RADIOCENTRE

Department for Digital, Culture Media & Sport

Radio prominence on Smart speakers

Final report – *amended for publication*

mtm

Contents

_Executive summary

Objectives: MTM were asked to assess the issues surrounding the prominence and availability of radio on smart speaker systems

Project team objectives:

- **Produce analysis** which assesses whether there is a **need or not for intervention** to **support the future of radio listening**, in line with digital audio trends
- **Draw conclusions** in the light of the **evolution of the market** and taking account of recent digital audio trends

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Research objectives:

- Create an up-to-date picture of **prominence and availability of radio on smart speaker systems**
- Go into more depth around **prominence and availability of different players** (e.g. BBC vs commercial, size of players, direct access vs via aggregators etc.)…
- … and **potential harm/ challenges** faced (e.g. disadvantageous access due to scale or location, loss of ad revenue, gatekeeping of digital platforms etc.)
- Create primary research on **audience behaviour** to help build the understanding on **audio listening behaviours** (e.g. defaults, number of stations) on smart devices, and **key challenges**

Approach: To understand the challenges for radio, we put smart speakers to the test, and further explored findings with consumes

SHAPE

Objectives

Define the key research questions and hypothesis to explore, leveraging learnings from the Digital Radio and Audio review[1]

Outcomes

- Detailed areas for testing across availability, personalisation, prominence and broadcaster access
- Tailored hypothesis based on learnings from the Digital Radio and Audio review

TEST

Objectives

Assess availability and prominence of radio on smart speakers, and ability to personalise and improve radio listening

Outcomes

- Summary tables on 1) availability, 2) personalisation, 3) prominence, and 4) broadcaster access (news)
- Highlight of main challenges for consumers and radio broadcasters

UNDERSTAND

Objectives

Capture and diagnose the issues consumers have that arise when trying to access radio through smart speakers

Outcomes

- Map of real-world radio and non-radio listener behaviours on smart speakers
- Flag priority barriers, and improvements, needed to support radio listening and to improve customer experience

Re-visit hypothesis and inform recommendations

Notes: (1) Digital Radio and Audio review, October 2021

Executive summary: More has to be done to ensure all broadcasters get fair access and reach on smart speakers

Stage

TEST
(smart speaker device testing around availability and prominence of radio)

Executive summary

- **Availability:** The BBC and big commercial broadcasters (e.g. Global) have direct integrations with smart speakers, offering improved availability of services and stations, albeit with account linking required in some cases; independent stations are still disadvantaged, with most lacking owned apps and only accessed via TuneIn
- **Personalisation:** Radio listening can be personalised, especially using custom routines, but the lack of radio-specific defaults and interoperability with other radio devices, means reduced personalisation opportunities compared to music or other audio content, and diminished use of radio in the long run
- **Prominence:** Big radio broadcasters get strong prominence, with reliable voice recognition for specific station requests. But lack of radio defaults and voice recognition maturity around contextual requests (e.g. different genres, local) means prominence, especially for independent stations, suffers in real use
- **Broadcaster access:** News content on smart speakers is accessed via reputable news sources, with many providers having integrations on smart speakers, meaning high attribution for news broadcasters. However, the lack of barriers to other content appearing in proximity to news still carries risks

Executive summary: Users still face challenges accessing the radio they want, and this can discourage listening

Stage

UNDERSTAND
(ethnographic research of real consumers accessing radio through smart speakers)

Executive summary

- **Availability:** Listeners notice, and value, when speakers automatically default to native radio or aggregators, but many find the process of set up challenging. Widespread frustration of having to download or sync up apps to listen to radio, which is likely to put off new listeners
- **Accessing radio:** Those who regularly listen to the radio via speakers tend to have more positive experiences, satisfied by simple and directive requests or going back to stations previously accessed. In comparison, new / novice users face greater difficulties and demand greater guidance and support
- **Accessing news:** Positive news experiences come from broad and generic news requests, often defaulting to trusted reputable brands, though specific news requests are met with greater difficulties e.g., politics, entertainment news or specific news broadcasters
- **Challenges:** Consumers face challenges accessing radio content, mainly in processing contextual requests (e.g., local radio), managing near misses, and personalising radio listening. These issues often leave consumers frustrated and can discourage listening long-term
- **Improvements:** Users expect better integration of radio services as standard, easier access of radio content via voice commands, more support for setting up radio, and greater access to contextual use cases (e.g. local radio)

Executive summary: We recommend that future policy supports the elevation of radio on smart speakers, and protects access

Recommendations: Potential areas of policy intervention

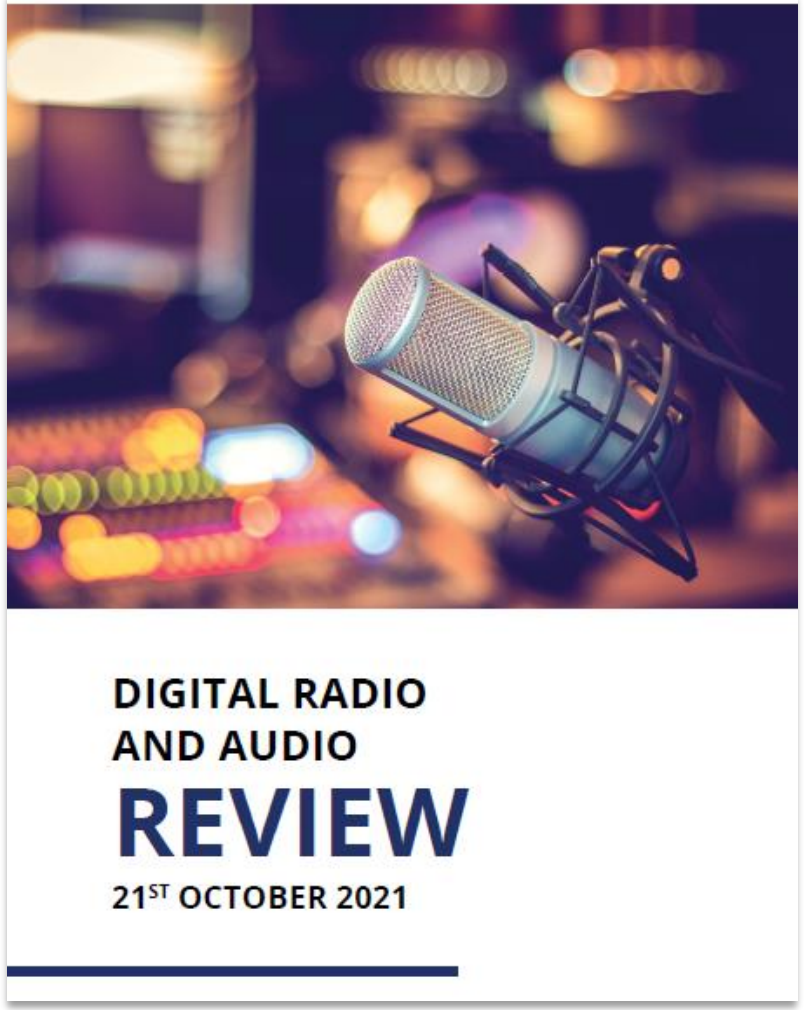
Executive summary

- **Availability:** Ensure all licensed radio content is discoverable on smart speakers, directly or via aggregators. Ensure all stations are supported in developing new functionalities on smart speakers, and in benefiting from the voice activated algorithms that promote their services
- **Personalisation:** Promote the improvement of radio functionalities on smart speakers, to elevate radio as a default audio type, and support development of improved course correction paths for radio. Support initiatives that promote the interoperability between smart speaker providers and radio broadcasters
- **Prominence:** Ensure all licensed radio content gets equal prominence on smart speakers to other forms of audio content. Support coalitions that promote the range and quality of radio services, including the improvement of contextual radio listening activation, to prevent displacement of radio content
- **Broadcaster access:** Support broadcasters' efforts to protect news content aggregation on smart speaker services; prevent platforms from using overlay adverts over radio content, without consent. Encourage listener data sharing for the purpose of improving services and listening experience

_Background and market context

Background: Strengthening UK radio on smart speaker devices

- The **Digital Radio and Audio Review (2021)** was commissioned by the UK government to assess future trends in radio listening and to make **recommendations on ways of strengthening UK radio and audio** on all devices
- One of those device categories was **smart speaker devices**. These devices are **becoming an important channel for radio consumption;** >25% of radio listeners use smart speakers to listen to the radio[1]
- **UK radio broadcasters** have already taken steps to **protect access on smart speakers** and to ensure a better listener experience. Some have also invested in **direct relationships** with the platforms, in order to reduce the dependencies on aggregators, and to secure a better presence on smart speakers
- However, important challenges remain in **maintaining access and prominence** for all broadcasters, **personalising services**, and effectively **monetising content** on the platforms
- This has led the UK government to **accept the need for regulation** to protect radio broadcasters' ability to compete on smart speakers in line with consumption trends, and to protect consumers' access to UK radio



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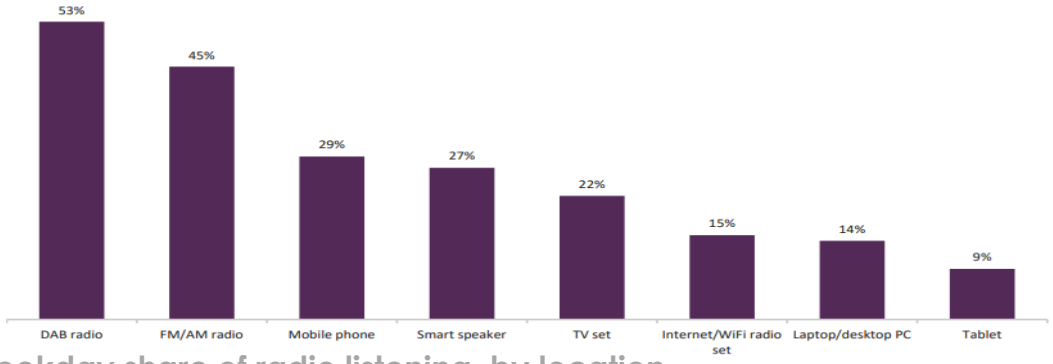
Source: (1) OfCom Media Nations report 2021

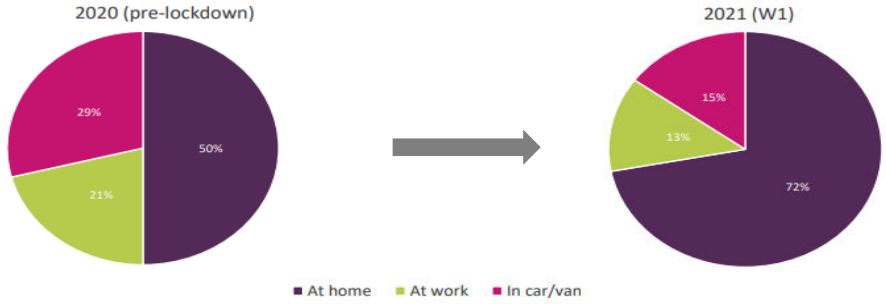
The emergence of smart speakers as radio listening platforms appears to justify action to protect radio listening in the future

Smart speakers are now used to listen to the radio by more than **25% of radio listeners;** with people increasingly listening to the radio **from home,** smart speakers' importance is likely to grow

Ways of listening to the radio

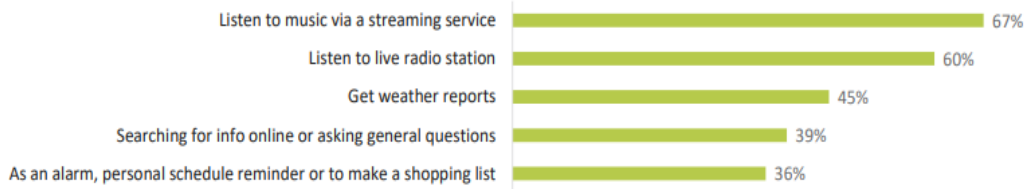


Weekday share of radio listening, by location

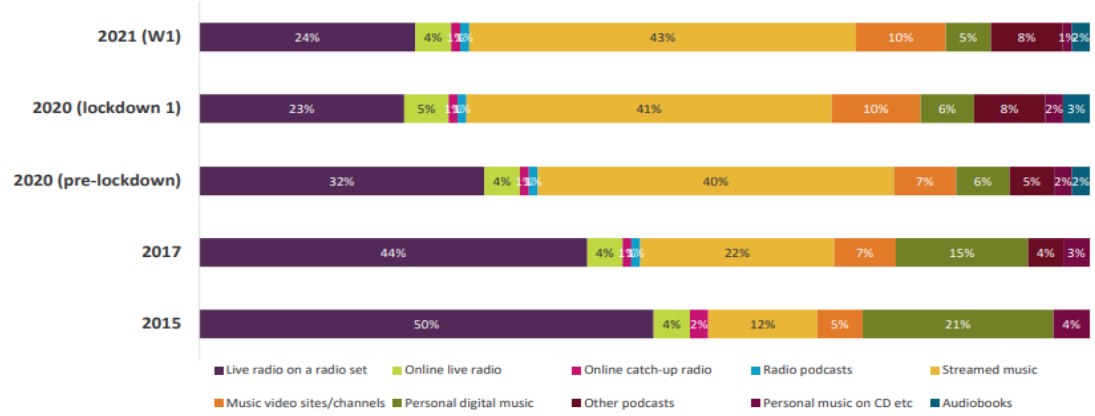


With **younger audiences consuming less live radio year on year**, it is important for UK radio to maintain prominence and availability on these devices, as media consumption diversifies in the future

Top smart speaker activities amongst users



Proportion of weekly audio time, by audio activity (adults 15-34)

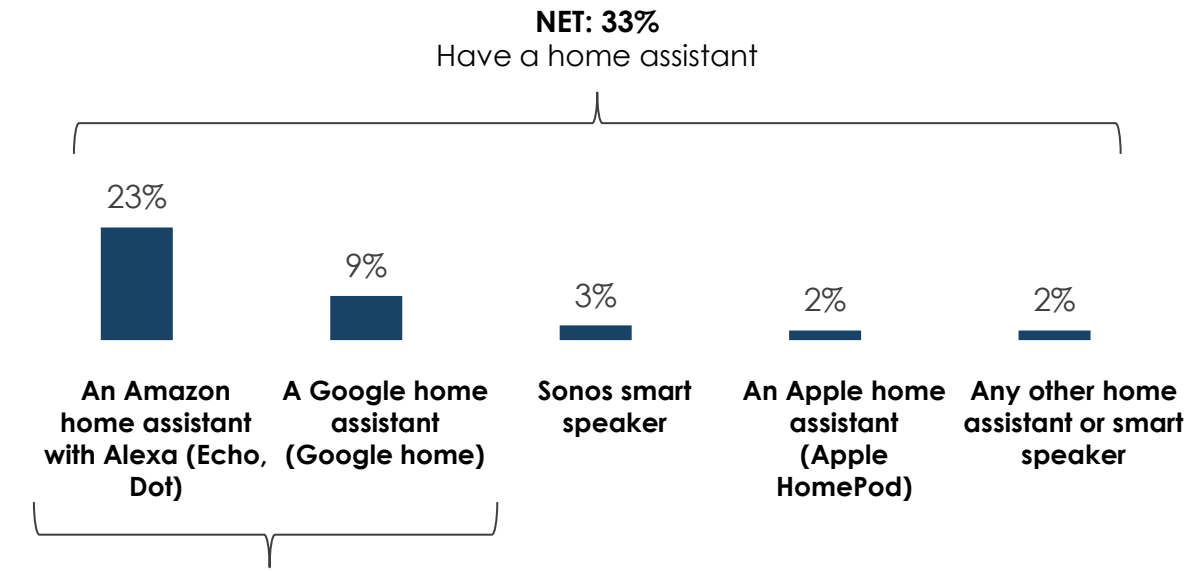


Source: OfCom Media Nations report 2021

ScreenThink: Nearly half of smart speaker users say they use voice commands to listen to radio stations

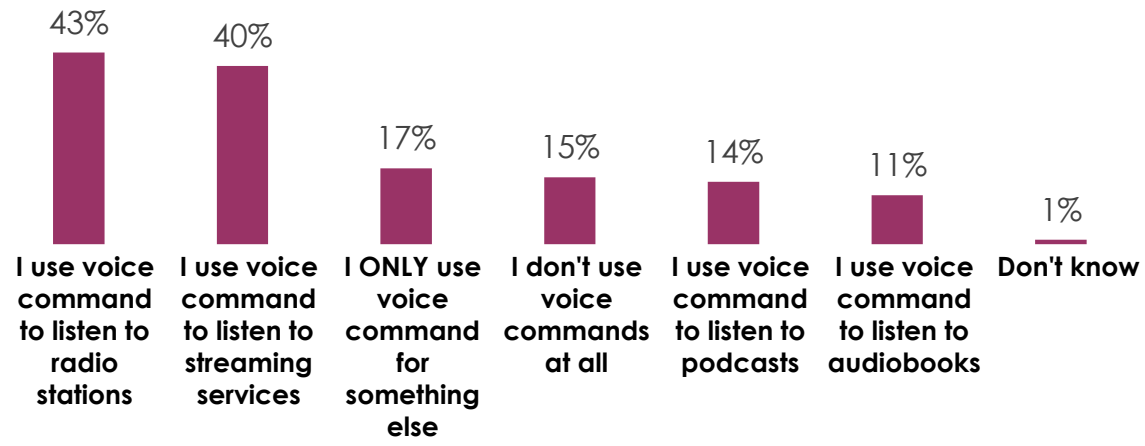
MTM research identified that **one third** of people in the ScreenThink UK online nat rep sample have **some kind of smart speaker home assistant**

Devices currently owned
Among the total UK online population



Findings consistent with macro UK data; Amazon and Google dominate the market

Usage of voice commands
Among those who have a home assistant



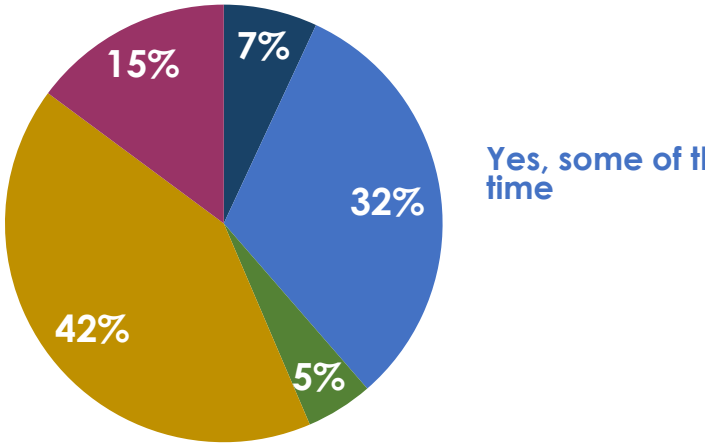
Base: Total online population (n = 3000), Those who have a home assistant (n = 988)
Source: ScreenThink UK. A22. Which of the following other devices do you or your household currently own? DCMS1. You previously told us that you use a home assistant / smart speaker in your household. Do you use voice command with your home assistant / smart speaker for any of the following?

ScreenThink: However, almost 2 in 5 face difficulties accessing the radio, and most don't use custom settings to improve experience

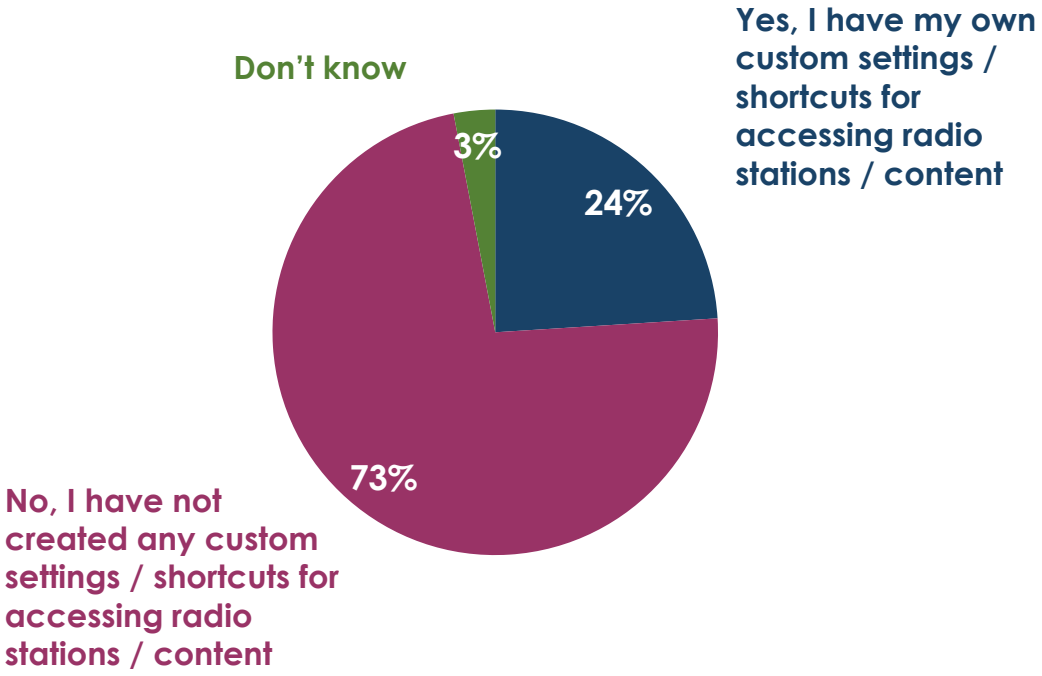
There is also low take-up of creating custom settings or shortcuts for radio stations

Faced difficulties accessing radio stations
Among those who use voice commands to listen to radio

NET:	
38%	Yes
57%	No



Ever added a custom setting to home assistant
Those who use voice commands to listen to radio stations



Base: Those who use voice commands to listen to radio stations (n = 424)
Source: ScreenThink UK. DCMS2. Have you ever faced difficulties in accessing the radio content you want via your home assistant / smart speaker? DCMS3. Have you ever manually added a custom setting / shortcut on your home assistant / smart speaker, which takes you straight to your preferred radio content?

The BBC and commercial broadcasters face similar opportunities and challenges

BBC and commercial radio prominence is on the rise

*Both the **BBC and other big commercial broadcasters** (like Global, Bauer and Wireless) have made **significant strides in improving prominence on smart speakers**, and in achieving **integration of services**, allowing for **improved data access to listeners**, and subsequent **personalisation and monetisation of services***

*There is **no significant difference** in the **practical prominence** and availability between the BBC and the other big commercial broadcasters, either in terms of **functionality** or in terms of **voice command maturity** on smart speakers*

*All have a role to play in ensuring the **radio prominence for all stations is improved,** and in safeguarding **discoverability of smaller stations***

Source: MTM smart speaker testing 2022

Both the BBC and commercial broadcasters have a role to play in ensuring the future of UK radio on smart speaker devices

The BBC and commercial broadcasters have an important role to play in the future of radio on smart speakers, given their position in the market and in society

- Both **contribute significantly to the news dissemination** and distribution of **local, national and international content** in communities across the country
- Both still **reach more than 30 million Britons every quarter**, and generate significant commercial value
- Both could be **challenged by the increased concentration of market power** into the hands of a **small group of platforms**, that have the potential **ability to elevate their own increasingly diverse range of services**, over radio-first services

This gives the BBC and commercial radio the scope to support policy and industry initiatives to ensure quality radio access in the future for all consumers and stations on smart speakers

- Both can **influence public and industry policy**, in a way that **benefits broadcasters and listeners alike**
- Both benefit (and support) the **elevation of radio-industry initiatives like Radioplayer,** for the benefit of all radio stations
- Both have **direct connections and integrations with smart speaker providers**, and can support the **evolution of digital radio listening** on smart speakers, and the **smoother development and integration of radio listening** experience across devices

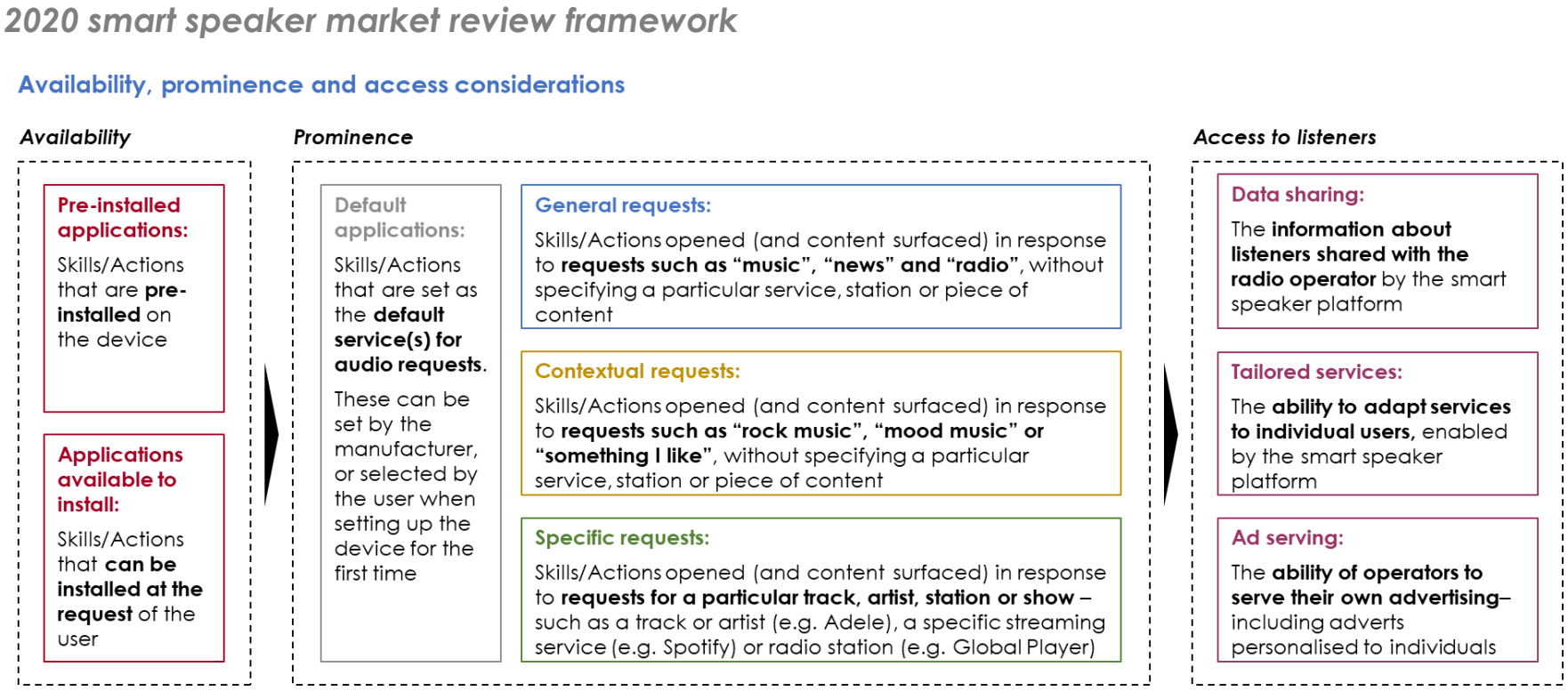
Source: RAJAR 2018-2022 Radio listening, Radiocentre Ad revenues and forecasts – commercial radio revenue, MTM analysis

PREVIOUS WORK: This research builds on the findings of our 2020 testing of radio availability and prominence on smart speakers

In 2020, MTM undertook a **review of the UK smart speaker market** and **developed policy recommendations** to help ensure that commercial radio maintains its important position within the audio content landscape

The review included **testing of smart speaker devices**, complemented with **market research** and **industry expert interviews**

MTM's report **supplemented** the propositions included in **the Digital Radio and audio review**



PREVIOUS WORK: The considerations focused on protecting access, improving discoverability, and encouraging audience data sharing

	2020 policy considerations
Availability	1. Ensure listeners have **access to full suite of stations** (via dedicated applications or set of commands) 2. Protect **radio broadcasters from access charges** to host services on smart speakers
Prominence	Encourage smart speaker platforms to ensure **radio broadcasters are discoverable and easy-to-find** 1. Ensure specific verbal requests for a station or radio show deliver the relevant programme 2. Enable users to create custom requests that act as shortcuts to their favourite radio stations 3. Incorporate radio skills as options for default applications for audio requests 4. Provide ownership of, and control over, listening journey (incl. 'continue listening' and 'create shortcut') 5. Give radio broadcasters prominence in instances where more than one outcome may be presented
Access	1. Improve **access to data** for radio broadcasters, and ensure parity with other streaming services: - Support radio broadcasters in accessing demographic, contextual and user journey data to better improve experiences on smart devices - Provide radio broadcasters with access to information around null requests or voice commands where users were requesting radio access, and associated terms and words for specific programs or stations 2. Ensure radio **broadcasters maintain relationships with advertisers** for media sales of smart speaker inventory

_ TEST summary

TEST outcomes

		Score
a	**Availability**	Availability of radio broadcasters and aggregators on smart speaker devices have improved since 2020, but few native (i.e. station specific) radio apps come pre-installed; Central stations favoured over local stations
b	**Support & personalisation**	Limited personalisation of radio available as default. Personalisation improves after linking of radio apps, but personalised commands only work when handling explicit requests or setting up routines; only music players can be set as default audio players
c	**Prominence**	Pre-installed apps get highest prominence out of the box, with TuneIn supplementing radio listening. Big Radio broadcaster prominence is improved after user links dedicated apps and services, but smaller stations still suffer
d	**Broadcaster Access**	News radio tends to be available through reputable news sources, but more needs to be done to protect content safety around news listening. Genre-specific requests (e.g. "Sports news") not as successful in finding radio content
	Servicing/ Help	Google offers comprehensive online support portals for their Home devices for radio, music and general audio use. Amazon support revolves around specific skills, so guidance on installation and use often depends on the app providers themselves

a **Availability:** Most big broadcaster stations are now available via direct integrations; smaller stations lack direct access

Availability – summary

- Good availability of **ubiquitous music players**[1], but **few native radio apps** come pre-installed or already integrated
- **Big broadcasters** (e.g. BBC, Global player) **have direct integrations**, helping users access those broadcasters' stations directly
- Most **independent stations** (E.g. smaller or location- specific) **do not have native apps**, and can only be accessed via aggregators
- As a result, national, **larger stations get priority over local stations** when playing radio

Amazon Echo

- \+ BBC sounds, Global player, Planet radio and Wireless apps all pre-installed
- \+ Smaller stations can be accessed via TuneIn out of the box
- \- Smaller stations lack native apps and can only be reached via aggregators
- \- Some local stations available but priority is overall given to national stations

Google Nest

- \+ Big broadcaster stations can be accessed via integrated native apps
- \+ Smaller stations can be accessed via TuneIn out of the box
- \- Smaller stations do not have native apps and can only be reached via aggregators
- \- Larger stations are always favoured over independent radio stations

Note: (1) Includes common music apps, e.g. Amazon music (on Amazon), Spotify, Apple music, YouTube Music (on Google)

b **Support & personalisation:** Radio listening cannot be fully personalised, especially compared to music listening

Support & personalisation – summary

- Out-of-the-box, **users have limited choice of radio apps** to be used as part of their personal audio experience
- **After linking** of radio apps, **speakers are better at personalising listening** from big radio broadcasters, but **radio apps cannot be set as default for audio**
- While **music preferences** (e.g. Spotify) can be transferred across digital ecosystems, this is **less evident with radio apps**
- Users can improve personalisation of radio listening by **setting up individual routines**

Amazon Echo

- \+ All music apps can be set to default
- \+ Can easily set-up routines to allow radio listening in different contexts
- \- No Radio app can be set as default music or audio player[1]
- \- Limited control over radio listening before linking of 3rd party apps
- \- Cannot process requests to play "last station" or "last song"
- \- Contextual radio requests can only be correctly routed via routines

Google Nest

- \+ All music apps can be set to default
- \+ Can easily set-up routines to allow radio listening in different contexts
- \- No Radio app can be set as default music or audio player[1]
- \- Limited control over radio listening on native radio apps (e.g. contextual radio requests can only be set-up via routines)
- \- Cannot process requests to play "last station" or "last song "

mtm

Note: (1) While specific preference settings exist for Music & Podcasts and News, there are no preference settings available for radio

C **Prominence:** Radio prominence greatly improved with big broadcaster integrations, but smaller stations face challenges

Prominence – summary

- **General and contextual requests** (incl. "radio", "local news") most often lead to the native music (or news) player apps, because **radio apps cannot be set as default**
- **Requests for big broadcaster stations** – BBC, Global, Bauer and Wireless – are accessed via their **dedicated apps** after linking
- **Requests for smaller stations** handled mostly via TuneIn, with limited native apps available; **practical prominence still an issue**
- **Radioplayer** offers an alternative to TuneIn on Amazon, but is **never prioritised**

Amazon Echo

- \+ Once native radio apps are linked, all requests go through their native apps by default
- \+ Requests for local stations (e.g. Scottish radio) or music are interpreted[1]
- – As default, all small radio station requests played through TuneIn…
- – … or are incorrectly recognised
- – No way to redirect listening to Radioplayer (over TuneIn) unless explicitly asked
- – Contextual requests, including "local radio" always revert to pre-installed apps

Google Nest

- \+ Requests for BBC, Global and Bauer radio stations always play through their native apps by default
- \+ Requests for local stations (e.g. Scottish radio) and music are interpreted[1]
- – As default, all small radio stations requests played through TuneIn
- – Listening to Radioplayer is not supported
- – Contextual requests, including "local radio" always revert to pre-installed apps

Notes: (1) Requests for local music were played through the default music player. Requests for local radio only worked when specific elements were made explicit e.g. "BBC Scotland" or "Nation Wales"

C While Prominence as a whole has improved, practical prominence remains a key risk

Theoretical vs Practical prominence

*While **theoretical prominence**, especially that of big broadcasters, has **significantly improved** since 2020, there are still **important issues** to be addressed when it comes to **practical prominence***

*While people are **able to access more radio services**, ask **more radio-specific requests** and **re-direct near misses better** than before…*

*… there remains a big discrepancy between **the scale and consistency of prominence** of **music apps** and **big broadcaster stations** compared to **smaller and independent stations***

*Smart speakers are still **not able to direct radio context requests as effectively as music or news requests**, leading to reduced practical prominence of radio in real use*

Prominence risks

- **Practical availability still a challenge of smaller stations**, hampered by the need to download apps and/ or go via aggregators
- **Voice activation favours pre-installed apps** and **big broadcasters** with integrated services; **service integration** challenges smaller stations
- **Course correction around radio is limited** when it comes to user voice commands, which may discourage use and listening
- **Fair prominence** is a challenge, with concerns around users **having to set-up routines** to overcame prominence issues – **3/4 of smart speaker radio listeners do not customise listening**[1]

Details in section 6

Notes: 1) MTM ScreenThink 2022

d **Broadcaster Access:** News access only through reputable news sources, but closer attention is needed by platforms on what content appears next to news

Broadcaster access – summary

- Priority for **news access always given to dedicated news apps** (e.g. BBC news, Sky) → speakers will ask user to define preferences upfront
- **Music apps and aggregators don't get priority** here
- Limited **safety barriers on proximity requests –** speakers will play any type of content (radio or other) after a news segment or station
- **Specific requests** (e.g. "play me the news from station X"), work better than **contextual requests** (e.g. "play sports news")

Amazon Echo

- \+ Easy set-up of default news provider upfront
- \+ News listening only available through dedicated news apps (e.g. BBC news)
- \+ Many reputable news sources pre-installed
- \- No safety barriers around news content – any type of content could be accessed in proximity of a news segment
- \- Generic requests for local news often revert to central app or station
- \- News genre (E.g. "Sports news") requests just revert to the central app or station

Google Nest

- \+ Easy set-up of default news provider upfront
- \+ News listening only available through dedicated news apps (e.g. BBC news)
- \+ Many reputable news sources pre-installed
- \+ News genre (E.g. "Sports news") requests processed through dedicated news apps
- \- No safety barriers around news content – any type of content could be accessed in proximity of a news segment
- \- Generic requests for local news often revert to central app or station

TEST considerations for regulatory and industry action

a	**Availability**	- **Smaller stations** still **require aggregators to be accessed** → Industry needs to do more to support ease of integration of services (including voice commands) and the elevation of Radioplayer - **Local stations** might **get lost on smart devices**, with algorithm favouring larger, national stations; more development is needed to capture local requests and access
b	**Support & personalisation**	- **Radio-specific listening needs to be set-up** on the speaker, with limited ability to transfer preferences → Providers can elevate personalisation, by supporting **wider interoperability** with radio app ecosystems - Providers can help elevate radio on smart speakers, by **simplifying process for customising radio listening** without need for custom routines, like what is already done for **music and news listening**
c	**Prominence**	- **Radio apps cannot be set as default** audio players, resulting in music apps getting higher prominence. **Local stations (e.g. local news) also downgraded** as contextual requests are processed **through default music apps**; allowing the setting of **radio stations as default** would help **avoid this downgrading** - For smaller stations, **Radioplayer** is downgraded in favour of **TuneIn,** potentially due to paid promotion by TuneIn → Intervention is needed if Radioplayer is to gain any practical prominence
d	**Broadcaster Access**	- **Providers and broadcasters can help protect news access,** by employing protective measures for when news content is followed up by other radio or audio content - **Lack of consistency around contextual news[1] access** can lead to downgrading of some news in favour of others; more development is needed for supporting **contextual news requests**

Notes: (1) e.g. segments of news like Sports, Politics

_UNDERSTAND summary

Understand outcomes

General experiences

Those who regularly listen to the radio via speakers tend to have more positive experiences, **satisfied by simple requests** or going back to stations previously accessed.

In comparison, new / novice users face **greater difficulties** and demand **greater guidance and support.**

Accessing radio

Prefer simple and directive requests, **avoid general or personalised commands** due to **fear of failure** or **hassle involved**.

Accessing stations can be inconsistent, with **local and independent the hardest to consistently access**, resulting in many going back to stations previously accessed.

Availability

Listeners notice, and value when speakers **automatically default** to native radio or aggregators.

However, many find the process of set up challenging with **widespread frustration** of downloading and syncing apps to listen, deterring new listeners from continuing.

Accessing news

Positive news experiences come from **broad and generic news requests**, often defaulting to trusted reputable brands, though **specific news requests are met with greater difficulties** e.g., politics, entertainment news or specific news broadcasters.

Challenges

Consumers **face challenges accessing radio content**, mainly in processing contextual requests (e.g., local radio), managing near misses, and personalising radio listening.

These issues often leave consumers **frustrated** and can **discourage listening**, esp. for new users put off trying again.

Calls for improvement

Consumers **expect better integration of radio services as standard** e.g. easier access of radio content via voice commands, more support for setting up radio, and greater access to contextual use cases (e.g. local radio)

Current smart radio listeners have positive experiences listening via their speakers, but experience some challenges

Majority have **positive experiences** accessing the radio via their smart speakers, highly valuing;

- Instantaneous results, easily facilitated by voice (vs hand devices)
- Seamless access to radio stations, replicating experience many are used to in listening in the car

> *The experience of playing radio stations is not difficult, very easy, it went straight to what I needed. You ask for what you want and you get it. It's often very responsive.*
>
> [Female, Smart radio listener]

Most have **adapted routines for listening** to the radio and prefer to stick with the status quo;

- Go back to familiar radio stations they know their speaker can access
- Use specific and simple commands – avoid any tasks that involve phone e.g. download apps, create routines etc

> *It is simple to use, especially when it knows what you're asking for, it becomes difficult if in a rush / not consistent – doesn't always do what you want*
>
> [Male, Smart radio listener]

However, **most have experienced some challenges** accessing radio via smart speakers;

- Access is inconsistent – 'hit or miss', some able to listen to radio 50% of the time
- Often depends 'how the speaker is feeling'
- Difficulties in accessing local content and independent stations

> *For me its not complicated, but it can be a bit of a faff, when its not connecting or doing what I want it to.*
>
> [Male, Smart radio listener]

While most have good experiences, many are able to think of ways listening on smart speakers can be improved.

While **new** radio smart listeners, found the experience more challenging and difficult to complete

New users **expected the process** of listening to the radio **to be easier** than experienced

- Expected easy commands to produce results, comparable to music requests
- Initial admin stage of downloading and syncing apps off-putting to many

With their **lack of experience** in listening to the radio often resulting in **failed requests**;

- Unable to access unless include 'radio' in – defaulting to music or non-responsive
- Difficulties accessing radio stations where apps are needed (on Alexa devices), and smaller local stations

Leaving many new listeners questioning if they were **'doing it right?'**

- Most were unsure over what commands would produce the best results for radio
- Desire for support and guidance in using speaker for the radio e.g. tutorial videos

> *Listening to the radio wasn't very easy, and that would put me off listening in the future – the stations I wanted I couldn't access and so that would put me off.*
>
> [Male, smart non-radio listener]

> *Not novice friendly – needed more support / info setting it up - maybe a link to show you how to do these things e.g. YT tutorial / video to watch*
>
> [Male, smart non-radio listener]

> *Seemed complicated / doing something wrong – was there something I was missing?*
>
> [Female, smart non-radio listener]

Demand for greater support and guidance when setting up and using smart speaker to access the radio.

These challenging and difficult experiences are likely to discourage radio listening on smart speaker devices

Interestingly, majority of listeners are **accepting** of times when the speaker is **unable to fulfil radio-based requests**

- Often blaming it on themselves e.g. I'm not asking right
- Count as limitations of technology

However, the inconsistent and challenging experiences can **significantly deter radio listening** on smart speakers;

- New listeners unlikely to persist or come back to radio if experience difficulties
- Current listeners more patient as they have good experiences to reflect on, often moving on to another station or audio if issues occur
- Most default to music when radio is met with challenges, going to established music apps e.g. Spotify, Apple Music – for saved playlists
- Minority will persist with radio listening via alternative devices e.g. phone, TV
- Some will be put off listening to something altogether, and move on to other tasks

> *I haven't gone back to try and play it – hard task to do, haven't tried listening to the radio again on my speaker*
>
> [Female, smart non-radio listener]

> *Sometimes I just go to Spotify – I can't be bothered, I'll catch up on news later, I don't want to spend my valuable time faffing around and asking it again.*
>
> [Male, smart non-radio listener]

> *The fact it doesn't work, Kiss via TuneIn, it would be a barrier to me listening to the radio again*
>
> [Male, smart non-radio listener]

All consumers (current and new) were able to recommend ideas for how radio smart speaker experiences should be improved

Improving inconsistencies in access

High appetite for consistent access to all stations, especially smaller and independent stations that many would expect to be easier to access (given ability to detect location via GPS).

Facilitating seamless radio listening

Desire for all radio-based apps and aggregators needed to come **integrated and synced as standard** (removing need to download). High desire for one single radio aggregator to navigate from.

Easy access via voice

Reflecting how majority of users prefer to use smart speakers, demand for **all radio-based tasks to be achieved through voice commands**. In app experiences frustrate and can put off radio listening.

Improving accessibility of radio

High proportion of users spoke to the fact listening to the radio via smart speakers could be more challenging for new users and less technologically advanced – and **improvements are needed to improve the accessibility**

Greater support and advice

Demand for more support and guidance when setting out to use the radio via speakers e.g., commands to use, and tutorials when navigating more challenging tasks e.g., setting a preferred station, creating a routine.

More choice over content consumed

High appetite to choose content consumed on speakers e.g., more localised content and news broadcasters. Many would like speakers to facilitate these choices with greater ease e.g., prompting the decision vs default.

_Policy recommendations

a **Availability:** Future policy needs to account for fair access to the smart speaker radio ecosystem for all broadcasters

Potential areas of policy intervention

- Ensure **radio content** from all licensed stations is **available and discoverable via voice activation,** either directly or via aggregators
- Work with platforms to **ensure broadcasters are not charged for access, for data, or for discoverability** on smart speakers
- Encourage **greater transparency around routing algorithms** with content providers and broadcasters
- Support the development of **easier access to "Skills/ Actions"** on leading smart speaker ecosystems, for smaller stations
- **Ensure Radioplayer and TuneIn** get equal access as default for radio listening
- Enable **better integration of geolocation and user data** (if given consent) with radio commands, to improve access to local radio

Benefits of potential regulation

- Maximises consumers' choice around listening to their favourite stations, including their local stations
- Improves customer perception of smart speaker devices for radio and audio listening in general
- Enables broadcasters to develop new services to better meet their customers' need on smart devices
- Encourages investment on new radio content and listening technologies

Risks if not considered

- Limits investment of radio broadcasters to the smart speaker ecosystem in the future
- Disproportionately harms smaller stations without the ability and scale to develop native apps and services
- Restricts consumer choice, ultimately hurting radio consumption in the future, especially as platforms gain more negotiating power

Benefits for *People* *Platforms* *Broadcasters*

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b **Support & personalisation:** Future policy should encourage the elevation of radio as a core audio category

Potential areas of policy intervention

- Promote **equal configuration** (esp. contextual) for **native music apps, 3rd party music apps**, and **3rd party radio apps** on smart speakers
- Support **improved interoperability between smart speaker providers** and **radio broadcasters,** for smoother integration of radio and audio services across platforms and devices
- Support the development of **radio-centric services** on smart speakers, focusing on **voice activation**, to allow **hands-free customisation** of defaults centered around radio listening
- Encourage **platforms to build intuitive and flexible voice support tools** for users on how to set-up and course correct radio specifically

Benefits of potential regulation

- Improved experience and integration of radio listening across devices
- More options for personalising use of smart speakers to specific needs, around radio and beyond
- Stronger value proposition of smart speakers as an essential part of a wider tech ecosystem
- Improved access to consumer data enabled via new services
- Higher practical prominence, with radio apps being used for new contexts and with less disruptions

Risks if not considered

- Limits investment of radio broadcasters to the smart speaker ecosystem in the future
- Limits time spent by consumers on smart speakers, due to limited personalisation options and contexts (e.g. radio alarms)
- Potentially affects demand for radio in the future, as consumption of audio becomes increasingly integrated

Benefits for *People* *Platforms* *Broadcasters*

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C **Prominence:** Future policy should ensure prominence for all stations, and ensure radio can be chosen as default audio

Potential areas of policy intervention

- Ensure all **licensed UK radio stations** are given **equal prominence** as other content on smart speakers – *covering voice recognition & prominence around contextual requests*
- Ensure smart speaker platforms allow **access to all licensed UK radio services**
- Consider steps with **platform providers** and bigger **industry coalitions** to help smaller stations improve quality and range of services
- Ensure **Radioplayer is given equal status** to **TuneIn** for prominence…
- … and support the development of **voice recognition algorithms** to improve processing of **multi-layer requests**[1] for radio
- Encourage platforms to enable **radio apps as default** for contextual listening

Benefits of potential regulation

- Maximises consumers' choice around listening their selected stations
- Maximises time people spend listening to the radio, and avoiding failed journeys/ course correction issues
- Increases investment in smart speaker services, and ensures a greater range of partners for smart speaker providers
- Improves prominence of all broadcasters by enabling easier discoverability and increasing listening hours
- Protects smaller stations from downgrading, loss of listenership, and loss of monetisation options

Risks if not considered

- Potentially affects demand for radio in the future, as listening is substituted by more easily accessible content like music streams and podcasts
- Limits investment of radio broadcasters to the smart speaker ecosystem in the future
- Challenges broadcasters', especially smaller ones', ability to monetise and deliver their services on smart speakers effectively

Benefits for *People* *Platforms* *Broadcasters*

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1) Mainly requests that combine different components of radio listening together, e.g. "station" + "Radioplayer" or "genre" + "Radio broadcaster"

d **Broadcaster access:** Policy focus should be on supporting safe news dissemination, and allowing fair access to listener data

Potential areas of policy intervention

- Support news broadcasters in protecting how their **news content is aggregated**
- Ensure **monetisation of content** is protected, and that radio content **cannot be monetised by platforms or aggregators, without explicit consent** from the content provider(s)
- Support **access of UK broadcasters to listening data** generated from their content on smart speakers, to enable continuous improvement of services
- Provide **UK broadcasters** with **user request data and trends** closely associated with radio (e.g. around specific key words "radio", "music", "play me…", location) to enable improvement of services and use cases
- Support access to **resources and tools**, to improve **processing and aggregation** of **contextual requests** around **news content**

Benefits of potential regulation

- Ensures safe access to news, without the potential for false/ inflammatory content appearing alongside reputable sources
- Improves consumer experience with voice commands in general
- Improves the reputation of smart speakers as valid avenues for news listening and as safe platforms for kids and adults alike
- Encourages further investment and monetisation on smart speaker platforms
- Maximises ability of broadcasters to effectively monetise their content and improve quality of service
- Protects broadcaster brand safety around news content dissemination

Benefits for *People* *Platforms* *Broadcasters*

Risks if not considered

- Enables the spread of potentially inflammatory or false content alongside news content, harming consumers and broadcaster brands alike
- Challenges broadcasters', especially smaller ones', ability to monetise and deliver their services on smart speakers effectively
- Limits radio broadcasters' ability to improve consumer experience on smart speakers, potentially harming radio consumption on smart speakers and in general
- Increases user frustration, leading to long-term avoidance of radio and reduced smart speaker use in general

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TEST detailed findings

TEST Framework reminder

Smart speakers TEST framework

Availability

Pre-installed applications:

Music players and additional apps (**"Skills" or "Actions") preinstalled** and activated

Applications available to install:

Group or service level apps that **can be installed/ activated at the request** of the user

Support & personalisation

Documentation

Availability **of documentation and user support** to enable radio listening

Assess this in the context of **ease** and **discoverability** ("How hard do I have to look to find what I need, in relation to radio?")

Defaults

Applications and "Skills" that are set as the **default service(s) for audio requests**.

Ability and ease of **changing and adapting** those defaults to the user's needs

Personalisation

Level of **interoperability and customisation** that can be carried over between favourite apps and smart speaker providers

Prominence

General requests:

Station/app access (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:

Station/app access (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:

Station/app access (and content surfaced) in response to **requests for a particular track, artist, station or show** –e.g. a specific streaming service (e.g. Spotify) or radio station (e.g. Global Player) or aggregator (E.g. TuneIn)

Broadcaster Access

News access

How does news content access look like on smart speakers from **generic** and **specific requests?**

Reputational and commercial risks for **broadcasters** for potentially harmful content appearing next to news content

Details of research questions in Appendix

Caveats to smart speaker testing

There are some important caveats and considerations surrounding our smart speaker testing analysis

Despite high penetration of Smart speaker devices[1], predicting future of radio on these platforms is challenging: High device ownership, and growth in digital radio listening[2], means that getting radio right on smart speakers is key. However, actual use of smart speakers is not easily correlated with ownership[1], and trends are difficult to pinpoint (see recent changes to RAJAR methodology). Our core hypothesis is that smart speaker consumption behaviours are important nevertheless, as they can affect radio consumption behaviours as a whole in the future

Rigorous testing of smart speaker radio prominence do not reflect actual consumer use cases: There is a difference between theoretical ("what is theoretically possible") and practical ("what consumers will do") prominence of radio on smart speakers, and this is discussed in the "Prominence" section. The consumer "UNDERSTAND" research is essential in supplementing TEST with real consumer experiences

TEST scope is not exhaustive: In this research we focused on the 2 pre-eminent smart speakers, Amazon and Google, together capturing ~85% of the UK smart speaker market. We also focused on testing the availability and prominence of the main radio stations in the UK. While we did consider implications for the wider ecosystem, and did test smaller, independent stations, our tests by no means capture the full radio landscape in the UK; we hope that our conclusions cover the concerns and considerations of most stations and platforms not tested

Increased interoperability protocols are on the horizon: …with industry-wide initiatives like Matter[3] or Amazon's Voice Interoperability Initiative[4] aiming to improve connectivity and personalisation of smart speaker devices. The impact of new protocols on radio remains to be seen, but it is nevertheless an opportunity for broadcasters to improve quality of service on smart speaker devices in the future

Notes: (1) OfCom Media Nations report 2021, (2) Digital radio UK (link) (3) Matter, the industry initiative on establishing a smart home interoperability protocol, was launched in 2019 (link), (4) Amazon's Voice Interoperability Initiative (link)

Smart speaker scoring scale

Scoring scale:

Amazon Echo alexa

Google Nest

Success: *Speaker meets all dimensions adequately*

Room for improvement: *Speaker succeeds in some dimensions but some risks remain*

At risk: *Speaker fails in most dimensions, leading to potential risks for consumers and radio broadcasters*

Speaker dimensions assessed

- *Meets request accurately in context (e.g. play the radio)*
- *Meets request accurately in specifics (e.g. play this station)*
- *Array of options as default*
- *Adapts to user preferences*
- *Theoretical user controls*
- *Practical user controls*

a **Availability:** Most big broadcaster stations are now available via direct integrations; smaller stations lack direct access

Availability – summary

- Good availability of **ubiquitous music players**[1], but **few native radio apps** come pre-installed or already integrated
- **Big broadcasters** (e.g. BBC, Global player) **have direct integrations**, helping users access those broadcasters' stations directly
- Most **independent stations** (E.g. smaller or location- specific) **do not have native apps**, and can only be accessed via aggregators
- As a result, national, **larger stations get priority over local stations** when playing radio

Amazon Echo

- \+ BBC sounds, Global player, Planet radio and Wireless apps all pre-installed
- \+ Smaller stations can be accessed via TuneIn out of the box
- \- Smaller stations lack native apps and can only be reached via aggregators
- \- Some local stations available but priority is overall given to national stations

Google Nest

- \+ Big broadcaster stations can be accessed via integrated native apps
- \+ Smaller stations can be accessed via TuneIn out of the box
- \- Smaller stations do not have native apps and can only be reached via aggregators
- \- Larger stations are always favoured over independent radio stations

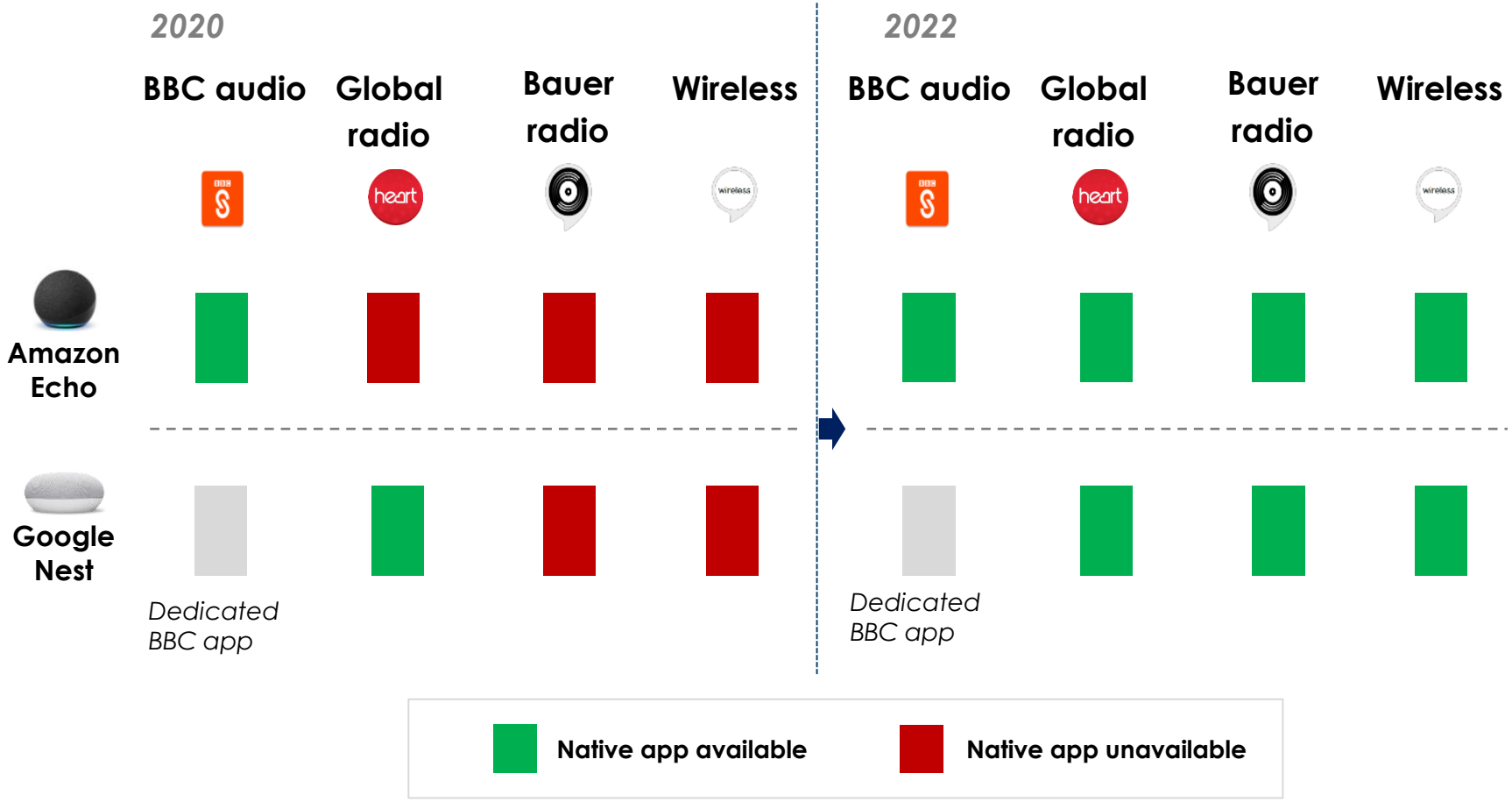
Note: (1) Includes common music apps, e.g. Amazon music (on Amazon), Spotify, Apple music, YouTube Music (on Google)

a **Availability:** Music players and apps still dominate defaults, but there is growing availability of radio services

Availability updated view – Q3 2022 – Not exhaustive

Notes: (1) Heart entertainment news and LBC news available, (2) Big Broadcasters' owned apps (e.g. BBC sounds, Global Player) offer streamlined access to their radio stations

a **Availability:** There has been significant improvement in the availability of native radio apps since 2020…



- Dedicated **radio broadcaster apps availability has improved** significantly since 2020
- This means easier **direct access for consumers** to big broadcaster radio stations…
- …and improved **data sharing and attribution** for the broadcasters from **smart speaker listening**

a **Availability:** …but creating a fair path for all broadcasters requires industry-wide support

Goal: "equal availability and access for all stations on smart speaker devices"

Creating an accessible path for all stations

Platforms **should ensure broadcasters are not charged** for access on smart speakers. This means avoiding **fees** to be **present on the platform, data sharing fees** or **fees for enhancing discoverability**

Platforms and industry leaders should work together to promote **initiatives that support integration of smaller stations**, including aggregators like **Radioplayer**

Needs to act:

- *Platforms*
- *Industry coalitions*

Actively supporting integration

Platforms should enable **easier access and transparency** to **routing algorithms** and **development support** for **Skills/ Actions,** in order to encourage further integration

Platforms should support, as much as possible, **equal discoverability** (by improving voice command recognition and processing) for **independent and new radio stations**

Needs to act:

- *Platforms*
- *Broadcasters*

Promoting service

Platforms should promote **new services** by capitalising on **contextual or near miss requests.** For example, encouraging **use of a new service** on command: "Did you know you can now listen to Station X via .."

Platforms should improve **default radio paths** to **contextual requests** (e.g. play me something else "...), and promote data sharing that can improve services (e.g. geolocation data)

Needs to act:

- *Platforms*

b **Support & personalisation:** Radio listening cannot be fully personalised, especially compared to music listening

Support & personalisation – summary

- Out-of-the-box, **users have limited choice of radio apps** to be used as part of their personal audio experience
- **After linking** of radio apps, **speakers are better at personalising listening** from big radio broadcasters, but **radio apps cannot be set as default for audio**
- While **music preferences** (e.g. Spotify) can be transferred across digital ecosystems, this is **less evident with radio apps**
- Users can improve personalisation of radio listening by **setting up individual routines**

Amazon Echo

- \+ All music apps can be set to default
- \+ Can easily set-up routines to allow radio listening in different contexts
- \- No Radio app can be set as default music or audio player[1]
- \- Limited control over radio listening before linking of 3rd party apps
- \- Cannot process requests to play last station or song
- \- Contextual radio requests can only be correctly routed via routines

Google Nest

- \+ All music apps can be set to default
- \+ Can easily set-up routines to allow radio listening in different contexts
- \- No Radio app can be set as default music or audio player[1]
- \- Limited control over radio listening on native radio apps (e.g. contextual radio request can only be set-up via routines)
- \- Cannot process request to play last station or song

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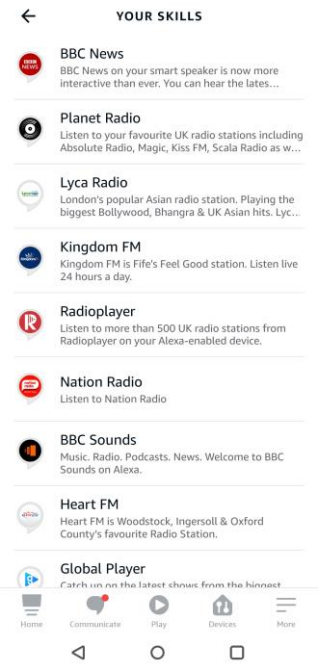
Note: (1) While specific preference settings exist for Music & Podcasts and News, there are no preference settings available for radio

Support & personalisation: Big station apps can be personalised, but priority still given to default music players

Contexts tested	*Desired outcomes*	*Practical outcomes*	*Score*
Account linking	"When I link my music and radio apps account(s), the smart speaker will adjust my experience to my preferences accordingly"	- **Music app experience** improved after linking, with ability to play songs from playlists and favourite songs - **Radio app experience** remained the same	
Playing last song or station played	"The smart speaker will play the last song or the last radio station I was listening to, via the correct app"	- **Last song** directs to the default music player, if that song was played through said player - **Last radio station** failed, even after linking	
Play the Radio	"The smart speaker will consider my linked accounts when deciding which radio station to play"	- **As default,** "play the radio" requests default to music player - **After linking,** radio stations will play through native apps when specified, but this is **constrained to big broadcasters**	
Set a radio alarm	"The smart speaker will allow me to set an alarm to my selected radio or music app"	- **Cannot be set via voice activation** unless speaker prompts this first - **Can be set** via a **linked radio app**, by **setting up a routine**	
Set a Routine	"I can define my own routines to support my radio listening experience" ***Detailed next***	- **Setting a routine significantly helps personalisation**, with the ability to set voice commands to open specific stations	

Support & personalisation: Routines can significantly boost personalisation

Personalisation – setting a routine takes 3 steps

Define Routine	Set Voice command	Select action
Name of Routine – e.g. "Morning Radio"	***E.g. "Alexa, play morning radio"*** 	***From Skills, select radio:*** 

- **Setting up a routine** can significantly enhance radio listening experience
- **This is particularly useful** for people who want to **redirect contextual or generic requests** to radio (E.g. "Alexa, play music" can be set up to open a specific radio app)
- **Improving user visibility around routines** in the context of radio listening, has the potential to impact the time spent listening to the radio on smart speakers

b **Support & personalisation:** Limited options to personalise radio listening compared to music players

Contexts tested	*Desired outcomes*	*Practical outcomes*	*Score*
Account linking	"When I link my music and radio apps account(s), the smart speaker will adjust my experience to my preferences accordingly"	- **Music app experience** improved after linking, with ability to play songs from playlists and favourite songs - Unable to link accounts for radio services. **Radio app experience** remained the same	
Playing last song or station played	"The smart speaker will play the last song or the last radio station I was listening to, via the correct app"	- **Last song** directs to the default music player, if that song was played through said player - Request for **last radio station** failed	
Play the Radio	"The smart speaker will consider my linked accounts when deciding which radio station to play"	- **As default,** radio requests will play through an aggregator or native radio apps, but this cannot be customised - **Radio stations** will play through **native apps** when specified	
Set a radio alarm	"The smart speaker will allow me to set an alarm to my selected radio or music app"	- Can be set **via voice activation**	
Set a Routine	"I can define my own routines to support my radio listening experience" ***Detailed next***	- **Setting a routine significantly helps personalisation**, with the ability to set voice commands to open specific stations	

b **Support & personalisation:** Routines can significantly boost personalisation

Personalisation – setting a routine takes 3 steps

Define Routine	Set Voice command	Select action
Name of Routine – e.g. "Morning Radio"	***E.g. "Hey Google, play morning radio"*** 	***From Play and Control media, select radio → type in request:*** 

- **Setting up a routine** can significantly enhance radio listening experience
- **This is particularly useful** for people who want to **redirect Contextual or generic requests** to radio (E.g. "Hey Google, play the radio" can be set up to open a specific radio app)
- **Improving user visibility around routines** in the context of radio listening, has the potential to impact the times spend listening to the radio on smart speakers

b **Support & personalisation:** Personalisation can be greatly improved by elevating radio to the level of music and news

Paths to improve personalisation and support around radio		*Provider affected*
Improved contextual processing	Support the creation of more **contextual uses for radio**, including playing favourites or stations frequently listened to. Encourage user input to **confirm request interpretation**	 *Neither speaker will prioritise radio listening to "favourites" or "Last played" requests*
Enhanced defaults for radio listening	Allow **defaults for generic or contextual radio listening** (e.g. types of music, charts), by enhancing ability of speakers to revert to radio specific options (e.g. "Would you like me to play this via Global radio?")	 *Support for generic or contextual radio requests is limited on Alexa, nearly always defaulting to music apps*
Improved voice correction options	Create better alternatives to **near-miss requests around radio**, to enable consumers to redirect; this can include **aggregators** or **voice support to set-up routines**	 *Neither speaker can effectively course correct around contextual radio requests*

C **Prominence:** Radio prominence greatly improved with big broadcaster integrations, but smaller stations face challenges

Prominence – summary

- **General and contextual requests** (incl. "radio", "local news") most often lead to the native music (or news) player apps, because **radio apps cannot be set as default**
- **Requests for big broadcaster stations** – BBC, Global, Bauer and Wireless – are accessed via their **dedicated apps** after linking
- **Requests for smaller stations** handled mostly via TuneIn, with limited native apps available; **practical prominence still an issue**
- **Radioplayer** offers an alternative to TuneIn on Amazon, but is **never prioritised**

Amazon Echo

- \+ Once native radio apps are linked, all requests go through their native apps by default
- \+ Requests for local stations (e.g. Scottish radio) or music are interpreted[1]
- – As default, all small radio station requests played through TuneIn…
- – … or are incorrectly recognised
- – No way to redirect listening to Radioplayer (over TuneIn) unless explicitly asked
- – Contextual requests, including "local radio" always revert to pre-installed apps

Google Nest

- \+ Requests for BBC, Global and Bauer radio stations always play through their native apps by default
- \+ Requests for local stations (e.g. Scottish radio) and music are interpreted[1]
- – As default, all small radio stations requests played through TuneIn
- – Listening to Radioplayer is not supported
- – Contextual requests, including "local radio" always revert to pre-installed apps
- – Radioplayer cannot be set as default aggregator (over TuneIn)

Notes: (1) Requests for local music were played through the default music player. Requests for local radio only worked when specific elements were made explicit e.g. "BBC Scotland" or "Nation Wales"

C **Prominence:** … on Amazon is elevated with specific requests, with general or contextual requests being less successful

	Score	Summary
General requests: Station/app access (and content surfaced) in response to **requests such as "music", "news" and "radio"**, without specifying a particular service, station or piece of content		- **Music and news requests** processed through dedicated apps, but radio more ambiguous, often resulting in music titles played through the default music player (e.g. Amazon music) - **General requests do not lead** to **dedicated Radio apps**, even after installation and linking of all relevant apps[1]
Contextual requests: Station/app access (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		- **Genre or music** requests always play through default music player - **Limited ability** (within test timeframe) of speaker to play preferred music (e.g. "something I like", "something popular" etc.) content - **Language/ regional requests** are inconsistent, sometimes leading to local radio and other times opening a music player (e.g. "Scottish radio" → Spotify music)
Specific requests: Station/app access (and content surfaced) in response to **requests for a particular track, artist, station or show** –e.g. a specific streaming service (e.g. Spotify) or radio station (e.g. Global Player) or aggregator (E.g. TuneIn)		- Even after linking of radio apps, requests around **songs, artists and shows** were **never directed to a radio station**, always going through the default music player - **Radio station requests** for all big broadcaster radio stations play through **dedicated app after linking** - **Smaller, independent stations** will still play through TuneIn as default

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Notes (1) Scoring influenced significantly by inability to prioritise general radio listening, despite reasonable success with music and news

C **Prominence:** Improved prominence of big radio stations and news stations have been the biggest improvements since 2020

		Default	2020 Score	Default	2022 Score
General requests: 	Music	Music player		Music player	
	Radio	Music player		Music player	
	News	BBC		Default news player[3]	
	Local news	N/A		Central news player	
Contextual requests: 	Genre	Music player		Music player	
	Mood	Music player		Music player	
	Something I like	N/A or inconsistent		Music player	
	Local radio	Not tested		Radio app but inconsistent[4]	
	Accents[5]	Not tested		Correct outcomes	
Specific requests: 	Artist	Music player		Music player	
	Track	Music player		Music player	
	Show/ Podcast	Music player or BBC[1]		Music player or TuneIn or Radio station[1]	
	Charts	Music player[2]		Music player[2]	
	Big Radio station	Aggregator or BBC[1]		Ratio station apps	
	Small radio station	Aggregator		Aggregator (+few station apps)	

- **Main improvements** since 2020 come in the form of **improved prominence** from **radio** and **news radio** apps
- This mainly means improved requests for **general news** and for **specific big broadcaster stations**
- **Contextual requests** still **favour music players…**
- **… while specific requests for smaller stations** inevitably **favour TuneIn**

Notes (1) Highly dependent on how specific the request was, with inconsistent results, (2) For Amazon, only played through Amazon Music, (3) many more options including Sky news, LBC news, The times etc., (4) Sometimes speakers process requests through BBC or Global, but with no consistent success rate (5) Tested several UK accents (London, North England, Scottish, Welsh) as well as Central European and Mediterranean accents

C **Prominence:** Similar to Amazon, specific requests are most successful

	Score	Summary
General requests: Station/app access (and content surfaced) in response to **requests such as "music", "news" and "radio"**, without specifying a particular service, station or piece of content		- **Music and news requests** processed through dedicated apps, but radio more ambiguous, often resulting in music titles played through the default music player (e.g. Spotify) - **General requests are inconsistent -** sometimes lead to dedicated radio apps, but also played though the default music player (e.g. Spotify)
Contextual requests: Station/app access (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		- **Genre or music** requests always play through default music player - **Limited ability** (within test timeframe) of speaker to play preferred music (e.g. "something I like", "something popular" etc.) - **Language/ regional requests** default to music player (e.g. "Scottish radio" → Spotify music) unless station name is specified
Specific requests: Station/app access (and content surfaced) in response to **requests for a particular track, artist, station or show** –e.g. a specific streaming service (e.g. Spotify) or radio station (e.g. Global Player) or aggregator (E.g. TuneIn)		- Requests around **songs, artists and shows** were never directed to a radio station, always going through the default music player - **Radio station requests** for big broadcasters play through dedicated app - **Smaller, independent stations** will still play through TuneIn as default

C **Prominence:** Google's specific prominence has improved, but general or contextual processing has broadly stayed the same

		Default	2020 Score	Default	2022 Score
General requests:	Music	Music player		Music player	
	Radio	Music player		Music player or radio app	
	News	BBC		Default news player[3]	
	Local news	N/A		Central news player	
Contextual requests:	Genre	Music player		Music player	
	Mood	Music player		Music player	
	Something I like	Music player		Music player	
	Local radio	Not tested		Radio app but inconsistent[4]	
	Accents	Not tested		Correct outcomes	
Specific requests:	Artist	Music player		Music player	
	Track	Music player		Music player	
	Show/ Podcast	Music player or BBC[1]		Music playrer[1]	
	Charts	Music player[2]		Music player[2]	
	Big Radio station	Aggregator or BBC[1]		Ratio station apps	
	Small radio station	Aggregator		Aggregator (+few station apps)	

- **Main improvements** since 2020 come in the form of improved prominence from **radio and news radio** apps
- This mainly means improved requests for **general news** and for **specific big broadcaster stations**
- **Contextual requests** still **favour music players…**
- **… while specific requests for smaller stations** inevitably **favour TuneIn**

Notes (1) Highly dependent on how specific the request was, with inconsistent results, (2) For Amazon, only played through Amazon Music, (3) many more options including Sky news, LBC news, The times etc., (4) Some times speakers process requests through BBC or Global, but with no consistent success rate (5) Tested several UK accents (London, North England, Scottish, Welsh) as well as Central European and Mediterranean accents

C Prominence tracker deep dive

Assessment

Request works correctly, and prioritised each time

Request works sometimes, usually only when explicitly spelled out

Request doesn't work

Glossary

Pre-loaded (music) player	**Includes common music apps, e.g. Amazon music, Spotify, Apple music, YouTube Music**
Aggregator	**Includes TuneIn (commercial) as well as Radioplayer (industry aggregator)**
Native app	**Includes any radio group app (e.g. BBC sounds, Global Player) as well as radio station specific apps (e.g. LBC news app)**

C **General:** News access through dedicated radio apps intuitive, but general radio requests harder to get right

After user links accounts[1]

General requests	Plays on pre-loaded player	Plays on aggregator	Plays on native apps	Course Correction ability
Music				
Radio				
News requests			*Selected news radio app*	
Local radio			*Most often reverts to the central or national radio app*[2]	
Niche request (e.g. sports, international news)	*Speaker might play song or podcast – depends on command*		*Speaker might play the news – depends on command*	

- **Music request** processed through default music app, which can be readily changed
- **News request** processed through default news app, which can be readily changed
- **Radio request(s)** had mixed results, most often playing through the default music player (e.g. Amazon music)
- **After linking apps,** a routine can be defined to improve customisation
- **Niche requests** see inconsistent outcomes and cannot be reliably directed to radio

Notes (1) Linking of accounts refers to the user "signing in" to the Global Player or BBC sounds app on Alexa using their accounts to the respective platforms
(2) Caveat that testing took place in London; performance in other regions would need to be independently tested – our consumer testing confirmed this remains an issue outside of London

C **Specific:** Even after linking, specific requests around songs, artists and shows were never directed to a radio station

Specific content requests

		Before user links accounts[1]			*After user links accounts*[1]		
Dimension	**Example**	**Plays on pre-loaded player**	**Plays on aggregator**	**Plays on native apps**	**Plays on pre-loaded player**	**Plays on aggregator**	**Plays on native apps**
Artist	Play [artist name]						
Track	Play [song name]						
Radio show	e.g. 'Play the Chris Evans breakfast show'						
Podcast	Play [Podcast title]	*Speaker can revert to TuneIn for specific shows*			*Speaker can revert to shows*	*TuneIn for specific*	
Charts	Play [top 20] today	*Amazon Music only*			*Amazon Music only*		
Favourite content	Play last [podcast or song] I was listening to	*For previous songs it reverts to default music app; For podcasts it can revert to TuneIn if it was the last player used*			*For previous songs it reverts to default music app; For podcasts it can revert to TuneIn if it was the last player used*		
Favourite Radio	Play the last radio station I was listening to						

Notes: (1) Linking of accounts refers to the user "signing in" to the Global Player or BBC sounds app on Alexa using their accounts to the respective platforms

C **Specific:** Specific requests for radio result in strong prominence for large broadcasters, but only after linking

Specific Radio station requests

		Before user links accounts[1]			*After user links accounts[1]*		
Channels	**Example**	**Plays on pre-loaded player**	**Plays on aggregator**	**Plays on native apps**	**Plays on pre-loaded player**	**Plays on aggregator**	**Plays on native apps**
BBC sounds	Play BBC sounds			*Linking of account prompted*			
BBC (other[2])	Play BBC 1 Play BBC 1 via BBC sounds Play BBC 1 via TuneIn/ Radioplayer		*When asked explicitly*			*When asked explicitly*	
Global Player	Play Global player						
Global (other[2])	(as BBC example)		*When asked explicitly*			*When asked explicitly*	
Planet Radio	Play Planet Radio						
Bauer (other[2])	(as BBC example)		*When asked explicitly*			*When asked explicitly*	
Wireless app	Play Wireless radio						
Wireless (other[2])	(as BBC example)		*When asked explicitly*			*When asked explicitly*	
Independent e.g. Lyca Radio Colourful radio, Asian sounds, Soho Radio	Play Colourful radio Play Colourful radio via TuneIn/ Radioplayer						*Few stations have available apps that can be downloaded*

Discussed on p.66

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Notes: (1) Linking of accounts refers to the user "signing in" to the Global Player or BBC sounds app on Alexa using their accounts to the respective platforms
(2) "Other" here refers to the actual radio stations from each brand, e.g. for BBC, this would be BBC radio 1, BBC radio 4, BBC radio 5 etc., for Global this would be Heart, Capital etc.

C **General:** News and radio access through dedicated radio apps intuitive, but local radio requests harder to get right

General requests

	Plays on pre-loaded player	Plays on aggregator	Plays on native apps	Course Correction ability
Music				
Radio	*Often resulting in music titles played through the default music player*			
News requests			*Selected news radio app*	
Local radio				
Niche request (e.g. sports, international news)				

- **Music request** processed through default music app, which can be readily changed
- **News request** processed through default news app, which can be readily changed
- **Radio request(s)** had **mixed results** - sometimes playing through dedicated radio apps, but though the default music player (e.g. Spotify)
- **A routine** can be defined to improve customisation
- **Niche requests** processed through default news app which can be readily changed

C **Specific:** Specific requests around songs, artists and shows were never directed to a radio station

Specific content requests

After all available customisation options[1]

Dimension	Example	Plays on pre-loaded player	Plays on aggregator	Plays on native apps
Artist	Play [artist name]			
Track	Play [song name]			
Radio show	e.g. 'Play the Chris Evans breakfast show'			
Podcast	Play [Podcast title]	*Speaker can revert to TuneIn for specific shows*		
Charts	Play [top 20] today			
Favourite content	Play last [podcast or song] I was listening to	*For previous songs and podcasts it reverted to default music app*		
Favourite Radio	Play the last radio station I was listening to			

Notes (1) There is no account linking on Google devices like there is on Alexa; all options to customise radio listening experience were explored

C **Specific:** Specific requests for radio result in strong prominence for large broadcasters

Specific Radio station requests

After all available customisation options[2]

Channels	Example	Plays on pre-loaded player	Plays on aggregator	Plays on native apps
BBC sounds	Play BBC sounds			
BBC (other[1])	Play BBC 1 Play BBC 1 via BBC sounds Play BBC 1 via TuneIn/ Radioplayer		*When asked explicitly*	
Global Player	Play Global player			
Global (other[1])	(as BBC example)		*When asked explicitly*	
Planet Radio	Play Planet Radio			
Bauer (other[1])	(as BBC example)		*When asked explicitly*	
Wireless app	Play Wireless radio			
Wireless (other[1])	(as BBC example)		*When asked explicitly*	
Independent e.g. Lyca Radio Colourful radio, Asian sounds, Soho Radio	Play Colourful radio Play Colourful radio via TuneIn			

Discussed on p.66

Notes: (1) "Other" here refers to the actual radio stations from each brand, e.g. for BBC, this would be BBC radio 1, BBC radio 4, BBC radio 5 etc.
(2) There is no account linking on Google devices like there is on Alexa; all options to customise radio listening experience were explored

C While Prominence as a whole has improved, practical prominence remains a key risk

Prominence assessment: Theoretical vs Practical prominence

	Theoretical prominence – *theoretical availability, visibility and discoverability– "What is possible"*	**Practical prominence -** *practical availability, visibility and discoverability– "What will a user do"*
User experience		
"I can ask the smart speaker to play me the radio, and it will do so consistently"	*Speaker will recognise the command…*	*… but will often play random titles through music apps or ask for more information*
"I can find the station that I am looking for, via simple voice commands"	*Speaker will most often identify the station, and will play it accordingly via an app or aggregator*	*Not all stations are recognised equally, with smaller stations often being incorrectly matched, causing frustration*
"I can ask for a specific station under different circumstances (e.g. play through an app, set a radio alarm)"	*Speaker can process big broadcaster station requests in different ways, depending on request*	*Most smaller stations are not integrated with speakers, and can't be customised to meet different requests*
"If the speaker makes a mistake, I can easily find my way to my preferred radio station"	*Speakers can re-direct service if a recognised app or service is asked for*	*Speakers find it difficult to redirect custom user requests, and users receive limited help on how to fix*
"Requests for different stations and apps are handled in the same way, in terms of accuracy and priority"	*Speakers can be customised, using routines, to enable user to favour whichever apps they want*	*Default music players, and to a certain extent broadcaster apps (e.g. Global) are heavily favoured without routines*

Practical prominence risks

- **Practical availability still a challenge for smaller stations**, hampered by the need to download apps and/ or go via aggregators
- **Voice activation favours pre-installed apps** and **big broadcasters** with integrated services; integration a challenge for **smaller stations**
- **Course correction around radio is limited** when it comes to user custom requests, which may **discourage use and listening**, as users seek simple and repeatable commands
- **Fair prominence** is a challenge, with users **having to set-up routines** to overcame prominence issues – **3/4 of smart speaker radio listeners do not customise listening**[1]

Notes: 1) MTM ScreenThink 2022

C Dependencies on TuneIn carry risks around flexibility of service, prominence, monetisation and attribution

Context - Why TuneIn helps +

TuneIn is the **default aggregator** on smart speaker devices, allowing users to listen to local and international radio stations, under a single app

TuneIn helps smaller stations provide **radio services on different platforms and devices,** without the need to scale up their own apps and infrastructure

TuneIn ensures that **users have access** to their favourite radio station(s) without the need to go into additional effort to download multiple aps and services

Potential risks –

Flexibility of service	Stations relying on TuneIn for streaming radio, have **limited ability to influence quality of service** and **customer experience,** with no direct access to listener data and no way to influence TuneIn's own services
Dependency for prominence	Recent legal challenges[1] have resulted in **TuneIn incorrectly removing smaller stations from the platform** on grounds of licensing issues; with such issues continuing[2], stations want to act to protect their access
Monetisation	TuneIn is able to **control monetisation of ads and data** on its platform, and offer premium services that remove ads altogether, **limiting ability of stations to monetise content**
Attribution	BBC research and the Digital Radio and Audio review highlight that **association and attribution of content to brands** on **3rd party apps** and **aggregators** is **significantly reduced**, compared to when consumed directly

Notes: 1) TUNEIN LOSES APPEAL AGAINST JUDGMENT IN SONY AND WARNER COPYRIGHT INFRINGEMENT LAWSUIT IN THE UK – Musicbuisnessworldwide (link), 2) TuneIn starts to remove UK radio stations from its platform – RadioToday (link)
Source: The Digital Radio and Audio review

C New native apps and Radioplayer have helped broadcasters limit dependencies on TuneIn, but issues remain

Mitigating actions			*Success to date*
Direct relationships and pre-installed apps	Big Broadcasters	Integrate **owned apps** that support access to all owned radio stations and programs (E.g. BBC sounds, Global Player) Form **direct relationships with smart speaker providers,** to have those services pre-installed those services	*The BBC, Global, Bauer and Wireless have been successful in integrating services on Amazon and Google products*[1]
	Independent stations	Integrate **owned apps** that support direct access to station Form **direct relationships with smart speaker providers,** to have those services pre-installed	*Very few smaller stations have applications available, and none come pre-installed, given smaller funding and negotiating power*
Aggregation	Radio player	Create **direct integrations** of industry-led aggregator **Radioplayer** with **smart speaker providers,** to enable fairer prominence for all stations	*Radioplayer is now available on Alexa, but is still given second priority over TuneIn; Not available with voice activation on Google*

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Notes: 1) Voice recognition, even for big broadcaster apps, still needs improvements despite steps taken to date

d **Broadcaster Access:** News access only through reputable news sources, but closer attention is needed by platforms on what content appears next to news

Broadcaster access – summary

- Priority for **news access always given to dedicated news apps** (e.g. BBC news, Sky) → speakers will ask user to define preferences upfront
- **Music apps and aggregators don't get priority** here
- Limited **safety barriers on proximity requests –** speakers will play any type of content (radio or other) after a news segment or station
- **Specific requests** (e.g. "play me the news from station X"), work better than **contextual requests** (e.g. "play sports news")

Amazon Echo

- \+ Easy set-up of default news provider upfront
- \+ News listening only available through dedicated news apps (e.g. BBC news)
- \+ Many reputable news sources pre-installed

- \- No safety barriers around news content – any type of content could be accessed in proximity of a news segment
- \- Generic requests for local news often revert to central app or station
- \- News genre (E.g. "Sports news") requests just revert to the central app or station

Google Nest

- \+ Easy set-up of default news provider upfront
- \+ News listening only available through dedicated news apps (e.g. BBC news)
- \+ Many reputable news sources pre-installed
- \+ News genre (E.g. "Sports news") requests processed through dedicated news apps

- \- No safety barriers around news content – any type of content could be accessed in proximity of a news segment
- \- Generic requests for local news often revert to central app or station

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d **Broadcaster Access:** We tested access, attribution and safety around news content dissemination on smart speakers

What we tested		What it means
Access	- Can users access the news content they need on Smart speakers? - Are different types of news providers prioritised? Can users change defaults to improve access?	- Are reputable news sources prioritised on generic news requests (e.g. "play the news") or contextual news requests (e.g. "play sports news")? - Which news stations get prominence and availability on news segments? Which can be set to default?
Attribution	- Are news providers getting fair attribution for the news content that they produce and disseminate on smart devices (as opposed to aggregators or audio apps)?	- Do requests to play a specific news station lead to the correct station? - Do requests to play the news via a news app lead to the correct app? - Do aggregators get prominence in news access over news apps?
Safety[1]	- Do smart speakers have safety barriers to ensure that news content does not appear in proximity to misleading or potentially harmful content? - What are the risks for broadcasters as a result?	- What do smart speakers play "next" to a news segment, or when asked to "play something else"/ "something similar"? What are the potential risks? - What do smart speakers play "other news"? What are the potential risks?

Notes: (1) In the Digital Radio and Audio review, news organisations (especially the BBC) have raised concerns about the lack of attribution when their news content is used on smart speakers. In particular, they have noted the risk that their contribution will appear alongside news items containing false, inflammatory or misleading content

d **Broadcaster Access:** Access to news on Alexa has improved, but there still more to be done to ensure safety of content

		Outcomes summary		Score
Access	Generic (e.g. Play the news)	Default news player	*An array of options from reputable news sources (e.g. BBC, Times, Sky, Daily mail)…*	
	Genre (e.g. Play politics news)	Default news player	*… but limited ability to customise listening according to genre (E.g. politics, sports etc.)*	
	Local (i.e. Play local news)	Default news player or N/A	*Without specific context, Alexa reverts to default or sometimes misses request entirely*	
	Specific (e.g. play BBC news)	Selected news player	*An array of options from reputable news sources, easily accessed via voice command*	
	Default options	Default news player	*Any of the available news sources (and only news sources) can be set as default*	
Attribution	News station	Selected news player or aggregator	*Successful response to play specific stations, if app exists; else plays that specific station via TuneIn*	
	App	Selected news player	*Successful response to request to play through app*	
	Aggregator	N/A	*Requests never default to aggregators, ensuring attribution goes to news broadcasters*	
Safety	Play next	Same or other news player	*Inconsistent results, with speaker sometimes just playing the same station again*	
	Play something else	Music player	*Plays through default music player; no consideration of content or context asked*	
	Play some more news	Default news player	*Unless explicitly asked, Alexa will always play through the default news player*	
	Play news from [other][1]	Selected news player	*Successful request to play specific stations, if app exists; else plays via TuneIn. No consideration of the context of news played before*	
	Other (e.g. play music)	Music player	*Plays through default music player; no consideration of content or context asked*	

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Notes: (1) While the Speaker is successful at changing stations when explicitly asked, the lack of any consideration for the content proximity can lead to potentially unsafe results for broadcasters

d **Broadcaster Access:** Access to news on Google has improved, but there still more to be done to ensure safety of content

		Outcomes summary		Score
Access	Generic (e.g. Play the news)	Default news player	*An array of options from reputable news sources*	
	Genre (e.g. Play politics news)	Default news player	*Good ability to customise listening according to genre (E.g. politics, sports etc.)*	
	Local (i.e. Play local news)	Default news player	*Without specific context Google reverts to default*	
	Specific (e.g. play BBC news)	Selected news player	*An array of options from reputable news sources, easily accessed via voice command*	
	Default options	Default news player	*Any of the available news sources (and only news sources) can be set as default*	
Attribution	News station	Selected news player or aggregator	*Successful request to play specific stations, if app exists; else plays via TuneIn*	
	App	Selected news player	*Successful response to request to play through app*	
	Aggregator	N/A	*Requests never default to aggregators, ensuring attribution goes to news broadcasters*	
Safety	Play next	Same or other news player	*Inconsistent results, with speaker sometimes just playing the same thing again*	
	Play something else	Music player	*Plays through default music player; no consideration of content or context asked*	
	Play some more news	Same or other news player	*Inconsistent results, with speaker sometimes just playing the same thing again*	
	Play news from [other][1]	Selected news player	*Successful request to play specific stations, if app exists; else plays via TuneIn. No consideration of the context of news played before*	
	Other (e.g. play music)	Music player	*Plays through default music player; no consideration of content or context asked*	

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Notes: While the Speaker is successful at changing stations when explicitly asked, the lack of any consideration for the content proximity can lead to potentially unsafe results for broadcasters

b→d **Near miss handling:** Smart Speakers have made important steps in improving course correction since 2020

Course correction analysis

	Personalisation & Support	Prominence	Broadcaster Access
Scenario	***Speaker is asked to revert to the last (or favourite) song or podcast played and fails*** *E.g. "Alexa, play the last podcast I was listening to"*	***Speaker fails to reach the correct station or app, and is asked to redirect*** *E.g. "Alexa, play [station x]… Alexa play [station y]"*	***Speaker is asked to play news in context and fails*** *E.g. "Alexa, play Politics news' or 'Alexa play me the latest news'*
2020 Outcomes:	Speakers can recall songs and sometimes podcasts, but specific episodes/stations cannot be recalled	Difficult to 'course correct' and access radio content once a request has been made	
2022 Outcomes:	Speakers can recall songs and sometimes podcasts, but specific episodes/stations cannot be recalled	Speakers can now readily redirect across different apps and aggregators with ease	Google can direct news genre requests with confidence, but Alexa struggles after a near miss of news genre or segment

Speaker response to contextual asks around previous requests or news access requests still challenging after a near miss…

… but significantly improved course correction for radio specific requests elevates experience, and is a testament to the efforts of the radio industry to create more direct integrations with platforms

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_Detailed consumer findings

Reminder of UNDERSTAND approach

We spoke to a **total of 10 respondents** with varying radio habits;

- **5 x smart radio listeners**: currently listening to the radio regularly via smart speakers
- **5 x smart non-radio listeners:** currently listen to a range of audio but not radio on smart speakers

1

4-day app-based media diary pre-task, recording natural usage of smart speakers and prompted radio activities

- **Task 1** – introducing themselves and current smart speaker use
- **Task 2** – recording real-world use of smart speakers for audio, recording commands used and experience
- **Task 3** – prompted radio activities to complete, recording commands used / completion and reactions to experience

Activities set include;

- Listening to radio stations – across bigger and local / independent
- Listening to radio via native apps (BBC Sounds, Global Player), and aggregators (TuneIn, Radio Player)
- Personalised requests e.g. play me last station, play me something I like, set up a routine
- Listening to the news on speaker – across a range of news requests

2

30 minute follow up depths to exploring current and prompted radio listening on smart speakers;

- Recap of smart speaker listening behaviours
- Exploring real world radio listening via speaker, and barriers for non-radio listeners
- Delving into activities completed via speaker, users experiences (benefits/ pain points), propensity to try again
- Suggested / desired improvements for radio listening on smart speakers

All users spoken to were able to recommend ideas for how radio smart speaker experiences could be improved

Improving inconsistencies in access

High appetite for consistent access to all stations, especially smaller and independent stations that can be more challenging and unpredictable to access.

Facilitating seamless radio listening

Desire for all radio-based apps and aggregators needed to come **integrated and synced as standard** (removing need to download). High desire for one single radio aggregator to navigate from.

Easy access via voice

Reflecting how majority of users prefer to use smart speakers, demand for **all radio-based tasks to be achieved through voice commands**. In app experiences frustrate and can put off radio listening.

Improving accessibility of radio

High proportion of users spoke to the fact listening to the radio via smart speakers could be more challenging for new users and less technologically advanced – and **improvements are needed to improve the accessibility**

Greater support and advice

Demand for more support and guidance when setting out to use the radio via speakers e.g., commands to use, and tutorials when navigating more challenging tasks e.g., setting a preferred station, creating a routine.

More choice over content consumed

High appetite to choose content consumed on speakers e.g., more localised content and news broadcasters. Many would like speakers to facilitate these choices with greater ease e.g., prompting the decision vs default.

Current access: Half of our sample currently listen to the radio via their smart speakers…

General smart speaker usage

- Engaged with **listening to a range of audio content on smart speaker**, across music, radio, podcasts and news
  - Most have a variety of audio apps synced to speaker across Spotify, Amazon music, TuneIn, BBC Sounds
- **Music and radio dominate listening**, but can differ between occasion
  - Gravitate to music to listen to personal content e.g. playlists saved
  - Radio tends towards lower immersion, background and companion listening e.g. when working from home

Listening to the radio

- **Radio is an essential part of listening** on smart speaker, with majority accessing every day;
  - Most have habitual routines of listening to the radio e.g. when getting ready in the morning, cooking dinner etc.
  - Gravitate to well-known bigger stations like KISS, Heart, and BBC radio 1, and BBC 2
  - Some using smaller niche stations accessible via TuneIn – RJR, LBC, Vibes FM

> *I often listen to radio in morning around breakfast or getting ready, and then when making dinner. The kids are often involved we like listening to heart 80s.*
>
> [Female, smart radio listener]

Current access: … and the other half do not listen to the radio via smart speakers, but are engaged radio listeners

General smart speaker usage

- **Mostly use smart speakers to listen to music**, with some progressing to use to listen to **podcasts and occasional news** snippets
  - Music streaming makes up high proportion, often Spotify and Amazon Music valued for personal content e.g., playlists
  - Content varies between user and occasion e.g., educational podcasts, nursery songs and soothing music for the dog

Listening to the radio

- While engaged with listening to the radio in other ways, most **haven't considered or attempted radio listening via smart speaker**
  - High proportion of radio listening outside home e.g., in car, desire for something else when at home
  - Habits around listening on other devices in home(connected TV)
  - Satisfied with current experience of listening to music via speaker, and haven't explored beyond this

> *Never thought of using it [smart speaker] for the radio, I just thought my speaker was what I've synced up, not flexible to what I want now… I never thought about it being reactive to me and what I want in the moment. Just use it to play my pre-set playlists*
>
> [Male, smart non-radio listener]

Current access: smart radio listeners have positive experiences listening via their speakers, but do experience some challenges

Majority have **positive experiences** accessing the radio via their smart speakers, highly valuing;

- Instantaneous results, easily facilitated by voice (vs hand devices)
- Seamless access to radio stations, replicating experience many are used to in listening in the car

> *The experience of playing radio stations is not difficult, very easy, it went straight to what I needed. You ask for what you want and you get it. It's often very responsive.*
>
> [Female, Smart radio listener]

Most have **adapted routines for listening** to the radio and prefer to stick with the status quo;

- Go back to familiar radio stations they know their speaker can access
- Use specific and simple commands – avoid any tasks that involve phone e.g. download apps, create routines etc

> *It is simple to use, especially when it knows what you're asking for, it becomes difficult if in a rush / not consistent – doesn't always do what you want*
>
> [Male, Smart radio listener]

However, **most have experienced some challenges** accessing radio via smart speakers;

- Access is inconsistent – 'hit or miss', some able to listen to radio 50% of the time
- Often depends 'how the speaker is feeling'
- Difficulties in accessing local content and independent stations

> *For me its not complicated, but it can be a bit of a faff, when its not connecting or doing what I want it to.*
>
> [Male, Smart radio listener]

Current smart users have a good experience listening to the radio, but feel it can be improved.

Current access: While new radio smart listeners, found the experience more challenging and called for greater support

New users **expected the process** of listening to the radio **to be easier** than experienced

- Expected easy commands to produce results, comparable to music requests
- Initial admin stage of downloading and syncing apps off-putting to many

> *Listening to the radio wasn't very easy, and that would put me off listening in the future – the stations I wanted I couldn't access and so that would put me off.*
>
> [Male, smart non-radio listener]

With their **lack of experience** in listening to the radio often resulting in **failed requests**;

- Unable to access unless include 'radio' in – defaulting to music or non-responsive
- Difficulties accessing radio stations where apps are needed (on Alexa devices), and smaller local stations

> *Not novice friendly – needed more support / info setting it up - maybe a link to show you how to do these things e.g. YT tutorial / video to watch*
>
> [Male, smart non-radio listener]

Leaving many new listeners questioning if they were **'doing it right?'**

- Most were unsure over what commands would produce the best results for radio
- Desire for support and guidance in using speaker for the radio e.g. tutorial videos

> *Seemed complicated / doing something wrong – was there something I was missing?*
>
> [Female, smart non-radio listener]

Demand for greater support and guidance when setting up and using smart speaker to access the radio.

Current access: Challenging and difficult experiences are likely to discourage radio listening on smart speaker devices

Interestingly, majority of listeners are **accepting** of times when the speaker is **unable to fulfil radio-based requests**

- Often blaming it on themselves e.g. I'm not asking right
- Count as limitations of technology

However, the inconsistent and challenging experiences can **significantly deter radio listening** on smart speakers;

- New listeners unlikely to persist or come back to radio if experience difficulties
- Current listeners more patient as they have good experiences to reflect on, often moving on to another station or audio if issues occur
- Most default to music when radio is met with challenges, going to established music apps e.g. Spotify, Apple Music – for saved playlists
- Some will be put off listening to something altogether, and move on to other tasks
- Minority will persist with radio listening via alternative devices e.g. phone, TV

> *I haven't gone back to try and play it – hard task to do, haven't tried listening to the radio again on my speaker*
>
> [Female, smart non-radio listener]

> *Sometimes I just go to Spotify – I can't be bothered, I'll catch up on news later, I don't want to spend my valuable time faffing around and asking it again.*
>
> [Male, smart non-radio listener]

> *The fact it doesn't work, Kiss via TuneIn, it would be a barrier to me listening to the radio again*
>
> [Male, smart non-radio listener]

Availability: Users notice devices automatically play via native apps and aggregators, but do experience some difficulties

- **High awareness of speakers automatically** using native apps and aggregators to play radio, with most noticing the 'jingle' that starts
- While many value this enhances their experience with seamless access to radio stations, there are **significant differences between devices**;
  - **Alexa:** some apps integrated and synced, but not all which causes difficulties
    - Native apps Global Player, Planet Radio and Wireless accessible, but BBC Sounds triggers need to download in order to sync
    - TuneIn default for many, but some have to download and sync
  - **Google:** seamless experience with most apps already integrated
    - Native apps (including BBC Sounds) and TuneIn play as default
- However, **direct requests** to play via aggregators, TuneIn and Radio Player were **met with difficulties,** with all unable to complete request

Examples

"Alexa, play Absolute Radio via TuneIn." → Absolute Radio from Patrice's TuneIn → Absolute Radio on TuneIn Live isn't available right now

"Alexa play Magic via Radio Player" → Playing music by Radio player is not supported → "Why is it not supported?"→ To answer that question go to help and support section in the app

"Alexa, play Kiss via Global player" > playing the latest episode → "Say what? That's car crash technology"

Availability: Majority find having to download radio-based apps off-putting, a significant barrier to radio listening via smart speakers

Having to download radio apps to listen was a **common annoyance** and **off-putting to many**;

- Significant mentions of users not wanting too many / another app on their phone
- Annoyance of disparate / disaggregated apps to use for each station
- Difficulties of downloading, syncing and playing via apps (esp. less tech advanced)
- Downloading to phone takes users away from navigating via voice – often the sole reason for listening via smart speaker!

Initial admin of having to download apps to listen to radio stations could **widely discourage radio listening**;

- Users deferring to radio-based apps already integrated, or other audio content and apps they already access
- Off-putting to new listeners who could find the process too much 'faff' to persist

BBC SOUNDS

Significant consideration for BBC which isn't integrated across all devices (particularly Alexa)

- Most would not expect to have to download an app for the well-known BBC stations
- Potential barrier to accessing broadcaster radio stations, with many likely to defer to content that is more readily available

> *RadioX was accessible but for any BBC, I had to download BBC sounds, that's a bit weird, I'm a TV licence payer, how dare it refuse me? A major station I thought they'd be easier to access*
>
> [Male, smart non-radio listener]

Availability: There is widespread demand and expectations for all necessary radio apps to be readily available on smart speakers

Wouldn't expect to download the app to use it – should have a lot of apps built in as standard – expect a standard radio app that can pick up majority of stations

[Male, smart non-radio listener]

Would be easier if were pre-installed and then you just sign into it, because they are there for you – that would be a lot quicker

[Female, Smart radio listener]

Availability: Users have a low willingness to pay to access radio stations and this could potentially deter radio listening

Low propensity among both new and existing users to pay to access radio via smart speakers;

- Most are **accepting of adverts** when it comes to the radio, as this reflects how many are used to listening e.g. commercial stations in car
- **Current radio experiences aren't perceived 'good enough'** to encourage paying for it – there is not consistent access to radio
  - If paying to access radio, would need to be accessible each time but many have difficulties e.g. with certain stations, certain requests
- Majority have a **high number of subscriptions** already paying out for
  - In general many are looking to cut back on subscription costs at this time (cost of living crisis)

> *In app purchases? Some radio stations are commercial stations – I wouldn't see any reason to pay for it, unless one app that played them all and the app cost a couple £, then maybe I would. But as long as it plays when I ask, which it doesn't now so I wouldn't!*
>
> [Male, Smart non-radio listener]

> *Because I, once again, have Disney, Paramount, Netflix, Amazon Prime- and I'm paying for those already, because of my family, I have got 6 kids and lots of grandchildren - and the paying is the key thing, I don't really feel I need to pay any more. For music, I've got Spotify, I've got Amazon Music, and if it's one of those two, well, I'm not really that interested.*
>
> [Male, Smart radio listener]

Navigating: Smart listeners often listen to the radio in very specific ways, avoiding generic requests for fear of failure

Most current users have developed a **good understanding of how to access the radio** via their speaker, and don't like to stray too far from this;

- Using very specific and simplistic commands to access the radio
- Sticking to familiar stations they know their speaker can access (visited before)

High awareness that the smart speaker has limitations, and so many **prefer to stick with the status quo**;

- Putting off trying anything different or new when listening to the radio, due to fear of failure
- Avoid or haven't considered personalising radio listening experiences

Example radio requests observed;

"Alexa, play Rock FM"

"Hey Google, play Radio 1"

"Alexa, play Talk Radio"

"Alexa, play LBC radio"

"Hey Google, play heart 80s"

"Alexa, play Smooth radio"

"Hey Google, play KISS FM"

> *I can understand technology, but I've never gone out of the way to sit down and think of how many different ways kind of use it. If I find a way that works, I'll just stick to that.*
>
> [Female, Smart radio listener]

> *With radio, if you don't say exact name of the station – you have a problem.*
>
> [Female, Smart radio listener]

> *As I want it for things that are just simple it does work ok, but if I wanted to do something more challenging, I think that could be more problematic.*
>
> [Female, Smart non-radio listener]

Navigating: In comparison, music requests used tend to be more generic but often producing desired results

Users tend to **use more generic and open requests** when navigating to music on smart speakers;

- More conversational commands used e.g. play something I might like, play me some music

Most observe the experience with **listening to music tends to be easier than for radio**;

- Majority of music requests produce desired results, even those more progressive and challenging (E.g. asking multiple layers of genre, language, duration etc.)
- Even obscure requests often produce music results – defaulting to playlists stored on associated apps (Spotify, Amazon music) satisfies
- Non-smart radio listeners surprised at the difference between listening to music, expecting radio to be comparably as easy

Examples

"Alexa, play some music"

"Computer, play some Jazz"

"Alexa, play some R&B"

"Hey Google, play nursery rhymes for babies"

"Hey Google, play soothing music for dogs"

"Alexa, play Spotify for fifteen minutes"

> *Because when I go to play music […] it's my own playlist right, so I know I mean, like everything on it.*
>
> [Male, Smart radio listener]

> *If I listen to radio, I will ask exactly for the radio, but for music I'd say play me something by – I'm more direct with radio*
>
> [Female, Smart radio listener]

> *I Just generally say 'Alexa, play some music' […] I think we've got a playlist, too, so sometimes we say 'Alexa, play a playlist,' and she will. But it works just fine."*
>
> [Female, Smart radio listener]

Navigating: Users gravitate to major stations with an expectation they will be easiest to find, but some do experience difficulties…

Most (new and existing) smart speaker users **gravitate to listening to the bigger, well-known radio stations**;

- High expectation of being easier to find and access via smart speaker
- Often going back to familiar stations played before via smart speaker

However, whilst not the norm, some do **experience difficulties** accessing bigger, commercial and broadcaster radio stations (see right).

Positive examples

"Alexa, please play Kiss Radio Station." → Kiss from Planet Radio

"Alexa, play Heart." → Heart Northwest, from Global Player.

"Hey Google, play Radio 1." → Streaming BBC Radio 1 from the BBC.

Challenging examples

"Alexa, play KISS radio via TuneIn" → The station KISS FM Romania is currently unavailable on TuneIn"

"Hey Google, play BBC Radio 1 via the BBC sounds" → Sorry, I didn't understand.

"I used to listen to Heart every day, and then one day I went to it, and it was that 'sorry I can't find that radio station anymore,'"

> *I asked for Radio 1, I ask for this every day, I never have a problem- it always understands me, I always say the exact same thing.*
>
> [Female, Smart radio listener]

> *Capital didn't work, and that's my preference – if that worked, I'd be more likely to listen to that in the morning*
>
> [Male, Smart non-radio listener]

Navigating: This said, local and independent station prove the most challenging for users to access via smart speakers

Local and independent stations were **difficult to access;**

- Independent radio stations much harder to access, with some speakers unable to find at all
- Generic requests for 'local radio' saw significant difficulties as most speakers unresponsive
- Inconsistent access – some note their speaker sometimes plays local radio and sometimes not

Most were **surprised by the speakers lacking ability** to access local content;

- High awareness of speakers having GPS built in which many would expect to use to find local radio

Examples

"Alexa, play Charlie FM." → Cheesy FM, from TuneIn.

"Alexa, play local radio." → Playing most played songs → "No, Alexa, play a radio station." → Here is some music you'd like. → "Alexa stop. Play local radio" → Here is something you might like, 90s hip hop.

"Alexa play Leighton Buzzard radio" > Here is some music you might like on amazon

> *It was frustrating I didn't get a local radio station, I thought it had GPS data – that jarred me, I wouldn't use it to listen to radio, it just seems like a whole lot of hassle, I'd just listen to my music playlist*
>
> [Male, Smart radio listener]

> *The challenges I have are specific radio stations, it doesn't pick it up, so I have to choose another station I know it can pick up easily*
>
> [Male, Smart radio listener]

> *I asked for local radio stations and it didn't work – it didn't grasp the concept – I don't know if I should have said regional*
>
> [Male, Smart non-radio listener]

High appetite for local radio stations across the sample, which many would like greater ease in accessing.

Navigating: Users are put off trying to listen to the radio in different ways due to the extra hassle and difficulties experienced

- Smart radio listeners prefer to keep radio commands simple and so have **not explored beyond their basic use**
- When tasked to complete a range of personalisation activities, many found it **extremely challenging** to complete
- Majority of smart speakers were unable to complete personalised radio requests, often **unresponsive or offering something different**
- As a result, new and existing smart speaker users **likely to avoid personalisation tasks** in the future, favouring simpler requests

Play last radio station

Smart speakers **unable to complete request** (across devices);

- Often unresponsive (continues playing existing)
- Default to music content, esp. amazon music for Alexa
- Most found this surprising, especially regular radio listeners

> *Not a very good experience, I use it often, so you'd expect it to know what station played last – I even tried to reset it.*
>
> [Male, Smart non-radio listener]

Play me something I like

Mixed results, working for some users, but not all;

- Defaults to playing music content, often playlists on Spotify, Amazon
- Heavy radio listeners expected radio to play here
- Some speakers unresponsive to this task 'sorry I don't know that'

> *Same with 'play me something I like', she came back and basically had no idea what I was on about.*
>
> [Female, Smart radio listener]

Creating a radio routine

Most **able to complete** this task (eventually!) **but difficult**;

- High difficulties, many sought guidance to complete task
- Users disliked having to use phone to set routines (prefer voice)
- Often took a long time to set routine, leaving many question if it had worked of not

> *I wasn't sure what it was saying most of the times when it was giving me instructions to what to put in the routine. But I managed to do it.*
>
> [Female, Smart radio listener]

Navigating: Low willingness among users to course correct, driven by a lack of patience to wait

Low patience to course correct

Simply, having to course correct is a lot of 'faff' for users.

Undermining the desire to use smart speakers e.g. an easy and seamless listening experience

This is driven by a variety of factors;

- Low expectations of smart speakers – limitations of technology, history of inconsistent access
- Speaker often unable to change response if not able to fulfil request at first ask e.g. 'sorry I can't complete that'
- Time limited, looking for quick access to audio, often moving quickly to another station or type of audio
- Low awareness of other ways around it, especially new and less tech savvy users unsure of other commands to ask

> *I'm quite impatient – I would give up pretty quickly.*
>
> [Female, Smart radio listener]

> *Smart devices need to be kept simple, and if making complicated, I know a lot of people that stopped using them – often have to persevere*
>
> [Male, Smart non-radio listener]

> *I just pick it up pick another radio station I want to listen to, whether it's news or radio, so if I can't get sky news or CNN or BBC.*
>
> [Male, Smart radio listener]

News: When navigating to news content, smart speaker users tend to use a wider variety of generic commands

High volume of smart users **listening to the news** via their speaker in a variety of ways;

- Often catching up on the latest headlines / top stories
- Some use for specific news - sports the most commonly asked for and politics, entertainment rarer

Despite news commands being **broader and more generic** (vs radio), smart speakers respond well to the ask;

- Users tend to be more conversational when asking for news e.g. 'what's the latest'
- Generic terms e.g. 'play me the news' will often produce the best results from the speaker
- Difficulties experienced when users ask in specific ways e.g. specific broadcasters, types of news

Examples

"Hey Google, read me today's headlines in England"

"Alexa, what is the latest headlines"

"Hey Google, play me latest headlines"

"Alexa, play today's news"

"Alexa, play independent radio station"

"Hey Google, I want to hear entertainment news"

"Alexa, play local radio"

"Alexa, play a radio station"

> *To set for News and Sports etcetera, it wasn't too bad; but I noticed when you ask Alexa individual categories, it doesn't always pick up, which is a bit of a nuisance.*
>
> [Male, Smart non-radio listener]

> *I occasionally listens to the news on Alexa, but it's always easy, I just asks her to 'play the news'.*
>
> [Female, Smart radio listener]

> *I didn't know if I should say news headlines or newspapers or what, but it was quite easy. I didn't ask for a particular news, or anything like that, I just let it reel off on its own.*
>
> [Female, Smart radio listener]

News: When attempting more specific news requests, users often experienced greater difficulties

Better results → *Worse results*

Sports

Sports commands are **often varied, producing good result**s, with specific request met with difficulties;

"Alexa, tell me the latest sports news please?" → *Plays*

"Alexa, play Sky sports" → Sky sports on Amazon Music

> *When I asked for sports, it took a while, I had to ask a second time, but all in all, I found it quite easy."*
>
> [Female, Smart radio listener]

Entertainment

Specific entertainment news requests often saw difficulties with speaker confused, or unresponsive;

"Alexa, what's the latest UK entertainment news" → Here's something I found on the web

> *Initially, when I ask for the sports news, that wasn't too bad. But when I asked for political and entertainment news, that didn't come up straight away."*
>
> [Male, Smart non-radio listener]

Politics

Requests for **Political news content saw greatest challenges**, with most speakers unable to fulfil;

"Alexa, play political news" → Political Peek from 2020 on Apple Music.

"Hey Google play political news" → no response – keeps playing music

> *It was quite hard... The questions after that, it didn't quite understand. So yeah, that was quite tricky."*
>
> [Female, Smart radio listener]

News: While requests often default to reputable brands, users would like to be offered more choice of broadcaster

Generalised news commands often default to **larger, well-known broadcasters**;

- Most are pleasantly surprised with being served news via **reputable and trusted sources** (BBC as the common default across devices)

Examples

"Alexa play today's news" → plays BBC news

"Hey Google, play me latest headlines" → plays BBC news

"Hey Google read me today's headlines in England." → Read her something from Daily Mail.

However, users would like to have **more choice over news broadcaster** played;

- Specific news broadcasters are more difficult to access when asked

Some users were able to select broadcaster, but **widely unknown, or difficult;**

- Minority prompted with a choice, but not able to select broadcaster desired (Al Jazeera)
- Some users gone through process of pre-setting news, but low awareness
- Majority felt this process could be a 'faff', taking them away from voice control to set on phones is annoying

> *The news is easy, yeah, the news is really easy, because everybody knows CNN, everyone known Sky Sports... it's one of those things where they're so well known, I think every speaker system or software system has those as it's default."*
>
> [Male, Smart radio listener]

> *Shows me there are limitations with choice, things aren't pre-set, it doesn't give me the options, it just gives me what it wants, I don't have a choice within that ask. That could make a difference for me.*
>
> [Female, Smart radio listener]

High appetite for smart speakers to prompt and facilitate choice of news broadcaster.

Appendix

- TEST approach summary
- Questions for the consumer research

TEST: We focused on testing the preeminent smart speaker devices against access to leading radio stations and services

Objectives

Assess availability and prominence of radio on smart speakers, and associated functionality & support tools

+

Scope

- Test Google and Amazon devices
- Test prominence of BBC vs commercial providers vs aggregators
- Produce summary of 1) availability, 2) functionality and supporting defaults, 3) practical prominence, and 4) Broadcaster access

Smart speaker devices and ecosystems; *top sellers in the UK market*

60+% of UK smart speaker market[1]

~20% of UK smart speaker market[1]

List of services and stations *that fairly reflects the UK radio listener market*

Music and radio streaming services

BBC audio

Global radio

Bauer radio

List not exhaustive

Notes: (1) Swotly.io (2021)

TEST: Our approach stemmed from the research hypothesis

Smart speakers radio landscape – key challenges hypothesis

Availability	Support	Prominence	Broadcaster Access
*Broadcasters, especially smaller stations, have **limited ability to deliver direct and ubiquitous applications** on smart devices* *Risk that **broadcast content will be lost** on connected platform devices*	*Risk of consumers not being able to **navigate their way to their selected stations*** *Few broadcaster owned apps come **pre-installed** and often **cannot be selected as default*** ***Limited interoperability** between devices or operating systems[1]*	*Risk of **commercial and public radio being "downgraded"** in favour of **pre-installed music** players and defaults* *Broadcasters concerned their services are being downgraded while others are **being upgraded through paid promotion***	***Opaque news dissemination** and transparency risks broadcasters' ability to **attribute,** and to **ensure brand safety*** ***Limited access to data** hinders broadcasters' ability to **personalise services** and **monetise them** effectively**

*****Not part of **TEST**; captured in the recommendations*

DIGITAL RADIO AND AUDIO REVIEW

Notes: (1) Platforms offer some level of customisation for radio, including specific use cases (e.g. Amazon's Skills allows users to listen to radio in specific ways - e.g. see "Radio Paradise", Google has commands to listen to radio on TV or other speaker") but these are often limited, not transferrable, and not influenced by the broadcasters

TEST: Framework expands on the 2020 study

Smart speakers TEST framework

Deep dives next

Availability

Pre-installed applications:

Music players and additional apps (**"Skills" or "Actions") preinstalled** and activated

Applications available to install:

Group or service level apps that **can be installed/ activated at the request** of the user

Support & personalisation

Documentation

Availability **of documentation and user support** to enable radio listening

Assess this in the context of **ease** and **discoverability** ("How hard do I have to look to find what I need?")

Defaults

Applications and "Skills" that are set as the **default service(s) for audio requests**.

Ability and ease of **changing and adapting** those defaults to the user's needs

Personalisation

Level of **interoperability and customisation** that can be carried over between favourite apps and smart speaker providers

Prominence

General requests:

Station/app access (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:

Station/app access (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:

Station/app access (and content surfaced) in response to **requests for a particular track, artist, station or show** –e.g. a specific streaming service (e.g. Spotify) or radio station (e.g. Global Player) or aggregator (E.g. TuneIn)

Broadcaster Access

News access

How does news content access look like on smart speakers from **generic** and **specific requests?**

Reputational and commercial risks for **broadcasters** to be alleviated

TEST: Our Availability analysis will offer a robust comparison of practical access between the different players

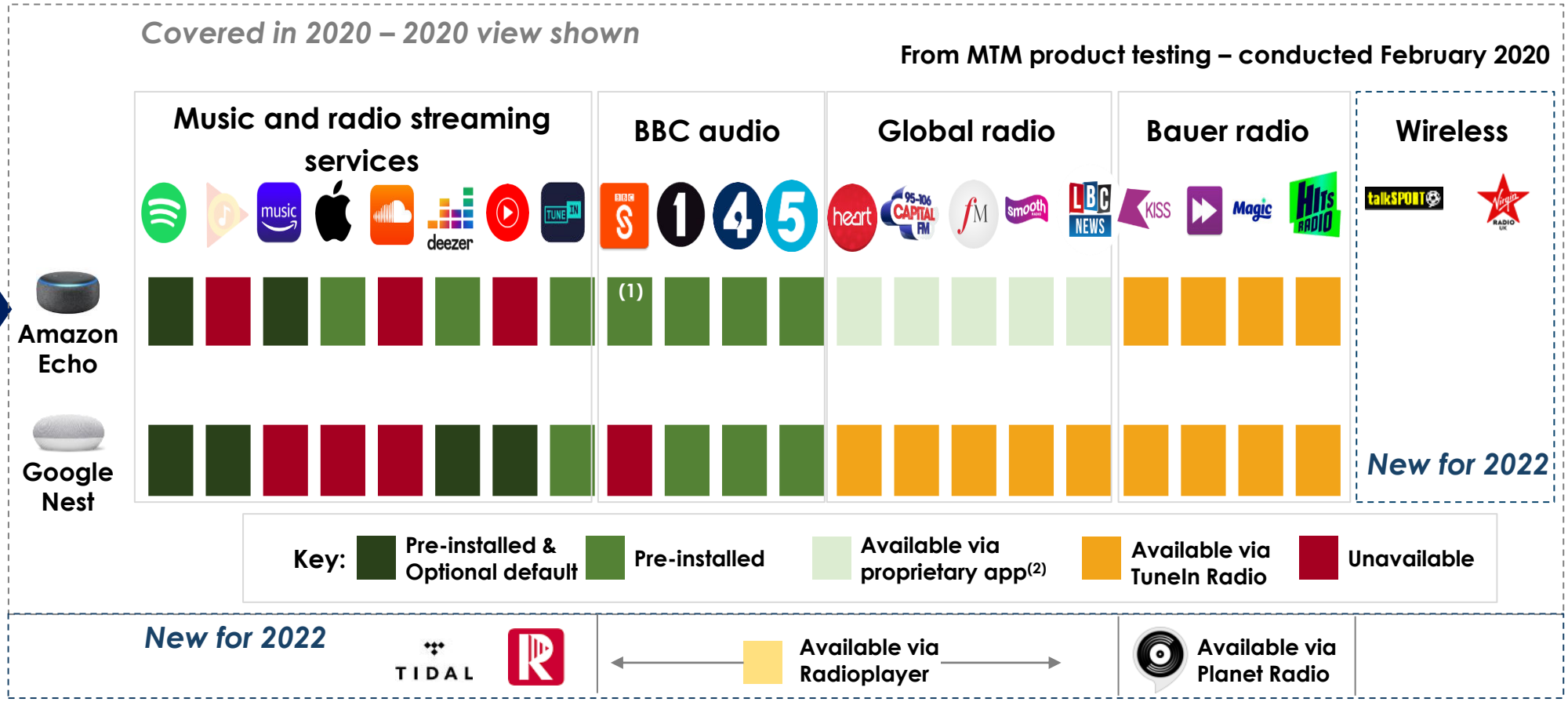
Availability

Pre-installed applications:

Music players and additional apps (**"Skills" or "Actions") preinstalled** and activated

Applications available to install:

Group or service level apps that **can be installed at the request** of the user



Notes: (1) BBC Sounds available as "BBC" on Amazon's Echo Dot. Only BBC radio available (2) Global Player available to install on Amazon Echo (stations otherwise available through TuneIn by default). Further integration of Global and Bauer stations has been rolled out since February 2020
Source: MTM product testing (conducted February 2020); Product websites

TEST: We will explore the challenges that consumers may face in personalising their radio listening experience

Personalisation

Personalisation

Level of **interoperability and customisation** that can be carried over between favourite apps and smart speaker providers

What we want to explore:

- *Are consumers able to customise their selected preferences for music and radio preferences?*
- *Is preference setting equal amongst apps?*
- *Do preferences from their other devices carry over to smart speakers?*

Personalisation and preference setting test pattern[1]

1. Can I link my **accounts and preferences** to selected **music providers**?
   - *With pre-installed apps*
   - *With broadcaster dedicated apps*
2. Can I link **accounts and preferences** of my **preferred radio services**?
   - *With pre-installed apps*
   - *With aggregator apps*
   - *With broadcaster dedicated apps*
3. Does the **linking** of my accounts (e.g. Heart radio app) **affect my listening experience** when prompted, e.g.: *"Play Music I like","Play Music I like on Heart Radio"*
4. Does the **linking carry over functionalities**, e.g.: *"Listen to radio live BBC radio" or "Listen to BBC Radio 1", "Continue listening from where I left off"?*
5. What options do I have to **customise my radio listening experience further** via voice commands? Via the app?

New for 2022

Notes (1): Terminology (e.g. "Linking", "Music player", "Radio", "Skills") will differ between Amazon and Google, but approach should be consistent

TEST: We will pay attention on how "near miss" cases are dealt with and what the implications are for disadvantaged players

Prominence

Contextual requests:

Station/app access (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

What we want to explore:

- *Are broadcasters downgraded in the place of default apps? Can this be influenced?*
- *Are some broadcasters disadvantaged because of context? Are there other potential factors? (e.g. paid promotion)*

Covered in 2020

- **How does the speaker** handle **contextual requests** in general in terms of 1) directing me to an app and 2) offering me relevant content?
- **Which apps and stations** are prioritised before any user inputs?
- **Which apps and stations** can be prioritised upon user input and changes to defaults?

New for 2022

- **How does the speaker** handle **requests to play radio** in general?
  - **Which apps and stations** are prioritised before any user inputs?
  - **Which apps and stations** can be prioritised upon user input?
- **How does the speaker** handle **requests to play different genres and languages** (to test multiple UK and Ireland accents)?
  - **Which apps and stations** are prioritised before any user inputs?
  - **Which apps and stations** can be prioritised upon user input?
- **How does prominence change** depending on the **context** described (e.g. are "Sports" requests more likely to access a radio station compared to "relaxing music" or "workout music", how is access to "local radio" etc.)

TEST: We will expand on our *Specific requests* testing to understand relationship between station and native apps further

Prominence

Specific requests:

Station/app access (and content surfaced) in response to **requests for a particular track, artist, station or show** –e.g. a specific streaming service (e.g. Spotify) or radio station (e.g. Global Player) or aggregator (E.g. TuneIn)

What we want to explore:

- *Do the BBC vs commercial providers have the same level of prominence? How does this compare to other music players?*
- *Are specific limitations (e.g. technical, voice command, favouritism) resulting in reduced prominence?*

Covered in 2020

Dimension	Example	Plays on pre-loaded player	Plays on aggregator	Plays on native apps
Artist	Play [artist name]	✓	✗	✗
Track	Play [song name]	✓	✗	✗
Radio station	'Play Radio 1' or 'Play 98.5'or (full) 'Play BBC radio 1'	✓	✓	✗
Radio show	'Play the Chris Evans breakfast show'	✓	✓	*Only when app can be set to default*
Podcast	Play [Podcast title]	*access to the correct station*[1]	*access to the correct station*[1]	✗
Charts	Play [title]	✓	✗	✗
Specific App *(aggregator)*	Play Kiss FM on TuneIn Play Kiss FM	✗	*Expect aggregator redirection to work, but native app only in cases when it is installed*	
Specific App *(player)*	Play BBC 1 on BBC Sounds Play BBC 1	✗	*Expect aggregator redirection to work, but native app only in cases when it is installed*	

New for 2022

Notes: (1) Only in specific cases; for example, BBC Sounds was not enabled on Google or individual Global stations were not accessible without Global Player

TEST: New for 2022, we will investigate how access to news is a challenge for consumers and a concern for broadcasters

Broadcaster access

News access

How does news content access look like on smart speakers from **generic** and **specific requests?**

Reputational and commercial risks for **broadcasters** to be alleviated

What we want to explore:

- *Do consumers have fair access to their trusted news radio stations*
- *Do radio broadcasters have the ability to attribute news audience effectively?*
- *Are news disseminated in a safe environment?*

Research questions from a user's perspective

Access

- **Can a user access** the news station they want?
- **What types of news segments** are prioritised on request?
- **Which apps and stations** can be prioritised upon user input?

Attribution

- (for radio stations accessed) Are news on the radio accessed via the **dedicated apps** upon request?
- Are they accessed via **aggregators?**
- Are there **stations not accessed** at all?

Safety

- How do speakers respond to **"near requests"** (e.g. play more news? To **new requests** (e.g. play something else)?
- Do **news stations** appear next to **false, inflammatory or misleading content?**
- Are any **requests** that present greater risks than others to broadcasters and consumers?

New for 2022

Appendix

- TEST approach summary
- Questions for the consumer research

a **Availability:** Questions for consumer research

Areas to investigate

- *Can consumers find the **radio stations** they are looking for on smart speaker devices? If not, how willing are they to further investigate how to access those stations (e.g. research online, ask for customer support, ask for help from the speaker etc.)?*
- *Can consumers find **music** that they are looking for, and how is that experience different to the radio journey?*
- *Are consumers willing to download new apps to enable smoother access to their favourite stations? How is the experience when prompted?*
- *Do consumers know the differences between default apps and native radio apps? Do they see availability (or lack thereof) of native aps as a pain point?*
- *Do consumers know the difference between Radioplayer and TuneIn? Do they recall availability of either on their smart speaker devices?*

b **Support & personalisation:** Questions for consumer research

Areas to investigate

- ***Music listeners:*** *Are music listeners on smart speakers able to link their favourite apps (E.g. Spotify, Amazon music, Apple music) with their smart speakers? How did this affect their listening experience?*
- ***Radio listeners:*** *Are radio listeners on smart speakers able to link their favourite radio stations (E.g. BBC, Global player) with their smart speakers? How did this affect their listening experience?*
- *Depending on use case, are consumers likely to consume radio via dedicated apps in the future?*
- *Can consumers easily re-play the last song, playlist or station played? What is the difference between radio and music specific requests?*
- *Can consumers easily set radio routines (e.g. set "Alexa, good morning" to always open BBC news) using voice commands? Using screen commands? Would they do it in practice?*

C **Prominence:** Questions for consumer research

Areas to investigate

- *Are consumers able to access big broadcaster stations via voice commands?[1] Do they recall how the speaker played their request (near miss or quick success, through which app)?*
- *Are consumers able to access smaller, independent stations via voice commands?[1] Do they recall how the speaker played their request (near miss or quick success, through which app)?*
- ***Music listeners:*** *Do they use generic (E.g. play me music, play me a song I like) or specific (e.g. play me this song, or this song via this app) requests for their audio listening? How is their experience to date?*
- ***Radio listeners:*** *Do they use generic (E.g. play me the radio, play me business news) or specific (e.g. play me BBC Radio 1, or play me Kiss radio) requests for their radio listening? How is their experience to date?*
- *Have they experienced near misses[2]? What is their willingness and appetite to course correct (will try again once, will customise a routine to fix the issue, will just not try the same command again)? Does it differ between music and radio listeners?*

Notes: (1) Big broadcaster stations refer to stations owned by the BBC, Global, Bauer or Wireless, understand the request OR plays the wrong thing

(2) Requests where the speaker fails: Needs more information OR doesn't

d **Broadcaster Access:** Questions for consumer research

Areas to investigate

- *When consumers want to access news via their smart speakers, will they use contextual (e.g. play me then news or play me business news) or specific (e.g. play me Sky news) requests?*
- *Are consumers able to access the news easily via their smart speakers? Does it defer depending on the request made? Do they recall how the speaker played their request (did it ask for additional questions, was a set-up needed, through which app)?*
- *What is the context of their news listening on smart speakers (time of day, what are they doing during that time)? What do they listen to (if anything) after their news listening on smart speaker devices?*
- *Have they ever heard content that is controversial or potentially harmful on their smart speakers? What was the context when that happened?*
- *Would they pay a premium for removing radio ads on smart speakers? Would they pay a premium to listen to their favourite radio stations on smart speakers? What would they do if such premium was imposed?*