Adoption vs Usage

Digital dependency trends in the UK

2023–2024

Contents

Report summary

- This report discusses usage and adoption patterns in relation to the smart home, assessing uptake of functional and entertainment devices, attitudes towards connectivity in the home, and considerations that arise once consumers become smart device owners.
- Globally, people are spending increasing amounts using digital devices.
- We're transitioning into an increasingly connected society – more time at home has led to more interest in connected gadgets.
- To give a picture of this growing 'digital dependency', Asurion aggregated data from a range of sources, creating two annual indicators: an Adoption Index and a Usage Index.
- The Usage Index indicates **current** dependency, while the Adoption Index is a lead indicator of **potential future** dependency.
- The Adoption Index measures the level to which consumers have access to digital devices and platforms.
- The Usage Index measures the extent to which people are using those devices or platforms.
- Adoption is seen to be in advance of usage. With connected home devices, more intensive usage lags behind product acquisition, as people get used to products and channels and how they can use them in their daily life.

The next digital frontier

Digital Dependency

Globally, people are spending increasing amounts of time on digital devices. In the UK, citizens between 16 and 64 years old spend on average 5 hours and 47 minutes per day using the internet.[1] Engagement with digital content – from television, to social media, to gaming – is increasing across the board, with time spent absorbing press media and podcasts showing over 40% year-on-year growth.[2]

A hybrid workforce

The rise in digital device adoption has been further stimulated with people spending more time at home and working remotely. Workplace collaboration moved to video conferences and internet messaging, replacing face-to-face interaction. Even the most reluctant digital users adopted technology to be able to work. And it is unlikely we will fully revert to old ways of working; the Office of National Statistics reports that, throughout 2022, the percentage of employed adults working from home

Time spent absorbing press media and podcasts [is] showing over 40% year-on-year growth.[3]

varied between 25% and 40%, commenting that homeworking remained "resilient to pressures such as the end of restrictions and increases in the cost of living".[4]

Work-life connectivity

But reliance on technology – or 'digital dependency' – is not limited to work. We're transitioning into an increasingly connected society in our day-to-day lives too, with one survey asserting that the average Briton has access to more than nine connected devices.[5] More time in the home has led to more interest in connected gadgets. Tech UK, the UK's technology trade association, notes that, "The UK connected home market continues to comfortably outperform pre-pandemic figures, suggesting a more lasting uplift in consumer interest in connected home devices."[6]

"The UK connected home market continues to comfortably outperform pre-pandemic figures, suggesting a more lasting uplift in consumer interest in connected home devices."[7]

The average Briton has access to more than nine connected devices.[8]

Adopter demographics

Which population groups are driving this interest? Adoption of some form of smart, connected device across all age groups averages at around 80%. Moreover, adoption of any connected home device shows relatively little differentiation across age groups – all sit close to the 80% average, with socio-economic profile being the major differentiator.[9] However, when analysing **multi-device** ownership, there is a clear skew towards young adults.

Those in the 16-24 and 25-34 ranges are more likely to own over three devices, at 43% and 45% respectively.[10] This is compared to the overall UK average of 34%.

It is this demographic who is therefore likely to drive future adoption growth, especially as these consumers begin to own their own homes. In addition, 'advanced adopters' are a growing cohort – i.e., owners of more than three connected home devices, according to Tech UK's definition – in nearly all age groups, albeit at a slower pace.[11]

Clearly there are a growing number of areas of digital dependency: computer and mobile internet; gaming; social media platforms; e-commerce; gaming; streaming TV; smart home; and so on. Use of individual digital products and platforms is going up, but what does a snapshot of overall digital access and usage look like? Asurion gathered data from a range of sources,[12] to build a picture of digital dependence in the UK. This aggregated data was combined to create two measures: an Adoption Index and a Usage Index.

The **Adoption Index** represents access to devices and channels, and is based on factors such as:

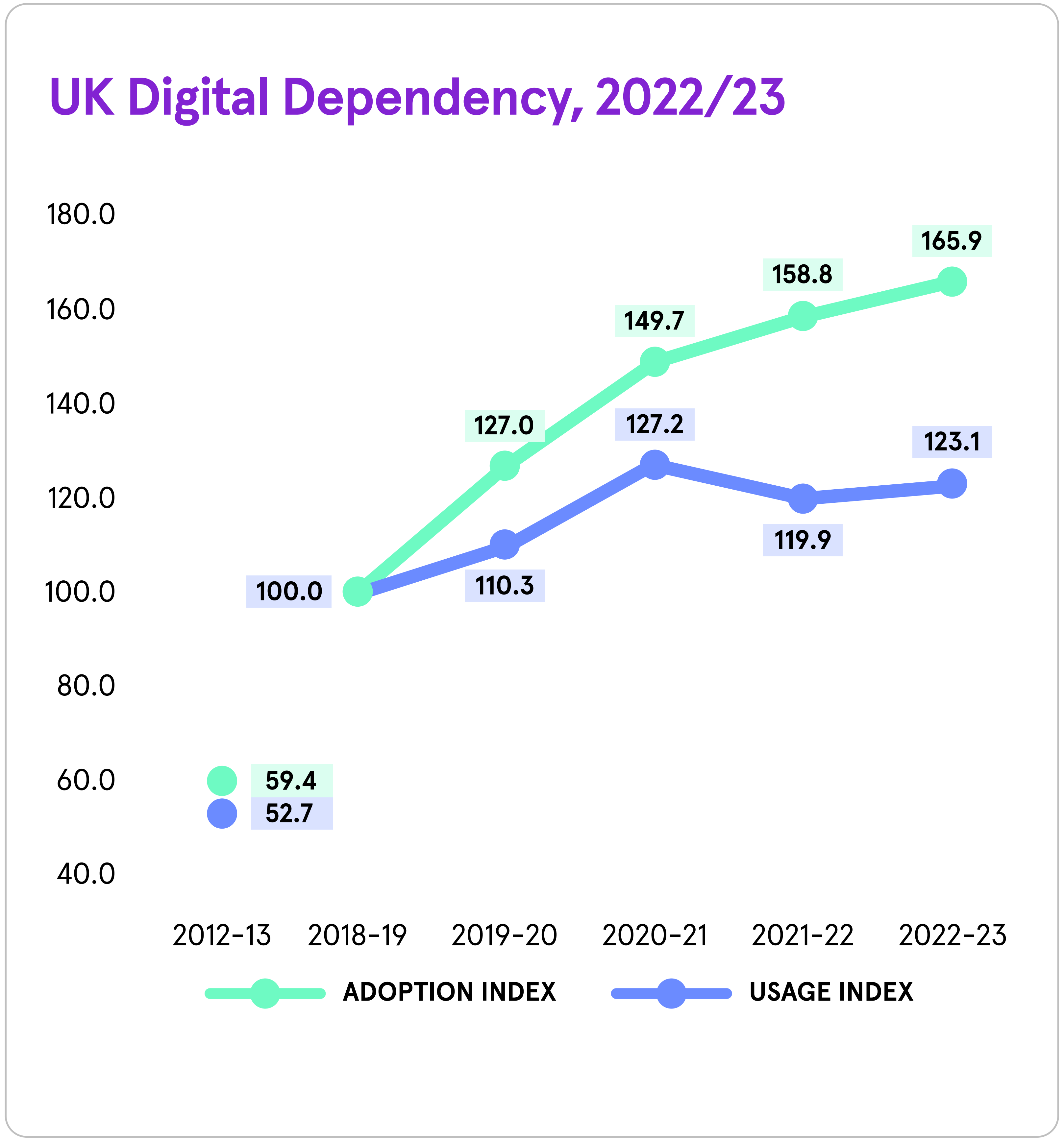
- **the number of internet users**
- **adult social media users**
- **mobile internet users**
- **wearables owners**
- **penetration of smart home devices**

On the other hand, the **Usage Index** represents how much time is spent on these digital devices and channels, for activities such as:

- **streaming TV**
- **browsing the internet and social media platforms**
- **playing on games consoles**
- **shopping online.**

What is the relevance of adoption and usage measures?

As shown in this chart, usage is rising at a slower rate than adoption. Owning a smart watch or having a social media account does not necessarily mean that the watch or account is being intensively used. Usage rates typically lag behind adoption rates, then rise over time, as we get used to the capabilities and applications of the devices and channels to which we have access. The Usage Index therefore indicates **current** dependency, while the Adoption Index represents **potential future** dependency.



This report delves further into usage and adoption patterns in relation to the smart home in particular, assessing:

- **uptake of functional and entertainment devices**
- **attitudes towards connectivity in the home, and**
- **considerations that arise once consumers become smart device owners.**

Functional connectivity

Utility versus entertainment

Within smart homes, smart appliances are globally the most lucrative segment for suppliers,[13] while the smart entertainment category, which includes smart TVs and speakers, remains the most popular in terms of device ownership.[14] However, there is a trend towards diversification, as more devices with different uses enter the market, offering security, medical, cleaning, and even pet care functions.

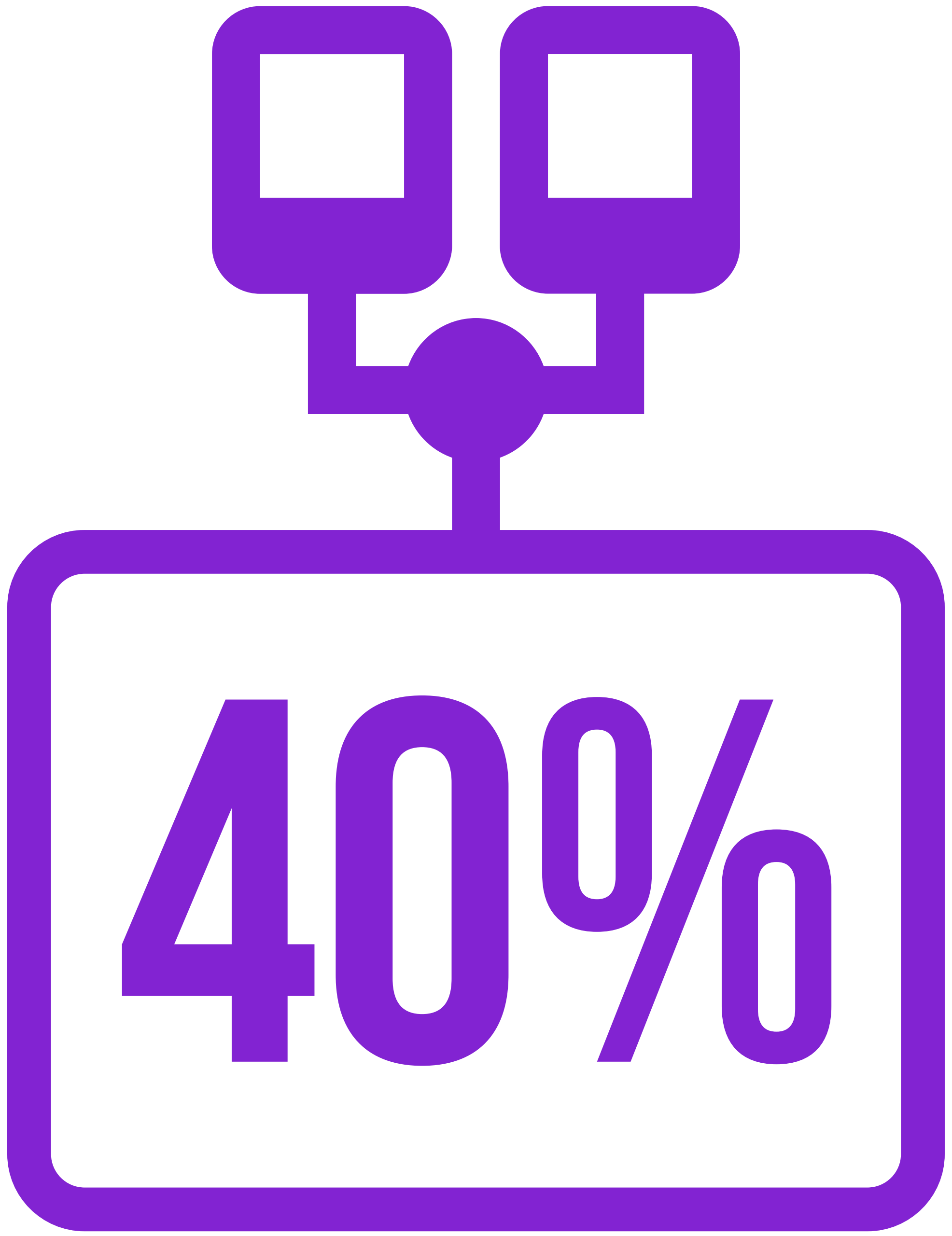
UK preferences

The UK is a little slower than its European neighbours in adopting smaller smart appliances, such as coffee machines and microwaves, and more noticeably so when it comes to robot vacuums and mowers.[15] However, larger items like refrigerators have a greater uptake, with an ownership rate that is on par with other major European countries.[16] Newer technologies such as connected doorbells, thermostats, lighting and alarm systems are also gaining popularity.[17] As more

consumers cotton on to the benefits of these products, it is likely a greater proportion of consumers will soon become 'advanced adopters'.[18] This may be influenced by external factors.

Efficiency savings

A particular attraction in the current economic climate is that connected products can help to save money and support environmental objectives. This also helps to justify the spend on smart devices. In fact, around 40% of surveyed consumers said they expected to recover the initial cost of purchasing energy-saving smart appliances through energy savings within a year.[19] The fact that energy prices remain inflated may therefore have a positive effect on smart purchasing, with consumers already paying more attention to their smart meter readings than previously.[20] Though sustainability considerations remain important, consumers are more focused on immediate worries about their expenses, compared to 2020 when interest in eco-friendly purchasing was at a particular high.[21]



Around 40% of consumers expect to recover the initial cost of an energy-saving smart appliance through energy savings within a year.[22]

Health and safety

Another relevant social trend is the ageing population. With the consequent increases in chronic disease associated with old age, tools which promote health and safety take on a new significance. In one example, the technology platform Anthropos aims to support and improve care of the elderly in the UK by connecting discreet, smart sensors around the home, allowing carers and family members to quickly detect any changes in an older person's routine. The platform connects to IoT devices and regular objects, such as fridges, kettles, or toilets, to help indicate healthy food and water consumption, among other behaviours.[23]

Parallel examples also demonstrate how smart products are becoming increasingly innovative and multipurpose. One brand, for instance, is adapting its TVs to connect with wearable devices and display a personal health dashboard.[24] As technology companies continue to develop new solutions, the line between utility and entertainment may be become even more blurred.

A home security system is more than just a collection of individual alarms, locks, or cameras. It's an interconnected set of electronic devices that work together to protect your home. Security packages can be simple and include just a few devices, or you could go for a more advanced setup. That extra protection could mean a device on your door that locks it automatically, a light that comes on outside to shoo away potential intruders, or a sensor on your windows that alerts you when someone breaks the glass.

[Asurion.com]

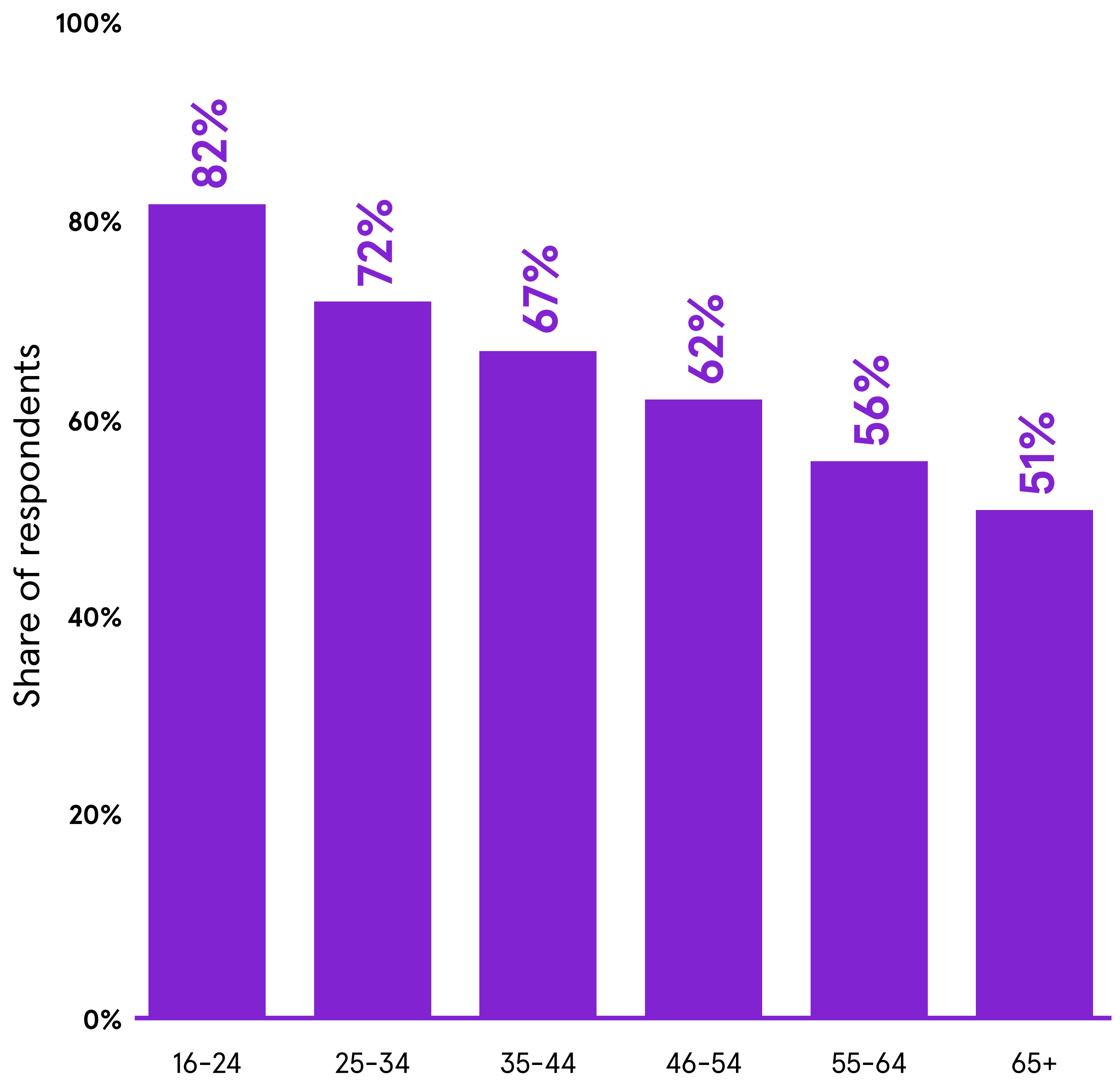
A gaming nation

A gaming powerhouse

The pandemic highlighted the extent of existing gaming interest amongst the population. In fact, the UK has the highest number of gamers across major gaming markets in Europe.[25] In 2022, video game revenue almost doubled that of 2017.[26] These gamers are more diverse than we might assume: 47% of UK gamers are female.[27]

The pandemic also contributed to growing the gaming community. 70% of those in the UK/US who started gaming more because of the pandemic have yet to stop.[28] Meanwhile, video gaming's offshoot, eSports, is also becoming more popular and profitable. It is expected that the number of UK eSports users will surpass 18.33 million in 2023[29] (for context, there are approximately 39.9 million gamers[30]), with projected eSports market revenues of over 202.25 million U.S. dollars in the same year.[31]

Share of gaming audiences who ever play games online in the United Kingdom (UK) as of 2022, by age group[32]

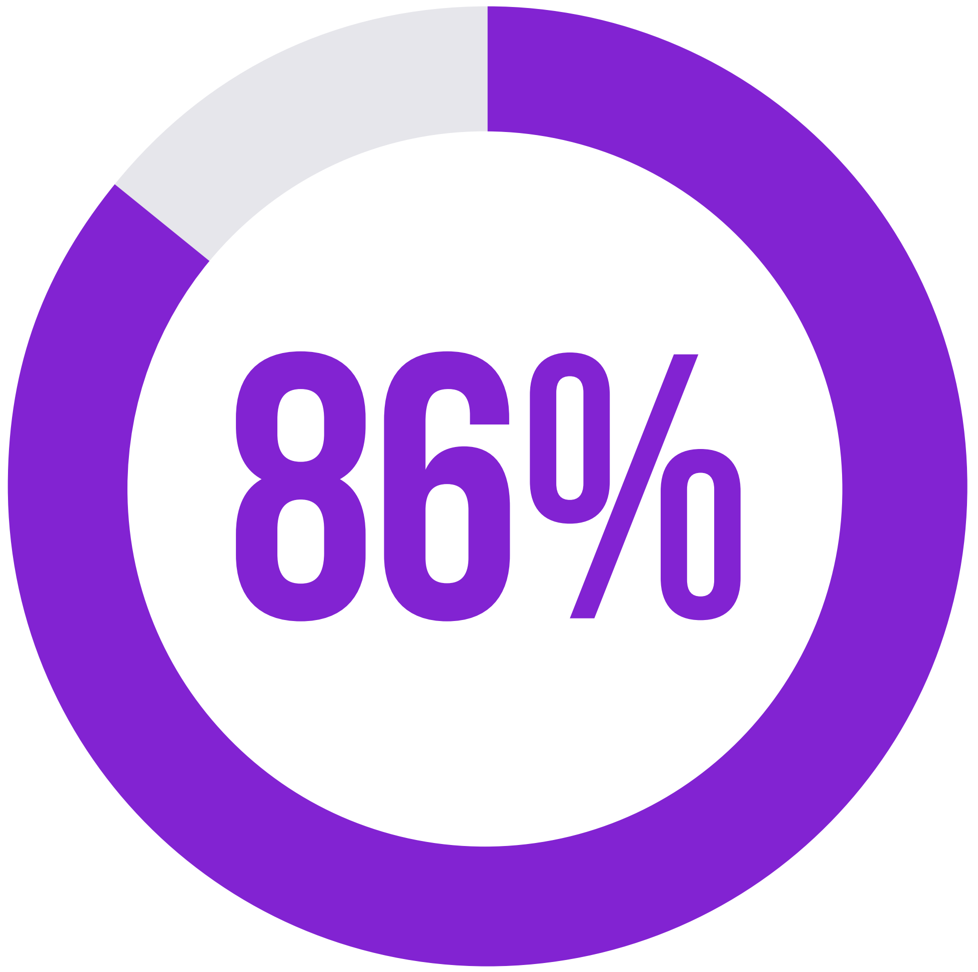


Entertainment everywhere

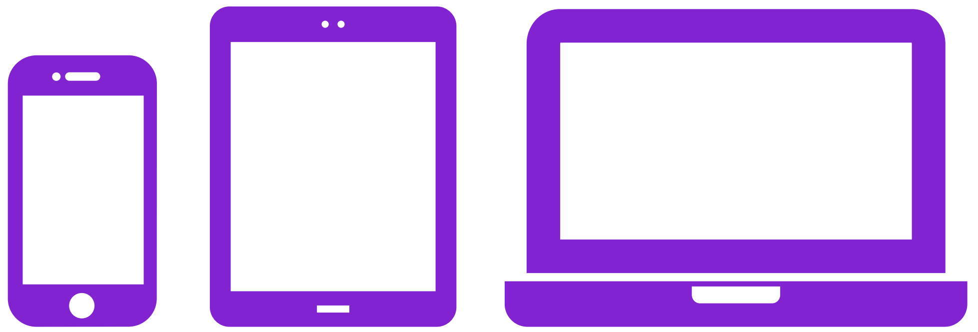
With 82% of UK respondents owning an entertainment device,[33] such as a Smart TV or Bluetooth speakers, it's fair to say that the nation is now accustomed to an optimised entertainment experience. Users often expect these devices to work together and to be multifunctional, with most gaming consoles now providing access to streaming services, for instance. Consumers enjoy the flexibility of device choice when they want to wind down. In fact, 86% of internet users play games on several types of device. And this is not a new phenomenon, as this figure has hardly changed since 2015.[34]

The reign of the console

The gaming industry itself is evolving. The way users consume games has changed, covering a broader range of devices. Beyond the gaming console, gamers use smartphones, laptops or mobile game devices to play. Though mobile gaming has the largest audience reach, console gaming remains the second most popular type of video gaming in the UK.[35] In fact, almost half of 16-24 year olds play on a console,[36] while in the UK as a whole, 33% of adults own or have access to a console.[37] Global research covering 43 markets also found that gaming consoles are the third most common home entertainment device, after televisions (77%) and DVD players (31%).[38]



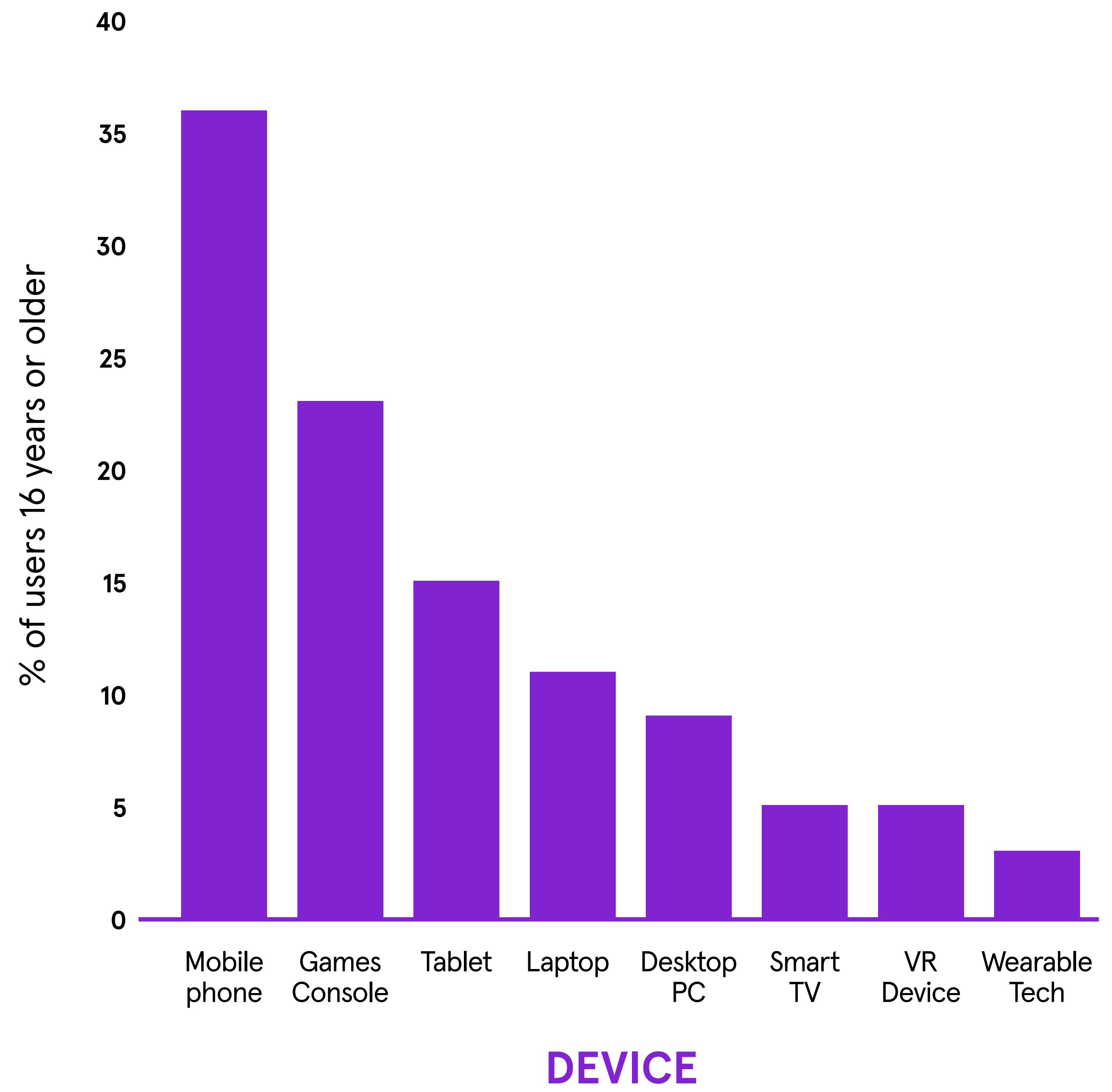
of internet users play games on several types of device.[39]



Game-changing trends

Regardless of the device, reliability is most important, since the biggest gamer frustrations lie in device performance, game difficulty, and expense.[40] The latter concern is all the more pronounced now that an array of accessories are available to complement the gaming experience, such as gaming chairs, steering wheels, and virtual reality headsets. A final, significant trend is that subscriptions and in-app purchases, rather than physical game purchases, are becoming more common. 48% of gamers use subscription services, and among daily gamers, this rises to 56%.[41]

A breakdown of UK online gaming population and the devices they use to access online games (2022)[42]



Attitudes towards connectivity

The path to purchase

Familiarity with smart home technology, as well as consumer perceptions of the associated benefits, is rising. A comparison of attitudes in 2016 and 2023 show slow but positive increases in consumers saying they know a little about the smart home, and a reduction in those saying they know nothing or have never heard of it.[43] Once familiar with connected devices, uptake and ultimate purchase of a connected device are influenced by factors such as ease of use, compatibility with other devices, potential to generate energy savings, increased convenience, and general ownership enjoyment.[44] In terms of compatibility, smartphone connectivity is clearly valued over connectivity with other devices.[45]

Barriers to adoption

The current economic outlook might dissuade some from upgrading to connected products. After all, saving money is a particular priority during a cost-of-living crisis, and it is hardly surprising that the greatest barrier to uptake is cost.[46] Concerns around personal privacy are also significant. Although connected devices come with many benefits, some may be concerned about products in their home collecting data about their daily activities. Other barriers include digital exclusion (particularly among the older generation), limited awareness of the value proposition, and a lack of interoperability among different brands.

Once users have invested in connected devices, though, they are then in a position to weigh up the value they bring to the home. Given rising uptake, it appears that once consumers experience the benefits of connected products for themselves, the devices quickly become integrated into daily life, and this may even drive further investment.

Interoperability: Introducing Matter™

For their home tech devices to easily work together, consumers are often locked into buying from the same brand. The Connectivity Standards Alliance (CSA), a group of more than 300 companies that sets standards for smart devices and other tech has now created a new standard called Matter™.[47] Launched in November 2022, the standard makes it easier for customers to buy, set up, and use any smart technology, and control it from any platform. In sum, it gives consumers greater choice and also reduces the development cost of making connected products.[48]

Supporting a connected home

Premium experiences

As connected devices become more widely adopted, services around them will proliferate too. Supporting services and protection for connected products offer the opportunity to further enhance the user experience through premium add-ons – as in the gaming segment. 30% of 'advanced adopters' use paid subscription services, compared to 20% overall,[49] suggesting that appetite for supplementary subscriptions increases with the number of devices. Notably, younger people (aged between 16 and 34) are also more likely to pay for subscription services.[50]

30% of 'advanced adopters' use paid subscription services, compared to 20% overall.[51]

Appetite for upgrades

In the same way that they might upgrade a smartphone, laptop, or other digital product every few years, owning a connected device creates a desire to invest in the latest iterations or new features. These items are travelling from home to home, now an integral part of the furniture. Companies monitoring these trends will be best placed to respond and offer useful improvements or additions. However, there also remains a tension between desire to upgrade and desire to minimise environmental footprint. Smart suppliers will need to address both in their consumer solutions and services.

Investing in tech protection

As the number of connected products in a home grows, warranties tend to accumulate, making them hard to track. Home tech protection packages that cover multiple devices are more streamlined, and also often come with other valuable advantages. Device insurance protects against damage and faults, discouraging the temptation to simply replace when faults occur. Tech support services help customers get more out of their devices, supporting with set-up, device

linking, optimisation and troubleshooting. In turn, access to support could further encourage adoption by boosting consumer confidence in connected products.

As our digital dependency increases, there is a growing incentive to invest in tech support packages and device protection. Each makes a positive contribution to the value and return-on-investment we get out of our smart, connected devices. Given that consumers prioritise value and convenience, ensuring that consumers can successfully use and take advantage of new connected devices will ultimately increase overall spending. Additionally, satisfied customers are more likely to hold on to devices for longer, rather than discarding them and adding to a growing hoard of electronic waste.

When customers do decide to replace devices, trade-in services recoup some financial rebate for their wallets, while ensuring that important and rare materials are recovered for re-use. A previous study from Asurion estimated that UK smartphone, laptop and tablet users could save over £18.8 billion if the nation were to extend their device life for an additional year and remember to trade in their devices at the end of that year. In addition, this would save the nation over 4.5 million tonnes of CO_2e.

As our digital dependency increases, there is a growing incentive to invest in tech support packages and device protection.

In turn, access to support could further encourage adoption by boosting consumer confidence in connected products.

A smarter society

- The UK is inexorably becoming a 'smarter' society, introducing more smart, connected devices to their homes. These devices benefit users of all ages and stages of life, with digital dependency growing over time throughout our nation.
- Aside from interoperability and data privacy concerns, which are gradually being addressed by technology companies and governments, our increased dependency on digital devices and platforms requires a greater investment in their performance by each of us as consumers and citizens.
- Specifically, investment in technical support is often needed to access digital benefits, for installation, continued use, optimised performance and broader connectivity. It is likely that holistic services, which include device support, protection and lifecycle management, will increase in demand and popularity as uptake of connected devices rises.
- Finally, as the UK population increases its reliance on connected devices, and as net zero climate change targets become more and more urgent, it becomes increasingly important to extend device lifetimes (to minimise unnecessary replacement) and responsible trade-in and disposal techniques (that recover materials from those devices for re-use).

References

1. Datareportal. (2023). *Digital 2023: The United Kingdom. The Essential Guide to the Latest Connected Behaviours.* (page 26 of embedded report). https://datareportal.com/reports/digital-2023-united-kingdom
2. ibid
3. ibid
4. Office for National Statistics. (2023). *Characteristics of homeworkers, Great Britain: September 2022 to January 2023.* https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/articles/characteristicsofhomeworkersgreatbritain/september2022tojanuary2023
5. Statista. (2022). *Average number of devices residents have access to in UK households. https://www.statista.com/statistics/1107269/average-number-connecteddevices-uk-house/*
6. Tech UK (2023). *State of the Connected Home 2023.* https://www.techuk.org/resource/state-of-the-connected-home-2023.html
7. ibid
8. Statista. (2022). *Average number of devices residents have access to in UK households.* https://www.statista.com/statistics/1107269/average-number-connecteddevices-uk-house/
9. Tech UK (2023). *State of the Connected Home 2023.* https://www.techuk.org/resource/state-of-the-connected-home-2023.html
10. ibid
11. ibid
12. ONS, Ofcom, Kantar, World Bank/International Telecommunication Union, Bond, Kepios, et al
13. Statista (2023). *Smart Home revenue forecast per segment in the World from 2020 to 2028 (in million U.S. dollars).* https://www.statista.com/forecasts/887687/smart-home-revenue-per-segment-in-the-world
14. ibid
15. Statista. (2023). *Ownership rate of smart appliances in major European countries in 2022.* https://www.statista.com/statistics/1174852/smart-appliances-ownership-europe/
16. ibid
17. Tech UK (2023). *State of the Connected Home 2023.* https://www.techuk.org/resource/state-of-the-connected-home-2023.html
18. ibid
19. Tech UK (2023). *State of the Connected Home 2023.* https://www.techuk.org/resource/state-of-the-connected-home-2023.html
20. Dimitris Mavrokefalidis. (2023). *More Britons turn to smart meters to save on energy bills.* https://www.energylivenews.com/2023/02/16/more-britons-turn-to-smart-meters-to-save-on-energy-bills/
21. BIMA. (2023). *Do Consumers Care About Sustainability in 2023.* https://bima.co.uk/do-consumers-care-about-sustainability-in-2023/
22. Tech UK (2023). *State of the Connected Home 2023.* https://www.techuk.org/resource/state-of-the-connected-home-2023.html
23. MedTech Innovation. (2022). *Meet the start-up: Sensing smarter care.* https://www.med-technews.com/medtech-insights/medtech-start-up-insights/meet-the-start-up-sensing-smarter-care/
24. Samsung. *Samsung Health app is now on your Samsung TV.* https://www.samsung.com/us/support/answer/ANS00086962/
25. Statista. (2023). N*umber of gamers in select European countries 2023.* https://www.statista.com/statistics/448421/gamers-in-european-countries/
26. Statista. (2023). *Digital video game revenue in the United Kingdom (UK) from 2017 to 2027, by category.* https://www.statista.com/forecasts/461236/video-games-revenue-in-theunited-kingdom-forecast
27. Statista. (2023). *Distribution of video game users in the United Kingdom (UK) as of June 2023, by gender.* https://www.statista.com/forecasts/461273/digital-games-users-age-gender-digital-market-outlook-uk

28. GWI. (2021). *The gaming playbook.* https://www.gwi.com/hubfs/Downloads/The%20Gaming%20Playbook%20-%20GWI.pdf

29. Statista. (2023). *Number of users of eSports in the United Kingdom from 2017 to 2027.* https://www.statista.com/forecasts/1373885/esports-market-reach-uk

30. Statista. (2023). *Distribution of video game users in the United Kingdom (UK) as of June 2023, by gender.* https://www.statista.com/forecasts/461273/digital-games-users-age-gender-digital-market-outlook-uk

31. Statista. (2023). *Revenue of the eSports industry in the United Kingdom from 2017 to 2027.* https://www.statista.com/forecasts/1373838/esports-market-revenue-uk

32. Ofcom. *Ofcom Adult media literacy core survey 2022 – 23rd September to November 9th 2022.* September 23 to November 9, 2022; 2,032 respondents; 16 years and older; who play games on any type of gaming device page 364; Online panel https://www.ofcom.org.uk/__data/assets/pdf_file/0022/251833/Adults-Media-Literacy-Core-Survey-2022-Data-Tables.pdf

33. Statista. (2023). *Smart home device ownership in the UK as of June 2023.* https://www.statista.com/forecasts/997845/smart-home-device-ownership-in-the-uk

34. GWI. (2021). *The gaming playbook.* https://www.gwi.com/hubfs/Downloads/The%20Gaming%20Playbook%20-%20GWI.pdf

35. Statista. (2023). *Console gaming penetration in the United Kingdom as of November 2022, by age group.* https://www.statista.com/statistics/273284/uk-console-gaming-reach-by-age/

36. Statista. (2023). *Console gaming penetration in the United Kingdom as of November 2022, by age group.* https://www.statista.com/statistics/273284/uk-console-gaming-reach-by-age/

37. YouGov. (2022). *Game console ownership around the world.* https://business.yougov.com/content/42391-game-console-ownership-around-world

38. YouGov. (2022). *Game console ownership around the world.* https://business.yougov.com/content/42391-game-console-ownership-around-world

39. GWI. (2021). *The gaming playbook.* https://www.gwi.com/hubfs/Downloads/The%20Gaming%20Playbook%20-%20GWI.pdf

40. GWI. (2021). *The gaming playbook.* https://www.gwi.com/hubfs/Downloads/The%20Gaming%20Playbook%20-%20GWI.pdf

41. ibid

42. Uswitch (2023). *Online gaming statistics 2023.* https://www.uswitch.com/broadband/studies/online-gaming-statistics/

43. Tech UK (2023). *State of the Connected Home 2023.* https://www.techuk.org/resource/state-of-the-connected-home-2023.html

44. ibid

45. ibid

46. ibid

47. Connectivity Standards Alliance. *The Foundation for Connected Things.* https://csa-iot.org/all-solutions/matter/

48. Asurion. (2022). *What's Matter—and why it matters for your smart home.* https://www.asurion.com/connect/tech-tips/what-is-matter-home-automation/

49. Tech UK (2023). *State of the Connected Home 2023.* https://www.techuk.org/resource/state-of-the-connected-home-2023.html

50. ibid

51. ibid