



Qualcomm

The State of Sound 2023 Report

A global analysis of audio consumer behaviors and desires

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Executive Summary

The State of Sound report compiles key findings from extensive audio research with consumers across the world. The 2023 study surveyed 7,000 smartphone users, with South Korea included for the first time this year. The report examines the factors that influence audio device purchases, as well as interest in present and future usage scenarios, and is intended to help understand the qualities that consumers seek across a range of audio equipment. The focus of this year's research is on how consumer use of wireless audio devices is evolving to include more complex use cases, from traditional uses like music listening, voice calls and watching video; to the use of devices in the workplace, for gaming and hearing enhancement.

This year we saw that earbuds and headphones are now considered crucial for activities such as working, commuting, gaming, and exercising. Our survey responses showed that listeners are seeking audio devices which are optimized for multiple use cases, rather than owning specific devices for each activity. Globally, the demand for true wireless earbuds and headphones is growing, with listeners using devices more often on a daily basis, and for longer periods of time.

Comfort in the ear has become the top purchase driver for the first time. The importance of comfort was also reinforced by our respondents when asked about the pain points they face. The number one response was that devices are "uncomfortable in the ear", and this was significantly higher than anything else. The typical length of time that people are wearing true wireless earbuds is increasing, across multiple use cases, which is making comfort much more important. Consumers are also looking for increased device range, particularly around the home.

Alongside the growing demand for true wireless earbuds, there is also increasing demand for more premium sound experiences. 73% of respondents stated, "I make sure that sound quality on my devices gets better and better with every purchase", up from 67% in 2022. Additionally, demand for music quality is at an all-time high, with 69% of consumers listing lossless audio quality as a likely purchase driver. This shift is paired with a growing interest in premium audio features such as spatial audio, clear voice calls and lower audio latency.

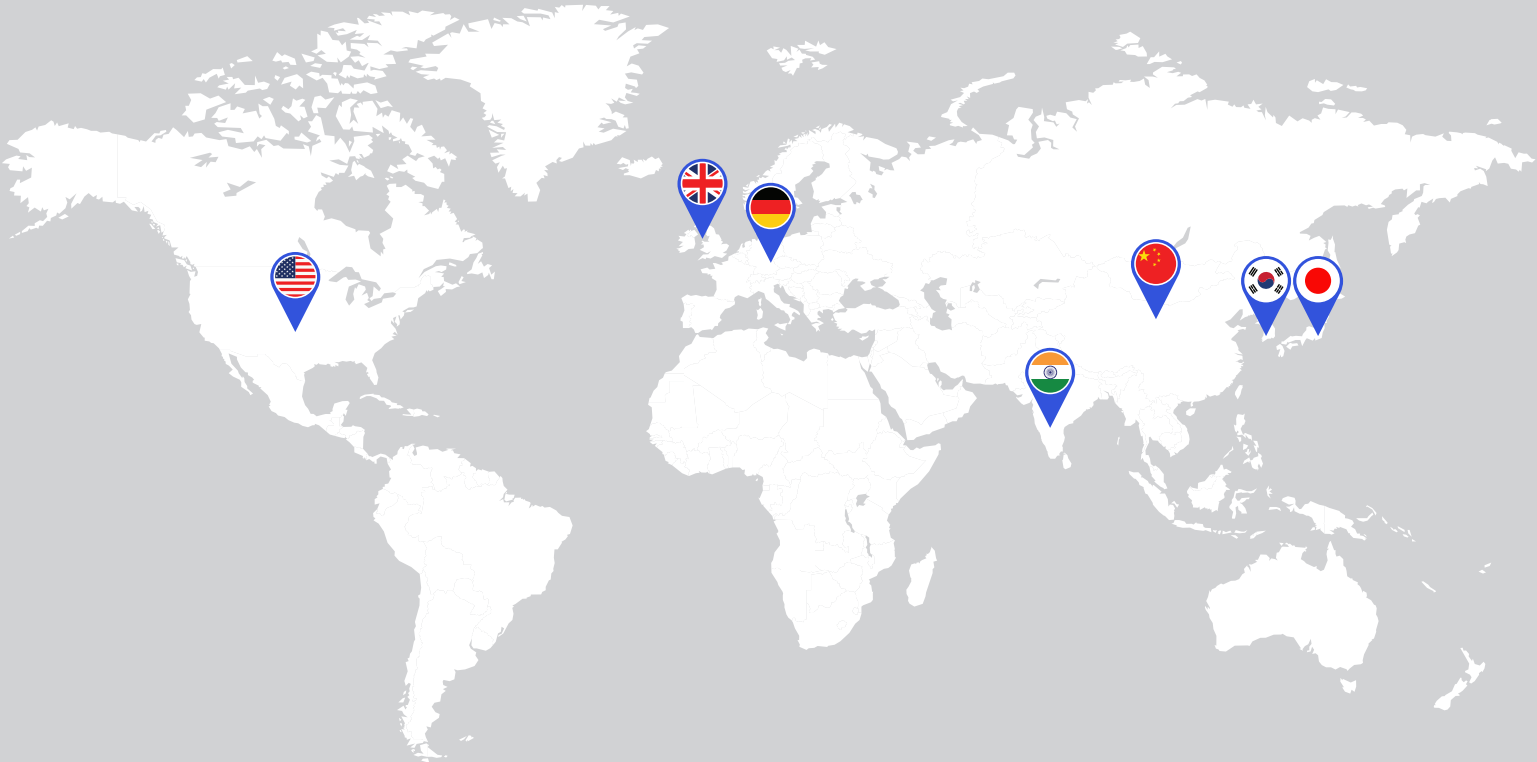
Research methodology

Locations United States, United Kingdom, Germany, China, India, Japan and South Korea

Demographic Smartphone users aged 18-64 years

Sample size 1,000 per country

Research conducted July 2023



This year we engaged SAR Insight & Consulting to also validate the responses we received from our survey.

Key findings



Consumers are seeking one wireless audio device for multiple uses

Respondents want to use the same device for everything—listening to music, gaming and calls—with 68% indicating they would want to use the same earbuds or headphones for all activities.



Comfort is key, because listeners are using devices for longer

This year, comfort is the #1 purchase driver for true wireless earbuds, driven by the fact that consumers are now wearing their devices for longer periods of time than ever before.



Listeners are actively looking for premium audio experiences, with music quality more important than ever

Premium audio experiences are front of mind for listeners, with 73% stating “I make sure that sound quality on my devices gets better and better with every purchase”, up from 67% in 2022. Demand for music quality is also at an all-time high, with 69% of consumers listing lossless audio quality as a likely purchase driver.



Evolving work environments driving demand for new features

More than two thirds of respondents said they work in a public space such as coffee shop, a common area in the home, or a shared workspace. To cater for a hybrid working world, workers need audio devices which help them ‘hear and be heard’ both in the office, and in other work environments.



Consumers are seeking improved device range in the home

In current audio devices, ‘range’ was highlighted as the third largest pain point, with 79% of premium* device owners listing ‘whole home coverage’ as a likely purchase driver for their next earbuds.

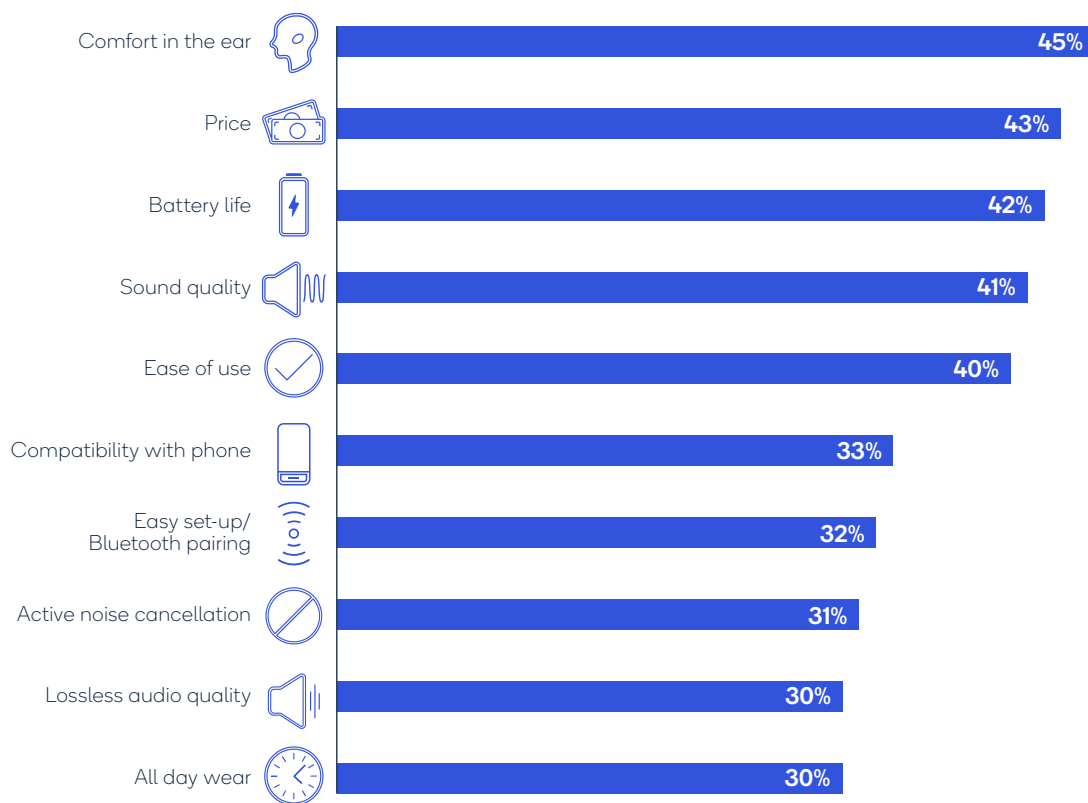
*Premium devices = audio devices with >\$150 retail value.

Top audio purchase drivers for earbuds

Comfort in the ear becomes the top purchase driver in 2023, narrowly pushing price into second place. The importance of comfort is reinforced by responses to questions about the biggest challenges consumers face when using earbuds. We found that “Uncomfortable in the ear” was the top pain point highlighted by respondents, significantly higher than anything else, and this is a much larger issue for <\$30 headsets, becoming less of an issue for more premium earbuds.

Why might this be? The typical length of time that people are wearing true wireless earbuds daily is increasing, with battery life in devices lasting longer, making comfort a more important factor.

True wireless earbud top 10 purchase drivers in 2023



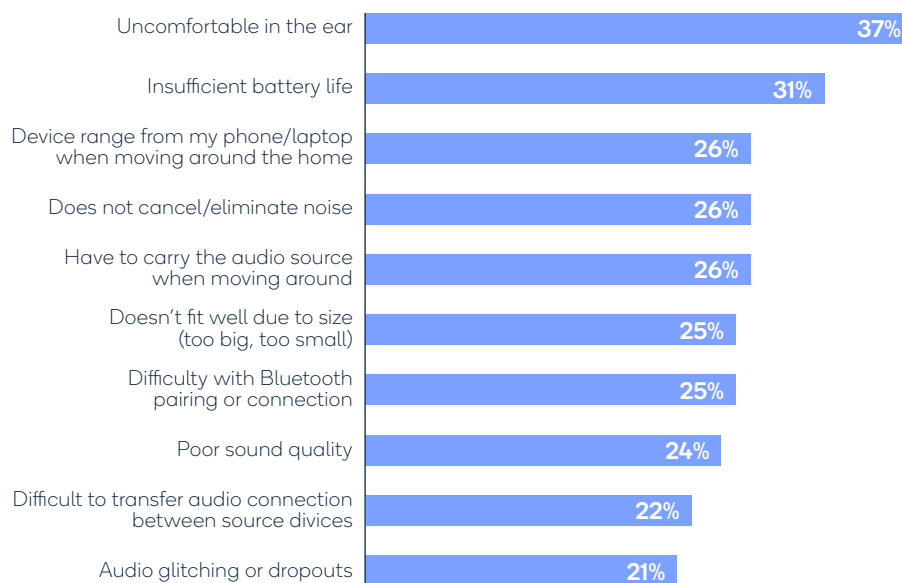
Interestingly, price remains the top driver for those purchasing devices that are <\$30 but becomes less important as people spend more on a device.

Overall, the ‘top 5’ drivers remain the same as 2022, albeit in a different order.

Audio 'Pain Points'—what issues are listeners looking to resolve with their next purchase?

This year, alongside key purchase drivers, respondents were asked about the key 'pain points' they experience with their current audio devices.

Top 10 Pain Points Experienced with Wireless Earbuds/Headphones



Discomfort in the ear was the largest pain point. However, this falls by over 20% for premium devices which indicates this issue is more prevalent for low-end earbuds and headsets.

Poor sound quality was the 2nd biggest issue in 2021, but has fallen far down the rankings in 2023. This, paired with growing awareness and desire for better audio quality indicates that respondents are moving to premium audio devices which offer sound quality advancements. Poor sound quality continues to be one of the top pain points for those with low-end wireless earbuds.

In current audio devices, 'range' was highlighted as the third largest challenge overall, indicating a need for increased range so that users can have an uninterrupted roaming experience as they move around their homes. In fact, 79% of respondents who currently own earbuds >\$150 listed 'whole home coverage' as a likely purchase driver for their next earbuds.



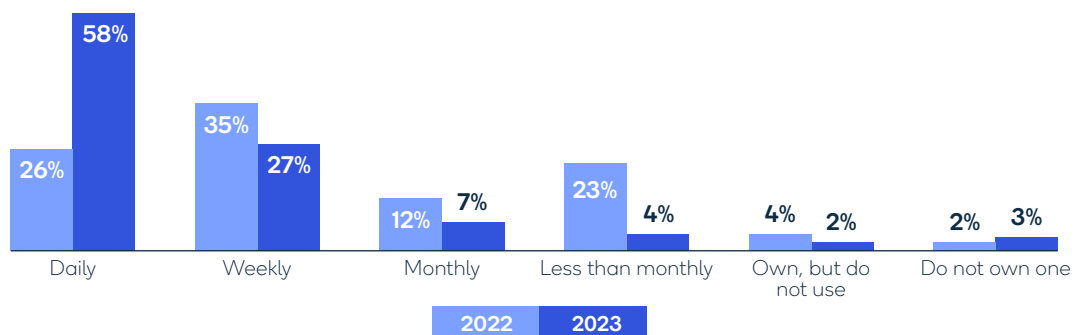
Connected audio and device usage

The following findings show which wireless audio devices are used most frequently, and the ways in which consumers are using them throughout the day—one key finding this year is the shift towards audio devices that can be used for multiple activities, for longer periods of time.

Frequency of use and 'all day wear'

The major shift this year is that more than half of respondents are using earbuds and headphones daily, compared to only 26% in 2022. Responses suggest that people globally are using their earbuds and headphones much more throughout the day, for different use cases. There has been a corresponding fall in the number of people listening to audio on their smartphone's in-built speaker in 2023. This is a major change in user habits.

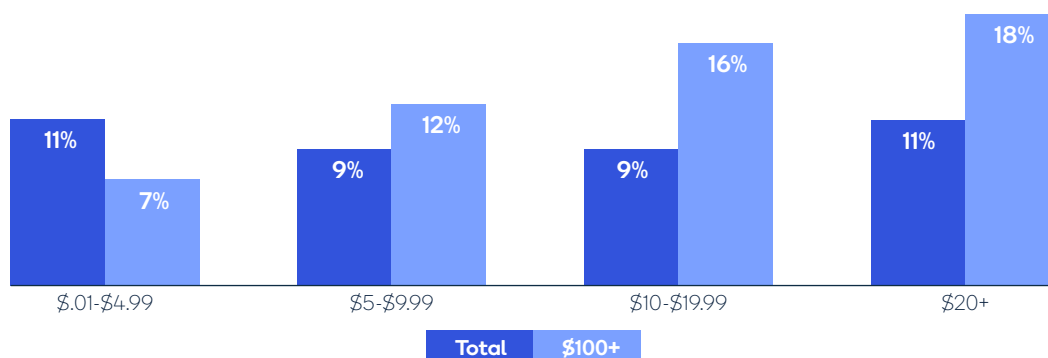
How frequently do you use your true wireless earbuds?



82% of respondents stated, 'all day wear' (using and wearing your earbuds/headphones comfortably throughout the day for multiple activities such as gaming, work, commuting, etc) would likely influence the selection of their next true wireless earbuds/headphones. 30% of respondents also said that all day wear would most influence the purchase of their next true wireless earbuds/headphones.

40% of respondents were prepared to pay extra for a device which is optimized for all day wear, this increased to 59% for those with devices which cost >\$100.

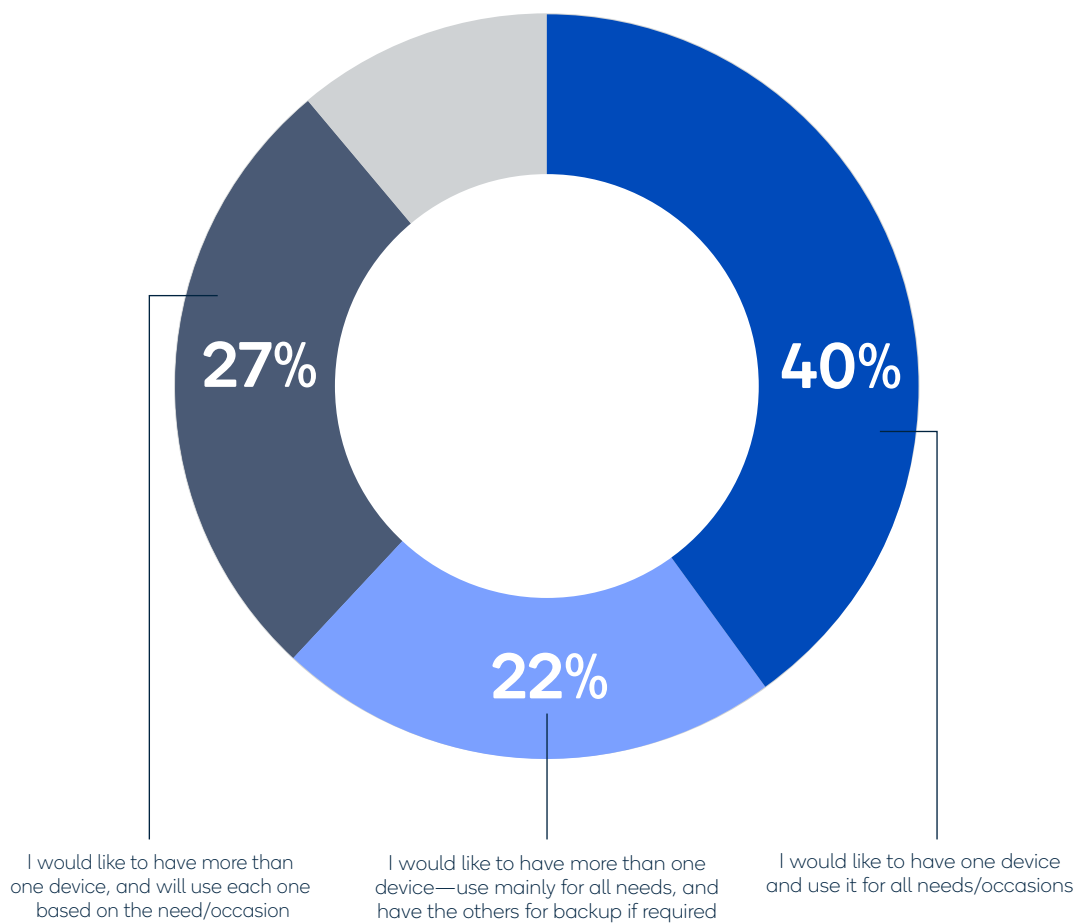
How much extra would you be willing to pay for all day wear?



One device for all uses

Consumers also want to use the same device across all use cases, from listening to music, gaming, commuting, and working. As we see premium devices expand in capabilities and features, this year's responses suggest that consumers will be willing to spend more on one device which is optimized for multiple purposes.

Attitudes to multiple audio device ownership

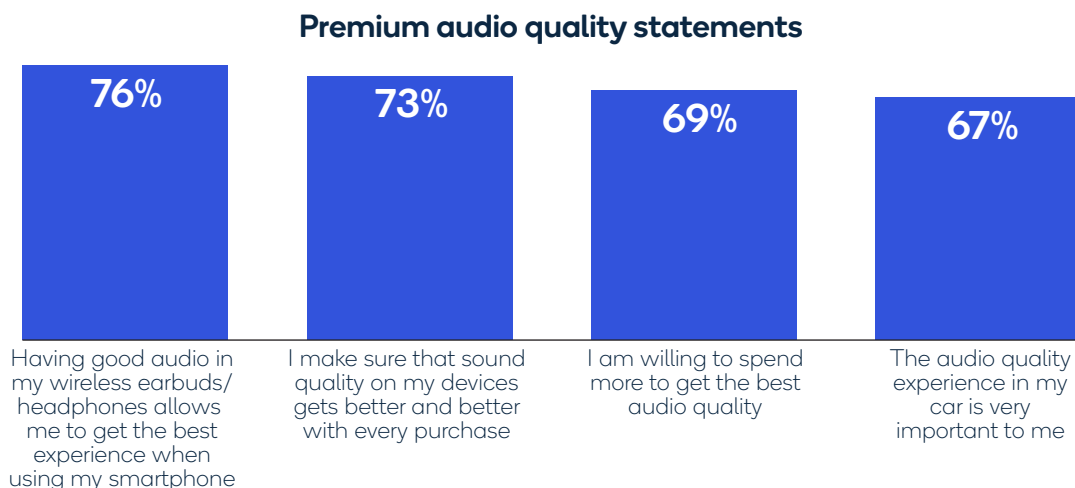


45% of those surveyed that plan to buy earbuds/headphones in the future want to own one audio device which they can use for all their needs throughout the day. **68%** also indicated they are likely to use the same device for all audio related activities over the next few years, such as gaming, commuting, working and exercising.

Listeners are actively seeking premium audio experiences

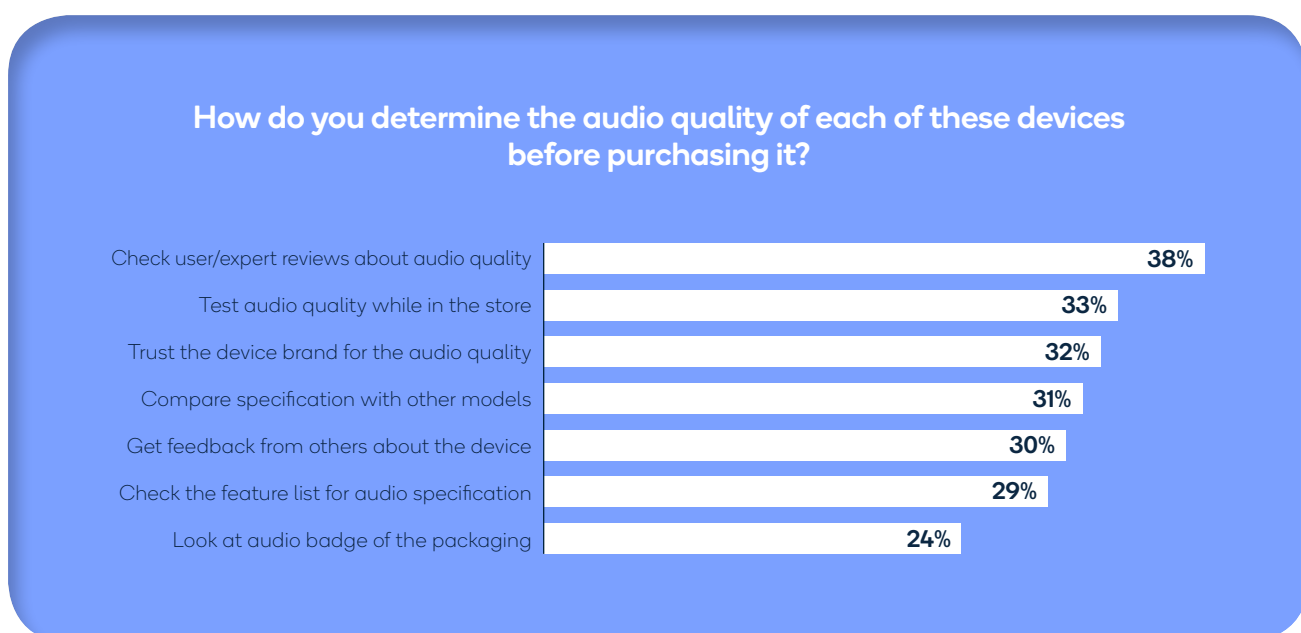
Sound quality statements

73% of respondents stated, "I make sure that sound quality on my devices gets better and better with every purchase", up from 67% in 2022. There was similar sentiment for other premium audio related statements:



Clearly, premium audio experiences are continuing to grow in importance for listeners around the world. With the increased support for premium audio from streaming services and other types of media, paired with technological advancements across price points, this is likely to be influencing consumer awareness.

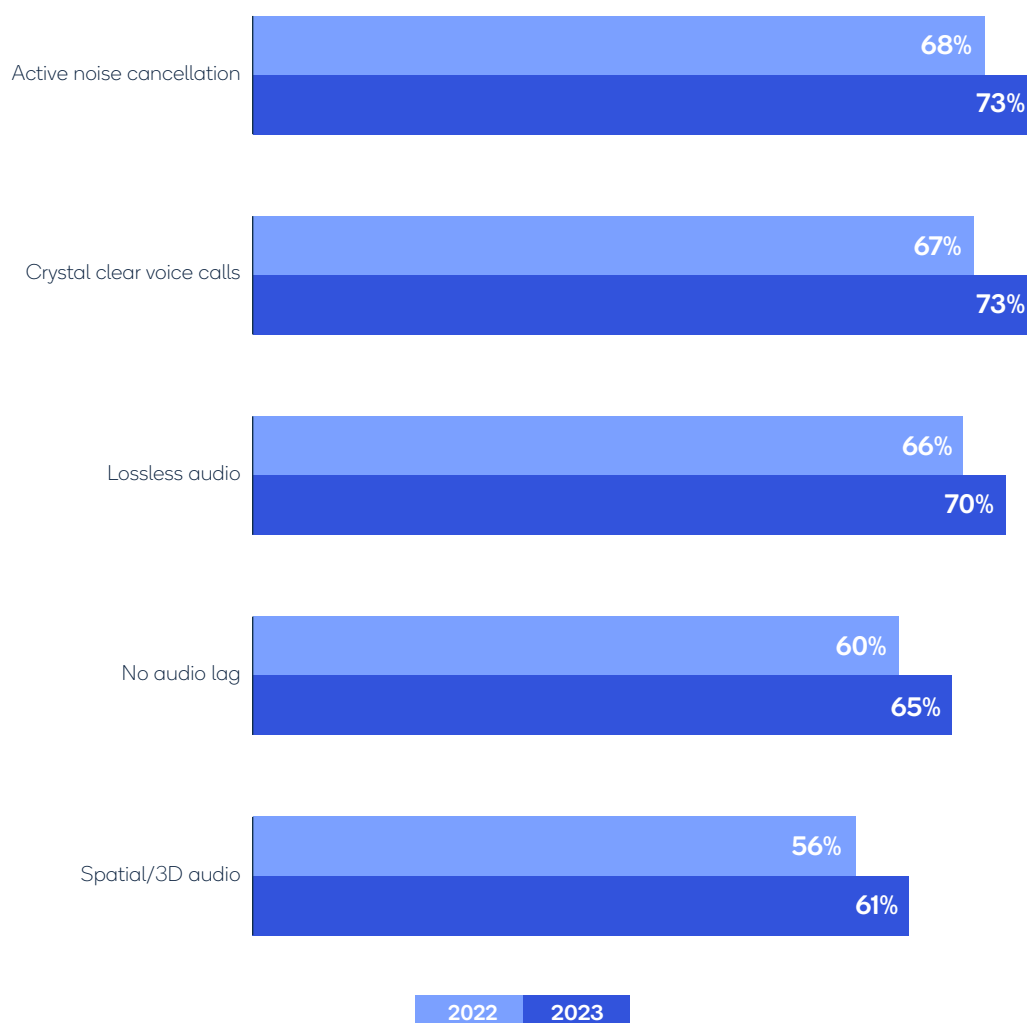
With this heightened focus on premium audio quality, we looked at how respondents determined audio quality before purchasing:



Biggest movers vs. 2022 (highest % increases for premium features)

As the importance of premium audio quality is rising year-over-year, it's critical to see which features consumers want in their next true wireless earbuds.

How likely would each of these features influence the selection of your next true wireless earbuds?



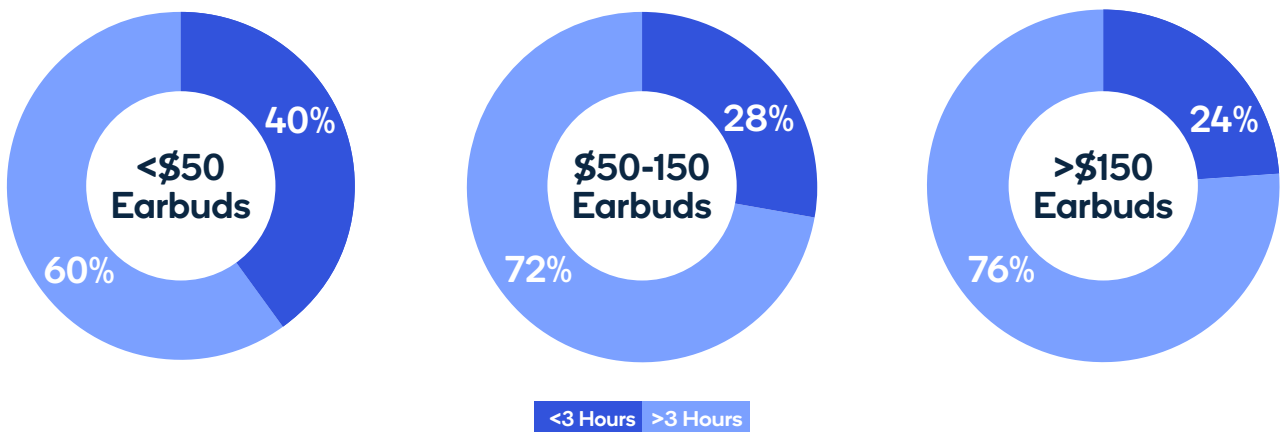
Compared to 2022, Active Noise Cancellation, clear voice calls and lossless audio quality have seen year-on-year rises in consumer demand. Responses indicate that consumers are seeking richer, more reliable, and more seamless experiences in the future.

Evolving device usage leading to different perspectives on battery life

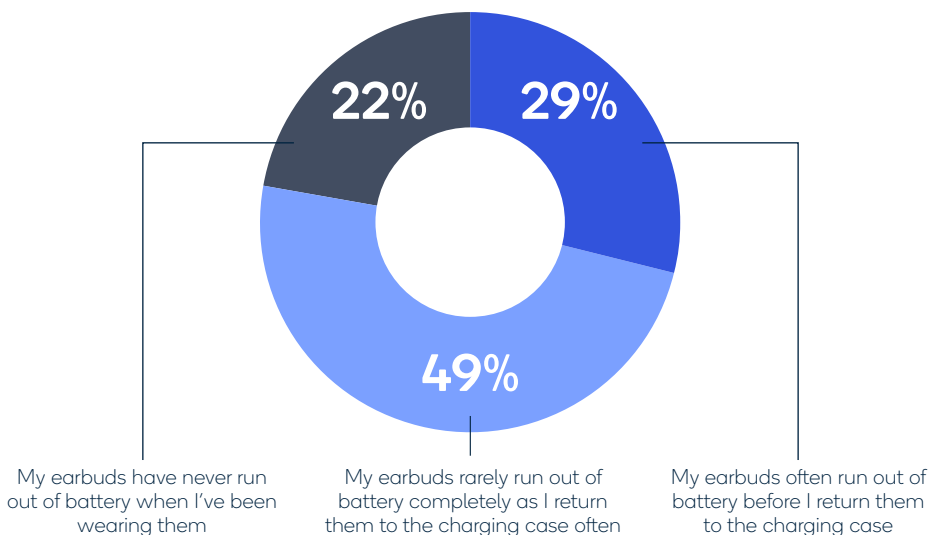
Sound quality and battery life remain in the top 3 drivers for those purchasing devices >\$100.

31% of all respondents said that they typically wear their earbuds for >3 hours before recharging. Also, more than 71% of respondents said they rarely or never run out of battery in their earbuds.

How many hours do you typically wear or use your true wireless earbuds before returning them to the charging case?



With regards to battery life for your true wireless earbuds, which of the following statements do you agree with?

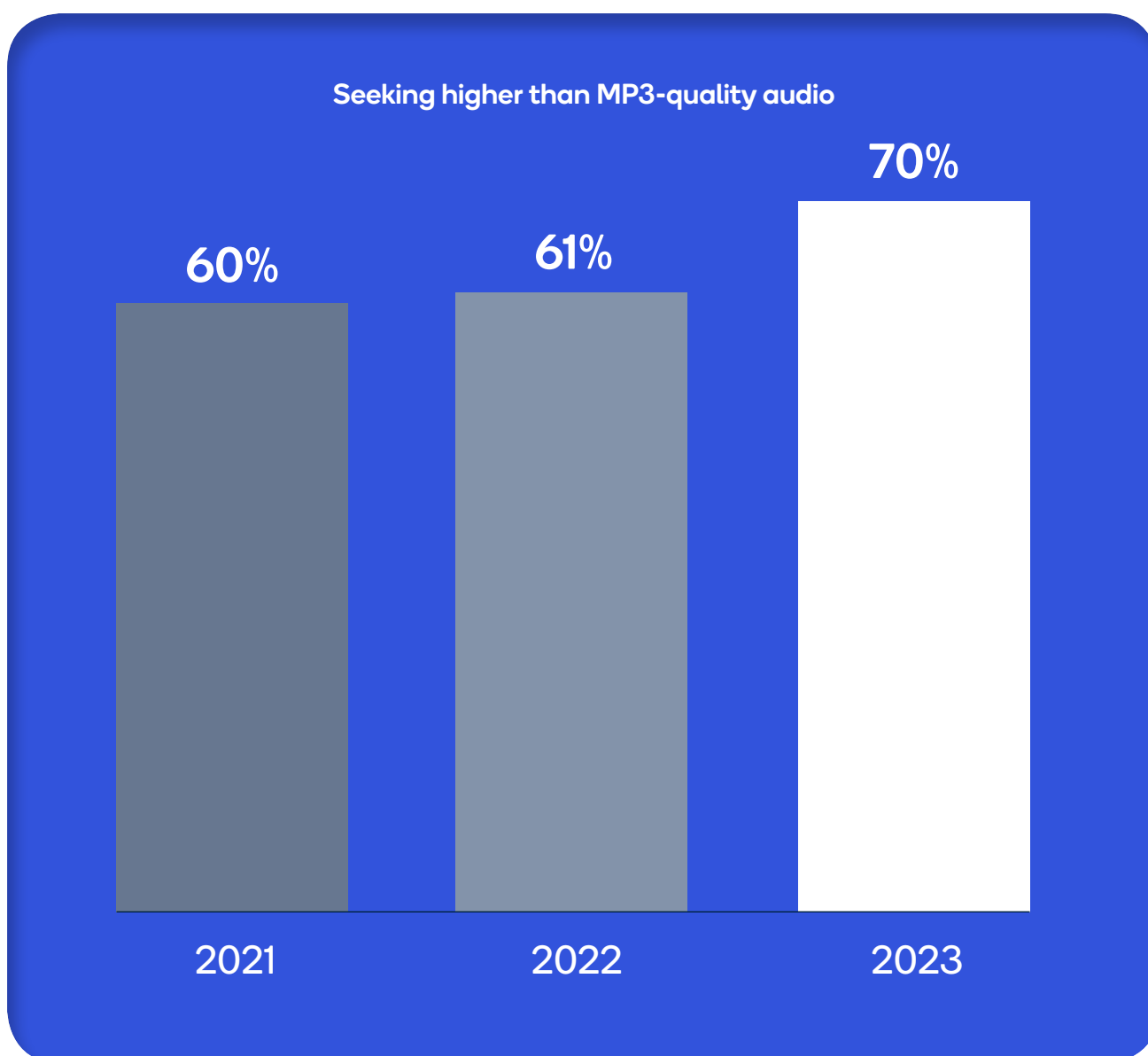


Technology has evolved to a point where most premium devices on the market promise a battery life of 4 to 10 hours per charge. Recent improvements in platform capabilities have meant that manufacturers are able to add richer features to their earbuds and headphones, while delivering battery life that supports consumer demand. As features and capabilities continue to advance, manufacturers will need to maintain this balance.

Demand for premium music quality from listeners is higher than ever

For audio devices, music quality is still one of the key factors in decision-making, and as audio technology continues to evolve, consumer expectations are rising year-on-year.

When asked 'which of the following music quality levels would you prioritize when shopping for your new wireless audio device?', 70% of respondents are seeking higher than MP3-quality audio, up from 61% in 2022. In addition, 69% of respondents listed lossless audio quality as a likely purchase driver.



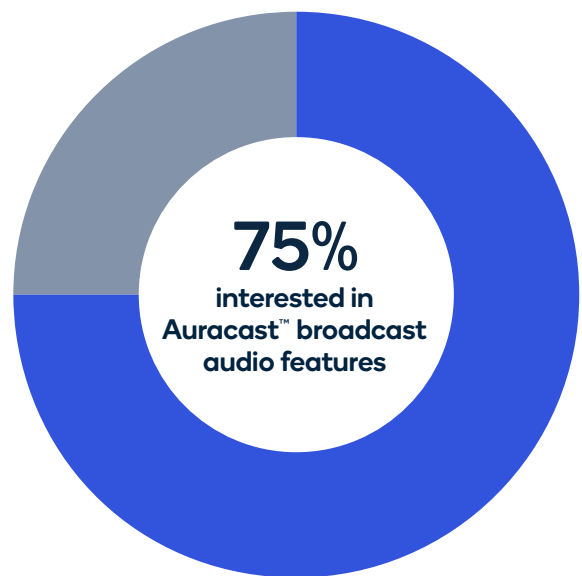
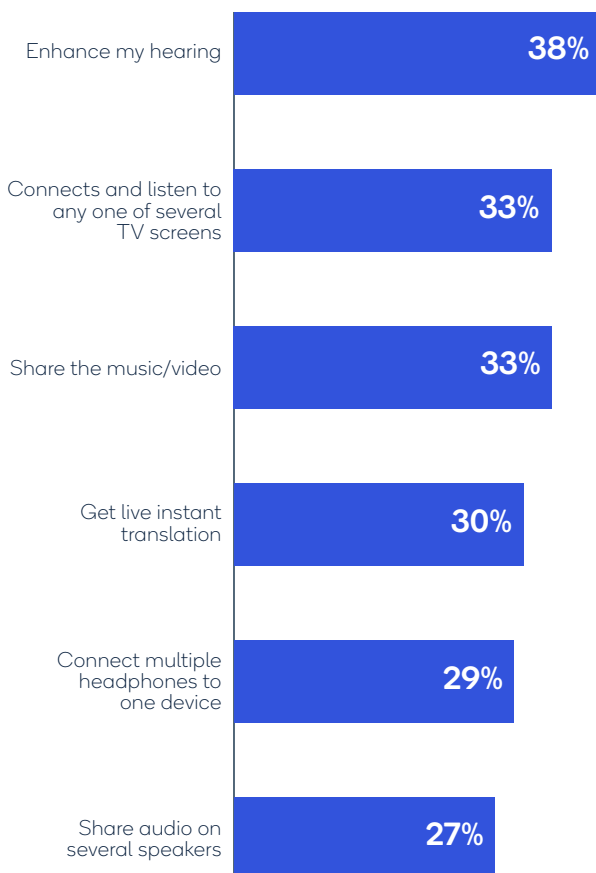
This trend indicates growing listener awareness of music quality, along with increased desire to have the very best audio experiences on their devices.

Feature focus: Bluetooth® LE Audio

A new age of Bluetooth® technology is here. With the latest LE Audio specification, the way we experience audio is set to evolve. From Auracast™ broadcast audio and hearing assistance, to new use cases that have not been imagined yet, LE Audio has rekindled innovation in wireless audio and will set the stage for the next 20 years of innovation in the space.

Respondents are interested in a whole range of features that could be enabled by Auracast™. When asked “which of the following audio sharing experiences would you be interested in?” respondents were most interested in enhancing their hearing in social/professional situations, connecting to a choice of screens when at a gym, airport departure boards, cinema screen, restaurant etc., sharing music/video with friends’ on their earbuds/headphones and more.

Which of the following audio sharing experiences would you be interested in?



In fact, 75% of all audio device owners listed interest in at least one or more Auracast™ broadcast audio features.

Active Noise Cancellation is influencing device choice

Active Noise Cancellation (ANC) is now a staple in audio devices, with 88% of respondents saying ANC will influence the selection of their next true wireless earbuds, with 31% stating that ANC will most influence their next purchase.

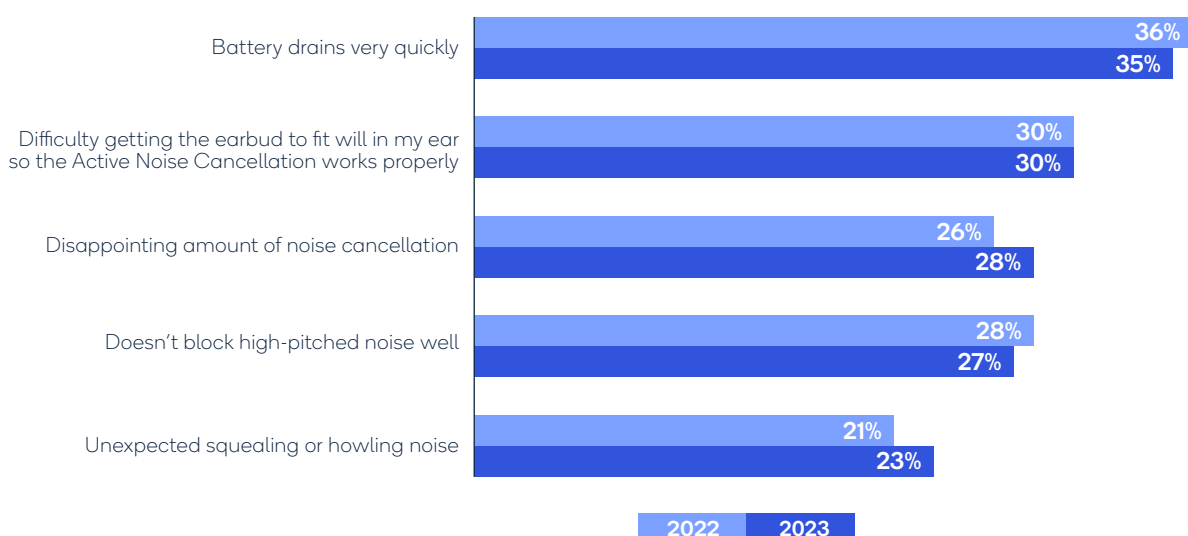
Listeners are interested in ANC across use cases with 35% of respondents saying that ANC influenced their choice of headphones for work, and 28% said ANC was an important feature when buying a gaming headset.

With consumer demand at an all-time high, how could ANC technology evolve?

One feature could be automatic adjustment based on environment. In fact, 28% of respondents said that ANC technology that automatically adjusts would most influence their next wireless audio device purchase.

Looking at the top listed issues with ANC, battery drain was the most often cited problem experienced while using ANC with wireless earbuds and headphones. Other issues such as disappointing noise cancellation, lack of cancelling high pitch noise and unexpected squealing/howling were also noted.

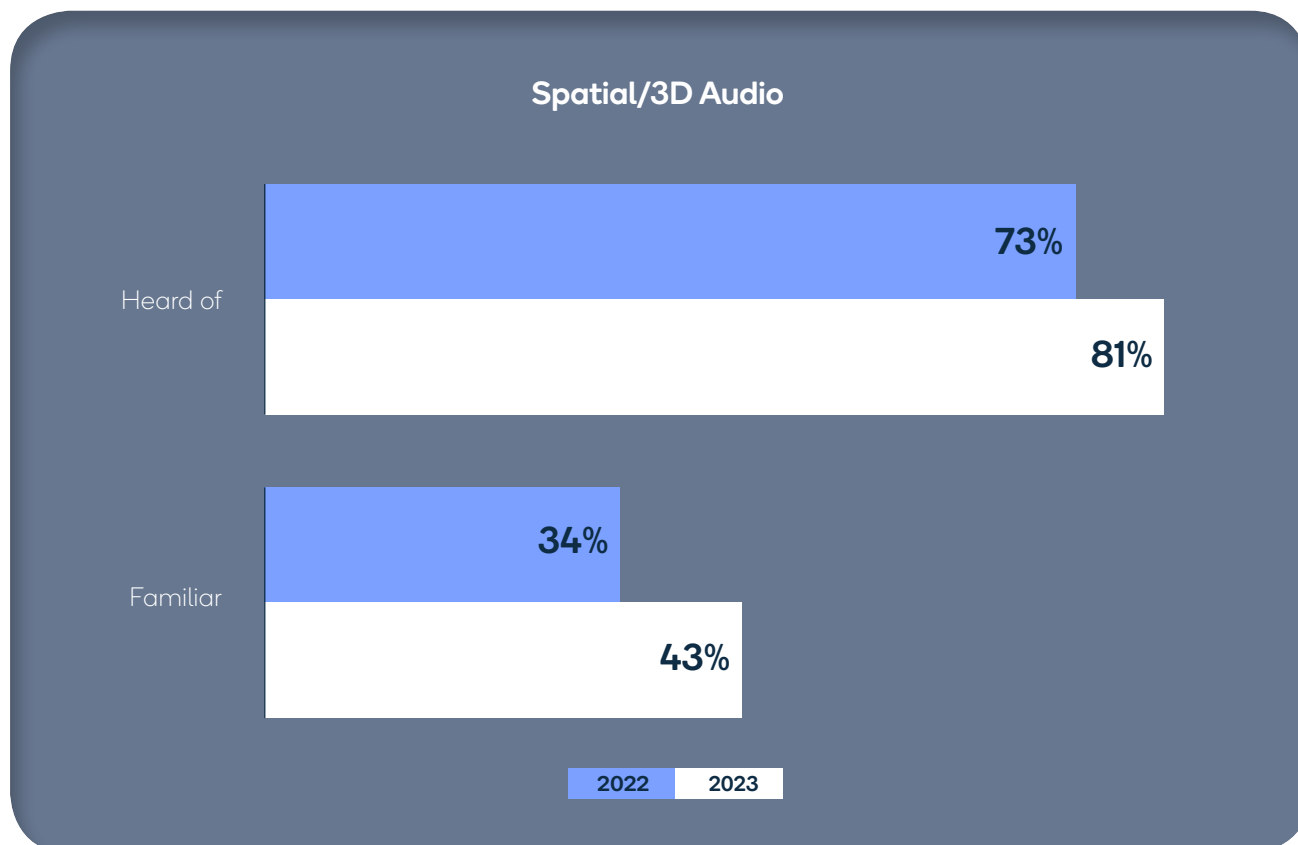
Which of the following problems, if any, have you experienced while using your wireless headphones/earbuds with Active Noise Cancellation?



With platform and technology advancements, ANC will continue to evolve and improve as new audio devices are developed. The technology will almost certainly remain a key purchase driver for audio devices.

Spatial audio continues to be a highly sought-after feature

Spatial audio is now established as a well-known technology, with 81% of respondents saying they had heard of it and 43% said they were familiar with it (up from 73% and 34% in 2022). This rise can be explained by music and TV streaming services marketing spatial audio heavily.



60% of respondents said that support for spatial audio will influence the purchase of their next true wireless earbuds/headphones (20% feel it will most influence their decision). 35% are also willing to pay extra for it.

There is now a wide range of content that people are interested in listening to with spatial audio. Music is number one, followed by video (movies, TV shows) and gaming.

However, there is a mixed response to how people want to consume spatial audio, with preference for fixed spot (stream stays in place as you turn your head) and head tracked (audio rotates when you move your head, for a more immersive experience) being almost the same.

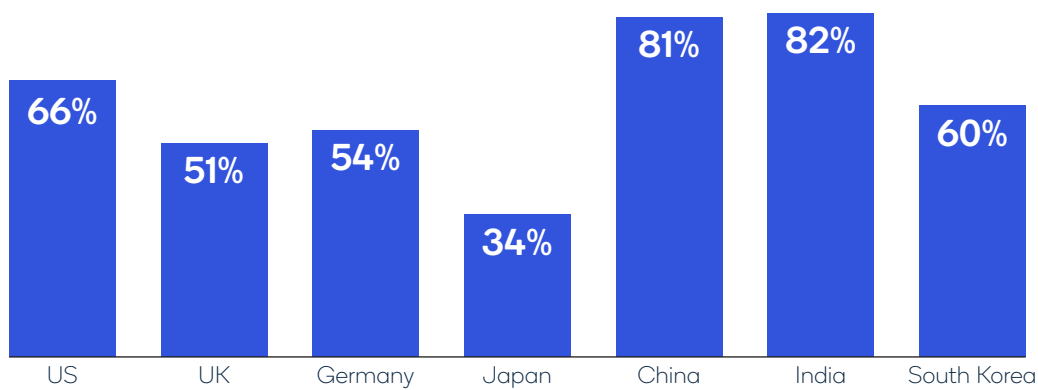
Hearing enhancement is an emerging use case for personal audio

As the capabilities of audio platforms and technologies evolve—an emerging use case is hearing enhancement, to help users communicate and listen more clearly. Hearing enhancement is not only for the hearing impaired, 61% of respondents said they struggle to hear in busy workplaces, lecture halls and meeting rooms. Additionally, 29% are using earbuds to block out background noise.

Respondents this year have indicated hearing enhancement is becoming a more important purchase driver, with 24% listing hearing assistance/enhancement as a key factor they would consider when purchasing their next earbuds. Interestingly, when splitting by age, this demand was higher in the ages 18-44 (27%) category vs. 45-64 (20%)

Consumers are interested in improving their hearing experience with audio devices. 60% of respondents listed hearing personalization (one-time hearing test for personalized audio) as a likely purchase driver for their next earbuds/headphones. This was highest in China and India, at over 80%.

Hearing assistance/enhancement will likely influence the selection of my next true wireless earbuds



This year's responses suggest that hearing enhancement could become more mainstream in the personal audio market in the future, and paired with technologies such as Auracast™ broadcast audio listeners will benefit from these newer technologies which will help them engage with the world around them.



Audio segment focus

The way audio devices are used continues to evolve, and what consumers value when it comes to sound experiences is changing.

This year we looked at some new areas to help understand the importance of sound and audio when working, for gaming, in cars, and on computers and laptops.

As a brand-new feature focus in The State of Sound, respondents were asked specifically about how they use audio devices for work. What they use, the main drivers for purchases, the main obstacles faced and more.

Hear and be heard: Key factors for audio devices in the workplace

The world of work continues to evolve, with 25% of respondents saying they expect to do voice/video calls for work more often in the next 12 months. As hybrid working continues, people must be able to work effectively in many different environments. More than two thirds of respondents said they work in a public space such as coffee shop, a common area in the home, or a shared workspace.

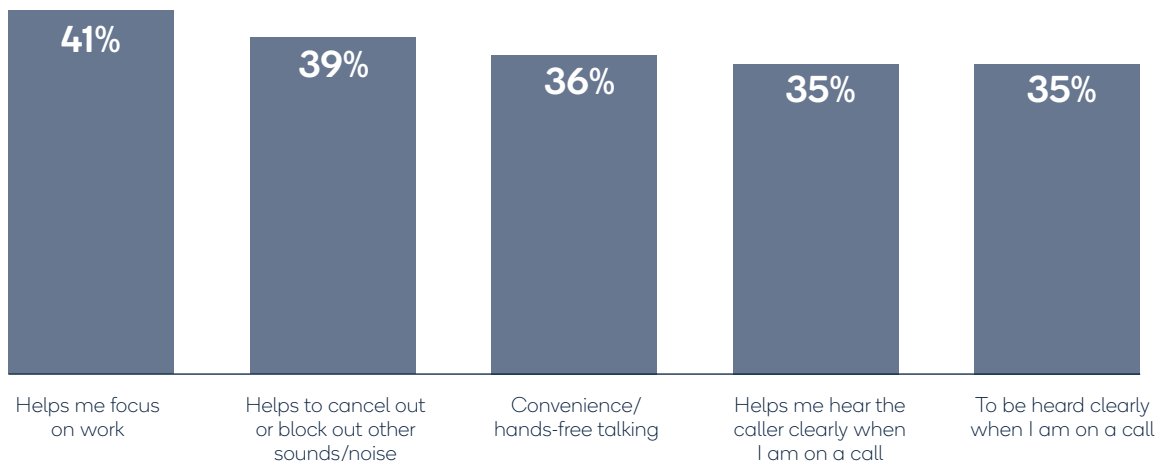
To match the balance of working traditionally in an office, in the home, or anywhere in between—being able to hear and be heard is critical. Respondents were asked to outline the key factors they consider when choosing their audio devices for work.

Top factors for influencing purchase of enterprise earbuds/headphones

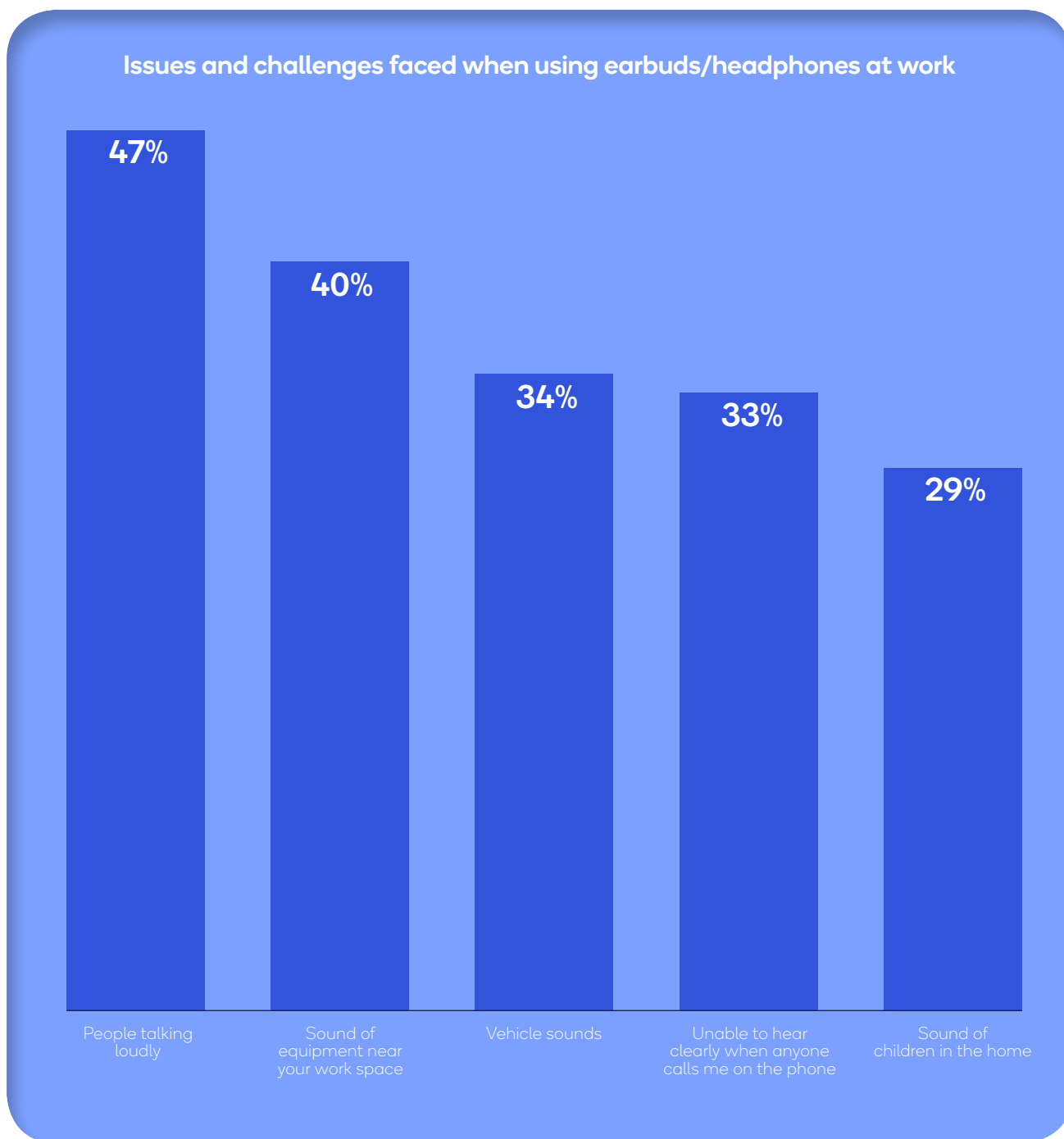


We saw that while the features consumers want from their general devices are similar, the way devices are used while working is significantly different:

Why do you use earbuds/headphones at work?



It's evident from the issues and challenges faced by those using earbuds and headphones at work that features such as clear voice pick-up, ANC and playback quality are critical.

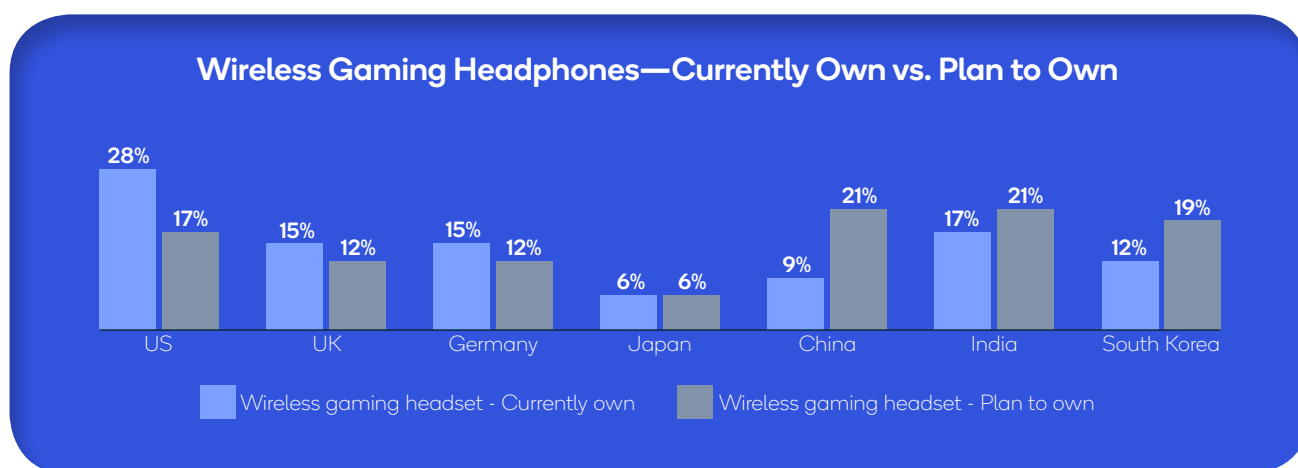


Consumers typically spend on average ~\$130 for their workplace headset, with 27% of respondents spending >\$150. We also found that 40% of respondents would like to have one device they use for personal and work use, and 68% would like to use the same pair of true wireless earbuds or headphones for all activities.

Gamers value great sound, across a variety of audio devices

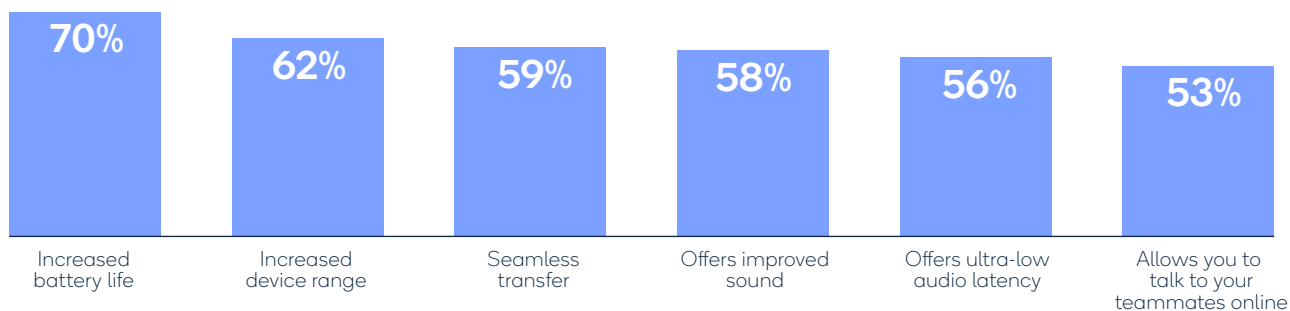
There is high demand for using true wireless earbuds and headphones for gaming. 47% of respondents connect their true wireless earbuds or wireless headphones to a handheld gaming device or console once or more per week. Additionally, 34% of respondents surveyed are currently using wireless earbuds or headphones when gaming on a smartphone.

Alongside earbuds, consumers globally are seeking headphones which are optimized for gaming. A total of 14% of respondents currently own a dedicated wireless gaming headset, with 16% planning to buy one in the next 12 months. The biggest adoption of gaming headsets are expected in India and China, two of the world's emerging hubs for gaming and eSports.



The features that gamers want to see in their devices also differs from typical consumers. They are interested in a broad set of features including increased battery life, increased range and premium, low-latency sound.

How interested are you in buying your next wireless headphones if they can do each of the following?



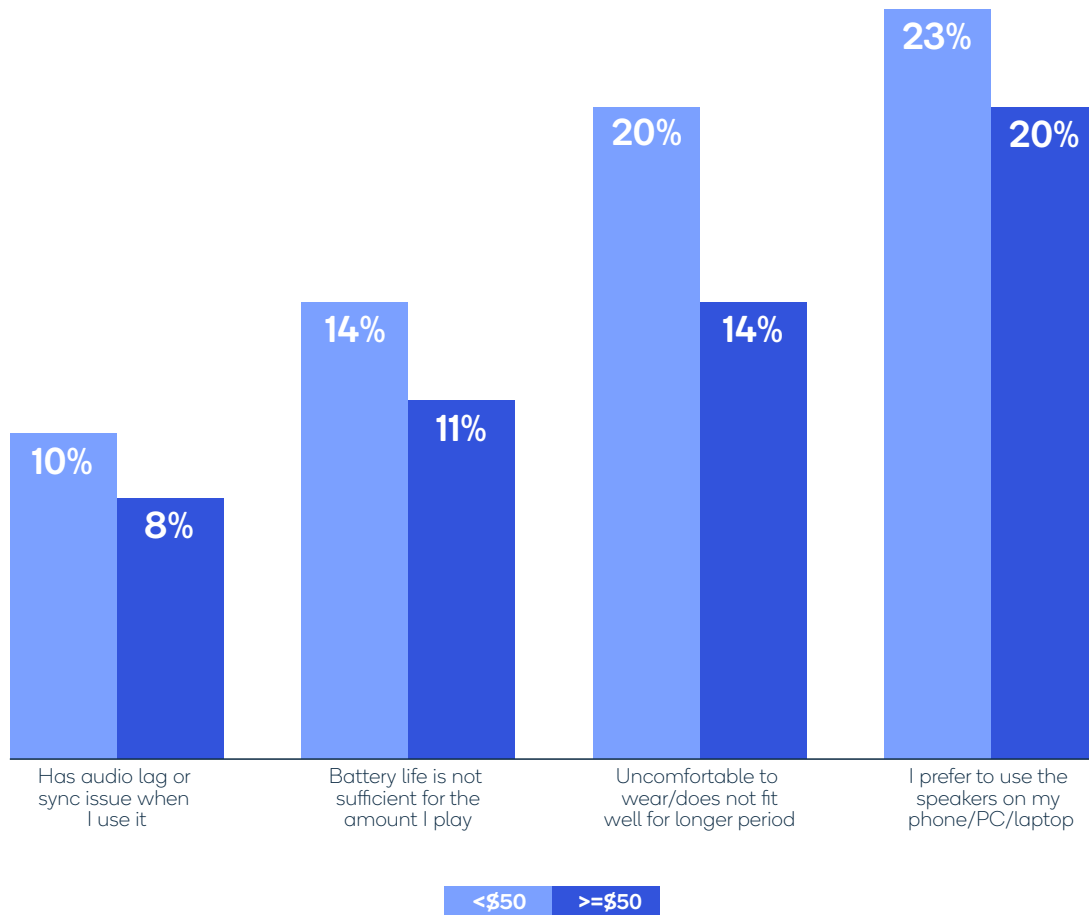
Continuing the trend this year, 37% of people who own earbuds/headphones for work also use, or plan to use the same device for gaming—further emphasising devices may need to be optimized to support multiple different uses throughout the day.

Importance of audio for Compute

While the majority of consumers use their smartphones as their primary device for wireless audio use, laptops and PCs came a close second this year, with 42% pairing their earbuds to a laptop or PC.

While many use PCs and laptops for work, gaming is also a key use case, and wireless headsets for gaming are growing in popularity, as latency continues to improve and technology advances. However, there are still reasons why gamers are not using a wireless gaming headset when playing games on their laptops/PCs:

Why don't you use wireless earbuds or a wireless gaming headset when playing games on your laptop/PC?

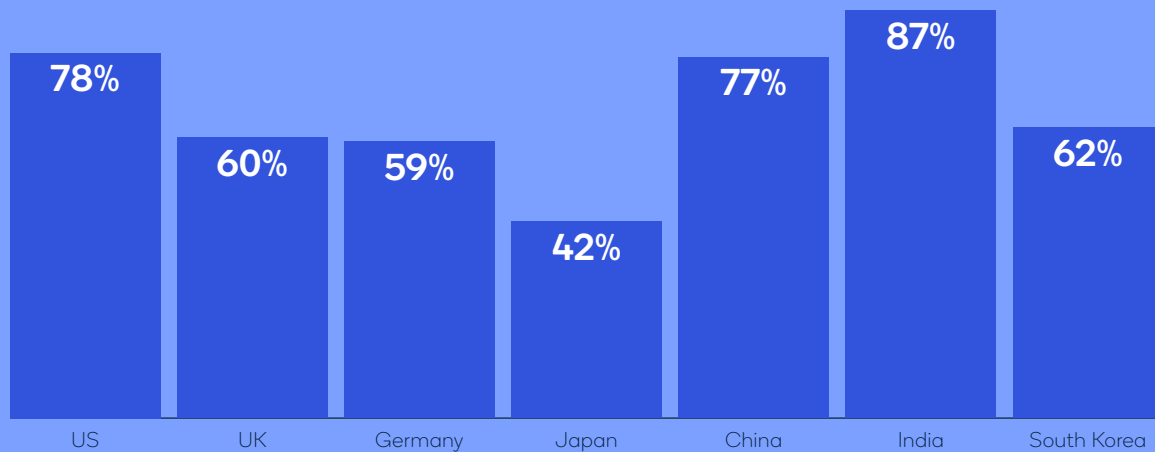


Along with increasing use of wireless audio devices for enterprise and work use cases, this year's responses indicate growing demand for gaming headphones/earbuds for use with laptops and PCs.

Importance of audio in the car

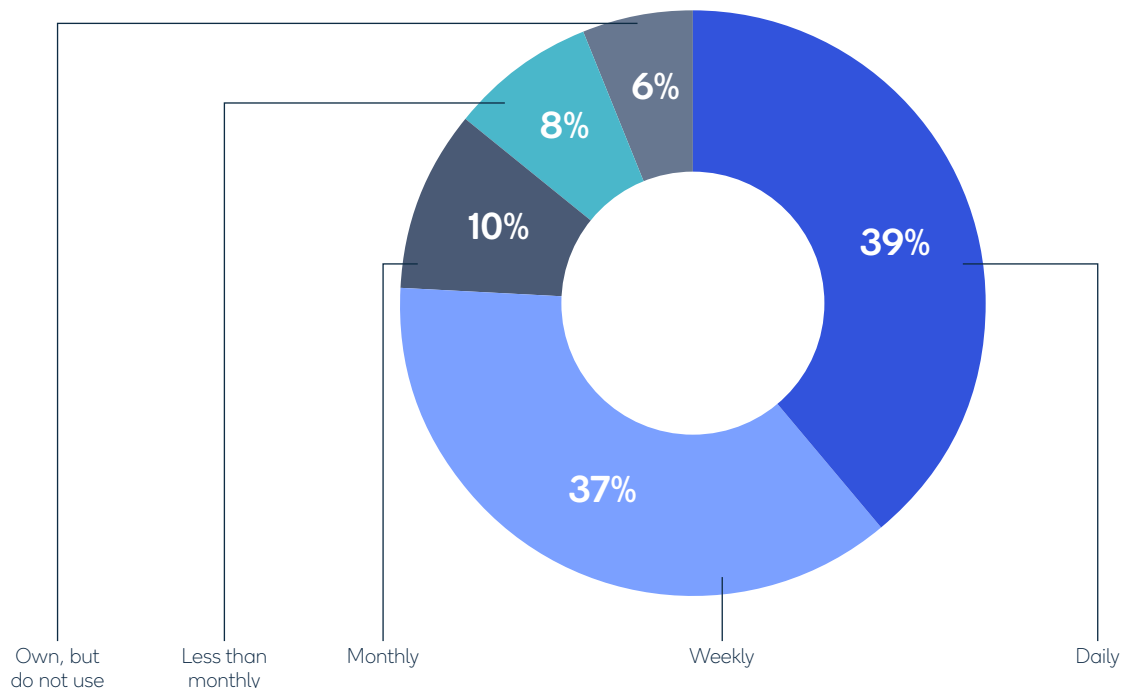
Beyond earbuds and headphones, consumers are demanding exceptional audio in their cars, with 66% of respondents listing it as an important factor in their decision to buy a vehicle.

The audio quality experience in my car is very important to me



More than one third of respondents said that they use their car stereo on a daily basis, two thirds using it weekly.

For those that own a car stereo, how frequently are they used?

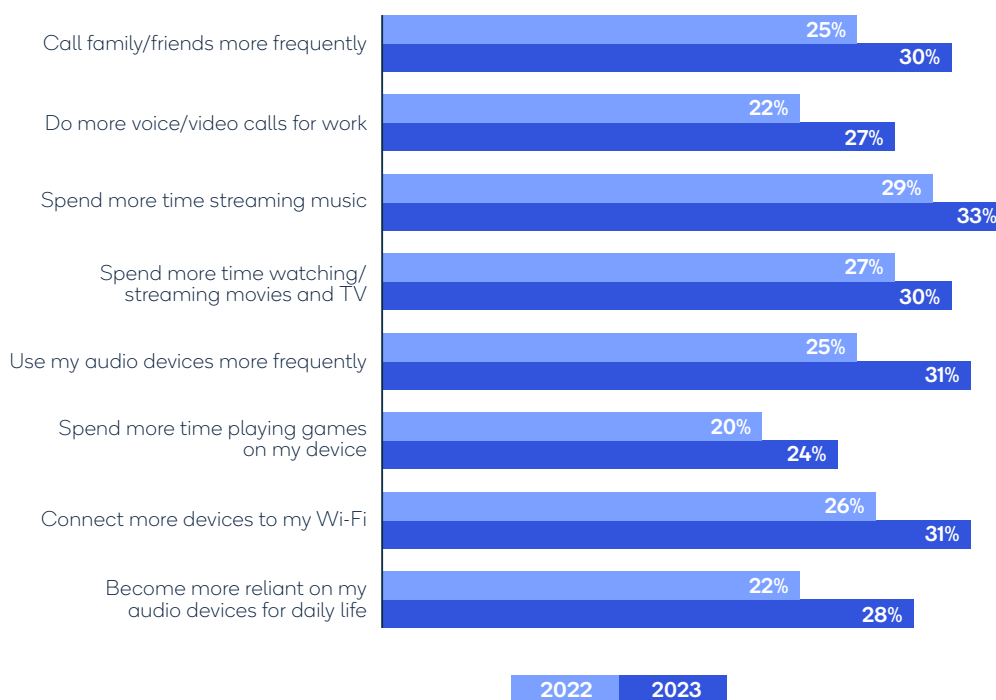


Globally, there is anticipation for growing in-car technological advancements, from in-car entertainment to further voice control. Audio will play a key role in these growth areas, and sound will be an important facet to the future of the automotive industry.

Consumers want richly featured devices that provide premium sound for all use cases, all day

Our findings this year demonstrate a shift in how consumers are using their audio devices. From traditional uses like music listening, voice calls and watching video; to increasing use of devices at work, for gaming, exercising, and hearing enhancement. This year respondents said they will be spending more time making calls (both personal and for work), more time gaming, watching shows on streaming, and generally becoming more reliant on their audio devices for daily life.

Compared to the last 12 months, how often would you expect to do each of the following in the next 12 months?



We continue to see a trend towards consumers becoming more aware of the technologies and capabilities supported by their devices—ANC, lossless and spatial audio all continue to grow in importance, while capabilities like whole home coverage, hearing enhancement technologies and lower audio latencies are all emerging as key features.

Qualcomm



Snapdragon Sound™ Technology Suite is designed to provide listeners with a superior audio experience—whether they're gaming, streaming music, or making voice and video calls.

By optimizing Qualcomm® technologies across connected devices, Snapdragon Sound is the wireless audio only solution designed to deliver Lossless music, industry leading low latencies, and by utilizing Qualcomm® High Speed Link technology, the most robust Bluetooth connections.

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