RADIOCENTRE

Smart Speaker Prominence

Final report

June 2020

mtm

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- Caveats and qualifications
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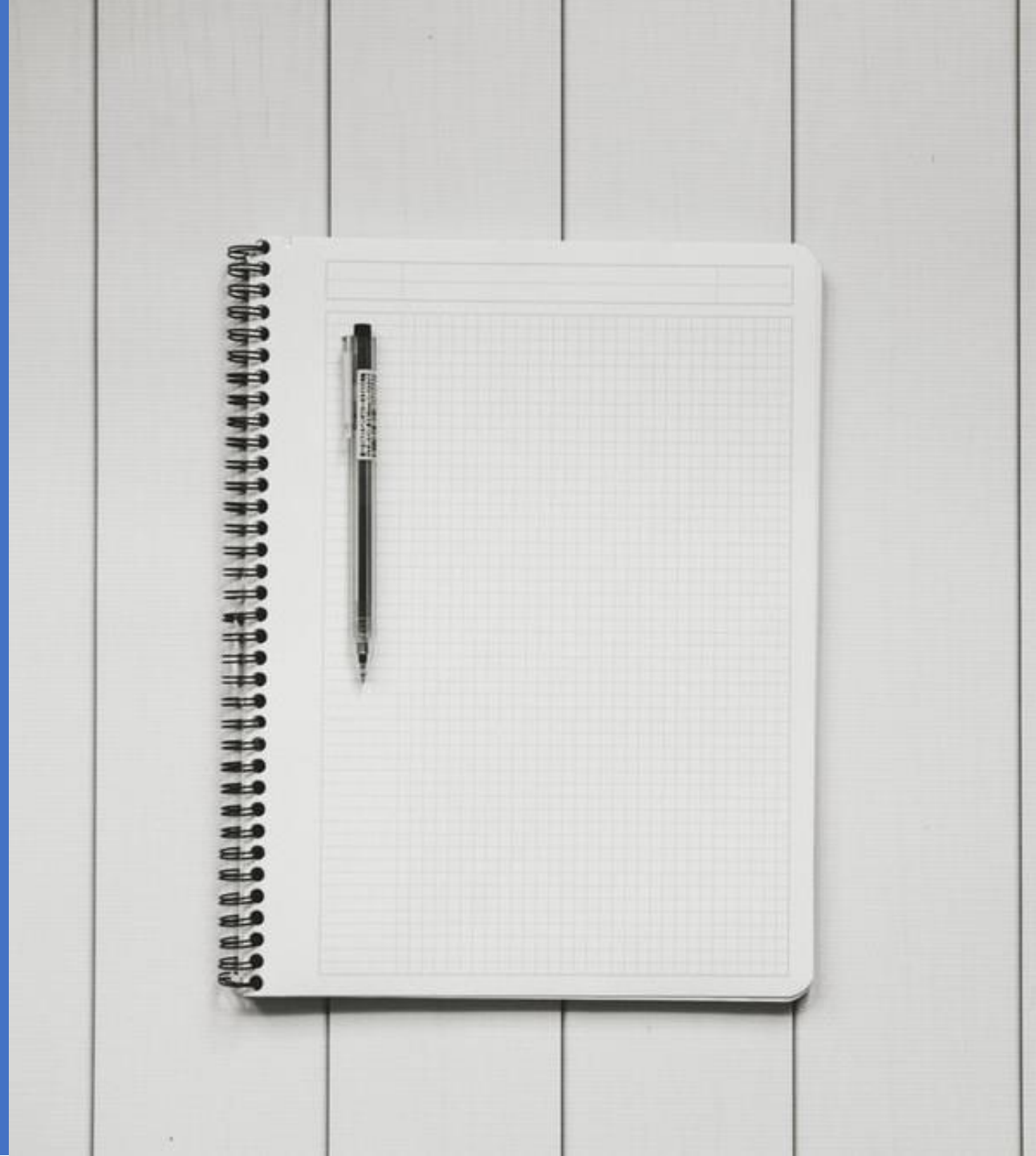


Radiocentre commissioned MTM to undertake a review of the UK smart speaker market, to inform its position in representing commercial radio within the audio content landscape

Project objectives

Consider market dynamics

Set the scene by considering and discussing **current market dynamics** for radio and smart speakers, **future developments** and the resulting **changes in UK consumer behaviour**

Analyse implications

Analyse the **implications of the growth of smart speakers on radio**, considering the typical **user journeys** to the main traditional radio stations

Implications for Radiocentre

Identify the main considerations and opportunities for Radiocentre's members in relation to smart speakers

We've undertaken three modules of research to evaluate key trends and developments in the smart speaker and wider audio market

Project approach

1 Synthesis research

Synthesise available data on the development of smart speakers

Review manufacturer websites / press

Analyse relevant data from Radiocentre stakeholders

Evaluate the current policy and regulatory landscape for radio and other adjacent markets

2 Smart Speaker Testing

Develop testing framework based on MTM's prior project experience

Apply testing framework to a set of the most prevalent smart speakers in the UK

Produce summary tables, comparing the features, functionality and resulting user journeys for each device

3 Industry Engagement

Interview expert industry interviews, including:

- Broadcasters
- Agency groups
- Other industry stakeholders

Explore strategies, perceptions and expectations for market development

There are four important caveats and qualifications to the findings in this report

Caveats and qualifications

The smart speaker market is fast-changing and industry data is limited and of varying quality. Estimates and forecasts for device penetration and market share can vary considerably between sources. Furthermore, device ownership does not necessarily imply usage of certain which might significantly affect the discoverability of radio content To overcome these limitations, we've drawn on a range of data sources, including MTM's proprietary ScreenThink survey.

MTM's smart speaker testing reflects the operation of a sub-set of smart speakers available in the UK at a given point of time. The product testing undertaken as part of this research was carried out in February 2020 on the latest available models – **3rd Generation Echo Dot** and **2nd Generation Nest Mini**. We have not considered legacy versions of these devices accounted for software updates since the testing occurred.

The views expressed by market participants interviewed as part of this research do not necessarily represent the longer-term strategies of their respective organisations. All interviewees are based in the UK.

The findings included in this report reflect the state of the UK radio and smart speaker markets at a specific point of time. All research was completed between February and April 2020 and forward-looking statements are based on historical data, 3rd party forecasts, industry participants' current views and MTM's best professional judgement. In particular, this study was conducted amidst the COVID-19 outbreak and, whilst the findings and conclusions have been updated to ensure relevancy, the underlying data does not represent the full impact on consumer behaviour.

There are three important areas to consider when looking to support commercial radio as smart speakers become more widely used: **Availability**, **Prominence** and **Access to listeners**

Availability, prominence and access considerations

Availability

Pre-installed applications:

Skills/Actions that are **pre-installed** on the device

Applications available to install:

Skills/Actions that **can be installed at the request** of the user

Prominence

Default applications:

Skills/Actions that are set as the **default service(s) for audio requests**.

These can be set by the manufacturer, or selected by the user when setting up the device for the first time

General requests:

Skills/Actions opened (and content surfaced) in response to **requests such as "music", "news" and "radio"**, without specifying a particular service, station or piece of content

Contextual requests:

Skills/Actions opened (and content surfaced) in response to **requests such as "rock music", "mood music" or "something I like"**, without specifying a particular service, station or piece of content

Specific requests:

Skills/Actions opened (and content surfaced) in response to **requests for a particular track, artist, station or show** – such as a track or artist (e.g. Adele), a specific streaming service (e.g. Spotify) or radio station (e.g. Global Player)

Access to listeners

Data sharing:

The **information about listeners shared with the radio operator** by the smart speaker platform

Tailored services:

The **ability to adapt services to individual users,** enabled by the smart speaker platform

Ad serving:

The **ability of operators to serve their own advertising**– including adverts personalised to individuals

The UK audio market today

- Smart speaker landscape
- Smart speaker testing
- Changing listening behaviour
- Policy context

The smart speaker landscape

Smart speaker penetration has grown significantly over the past two years and Google and Amazon dominate the market

Smart speaker penetration (UK)

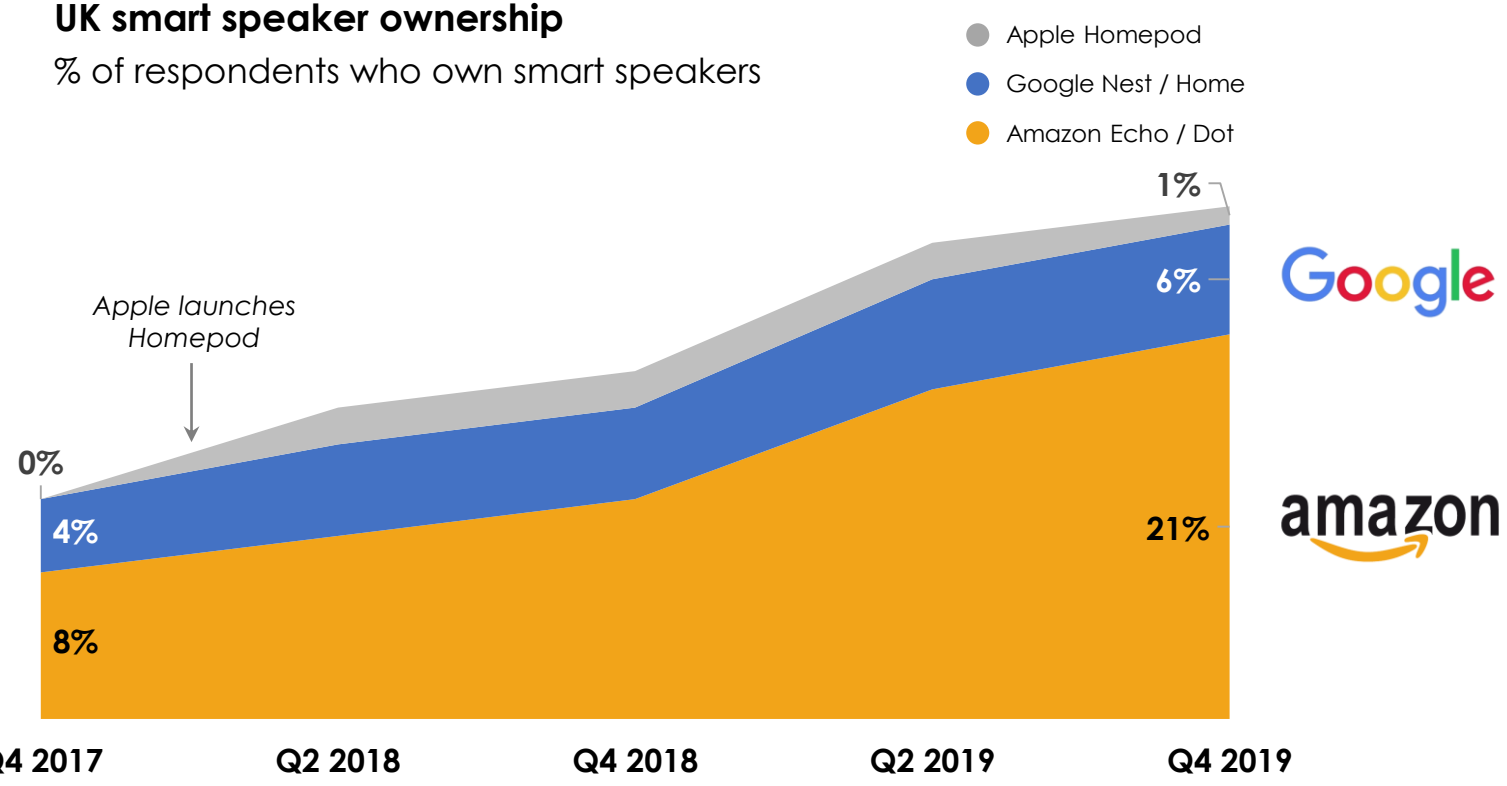
MTM has recorded the uptake of the major smart speakers in the UK since 2017 through its bi-annual ScreenThink tracker

As of Q4 1029, **28% of UK adults own smart speakers, increasing from just 12% two years prior**.

Together, **Amazon and Google dominate the smart speaker market with one or more of their devices present in more than a quarter of UK homes**.

UK smart speaker ownership

% of respondents who own smart speakers

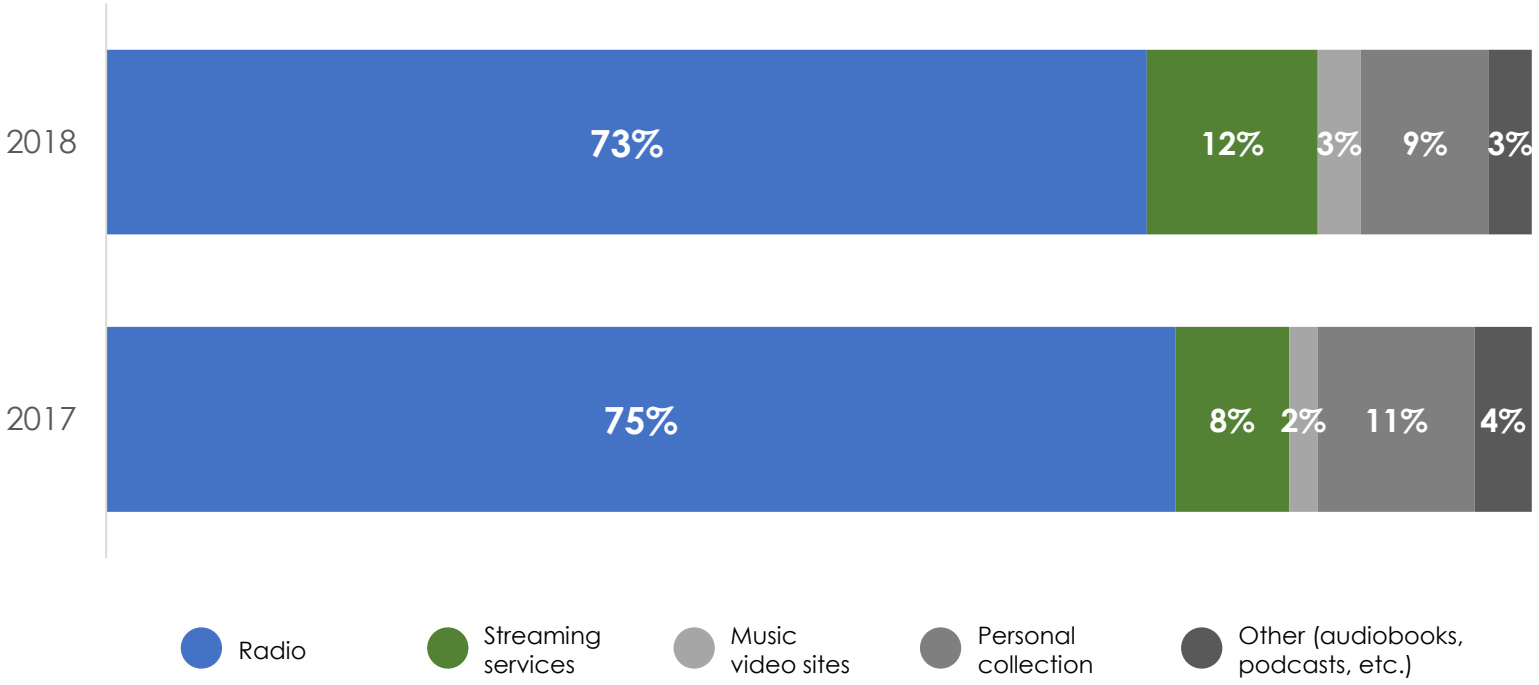


Base: NatRep sample. All respondents – Q4 2017 (3,001) Q2 2018 (3,011), Q4 2018 (3,006), Q2 2019 (3,009), Q4 2019 (3,008)
Source: MTM ScreenThink – MTM's propriety research tracking consumer behavior in the media market
Questions: A19./ A21./ A22. Which of the following hand-held devices/ gaming devices/ other devices do you currently own or have use of in your household?

Changing listening behaviour

Radio accounts for around three quarters of audio consumption by UK adults (15+), but streaming services are the fastest growing segment of listening time

Share of audio listening time by service (Adults 15+)



For adults in the UK, radio remains the dominant means of consuming audio content, though it's 'share of ear' declined in 2018.

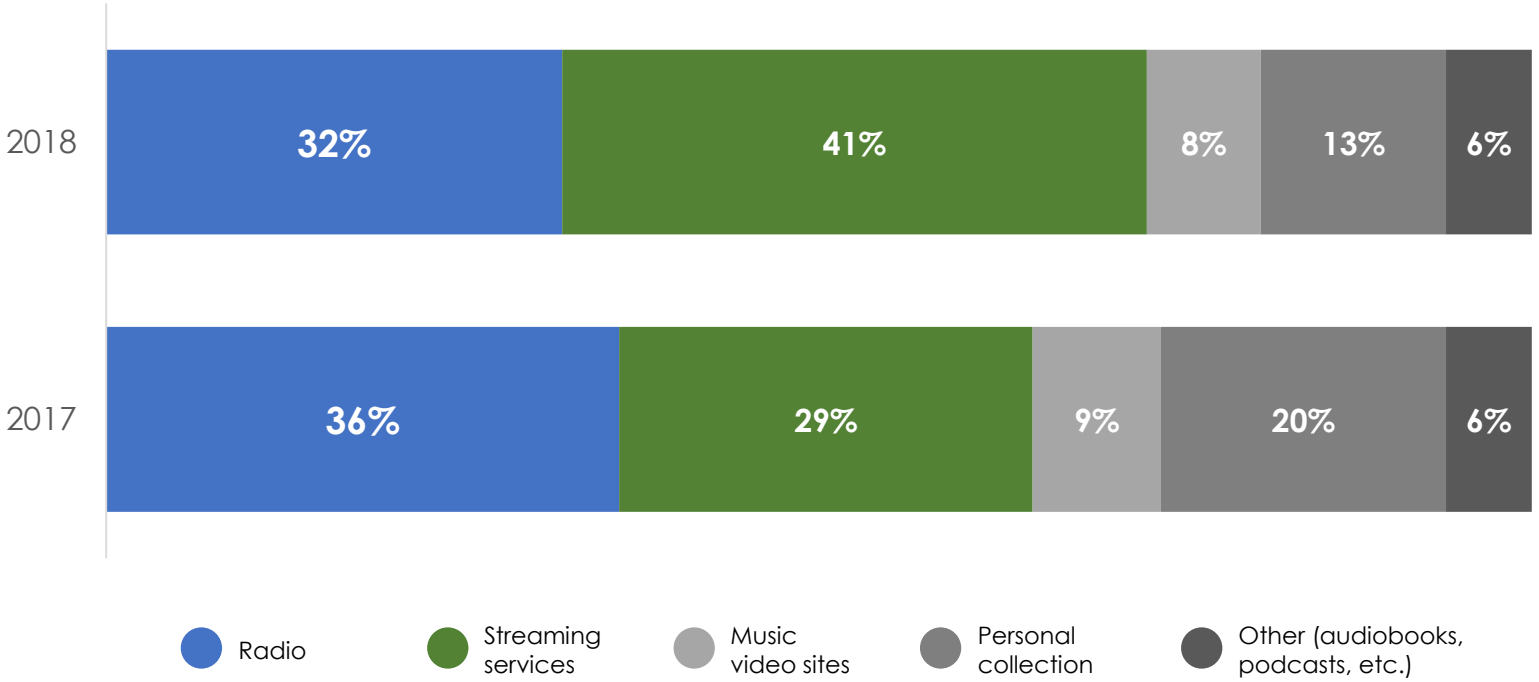
Music streaming services share of listening increased by 50% between 2017 and 2018.

The share of listening via music video sites also increased, reflecting changes in how audio is consumed.

Source: Ofcom Media Nations UK 2018, 2019; MTM analysis

Streaming services already account for the largest share of audio consumption among younger adults (15-24) – and consumption is growing rapidly – suggesting radio is being displaced as the dominant audio format

Share of audio listening time by service (Adults 15-24)



Younger audiences have much more diverse listening habits.

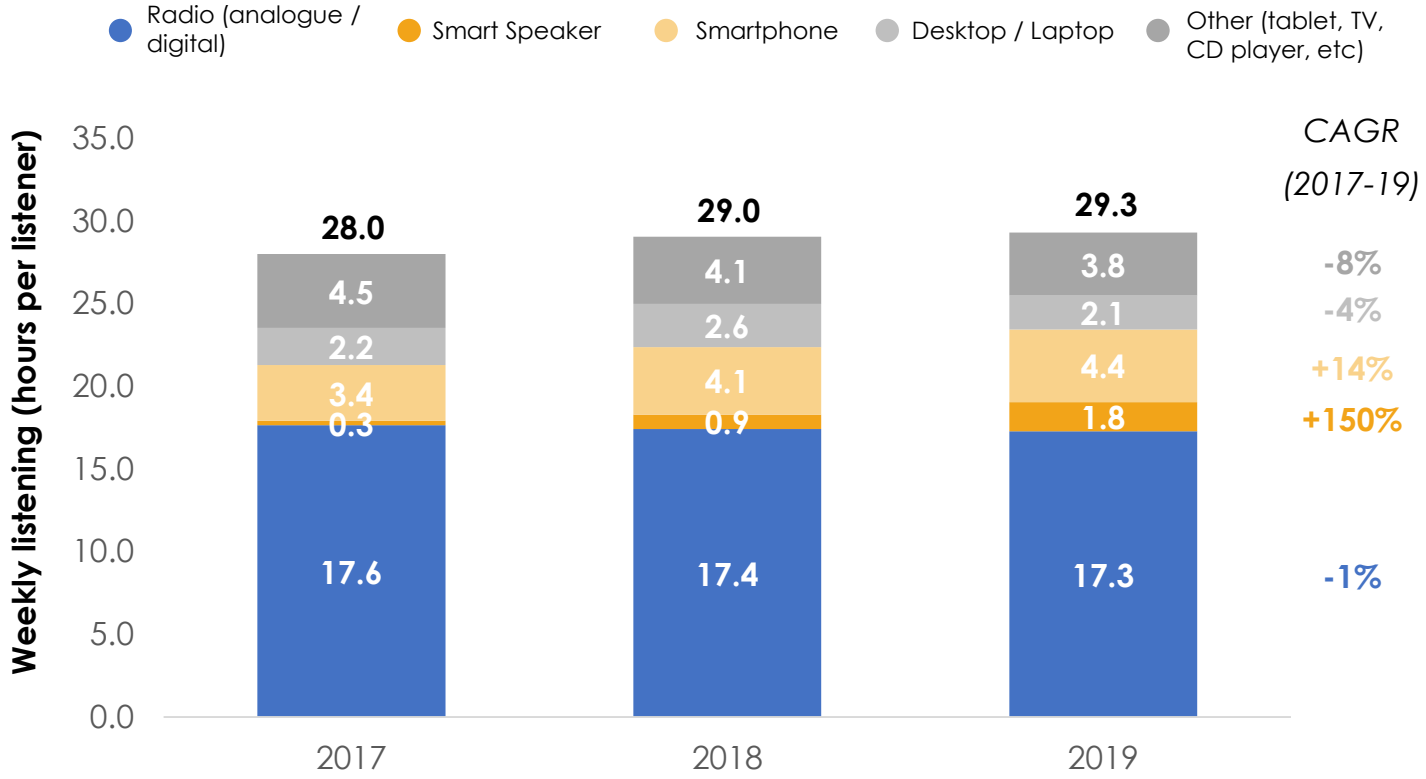
They particularly over index in streaming services at the expense of radio listening, compared to the average adult.

The shift towards streaming has been much more stark for the 15-24 age bracket, increasing by 12 percentage points since 2017.

Source: Ofcom Media Nations UK 2018, 2019; MTM analysis

Radio is the most commonly used device to access audio content, but smart speakers are the fastest growing; Smart speakers' share of listening time is growing faster than ownership, suggesting existing owners are using them more frequently

Audio listening time by device (Adults 15+)



Radio sets are the device with the highest share of listening, primarily because radio remains the preferred content.

The share of audio consumed via smart speakers doubled from 2018 to 2019, and share of smartphones (most of which are voice-enabled) also grew.

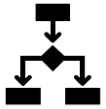
This exceeds the rate of growth of smart speaker ownership, suggesting not only that smart speakers are more widespread, but that owners are also using them more.

Source: RAJAR MIDAS Autumn Survey 2017, 2018, 2019, Ofcom Media Nations 2018, 2019; MTM analysis

Radio stations play an important role in educating consumers and supporting the UK creative economy

Benefits of radio

Radio stations remain a trusted source of news and current affairs, informing audiences of global updates



Radio broadcasters adhere to public service guidelines through editorially curated schedules: informing, educating, and entertaining, removing the paradox of choice and online echo chambers

Radio broadcasters actively contribute to the UK creative economy, providing platforms for discovering, training and developing unknown and homegrown talent

Negatives of streaming

Most people still use FM/AM radio signals as they are readily available and do not depend on the strength and reliability of an internet connection

There are fragmented audiences online, with multiple different internet radio stations and perspectives, without the same level of companionship and community

Sources: The Guardian (Feb 2019); Ofcom (2019)

Radio broadcasters are leveraging the opportunities of IP delivery despite significant technical challenges and necessary changes to business models

Opportunities for radio broadcasters

- Supports personalisation of services, as streams are served directly to individual listeners
- Enables commercial broadcasters to provide advanced advertising services, increasing the value of inventory
- Enhances listener data, allowing broadcasters to analyse the success of content in more detail

Challenges for radio broadcasters

- Listeners have control of when (and on what device) they request an IP stream
- Many of the advantages listed create further complications for serving individual listeners, as in each case the data transferred over IP is becomes more bespoke to an individual listener
- IP delivery fragments audiences, reducing the effectiveness of broadcast advertising and shifting broadcasters to online monetisation models

Case study

Radio player

The radio industry has developed its own multi-broadcaster platform, Radioplayer.

Radioplayer is a pan-industry partnership aimed at growing online radio listening. Originally a shared web application, UK Radioplayer now supports smart speaker providers and car manufacturers.

Radioplayer combines stations the BBC and commercial radio operators and provides a single interface to industry collaborators.

Ofcom recognises the complexity of prominence and discoverability within online audio applications

Ofcom has recognised the importance of changes in listening behaviour, driven by online listening…

"Audio listening is changing, however, with online listening continuing to grow in importance.

On online platforms, listeners choose what to listen to in a variety of different ways depending on the platform and device.

For instance, content can be listened to directly from websites, using apps, or directly through devices that stream content such as smart speakers. This variety of listening methods means that there is no simple read-across from online TV content to online audio content."

… and notes the conditions that could trigger a review of prominence of audio content

"If, in future, online platforms become a major way of listening to content and evidence of a problem around the ***discoverability of public service content*** *emerges, then the case for prominence for audio content could be considered in more detail."*

The challenges for discoverability of public service content within online audio platforms are similar, if not equivalent, to challenges faced by commercial radio broadcasters

Source: Ofcom - Review of prominence for public service broadcasting (July 2019)

Smart speaker testing

(February 2020)

MTM have tested Amazon and Google's latest devices to evaluate the availability and prominence of radio services and radio content within a variety of possible interactions and user journeys

Availability and prominence framework

Availability

Pre-installed applications:

Skills/Actions that are **pre-installed** on the device

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Specific requests:

Skills/Actions opened (and content surfaced) in response to requests for a particular track, artist, station or show – such as a track or artist (e.g. Adele), a specific streaming service (e.g. Spotify) or radio station (e.g. Global Player)

Content

Although widely available on the latest Amazon and Google smart speakers, radio stations and content tend to be accessible via specific user requests; International streaming services are often recommended as defaults and surfaced more easily

Smart speaker testing – Definitions and key takeaways

Availability

Which audio applications are available on each smart speaker, and are they set as default audio players, pre-installed or available to install if requested?

Key takeaways

- **The major commercial and public service radio stations are generally available within Amazon and Google's smart speaker interfaces**, either through radio aggregators (e.g. TuneIn) or standalone applications (e.g. Global Player)
- **It is not possible for owners of Amazon or Google smart speakers to set a radio station or application as their default music application**

Prominence

How easily are various audio services and content surfaced within the voice-based interface, and how do smart speakers prioritise services and content in response to different types of user queries?

Key takeaways

- **Most radio stations can be surfaced when explicitly requested**, often via the pre-installed TuneIn app on both Amazon and Google smart speakers
- **Amazon and Google smart speakers appear to favour major streaming services** in response to both general (e.g. play music) and contextual (e.g. play me something I'll like) requests
- **It can be difficult to 'course correct' and access radio content** once a request has been made and the user has been directed to a particular service

Smart speakers appear to prioritise default music streaming services (e.g. Spotify, Amazon and Google Music) over radio stations and aggregators; Users typically need to make a specific request for a radio station to surface its content

Prominence within the Amazon Echo interface

Start-up

Defaults

Amazon Music was set as the default music service for both music and radio. Whilst Spotify can be assigned as the default music service, users are not able to set or change the default radio service

Users must request the Global Player service in order to install it

General operation

General

Amazon appears to favour it's own streaming service in response to requests for both music and radio. Users must specifically request TuneIn or Global player in order for them to play

Contextual

Requests for a specific mood or genre also default to Amazon Music

Users can surface radio by genre if they specify the player they wish to use (e.g. "Alexa, play me pop music on Global")

Specific

If Amazon Music is not installed, the device directs users to Spotify in response to a request for a specific track or artist

Global Player allows users to request specific Global shows (including those already aired), if the user has chosen to install it

Prominence within the Google Nest interface

Start-up

Defaults

Users are prompted to choose between Spotify, YouTube Music, Google Music and Deezer as their default music service when setting up the device

A user cannot set a radio service (e.g. TuneIn) or station as their default music player

General operation

General

General requests for both music and radio direct to the music service that the user selected as their default during set-up

Contextual

The chosen default service is surfaced in response to contextual requests

Users are not typically directed to radio content in response to contextual requests

Specific

Requests for specific tracks and artists direct the user to their default service

Commercial radio stations can be difficult to access and, unless requested directly, will not be surfaced

Amazon defaults to its proprietary music service for most audio requests; Alternative pathways exist for surfacing radio content, but then tend to require the user to make very specific requests for a particular station, or install Global Player

Prominence Testing: Amazon Echo Dot

	User journey	Default surfaced	Override to radio[1]?
General	Music	Amazon Music	Yes
General	Radio	Amazon Music	Yes
General	News	None[2]	Yes
General	Local news	None[2]	No
Contextual	Genre	Amazon music	Yes
Contextual	Mood/scenario	Amazon music	No
Contextual	Something I'll like	Not available	Not available
Specific	Artist	Spotify[3]	No
Specific	Track	Spotify[3]	No
Specific	Radio station	TuneIn	Yes
Specific	Radio show	TuneIn / BBC	Yes
Specific	Podcast	TuneIn / BBC	Yes
Specific	Charts	Amazon Music	Yes
Specific	Previous radio show/podcast	Not available	Not available

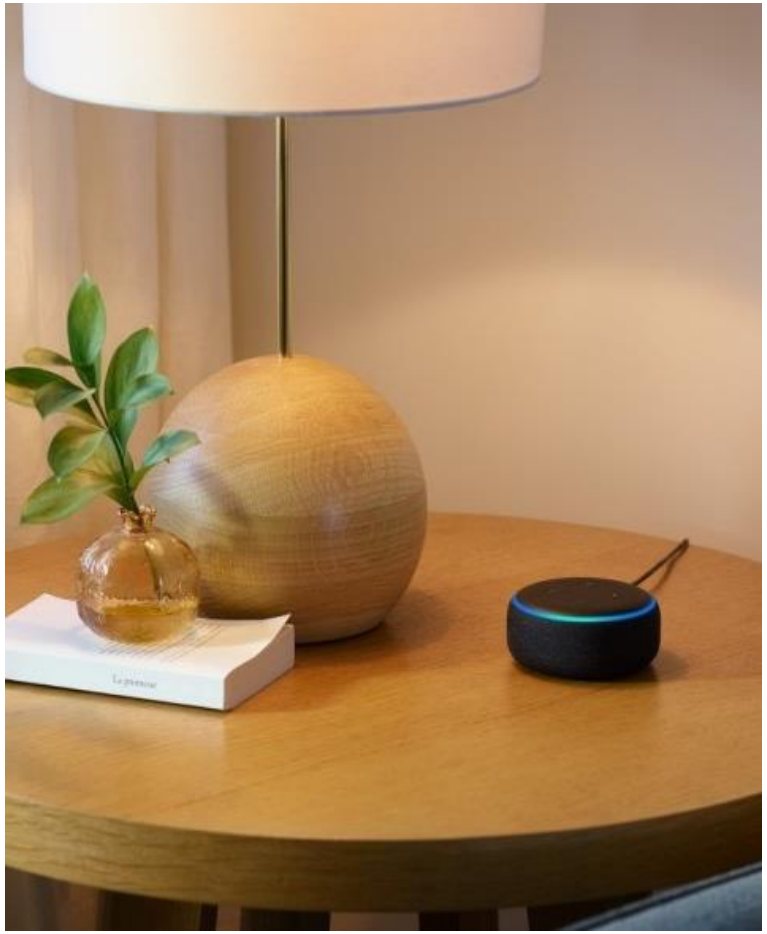
Points of interest

Although the Echo Dot has a pre-installed BBC Skill, it **allows the user to set a default news provider** (incl. LBC, BBC and Sky)

Users can select Spotify as the default streaming service through the Alexa app, but **Amazon Music cannot be disabled as the default for contextual listening**

TuneIn is the default portal for accessing radio on Amazon devices, but journeys to Global stations will be directed to the Global Player (if it has been installed)

Alexa can recall the most recent episode of radio or podcasts, but recalling a specific episode is difficult



Notes: (1) Radio override was achieved (when able) by instructing the Echo Dot to play through TuneIn radio, or by specifying Global Player or BBC skills; (2) Here Alexa prompted to choose a news source based on preference, she gave the following options: BBC News, Sky News, Daily Mail and LBC; (3) Unable to play a specific track or artist through Amazon Music without a subscription, defaulted to Spotify after Spotify premium account was linked; (4) Testing took place in February 2020

Once selected by the user, Google directs the majority of queries or requests to the assigned default audio service; Radio content from both commercial broadcasters and the BBC has to be specifically requested in order for it to be surfaced

Prominence Testing: Google Nest Mini

	User journey	Default surfaced	Override to radio[1]?
General	Music	Spotify[2]	No
	Radio	Spotify[2]	Yes
	News	BBC	Check
	Local news	Not available	Not available
Contextual	**Genre**	**Spotify[2]**	**No**
	Mood/scenario	Spotify[2]	No
	Something I'll like	Spotify[2]	Yes
Specific	Artist	Spotify[2]	No
	Track	Spotify[2]	No
	Radio station	TuneIn / BBC	Yes
	Radio show	Not available	Not available
	Podcast	Google Podcasts	No
	Charts	Spotify[2]	No
	Previous radio show/podcast	Not available	Not available

Points of interest

The Nest interface **defaults to the BBC for news**

Users cannot request radio stations by genre, but asking for something they like on TuneIn will default to the most recent station

Commercial radio stations do not have direct integrations with Google's speaker and have to be streamed via TuneIn

Users rely on TuneIn to surface radio content and, as a result, have **limited ability to request current and past radio shows**

Notes: (1) Radio override was achieved (when able) by specifying the home assistant to play 'through TuneIn Radio'; (2)Spotify was selected as default audio service, from an initial choice of Spotify, YouTube Music, Google Play Music and Deezer. No radio options were presented here; (3) Testing took place in February 2020.

From the industry: potential implications for commercial radio

- Industry stakeholders expect continued growth in smart speakers
- The risk of reduced audience and inability to monetise effectively may undermine future relationships
- Smart speakers may exacerbate a shift from radio to streaming, posing a threat to radio broadcasters

Stakeholders share a positive outlook on the benefits of smart speakers, but exercise caution in collaborating with platforms

Summary of themes from industry interviews: potential implications for commercial radio

Industry participants widely expect the rapid growth in smart speaker ownership to continue, and for smart speakers to become an increasingly important part of UK audio (and radio) discovery and consumption

Relationships between smart speaker platforms and radio operators are healthy today, but this may not always be the case if the balance of power (and listening hours) shifts

Smart speakers may restrict the availability of commercial radio applications and reduce broadcasters' ability to monetise their smart speaker audiences

The migration from radio to international streaming services is likely to be exacerbated by smart speakers, and represents a significant risk to the future of the UK audio industry

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