Screen Industries Growth Network

THE IMPACT OF VIDEO-ON-DEMAND ON TV VIEWING IN THE UK

ROUTES TO CONTENT AFTER COVID-19

INTERIM REPORT

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Inspiring global professionals

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About SIGN

The Screen Industries Growth Network (SIGN) is a unique, business-facing initiative supporting the TV, film and games industries in Yorkshire and the Humber. SIGN aims to make this region the UK's centre for digital creativity, and a model of diverse and inclusive activity. In order to do this, SIGN connects companies, support agencies and universities through a programme of training, business development, research and evaluation.

SIGN is a £6.4M project, starting in Summer 2020, and funded by Research England, the University of York, and its partners. The University of York leads the initiative, working with Screen Yorkshire and eight other Yorkshire universities. An extensive network of collaboration ensures that SIGN is equipped to deliver maximum impact across the region.

Report published, 2022.

About the report

The report examines how television viewing habits have changed in the UK since the increased uptake of video-on-demand (VOD) and streaming services during 2020. It not only asks what channels/services people are watching, but also interrogates their depth of engagement and how they find and discover content.

It defines TV as any audiovisual content, from movies and television programmes to online videos, viewed on small screens, such as television sets, tablets, computers and mobile phones, including through TV channels, on-demand and video-sharing services.

The report is based on data gathered through a representative survey of 1,495 people in the UK conducted in May 2021. This interim report is largely based on descriptive statistics related to the technological and industrial factors shaping how people in the UK watch television and how they find and decide what to watch. The research was co-funded by the Screen Industries Growth Network and the University of Huddersfield.

The report is part of a larger Routes to Content project at the University of Huddersfield and builds on two waves of qualitative research conducted in 2019 (‘Routes to Content’, January 2020) and 2020 (‘Covid TV’, October 2020).[1] A full report of the survey findings will be published later in 2022.

Context

Audiovisual viewing in the UK increased by 47 minutes per person per day in 2020 relative to 2019 because of Covid-19 restrictions. Although this included increases in linear TV and public service broadcasting (PSB) viewing share, the greatest increases were to subscription video-on-demand (SVOD), used by 60% of UK households by Q3 of 2020, an increase of 47% on 2019. Viewing through video-sharing services, such as YouTube and Twitch, also increased, as streaming became a core component of UK audiences’ viewing habits.[2]

Viewing on-demand and streamed video requires the use of internet-connected devices, such as smart TVs, set-top-boxes, streaming devices (e.g. Roku, Amazon Fire TV Stick) and mobile devices. In 2020 79% of TV households in the UK connected their television to the internet.[3] The increased uptake of streaming and VOD places television viewing within internet-connected environments that are underpinned by data, algorithms, and the logics of tech platforms, rather than broadcasting.

These transformations in TV viewing habits have raised concerns about the discoverability of content. In on-demand environments, content discoverability is shaped by algorithmic recommendations and search, alongside financial deals for prominence, with transnational tech platforms, device manufacturers and new discovery aggregators increasingly shaping which content and services are most visible to viewers.[4] This has

[1] These two project were funded by the University of Huddersfield. Reports and briefing notes of the findings can be accessed from https://research.hud.ac.uk/institutes-centres/cpc/ourprojects/routes/.

[2] Ofcom, Media Nations: UK 2021, 2021: p.4.

[3] ibid.

[4] See, for example, Gunnarsson, T, *OTT Discovery: How to Stand Out Amongst the Crowd*, MaginePro / Omdia, May 2021; Johnson, C, ‘The Appisation of Television: TV apps, discoverability and the software, device and platform ecologies of the internet era,’ *Critical Studies in Television*, 15(2), 2020: pp.165-182; MTM *Review of TV User Interfaces in the UK market: Current offerings and future developments*, May 2019.

led to regulatory debates about the discoverability of content and services provided by public service broadcasters within on-demand environments where they are not protected by prominence legislation.[5] In April 2022, the UK government's White Paper on the future of the broadcasting sector, *Up Next*, identified discoverability as crucial for the future vitality of the UK's public service broadcasters, proposing to introduce new prominence legislation to ensure that public service content is available and easy to find in on-demand environments.[6]

Key Findings

1. On-demand viewing has been integrated into the habits of all demographics, even older viewers, but linear is still important for many viewers.
    - On average our participants used four different types of audiovisual service to watch TV and 10 different individual audiovisual services. Over half of our participants watched audiovisual content on SVOD services (75%), free video-sharing services (68%), free-to-air channels on a TV set (60%), and free VOD services (56%) once a week or more. However, participants were marginally more likely to watch free-to-air channels on a TV set (34%) than SVOD services (32%) every day.
    - Age was the primary demographic shaping the use of different types of audio-visual service. Older viewers aged 55+ were more likely to watch free-to-air channels on a TV set and free VOD services, while younger viewers aged 18-34 were more likely to watch free video-streaming services and use transaction VOD (TVOD) services to buy or rent streamed audio-visual content. Our data also indicated that the average age for frequent viewers of free VOD services was lower than that for free-to-air channels on a TV set, suggesting that free VOD services are engaging younger audiences with the broadcast content provided by free-to-air channels.
    - However, ethnic minority participants were also more likely to use free video-sharing services, transaction VOD (TVOD) services and SVOD services than free VOD services and free-to-air channels. This suggests that UK broadcasters still need to do more to engage ethnic minority audiences.

2. Cost, not technology, determines use of audiovisual services. We identified three categories of viewer:
    1. Free-seekers (30% of sample) who have a strong preference for free services – free-to-air channels, free VOD services and free video-sharing services – and are less likely to pay for services.
    2. Subscribers (17% of sample) who make little use of free services and have a strong preference for SVOD services.
    3. All-rounders (53% of sample) who make use of a wide range of different kinds of services while exhibiting a preference for SVOD, free-to-air channels, free VOD and free video-sharing services.

3. Public service broadcasting remains central to people's viewing habits. The channels and VOD services of the UK's public service broadcasters are the most frequently

[5] EBU, PSM and Prominence: Finding PSM in the Digital Space, January, 2021; Ofcom, Review of prominence for public service broadcasting: Recommendations to Government for a new framework to keep PSB TV prominent in an online world, July 2019; Ofcom, Small Screen Big Debate: Recommendations to Government on the future of Public Service Media, July 2021: p.3.

[6] DCMS, Up Next: the Government's vision for the broadcasting sector, CP 671, 2022.

watched audiovisual services in the UK, watched every day by almost half (46%) of our participants. Despite the rise of VOD and streaming, the BBC's TV channels remain the most frequently watched across all categories of audiovisual service (watched at least once a week by 71% of participants).

4. The UK's public service broadcasters also demonstrated high levels of engagement, being most likely to be watch for 30-60 minutes, 1-2 hours and 3-4 hours a day. SVOD services were most likely to be watched for 5 hours or more. Free video-sharing services were most likely to be watched for 30 minutes or less, but also came second for those watched for 5 hours or more a day, suggesting that they are offering opportunities for extended engagement for some viewers. There is no clear correlation between length of viewing and cost, with pay-TV channels viewed for a shorter length of time each day than the channels and free VOD services of public service broadcasters.

5. Television is primarily accessed within internet-connected environments, with 80% of our participants using an internet-connected device to watch television at least once a month. Although the smart TV is the primary device for accessing television, on average our participants were using 3.8 different devices to watch TV at least a few times a month. Age was the primary demographic determining device use, with younger participants (18-34) more likely to use smartphones, streaming devices and laptop/desktop computers to watch audiovisual content, and older participants (55+) more likely to use set-top boxes, smart TVs and DVD/Blu-ray players.

6. The most established and viewed VOD services in the UK are used both to watch new content and to re-watch content that has been viewed before. However, certain services (BritBox, UKTV Play and Disney+) were more likely to be used to re-watch old content compared to other VOD services. And Hayu, Twitch and Apple TV+ were more likely to be used to watch new content. This demonstrates the variety of business models and content offers across SVOD and free video-streaming services and the dangers of treating each as a homogenous group.

7. The increased uptake of VOD services and use of internet-connected devices has made on-demand environments more important in shaping how people find and discover content. Browsing on-demand services (such as Netflix, iPlayer and YouTube) was the most commonly used method to find new content to watch, used frequently by 46% of participants. Only 11% of participants frequently followed recommendations on their connected devices (smart TVs, streaming devices etc.) to find new content to watch. This was similar to the percentage of participants frequently using text or voice search (10%). People were more likely to frequently follow recommendations within SVOD services (40%) and free video-streaming services (28%) than within free VOD services (13%) or on the home screens of smart TVs (9%).

8. However, on average participants used eight different methods to find new content to watch, demonstrating that people's decisions about what to watch are not shaped by recommendation algorithms alone. Linear habits such as watching the channel usually viewed (30%) and external factors, such as word of mouth (29%) and trailers/advertising (20%) were also frequently used by participants to find new content to watch.

Action Points

1. Current UK regulation needs revising to address the new media environment in which people are accessing television across multiple internet-connected devices and through both linear and on-demand environments.

2. Any new media policy needs to account for the continued importance of linear for large numbers of people, while addressing the new online environment within which both linear and non-linear television is consumed. It also needs to recognise the importance of cost in determining people's TV use and that a significant proportion of people exhibit a strong preference for free services.

3. Despite the rise of on-demand viewing, public service broadcasters' channels and VOD services remain central to people's TV viewing habits and need to be supported to thrive in an on-demand environment.

4. Prominence legislation needs to extend beyond connected devices and the VOD services of PSBs to address the prominence of PSB content within streaming services (such as YouTube) and on-demand environments. Given that only 11% of participants frequently used device recommendations to decide what to watch, prominence legislation focused solely on devices (such as smart TVs, set-top boxes and connected devices) will not address fully the impact of VOD on the discoverability of public service broadcasting. In addition, legislation focused solely upon ensuring the prominence of the VOD services of public service broadcasters will fail to address the role of search engines (including voice search) and on-demand services (such as YouTube) when PSB content is disaggregated.

5. Addressing legislation only to the prominence of PSB services also fails to address the impact of algorithmic personalisation within VOD services and the extent to which it may, or may not, reduce the diversity of people's media consumption. Increasing the transparency of algorithmic recommendations used by VOD services and search engines would help to improve understanding of the impact that recommendation engines have on the diversity of people's consumption and ensure that users encounter a wider variety of content in on-demand environments. [7]

You can find out more about the **Routes to Content Project** and contact the authors at https://research.hud.ac.uk/institutes-centres/cpc/ourprojects/routes/

[7] Ranaivoson, H, 'Online Platforms and Cultural Diversity in Audiovisual Services', in Albornoz, LA and Garcia Leiva, MT (eds) *Audiovisual Industries and Diversity*, London: Routledge, 2020: pp.100-118.

1. The Integration of VOD Into Everyday Life.
Our data confirmed that streaming and on-demand viewing has become integrated into people's viewing habits. When asked how frequently they used different types of audiovisual service, 32% of participants reported using SVOD services every day, rising to 64% several days a week or more (Figure 1). Only 15% of participants rarely or never used free VOD services, rising to 18% for SVOD services. By comparison, 30% of participants rarely or never used free-to-air channels on a TV set. In addition, more participants were using SVOD services (75%) and free VOD services (68%), than free-to-air channels on a TV set (60%) once a week or more. This demonstrates the extent to which on-demand viewing has become a core component of people's everyday viewing behaviours.

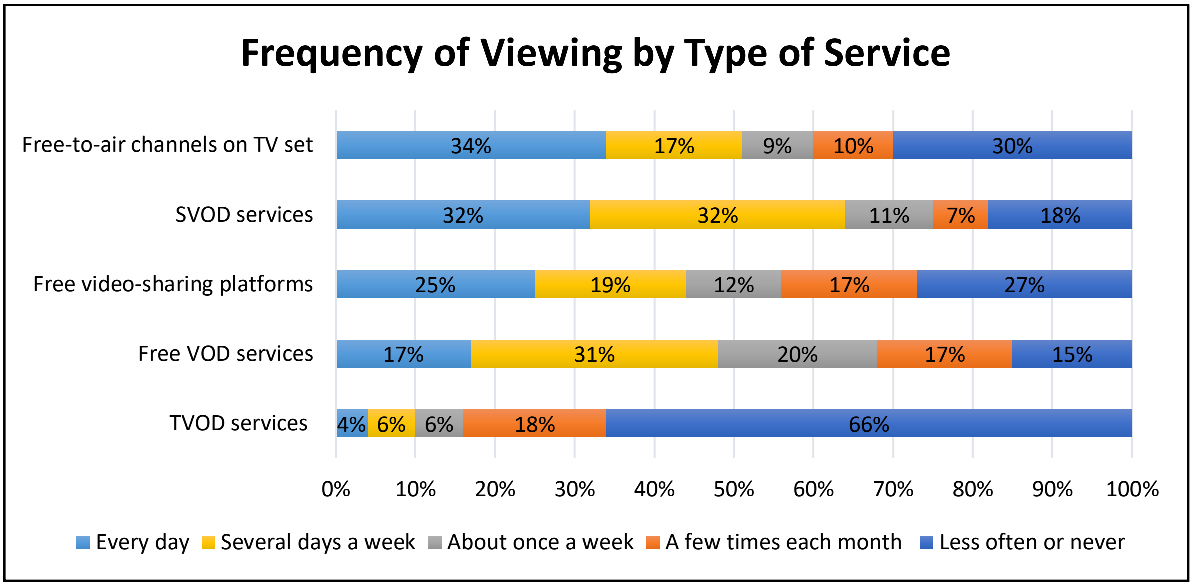

Figure 1. *How often do you watch television, films or video in the following ways? Via free-to-air channels on your television set (e.g. Freeview); Via free on-demand services (such as BBC iPlayer, ITV Hub, All4, etc.); Via a subscription on-demand service (such as Netflix, Disney+, Amazon Prime Video etc.); Via free video sharing platforms (YouTube, Twitch, Vimeo etc.); Streamed content you have purchased or rented (on iTunes, Amazon, Google Play, Sky Box Office, etc.)*

However, linear TV remains a crucial component of people's habitual TV viewing, with slightly more participants watching free-to-air channels on a TV set every day (34%) than using SVOD every day (32%). In addition, we found that people used, on average, four of these five different methods to watch audiovisual content. As such, VOD and streaming have not replaced traditional linear modes of TV viewing. Rather, people have adopted multiple ways of viewing television into their daily habits.

Age is the primary demographic shaping the use of different types of audiovisual service. Older viewers aged 55+ were more likely to watch free-to-air channels on a TV set and free VOD services, while younger viewers aged 18-34 were more likely to watch free video-streaming services and use transaction VOD (TVOD) services to buy or rent streamed audiovisual content (Figure 2). It is notable, however, that the percentage of older and younger viewers watching SVOD services at all was almost identical (30% and 31% respectively), demonstrating the extent to which older viewers have adopted SVOD use in the UK.

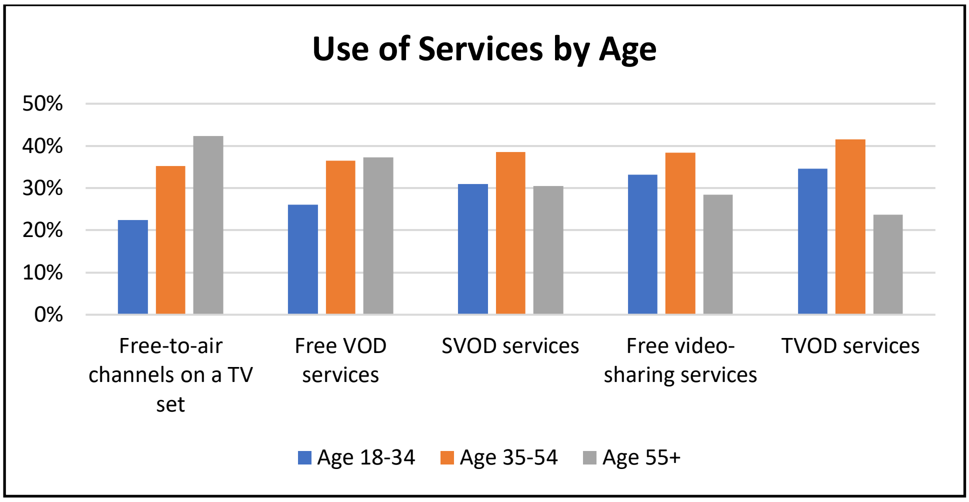

Figure 2: Percentage of participants using different kinds of audiovisual service a few times a month or more according to age

When looking at the average age of participants according to the frequency by which they used different services, we found that regular viewers of free-to-air channels on a TV set were also more likely to be older, while frequent viewers of free video-sharing services and SVOD services were more likely to be younger (Figure 3). This suggests that while similar numbers of older and younger people might be using SVOD services, younger viewers were more likely to make frequent use of SVOD.

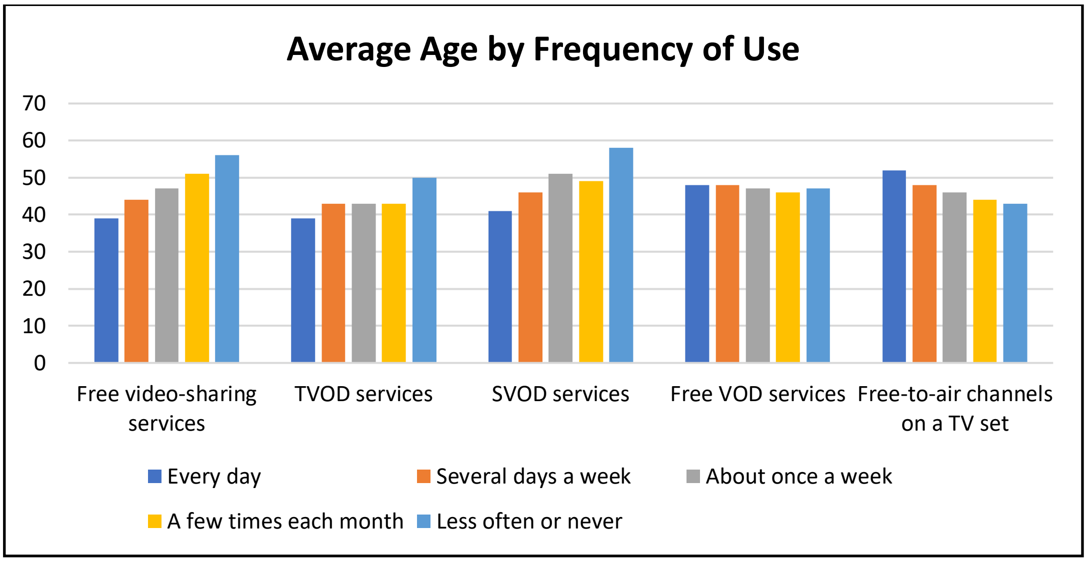

Figure 3. Average age of participants according to the frequency by which they used different types of service

This data also demonstrates the importance of free VOD services (such as BBC iPlayer, ITV Hub, All4, My5, UKTV Play and Freeview Play) for linear broadcasters. The average age for frequent viewers of free VOD services is lower than that for free-to-air channels on a TV set, indicating that free VOD services are engaging younger audiences with the broadcast content provided by free-to-air channels.

The other demographic factor that informed the use of different types of TV service was ethnicity (Figure 4). Although the variation is small, we saw a slight increase in the percentage of ethnic minority participants that used free video-sharing services (18%), TVOD (17%) and SVOD services (15%) compared to free VOD services (13%) or free-to-air channels (13%) and compared to the distribution of these participants within the overall sample (14%). This trend was similar across the different categories of ethnic minority participant with little variation between those identifying as Black, Black British, Asian, Asian British, mixed and other ethnic group. This accords with earlier studies that revealed that the audiences for UK TV channels, and public service broadcasters, in particular, were heavily skewed towards white viewers.[8] It indicates that more work is still needed to ensure that ethnic minority audiences have their viewing needs met by UK broadcasters.

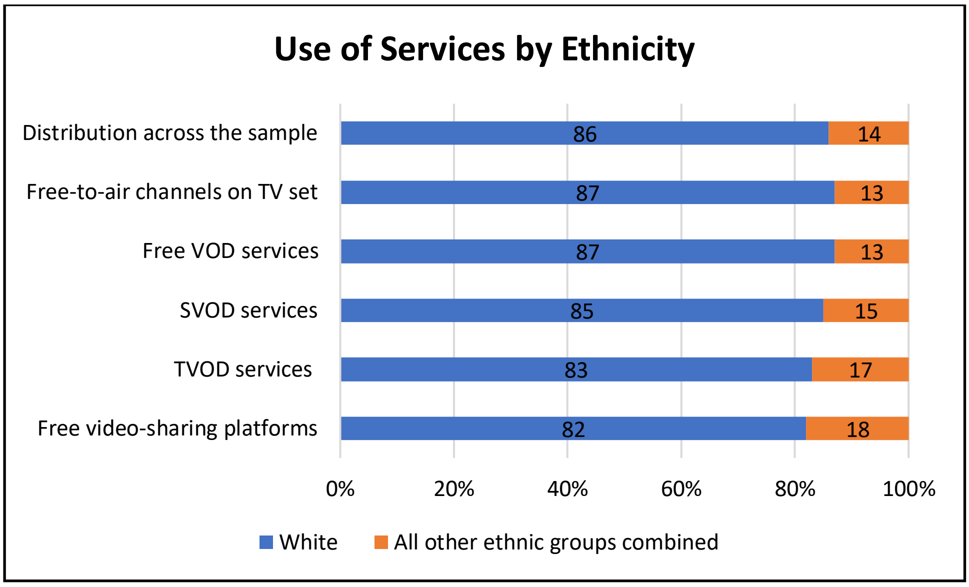

Figure 4. Percentage of participants using different kinds of audiovisual service a few times a month or more according to ethnicity

We examined whether there was any link between the number of different genres that people enjoyed and the type of audiovisual service they watched. There was little variation between the different services, with participants, on average, expressing a preference for eight different genres. Those who used TVOD services to rent or buy streamed content liked slightly more genres than other participants (nine on average). This could suggest that people with wider tastes are more prepared to seek alternative sources to pay for content not found on other services.

2. Cost, not technology, determines use of audiovisual services

So far, our data has demonstrated the integration of VOD and video streaming into people's weekly viewing regimes, particularly for younger and ethnic minority viewers. Integrating this with data gathered about people's use of pay-TV channels available through cable or satellite subscription packages enabled us to identify three categories of viewer that each shared similar behaviour (Figure 5).

[8] Digital.i, *Mind the Viewing Gap*, 2016.

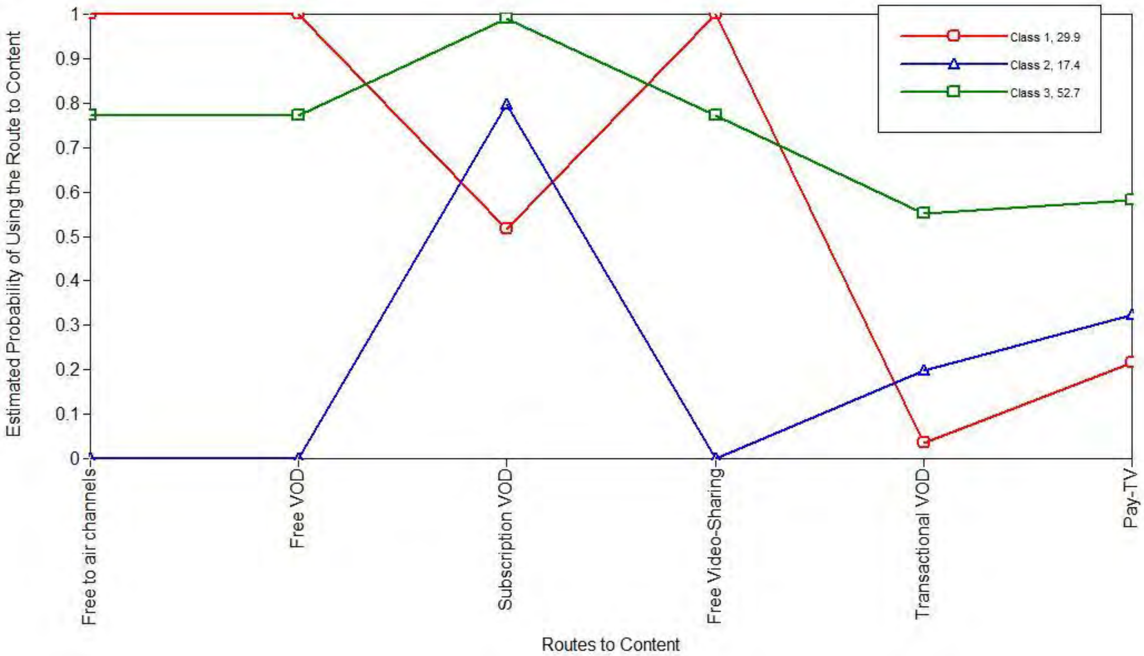

Figure 5. Latent class analysis to identify categories of audiovisual user according to the types of audiovisual services that they use.

Class 1: Free Seekers
This category of viewer made up 30% of our sample and demonstrated a strong preference for free services – free-to-air channels, free VOD services, free video-sharing services. This category of viewer is less likely to pay for services, particularly TVOD and pay-TV.

Class 2: Subscribers
The second category of viewer made little use of free services of any kind and demonstrated a strong preference for SVOD services, as well as some use of TVOD and pay-TV. This was the smallest category, making up just 17% of our sample.

Class 3: All-rounders
The third category of viewer was the most common (53% of our sample) and were likely to make use of all six different kinds of service, while exhibiting a preference for SVOD, free-to-air channels, free VOD and free video-sharing services.

In our full report due out later in 2022 we will interrogate these different categories of user in more detail. For now, it is revealing that the primary difference in the likelihood of people using different types of audiovisual service is not technological, but rather determined by cost. This suggests that future audience behaviour is likely to be determined by the cost of service rather than the technology through which that service is provided.

3. The Continued Importance of Public Service Broadcasting
In addition to asking our participants how frequently they watched different types of audiovisual services, we also asked them how frequently they watched the specific services that they had access to. The list of services was generated according to the most-viewed TV services in the UK in 2020 within four categories: Public Service

Broadcasting, Cable/Satellite/Digital Terrestrial, SVOD and Free Video-Sharing (Figure 6).

Public Service Broadcasters	**Cable/Satellite/Digital Terrestrial Providers**	**SVOD Providers**	**Free Video-Sharing Providers**
BBC TV Channels	BT Sport Channels	Disney+	Twitch
ITV Channels	Sony Film and Sony Channel	Apple TV+	YouTube
Channel 4 Channels	Nickelodeon and Comedy Central Channels	Amazon Prime Video	
Channel 5 Channels	Sky Entertainment Channels	Netflix	
BBC iPlayer	Discovery Channels	Hayu	
ITV Hub	MTV Channels	BritBox	
All 4	Sky Cinema Channels	ITV Hub+	
My5	Sky Sport Channels		
	Sky News		
	Dave		
	TBS Channels		
	Utsav Channels		
	Freeview Play		
	UKTV Play		
	National Geographic Channels		

Figure 6: The primary audiovisual services in the UK (as of 2020) categorised according to provider. [9]

[9] There is some slippage between these categories. Britbox and ITV Hub+ are both provided by the public service broadcaster, ITV. However, they are not governed by ITV's PSB remit and, unlike the other PSB services, are not provided free to air. They are, therefore, categorised here as SVOD services. UKTV Play and Freeview Play have been categorised as satellite/cable/digital terrestrial services, despite being part or wholly owned by one or more public service broadcaster. Because UKTV is owned by the BBC's commercial arm, BBC Studios, it is not subject to the same PSB requirements as the rest of the BBC's services. Similarly, although Freeview is part-owned by BBC, ITV and Channel 4, it is managed by Digital UK Ltd and DTV Services Ltd, of which Sky is a shareholder. UKTV and Freeview, therefore, are operated at arm's length from the core PSB services of BBC, ITV and Channel 4.

This enabled us to interrogate the use that our participants were making of the services offered by different types of provider, such as public service broadcasters' channels and VOD services vs cable/satellite/digital terrestrial channels or SVOD services.[10]

Looking at people's viewing habits according to different categories of provider reveals the continued importance of public service broadcasting within the UK (Figure 7). When we combine the frequency with which all participants watched the UK's five public service broadcasters' channels *and* VOD services, we can see that almost half of our participants (46%) were watching public service broadcasters' channels or free VOD services every day, compared to 29% for the services offered by free video-sharing providers (such as YouTube, Twitch) and 27% for SVOD providers. Indeed, only 7% of our participants watched public service broadcasting less often than a few times a month or never.

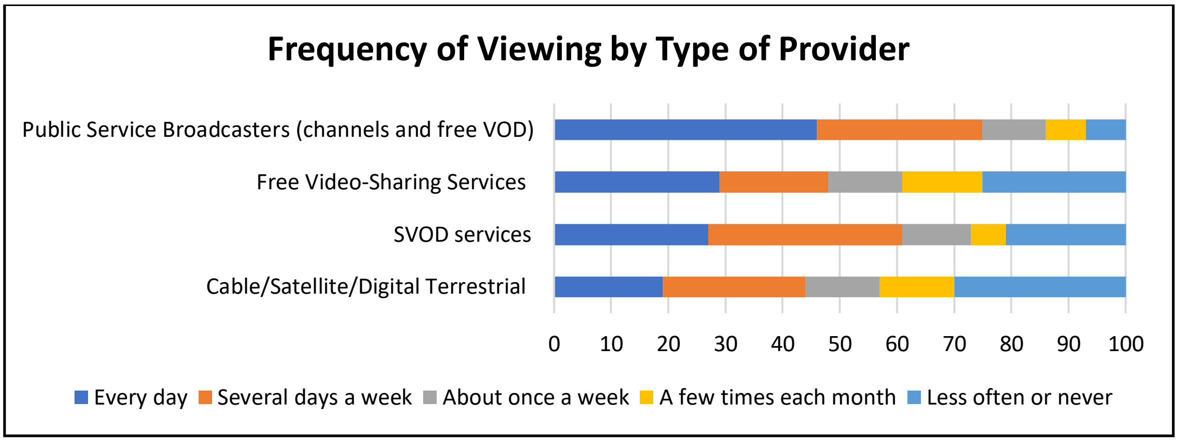

Figure 7. *How frequently do you watch programmes, shows, films or videos on the below television services?* Selection based on Figure 6. Participants were only asked about the pay-TV channels, VOD and streaming services to which they had access.

It is notable, however, that 61% of participants were watching SVOD services several days a week or more, suggesting that these services have a valuable place in people's weekly viewing habits. In addition, our research suggested that participants were using on average ten different individual services from three different types of providers. This indicates that people are engaging across a wide range of different kinds of TV, rather than substituting SVOD for public service broadcasting (for example).

Our data also suggests that there is no significant relationship between the type of services that people are watching and the narrowness of their genre preferences. Put

[10] Our category of SVOD provider used in the subsequent sections of this report does not include the use of Now TV due to a small error in the survey design. We did generate information on our participant's access to Now TV and how that compares to access to other SVOD services. Although just under 12% of the overall sample reported having access to Now TV, the vast majority of those participants (97%) also had access to another SVOD service. Moreover, 96% of those participants with access to Now TV also reported accessing the three top-used SVOD services (Netflix, Amazon Prime Video and Disney+) and 87% also had access to the most frequently used SVOD service (Netflix). Our groupings of the different types of SVOD service in this report are based on the service in each category that the respondent reports using the most. Because of this, and the high frequency with which people with access to Netflix use the service (with more than 91% of those with access to Netflix using it once a week or more), we are confident that the exclusion of Now TV does not significantly affect the estimates and descriptive information presented below in relation to the category of TV service provider.

simply, watching PSB or SVOD does not correlate with having a wider or narrower set of genre preferences.

Breaking frequency of viewing down according to specific services, the BBC's TV channels remain the most viewed every day (33%) and at least once a week (70%) (Figure 8). In addition, the BBC's News and Parliament services were watched every day by 17% of participants. While this speaks to the ongoing value of the BBC to UK audiences, it is striking that YouTube and Netflix were watched every day by 29% and 25% of participants respectively, demonstrating the centrality of SVOD and free video-streaming to people's viewing habits, and the prominence of Netflix and YouTube in these sectors. Although ITV and Channel 4 come lower in terms of everyday viewing, they are viewed at least a few times each month by more people than Netflix and YouTube. For Channel 4, in particular, this would suggest that it is fulfilling its remit to provide an alternative service to the BBC that might not be watched every day, but provides something for most viewers some of the time.

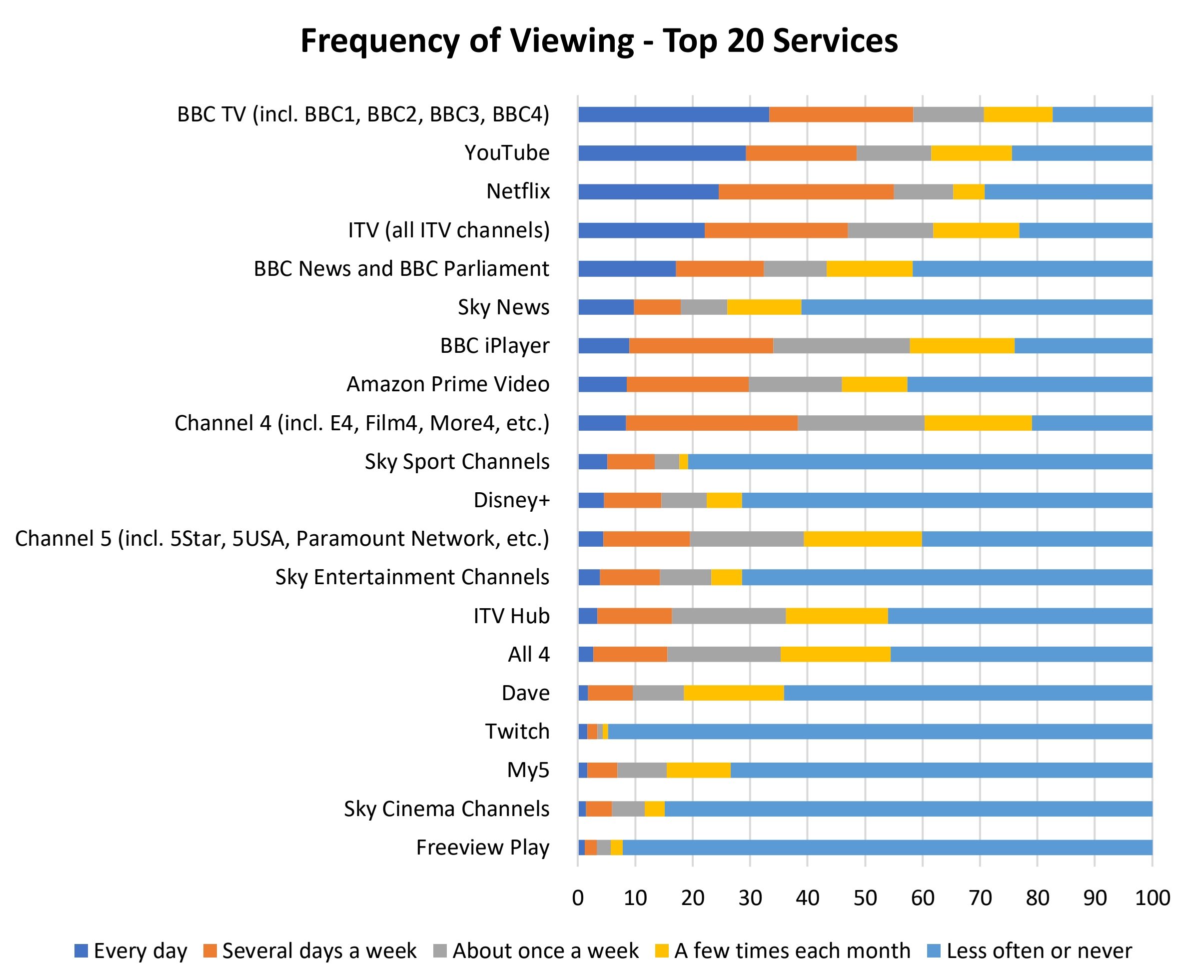

Figure 8: *How frequently do you watch programmes, shows, films or videos on the below television services?* Top 20 services viewed every day.

4. Depth of Engagement

Although frequency of viewing is useful for indicating the value of different audiovisual services, length of viewing time helps us to understand the depth of people's engagement.

Figure 9 collates the data we gathered on how long people reported watching specific services on a typical day according to our categorisation of different types of providers. The public service broadcasters' channels and free VOD services demonstrated high levels of engagement, being most likely to be watched for 3-4 hours. The fact that these services were also most likely to be watched for 30-60 minutes and for 1-2 hours reflects the diversity of content offered by public service broadcasters. SVOD services also demonstrate high levels of engagement, being most likely to be watched for 5 hours or more and least likely to be watched for under an hour. Given their focus on short-form content, it is unsurprising that free video-sharing services were most likely to be watched for 30 minutes or less. However, these services came second for those watched for 5 hours or more a day. Although only a small proportion of our participants watched any one service for this length of time, this does suggest that free video-sharing services are offering some people opportunities for extended engagement.

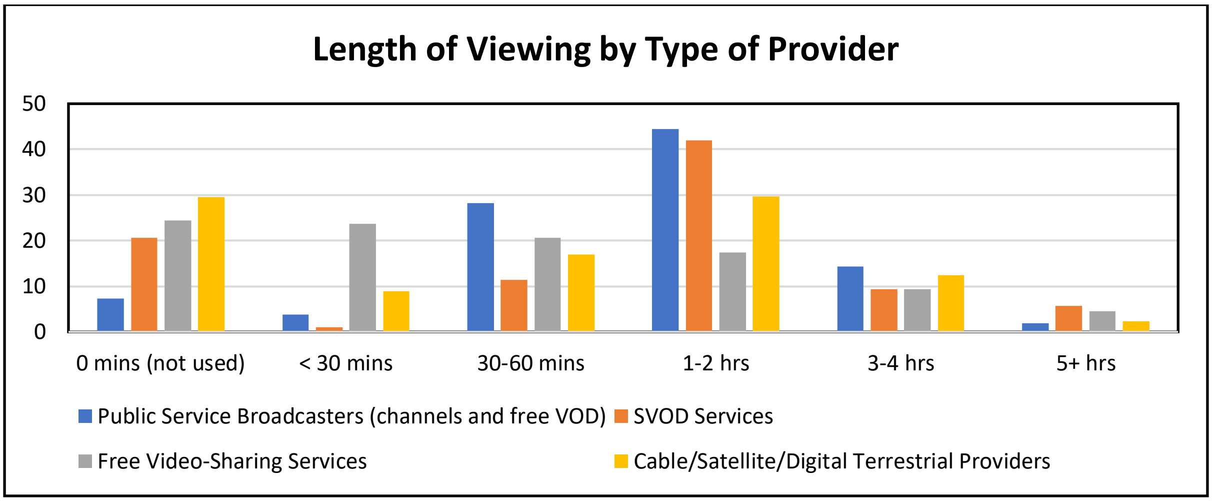

Figure 9. *How long do you typically spend on the below services on the days that you access them?* Selection based on Figure 6. Participants were only asked about the pay-TV channels, VOD and streaming services to which they had access.

We also examined length of viewing data for pay-TV channels, as a sub-category of cable/satellite/digital terrestrial providers, to interrogate the extent to which paying for content had an impact on length of viewing time (Figure 10). This suggests there was no clear correlation between the cost of service and length of engagement. Out of those that used pay-TV channels, 29% typically viewed for 1-2 hours and 12% for 3-4 hours.

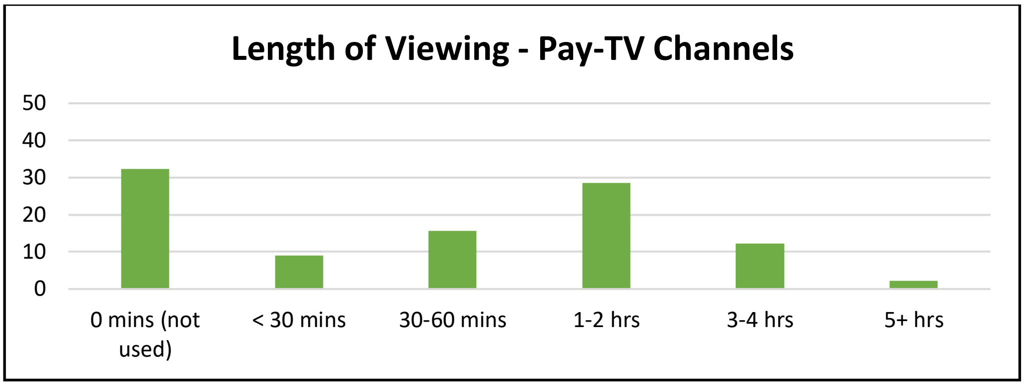

Figure 10: *How long do you typically spend on the below services on the days that you access them?* Data relating specifically to channels only available through a pay-TV subscription.

On the whole, pay-TV channels were watched for a shorter length of time than public service broadcasters' free channels and VOD services, where 45% of users viewed for 1-2 hours and 14% for 3-4 hours. This may be because pay-TV subscriptions are valued for providing access to specific forms of niche content, to a wide variety of content, or because they provide access to useful technologies, such as set-top-boxes and broadband.

5. The Rise of Internet-Connected TV: Device Use

Television and audiovisual content are mainly accessed through internet-connected devices. 80% of our participants used an internet-connected device at least once a month to watch video (Figure 11).[11]

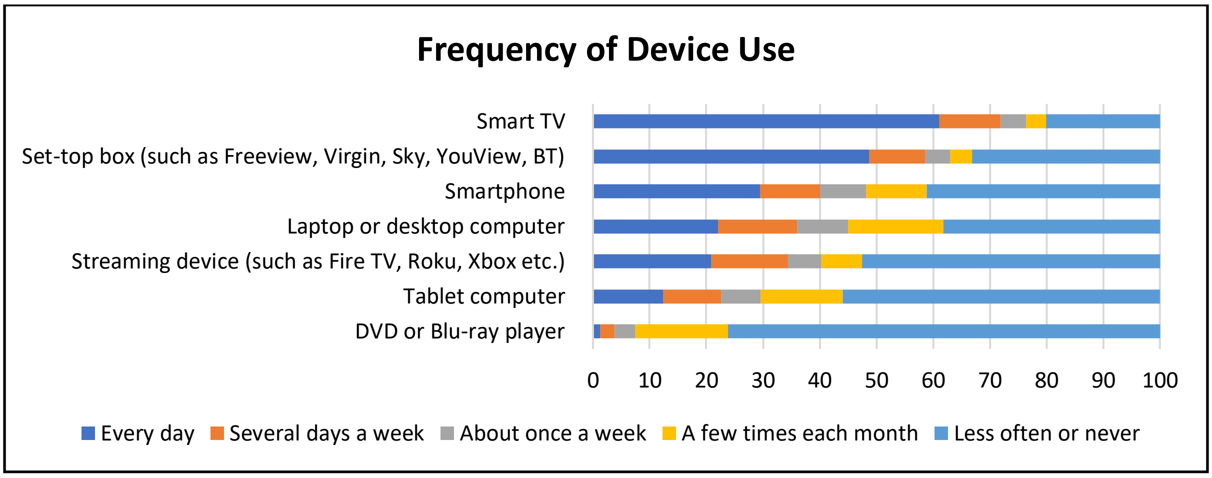

Figure 11. *How frequently do you use the following devices to watch television programmes, shows, films or videos? Remote that came with your Smart TV to change channels; Remote of a set-top box (such as Freeview, Virgin, Sky, YouView, BT) to change channels or services; Remote or controller of a streaming devices (such as Fire TV, Apple TV, Roku, Chromecast, Xbox, PlayStation, etc.) to change channels or services; Smartphone; Tablet computer; Laptop or desktop computer; DVD or Blu-ray player*

[11] In order to account for the fact that multiple devices are often used simultaneously (e.g. watching content through a set-top box connected to a smart TV), we asked our participants how frequently they used the remote control of their smart TV, set-top box and/or streaming device to change channels or services.

Amongst these, the smart TV remained the most frequently used device, used every day by 61% of our participants, compared to 49% using a set-top box, 30% a smartphone, 22% a laptop or desktop computer and 21% a streaming device (such as Amazon Fire TV Stick, Apple TV, Roku, Xbox etc.) every day.

However, on average, our participants were using 3.8 different devices to watch TV at least a few times a month. This indicates that despite the dominance of the smart TV, TV viewing for most participants took place across multiple internet-connected devices.

Age had an impact on the kinds of devices that people used and the number of devices that they used (Figures 12 and 13). Older participants (55+) were more likely to use set-top boxes, DVD/Blu-ray players and smart TVs than those under 55. They were also less likely to use streaming devices and smartphones to watch audiovisual content. The opposite was the case for 18-34-year-olds, who demonstrated a preference for portable technologies, such as smartphones, streaming devices and laptop/desktop computers to watch audiovisual content (Figure 12).

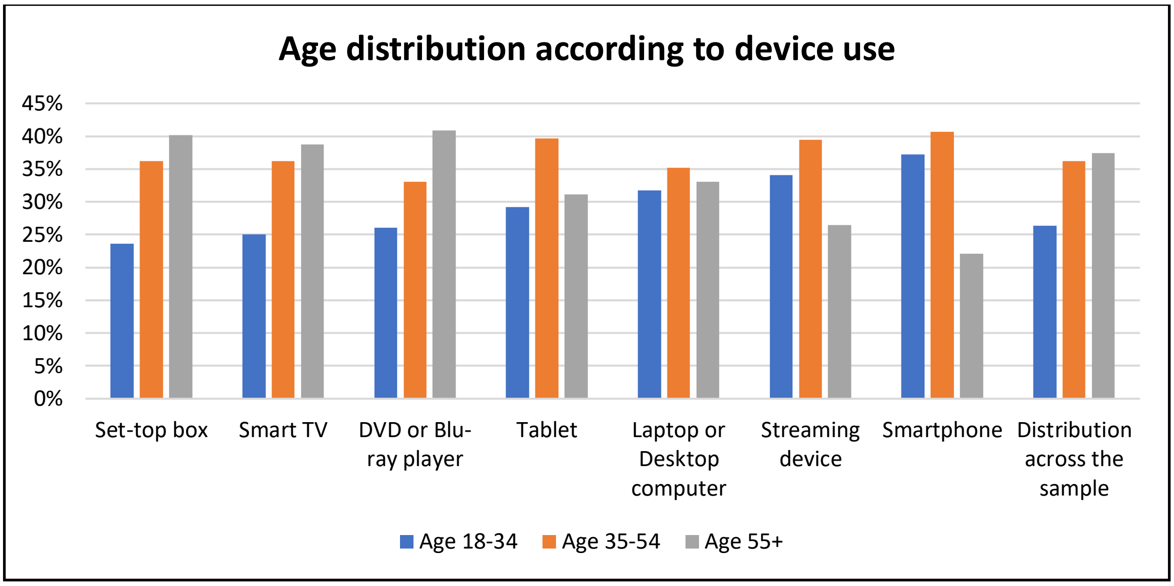

Figure 12. Percentage of participants using different types of device to watch audiovisual content according to age.

It is notable that a significant percentage of 35–54-year-olds made use of all seven types of TV-viewing technology. However, 18–34-year-olds also used, on average, more devices, particularly when compared to over 55s (Figure 13).

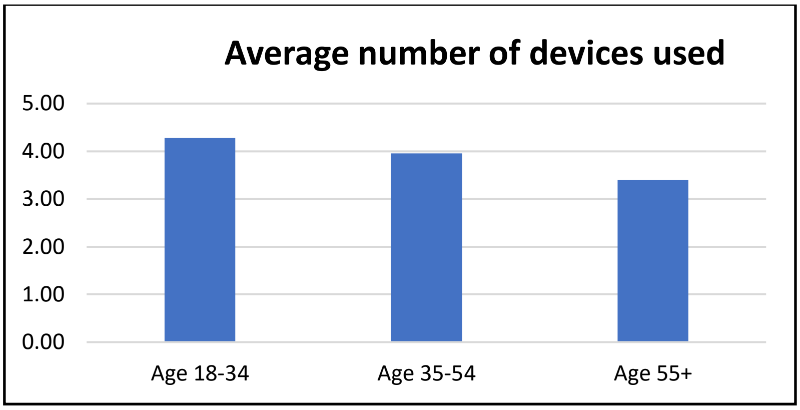

Figure 13: Number of devices used by age

From this data, it is hard to determine whether these differences are a consequence of age, lifestage or both. Our qualitative research suggested that some younger viewers turn to mobile technologies because they lack access to the main television set, set-top box and/or streaming device in the home, which tends to be controlled by the parents.[12] Our full report will examine where, and with whom, people are watching television to explore in more detail what impact social factors might have on the behaviours of different demographics.

6. New Content vs Re-Watching

The increased uptake of on-demand services provides viewers with access to large catalogues of content, which has increased the importance of intellectual property and libraries of videos. We examined the extent to which people were using different VOD services to watch new content or re-watch old content (Figures 14-16).

We found that it was the nature of the catalogue, rather than the type of service or provider that was the primary indicator of whether people used a VOD service for watching new content or re-watching old content. Although most studies tend to differentiate between free VOD, SVOD and video streaming services, this indicates that there are significant differences between SVOD and free video streaming services. In particular, it suggests that we need to be more attentive to the business models and content catalogues of individual services, rather than focusing solely on type of service (e.g. video streaming vs free VOD) or provider (e.g. SVOD or public service broadcaster).

We identified three different types of VOD service, according to whether their use is oriented towards watching new content, re-watching old content or a combination of the two.

1. VOD services used to watch new content and re-watch old content

This category is made up of the most long-running free VOD services, SVOD services and free-viewing streaming services in the UK, namely BBC iPlayer, ITV Hub, ITV Hub+, All4, My5, Freeview Play, Amazon Prime Video, Netflix and YouTube (Figure 14).

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[12] Johnson, C, Dempsey, L, and Hills, M, *Routes to Content: How people decide what TV to watch*, University of Huddersfield, 2020: p.12, available at: https://research.hud.ac.uk/institutes-centres/cpc/ourprojects/routes/

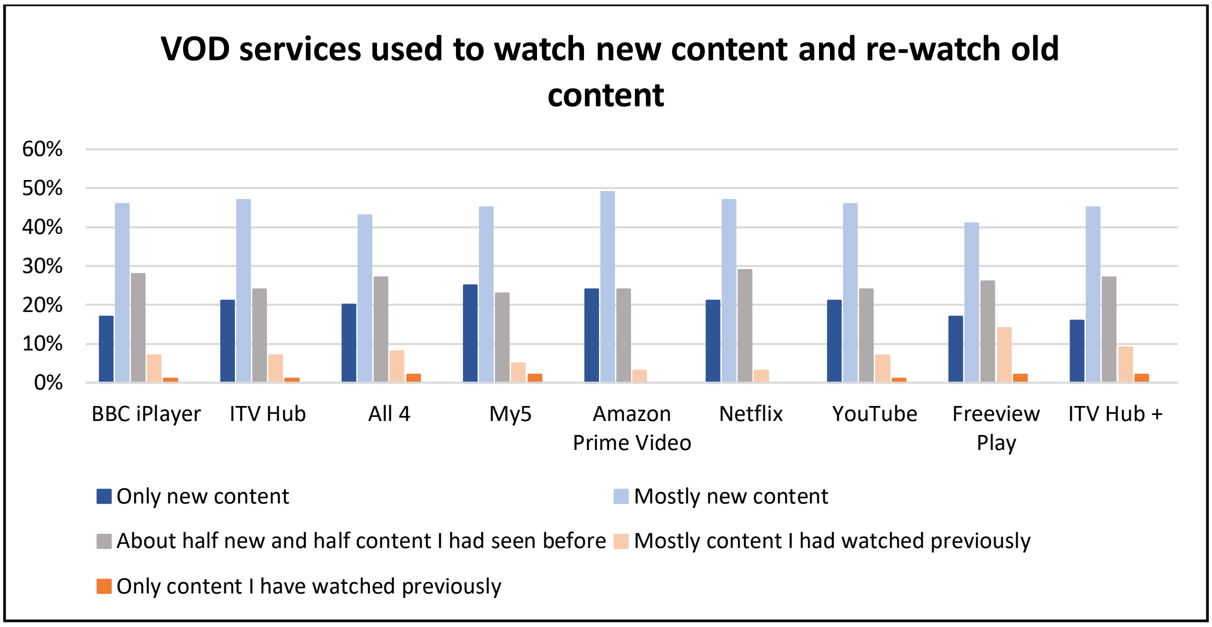


Figure 14. *Thinking about your use of video-on-demand services, do you use these primarily to watch new content? Or do you tend to re-watch content you have enjoyed previously?* Selected VOD services that demonstrate viewing of new content and re-watching of older content.

Despite offering different kinds of content and viewing experiences, all of these services had similar profiles in terms of the extent to which the people who used them did so for viewing new content or re-watching old content. Across the board, these services garnered a significant amount of new viewing, with most participants using them to mostly watch new content. However, a significant number of participants used them to re-watch some content that they had seen before. These are the more established UK VOD services that combine back catalogues with significant investment in new content.

2. VOD services oriented towards the re-watching of content

The VOD services in this category were also used to watch new and re-watch old content. However, compared to the other categories, they were more likely to be used to re-watch content that viewers had previously seen (Figure 15). There were two different kinds of service in this category. BritBox and UKTV Play are services largely oriented around re-runs of previously broadcast programmes, which would tend towards re-watching. Disney's strategy for Disney+ has been to depend on the draw of its valuable back catalogue of content, while developing its investment in new, original content. As its business matures, Disney+ may move into Category 1, but this data suggests that a significant number of viewers were using the service to re-watch content they had already seen.

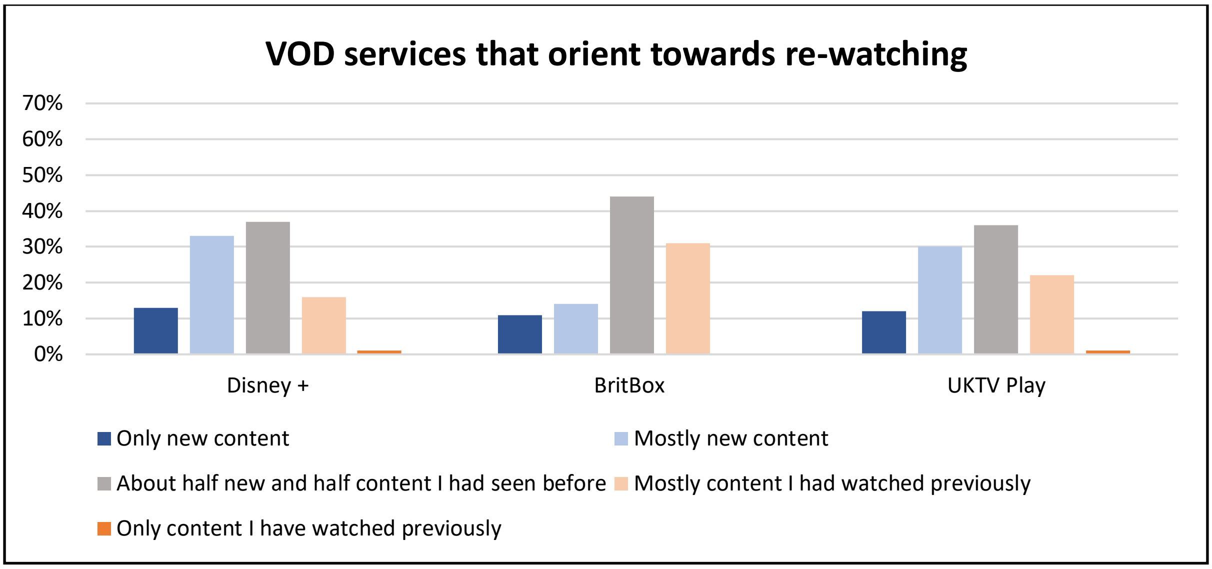


Figure 15. *Thinking about your use of video-on-demand services, do you use these primarily to watch new content? Or do you tend to re-watch content you have enjoyed previously?* Selected VOD services that orient towards re-watching.

3. VOD services oriented towards watching new content.

Viewers who watched these VOD services turned to them primarily to watch new content (Figure 16). Hayu and Twitch's position within this category stems from the type of content that they provide access to. Hayu's emphasis on reality television and Twitch's focus on live video streaming are less oriented towards re-watching. By contrast, although the genres of content shown on Apple TV+ are similar to Netflix and Amazon Prime Video, it lacks the back catalogue of these more established providers and depends on attracting viewers to its slate of new, original content.

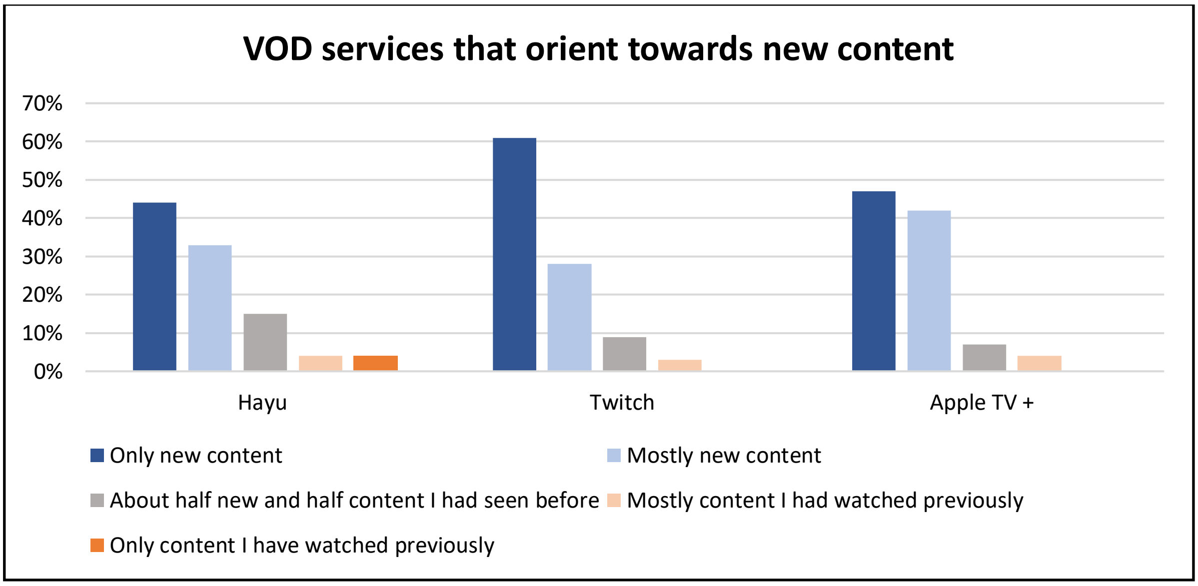


Figure 16. *Thinking about your use of video-on-demand services, do you use these primarily to watch new content? Or do you tend to re-watch content you have enjoyed previously?* Selected VOD services that orient towards the viewing of new content.

The differences between Netflix and Amazon Prime Video (Category 1), Disney+ (Category 2), Hayu and Apple TV+ (Category 3), and between YouTube (Category 1) and Twitch (Category 3) demonstrate the variety of business models across SVOD services and across free video-streaming services, and the need to avoid treating each as a homogenous group. The differences between Disney+ and Apple TV+ reflect their business origins, with Apple TV+ lacking the established back catalogue and valuable brands of a media conglomerate like Disney. Given that the most established and viewed VOD services in the UK are those in Category 1, this data also suggests that mainstream VOD services need to provide content catalogues that support both new viewing and re-watching, even though there may be a market for niche services, such as Twitch and Hayu that orient more towards the viewing of new content.

7. Discoverability Within On-demand Environments

The increased uptake of VOD services and use of internet-connected devices to watch television changes the ways in which people find and select content to view. We asked our participants how they found out about new content that they have watched, drawing on the range of methods identified in our earlier qualitative research (Figure 17).[13]

The increase in on-demand viewing has led to concerns about the role of platforms, interfaces and algorithmic recommendations in shaping the visibility and discoverability of content and, in particular, the continued ability for public service broadcasters' content to be 'widely available and prominent for audiences on broadcast TV and online'.[14] Following Ofcom's recommendations in 2019 and 2021, in 2022 the UK government's White Paper on the future of broadcasting set forward a new 'prominence' framework for on-demand television. The proposals aim to require the most popular TV platforms, including smart TVs, pay-TV operators and global TV platform providers, to give appropriate prominence to designated on-demand services from public service broadcasters.[15]

Our data revealed that browsing on-demand video services (such as Netflix, iPlayer and YouTube) was far and away the most popular method to discover new content to watch, used frequently by 46% of our participants. In a relatively short space of time, on-demand environments have become vital in shaping not only how we watch, but also what we watch.

Extracting out the data from Figure 17 to focus solely on modes of discovery that take place within on-demand environments, points to some of the limitations with current recommendations for changes to prominence legislation (Figure 18).

[13] Johnson, C, Dempsey, L, and Hills, M, *Routes to Content*, 2020: p.7-8.
[14] Ofcom, Small Screen Big Debate: Recommendations, 2021: p.32.
[15] DCMS, *Up Next*, 2022.

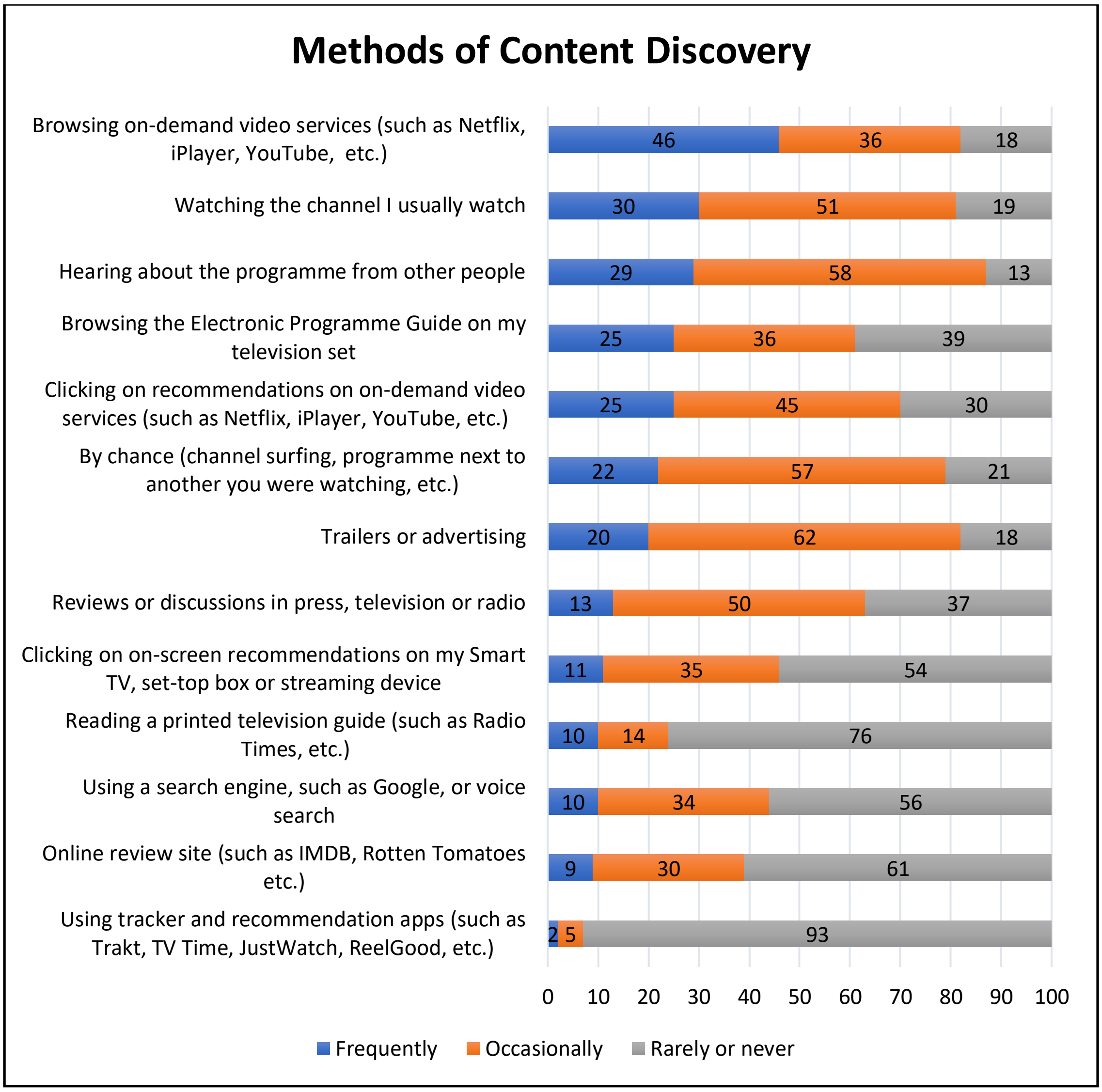


Figure 17. *Please think about times when you watch a programme, series, show or film on television for the first time. How frequently do you find out about these by the following means?*

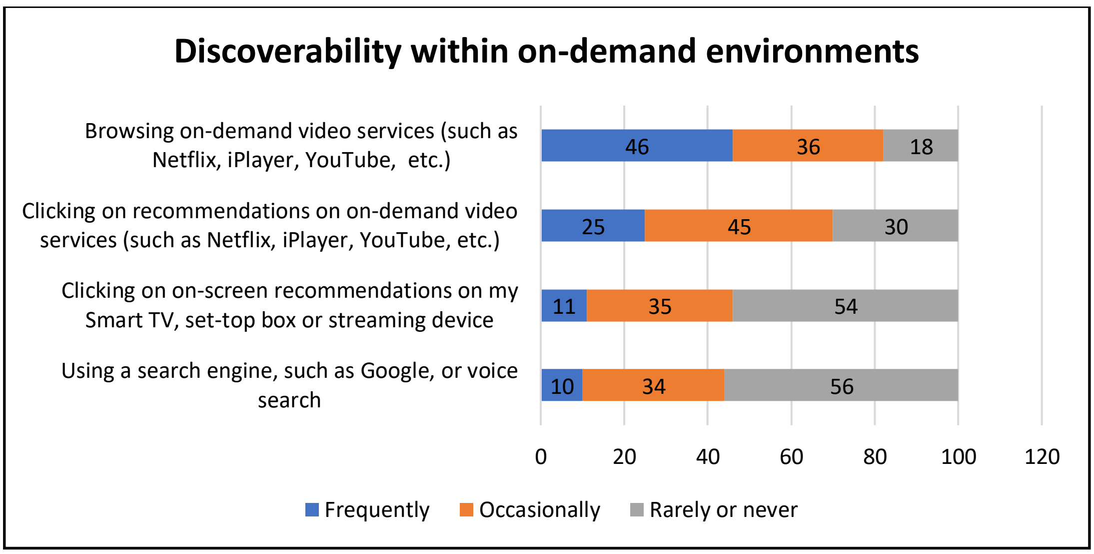


Figure 18: *Please think about times when you watch a programme, series, show or film on television for the first time. How frequently do you find out about these by the following means?* Selected methods for discovering content that take place within on-demand environments.

This data indicates that it was the interfaces and recommendations *within VOD services* (such as Netflix, iPlayer and YouTube), rather than within devices (such as smart TVs, set-top boxes or streaming devices), that were more frequently used to find new content to watch. Furthermore, although browsing within VOD services was the most frequently used route to discovering new content, when people did follow recommendations, they were more than twice as likely to follow recommendations within VOD services than within devices. In addition, our participants used search engines almost as frequently as they followed the on-screen recommendations of devices. This is important because public service broadcasters' content is increasingly disaggregated from their VOD services and searchable within the interfaces of third-party aggregators, devices and search engines.

Finally, our data indicates that the frequency with which people follow on-screen recommendations varies according to the services that they use.

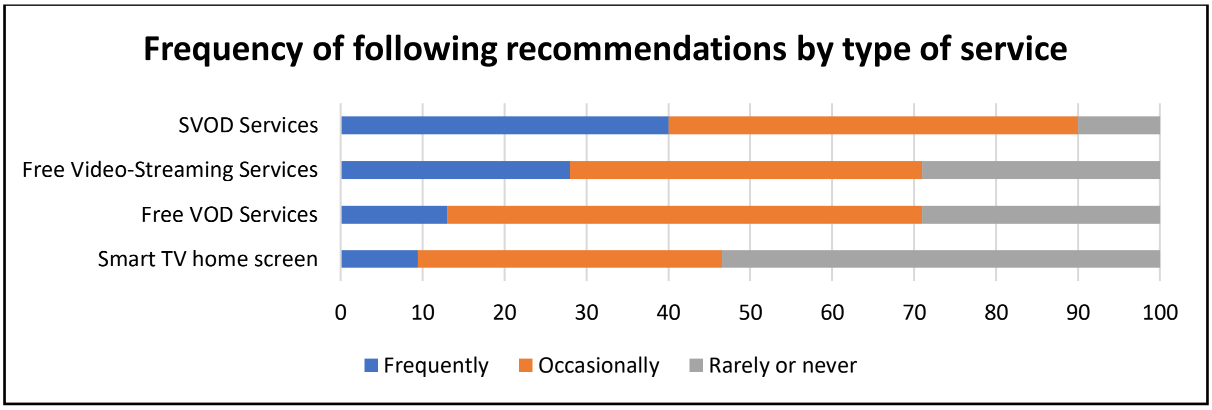


Figure 19: *Next, we would like you to think about times when you start watching a programme, show, film or video for which you see an on-screen recommendation. How frequently do you follow these recommendations on the below video-on-demand services?* Participants were only asked about VOD services that they use. Data organised according to type of provider/device.

Figure 19 demonstrates that people more frequently follow the recommendations within SVOD services and free video-streaming services to discover new content to watch, than the recommendations of free VOD services or their smart TV home screen.

Breaking this data down according to VOD service, reveals the extent to which our participants made frequent use of the recommendations of SVOD services, and Netflix in particular, especially when compared to the on-screen recommendations of public service broadcasters' free VOD services (Figure 20).

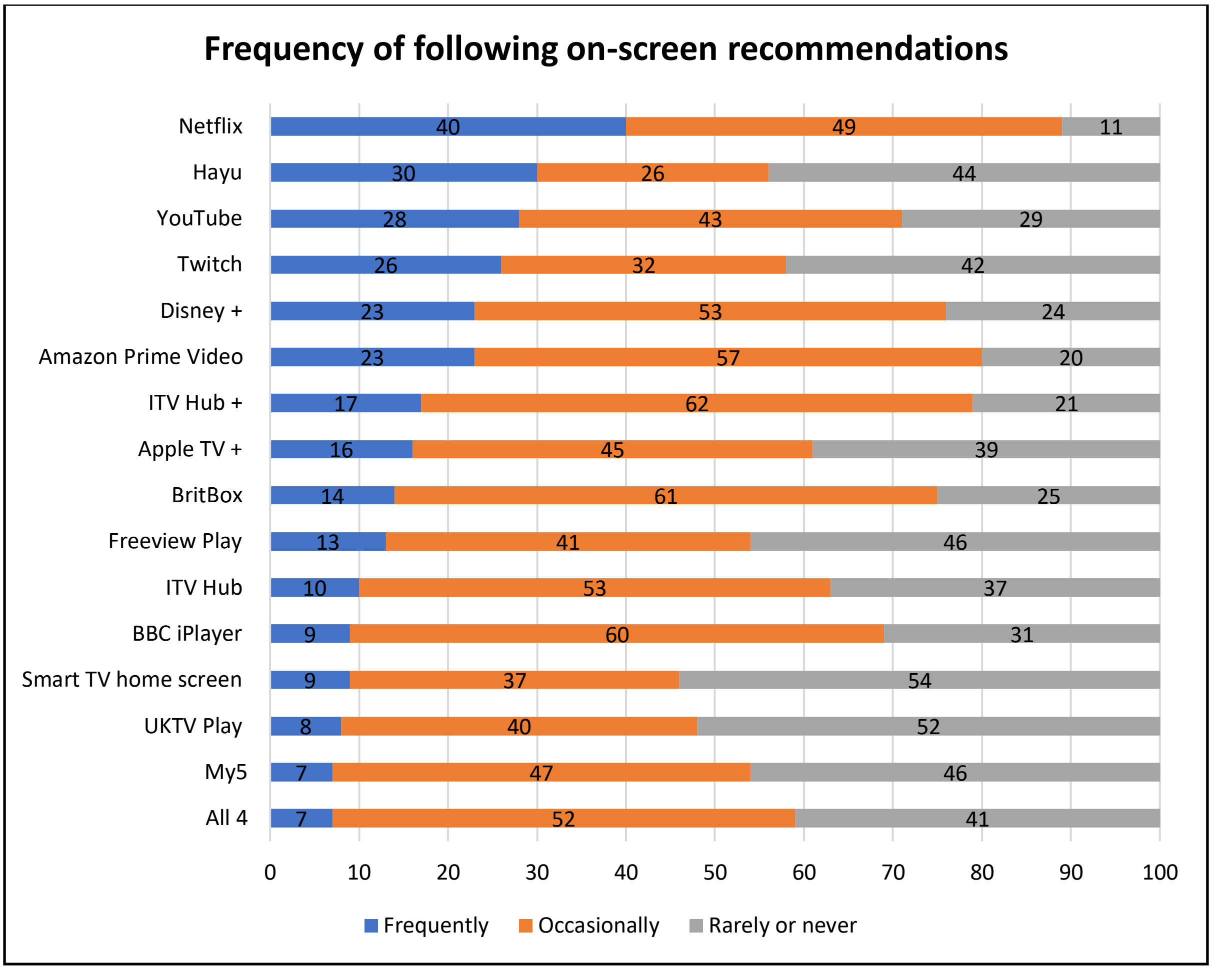


Figure 20. *Next, we would like you to think about times when you start watching a programme, show, film or video for which you see an on-screen recommendation. How frequently do you follow these recommendations on the below video-on-demand services?* Participants were only asked about VOD services that they use.

This could suggest that people value and trust the recommendations within SVOD and free video-streaming services more than those of free VOD services and smart TVs. However, as will be discussed below, it might also point to the importance of other factors in determining how people find out about the content that they view within free VOD services.

Combined, however, this data suggests that legislation focused solely upon devices will only address a relatively limited set of behaviours through which people discover new content – one used frequently by only 11% of our participants. In addition, legislation focused solely upon ensuring the prominence of the VOD services of public service broadcasters will fail to address the role of search engines (including voice search) and the recommendations of video streaming services such as YouTube when PSB content is disaggregated. Addressing legislation only to the prominence of PSB services also fails to address the impact of algorithmic personalisation within VOD services and the extent to which it may, or may not, reduce the diversity of people's media consumption.[16] Increasing the transparency of algorithmic recommendations

[16] Ranaivoson, H, 'Online Platforms and Cultural Diversity', 2020: p.118.

used by VOD services and search engines would enable regulators, such as Ofcom, to better assess the role that algorithmic recommendation plays in shaping the diversity of people's media consumption.

8. Discoverability Beyond On-Demand Environments

Regulatory discussions about prominence and discoverability have focused on the ways in which the algorithms and interfaces of on-demand devices and services might shape people's routes to content. Our data, however, points to the importance of linear environments and habits in shaping content discoverability for a significant proportion of the audience (see Figure 17). The second most frequently used method to discover new content was 'watching the channel I usually watch' (used frequently by 30% of participants), with browsing the electronic programme guide (EPG) coming fourth (used frequently by 25% of participants).

In addition, social and cultural factors, such as word of mouth, marketing and reviews, play a crucial role in shaping people's routes to content (Figure 21).

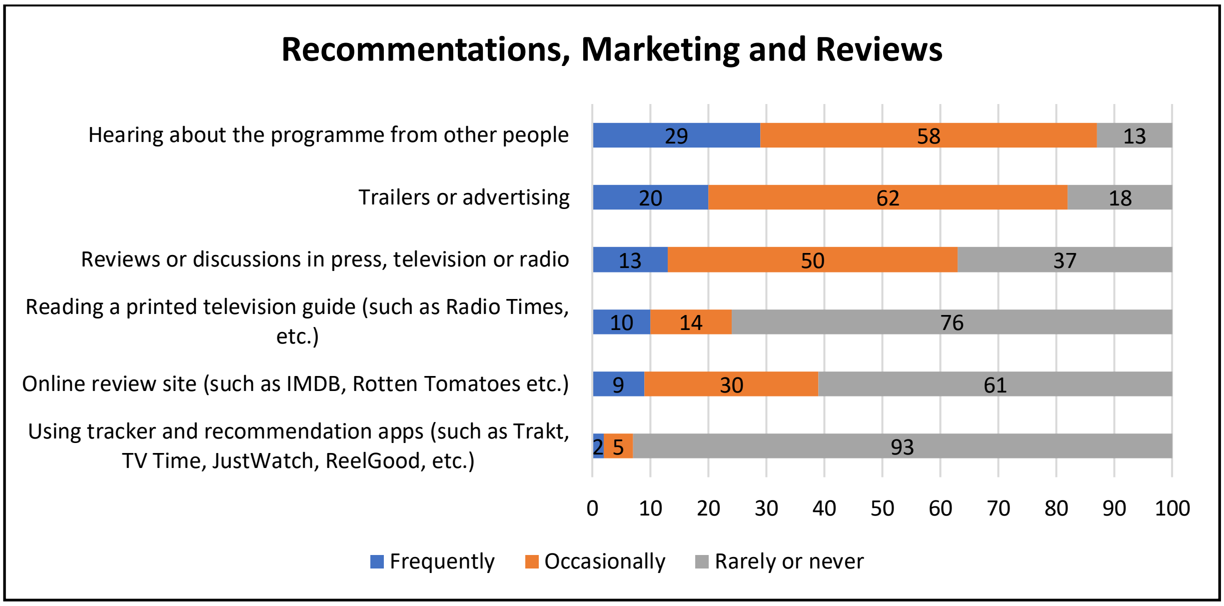


Figure 21. *Please think about times when you watch a programme, series, show or film on television for the first time. How frequently do you find out about these by the following means?* Selected methods for discovering content related to social and cultural factors.

Hearing about programmes from other people (which can take place on- and off-line) was the third most frequently used way of discovering new content (29%), and the most significant when also factoring in occasional use (87%) (see Figure 17).

In addition, trailers and advertising were used frequently by more people (20%) than on-screen device recommendations (11%). The importance of socio-cultural factors in shaping how people discover new content is even more apparent if we factor in occasional use. Only 13% of participants never or rarely used word of mouth to decide what to watch, and only 18% never or rarely used trailers or advertising, the same figure as for browsing VOD services. These social and cultural factors are particularly salient given that that 48% of our participants said that most of the time they knew what they wanted to watch in advance of viewing.

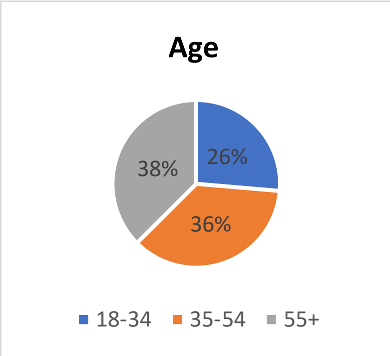
It is important to recognise, however, that word of mouth and trailers/reviews are not immune from algorithmic interference. Our qualitative research demonstrated that word of mouth, trailers and reviews are often encountered in online environments (such as social media sites or online search engines) where what is visible and prioritised is often algorithmically determined and controlled by largely US tech platforms.[17]

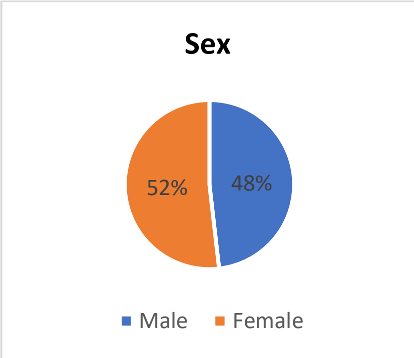
In addition, our research indicates that these forms of discoverability should not be understood as mutually exclusive. Most of our participants used multiple methods to discover new content – on average eight. This accords with earlier research which suggested that people bring together multiple factors when deciding what to watch. Indeed, our previous qualitative research suggested that word of mouth, marketing and reviews played an important role in shaping people's choices when browsing through EPGs and the interfaces of on-demand services and devices.[18]

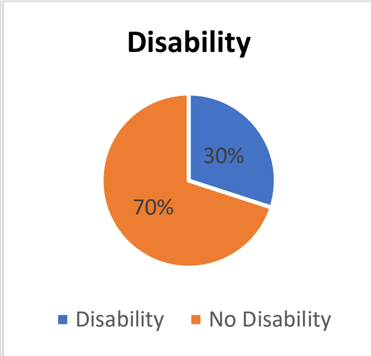
[17] Johnson, C, Dempsey, L, and Hills, M, *Routes to Content*, 2020: p.7-10.
[18] Ibid.

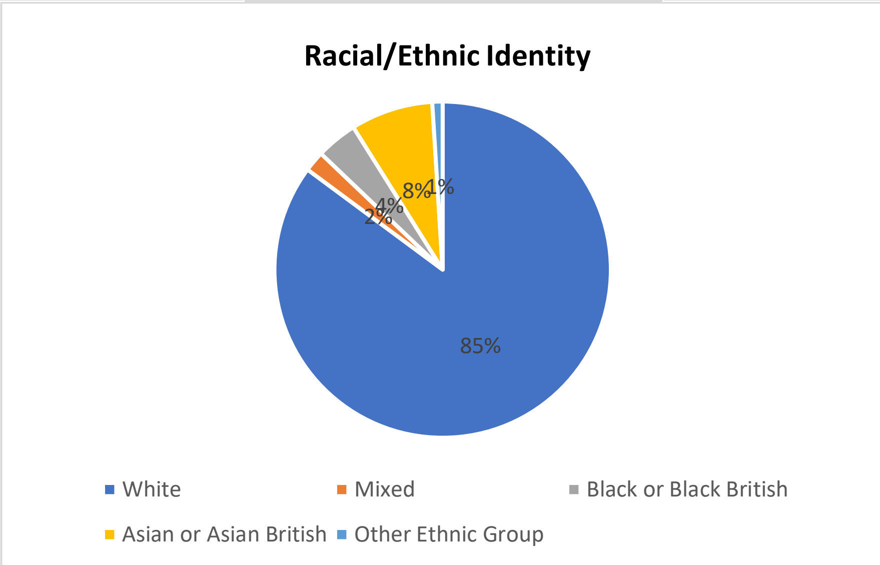
Methodology
The data presented in this report is based on a survey conducted in May 2021 of a representative sample of 1,495 people in the UK. The majority of the results presented are descriptive statistics and do not reflect statistical significance.

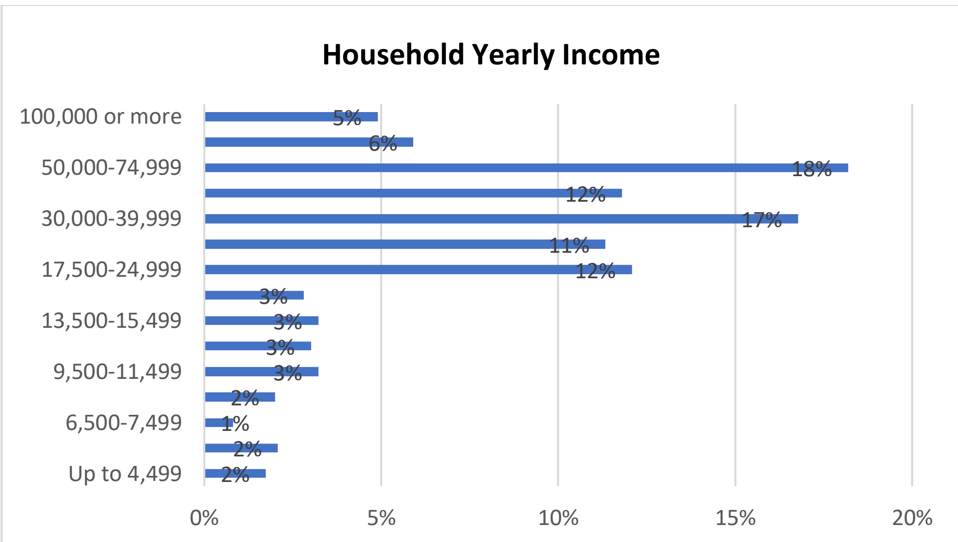
The demographic distribution of the sample was as follows:

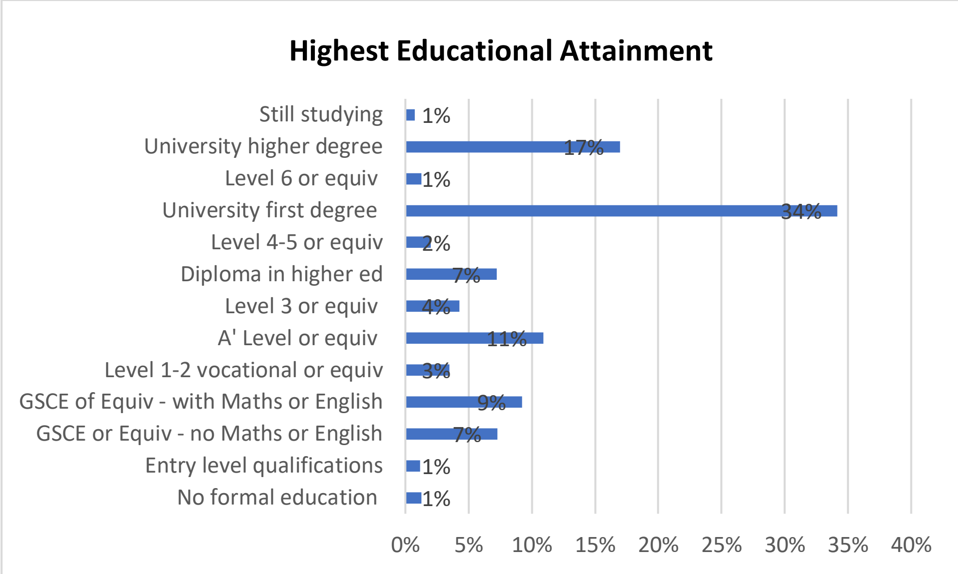











Highest Educational Attainment
Still studying
University higher degree
Level 6 or equiv
University first degree
Level 4-5 or equiv
Diploma in higher ed
Level 3 or equiv
A' Level or equiv
Level 1-2 vocational or equiv
GSCE of Equiv - with Maths or English
GSCE or Equiv - no Maths or English
Entry level qualifications
No formal education
1%
17%
1%
34%
2%
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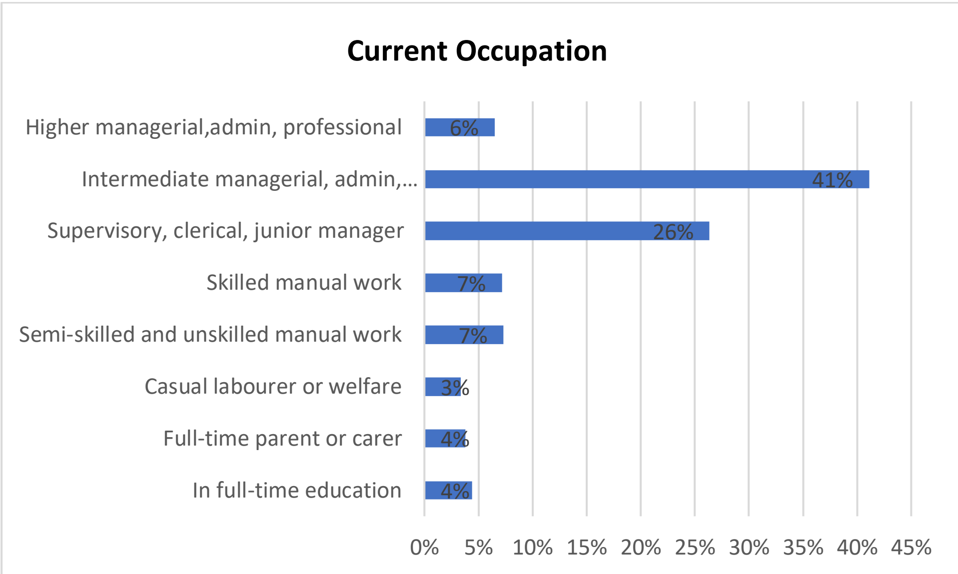
Current Occupation
Higher managerial,admin, professional
Intermediate managerial, admin,...
Supervisory, clerical, junior manager
Skilled manual work
Semi-skilled and unskilled manual work
Casual labourer or welfare
Full-time parent or carer
In full-time education
6%
41%
26%
7%
7%
3%
4%
4%
0% 5% 10% 15% 20% 25% 30% 35% 40% 45%

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