, we provide new perspective to help design and implement strategies that win in today's markets.

Customer Experience and Engagement

To meet the increasing demands of their customers, today's businesses invest heavily in their customer experience initiatives. But many struggle to achieve the desired return on these investments. We help companies optimize spend and investments while delivering winning customer experiences suited for the digital age.

KPMG Elevate

Optimize performance, serve customers, and elevate your business. We combine deep industry knowledge and functional depth with proprietary data analytics tools to help deliver material, rapid, and lasting performance improvement.

Cyber Security Services

The smartest businesses do not just manage cyber risk, they use it as a source of growth. KPMG helps you create a resilient and trusted digital world—even in the face of evolving threats. That's because we bring a combination of technological expertise, deep business knowledge, and creative professionals who are passionate about protecting and building your business.

KPMG ESG

Unlock ESG opportunities to enhance trust, mitigate risk, and create new value. With deep multidiscipline expertise across critical issues and capabilities, we can guide your teams to help drive sustainable innovation across your business and help you gain a competitive edge.

Author

Mark Gibson is the Global Head of Technology, Media & Telecommunications (TMT), KPMG International, and Head of TMT, KPMG LLP. Previously, he served as the office managing partner of the KPMG office in Seattle from 2011 to 2020.

During his 30-year career, he has worked with clients in the technology, consumer products, and retail industries, and now collaborates with TMT teams across audit, tax, and advisory in more than 15 different countries. Mark is currently the account executive for some of the firm's largest technology clients.

Mark spent the first 28 years of his career in the audit function, transitioning to advisory in 2019— giving him a broad cross-functional viewpoint and depth of experience. From 2002 to 2005 he was based in the KPMG office in New York and played an integral role in the firm's adoption of the provisions of the Sarbanes-Oxley Act.

Mark has a deep commitment to the KPMG values and culture and is passionate about supporting the community. He serves on the boards of Junior Achievement of Washington and the University of Washington's Foster School of Business. He was a board member of The Seattle Foundation from 2011 to 2020.

Mark Gibson
Global Head of Technology, Media & Telecommunications (TMT), KPMG International, and Head of TMT, KPMG LLP
mgibson@kpmg.com

Some or all of the services described herein may not be permissible for KPMG audit clients and their affiliates and related entities.

kpmg.com/socialmedia