



Qualcomm

# The State of Sound Report 2021

A global analysis of audio consumer behaviors and desires



# What's inside

<b>Executive summary</b>	<b>3</b>
<b>Research methodology</b>	<b>4</b>
<b>Key findings</b>	<b>5</b>
<b>Global trends in digital sound</b>	<b>6</b>
<b>Product focus: true wireless earbuds</b>	<b>15</b>
<b>Top scenarios for sound</b>	<b>19</b>

# Executive summary

The State of Sound report is an annual study that features a summary of insights based on dedicated audio research with consumers from around the world. 6,000 smartphone users participated in the 2021 study. The research looks at audio device purchase drivers as well as interest in current and future use cases. It is designed to help better understand the features that today's users look for in earbuds, headphones, speakers, and other audio products. This year's report includes a focus on the growth category of true wireless earbuds, audio accessory use for gaming, and remote working.

Sound, whether music or voice, has become more important than ever—particularly as a result of the COVID-19 pandemic which has expanded the use of audio devices overall. Many consumers today are heavily reliant on their audio devices to aid connectivity, as well as to watch videos, play games, work remotely, and listen to music.

Globally, the most in-demand personal electronic devices are smartphones, smartwatches, and true wireless earbuds. There may be opportunities for device manufacturers to create new consumer experiences as the use cases of these three devices converge. As smartphone capabilities continue to become richer, 70 percent of consumers surveyed acknowledge that the performance of audio accessories has an impact on their overall smartphone experience.

Year over year, sound quality remains the most powerful purchase driver for audio products, and quality-related features such as high-resolution and high-definition audio are increasingly important as differentiators. Active noise cancellation remains the highest-ranked rich audio feature by respondents.

Gaming has accelerated in popularity, providing a key opportunity for manufacturers to highlight very low latency and other gaming-related benefits in next-gen audio products.

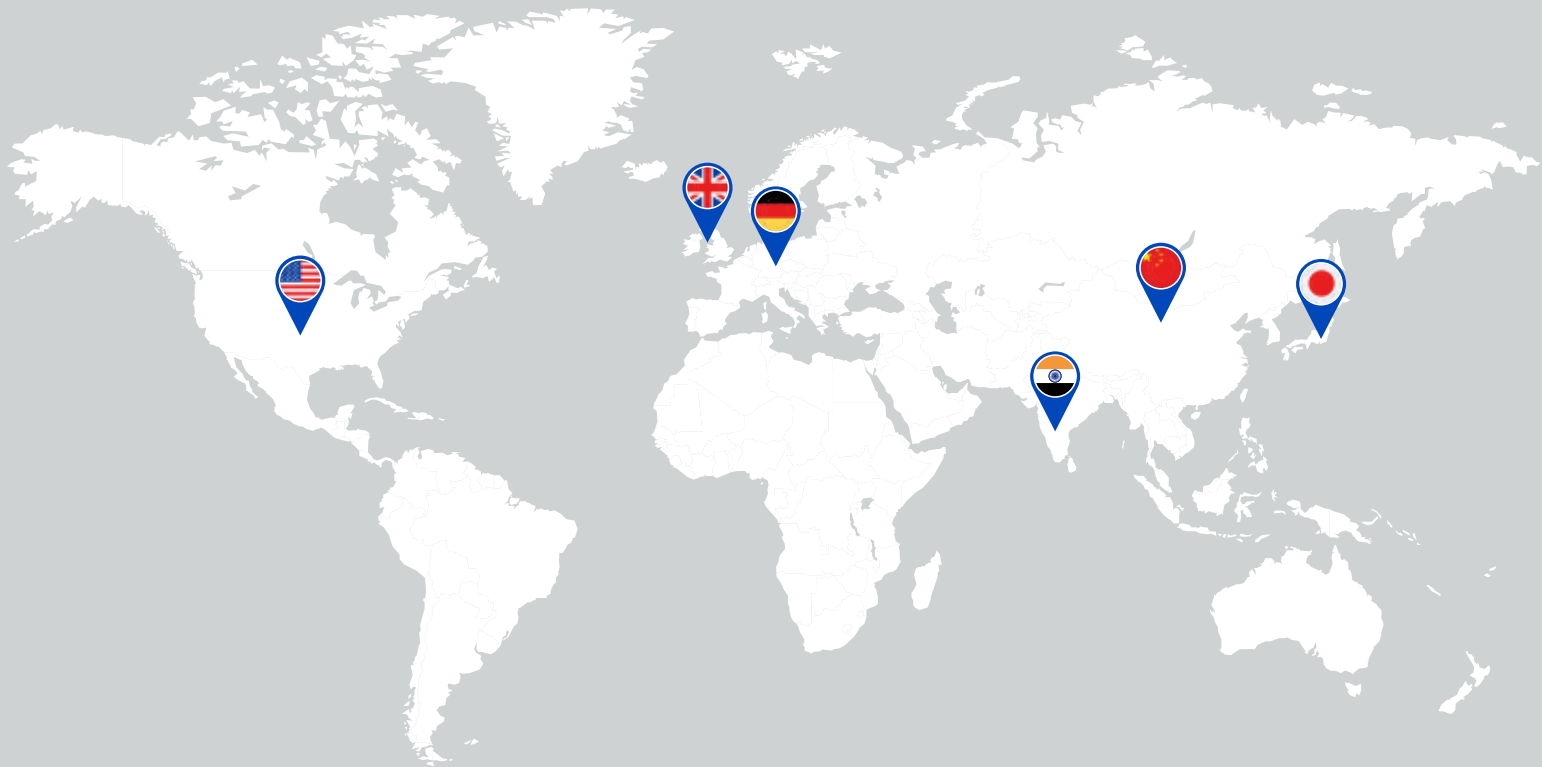
# Research methodology

**Locations** United States, United Kingdom, Germany, China, India and Japan

**Demographic** Smartphone users aged 18-64 years

**Sample size** 1,000 per country

**Research conducted** May 2021



# Key findings



## Audio enhances the mobile experience

70% of those surveyed say having good sound in their wireless headphones or speakers creates the best experience when using a smartphone.



## HD audio content seeing strong demand

58% of respondents say they are likely to subscribe to an HD streaming service, while 5% currently subscribe.



## Broad popularity of audio accessories for gaming

42% use truly wireless earbuds for gaming across PC, Console, and Mobile devices.



## High-resolution sound is a differentiator

52% of respondents are seeking either high-resolution or lossless audio quality.



## Lasting changes in user behavior post COVID-19

57% say they will continue to use their audio devices more frequently after the COVID-19 pandemic ends.

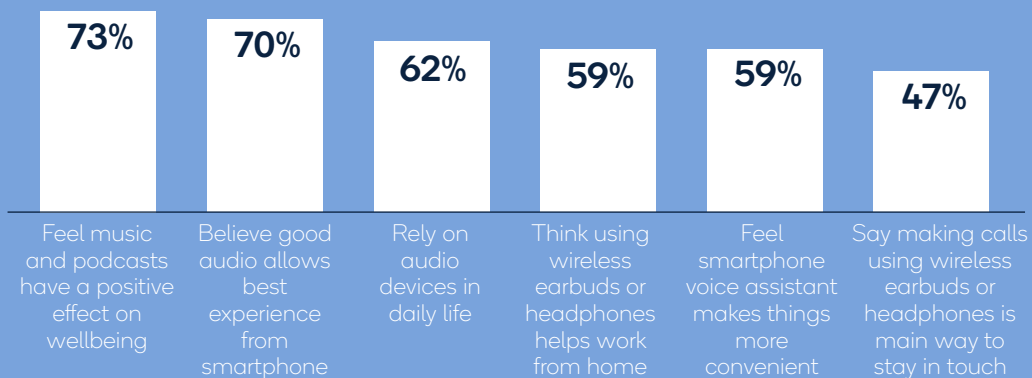
# Global trends in digital sound



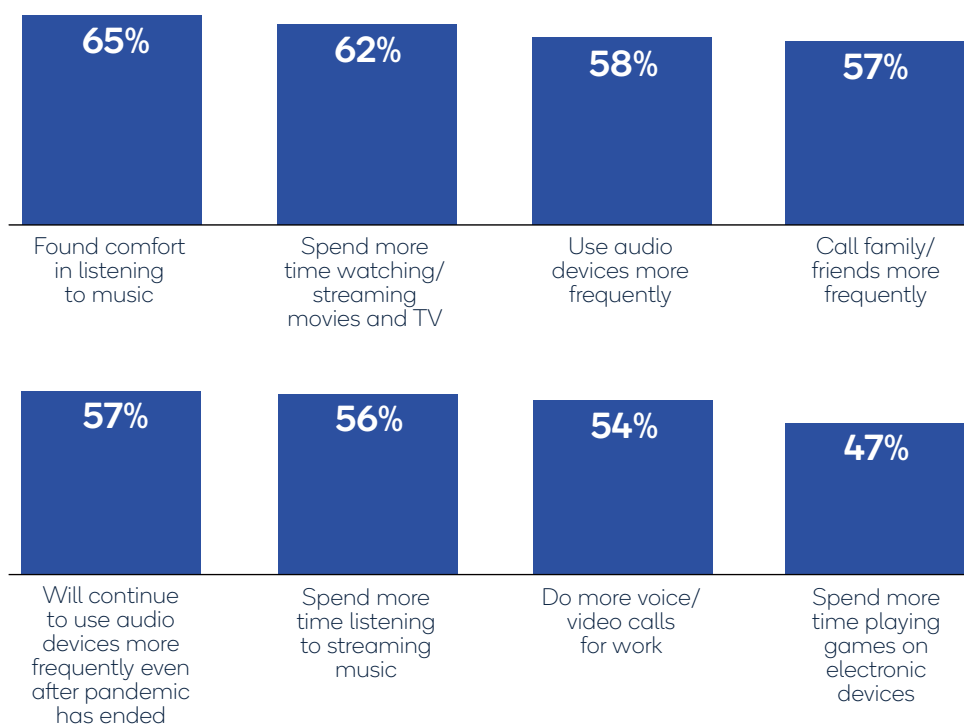
# Comfort in a pandemic: Importance of audio devices in 2021

The report highlights consumer sentiment towards audio, as well as the importance of audio devices during the COVID-19 pandemic and its expected longer-term impact. The findings indicate the value of music and media listening to overall wellbeing, as well as an increased reliance on connected audio streaming.

## Consumer sentiment towards audio use



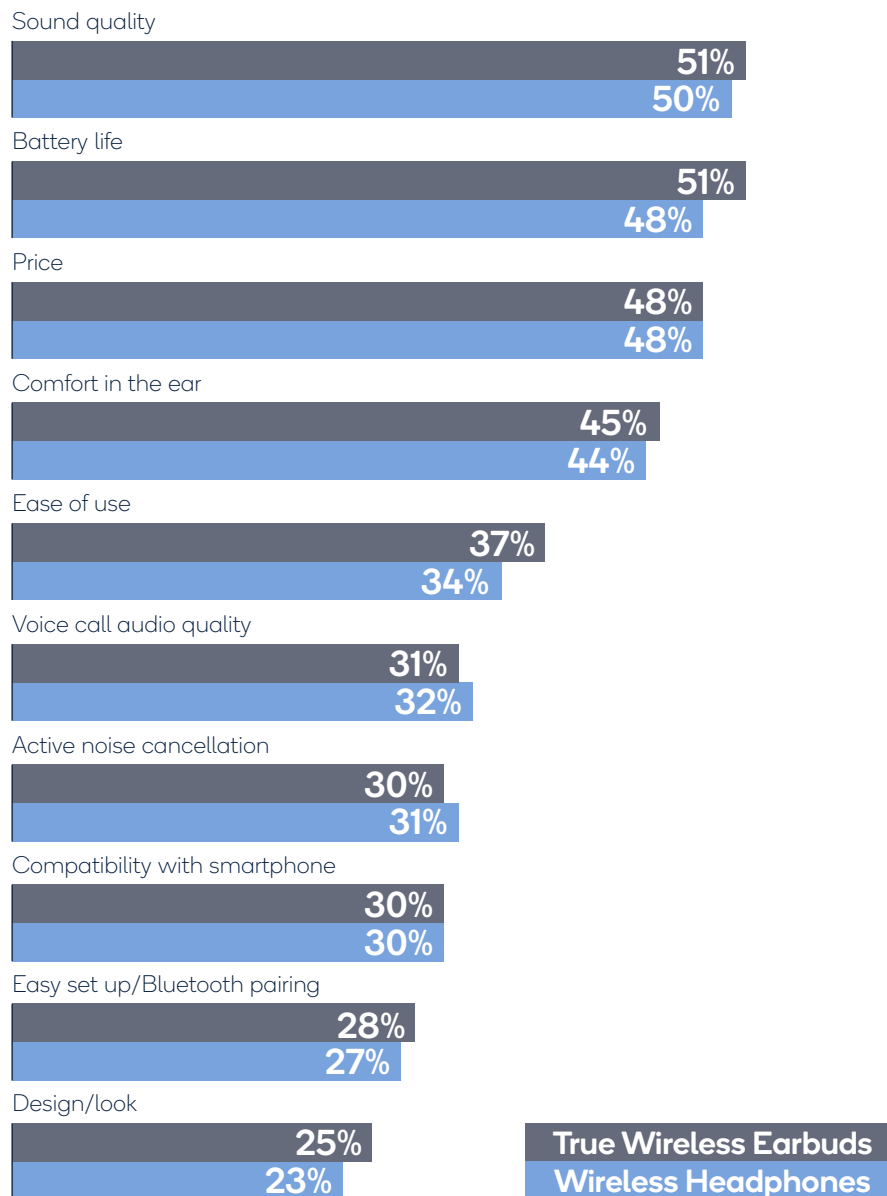
## Behavior since the COVID-19 pandemic



# What matters most: audio purchase drivers

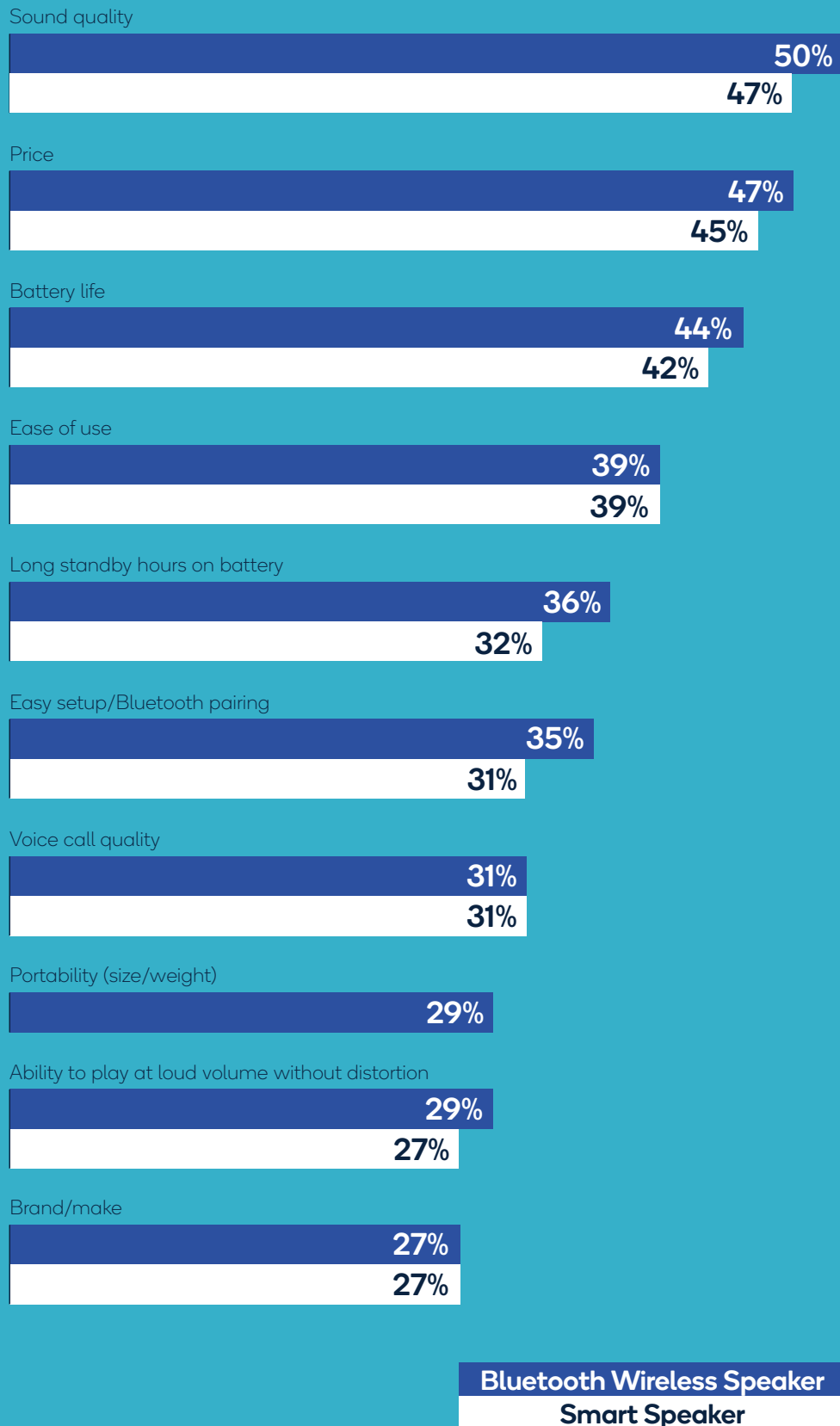
The following charts show how consumers rate the significance of features for each audio product category. Sound quality is most critical across all types of devices, as it has been for the past six years of this research. High resolution audio quality has grown in importance from 18 percent of respondents in 2020 to 24 percent of in 2021, suggesting an increasing awareness of sound quality differentiation.

## True wireless earbud and wireless headphone purchase drivers in 2021





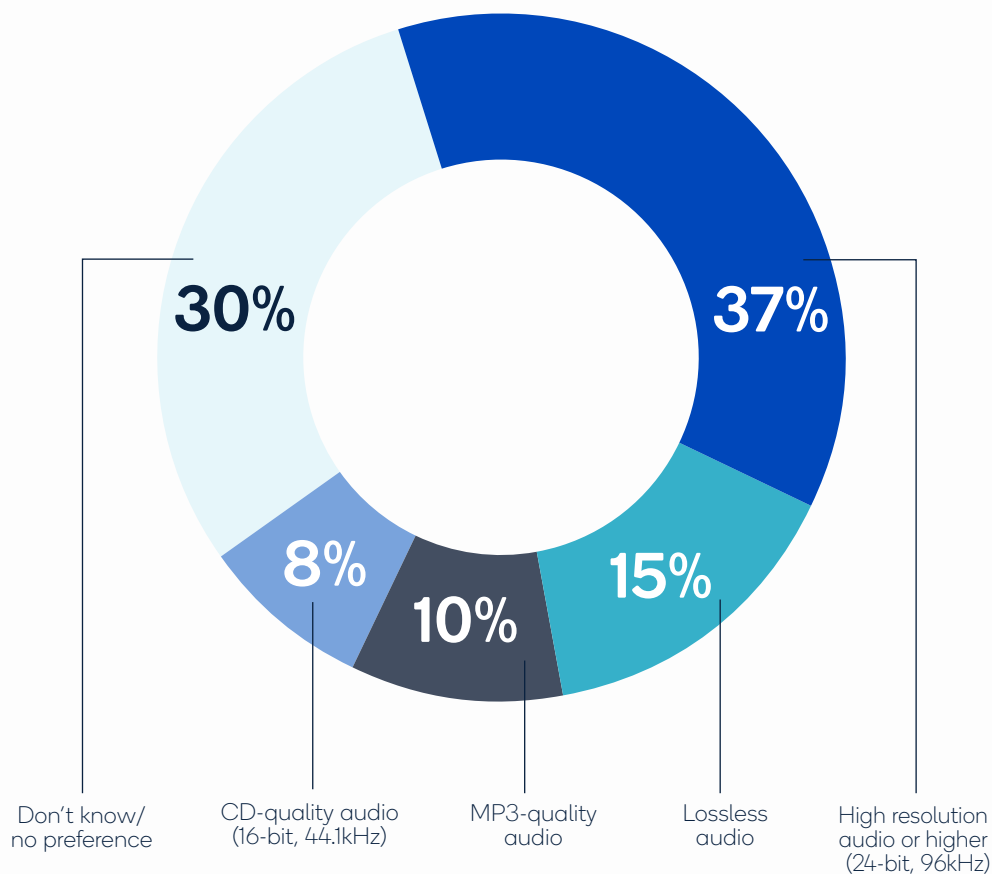
## Bluetooth wireless speaker and smart speaker purchase drivers in 2021



# Sound quality attitudes worldwide

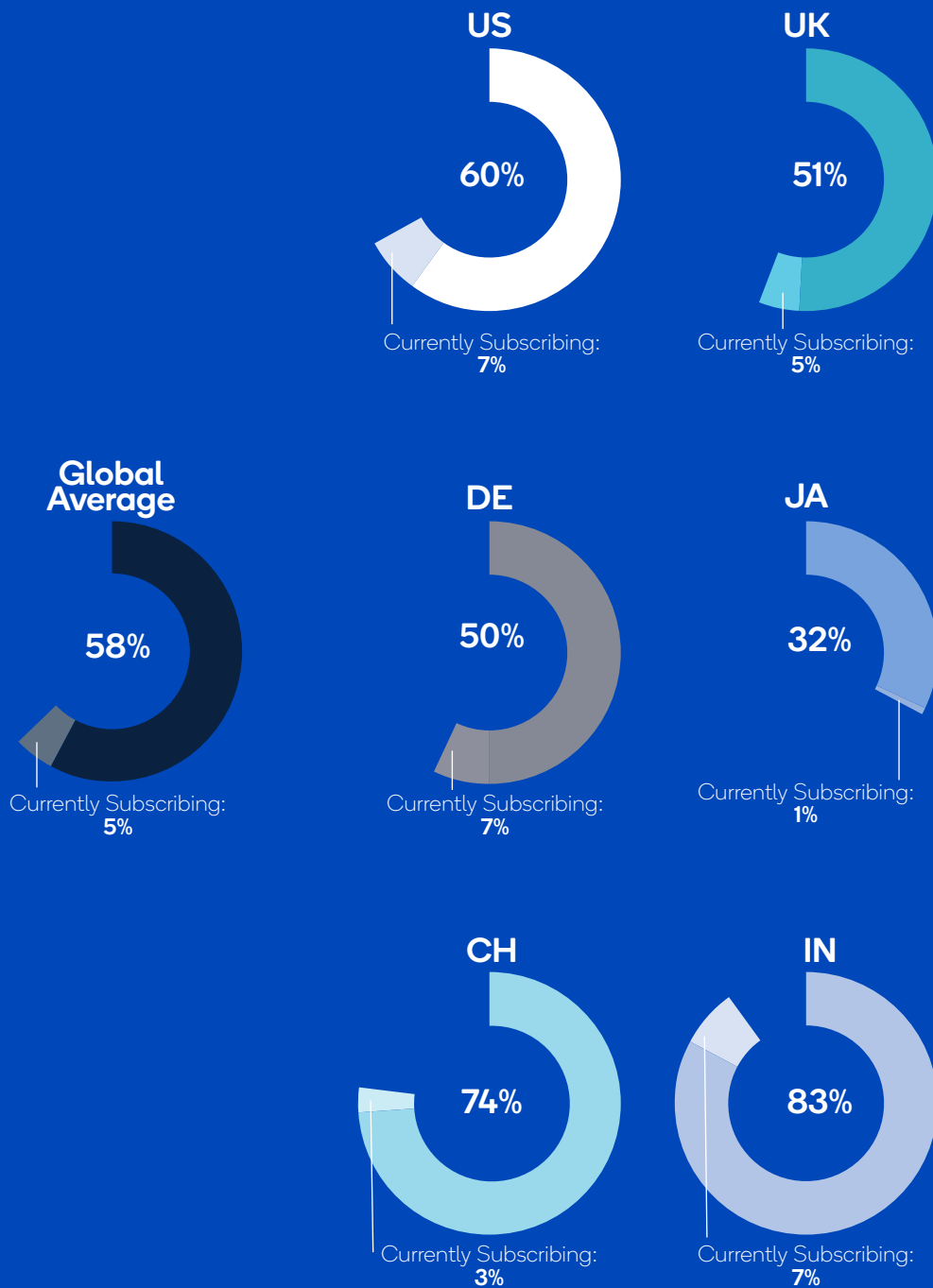
Sound quality is the number one purchase driver for audio devices, even out-ranking price. The data in this section highlights consumer attitudes toward sound quality in more detail, focusing on the level of sound quality commonly demanded and how much of consumer behavior is driven by perceived differences in sound quality. Further, it spotlights the benefit of helping educate consumers on the mechanisms of sound delivery.

## Percentage of consumers seeking different levels of sound quality



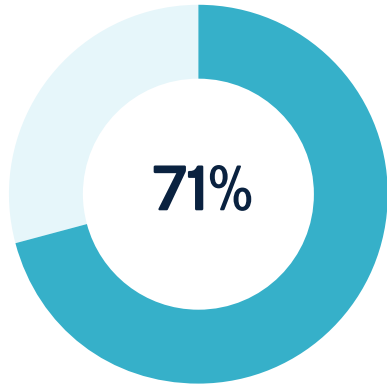
This data indicates increasing awareness of sound quality differentiation among listeners.

## Likeliness to subscribe to a high definition (HD) / high resolution audio streaming service

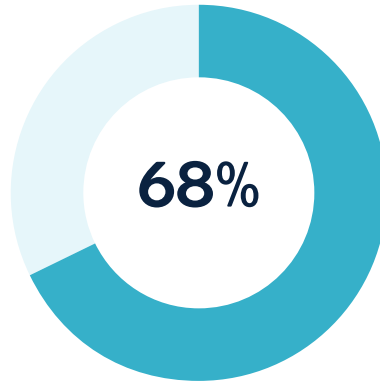


These findings suggest broad adoption of superior-quality audio streaming may be expected in the near future.

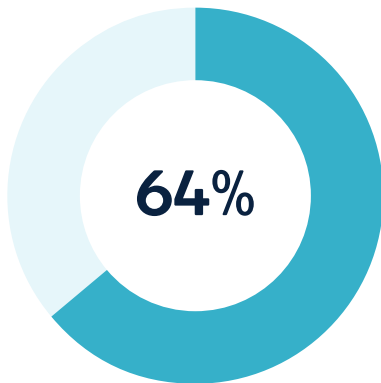
**Percentage of consumer wireless earbud purchases likely to be influenced by sound quality improvement features**



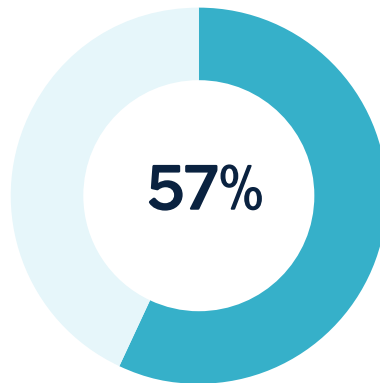
Active noise cancellation



High-resolution high-definition (HD) audio



Lossless audio quality



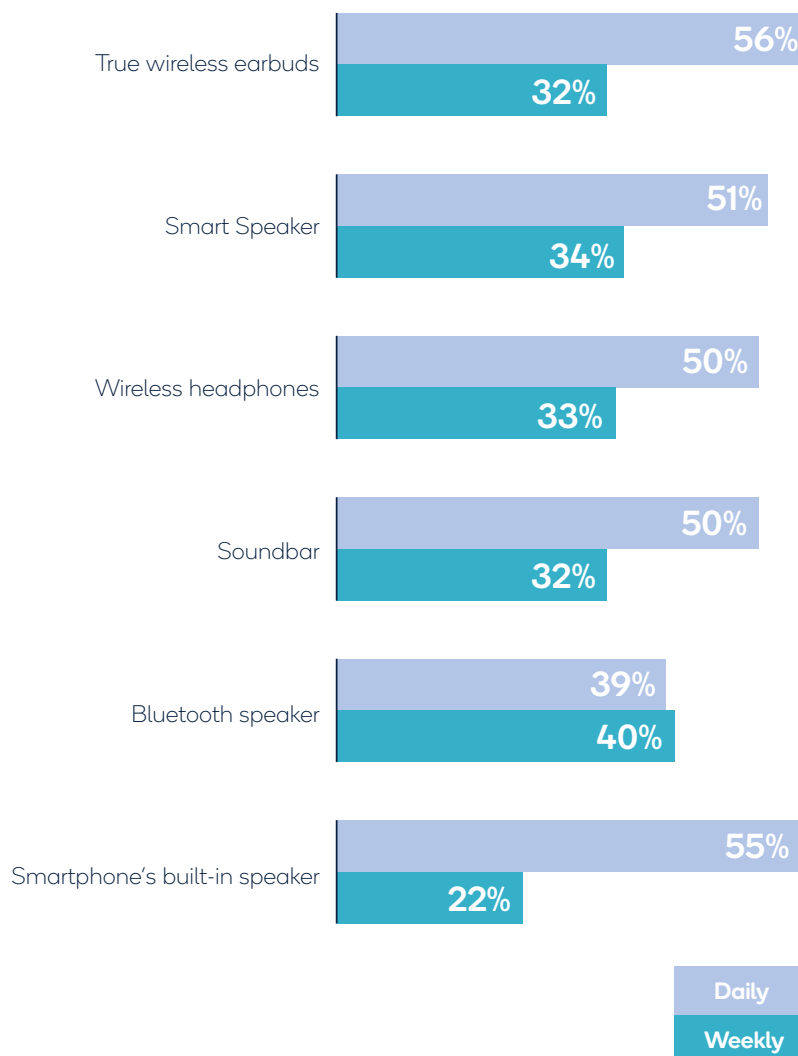
Spatial/3D audio

The findings above show which advanced, sound quality related features are most impactful to consumer purchase decisions, assuming the product meets the fundamental needs for sound quality, battery life, comfort, ease of use and price.

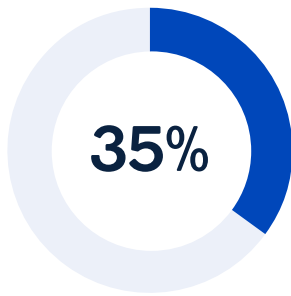
# Overview of connected audio

The following findings detail the wireless audio devices consumers use most frequently, and the most common user pain points. As the frequency and duration of true wireless earbud use has grown, insufficient battery life has become the top issue for many consumers.

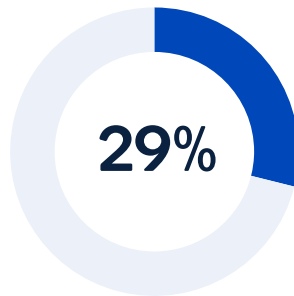
## Usage frequency of audio devices



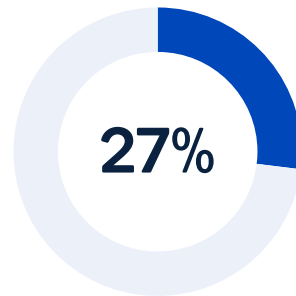
## Top issues experienced when using wireless audio devices



Insufficient battery life

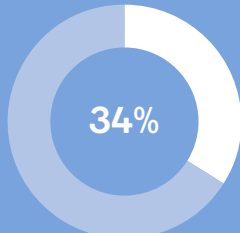


Uncomfortable in the ear

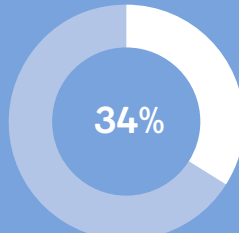


Audio dropouts or glitching

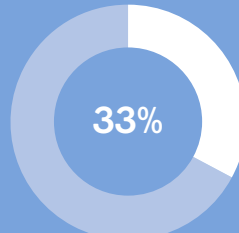
## Interest in forthcoming LE Audio sharing use cases



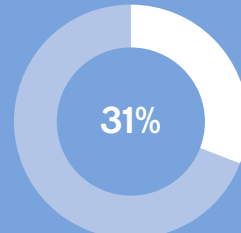
Stream to multiple Bluetooth/smart speakers



Watch the same TV program at different volumes over individual wireless earbuds/headphones



Connect wireless earbuds/headphones to a public venue's broadcast



Stream to multiple wireless earbuds/headphones simultaneously

On average, more than a third of consumers surveyed indicate interest in each of the new use cases that will be possible with the forthcoming Bluetooth LE Audio standard. This is a high number for an unreleased technology, representing strong potential for consumer adoption as new use cases become available.

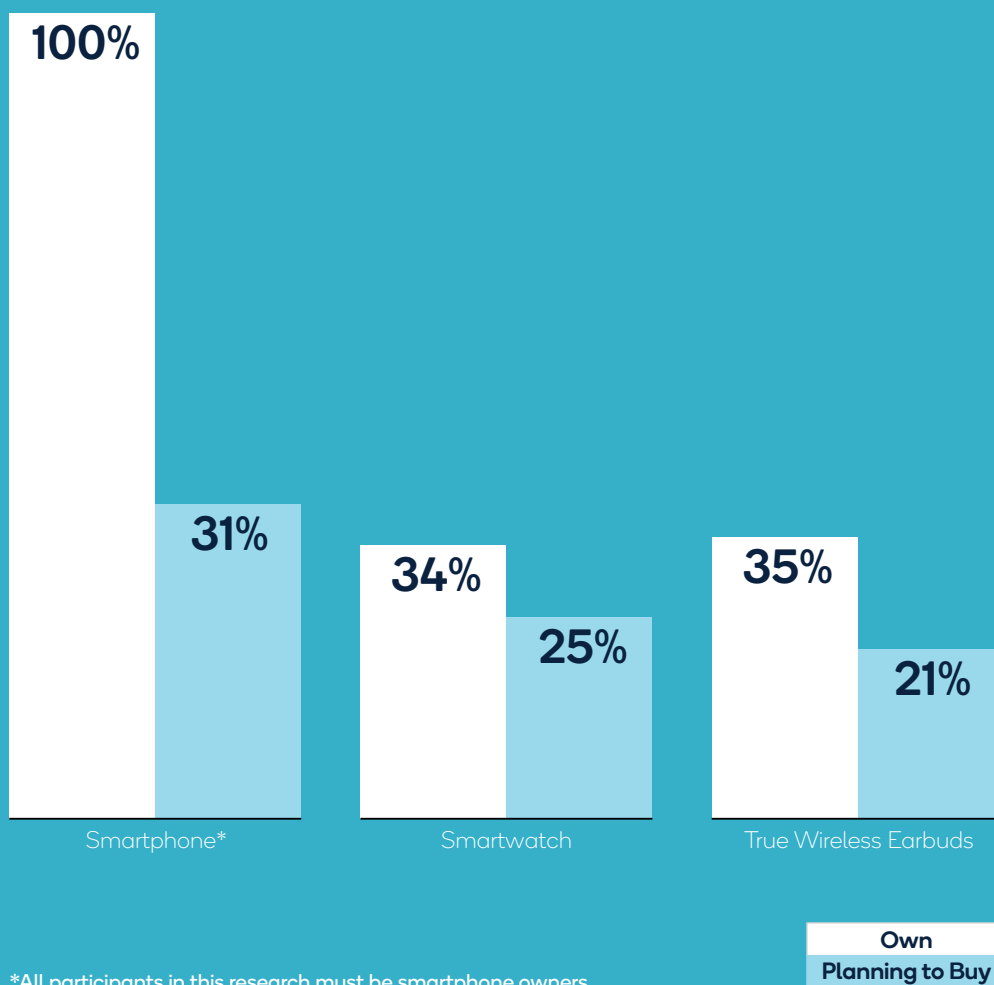
Product focus:  
true wireless earbuds



# True wireless earbud category in detail

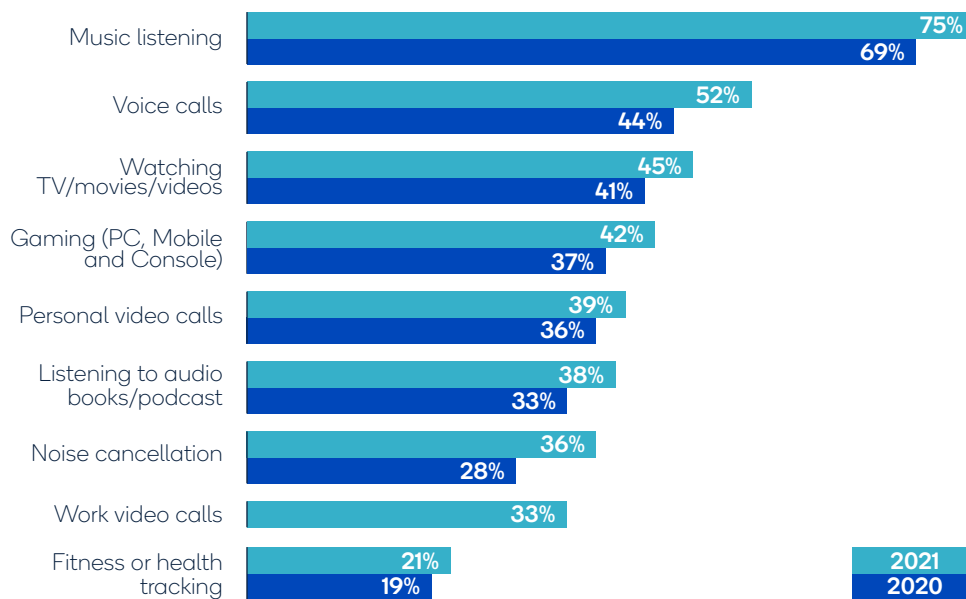
True wireless earbud products are a high growth category in consumer audio electronics. The findings in this section highlight consumer adoption relative to other electronic devices, as well as earbud use type, use duration, and most wanted advanced features. Additionally, compared to 2020, consumer use of wireless earbuds for voice calls, watching video, listening to podcasts, and gaming has increased.

## Consumer adoption of certain electronic devices





## True wireless earbud use by type of activity

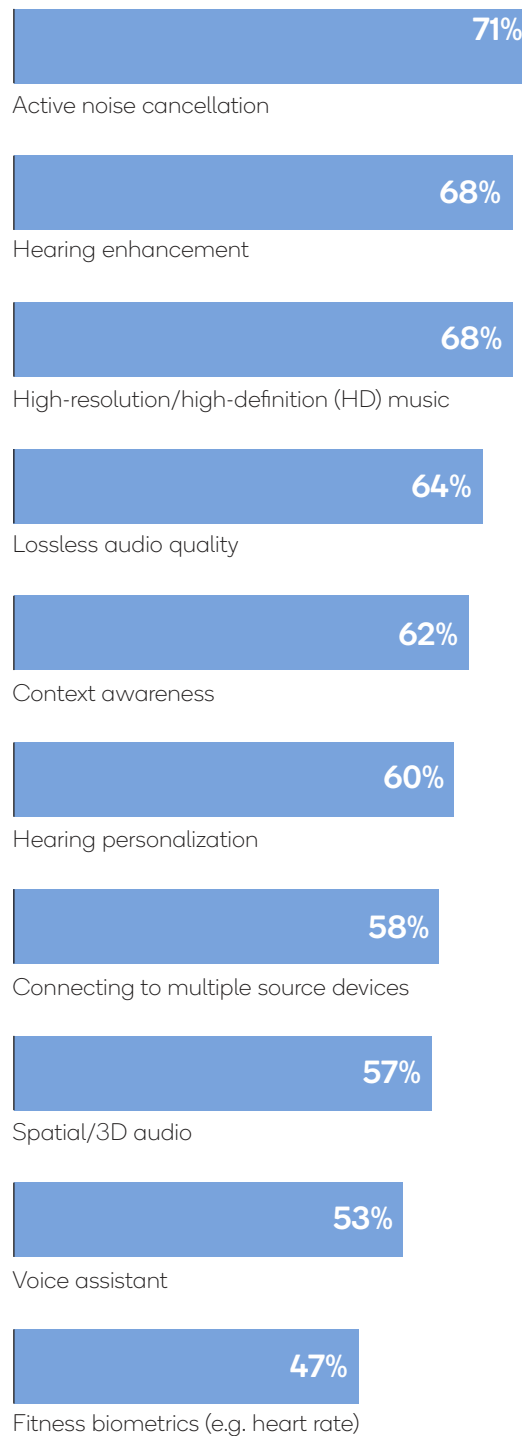


True wireless earbud use increased across virtually all activities in the last 12 months.

## Mean hours per day spent using true wireless earbuds for each activity (global average)



## Likely impact of advanced features on true wireless earbud purchase



\*Recipient ranking likely impact of rich features only.

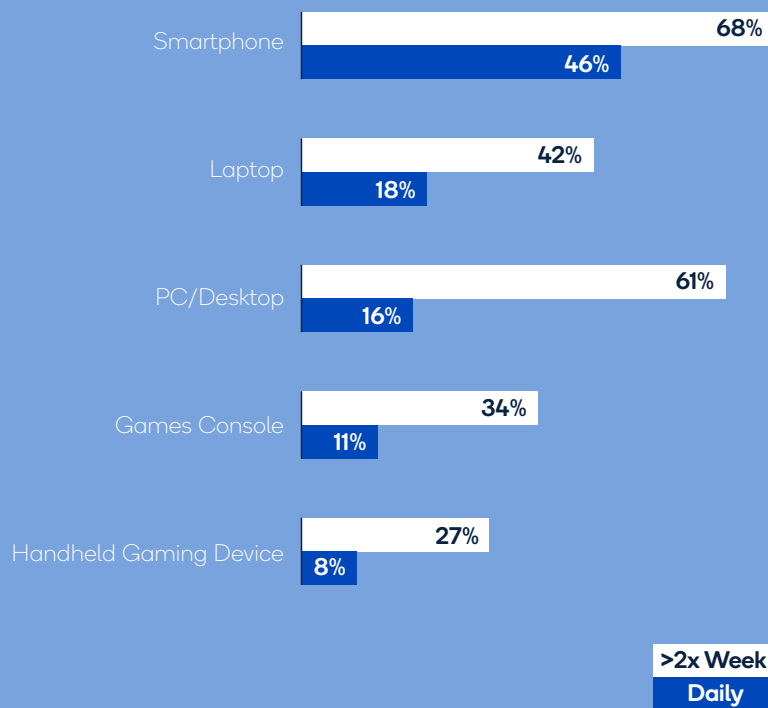
# Top scenarios for sound



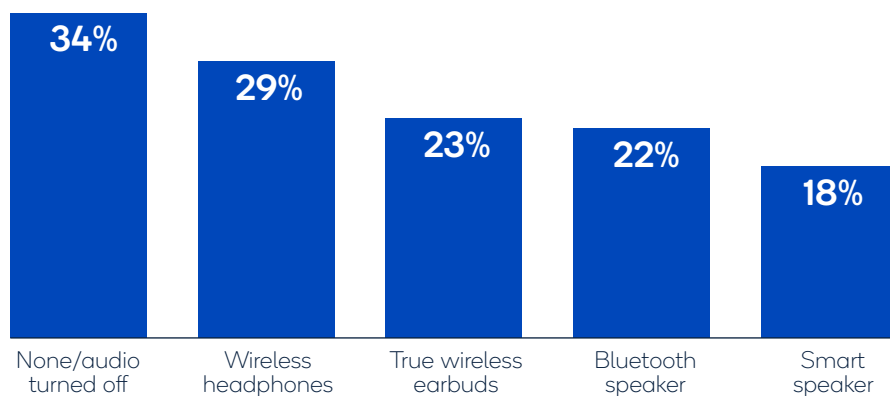
# Importance of sound for gaming

A significant 68 percent of consumers surveyed play games on their smartphone at least twice per week and 46 percent do so every single day. On average, gaming is the longest duration activity for truly wireless earbuds. Technologies that enhance the gaming experience, such as voice over back-channel communication, are driving user interest. The following charts indicate the most-used devices for gaming.

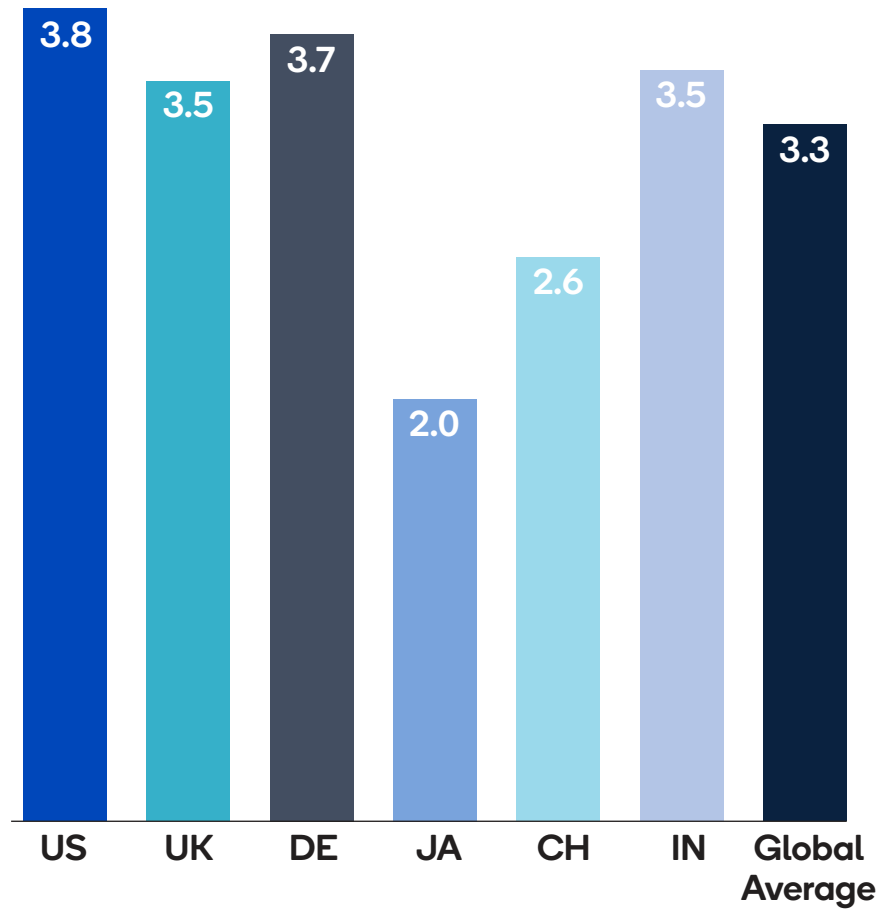
## Percentage of gaming on different source devices



## Percentage of respondents using wireless audio accessories for smartphone gaming

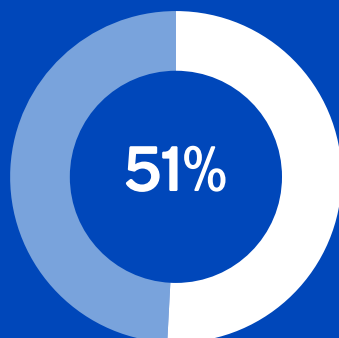


**Average daily hours true wireless earbuds used while gaming  
(across PC, Console and Mobile)**



\*average across all included types of gaming

## Key finding

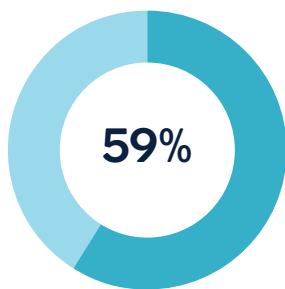


51% of respondents say they are interested in purchasing wireless earbuds or headphones that allow voice backchannel to talk to teammates while playing multi-player games.

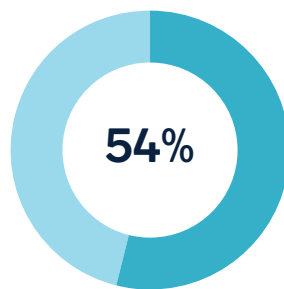
# Audio is essential for remote working

The COVID-19 pandemic redistributed many people's working patterns, resulting in more prevalent remote or hybrid work scenarios. It is expected that many of these changes will continue, and that connected audio devices will play a major role in facilitating this evolution. The following charts summarize the data on consumer attitudes towards audio devices for remote working.

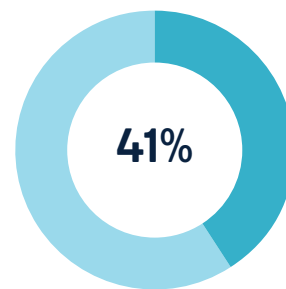
## Attitudes towards audio for remote working



Using wireless earbuds or headphones for voice/video calls helps work from home

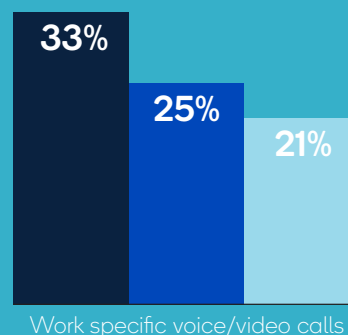
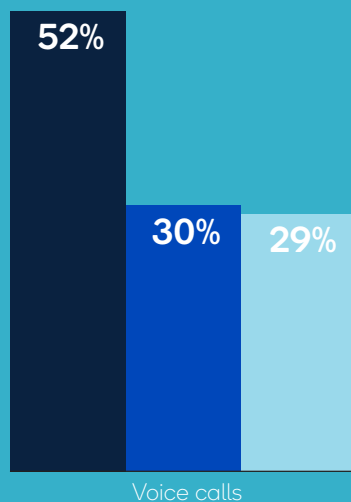


Doing more voice/video calls for work since 2020



Work remotely now and do not expect to return to previous place of work anytime soon

## Most used audio devices for voice and video calls



True Wireless Earbuds  
Wireless Speaker  
Smart Speaker

\*Data for wireless headphones not gathered in 2021

# Qualcomm



A premium sound experience.

Snapdragon Sound™ brings together the very best audio, connectivity and mobile innovations from Qualcomm to deliver high-resolution music, crystal-clear voice calls, and lag-free gaming—all with rock-solid connectivity and extended battery life. This is how sound should sound.

Follow us on: [f](#) [🐦](#) [in](#)

For more information, visit us at:

[qualcomm.com/snapdragonsound](https://qualcomm.com/snapdragonsound)

Nothing in these materials is an offer to sell any of the components or devices referenced herein.

©2020-2021 Qualcomm Technologies, Inc. and/or its affiliated companies. All Rights Reserved.

Qualcomm is a trademark of Qualcomm Incorporated, registered in the United States and other countries. Other products and brand names may be trademarks or registered trademarks of their respective owners.