How voice-activated devices are increasing radio listening and elevating audio branding
INTRODUCTION

Why we conducted this study

Many people have experimented with voice-activated assistants such as Siri and Cortana since they were first introduced in 2011, but the screen has remained the predominant interface for the devices on which they are found.

The second wave of voice-activated technology - Amazon Echo (launched in the UK in autumn 2016) and its new competitor Google Home (launched in April 2016) - is fundamentally different in that these devices do not have a screen. All interaction – both stimulus and response – takes place through voice alone.

Tech industry predictions highlight the potential for voice-activated devices and behaviour to become mainstream in the near future (technology research company Gartner predicts 75% US household penetration by 2020) yet the lack of visual interface presents a challenge for advertisers who have historically focused their energies on reinforcing the visible elements of their brand.

This study, co-funded with Radioplayer and Global, set out to capture a UK perspective on ownership and usage of screen-less voice-activated devices, explore their impact on radio listening, and consider how brands might adapt to an increasingly voice-activated future. As the only device of this nature in the UK when the fieldwork was conducted we selected the Amazon Echo as a proxy for the whole market.

A key headline from the research reveals how Echo has already become widely established and predicts that it will become mainstream technology in the UK within the next 12 months.

We hope that this study helps shed further light on this fast developing market and its implications for advertisers. If you’d like to discuss the implications for your brand, we’d love to hear from you.
OBJECTIVES

- Establish current penetration of screen-less voice activated devices and likely growth
- Understand usage patterns and new behaviours
- Explore opportunities for brands to communicate in this new environment

As the only device of this nature in the UK when the fieldwork was conducted Amazon Echo was selected as a proxy to represent all screen-less voice-activated devices.

METHODOLOGY

In-home ethnography
Innovative technology stimulates new behaviours which users aren’t always aware of. We spent eight days with four Amazon Echo households to observe and interview users in depth.

Qualitative super group
This was used to explore observations and interrogate behaviours revealed in the ethnographic stage with a wider group of 15 Amazon Echo users.

Omnibus survey
This established current awareness and ownership of Amazon Echo and intent to purchase amongst a nationally representative sample of 1,000 adults.

Focused U&A survey
We surveyed 500 Amazon Echo owners to quantify behaviours identified in the qualitative phase.

Desk research
We conducted a review of existing data relating to Amazon Echo to provide further context to our own research.
Echo is rapidly becoming established as mainstream technology
Adoption of Amazon Echo has been rapid since launch in autumn 2015, with over 9% of UK households owning one or more devices; claimed intent to purchase suggests household penetration of voice-controlled smart devices could hit 40% by early 2018. Eight out of ten owners aim to set up Alexa in-car once the technology becomes available.

Echo is a shared experience for the whole household
Despite requiring users to learn voice-only navigation, Echo already plays a central role in the home and is used by all family members. In single-device households, the predominant location is in a shared space such as the living room, kitchen or dining room, meaning that it is easily accessible for and used by all members of the household.

Once adopted, Echo quickly becomes an important part of the daily routine
The vast majority of owners use Echo regularly – 81% at least once a day or more – with the audio-only output making it a perfect partner for multi-tasking. Reasons for use vary across the day to reflect the user’s needs e.g. functional bite-sized information gathering in the morning to prepare for the day ahead compared to more immersive entertainment-led activities when relaxing in the evening. In households with more than one, additional devices are likely to be found in the bedroom, which is leading to Echo challenging the mobile phone’s dominance as the first and last device used during the day.

Audio entertainment - and radio in particular - dominates time spent with Echo
The primary reason for purchase is greater access to audio entertainment and this dominates current usage. Listening to radio or on-demand music services is the most widely reported use of Echo with the frictionless experience leading to increased listening for both live radio and on-demand music services such as Spotify and Amazon Prime Music. Despite all of the other functions available, radio dominates listening on Echo accounting for 72% of all Echo time spent with audio entertainment – aided by the improved user experience delivered through the UK Radioplayer skill (i.e. the Amazon Echo equivalent of an app).

Radio advertising is the most natural route for brands to communicate via Echo
Despite the lack of a screen preventing visual advertising, over half of daily Echo users recall hearing advertising on the device, with radio cited as the main – and most natural - source of exposure ahead of other audio services. This highlights how radio’s resilience is reinforced by its adaptability to new technologies, helping to keep it relevant for listeners and advertisers.

Developing a consistent brand sound now will benefit advertisers in an audio-led world
As audio-led user-interfaces proliferate and search becomes not just triggered but also delivered by audio, brands will need to develop distinctive brand sound to help them stand out from the crowd. Consistent use of straplines, music, and voice - over time and across different platforms - helps drive brand recognition, likeability and deeper engagement.
Who is using Echo?

Adoption of Amazon Echo has been rapid since its UK launch in autumn 2015, with around 9% of UK households owning one or more devices. Typically for new home-based technology, ownership is higher amongst men, 25-44 year olds, and those living in London and the South East.

“Almost four in ten UK adults are likely to purchase a device for their home.”

Almost four in ten UK adults intend to purchase an Echo with 87% of these saying they will buy in the next 12 months. This suggests that voice-controlled smart devices will rapidly become mainstream technology with household penetration potentially exceeding 40% by early 2018.

INDEX OF AMAZON ECHO OWNERS VS. UK POPULATION

Echo ownership profile is typical for new home-based technology

Almost four in ten UK adults intend to purchase an Echo with 87% of these saying they will buy in the next 12 months. This suggests that voice-controlled smart devices will rapidly become mainstream technology with household penetration potentially exceeding 40% by early 2018.
The user experience is very positive – 89% of current owners either love or like their Amazon Echo - suggesting that recommendation will play an important role in driving penetration. This also explains why users are keen to adopt voice-activated technology in other environments beyond the home. In our research, eight out of ten owners are likely to set up Alexa in-car once the technology becomes available.

- **Love/like Echo:** 89%
- **Likely to set up in car:** 81%
Where is Echo being used?

Echo appears to occupy a central place in the household reinforced by the fact that in single-device households, the predominant location is in a shared space such as the living room, kitchen, or dining room.

Echo predominantly resides in shared spaces in single device households.

In multi-device households, Echo extends placement into more private spaces, with the bedroom taking over as the second most common setting for the device after the living room – even in these circumstances Echo is most accessible in a shared space.

In multi-device homes Echo extends into more private locations.

LOCATION OF ECHO IN SINGLE DEVICE HOUSEHOLDS

LOCATION OF ECHO MULTI-DEVICE HOUSEHOLDS
“Our first one [Echo] we put in the living room so anyone could have access to it. We loved it so much we’ve bought a Dot for the bedroom too.”

Despite users having to learn voice-only navigation, Echo’s position in shared spaces within the household means it is easily accessible to all members of the household. The JWT Innovation Group/Mindshare Futures study ‘Speak Easy’ cites ease of use/convenience as key reasons for using voice technology generally. In tandem with the ‘humanisation’ of Echo’s voice assistant Alexa (two-thirds of users see ‘her’ as more human than technology) this helps encourage even tentative technology users to give it a go.

Echo is a shared device (with both younger and older active users)

Of the people who you said live in your household, please can you indicate which of them use the Amazon Echo(s)? (Active users %)

Base: Echo Household members
Source: differentology
Echo User study 2017

USERS OF AMAZON ECHO IN THE HOUSEHOLD

<table>
<thead>
<tr>
<th>Group</th>
<th>Active Users %</th>
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</thead>
<tbody>
<tr>
<td>Partner</td>
<td>93%</td>
</tr>
<tr>
<td>11-17 year old children</td>
<td>91%</td>
</tr>
<tr>
<td>18+ adult children</td>
<td>91%</td>
</tr>
<tr>
<td>Siblings</td>
<td>87%</td>
</tr>
<tr>
<td>Friends</td>
<td>85%</td>
</tr>
<tr>
<td>Parents</td>
<td>77%</td>
</tr>
<tr>
<td>0-10 year old children</td>
<td>34%</td>
</tr>
</tbody>
</table>

“...mine, but my boyfriend uses it just as much. I tell him off for taking control of her.”
“So, usually in the morning, I’ll be able to, before I get out of bed, get some music playing or when I come out the shower and I’ve got all wet hands, so rather than going onto my phone with wet hands, I can then just get the music ready for when I’m getting ready for work in the morning.”

81% of Echo owners use the device at least once a day or more

Echo usage tends to be highest in the morning and evening during the week, and during the day at the weekends, perhaps reflecting when people are most available to access – after all, it is predominantly an in-home device currently.

Time of usage reflects audience availability

% ECHO USAGE BY TIME OF DAY (WEEKDAY VS. WEEKEND)
People’s reasons for using Echo, and the specific functions they access, vary across the day to reflect the user’s needs. In the morning, people use Echo to gather functional bite-sized information to help them prepare for the day ahead; when relaxing in the evening the emphasis is more on immersive entertainment-led activities. Radio is used consistently across both day parts.

Morning mindset:
Be useful, update me on what’s happening

Evening mindset:
Entertain and enlighten me, I’m inquisitive so let me explore
Of the devices that you interact with on a typical weekday/weekend, please can you indicate which you do first/last?

Base: N=61
(Daily Echo users with a second device in bedroom)
Source: dfferentology
Echo User study 2017

Location of device also has an effect on how people use their Echo. As already identified, the bedroom is the second most common location for Echo is in households with more than one device.

In these households, Echo is used for more tasks, more often. Usage also reflects the user situation and mindset. For example, there is a particularly significant increase in the number of people controlling their heating through the Hive skill (presumably to warm the house from their bed without having to move). Interestingly, it seems that users with a device in this location prefer to invite a human into the bedroom - they are 13% more likely to refer to their device as Alexa over Echo.

The data also highlights how the accessibility of Echo in bedrooms is helping it to challenge the mobile phone’s dominance as the first and last device used during the day. With certain content more accessible and easier to navigate on Echo than on mobile devices it will be interesting to monitor any wider impact this has on the consumption of this content over time.

When located in the bedroom, Echo is challenging mobile’s dominance
The role of audio and radio

The primary reason people gave for buying the Echo is for greater access to audio entertainment it provides. As a result, audio dominates current usage with a total of 91% of daily Echo users listening to radio or on-demand music services through the device. Within this, radio is the most widely accessed form of audio entertainment on Echo.

“We mainly use it for music really... Together we use Spotify but sometimes I get a bit bored listening to music. That’s why I like to hear people talking as well and discussions, so I like the radio more.”

Echo’s hands-free control and audio-only output makes it the perfect device to use when engaged in other activities and audio entertainment is the perfect accompaniment to multi-tasking. When combined with greater accessibility and ease of use, this means Echo is helping to increase time spent listening to both live radio and streamed music services such as Spotify and Amazon Prime Music.

Radio is the most most widely accessed form of audio entertainment

Audio entertainment functions used on Echo (% of daily users)

Do you listen to the radio more or less often since getting your Amazon Echo(s)?
Base: N=408/323 (Amazon Echo owners who listen to radio or stream music)
Source: dfferentology Echo User study 2017

Do you listen to streaming services such as Spotify, Deezer etc. more or less often since getting your Amazon Echo(s)?
Base: N=408/323 (Amazon Echo owners who listen to radio or stream music)
Source: dfferentology Echo User study 2017

73% Listen more often to streamed music services

71% Listen more often to radio

Proportion of Echo users claiming to listen more often
“It’s not that we’re doing new things. We’re doing things we were already doing, just more of them. And it’s easier this way. So we were already listening to the radio, but now it’s easier. Everything is in one place.”

Source: RAJAR MIDAS
Spring 2017

“Worked perfectly from first attempt. Tune-In used to drop links to a variety of stations but Radioplayer just keeps on going. A great improvement. Just waiting for Amazon to give us the option to make it the default setting.”

Radioplayer Echo Skill review, March 2017

Despite the range of audio options available via the device, radio dominates listening on Echo. According to RAJAR MIDAS, Echo users tune in to over 3 million hours of live radio every week through the device, meaning that it accounts for almost three-quarters of all Echo time spent with audio entertainment.

Radio listening is undoubtedly underpinned by the superior user experience delivered by the UK Radioplayer Echo skill. User reviews highlight how Radioplayer has better station-name recognition, official streams with full content available, and a rich ‘recommend a station’ feature.

This has resulted in the majority of Echo radio-listeners tuning in through the Radioplayer skill rather than Tunein (even though that’s currently the default).

Radioplayer tops usage of radio ‘skills’

You mentioned you listen to radio through your Amazon Echo(s). Which is the main skill(s) you listen to the radio through?

Base: N=83
(Heavy radio listeners via Echo)
Source: differentiology
Echo User study 2017
The opportunity for advertisers

There has been a lot of debate about the best way for advertisers to engage with Echo users. In the absence of a screen much of this assumes that the interruptive paid-for advertising model won’t translate easily to voice-activated devices.

However, existing advertising opportunities are already enabling brands to communicate successfully with Echo users. Over half of daily users recall hearing advertising on the device with radio cited as the main source of exposure.

Over 50% of daily Echo users recall hearing advertising via the device

Radio seamlessly incorporates advertising into the broadcast linear flow. As a result, our research demonstrates that advertising feels more natural and less interruptive in radio content in comparison to pre-roll ads when launching skills and other audio entertainment.

Radio is perceived to be the most natural home for audio advertising on Echo

Have you heard any advertising on your Amazon Echo(s)?
Base: N=402 (Daily Echo users)
Source: diferento/ogy
Echo User study 2017

“We have Spotify Premium so there’s no adverts. That way, and as far as I’m aware, there’s no built-in advertisements. So, yeah, it’s only radio.”

When using Amazon Echo how acceptable do you find hearing ads when listening to...?
(Feels very natural vs. feels very interruptive %)
Base: N=420 (Daily Echo users)
Source: diferento/ogy
Echo User study 2017

Net positive score +17.1%
Net positive score +3.9%
Net negative score -0.7%
Net positive score +6.8%

Radio Streaming services Other skills (e.g News Summaries, Weather) Podcasts

Radio is perceived to be the most natural home for audio advertising on Echo

PROPORTION OF DAILY USERS EXPRESSING DIFFERENT ATTITUDES TOWARDS AUDIO ADVERTISING WITHIN VARIOUS CONTEXTS ON ECHO
What next for brands on Echo?

NEW ADVERTISING FORMATS

The frictionless nature of interacting with Echo skills and content that users highlighted at the qualitative stage of the project also means that they are open to a greater engagement with brands and advertising. However, this needs to be handled sensitively – the user needs to retain control of any deeper level of interaction and relevance is vital. Outside of traditional audio advertising it is clear that brands need permission before they intrude in the user: Echo relationship.

Next generation advertising needs to ensure the user is in control to avoid unwanted brand intrusions

Audio Search

Amazon Echo is able to answer (some) factual questions currently but is not yet set up to respond to more exploratory search that the internet is typically used for. However, Gartner Research predicts that 30% of web browsing will be done via screen-less user interfaces by 2020. With Google now entering the device market it is anticipated that exploratory search will eventually become delivered (as well as triggered) by audio on voice-activated devices.

However, it is generally accepted that voice technology works best when presenting only one answer to a question. This creates a challenge for brands seeking to intervene in the audio search process.

The JWT Innovation Group/Mindshare Futures study ‘Speak Easy’ suggests that the answer may lie in advertisers paying commission to be accessible/recommended via voice-activated devices or through ‘algorithm optimisation’ (the voice-activated equivalent of SEO) to effect the likelihood of the voice activated devices recommending their brand.

Brand Skills

Another potential communications opportunity lies in advertisers developing branded Skills (or Conversation Actions in the case of Google Home). However, as with apps for mobile phones, the market is already littered with low-value, poorly executed, and little-used skills. Branded skills will need to provide real value to the user and a positive experience if they are to benefit from wide take-up and frequency of usage.
IMPLICATIONS FOR ADVERTISERS

Developing a consistent brand sound now will benefit advertisers in an audio-led world

This study highlights how radio adapts to new technologies, making it more resilient to change and helping to keep it relevant for listeners and advertisers. It also suggests that audio entertainment will account for a larger proportion of people’s overall media consumption as penetration of voice-activated devices grows. In turn, this should mean that audio advertising assumes greater important as a brand communications medium.

It is generally assumed also that at some stage search will become not just triggered but also delivered by audio, making it even more vital for brands to develop a distinctive brand sound to help them stand out from the crowd.

Radiocentre research into brand sound (Turning Art into Science; Strike a Chord) has a clear learning: listeners respond positively to familiarity. Familiar music, voices, constructs, and straplines -used consistently over time and across different platforms – help the listener instinctively recognise who is speaking to them, and drive likeability of and deeper engagement with advertising content.

Distinctive audio branding used across advertising, search, brand skills (as well as other audio touchpoints), may come to define successful businesses as audio-driven technologyprospers. With brand sound set to become as important as a brand logo, forward-thinking advertisers can gain advantage now by testing and refining their approach with audio advertising.
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